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Institute of
Life Course and
Medical Sciences



PALLIATIVE CARE UNIT ANNUAL REPORT

2023/24



Liverpool University Hospitals
NHS Foundation Trust

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About the Palliative Care Unit

The Palliative Care Unit (PCU) at the University of Liverpool brings together research, educational and clinical expertise in order to achieve its vision that ‘all people experience a pain free and dignified death, regardless of where they die, supported by the very best clinical and compassionate care’.

The PCU utilises its network of national and international collaborators to design, develop and deliver novel research and educational programmes that have a direct impact on the care provided to dying people and those close to them.

The PCU is led by Professor John Ellershaw MA FRCP, a leading figure in palliative and end of life care on the national and international stage, who has spearheaded the development of palliative care services and education in Liverpool since 1994 and has also held national leadership roles with the Department for Health (National Deputy Director for End of Life Care, 2010–2013), the Royal College of Physicians (Clinical Lead, National Care of the Dying Audit Hospitals, 2009–2014), and the Association for Palliative Medicine (Executive Committee Member, 2015–2020; Co-Chair of the Undergraduate Medical Education Special Interest Forum, 2014–present). In June 2023 he was appointed Chair of the Steering Committee for the National Audit of Care at the End of Life (NACEL). Professor Ellershaw is also the co-founder and chair of the International Collaborative for Best Care for the Dying Person, ([page 2](#)) which focuses on research and service improvement in care for the dying, and currently encompasses some 800

members from 58 countries around the globe.

Academic activity at the PCU underpins the End of Life & Bereavement Strategy at the Liverpool University Hospitals NHS Foundation Trust (LUHFT) and played a key role in the Royal Liverpool and Broadgreen Hospital’s ‘Outstanding’ CQC rating for end of life care in 2016. This has been consolidated with further development of the research portfolio, most notably in completing the €4.017 million ‘LIVE’ project ([page 7](#)).

Over the past year, the multidisciplinary PCU team has published 21 research papers and delivered a wide range of online and in-person education and training courses, expanding the evidence base and enabling clinicians to make a difference through research, leadership and direct clinical care. This annual report details these achievements and describes the aims and objectives that will ensure that progress is sustained into 2025/26 and beyond.

International Collaborative for Best Care for the Dying Person

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Global Collaboration: The International Collaborative for Best Care for the Dying Person

The PCU is the Coordinating Centre for the International Collaborative for Best Care for the Dying Person, which was established in January 2013 by a group of leading thinkers, practitioners and researchers from 12 countries. This group, led by the PCU, had previously worked together on the €2.2m EU FP7 Coordination and Support Action Grant-funded “OPCARE9” project to optimise research for the care of cancer patients in the last days of life.

Chaired by Professor John Ellershaw with Professor Carl Johan Fürst of Sweden’s Lund University as Vice Chair, the Collaborative’s membership has grown considerably since its inception and at the time of writing represents almost 800 people from 58 countries, generating almost £10,000 of income. Each of these members shares the Collaborative’s vision “for a world where all people experience a good death as an integral part of their individual life, supported by the very best personalised care”.

The work of the Coordinating Centre

To engage with the Collaborative’s growing membership, the PCU manages an X account (formerly known as Twitter) and produces a bi-monthly newsletter for individuals who have registered on the bestcareforthedying.org website to receive updates on the Collaborative’s work. To further enhance the Collaborative’s global reach, the PCU has organised and delivered a programme of quarterly educational webinars. In 2023/24, the topics were:

- Is a good death achievable?
- Facing life’s end: understanding death anxiety and spiritual wellbeing
- The role of volunteers at the end of life: results from the EU Horizon 2020 iLIVE Study
- Care for the dying person with Motor Neurone Disease

International Collaborative research

With leadership and input from the PCU, the Collaborative’s project groups create opportunities for international exchange and co-operation, and have secured two major EU-funded research grants. The International Care of the Dying Evaluation (iCODE) project secured €476,885 from the Network of the European Union, Latin America and the Caribbean Countries on Joint Innovation and Research Activities (ERANet LAC) to investigate quality of care for cancer patients as perceived by bereaved relatives. This project completed in 2019 and continues to publish outputs in peer reviewed journals.

‘Living well, dying well: A research programme to support living until the end of life’ (the iLIVE project) secured €4,017,817 over four years from the European Union Horizon 2020 Framework and is detailed on **page 7**.

In 2021/2022 the PCU led a Delphi Study that sought to update consensus on the 10 key principles and 40 core outcomes of the International Collaborative 10/40 Model of Care for the Dying Person. The results were published in the Journal of Palliative Medicine in February 2023, contributing significantly to the evidence base in end of life care by providing an agreed international position on what constitutes ‘best care for the dying person’. The paper also evidences the 10/40 Model’s clinical relevance and applicability for practice as it is used to guide the delivery of high-quality care for dying patients, regardless of the location of care. To date, the model has been implemented in 20 institutions across 11 countries and, led by the PCU, a survey has been piloted in five countries to better understand clinicians’ perceptions of using their congruent care plans. Following the pilot, the survey will be refined, translated, and rolled out to all care plan users in order to identify areas of best practice and opportunities for continued improvement.

Events

Supported by the PCU, the Collaborative holds a range of annual events to engage its members and disseminate its work. The

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latest Annual Conference was held in Rotterdam, The Netherlands, in November 2023, and plans for the 2024 event in Porto are currently being finalised. Work is also underway to prepare for the 2025 conference, which will be hosted by the PCU at the prestigious Royal College of Physicians North in Liverpool.

The annual Summer School was held in Malaga, Spain, in May 2024, with over 40 participants in attendance. The main theme of the event focused on the 10/40 Model for Best Care for the Dying Person, with a series of workshops and plenaries that gave new and existing Collaborative members a thorough grounding in the model's purpose and application. Parallel workshops on research, benchmarking, and education and training provided opportunities for the advancement of international projects.

Following successful events in previous years, the PCU hosted the fourth annual Research Thinktank in February 2024, which saw participants from ten countries come together online to take part in discussions aimed at driving forward the development of new international projects. The next Thinktank will be held in February 2025.

The EAPC Task Force on Care for the Dying

In November 2023 the Collaborative joined forces with the European Association for Palliative Care to establish a new EAPC Task Force on Care for the Dying. With its unique focus on care in the last days and hours of life, this initiative represents a remarkable synergy of expertise and shared vision in the field of palliative care. The Task Force will act as a catalyst for change in this important area, advocating for improved end-of-life care across Europe and beyond through its delivery of research, quality improvement, and education activities. At the heart of its mission lies the development of an EAPC White Paper on Care for the Dying, which will increase awareness among healthcare professionals, policymakers, and the general public about the importance of providing high-quality care to individuals at the end of life.



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Clinical Collaboration with local NHS Trusts

Liverpool University Hospitals NHS Foundation Trust

The PCU's academic activity directly underpins the Liverpool University Hospitals NHS Foundation Trust (LUHFT) End of Life & Bereavement Strategy. The research, innovation, education and training undertaken by the PCU and potentiated via LUHFT's 8-bedded Academic Palliative Care Unit is fundamental to the delivery of both the strategy itself and its associated clinical quality programmes. Professor Ellershaw chairs the Palliative Care Research & Development Management Group that drives this research agenda forward. Specific PCU projects in support of the LUHFT End of Life & Bereavement Strategy are highlighted below and detailed elsewhere in the report as indicated.

- **International Collaborative for Best Care for the Dying Person (page 2)**

Participation in international research projects under the auspices of the International Collaborative allows the PCU to transfer best practice, leadership and learning into LUHFT.

- **Palliative Care Research Partnership North West Coast (PalCaRe NWC) (page 5)**

This new clinical and research partnership was formed to support and encourage palliative care research in the North West Coast area of England.

- **Living well, dying well: A research programme to support living until the end of life (iLIVE) (page 7)**

This €4 million research project aimed to develop novel, evidence-based and sustainable interventions to relieve the symptoms and suffering that occur at end-of-life for patients with advanced chronic illnesses and their families.

- **Serious Illness Care Programme (page 11)**

The Serious Illness Care Programme promotes earlier conversations between clinicians and people with a life limiting illness, leading to improved quality of patient care. A pilot project in collaboration with the LUHFT Nephrology Department is currently underway and development work is ongoing with colleagues in Respiratory Medicine and Acute Medicine.

- **Research for Palliative Care Clinicians (RESPACC) (page 11)**

The RESPACC project aims to include basic research competences as part of the clinical practice of palliative care professionals within the Trust.

- **Evaluation of the SWAN educational programme to improve healthcare professionals' confidence and competence in providing care for the dying (page 13)**

An initiative to evaluate the impact of the SWAN Education Programme to determine if and how the study programme promotes changes to practice and improves patient care.

Clatterbridge Cancer Centre NHS Trust

Over the past year, linkages have been developed with colleagues at Clatterbridge Cancer Centre Liverpool (CCCL) with the aim of potentiating supportive, palliative, and end-of-life care research and education across the Trust. Projects in development include:

- a proposal for a Senior Clinical Fellow in Supportive Oncology;
- collaboration in the support for a PhD project to begin Feb 2025 - "Assessing the supportive care needs of patients with advanced colorectal cancer (ACRE)";
- participation of CCCL staff in teaching opportunities, including MSc, Medical Students and Advance Care Planning;
- participation of CCCL staff in PCU Steering Groups.

About the Palliative Care Unit

Academic Collaboration

The PCU has a network of multiprofessional academic collaborators that facilitates the design, development and delivery of a range of innovative projects. The PCU team continues to pursue research and development collaborations to further enhance its strong record of innovation and improvement in end of life care. Current collaborating institutions are described below.

Palliative Care Research Partnership North West Coast (PalCaRe NWC)

This clinical and research partnership was formed to support and encourage palliative care research in the North West Coast area of England, which has the third highest prevalence of palliative care need in England and historically low recorded NIHR research activity. There is a high incidence of life-limiting disease within the region, compounded by high levels of socioeconomic deprivation. Regionally, this is characterised by clusters of multidimensional disadvantage, including populations known to be underserved, such as areas with ageing or ethnic minority populations, and the deprivation associated with coastal and rural communities.

Working in partnership with colleagues at the Universities of Lancaster, Chester and Central Lancashire, together with Lancashire Teaching Hospitals NHS Foundation Trust, Liverpool University Hospitals NHS Foundation Trust, Clatterbridge Cancer Centre NHS Trust, Clinical Research Network North West Coast, and supported by the ARC NWC, local hospices, and other clinical partners in the North West, the PalCaRe NWC project has three aims:

- to explore and understand more about what helps and hinders research and address these barriers;
- to help develop research capacity and expertise across the local area through working with partners;
- to support people applying for large-scale NIHR grants through active mentoring of early career researchers.

The Liverpool Head and Neck Centre

The Liverpool Head & Neck Centre (LHNC) combines internationally recognised clinical and research strengths to deliver research-led improvements in patient care. Co-located at the University of Liverpool, LHNC brings together a breadth of internationally-recognised clinical and scientific expertise, providing a unique opportunity to make impactful differences for patients with diseases of the head and neck locally, nationally and internationally. LHNC aims to enhance quality and safety of care driven by world-leading translational research defined by contemporary clinical problems, covering the whole pathway from diagnosis to end of life. The PCU has partnered with LHNC to develop a joint research strategy aimed at addressing the palliative care needs of head and neck cancer patients across Cheshire and Merseyside, which has a 30% higher rate of this type of cancer than the rest of England.

University of Lancaster

Dr Amara Nwosu is a Senior Clinical Lecturer in Palliative Care at Lancaster Medical School, where he undertakes research with the International Observatory on End of Life Care. He is also the research lead for Marie Curie Hospice Liverpool and a former Research Scholar for the National Institute for Health Research (NIHR) North West Coast Clinical Research Network. Dr Nwosu works clinically as an Honorary Consultant in Palliative Care at LUHFT and is the Digital Technology Editor for SAGE Publications' *'Palliative Medicine'* journal, where he produces podcasts to enable dissemination of the journal's work to a wider audience. Dr Nwosu is a Winston Churchill Fellow (2020) and travelled to the USA and the Netherlands in summer 2023 to research how digital health can improve palliative care.

Facilitated by Dr Nwosu, the PCU's collaboration with both Lancaster University and Marie Curie provides opportunities for research to evaluate the use of technology to support care for patients with advanced disease in hospital, community and hospice settings. Current projects involve the assessment of hydration in advanced cancer using non-invasive technology (**page 10**) and a study to determine technology research priorities in palliative care (**page 15**).

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Liverpool John Moores University

Dr Andrew Dickman is the Consultant Pharmacist in Palliative Care at the Academic Palliative and End of Life Care Centre, LUHFT, and an Honorary Lecturer at the School of Pharmacy and Biomolecular Sciences at Liverpool John Moores University. He is a founding member of the Association of Supportive and Palliative Care Pharmacy and currently a member of the NACEL Steering Group. From 2007 to 2022, he was an honorary member of the Faculty at the Graduate School of Pharmaceutical Sciences, Osaka University.

Dr Dickman's links with both Liverpool John Moores and Osaka universities facilitates research into pharmaceutical aspects of palliative care. Current projects include the examination of the compatibility and stability of drug combinations that may ultimately improve the management of palliative care patients (**page 16**), and a new project in collaboration with Osaka, where an honorary researcher is developing a project to compare and contrast the pharmacological management of patients at the end of life in Japan and the UK.



The PCU Research Portfolio

A multiprofessional Research & Development Group leads the PCU's research and innovation activities. Work undertaken in 2023/24 has generated 21 academic papers published in leading peer-reviewed journals, a full list of which can be found in Appendix 1.

The PCU research portfolio is categorised under four themes:

- Best care for the Dying Person, led by Professor John Ellershaw
- Supportive and Palliative Care, led by Dr Stephen Mason
- Education Research & Development, led by Dr Stephen Mason
- Clinical Pharmacy and Pharmacology,

led by Dr Andrew Dickman.

This section of the report describes the active projects within each of these themes and the progress made against them in 2023/24.

Research Theme 1: Best Care for the Dying Person

Living Well, Dying Well: A research programme to support living until the end of life (iLIVE)

PCU Lead: Professor John Ellershaw

The EU Horizon 2020-funded iLIVE project aimed to provide an in-depth understanding of the concerns, expectations and preferences of dying patients and their caregivers, achieved through a 10-country prospective cohort study of 2000 patients with a life expectancy of six months or less, across different settings, diagnoses, ages, genders, socio-economic, and religious groups. Two clinical trials were embedded within the cohort study:

- A digital clinical tool to optimize medication management for the relief of symptoms that occur at the end of life;
- A volunteer programme to support patients, and their families, dying in the hospital setting.



The PCU led on the volunteer programme work package, which developed the first European Core Curriculum for Hospital Palliative and End-of-Life Volunteer Services and led to services being successfully implemented in five countries.

A total of 106 patients and 14 relatives were recruited to the study by the PCU team, and the project is now in the analysis and reporting phase.

The PCU Research Portfolio

Collaboration during the iLIVE project has also led to the development of a Project Group to explore and develop a strategy for international benchmarking in care for the dying within the International Collaborative for Best Care for the Dying Person.

Publications

Yildiz B, van der Heide A, Bakan M, Iversen GS, Haugen DF, McGlinchey T, Smeding R, Ellershaw J, Fischer C, Simon J, Vibora-Martin E, Ruiz-Torreras I, Goossensen A, iLIVE consortium. Facilitators and barriers of implementing end-of-life care volunteering in a hospital in five European countries: the iLIVE Study. *BMC Palliative Care* 2024 Apr 2;23(1):88. doi: 10.1186/s12904-024-01423-5.

McGlinchey T, Mason SR, Smeding R, Goossensen A, Ruiz-Torreras I, Haugen DF, Bakan M, Ellershaw JE. iLIVE Project Volunteer Study. Developing international consensus for a European Core Curriculum for hospital end-of-life care volunteer services, to train volunteers to support patients in the last weeks of life: A Delphi study *Palliative Medicine* 2022 Apr;36(4):652-670. doi: <https://doi.org/10.1177/02692163211045305>.

10/40 Model for Best Care for the Dying Person: Pilot of a self-completion questionnaire to assess the knowledge, skills and experience of clinical staff of using a care plan to support patients in the last hours or days of life

PCU Lead: Dr Stephen Mason

The 10/40 Model comprises 10 Key Principles of care that underpin 40 Core Outcomes which organisations can use to develop clinical documentation to promote consistent, equitable and individualised care for every patient, regardless of diagnosis or place of care. Within countries linked with the International Collaborative, implementation and use of the 10/40 Model is coordinated by the 'Facilitator Network' - a group of multidisciplinary healthcare professionals with responsibility for leading the implementation and dissemination of the 10/40 Model on a local, regional, or national level.

Zambrano, S.C., Haugen, D.F., van der Heide, A. *et al.* Development of an international Core Outcome Set (COS) for best care for the dying person: study protocol. *BMC Palliat Care* 19, 184 (2020) <https://doi.org/10.1186/s12904-020-00654-6>

Collaborators

Professor Agnes Van Der Heide, (Erasmus Univ. NL); Professor Steffen Eychmüller (Univ. Hospital Bern, CH); Professor Carl Johan Fürst (Lund Univ. SE); Professor Dagny Faksvåg Haugen (Bergen Univ. NO); Dr Urska Lunder (Univ. Clinic Golnik, SI); Dr Marisa Martín-Rosello (Fundacion Cudeca, ES); Dr Valgerður Sigurðardóttir (Landspítali Univ. Hospital, IS); Professor Gustavo de Simone (Pallium Latinoamerica, AR); Professor Ann Goossensen (Univ. Humanistic Studies, NL); Professor Claudia Fischer (Medizinische Univ. Wien, AT); Associate Professor Mark Boughey (Univ. Melbourne, AU); Professor Simon Allan (Arohanui Hopsice, NZ).

Funding

€4,017,817 (of which €428,500 to the PCU) from the European Union Horizon 2020 Framework.

As part of the ongoing learning from the Facilitator Network, it is important to gain feedback on users' perceptions of using the care plan within 10/40 Model user sites. This project will use a self-completion questionnaire to assess the knowledge, skills and experience of using a care plan to support care, across the user sites affiliated with the International Collaborative. This study will first pilot test a developed self-perception questionnaire, created for this purpose in New Zealand, to assess the validity and acceptability of the questions and feasibility of completion, to establish if there is a need for amendment prior to the wider evaluation study. Following the pilot, which collected data from five user sites, the questionnaire will be distributed to clinical staff working within 10/40 Model user sites.

Collaborators

Dr Arianne Stoppelenburg (Erasmus Univ. MC, Netherlands) Dr Vilma Tripodoro (Univ. Navarra, Spain)

The PCU Research Portfolio

The Biology of Dying

PCU Lead: Dr Seamus Coyle

We know what good end-of-life care looks like and systems are in place to ensure that patients approaching death receive appropriate care. However, recognising approaching death remains a key clinical challenge, one which the 'Biology of Dying' project aims to overcome. Previous work undertaken by the PCU in patients with lung cancer enabled the identification of metabolites that change in the last weeks of a patient's life. This led to further collaborative work which identified altered pathways during the dying process and allowed the development of a model (algorithm) predicting the last weeks and months of life. This is the only test predicting dying within the last two weeks of life, establishing proof that there is indeed a 'process' to dying and cementing the University of Liverpool's reputation as a world leader in this area.

This project has resulted in:

- Three clinical studies that recruited nearly 400 patients at eight different sites, including four hospices;
- Publication of the first paper to describe the prospective collection of biosamples from patients at the end of life;
- Published papers on Gas Chromatography-Mass Spectrometry method development for the detection of Volatile Organic Compounds in urine;
- A UK patent application (No GB2204213.9) on metabolite changes at the end of life: "Urinary metabolites that predict the last weeks and days of life";
- Publication of the first paper demonstrating that there are changes in metabolites at the end of life;
- Ongoing development of a low-cost, low-risk, rapid point of care urine test for use in any healthcare setting to predict time until death.

Publications

Coyle S, Chapman E, Hughes DM, Baker J, Slater R, Davison AS, Norman B, Roberts I, Nwosu AC, Boyd MT, Mayland CR, Kell D, Mason S, Ellershaw J, Probert C. Predicting Dying: Metabolomic Changes, a Model and the Dying Process in Patients with Lung Cancer (PREPRINT)

Chapman EA, Baker J, Aggarwal P, Hughes DM, Nwosu AC, Boyd MT, Mayland CR, Mason S, Ellershaw J, Probert CS, Coyle S. GC-MS Techniques Investigating Potential Biomarkers of Dying in the Last Weeks with Lung Cancer. *International Journal of Molecular Sciences* 2023; 24(2):1591. <https://doi.org/10.3390/ijms24021591>

Aggarwal P, Baker J, Boyd MT, Coyle S, Probert P, Chapman EA. Optimisation of urine sample preparation for headspace-solid phase microextraction gas chromatography-mass spectrometry: altering sample pH, sulphuric acid concentration and phase ratio. *Metabolites* 2020, 10(12), 482.

Coyle S, Scott A, Nwosu A, Latten R, Wilson J, Mayland CR, Mason S, Probert C, Ellershaw JE. Collection of biological material from patients towards the end of life *BMJ Open* 2016, 6. e011763. doi:10.1136/bmjopen-2016-011763

Aggio R MA, Coyle S, Reade S, Khalid T, Ratcliffe N, Probert C. Freeze-drying for the analysis of volatile organic compounds in the headspace of urine samples using solid phase microextraction coupled to gas chromatography – mass spectrometry. *Chemistry Central* 10:9 DOI: 10.1186/s13065-016-0155-2)

Collaborators

Prof C Probert, Dr A Davison, Dr B Norman, Prof D Kell, Prof Dunn, Prof C Eyres (Univ. Liverpool, UK); Prof D Hughes (Bangor Univ., UK); Dr J Appleby (Lancaster Univ., UK); Medtechtomarket.

Funding

Clatterbridge Cancer Centre, £49,918; University of Liverpool, £99,926; University of Liverpool, £2,499; North West Cancer Research, £33,989.70; Wellcome Trust £99,287.

The PCU Research Portfolio

The Study of Hydration Status and Complex Symptoms in Advanced Cancer Using Bioelectrical Impedance Vector Analysis

PCU Lead: Dr Amara Nwosu

This study used a non-invasive objective measurement of hydration status to study clinically significant relationships between hydration status and patient-reported symptoms, physical signs and quality of life in adults with advanced cancer. Data collection is complete, with 125 patients and 52 caregivers recruited to the study. Data to support the development of this work has been presented at the following scientific meetings: Association of Palliative Medicine Supportive and Palliative Care Conference (2019), the EAPC World Research Congress (2019/2020), Hospice UK conference (2019), Palliative Care Congress (2020). Data from the current work was presented at conferences in 2022 and 2023. Data analysis is complete and the manuscript has been accepted for publication in *BMC Palliative Care* (2024).

Publications

Nwosu AC, Stanley S, McDougall A, Mayland CR, Mason S, Ellershaw JE. Non-invasive technology to assess hydration status in advanced cancer to explore relationships between fluid-status and symptoms at the end-of-life: an observational study using bioelectrical impedance analysis *BMC Palliat Care* **23**, 209 (2024). <https://doi.org/10.1186/s12904-024-01542-z>

Research Excellence Framework 2028 Case Study: Improving evidence-based care for the dying on a global basis

PCU Lead: Professor John Ellershaw

Research conducted by the PCU exploring the needs of the dying person and the role and importance of personalised care and communication has shaped the palliative care environment in England and Wales. Globally, the research has helped set standards in palliative care across more than 20 countries. Through international collaborations and research, these best practices have been adopted and tailored to diverse healthcare systems, establishing a global benchmark for the

Stanley S and Nwosu AC. Case Report: The use of advanced consent methodology and healthcare professional consultee to facilitate research participation in dying patients [version 1; peer review: awaiting peer review]. *AMRC Open Res* 2021, 3:3 (<https://doi.org/10.12688/amrcopenres.12961.1>)

Nwosu AC, Mayland CR, Mason S, Cox TF, Varro A, Stanley S, *et al.* Bioelectrical impedance vector analysis (BIVA) as a method to compare body composition differences according to cancer stage and type. *Clinical Nutrition ESPEN*. (2019) <https://doi.org/10.1016/j.clnesp.2019.02.006>

Collaborators

Marie Curie Hospice West Midlands; Dr Laura Chapman (Marie Curie Hospice Liverpool, UK); Dr Trevor Cox (Liverpool Cancer Trials Unit, UK).

Funding

Academy of Medical Sciences, £24,250; UKH Foundation, £5,000; Anne Duchess of Westminster's Charity, £5,000; LCCG Research Capability Funding (RCF) streams, £22,029. Marie Curie, £14,025.

highest quality of care for dying patients. In recognition of this, the PCU has been invited by the University of Liverpool to develop an Impact Case Study to the 2028 Research Excellence Framework (REF), the UK's system for assessing the excellence of research in UK higher education providers, and work is ongoing to refine and develop the case study and provide evidence of the PCU's global impact.

The PCU Research Portfolio

Research Theme 2: Supportive and Palliative Care

Serious Illness Care Programme UK

PCU Lead: Dr Stephen Mason

The Serious Illness Care Programme (SICP), developed by Ariadne Labs and Harvard University, is a 'systems-wide' complex intervention to promote communication and individualised care planning between clinicians and patients with serious illness. It supports informed choices about care, including care at the end of life.

Working in partnership with Ariadne Labs, the PCU has developed projects to facilitate the implementation of and research around SICP in the UK, including a national implementation initiative with developmental sites including Northwick Park Hospital, London, and hospitals within trusts in Gateshead, Newcastle, and Northumbria. Within Liverpool, SICP has been implemented in Renal Medicine at LUHFT, with a parallel pilot in Respiratory Medicine as a precursor to wider roll-out. Further development plans include a pilot within in Emergency Medicine. New evidence on the effects of SICP was reported in a PhD thesis examining patient and clinician experiences of engaging in Serious Illness Conversations, completed by PCU staff member Tamsin McGlinchey in 2024.

Plans for 2024/25 include the development of a project group with the International Collaborative for Best Care for the Dying Person, led by Professor Anna Sandgren and Dr Stephen Mason, to further explore the potential of international projects to develop the SICP.

Publications

McGlinchey T, Mason S, Coackley A, Roberts A, Maguire M, Sanders J, *et al* (2019). Serious Illness Care Programme UK: assessing the 'face validity', applicability and relevance of the serious illness conversation guide for use within the UK health care setting. *BMC Health Services Research* 2019;19(1):384. <https://doi.org/10.1186/s12913-019-4209-8>.

Collaborators

Professor Susan Block (Harvard Univ. US); Professor Justin Sanders (McGill Univ. CA); Dr Alison Coackley (Countess of Chester Hospital NHS Foundation Trust, UK).

Liverpool Research for All Palliative Care Clinicians (L-RESPACC)

PCU Lead: Dr Stephen Mason

The PCU's Dr Stephen Mason collaborated with colleagues from across Europe to deliver the EU ERASMUS+-funded RESPACC project, which provides a framework to assess and promote basic research competences as part of the core clinical practice of palliative care professionals. RESPACC delivered::

- A core research competences framework;
- Guidelines for critical reading and academic writing;
- Webinars on undertaking research in palliative care;
- Guidance material on methodology, design, data collection and analysis of qualitative and quantitative research;
- Training events for clinicians.

The lessons from RESPACC are now being developed as a pilot implementation project with palliative care teams at both the Royal Liverpool and Aintree sites of LUHFT. L-RESPACC will provide research training days and will support a selected number of staff in a 'Research Learning Set' to develop and enhance their research skills. Evaluation of the L-RESPACC pilot will enable refinement of the programme to support palliative care clinicians at LUHFT and beyond.

Publications

Mosoiu D, Payne S, Predoiu O, Arantzamendi M, Ling J, Tserkezoglou A, *et al*. Core Palliative Care Research Competencies Framework for Palliative Care Clinicians. *Journal of Palliative Medicine*. 2023;27(4):471-80. <https://doi.org/10.1089/jpm.2023.0399>

Mason S, Ling J, Mosoiu D, Arantzamendi M, Tserkezoglou AJ, Predoiu O, *et al*. Undertaking Research Using Online Nominal Group Technique: Lessons from an International Study (RESPACC). *Journal of Palliative Medicine*. 2021. <https://doi.org/10.1089/jpm.2021.0216>

The PCU Research Portfolio

Reducing Emergency Admissions for Patients with Cancer Complications and/or Co-Morbidities (REAP-CCC)

PCU Lead: Professor John Ellershaw

Developed in partnership with The Clatterbridge Cancer Centre, this project seeks to address the gaps in understanding why cancer patients with complications or co-morbid conditions, referred to as type 3 presentations, frequently visit emergency departments (ED). Unlike type 1 and type 2 presentations, which have established pathways (where ED attendance leads to a cancer diagnosis or results from cancer treatment complications), type 3 presentations often involve complex, multifaceted issues that lead to unplanned and recurrent ED admissions. These emergency visits not only impose financial burdens on healthcare systems but also create distressing and confusing experiences for patients.

The REAP-CCC study aims to explore the holistic needs of type 3 cancer patients, considering psychosocial concerns, decision-making processes, and the influence of family, friends, and healthcare professionals. Data reveals that 50% of unplanned cancer care involves type 3 patients, with 88% of these cases being palliative. These patients typically present with cancer progression, pain, and effusion, often leading to multiple emergency readmissions within a year.

The study involves interviewing patients, families, and healthcare professionals to identify the reasons behind ED visits and explore whether alternative services could have prevented these admissions. The research will contribute to developing new models for urgent cancer care, with a particular focus on cancer care for the elderly, and findings will help to facilitate the design of interventions to reduce unnecessary ED admissions for type 3 cancer patients.

Collaborators

Dr Lynda Appleton, Dr Ernie Marshall (The Clatterbridge Cancer Centre, UK); Professor Helen Poole, Ms Lisa Jones (Liverpool John Moores Univ., UK); Mr Elliot Graves, Dr Joe Abbott (Liverpool Univ. Hospitals NHS Foundation Trust, UK); Ms Michelle Timoney (Liverpool CCG, UK); Dr Cathy Hubbert (Aintree Park Group Practice, UK)



The PCU Research Portfolio

Research Theme 3: Education Research & Development

Evaluation of the SWAN educational programme to improve healthcare professionals' confidence and competence in providing care for the dying

PCU Lead: Tamsin McGlinchey/Dr Stephen Mason

The SWAN (Signs, Words, Actions, Needs) Model of care was developed in 2012 under the leadership of Fiona Murphy RGN MBE to support and guide healthcare professionals in caring for patients and their families at the end of life. It is underpinned by the five key priorities of care for the dying patient outlined in the 'One Chance to Get it Right' report from the National Leadership Alliance for the Care of the Dying. Since its inception, the SWAN Model has been implemented into LUHFT along with 60 other hospitals.

A SWAN Scholarship programme has been developed as a joint initiative between LUFHT and the University of Liverpool. It encompasses two Master's-level modules (Advanced practice in Palliative Care and Advanced Practice in End-of-Life Care) resulting in the award of a Postgraduate Certificate in Palliative and End of Life Care. The first cohort of 15 SWAN Scholars completed their PGCert in 2023, and a second cohort is underway. This study will evaluate the impact of the scholarship programme across the domains of knowledge, skills, and attitude, using the reflective assignments completed by the SWAN Scholars and through focus groups, to identify if and how the study programme promotes changes to practice and improves patient care.

Evaluation of Communication Skills Training in Discharge Planning

PCU Lead: Anita Roberts/Dr Stephen Mason

Effective and timely discharge planning for patients with complex healthcare needs is a key priority within the NHS, and having a robust policy for discharge planning is a core requirement for all NHS hospitals. For these patients, ensuring a timely and safe discharge from hospital with appropriate support is one of the main drivers for preventing emergency

readmissions. Effective communication skills are essential for nurses to facilitate patient involvement, education, and coordination in the discharge process, but literature suggests this remains one of the most common barriers to effective and timely discharge planning.

This research aims to evaluate a training programme designed to enhance nurses' communication skills in discharge planning for patients with complex healthcare needs who have been admitted to the ED. Specifically, it seeks to assess changes in communication approaches, and explore perceived challenges to discharge planning, following participation in the communication skills training course 'Improving Complex Conversations in Discharge Planning'.

Funding: £21,818 from Liverpool University Hospitals NHS Foundation Trust

PALPREP – Preparedness of Junior Doctors to Practise Palliative Care within Hospitals

PCU Lead: Dr Stephen Mason

The General Medical Council recognises the importance of including palliative care (PC) within the undergraduate medical curriculum. However, there is currently no guidance on the extent to which PC is included, leading to great variation between UK medical schools. It is imperative that junior doctors feel prepared and supported to practise PC within the acute medicine setting to enable delivery of quality end-of-life care and also to ensure their own emotional wellbeing. PALPREP will investigate the preparedness of Foundation Doctors to practise palliative care to: establish self-efficacy, attitudes, and support available to foundation doctors when practising palliative care; estimate how many patients foundation doctors have cared for with end-of-life needs; investigate the quantity and quality of training received at medical school and during foundation training in palliative care medicine, and establish suggestions to improve palliative care training at undergraduate and postgraduate level. Data collection for Phase 1 will be complete by autumn 2024, with longitudinal assessments further engaged in summer 2025.

Collaborators

Dr Jessica Craig and Dr Alba Saenz De Villaverde Cortabarría (LUHFT)

The PCU Research Portfolio

CODE-YAA: COLlaboratively DEveloped culturally Appropriate and inclusive Assessment tool for Palliative Care Education

PCU Lead: Dr Stephen Mason

The World Health Organisation (WHO) proposes that palliative care should be provided at all levels of care through person-centred and integrated health services that pay special attention to individuals' specific needs, values, and preferences. Evidence supporting investment in palliative care shows that it is effective in reducing suffering for patients and families, and is cost-effective for integrated health care systems. Hence, the goal of this EU COST Action project is to set quality indicators to establish a gold standard for high-quality education and training in palliative care. CODE-YAA aims to measure, explore, and promote access to palliative care education and training in the WHO Euro-region.

Current activity of Work Group 1, led by Dr Stephen Mason, is the development of the CODE-YAA tool following a Scoping Review and international Delphi study, due to be completed early in 2025. Further information is available at <https://codeyaa.eu/>.

Publications

Paal P, Mason S, Larkin P, Hökkä M, Economos G, Pawlowski L, et al. Cultivating excellence in palliative care education and training: a network and thematic deep dive into CODE-YAA@PC-EDU initiatives. *Palliative Medicine in Practice*. 2024;0(0).

Collaborators

Prof. Piret Paal (Univ. of Tartu, EE – Study CI); Prof. Sandra Martins Periera (Univ. Católica Portuguesa, PO); Prof. Phil Larkin (Univ. de Lausanne, CH); Prof. Minna Hökkä (Diaconia Univ. of Applied Sciences, FI); A.Prof.r Gil Goldzweig (Academic College of Tel-Aviv, IS); Prof. Pablo Hernandez Marrero (Univ. Católica Portuguesa, PO); Dr Guillaume Economos (Centre de Soins Palliatifs, FR)

Funding

European Cooperation in Science and Technology (EU COST Action) €151,851.59

The Global IMEP (International Assessment of Medical Education in Palliative Care) Initiative

PCU Lead: Dr Stephen Mason

Formerly a Taskforce project of the European Association for Palliative Care (EAPC) Steering Group for Medical Education and Training, the IMEP project seeks to assess how prepared newly-qualified doctors are to care for patients with palliative care needs. The PCU has established the feasibility of collecting data using translated versions of validated scales (originally developed by the PCU), which have been used in 16 countries. Internationally, work continues to support studies that examine the development and assessment of clinical education in palliative care.

Publications

Marciniak K, Scherg A, Paal P, Mason S, Elsner F. The outcomes of postgraduate palliative care education and training: assessment and comparison of nurses and physicians. *BMC Palliat Care* 22, 94 (2023). <https://doi.org/10.1186/s12904-023-01217>

Hagedorn C, Tadevosyan A, Mason S *et al.* Palliative Care education in Armenia: perspectives of first-year Armenian physician residents. *BMC Palliat Care* 21, 53 (2022). <https://doi.org/10.1186/s12904-022-00938-z>

Gryschek G, Cecilio-Fernandes D, Mason S, *et al.* (2020). Assessing palliative care education in undergraduate medical students: translation and validation of the Self-Efficacy in Palliative Care and Thanatophobia Scales for Brazilian Portuguese. *BMJ Open* 2020;10:e034567. <http://dx.doi.org/10.1136/bmjopen-2019-034567>

Rai A and Mason S (2019). The development and evaluation of an electronic tool to assess the effect of undergraduate training in palliative care: the International Medical Education in Palliative Care (IMEP-e) assessment tool. *BMC Palliat Care* 18:76 <https://doi.org/10.1186/s12904-019-0460-3>

Collaborators

Prof. Frank Elsner (Aachen Univ., DE); Prof. Piret Paal (Univ. of Tartu, EE).

The PCU Research Portfolio

Identification of Digital Health Priorities for Palliative Care Research: Modified Delphi Study

PCU Lead: Dr Amara Nwosu

The aim of this project is to identify the research priorities, challenges and ethical considerations for the use of data-sharing technologies in palliative care (specifically, machine learning, artificial intelligence, the Internet of Things, wearable technology, mobile apps and Big Data analytics).

The study has been completed and was published in *JMIR Aging*. Data to support the development of this work has previously been presented at local, national and international conferences. Most recently, Dr Nwosu has presented the study outcomes at the Palliative Care Congress (2021), St Ann's Hospice & Stockport Foundation Trust Specialist Palliative Care Conference (2022) and the 4th Annual Research Symposium of the Scholl Academic Centre, Isle of Man (2022). Dr Nwosu was awarded the 2020 Churchill Fellowship and in 2023 travelled to the Netherlands (Erasmus Medical Centre, Delft University of Technology and the Netherlands Comprehensive Cancer Organisation (IKNL)) and the USA (Dana Farber Cancer Institute, Harvard Medical School and Massachusetts Institute of Technology (MIT)) to research how digital health technology can improve palliative care. Findings will be used to develop recommendations, in partnership with Marie Curie, to provide a framework for researchers to explore how digital health methods can support UK palliative care.

Publications

Nwosu AC. Telehealth requires improved evidence to achieve its full potential in palliative care. *Palliative Medicine*. 2023 Jul;37(7):896-7.

Nwosu AC, McGlinchey T, Sanders J, Stanley S, Palfrey J, Lubbers P, Chapman L, Finucane A, Mason S Identification of Digital Health Priorities for Palliative Care Research: Modified Delphi Study. *JMIR Aging* 2022;5(1):e32075 (<https://aging.jmir.org/2022/1/e32075>)

Crosby B, Hanchanale S, Stanley S and Nwosu AC. Evaluating the use of video communication technology in a hospital specialist palliative care team during the COVID-19 pandemic [version 1; peer review: awaiting peer review]. *AMRC Open Res* 2021, 3:5 (<https://doi.org/10.12688/amrcopenres.12969.1>)

Nwosu, AC, Sturgeon B, McGlinchey T, Goodwin CD, Behera A, Mason S *et al*. Robotic technology for palliative and supportive care: Strengths, weaknesses, opportunities and threats. *Palliative Medicine*. <https://doi.org/10.1177/0269216319857628>

Collaborators

Prof. Justin Sanders (McGill Univ., CA); Dr Terry Payne (Univ. Liverpool, UK); Dr Brendan Collins (Univ. Liverpool, UK); Dr Laura Chapman (Marie Curie Hospice Liverpool, UK); Jennifer Palfrey (Princess Alice Hospice, UK); Patrick Lubbers (Netherlands Comprehensive Cancer Organization, NL); Anne Finucane (Univ. of Edinburgh, UK).

Funding

LCCG, £20,970; LCCG, £807; Wellcome Trust, £360.

Development of 'Use Cases' for a Digital Palliative Care Bereavement Service

PCU Lead: Dr Amara Nwosu

In this study we will interview staff and caregivers about bereavement support to understand what a digital bereavement service should look like. This information will be used to design the 'blueprint' which is needed to design a new digital bereavement support service. In computer science this 'blueprint' is called a 'use-case'. We will partner with computer developers to design 'use-cases' which we can then use to build a digital bereavement service. After this study we will do more research to test whether the new digital bereavement service is helping more people to get the support they need. Data to support the development of this work was presented at the European Association of Palliative Care World Congress (2022).

Collaborators

Dr Amjad Fayoumi (Lancaster Univ., UK); Dr Laura Chapman, Sarah Stanley and Marie-Claire Mulcahy (Marie Curie Hospice Liverpool, UK).

Funding

LCCG, £17,869.28.

The PCU Research Portfolio

Research Theme 4: Clinical Pharmacy & Pharmacology

SCUTI48—An International Survey of Continuous Subcutaneous Infusions: is there an unmet need for extended infusions of 48 hours and beyond?

PCU Lead: Dr Andrew Dickman

The PCU has developed a pharmacist-led study group to investigate the potential for increasing the maximum infusion time from 24 to 48 hours for continuous subcutaneous infusions (CSCIs), commonly used in end-of-life care. This step-change in clinical practice may have numerous benefits in both patient care and health service resource utilisation. SCUTI48, an extension of the ChemDEL work, began in September 2023. It is an international service evaluation with study centres in the UK, Ireland, Germany, Australia, New Zealand and Japan. A global medical technology company has signalled its intention to support further work should a clinical need be identified by this project.

Publications

Baker J, Dickman A, Mason S *et al.* An evaluation of continuous subcutaneous infusions across seven NHS acute hospitals: is there potential for 48-hour infusions? *BMC Palliat Care* 19, 99

(2020). <https://doi.org/10.1186/s12904-020-00611-3>

Baker J, Dickman A, Mason S & Ellershaw J 2018. The current evidence base for the feasibility of 48-hour continuous subcutaneous infusions (CSCIs): A systematically-structured review. *PLoS One*, 13, e0194236. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0194236>

Collaborators

Penny Tuffin (WA Country Health, AU); Emma Griffiths (Univ. Auckland, NZ); Dr Denise Hayes (Univ. Hospital Waterford, IE); Constanze Remi (Univ. Munich Hospital, DE); Dr Yuko Yoshida (Osaka Univ., JP); Melissa Russell (Liverpool John Moores Univ., UK)





The Learning & Teaching Programme

The PCU remains at the forefront of education and training in palliative care, developing the knowledge and skills of senior national and international clinicians and academics and enabling them to make a difference through direct clinical care, leadership and organisational management.

The PCU Learning & Teaching (L&T) programme is categorised under three themes:

- Undergraduate education;
- Postgraduate education;
- The Centre for Communication Skills Education and Training;

This section of the report describes the active projects within each of these themes and the progress made against them in 2023/24.

L&T Theme 1: Undergraduate Education

The University of Liverpool MBChB Programme: Palliative Medicine Theme

The PCU leads palliative care education and student-centred Communication for Clinical Practice (CfCP) training within the University of Liverpool's fourth year MBChB curriculum, working in close collaboration with expert clinicians from seven local hospices. The 2023/24 academic year has seen the second

The PCU Learning & Teaching Programme

delivery of the updated palliative medicine/oncology/haematology block as part of the new curriculum. A total of 381 students undertook two-week palliative medicine placements with multi-disciplinary specialist palliative care teams during this period, incorporating clinical observation, practice, and teaching during both placements and CfCP. This approach has facilitated the application of theory to practice.

Changes to the CfCP programme this year have again been driven by student and facilitator evaluations and involve a double opportunity for experiential learning. Evaluations demonstrated the rise in comfort and confidence in students' self-perceived ability and willingness to initiate and engage with complex and sensitive conversations from day 1 to day 3 of the programme. In short, the vast majority of students have indicated that they feel more prepared for complex and challenging conversations in clinical practice as a result of the facilitated three-day programme.

The CfCP programme delivered during this period has rated between 4.7 and 4.88 out of 5 on student satisfaction, with the palliative medicine, CfCP teaching, and student experience once again being commended by both the Quality Team and the Dean at the School of Medicine. We are also proud to say that the University of Liverpool School of Medicine's innovative delivery of palliative care education, led by the PCU and hospices within the Mersey Region, is recognised by the General Medical Council as a model of good practice as highlighted in its undergraduate medical education case studies, indicating many positive outcomes for clinical practice. To read the case study, visit <https://www.gmc-uk.org/education/standards-guidance-and-curricula/guidance/undergraduate-clinical-placements/palliative-care-clinical-placement-at-school-of-medicine-university-of-liverpool>

The School of Medicine Undergraduate Research Scholar Programme

The School of Medicine Undergraduate Research & Scholarship Programme at the University of Liverpool allows students an opportunity to develop creative and independent critical thinking skills within a specific area of research interest. During 2023/24, the PCU has supported two students who have successfully submitted their work and will explore further opportunities for conference presentation and publication.

The Association for Palliative Medicine Special Interest Forum for Undergraduate Medical Education

The PCU continues to work in close collaboration with the University of Cambridge on the development of the Association for Palliative Medicine Undergraduate Medical Education Special Interest Forum (APM SIF). The SIF is co-chaired by Professor John Ellershaw and Professor Stephen Barclay, Professor of Palliative Care, General Practitioner and Honorary Consultant Physician in Palliative Care at the University of Cambridge.

The APM SIF holds an annual meeting for educators from around the UK interested in teaching palliative medicine to undergraduates. The well-attended 2023 meeting, hosted by the PCU at the prestigious RCP North in Liverpool, was entitled "Contemporary Issues in Undergraduate Palliative Medicine Education". The next meeting will be held in Cambridge in October 2024.

L&T Theme 2: Postgraduate Education

Masters in Palliative & End of Life Care

The MSc in Palliative and End of Life Care (see <https://www.liverpool.ac.uk/courses/2024/palliative-and-end-of-life-care-msc>) has been developed to enable healthcare and allied professionals, and intercalating medical students, to engage with both theoretical and practice elements in the study of Palliative and End of Life Care at Master's level. Designed for all healthcare and allied professionals who support patients with life-limiting illness, the programme seeks to develop critical understanding of the evidence that underpins the practice and development of palliative and end-of-life care services. Work-based learning placements within specialist palliative care settings provide students with the opportunity to contextualise learning. Students also undertake Advanced Communication Skills Training, delivered by the PCU's internationally renowned experts and designed to develop and enhance skills to address challenges frequently encountered in practice.

The PCU Learning & Teaching Programme

Within the programme are four 30-credit modules, which cover:

- design of effective education strategies for enhancing basic research competences across members of multidisciplinary palliative care teams;
- stimulating the development and use of innovative approaches to increase uptake of evidence-based research;
- increasing research capacity for palliative care practitioners;
- raising awareness regarding the importance of research integration into clinical practice.

In addition to the core students within the programme, the Advanced Practice in Palliative Care module supports CPD learning and addresses competencies for trainees in Internal Medicine, Care of the Elderly and General Practice, while the Research Methods modules engage students from across the University's institutes, including Psychology, Nursing and the Integrated Clinical Academic Trainee programmes. Flexible learning continues to be a key focus for the PCU, and the use of technology enhanced and blended learning remains an important element within the academic programmes provided.

Palliative Medicine Training Course for Specialist Registrars

Palliative Medicine training for Specialist Registrars and GP trainees continues to form part of the PCU Learning and Teaching programme and remains embedded within the Masters-level MDSC 160 Advanced Practice in Palliative Care course. This offers participants the flexibility of undertaking study with credit or non-credit bearing options. The course is delivered jointly by PCU academic staff and senior palliative care clinicians, giving the additional benefit of supervised clinical visits and the inclusion of Advanced Communication Skills Training. Participants continue to share learning with healthcare professionals undertaking the credit-bearing Masters-level course, which provides the benefits of a multi-professional approach.

Training for Teachers in Palliative Care

This international multi-disciplinary course continues to be delivered in collaboration with Dr Ruthmarijke Smeding, a senior Educational Psychology consultant from the Netherlands. The course aims to equip senior professionals with modern and effective ways of teaching in palliative and end-of-life care using specific educational theory. The course has proved extremely successful since its introduction into the PCU portfolio and was delivered in 2024 with 22 delegates from across Europe.

European Association for Palliative Care Reference Group on Medical Education and Training

The PCU continues to contribute to, and collaborate with, the activities of the EAPC Reference Group. Dr Stephen Mason is a co-chair of the Steering Group, and Professor Ellershaw collaborates with Professor Piret Paal of the University of Tartu, Estonia, to co-lead a new taskforce that will identify and examine indicators for palliative care education across Europe.

Cheshire & Merseyside Palliative & End of Life Care Network Education Strategy Sub-Group: Palliative Care Unit Education Hub

This is a collaborative group that aims to make recommendations and encourage consistency in the development and delivery of high-quality education and training in palliative and end-of-life care across Cheshire and Merseyside. The group also aims to support education and training that helps staff at all levels to improve their skills, knowledge and confidence to care for people who are at the end of their lives, irrespective of their medical condition or location of care, and to support the people who are important to them. The Strategy Group reports to the Palliative and End of Life Care Delivery & Oversight Group for Cheshire & Merseyside, which sits within the Governance Framework for NHS Cheshire & Merseyside.

Some of the key drivers to support the aims of the Education Strategy Group include the NHS Long Term Plan (specific to End

The PCU Learning & Teaching Programme

of Life Care), Personalised Care and Support Planning, Early Identification, Skilled Workforce, Carer Support, Ambitions – national framework for local action, Ageing Well Programme and Enhanced Health in Care Homes Framework.

As a core member of the Strategy Group, the PCU leads the Liverpool Education “Hub” as part of a hub and spokes model of collaboration across Trusts and organisations, facilitating, supporting and delivering creative training models. An



ADVANCE CARE PLANNING



North West Coast Learning Collaborative

example of this is the Mayfly Programme which, as a cascade model delivered to frontline staff, aims to reduce hospital admissions by raising awareness and encouraging care planning conversations, whilst at the same time recognising the challenges that these sensitive conversations pose for both patients and healthcare workers.



The PCU Learning & Teaching Programme

L&T Theme 3: The Centre for Communication Skills Education and Training

The PCU has a long-established record of delivering communication skills training at all levels. The Centre for Communication Skills Education and Training brings together much of the current teaching provision offered by the PCU to provide a platform for the development and delivery of new concepts within communication skills education, training and research. In addition to its core course portfolio delivered on-site at the University of Liverpool, the centre also delivers specially-commissioned courses for external organisations.

Advanced Communication Skills Training (ACST) for Senior Healthcare Professionals

This two-day multi-professional course uses a variety of teaching methods that allow experienced senior professionals to explore the evidence base relating to effective communication within healthcare, and to examine the application of specific communication skills strategies to complex healthcare interactions. The course is led by facilitators with a clinical background in healthcare and a wealth of experience in delivering ACST across the UK and internationally.

The experiential approach of the course allows participants to examine complex communication-related topics using actor-based simulated patient scenarios. The programme draws upon a participant-led agenda, allowing time to reflect upon current expertise, practise newly developed skills with the use of role play, and receive constructive feedback within an interactive, intensive, but safe and supportive learning environment.

Both virtual and face-to-face courses have been provided during 2023/24 and have received very positive feedback.

Facilitator Training for ACST

This three-day multi-professional course prepares facilitators to deliver high quality, evidence based ACST courses. The main aim of the course is to develop participants' knowledge and understanding of teaching and assessing communication skills at an advanced level.

The course provides an opportunity to gain up-to-date knowledge of the evidence base surrounding the application of communication skills training and course design. Participants learn how to set up and facilitate role play, how to use video feedback and discussion safely and effectively, to understand and manage group dynamics, and how to work with actors.

The course has been used to train facilitators across the UK to the standard of the National Advanced Communication Skills Programme (Connected). It is open to senior healthcare professionals who have completed an ACST programme and who want to be actively involved in teaching communication skills to healthcare professionals.

The COVID-19 pandemic magnified the importance and value of good communication in health and social care, and as a result there has been a surge in demand for Facilitator Training to enable Trusts and other organisations to deliver ACST courses for their own staff. The face-to-face courses delivered in 2023/24 evaluated very positively and there is already a waiting list for courses to be delivered in 2024/25.

PCU Objectives

The PCU sets annual objectives that consolidate the developments and successes achieved in-year to enable impactful and meaningful academic outputs in line with the University of Liverpool's overall mission - for advancement of learning and ennoblement of life.

In working towards its annual objectives, the PCU continues to strive for excellence and aims to maintain its position at the forefront of palliative care research and education. The scope of work delivered by the PCU in 2023/24 is clearly demonstrated in the preceding sections of this report, and the unit has made great strides in achieving its annual objectives.

Inspired by the successes of 2023/24 and the new opportunities that the coming academic year will bring, the objectives set by the PCU for 2024/25 are challenging yet achievable. They are set out below.

2024/25 Palliative Care Unit Objectives

Research & Development

- To deliver the Research & Development objectives for the LUHFT End of Life & Bereavement Strategy
- To be awarded £250k in research grants, including 1 x NIHR/BC grant
- 10 publications in journals with impact >1; 2 publications in journals with impact factor ≥5
- Refine and develop the impact case study for the 10/40 Model for Best Care for the Dying Person
- Develop a strategy for recruitment and capacity building to support Masters and PhD students
- Engage in strategic development of the PCU within Cardiovascular & Metabolic Medicine (CMM)
- Implement a Palliative Care Research Strategy with the Head & Neck Cancer Centre
- Implement the RESPACC framework for academic engagement and development of clinical staff

Learning & Teaching

- To deliver the International Conference for Best Care for the Dying Person, November 2025
- Establish MSc Palliative Care paediatric module
- Establish a Learning & Teaching programme for the Serious Illness Care Programme
- To ensure high-quality delivery of the palliative medicine component of the MBChB programme
- To undertake two international education projects

Conclusion

The PCU has made significant progress across its portfolio during 2023/24, and is committed to maintaining this momentum into the new academic year and beyond.

The successes achieved in 2023/24 are testament to the dedication and commitment of the PCU team. In pursuing the highest standards of research and education delivery, each member has played a pivotal role in the promotion of compassionate and comprehensive care.

The PCU's ground-breaking studies and publications continue to contribute to the advancement of palliative care knowledge and practice. The collaboration between clinicians, researchers, and educators has been the

driving force behind these achievements, which have occurred in an environment of innovation and a culture of academic excellence.

The PCU, along with its international academic partners, eagerly anticipates the possibilities that the coming year holds, and looks forward to the continued pursuit of its mission: to be a centre of excellence, bringing together academic and clinical expertise in palliative and end-of-life care that drives forward outstanding evidence-based care for patients and their families.



Appendix

Appendix I: Publications

Published in 2024

1. Hanchandle S, Nwosu AC, Boland JW. New UK palliative medicine consultants: clinical and non-clinical preparedness after higher specialty training. *BMJ Supportive & Palliative Care* Published Online First: 23 February 2024. <https://doi.org/10.1136/spcare-2023-004413>
2. Yildiz B, Van Der Heide A, Bakan M, Skorpen Iversen G, Faksvag Haugen D, McGlinchey T, Smeding R, Ellershaw J, Fischer C, Simon J, Vibora-Martin E, Ruiz-Torres I, Goossensen A. Facilitators and barriers of implementing end-of-life care volunteering in a hospital in five European countries: the iLIVE study. *BMC Palliative Care* 23, 88 (2024) <https://doi.org/10.1186/s12904-024-01423-5>
3. Nwosu AC, Mills M, Roughneen S, Mason S, et al. Virtual reality in specialist palliative care: a feasibility study to enable clinical practice adoption. *BMJ Supportive & Palliative Care* 2024; 14:47-51 <https://doi.org/10.1186/s12904-024-01351-4>
4. Suija K, Mason S R, Elsner F. *et al.* Palliative care training in medical undergraduate education: a survey among the faculty. *BMC Palliat Care* 23, 19 (2024) <https://doi.org/10.1186/s12904-024-01351-4>
5. Liang JZ, Ng DKW, Raveendran V, Teo MYK, Quah ELY, et al. The impact of online education during the Covid-19 pandemic on the professional identity formation of medical students: A systematic scoping review. *PLOS ONE* 19(1): e0296367 <https://doi.org/10.1371/journal.pone.0296367>
6. Mosoiu D, Payne S, Predoiu O, Arantzamendi M, Ling J, Tserkezoglou A, Mitrea N, Dionisi M, Martinez M, Mason S, Ancuta C, Centeno C. Core Palliative Care Research Competencies Framework for Palliative Care Clinicians. *Journal of Palliative Medicine* 27 : 4 471-480 <https://doi.org/10.1089/jpm.2023.0399>
7. Paal P, Mason S, Larkin P, Hokka M, Economos G, Pawlowski L, Pereira S, Hernandez-Marrero P, Goldzweig G. Cultivating excellence in palliative care education and training: a network and thematic deep dive into CODE-YAA@PC-EDU initiatives. *Palliative Medicine in Practice* <https://doi.org/10.5603/pmp.100189>
8. Walshe C, Dunleavy L, Preston N, Payne S, Ellershaw J, Taylor V, Mason S, Nwosu A, Gadoud A, Board R, Swash B, Coyle S, Dickman A, Partridge A, Halvorsen J, Hulbert-Williams N. Understanding barriers and facilitators to palliative and end-of-life care research: a mixed method study of generalist and specialist health, social care, and research professionals. *BMC Palliative Care* 23, 159 (2024) <https://doi.org/10.1186/s12904-024-01488-2>

Published in 2023

1. Chapman EA, Baker J, Aggarwal P, Hughes DM, Nwosu AC, Boyd MT, Mayland CR, Mason S, Ellershaw J, Probert CS, Coyle S. GC-MS Techniques Investigating Potential Biomarkers of Dying in the Last Weeks with Lung Cancer. *International Journal of Molecular Sciences*. 2023; 24(2):1591. <https://doi.org/10.3390/ijms24021591>
2. Latham JS, Sawyer H, Butchard S, Mason SR, Sartain K. Investigating the Relationship between Fear of Failure and the Delivery of End-of-Life Care: A Questionnaire Study. *Nursing Reports*. 2023; 13(1):128–144. <https://doi.org/10.3390/nursrep13010014>
3. McGlinchey T, Early R, Mason S, Johan-Fürst C, van Zuylen L, Wilkinson S, Ellershaw J. Updating international consensus on best practice in care of the dying: A Delphi study. *Palliat Med*. 2023 Feb 3:2692163231152523. doi: 10.1177/02692163231152523. Epub ahead of print. [10.1177/02692163231152523](https://doi.org/10.1177/02692163231152523)
4. Predoiu O, Tserkezoglou AJ, Payne S, Moşoiu D, Arantzamendi M, Martínez García M, Ling J, Dionisi M, Mason S, Centeno Cortes C. Development and piloting of a self-assessment measure of core research competencies for palliative care clinicians: the RESPACC project. *Paliatia – Journal of Palliative Care*. 16 (2) https://www.paliatia.eu/new/wp-content/uploads/2023/05/Jurnalul-Paliatia_apr-2023_1-6.pdf
5. Ting JJQ, Phua GLG, Hong DZ, (Mason) et al. Evidence-guided approach to portfolio-guided teaching and assessing communications, ethics and professionalism for medical students and physicians: a systematic scoping review. *BMJ Open* 2023;13: e067048. DOI: [10.1136/bmjopen-2022-067048](https://doi.org/10.1136/bmjopen-2022-067048)
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