Irish Pain Society

25th Annual Scientific Meeting

Theme: Pain Management, Research, and Education in Low- and Middle-Income Settings

PROGRAMME

2025

18th October 2025
Aras Moyla,
University of Galway

IPS ASM 2025 has been Endorsed by EFIC

www.irishpainsociety.ie

Irish Pain Society

Annual Scientific Meeting 2025

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Welcome from the President of the Irish Pain Society

Dear IPS ASM Delegates, Speakers and Chairs,

It is my great pleasure to welcome you all to the University of Galway and to our Annual Scientific Meeting (ASM) celebrating the 25th Anniversary of the Irish Pain Society (IPS). I would like to thank Prof. David Burn, the newly appointed President of the University of Galway, for opening this meeting. Established in 2000 by Dr Roísín O'Sullivan and colleagues, the Irish Pain Society comprised of multidisciplinary health care professionals and scientists across Ireland, dedicated to research, and educational and clinical aspects of pain management. The IPS is the national chapter of the International Association for the Study of Pain (IASP) and the European Pain Federation (EFIC), I am delighted that EFIC President Prof Luis Garcia-Larrea has been able to join us for this momentous occasion, and that this meeting has been endorsed and supported by the EFIC executive council. While Prof Andrew Rice President of IASP was unable to attend in person, he has sent a video message to congratulate the IPS on our 25th Anniversary and to acknowledge the role the society and its members has made to the IASP mission, to pain education, research and management.

To celebrate our 25th Anniversary, the IPS council have developed a stimulating high-quality multidisciplinary programme which will showcase the latest pain research and management approaches both nationally and internationally. I would sincerely like to thank all our invited speakers and chairs who have travelled from near and far, for their valuable contribution to the scientific programme and look forward to the opportunity for discussion, education and networking throughout the meeting.

In line with IASP Global Year, the theme of this year ASM is "*Pain Management, Research and Education in Low- and Middle-Income Settings*". Invited international and national speakers will highlight the complexity of pain and pain management in such settings, identify barriers, strategies, and the need to employ an interdisciplinary approach to pain management. Research talks will be complemented by a panel discussion on trauma-informed pain care, which will see participation from across the disciplines including from individuals with lived pain experience. I would like to thank all for their participation in this discussion.

In addition to stimulating research talks and discussion, a diverse range of discipline specific educational meetings and workshops have been arranged. I would like to thank the various groups from nursing (IPNMS), psychology, physiotherapy, medical procedures and basic science for organising and leading on these unique interactive opportunities for learning and networking.

This year we have had a record number of 62 abstracts submitted for short oral and poster presentations from across all pain disciplines. I congratulate the presenters today on their outstanding research, which demonstrates the high level and quality of pain research being conducted in our universities, hospitals and community settings across the Island of Ireland. As always, a number of prizes and awards are on offer for the best and runner-up presentations at the ASM. This year, I am delighted to announce the inclusion of an additional award, The Prof. Laserina O'Connor Medal for the best presentation from a nurse or advance nurse practitioner. Prof. O'Connor was the first nurse to become President of the IPS (2013-2015). She worked tirelessly to promote the IPS and pain management in Ireland, was recognised for her commitment to excellence in nursing care and for developing and leading several advance nursing educational programmes. Sadly, she passed away in 2022, however we are pleased to establish this new award in recognition of our colleagues' and

friends' valuable contribution to the IPS and to advanced nursing education in Ireland. I would like to thank Prof Brian McGuire for coordinating the poster and oral judging and to the judges of the pain research prizes for your valuable contributions.

This meeting would not be possible without the very generous support from our many trade exhibitors. We encourage delegates to visit their stands during the coffee and lunch breaks. In addition to hearing about their range products and services, by collecting a stamp at each exhibit booth you will be entered into a draw for a €200 gift voucher [first prize] and complimentary registration [second prize] for the Annual Scientific Meeting of the IPS in 2026.

A special word of thanks to my colleagues on the IPS council who have worked so hard to advance the mission of the society and in organising today's exciting meeting. It is a pleasure to work with such a dedicated and supportive group of individuals, particularly over the past 2 years during my Presidency. A special word of thanks to Ms Juliana Gonzalez and Ms Nicola Knowles on their exceptional administrative support during the year and to Ms Gonzales in her tremendous support with organising this ASM.

Finally, to all our delegates, I hope you enjoy the meeting.

Kind Regards

Michelle Roche

President of the Irish Pain Society

Scientific Programme

9.00-9.30	**Registration & Coffee** **Trade exhibition**
9.30-9.40	**Welcome by Dr Michelle Roche, University of Galway and IPS President** **Opening Address: Prof David Burn, President of the University of Galway**
9.40-10.10	***Plenary talk:*** Prof. Luis Garcia-Larrea, Lyon Neuroscience Centre, France and President of the European pain Federation EFIC **Cortical stimulation for chronic pain: from anecdote to evidence**
Session 1	**Chairperson: Dr Joanne O'Brien Kelly, Beaumont Hospital, Dublin**
10.10-10.40	***Nursing Speaker*** Dr. Nadja Nestler (Head of Department of Nursing Development Units at the Institute for Nursing Science and Practice of the Paracelsus Medical Private University, Salzburg, Germany. President of the German Pain Society). **Pain Management and Research from a Nursing Perspective**
10.40-11.10	***Psychology Speaker*** Prof. Kevin Vowles (Professor, School of Psychology, Queens University, Belfast) **Rehabilitative treatments for chronic pain: Three decades of lessons learned**
11.10-11.30	**Coffee break** **Trade exhibition and Poster presentations**
Session 2	**Chairperson: Dr Conor Hearty, Dean Faculty of Pain Medicine, Dublin**
11.30-11.50	***Pain Medicine Speaker*** Dr. David Moore, iPainCentre, Beaumont Hospital, Dublin **Developing an Integrated Community Based Pain Service: Lessons Learned**
11.50-12.30	**Trauma-informed Pain Care: Panel discussion and Q&A** Panelists: Dr David Moore (Clinician), Prof Kevin Vowles (Psychology), Roisin Hosie (Physiotherapist) and Niamh Walsh (Chronic Pain Ireland and person with lived pain experience)
Session 3	**Dr. Olga Baron, University College Dublin**
12.30-13.15	**Short Oral Presentations hosted by the Irish Pain Researchers Network (IPRN)**
13.15-14.30	**Lunch** **Trade exhibition and Poster presentations**

Session 4	Chairperson: Prof David Finn, University of Galway
14.30-15.00	***Physiotherapy Speaker*** Prof. Harriet Wittink (Professor Lifestyle and Health at HU University of Applied Sciences Utrecht, Netherlands) **Activity Patterns in Chronic Pain**
15.00-15.30	***Basic Science Speaker*** Prof. Jeffery Mogil (E.P. Taylor Professor of Pain Studies, Department of Psychology, McGill University, Montreal, Canada) **Pain, Sex, and Death**
Session 5	**Educational Meetings and Workshops**
15.30-16.30	**Room 1: Irish Pain Nurses** Educational Meeting: Chairs: Joanna Fahey & Patricia Molyneaux Transitional pain nursing to prevent chronic postsurgical pain
	Room 2: Irish Physiotherapy Group Educational Meeting: Chair: Prof Keiran O'Sullivan The role of Physiotherapists in identifying non-physical barriers to recovery from persistent pain
	Room 3: Irish Pain Psychologist Group Educational Meeting: Chair: Prof Brian McGuire **The role of Psychology in Chronic Pain Services; review, development and the model of care**.
	Room 4: Basic Science of Pain Educational Meeting: Chair: Prof Siobhain O'Mahony The future of animal models and the use of omics in pain research
	Room 5: Pain Medicine Procedures Workshop: Chair: Dr Tadgh Lynch Neurophysiology of Chronic Pain
Session 6	**Chairperson: Dr Michelle Roche (University of Galway and IPS President)**
16.30-16.45	Closing Address: **Prof Andrew Rice**, President of the International Association for the Study of Pain
16.45-17.00	**Prize-giving and Awards** The Pain Research Medals – awarded to best Clinical & Non-Clinical Pain Research Posters Dr Hugh Raftery Medal- awarded to best presentation by an NCHD Prof Laserina O'Connor Medal – awarded to best presentation by a nurse or ANP The Best Short Oral Medal – awarded to the best short Oral Presentation. Runner up prizes will also be awarded
	Meeting Ends

Irish Pain Society Council 2025

Name	Role
Dr. Michelle Roche	President
Prof. Siobhain O'Mahony	President-elect
Dr. Tadhg Lynch	Honorary Treasurer
AnnMarie Kiernan	Honorary Secretary
Prof. David Finn	IPS Rep on EFIC Council
Prof. Brian McGuire	IPS Representative on SIP
Dr. Joanne O'Brien	EFIC Executive Board Member
Dr. Andrew Purcell	Council Member
Dr. Cormac Mullins	Council Member
Dr. John Browne	Council Member
Prof. Kieran O'Sullivan	Council Member
Ms. Mary Patricia Molyneaux	Council Member
Dr. Olga Baron	Council Member
Dr. Patrick Finan	Council Member
Dr Zaeem Siddique	Council Member

Meeting Information

Registration: Delegates are asked to register in advance online and collect their name badges at the registration desk on arrival. Limited onsite registration will be available.

Getting to the Venue: Detailed travel information can be accessed here Travel to Galway - University of Galway. The meeting will take place in Aras Moyola at the University of Galway (Eircode H91E3YV).

Parking: For those driving to the venue, please note there are no parking restrictions in place on campus during weekends or after 17.30 Monday to Friday. During these times parking is available in any white line parking spaces on campus. Parking will be available on a first come basis. Further information relating to campus entrances for driving delegates can be found here Campus Entrances & Parking

Mobile phones: Please remember to keep mobile phones switched off or on silent during sessions.

WiFi: Guest Wi-Fi will be available via Eduroam and login details are provided at the registration desk.

Poster Presentations: Posters may be viewed at any time over the course of the meeting. Authors whose work has been accepted for a poster are expected to be available at their posters at the poster presentation times where poster judging will take place. Those with odd poster numbers will present from 13.30-14.00hrs and those with even numbers will present from 14.00-14.30hrs.

Pain Research Prizes:
Clinical and Non-Clinical Research Medals will be awarded for the best posters at the meeting.
Best Short Oral Presentation
The Hugh Raftery NCHD Medal will be presented to best poster by a non-consultant hospital doctor.
Prof Laserina O'Connor Medal awarded to best presentation by a nurse or ANP.
Runner up prizes will also be awarded

Trade Exhibition: The trade exhibition is an important part of the meeting and we encourage all participants to visit the various trade stands. As an additional incentive, delegates will receive a stamp on each time they visit a trade stand, and will be eligible to enter a competition for a €200 voucher (1st prize) and Free registration at next year IPS ASM (2nd Prize)

Evaluation Forms: In order to identify sessions and topics that have been of particular interest, all participants are asked to complete a digital evaluation form. The link for this can be found around the location with QR code link.

Continuing Education and Professional Development: 6 CPD points and 7 NMBI CPD points are awarded on receipt of a completed evaluation form

Certificate of Attendance : Certificate of attendance are available following this ASM

LinkedIn: Please feel free to use LinkedIn to promote the meeting (#IPSASM2025)

The Irish Pain Society would like to thank the following sponsors of the Annual Scientific Meeting

Gold Sponsors	
Lundbeck	**H. Lundbeck A/S** is a global pharmaceutical company that specializes in brain health. Founded in 1915 and headquartered in Copenhagen, Denmark, Lundbeck is committed to improving the lives of people living with psychiatric and neurological disorders. **"We are tirelessly dedicated to restoring brain health, so every person can be their best."** This mission reflects Lundbeck's deep commitment to neuroscience and its focus on improving the lives of people affected by brain diseases. The company focuses on research, development, manufacturing, and marketing of pharmaceuticals for diseases such as depression, schizophrenia, Alzheimer's disease, Parkinson's disease, and migraines. Lundbeck's mission is to restore brain health so every person can be their best. With a strong emphasis on innovation, Lundbeck invests heavily in research and development to discover and develop new treatments. The company operates globally, with thousands of employees and a presence in more than 50 countries.
pei Create Better Outcomes	PEI helps healthcare professionals and their teams deliver a variety of potential treatment pathways, based on the individual needs of patients. PEI is uniquely positioned to support Pain Management Clinicians, as we can provide RF Ablation, Spinal Cord Stimulators and Deep Brain Stimulators to support the treatment pathways required. We currently employ 5 employees on the pain team strategically located around the country. PEI has multiple patient clinics across Ireland, making it very suitable for pre-procedure education and post-procedure programming. We place a core focus on customer/patient expertise and education for the benefit of all involved.

The Irish Pain Society would like to thank the following sponsors of the Annual Scientific Meeting

Silver Sponsors	
EFIC EUROPEAN PAIN FEDERATION	**EFIC**
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PLATFORM20	**Platform 14**
QST.Lab	**QST Lab**
RELEVIUM MEDICAL	**Relevium Medical**
ROCKFORD HEALTHCARE	**Rockford Health Care**
TEKNO SURGICAL	**Tekno Surgical**

Biographies

and

Conference Abstracts

Opening Address and Plenary talk

Welcome and Plenary Chair: Dr. Michelle Roche, President of Irish Pain Society, University of Galway

Opening Address: Prof .David Burn: President of the University of Galway

Plenary talk

- **9.40-10.10: Prof. Luis Garcia-Larrea** - Cortical Stimulation for Chronic pain: from anecdote to evidence

Dr Michelle Roche: Dr Roche is Associate Professor in Physiology and Co-Director of the Centre for Pain Research at the University of Galway, Ireland. She is current President of the Irish Pain Society (2023-2025). Her research interests focus on enhancing understanding of the neurobiology and pathophysiology underlying pain, mood disorders, autism and their interactions. She has a particular interest sex differences and the role of the neuro-immune, endocannabinoid and opioid systems.

Professor David Burn is President of University of Galway. He became the 14th President of Ollscoil na Gaillimhe - University of Galway in September 2025. Previously, Professor Burn served as Pro-Vice Chancellor of the Faculty of Medical Sciences, Newcastle University since 2017 where he led transformative change initiatives to restructure faculty, accelerate research performance, advance equality, diversity and inclusion and drive internationalisation. Until July 2025, David was also Professor of Movement Disorders Neurology and Honorary Consultant Neurologist for Newcastle upon Tyne Hospitals NHS Trust.

Prof. Luis Garcia-Larrea

Cortical Stimulation for Chronic Pain: from anecdote to evidence

Luis Garcia-Larrea, MD, PhD (Madrid 1956) is Director of Research at INSERM (National Agency for Medical Research, France), at the Inserm/University research lab "Central Integration of Pain in Humans" (Lyon Neuroscience Center), and a clinical practitioner at the neurology department of CH Valence (Drôme). His research focuses on the cortical mechanisms supporting the translation of cortical nociception into

conscious pain; the instrumental diagnosis of neuropathic pain, and the use of cortical neuromodulation for pain relief. Author or co-author of over 250 publications and 60 didactic articles, and editor of the book "Pain and the Conscious Brain" (IASP-Wolters-Kluver 2016), he has served as deputy director of the Human Biology Department at Claude Bernard University in Lyon (2013-2017), President of the French and European Societies of Clinical Neurophysiology (EC-IFCN, 2010-2015), and editor-in-chief of the European Journal of Pain (2015-2023). Luis Garcia-Larrea was awarded the Grand Prix de Neurosciences by the Institut de France (2009) and the Guerra-Lambrecht-Maïano Prize for pain research by the same Institute (2015). He has also received the Ronald Melzack Award from the International Association for the Study of Pain (IASP, 2012), the Translational Research Prize from the Société Française de la Douleur (2014), the Erik Stälberg Prize from the IFCN (2023) and the Axel Kahn Prize from the French Anti-cancer Ligue (2024). He is currently President of the European Pain Federation EFIC.

Session 1

Chairperson: Dr Joanne O'Brien

- **10.10-10.40: Dr Nadja Nestler** - Pain Management and Research from a Nursing Perspective
- **10.40-11.10am: Prof Kevin Vowles –** Rehabilitative treatments for chronic pain: Three decades of lessons learned.

Dr. Joanne O'Brien

Chair Session 1

Dr O'Brien Kelly is a Registered Advanced Nurse Practitioner in Pain Management with 25 years clinical experience in the management of acute and chronic pain. In 2018 she was awarded an Employment Based Scholarship from the Irish Research Council completing a PhD with the RCSI in 2022 for the design and development of an eHealth information resource for patients living with Fibromyalgia, called FibromyalgiaMatters.ie.
In 2023 Dr O'Brien Kelly joined the Beaumont Hospital iPainCentre team, a Sláintecare funded project to develop the first Integrated Community Based Pain Service in Ireland. She is also a nurse representative on the working group currently developing a Model of Care for Pain Management in Ireland.

Dr O' Brien Kelly is a past president of the Irish Pain Society, past Irish Councillor to the European Pain Federation (EFIC) and in 2023, the first nurse to be elected to the Executive Board of the European Pain Federation, where she is Vice Chair of the EFIC Advocacy Committee and member of the EFIC Diploma in Pain Nursing (EDPN) committee.

Dr. Nadja Nestler

Pain Management and Research from a Nursing Perspective

Professor Nadja Nestler from Paracelsus Medical University of Salzburg, where she serves as deputy director, is a leading expert in Pain Nursing.
Her work focuses on chronic care, digital health, and the implementation of advanced practice nursing (APN) models. She leads several national research projects including initiatives on sensor-based fall and pressure ulcer prevention and the integration of APNs in care for specific groups.
With a background in coordinating multi-year projects on pain management in older persons and health literacy, she brings deep expertise in evidence-based nursing development. Prof Nanja Nestler is actively involved in shaping science policy, serving as President-elect for the German Society for Pain Medicine. She contributes to European and national guideline development. She is a member of key international organisations such as ICN and the European Pain Federation advancing nursing standards across clinical and academic settings.

Prof. Kevin Vowles

Rehabilitative treatments for chronic pain: Three decades of lessons learned

Over the course of his career, Kevin has worked almost exclusively in the area of chronic pain. He has been a key figure in the development and adaptation of Acceptance and Commitment Therapy (ACT) for this complex condition. His work is cited by the American Psychological Association's Division of Clinical Psychology and by the UK's National Institute for Health and Care Excellence (NICE) in their recommendations of ACT for chronic pain as an intervention with strong research support. Kevin's recent work has expanded to include issues of substance use in chronic pain, including opioids, benzodiazepines, and alcohol. In 2020, he co-chaired a pan-European task force which provided a comprehensive set of clinical practice recommendations regarding opioid use for chronic non-cancer pain.

Kevin completed his PhD in clinical psychology at West Virginia University in 2004 and post-doctoral fellowship at the University of Virginia the following year. From 2005 to 2009, he was employed by the Centres for Pain Research and Services at the University of Bath and Royal National Hospital for Rheumatic Diseases. Beginning in 2009, he accepted a position to provide psychology leadership in developing a novel interdisciplinary pain rehabilitation program with Keele University and the Haywood Hospital. After three years of trial funding, this program was deemed by the UK's National Health Service (NHS) to be highly effective in both clinical and financial terms and permanent funding was secured. This service was awarded with the National Care Integration Award in 2012. That same year,

Kevin moved to the Department of Psychology at the University of New Mexico, where he was promoted to Full Professor in 2019. Currently, he holds a chair as Professor of Clinical Psychology in the School of Psychology at Queen's University in Belfast, Northern Ireland and works clinically with the Belfast Centre for Pain Rehabilitation in the Belfast NHS Trust and Complex Pediatric Pain Service within Children's Health Ireland.

Regarding productivity, Kevin has published over 130 scientific articles since 2002. His work has been continuously funded by extramural bodies for almost two decades. He has been a part of developing three comprehensive interdisciplinary treatment programmes for chronic pain, two in the UK and one in the USA. His work on opioids for chronic pain is referenced in the policy documentation of several governmental bodies across the world. He delivered the 2019 BF Skinner lecture at the 45th annual meeting of the International Association for Behavior Analysis, which was about as cool as it gets for a behavior analyst trained in West Virginia.

Session 2

Chairperson: Dr. Conor Hearty

- **11.30-11.50am: Dr. David Moore** – Developing an Integrated Community Based Pain Service: Lessons Learned.
- **11.50-12.30: Trauma-Informed Pain Care: Panel discussion and Q&A**

  Panellists: Dr. David Moore (Clinician), Prof. Kevin Vowles (Psychologist), Roisin Hosie (Physiotherapy), Niamh Walsh (Chronic Pain Ireland and person with lived pain experience)

Dr Conor Hearty

Chair
Session 2

Dr Conor Hearty, Dean of the Faculty of Pain Medicine is a Consultant in Pain Medicine at the Mater Misericordiae University Hospital and the National Orthopaedic Hospital Cappagh. He obtained his undergraduate degree from University College Dublin in 2001. He subsequently completed his Anaesthesiology training in Ireland in 2011 after a short career in General Medicine in 2002.
During his Anaesthesiology training he developed a subspecialty interest in Pain Medicine which led to an interventional fellowship at St James' Hospital in 2008. He was appointed as a Consultant in Anaesthesiology and Pain Medicine at the Mater Misericordiae University Hospital and the National Orthopaedic in 2012 Cappagh, after completing a further Pain Fellowship at the Royal Adelaide Hospital in South Australia in 2011. He was involved in the development of techniques for cancer pain management and a regular contributor to acute pain practice. Dr Hearty passed the Australian and New Zealand College of Anaesthetists (ANZCA) Pain Faculty Examination in 2011.
His current work at the Mater Misericordiae University, where he is Lead Clinician of the Department of Pain Medicine, involves the development of interdisciplinary pain management services and interventional pain therapies including neuromodulation. Since his appointment at the Mater Misericordiae University Hospital he has championed the ACT pain management program, and is currently involved in ongoing research in this arena. Dr Hearty is an examiner with the Faculty of Pain Medicine. He is a member of the World Institute of Pain, the International Association for the Study of Pain (IASP) and a Fellow of Interventional Pain Practice

(FIPP) in 2008. He has been invited to speak at both national and international pain medicine meeting including the 2018 European Society of Regional Anesthesia, Pain meeting. He has acted as Faculty at several fluoroscopically guided interventional pain medicine cadaveric training courses. He has published peer-reviewed papers and presented posters on a variety of pain-related topics. Active areas of research include the study of botulinum toxin for the management of neuropathic pain

Dr. David Moore

MB, Bch, BAO, MRCPI, FCARSCSI, FFPMCAI

Developing an Integrated Community Based Pain Service: Lessons Learned

Dr David Moore is a Consultant in Anaesthesiology and Pain Medicine. He is the Clinical Lead of the Department of Pain Management in Beaumont Hospital, Dublin and Clinical Lead for the Sláintecare-funded iPainCentre in Beaumont Hospital and the MyPainMatters.ie eHealth platform. Dr Moore is Lead for examinations in the Faculty of Pain Medicine, College of Anaesthesiology Dublin and a Council member with the European Society of Regional Anaesthesia and Pain Medicine.

Dr Moore has extensive clinical experience in managing all persistent pain syndromes and has a particular interest in facial pain management and in using intrathecal therapies to manage spasticity and cancer pain.

He is passionate about reforming the way pain management teams work in Ireland and in improving access for all people with persistent pain to the best evidence-based treatments. He shares the vision and ambition shown by Sláintecare in improving community-based care for people living with chronic disease in Ireland. In parallel to his work with Sláintecare, Dr Moore is also leading a multidisciplinary project to develop a Model of Care for Pain Management in Ireland.

Niamh Walsh

Chronic Pain Ireland

Trauma-Informed Care: Panel Discussion

Niamh Walsh brings a multi-perspective approach to chronic pain care as a board member of Chronic Pain Ireland, qualified psychotherapist, and person with lived experience of chronic pain recovery (migraine).
Niamh completed an MA in Humanistic and Integrative Psychotherapy with The Tivoli Institute, focusing her dissertation on the experiences of psychotherapists supporting clients with chronic

pain. She presented a poster on this research at EFIC 2025 in Lyon. Niamh currently works part-time as a psychotherapist with Mind and Body Works in Dundrum.

With over 20 years' experience in senior marketing and communications roles across public and private sectors, Niamh brings strategic communication expertise to chronic pain advocacy. She currently works with Learnovate, Trinity College Dublin's research centre for technology-enhanced learning as Content Marketing Manager.

Niamh holds degrees in Philosophy & Classics (UCD), Computer Science (UCC, TCD), and qualifications in Training & Continuing Education (Maynooth University), Management & Marketing (TU Dublin), Business & Executive Coaching (UCD Smurfit School), and Lean Six-Sigma Green Belt certification.

Róisín Hosie

Trauma-Informed Care: Panel Discussion

Ms Róisín Hosie is a Clinical Specialist Physiotherapist at the Pain Excellence Centre in Croom Orthopaedic Hospital, Limerick. Having graduated from UCD in 2008 she worked in Canada for many years where her interest in chronic pain developed and grew. Róisín completed the Post-baccalaureate Certificate in Pain Management through the University of Alberta before returning to Ireland. With a strong background in musculoskeletal physiotherapy, Róisín has been instrumental in advancing patient-centred care pathways for individuals living with persistent pain. Her clinical expertise lies in triaging, assessing, and managing complex pain presentations, ensuring timely and appropriate interventions that align with best practice and evidence-based care.

Róisín is part of a dynamic multidisciplinary team that has significantly reduced waiting times and improved access to care for patients across the Mid-West. She is deeply committed to empowering patients through education, self-management strategies, and community-based rehabilitation, with a particular interest in the “de-medicalisation” of chronic pain—supporting patients to regain confidence and autonomy in managing their condition. Róisín is passionate about collaborative practice, engaging closely with GPs, consultants, and community services to deliver integrated care. Outside of her clinical role, Róisín is an advocate for innovation in physiotherapy and enjoys exploring new approaches to enhance patient outcomes.

Session 3

Chairperson: Dr Olga Baron, University College Dublin

12.20-13.15pm: Short Oral Presentations hosted by Irish Pain Research Network (IPRN)

Dr. Olga Baron

Chair
Short Oral Presentations hosted by IPRN

Dr. Olga Baron is an Assistant Professor in Neuropharmacology at the School for Biomedical and Biomolecular Sciences of the University College Dublin. Her research focuses on molecular mechanisms important for pain resolution and healthy neuronal ageing. She completed her PhD studies at the Hannover Medical School in Germany, specializing in Systems Neuroscience. For her thesis titled "Role of FGF-2 in dopaminergic neuron development", she received the Prize in Veterinary Medicine by the Kurt Alten Foundation. In 2013, Olga joined the fruit fly laboratory of Dr Manolis Fanto at King's College London in the UK, where she established critical work that led to the discovery of Karyoptosis - a novel mechanism of neuronal cell death by nucleophagy. In November 2018, she started developing her independent research program under the mentorship of Professor Stephen McMahon at the Wolfson Center for Age-Related Diseases, KCL, UK. As an NC3Rs David Sainsbury fellow and as a recipient of the Versus Arthritis ECR Pain award, she established paradigms for the use of the fruit fly *Drosophila melanogaster* to study mechanisms important for musculoskeletal pain.

Irish Pain Research Network (IPRN)

The Irish Pain Research Network (IPRN) is a special interest group (SIG) of the Irish Pain Society. The aim of the IPRN is to bring together all active pain researchers on the island of Ireland (North and South) for the purposes of sharing research results and ideas and facilitating cross-institutional collaboration in the area of pain research. The IPRN was launched formally by Professor Rolf Detlef-Treede, President of the International Association for the Study of Pain (IASP), at the 15th Annual Scientific Meeting of the Irish Pain Society on Saturday 26th September 2015.

The idea to establish the IPRN arose from the fact that while a number of academic institutions and hospitals in Ireland currently have a cluster or centre of pain researchers, there is currently no forum that brings all of these groupings together specifically for the purpose of discussing pain research and advancing collaborative pain research within Ireland. It was felt that the establishment of an all-inclusive research network would facilitate closer dialogue and collaboration between all active pain researchers based either in academic institutions, hospitals, other healthcare practices, or industry.

If you are active in pain research within Ireland, and not already a member of IPRN, then we would like to extend a very warm invitation to you to join. The aim is to have strong representation from every major pain research grouping across the Island. Pain researchers at any level of seniority are welcome to join, and we particularly welcome students and early-career researchers. Membership of the IPS is a requirement for those who wish to join IPRN; all registered delegates at the Annual Scientific Meeting will automatically become members of the IPS for the subsequent year and are therefore eligible to join IPRN if they wish. There is no additional fee to join IPRN.

For more information and to join the IPRN, please complete the short Application Form at https://irishpainsociety.ie/iprn/

Short Oral Presentation Abstract Index

Session 4:

Chairperson: Prof. David Finn

- **14.30-15.00pm: Prof. Harriet Wittink –** Activity Patterns in Chronic Pain
- **15.00-15.30pm: Prof. Jeffery Mogil –** Pain, Sex, and Death

Prof. David Finn

Chair
Session 4

David Finn is Established Professor of Pharmacology and Therapeutics, Principal Investigator and Founding Co-Director of the Centre for Pain Research at University of Galway, Ireland. Professor Finn graduated with a BSc (Hons) in Biotechnology from University of Galway and a PhD in Neuroscience from University of Bristol, and he worked as a postdoctoral researcher at the University of Nottingham before his appointment as an academic at University of Galway in 2004. His research focuses on the affective and cognitive dimensions of pain, stress-pain interactions, and neuroinflammatory processes, with an emphasis on the endogenous cannabinoid system. He is Past-President of the International Cannabinoid Research Society (ICRS) and of the Irish Pain Society. He has been a member of the Presidential Task Forces for Cannabis, Cannabinoids and Chronic Pain of both the International Association for the Study of Pain (IASP) and the European Pain Federation (EFIC), and leader of the Basic Science Work Package for the IASP Task Force. He is a member of the EFIC Working Groups for Translational Pain Research and Pain Research Strategy, the IASP Task Force for Use of Animals in Pain Research, a member of the Scientific Programme Committees for the IASP 2026 and 2024 World Pain Congresses, NeuPSIG 2025, EFIC 2022, and a member of EFIC Council. Professor Finn is a member of the Editorial Boards of multiple international scientific journals including *Pain, Journal of Psychopharmacology, Frontiers in Neuropharmacology, Frontiers in Pain Research, and the Scandinavian Journal of Pain*. He has published over 195 peer-reviewed journal papers and book chapters and frequently lectures at international conferences. In addition to directing his research programme, Professor Finn teaches a range of Pharmacology topics to undergraduate and postgraduate science, pharmacy and medical students.

Prof. Harriet Wittink

Activity Patterns in Chronic Pain

Harriët Wittink, PhD PT is a physiotherapist and emeritus Professor. She was chair of the Lifestyle and Health research group, Utrecht University of Applied Sciences, Utrecht, The Netherlands. She holds a Master of Science in Orthopaedic and Sports Medicine from the Institute of Health Professions at Massachusetts General Hospital, Boston, and a PhD in Interdisciplinary Studies from Boston University. Her research interests are chronic pain (physiotherapy) management, physical activity (patterns) and behavioral change, health literacy and clinimetrics. She has authored over a 100 book chapters, monographs, and scientific papers. She is currently the chair of the EFIC physiotherapy examination committee.

Prof. Jeffery Mogil
PhD, FCAHS, FRSC

Pain, Sex, and Death

Prof. Jeffery Mogil is currently the E.P. Taylor Professor of Pain Studies and a Distinguished James McGill Professor at McGill University. Dr. Mogil has made seminal contributions to the fields of pain genetics, sex differences in pain, and pain testing methods in the laboratory mouse. He has published over 280 manuscripts and book chapters and currently has an h-index of 103. He is the recipient of lifetime achievement awards from the American and Canadian Pain Societies and the Canadian Psychological Association, and is a Fellow of the Canadian Academy of Health Research and the Royal Society of Canada. He has served as Neurobiology Section Editor at the journal, Pain, as a Counselor at the International Association for the Study of Pain, and was the Chair of the Scientific Program Committee of the 13th World Congress on Pain. He is also the founder and Director of the North American Pain School.

15:30-16:30: Educational Meeting and Workshops

Room 1: *Irish Pain Nurses and Midwives Society (IPNMS) Educational Meeting*

Chairs: Joanna Fahey & Patricia Molyneaux **Speaker: Dr Nadja Nestler**

Title: Transitional pain nursing to prevent chronic post-surgical pain

Nursing in a transitional pain management

Depending on the type of surgery and other factors, such as catastrophizing, patients have the risk of developing chronic postsurgical pain (CPSP). To prevent and reduce this risk, transitional pain management is established in different countries. One option is to implement transitional pain services to support patients with a risk for CPSP from the preoperative, over the perioperative, to the postoperative stage in an outpatient setting. This interdisciplinary approach incorporates the work of different professions, which collaborate with patients to ensure a recovery without chronic pain.
Nurses belong to these services as one profession. Their part is an enhanced education to support self-management and the realisation of pain management in the outpatient setting by the patients themselves.
The talk gives a short overview of transitional pain management and advanced pain nursing to educate patients. Nurses strengthen patients' self-management to ensure recovery at the earliest opportunity in activities of daily living, including their health literacy competencies to achieve this goal.

Room 2 Irish Pain Physiotherapy Group Education Meeting

Chair: Prof. Keiran O'Sullivan

Title: The role of physiotherapists in identifying non-physical barriers to recovery from persistent pain

Outline: this session will discuss research in this area across different populations with pain, and some specific challenges and recommendations
What – what are these barriers?
So what - Why does it matter for physios?
Now what - practical strategies for physiotherapists to use

Room 3 Irish Pain Psychologist Group Education Meeting

Chair: Prof Brian McGuire

Title: *The role of Psychology in Chronic Pain Services; review, development and the model of care*

The 'Psychologists working in Chronic Pain' session is for any psychologist working in a pain management setting. The meeting will be chaired by Professor Brian McGuire and we are honoured to have Professor Kevin Vowles from Queen's University Belfast as a guest contributor. Key topics for discussion are the development of psychology resources in Pain Services, the contribution of Psychology within the interdisciplinary team and the ongoing development of the Model of Care for Pain Services in Ireland.

Room 4 Basic Science of Pain Education Meeting

Chair: Prof. Siobhain O'Mahony

Title: The future of animal models and use of omics in pain research

This workshop will introduce scientists to foundational approaches in pain research, with a focus on animal models and the integration of omics technologies to uncover molecular pathways of pain. We will explore how these tools can advance our understanding of sex differences in pain biology and highlight their application to women's health, where pain conditions are often under-researched and under-treated. The goal is to provide participants with both practical insights and a translational perspective to better inform future research and therapeutic development.

Room 5 Pain Medicine Procedures Workshop

Chair: Dr. Tadhg Lynch

Title: Neurophysiology of Chronic Pain

Presentation and discussion on neurophysiology tools to investigate chronic pain including EMG, NCS, Somatosensory EPS and sympathetic cutaneous responses.

Abstracts for Poster Presentations

Abstract No. 1

TITLE: EVALUATING ADVANCED CLINICAL PRIORITISATION IN PAIN MEDICINE: A SUSTAINABLE STRATEGY FOR TIMELY AND ACCURATE CARE DELIVERY.

Authors: Ankita Miglani[1,2*], Alan Blake[1], Camillus K Power[1,3].

1. Tallaght university hospital, (department of Anaesthesia and Pain medicine), Dublin, Ireland.
2. Royal college of surgeons of Ireland, Dublin, Ireland.
3. Trinity college Dublin, Ireland. Ankitamiglani83@gmail.com (corresponding author)

Introduction: Long waiting time to access specialised care is an ongoing problem only compounded by inadequate resources including manpower. Improving timely access to healthcare is one of the top priorities of the government of Ireland's, Sláintecare healthcare reform programme. Telemedicine has been increasingly utilised in care delivery by pain management services in Ireland. Advanced clinical prioritisation (ACP) was one of the initiatives proposed by scheduled care transformation programme (SCTP) of the health service executive (HSE) to validate and hence manage waiting lists. A pilot study on ACP pathway in pain management by our group showed potential for improving access.
Aim: We aimed to evaluate the impact of implementing the ACP model for pain management with pre-screening of referrals to direct the patients to the most appropriate care pathway.

Methods: The referral letters were pre-screened, and the appropriate care determined after a consultant delivered telephone consultation.

Results: Out of 307 ACP tele-consultations included in this study, the ones that needed to be scheduled for face-to-face appointment with the service was reduced to only 21.4% and 45.4% patients were referred directly for diagnostic or therapeutic interventional pain management procedures.

Discussion: Publicly available data from National Treatment Purchase Fund (NTPF) suggested that of the patients waiting for their first pain specialist appointment in our institute, 86.3% were waiting for a period above national average. The results highlighted the sustainable potential of this model of care in improving access to the service and in ensuring that the right care is delivered in timely manner.

Competing interest: There is no competing interests to declare that are relevant to the content of this article.

Funding: No funding was received to assist with the preparation of this manuscript.

Financial interests: The authors declare that they have no financial interests.

Human ethics and Consent to participate declaration: Not applicable.

Key words: Advanced Clinical Prioritisation (ACP), pain management, waiting list, scheduled care transformation programme (SCTP), telemedicine.

Abstract No. 2

Title: ENHANCING PAIN SCIENCE EDUCATION IN MEDICAL AND PHYSIOTHERAPY STUDENTS USING VIRTUAL REALITY (VR)

Authors names: Annabelle Morris[1], Eimear O'Brien[2], Dr Brona Fullen[3], Dr Sinead McMahon[4]

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2. Beacon Hospital Research Institute, Beacon Hospital, Dublin, Co.Dublin
3. UCD School of Public Health Physiotherapy and Sports Science, University College Dublin, Dublin, Co.Dublin
4. UCD School of Public Health Physiotherapy and Sports Science, University College Dublin, Dublin, Co.Dublin

Introduction: According to the International Association for the Study of Pain, current health professional education does not fully equip new graduate clinicians to manage people in pain[1] Innovative approaches such as virtual reality (VR) simulation may offer an immersive, engaging solution for students to gain key pain management competencies.

Aim of Investigation: To evaluate the use and effect of a VR acute pain case scenario during clinical education placement for physiotherapy and medical students in a Dublin hospital

1. To measure the utility and usability of VR as an educational tool using a questionnaire based off the Technology Acceptance Model.
2. To evaluate students' satisfaction and self confidence in learning from VR, through the Student Satisfaction and Self-Confidence in Learning (SCLS) scale
3. To assess students' knowledge from VR through a pain MCQ
4. To gain overall feedback through feedback session.

Methods: A mixed-method approach was utilised: Quantitative data was analysed on SPSS. The Braun and Clarke[2] approach was employed for thematic analysis of the qualitative data.

Results: An average .739 ± 1.124 improvement in MCQ results post intervention. An average score 51 ± 6.4 in SCLS, indicating high satisfaction and self confidence in VR. High acceptance of VR was demonstrated in post VR feedback sessions.

Discussion: VR proves to be an interactive, informative, enjoyable educational tool with an exciting and promising role in enhancing pain science education. Recommendations for further research include investigating implementation and feasibility of VR in the curricula of health professional pain science education.

Ethical Approval: Granted from University College Dublin Human Research Ethics Committee - Sciences (HREC-LS) ref: 147-LS-CO-25-McMahon, and the Beacon Hospital Research Ethics Committee ref: BEA0248.
Acknowledgements: University College Dublin- Beacon Hospital Collaborative Research Seed Funding Grant 2024
Disclosures/Conflict of interest: nil to disclose
Key Words: Virtual Reality, Pain Science Education, Physiotherapy Education, Medical Education

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Abstract No. 3

Title:
STRENGTHENING FOUNDATIONS IN PAIN MEDICINE: A PILOT INDUCTION PROGRAMME FOR NCHDS

Authors: Aoife Driscoll[1] , Caitriona O' Malley[2], Joanne Goold[3], Marion Costello[4] and Cormac Mullins[5]

Afilliation

1. Department of Anaesthesiology, Intensive Care and Pain Medicine, Cork University Hospital (CUH), Ireland.
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5. Department of Anaesthesiology, Intensive Care and Pain Medicine, CUH, Ireland.

Introduction: Completion of the Specialist Anaesthesiology Training (SAT) scheme in Ireland requires a two-month period of modular training in Pain Medicine and uniquely qualifies trainees for post-CSCST specialist training in Pain Medicine. However, structured pain Medicine education is limited. Unlike intensive care and obstetric anaesthesia modules, which include CAI-mandated simulation and preparatory courses, no equivalent training is in place for Pain Medicine. NCHDs frequently feel underprepared when transitioning from managing acute perioperative pain to the complex, multidisciplinary care of chronic pain patients. To address this gap, we developed a structured Pain Medicine induction for NCHDs.

Aim of Investigation: To evaluate the effectiveness of a multidisciplinary team (MDT)-led induction in improving NCHD confidence in assessing patients with chronic pain.

Methods: NCHDs completed a pre-induction questionnaire rating confidence in chronic pain assessment on a percentage scale. An induction programme delivered by Pain Medicine consultants, a clinical psychologist, and clinical specialist physiotherapists was followed by a post-induction questionnaire.

Results: Across eight domains, average confidence increased from 44% (range 35–55%) pre-induction to 69% (range 59%–74%) post-induction, representing a 25-percentage-point improvement.

Discussion: NCHD confidence in chronic pain assessment is low before commencing the Pain Medicine module. A structured MDT-led induction can substantially improve trainee confidence and help bridge a significant educational gap in the SAT curriculum.

Acknowledgements: None.
Disclosures/Conflicts of Interest: None.

Keywords: Pain Medicine education; SAT training; Chronic pain assessment; Multidisciplinary induction; Trainee confidence

Abstract No.4

Title: SERVICE EVAULATION OF REGIONAL ANAESTHESIA PERFORMED AT THE SOUTH DUBLIN SURGICAL HUB

Authors: Byron Rudman[1], Dr Ben Atterton[2], and Dr Mike Johnston[2]

1. Anaesthetic NCHD, Department of Anaesthesiology, St. James's Hospital, Dublin, Ireland.
2. Consultant Anaesthesiologist, Department of Anaesthesiology, St. James's Hospital, Dublin, Ireland

Introduction: The newly-opened South Dublin Surgical Hub (SDSH) is a state-of-the-art facility aiming to provide high-quality ambulatory surgical care. This project evaluates the safety, efficacy, and outcomes of peripheral nerve blocks (PNB) performed at the hub since its inception.

Aim of the investigation: To assess patient satisfaction, efficacy and complications of PNBs performed at the SDSH.

Methods: All patients receiving a PNB between 10th March and 28th July 2025 were included. Telephone follow-up of patients was attempted 48 – 72 hours after surgery seeking information about their experience.

Results: Fifty-seven PNBs were performed between 10th March and 28th July 2025. Fifty-two axillary brachial plexus blocks, 4 supraclavicular blocks and 1 popliteal sciatic block were included. 57.8% of PNBs were performed by trainees under supervision, with the remainder by consultants. The overall success rate was 97%. Four patients were uncontactable. Half the PNBs lasted more than 12 hours (50.9%). Four complications were reported; two block failures requiring general anaesthesia, and two cases of pain after block resolution resulting in unplanned healthcare interactions. Ninety-six percent of patients indicated that they were satisfied with the PNB and would have it again for future surgery if offered.

Discussion: PNBs performed in an ambulatory surgery setting, offer high success rates, effective perioperative analgesia, minimal complications and are acceptable to patients. Over half of the PNBs were performed by trainees under supervision, demonstrating education and training can be incorporated into a successful PNB service. These findings support the use of PNBs in ambulatory surgery and demonstrate they augment the patient experience.

Ethics Approval: Approval was obtained from the St. James's Hospital Clinical Audit Office.

Acknowledgements: N/A

Disclosures/Conflicts of Interest:
None to declare.

Key Words: Regional anaesthesia, Peripheral nerve block, Day case surgery, Ambulatory surgery, Surgical Hub.

Abstract No.5

Title:

PAIN MANAGEMENT IN ROBOTIC OESOPHAGECTOMY: AUDIT OF ANAELGAESIC STRATEGIES AND OUTCOMES

Authors: A.O'Gara[1] & C.Brits[2] , Byron Rudman

1. Consultant in Pain Medicine and Anaesthesia, St James's Hospital, Dublin, Ireland
2. NCHD in anaesthesia, Coombe Hospital, Dublin, Ireland

Introduction:
Robotic oesophagectomy presents unique challenges in postoperative pain management, which is crucial for optimal recovery. This audit evaluates current pain management practices and outcomes in this patient population.

Aim:
To assess pain outcomes, opioid consumption, and patient factors influencing analgesic requirements after robotic oesophagectomy.

Methods:
A retrospective review was conducted for patients undergoing robotic oesophagectomy. Data included demographics, surgical details, pre-existing chronic pain or opioid use, analgesic techniques, pain scores (NRS Days 1–3), and complications. Patients with chronic pain or opioid use were analysed separately.

Results:
Severe pain (NRS 7–10) was reported by about half of patients during the first three postoperative days.
Patients without chronic pain or opioid use had lower pain scores and improved pain trajectories.
Mean Oxynorm PCA use (mg): 85.95 at 24 hours, 165.95 at 48 hours, and 201.26 at 72 hours; lower values were observed when excluding those with chronic pain or opioid use.
Variability in opioid use was linked to pain history, age, sex, and psychological factors.
Prolonged PCA use and persistent pain were more common in patients with chronic pain histories.

Discussion:
Pain and opioid requirements varied widely, primarily due to patient-related factors. Most opioid- naive patients achieved adequate control with standard protocols, while those with chronic pain or opioid tolerance required higher doses and specialist input. Individualized, multimodal analgesia and early pain team involvement are recommended.

Disclosures/conflicts: none

Keywords: Robotic surgery, oesophagectomy, anaelgaesic strategie

Abstract No. 6

Title: INFLUENCE OF THE OESTROUS CYCLE ON PAIN-RELATED BEHAVIOUR IN A RAT MODEL OF OSTEOARTHRITIS PAIN

Authors: Canny Kyeremaa Adjei[1,3,4]*, Rosmara Infantino[1,3,4]*, Mehnaz Ferdousi[5], Alison Liddy[5], Martin O'Halloran[6], Leo Quinlan[2], David P. Finn[1,3,4]

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6. Translational Medical Device Laboratory, University of Galway, Ireland *equal contribution

Introduction: Osteoarthritis (OA) is the most common musculoskeletal diseases globally, leading to disability and reduced quality of life. Joint pain is the primary symptom of OA, yet it remains inadequately managed. Women tend to experience more severe symptom progression and higher pain levels in OA. Additionally, pain perception in women with chronic pain can vary across the menstrual cycle, suggesting a potential link between oestrogen levels and pain sensitivity.

Aim of Investigation: To evaluate if oestrous cycle influences pain-related behaviour in a female rat model of OA induced by monosodium iodoacetate (MIA).

Methods: Female Sprague-Dawley rats (8-9 weeks old) received an intra-articular injection of MIA 2mg/50µL (n=100) or saline (n=30) into the left knee under anaesthesia (Day 0). Weight- bearing (WB) and electronic Von Frey (eVF) tests were conducted at baseline and on Days 7 and 14 post-injection to assess primary site pain and secondary mechanical hypersensitivity, respectively. Vaginal cytology samples were collected on Days 0, 7, and 14 and examined via light microscopy to determine the cycle phase.

Results: Binomial logistic regression showed that oestrous cycle stage did not significantly predict responder status in WB or eVF tests. Chi-square tests likewise showed no significant association between cycle stage and pain-related tests. One-way ANOVA and unpaired t-tests revealed no significant differences in WB or eVF thresholds across the different cycle phases at baseline, Day 7, or Day 14 post-injection.

Conclusions: These findings suggest that the oestrous cycle phase does not influence pain-related behavioural responses in female rats with MIA-induced OA pain.

Ethics Approval: The procedures were approved by HPRA (authorization n. AE19125_P104) and University of Galway's Animal Care Research Ethics Committee (ACREC), approval n. 2020.04.002.

Acknowledgements: This work is funded by ERC Funding Arth-Alleve: Disruptive Therapies for the long-term relief of Osteoarthritis Pain, Grant ID: 101045226.

Disclosures: MF: employed by Relevium Medical. DF, MH and AL: Shares in Relevium Medical. AL: Inventor on the Relevium Patent. CA, RI, and LQ: none.

Key words: Osteoarthritis pain, chronic pain, oestrous cycle.

Abstract No. 7

Title: EFFECTIVENESS OF HIGH-CONCENTRATION CAPSAICIN PATCH IN NEUROPATHIC PAIN: RETROSPECTIVE OBSERVATIONS

Authors: Carmel Daly[1], Victoria Hennessy[1], Moustafa Moustafa[1] and Aine O'Gara[1]

1. Department of Anaesthesiology, Pain Unit, Saint James Hospital (SJH), Dublin, Ireland.

Introduction: Topical high-concentration capsaicin 8% patch (Qutenza®) is an FDA- and EMA-approved treatment for localized peripheral neuropathic pain. Capsaicin acts via transient receptor potential vanilloid 1 (TRPV1) receptor agonism, leading to reversible defunctionalization of nociceptors and long-lasting analgesia [1,2]. The patch has demonstrated efficacy in randomized controlled trials across various neuropathic pain conditions, particularly postherpetic neuralgia [1].

Aim of the investigation This analysis explores the real-world effectiveness of capsaicin 8% patch across postherpetic neuralgia (PHN), peripheral neuropathy (PN), and post-surgical neuropathic pain (PSNP) at Saint James Hospital.

Methods: A retrospective review was conducted for 62 patients who received capsaicin 8% patch. Patients were grouped as PHN (n=27), PN (n=18), and PSNP (n=17). Collected variables included age, gender, LANSS score, BPI severity and interference, percentage and duration of pain relief, and emotional stressors. Outcomes included ≥30% relief, no benefit, complete relief, and duration of relief. ANOVA and Chi-square tests were used for comparisons.

Results: PHN patients were significantly older and had the lowest LANSS but highest BPI severity scores. Emotional stressors were more common in PN and PSNP ($p<0.001$). Complete relief was exclusive to PHN (23.1%), while no relief was most frequent in PSNP (20%) ($p=0.008$). Rates of ≥30% relief were comparable across groups ($p=0.319$). Among those with temporal relief, PHN had the highest median relief percentage (45%) and duration (3–4 weeks), though not statistically significant ($p=0.498$, 0.46).

Conclusion: Capsaicin 8% patch offers consistent partial pain relief across neuropathic pain types, with complete relief seen only in PHN.

Ethics Approval: This study was approved by the **Research & Innovation Office, St. James's Hospital**, reference number is **295**, and the approval was granted in **July 2025**. The study adhered to the **General Data Protection Regulation** and all data were anonymized according to the hospital's ethical guidelines.

Acknowledgements: this work did not need any special fund, and the research team used their non-clinical time to collect data.

Disclosures/Conflicts of Interest: there was not any conflict of interest to disclose
Key Words: neuropathic pain, Capsaicin patch 8%, treatment response, differential response to Capsaicin treatment

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Abstract No. 8

Title: NAVIGATING CHRONIC PAIN IN SCHOOL: A PROTOCOL FOR THE EASE (EDUCATIONAL PSYCHOLOGISTS APPLYING BEST PRACTICE TO SUPPORT YOUNG PEOPLE WITH CHRONIC PAIN IN EDUCATIONAL SETTINGS) PROGRAMME

Authors: Catherine Mary Quinn[1,2] and Therese Brophy[1]

1. Department of Educational Psychology, Inclusive and Special Education, Mary Immaculate College, Limerick, Ireland
2. Psychology Department, Community Health Organisation 3, Health Service Executive, St Joseph's Hospital, Limerick, Ireland

Introduction: Chronic pain affects one in five school-aged children and significantly impacts their school related functioning. Many children and adolescents with ongoing pain miss significant amounts of school and fall behind in their academic schoolwork. Peer relationships and mental wellbeing are also affected.

Aim of Investigation: The aim of this study is to develop a programme for educational psychologists based on current research in the field to support children and young people with chronic pain in school settings.

Methods: A scoping review conducted by the primary author found eight themes on providing support in school setting from a synthesis of retrieved data. Themes of support included optimising communication channels, providing academic supports, pain knowledge and training, managing school attendance, providing psychological support, school personnel providing support, peer relationships and adoption of a healthy lifestyle. The data obtained was used to design the EASE programme, which will be conducted online over two three-hour sessions with National Educational Psychological Service (NEPS) Psychologists.

Results: The primary outcomes are to establish if the EASE programme impacts the self- efficacy and ability of NEPS Psychologists to make appropriate recommendations for students with chronic pain in school settings. The acceptability, appropriateness and feasibility of the programme will also be determined.

Conclusions: The data collected from this project will hopefully establish if the implementation of an online education programme on supporting students with chronic pain in school is feasible and beneficial for NEPS Psychologists working within the Department of Education.

Ethical Approval: Ethical approval has been granted by the Joint Faculty Research Ethics Committee at Mary Immaculate College, Limerick.

Acknowledgements: The primary author is funded by the Irish Health Service Executive, Community Health Organisation 3 to complete a Professional Doctorate in Educational and Child Psychology.

Disclosures/Conflict of Interest: n/a

Key Words: chronic pain, children, adolescents, school support

Abstract No. 9

Title: USING VIRTUAL REALITY TO SUPPORT AUTISTIC YOUNG PEOPLE IN MANAGING NEEDLE-RELATED PAIN: A PILOT AND FEASIBILITY STUDY

Authors: Chelsea Carr [1 2], Conor O'Neill [1 2] Brian E. McGuire [2], Helena Lydon [I], Orla Flanagan [3], Aisling Lyons [3], Michelle Dillon [3], Catherine O Brien [4], Delia McGuinness[4], Hilary Stokes[5], Una Murtagh[6], Vincent McDarby[6], Janet Carter Callanan[6], Caroline Chawke[6]

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5. Paediatric Department at the University Hospital Mayo
6. ASD Paediatric Phlebotomy Clinic at Children's Health Ireland at Connolly, Dublin

Introduction: Virtual Reality (VR) has emerged as a popular distraction technique and has shown efficacy during a range of medical procedures among neurotypical children. This research seeks to extend these findings to a neurodiverse population.

Aim of Investigation: To examine the feasibility and preliminary effectiveness of VR distraction in reducing needle-related pain and distress during venepuncture in a sample of autistic children and adolescents (with or without co-occurring Intellectual Disability).

Method: Thirty one children, aged 4-16, who were scheduled for outpatient venepuncture procedure were recruited. Participants were randomly assigned to intervention group (n= 16, who used VR distraction during procedure) or control group (n=15, who received standard care). Children in the VR condition played a virtual aquatic safari game, *Ocean Rift*.

Results: Preliminary analyses show a significant reduction in pain scores and avoidant behaviours among children in the VR condition, with large and moderate effect sizes, respectively, compared to standard care. Parents/caregivers and nurses/phlebotomists reported high levels of satisfaction with VR distraction. Early qualitative findings further suggest that VR is feasible, tolerable, and applicable for use with autistic children and adolescents, both with and without co-occurring intellectual disability.

Discussion: This research contributes to the limited research exploring the role of VR in reducing pain and distress in children with developmental disorders. As the first feasibility and pilot study, it examines the use of VR distraction in reducing needle-related pain and anxiety in autistic children. The study was pre-registered on the International Standard Randomised Controlled Trial Number registry (https://www.isrctn.com/ISRCTN14514643).

Ethical Approval: Ethical Approval was provided by the School of Psychology at University of Galway, the Clinical Research Ethics Committee at Galway University Hospital and Children's Health Ireland Research Ethics Committee.

Acknowledgements: Funding Insert NA

Disclosure/Conflict of Interests: The authors have no conflict of interests.

Keywords*:* Virtual Reality, Distraction, Venepuncture, Autism, Pain, Distress

Ethical Approval: Participants were recruited and consented to procedures approved by the University of Galway and from HSE area CHO2 (Galway University Hospital Research Ethics Committees, including MUH and CAMHS) and from CHI (Connolly).

Abstract No. 10

Title: INHIBITION OF SPINAL MICROGLIAL ACTIVATION ATTENUATES CHRONIC STRESS-INDUCED PROLONGATION OF POST-SURGICAL MECHANICAL HYPERSENSITIVITY

Authors: Daniela Rodrigues-Amorim[1,2,3,4], Ariadni Bella[1,3,4,5], Hong Su[1,3,4], Jonathan Costello[1,3,4], Abhay Pandit[2], David P. Finn[2,3,4,6], Michelle Roche[1,2,3,4]

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5. Centre National de la Recherche Scientifique, Université de Strasbourg, Institut des Neurosciences Cellulaires et Intégratives, Strasbourg, France.
6. Pharmacology and Therapeutics, School of Medicine, University of Galway, Galway, Ireland.

Introduction: Chronic pre-surgical stress is a significant risk factor for the prolongation and exacerbation of post-surgical pain. While the underlying mechanism mediating this association is unknown, microglial activation and proinflammatory signaling within the spinal cord are key mediators in the transition from acute to chronic pain[1,2], and chronic stress is associated with neuroinflammation[1,3]. This study investigated whether spinal microglial activation may underlie chronic repeated restraint stress (RRS)-induced prolongation of post-surgical mechanical hypersensitivity and aversive pain-like behaviours.

Methods: Male Sprague-Dawley rats were exposed to RRS (6 h/day for 21 days) or left undisturbed (non-RRS, NRRS), followed by hind paw incision surgery (PI). Animals received intrathecal injections of minocycline (50 µg/10 µl) or saline vehicle on day 2 and day 5 post-surgery and were assessed for aversive pain-like behaviour in the place escape/avoidance paradigm (PEAP) and mechanical hypersensitivity in the von Frey (VF) test, respectively. Real-time qPCR was performed on the lumbar spinal cord to assess the expression of microglial and inflammatory markers.

Results: PI surgery induced mechanical hypersensitivity, which was exacerbated in RRS-exposed animals on day 3 and day 5 post-surgery. Intrathecal administration of minocycline significantly attenuated the RRS-induced exacerbation of mechanical hypersensitivity post-surgery but did not alter aversive-like behaviour. Minocycline significantly reduced *iba1* and *il1b* expression in the ipsilateral dorsal horn of the spinal cord, indicating suppressed microglial activation and proinflammatory signaling.

Conclusions: These findings demonstrate that chronic stress-induced exacerbation of post-surgical mechanical hypersensitivity is mediated by enhanced spinal microglial activation. Therefore, inhibition of spinal microglial activation represents a promising strategy to prevent stress-induced exacerbation of post-surgical pain.

Ethics Approval: Ethical approval was obtained from the Animal Care and Research Ethics Committee (ACREC) at the University of Galway and licensed by the Health Products Regulatory Authority (HPRA).

Acknowledgments
Co-funded by the European Union (EU) Grant Agreement nº101081457 and the Irish Pain Society.

Disclosures/Conflicts of Interest: The authors do not have any conflicts of interest.

Key Words: microglial activation, minocycline, mechanical hypersensitivity, chronic stress, post-surgical pain

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Abstract No. 11

Title: SPINAL IL-1β SIGNALING MEDIATES CHRONIC STRESS-INDUCED POTENTIATION OF POST-SURGICAL SOMATOSENSORY HYPERSENSITIVITY AND PAIN-REALTED AVERSION IN MALE RATS.

Authors: Ariadni Bella [1,3,4,5], Khaled Abdallah [5], Charles Decraene [5], Alba M. Diego [2,3,4], Chiara Di Marino [2,3,4], David P. Finn [2,3,4], Ipek Yalcin [5], Michelle Roche [1,3,4]

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Background and aims: Pre-surgical stress is recognised as a risk factor for the development of persistent post-surgical pain with neuroimmune signalling identified as a key mediator of this interaction. This study investigated
the impact of repeated restraint stress (RRS) on sensory and affective responses following surgery, w ith a focus on the role of IL-1β signalling.

Methods: Male Sprague-Dawley rats (n=12-16) were subjected to either 21 days of RRS (6 hours/day) or standard handling. Following the stress protocol, fecal corticosterone levels and despair-like behaviour (Forced Swim Test) were assessed before they underwent either paw incision or sham surgery. We evaluated mechanical (eVon Frey test) and thermal hypersensitivity (Hargreaves test) before and for 17 days po st- surgery. Affective behaviours were assessed using Place Escape/Avoidance Paradigm , Open Field Test, (Elevated Plus Maze and Light Dark Box . 3'RNAseq and RT-qPCR were conducted on dorsal horn spinal cord samples taken on day 5 post surgery. In a separate cohort, IL-1Ra (1µg/µl) or, MCC950 (NLRP3 inflammasome inhibitor 0.67 µg/µl) were intrathecally administered on days 2 and 5 post surgery, followed by PEAP and eVon Frey respectively.

Results: RRS increased fecal corticosterone levels and immobility time in the Forced Swim Test without affecting pre-surgical mechanical or thermal sensitivity. RRS prolonged post-surgical mechanical and thermal hypersensitivity, increased pain-related aversion, and anxiety-like behaviour . RRS upregulated IL-1β and NLRP3 pathways and increased *Iba1*, *Itgam*, *IL-1β*, and *NLRP3* expression in the ipsilateral dorsal horn on day 5 post-surgery. Intrathecal IL-1Ra or MCC950 prevented RRS-induced pain aversion, and IL-1Ra also attenuated RRS-induced increase of mechanical hypersensitivity.

Conclusion: These data suggest that spinal IL-1β-NLRP3 signalling mediates chronic stress-induced exacerbation of sensory and affective responses in post-surgical pain.

Ethical approval

The experimental procedures were approved by the Animal Care and Research Ethics Committee, National University of Ireland Galway and carried out under license from the Health Products

Regulatory Authority in the Republic of Ireland and approval by the regional ethical committee of Strasbourg (CREMEAS, APAFIS 43704**)** in accordance with EU Directive 2010/63 and the ARRIVE guidelines.

Funding

This work was supported by European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 955684. This work was facilitated by the University of Galway, the Centre National de la Recherche Scientifique (contract UPR3212) and the University of Strasbourg. We would like to thank the Bio-Resources Unit and UMS3415 Chronobiotron for animal care and the In Vitro UAR 3156 imaging platform.

Abstract No. 12

Title: IMPACT OF REGIONAL ANAESTHESIA STRATEGIES ON PAIN AND SAME DAY DISCHARGE FOLLOWING KNEE ARTHROPLASTY: A PROSPECTIVE STUDY

Authors:

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2. Department of Orthopaedics, South West London Elective Orthopaedic Centre (SWLEOC),

Affiliation: Epsom and St Helier University Hospital NHS Trust, Epsom, United Kingdom

Introduction: Knee arthroplasty is an established treatment for degenerative and inflammatory knee disorders. Effective perioperative analgesia is essential for early mobilisation and same-day discharge.

Aim of the Investigation: This study evaluated the relationship between different regional anaesthesia techniques, postoperative pain, and same-day discharge rates in knee arthroplasty patients.

Methods: A prospective evaluation of 100 consecutive patients undergoing knee arthroplasty was performed. Four regional anaesthesia strategies were used: adductor canal block (ACB) only, ACB + genicular, ACB + IPACK (infiltration of popliteal artery and capsule of the knee), and no block. Pain was assessed using a verbal rating scale (0-3) at 2, 6, 12, and 24 hours postoperatively. Patient demographics, anaesthetic technique, and discharge status were recorded. Group comparisons were statistically analysed and predictors of same-day discharge were assessed adjusting for age, gender, BMI, and mean 24-hour pain score.

Results: Mean 24-hour pain score for the cohort was 1.05 ± 0.81, with women reporting higher scores than men (p-value 0.023). Higher pain scores were independently associated with reduced odds of same-day discharge (OR 0.32, p-value 0.002). Across the four block modalities, mean pain scores did not differ significantly (p-value 0.968).
Using no block as the reference, ACB + genicular was associated with higher odds of same-day discharge (OR 5.29, p-value 0.035). Younger age (p-value 0.022) and higher BMI (p-value 0.044) were also significant predictors; gender and ASA grade were not.

Discussion: While overall pain scores were similar between block types, ACB + genicular was associated with increased likelihood of same-day discharge compared with no block. Effective pain control and choice of anaesthetic technique based on patient factors remain key to optimising early mobilisation and discharge after knee arthroplasty.

Ethics Approval: None declared

Acknowledgements: None declared

Disclosures/ Conflicts of Interest: None declared

Key Words: Knee Arthroplasty; Regional Anaesthesia; Adductor Canal Block; Genicular Nerve Block; Same-Day discharge; Postoperative Pain

Abstract No. 13

Title: RETURNING TO ROLES THAT MATTER: INSIGHTS FROM A PAIN MANAGEMENT EDUCATION PROGRAMME

Authors: Edel Parkes, Clinical Nurse Specialist, Pain Management Education Programme, Sligo University Hospital, Ireland

Introduction: Chronic pain disrupts patients' capacity to sustain meaningful work and valued roles, reducing quality of life. Pain Management Education Programmes (PMEP) aim to enhance self-management and re-engagement. This study explored PMEP impact on patients' confidence, role participation, and perceived barriers/supports.

Aim: To evaluate how PMEP influenced engagement in valued roles, confidence in pain self-management, and perceived facilitators/barriers.

Methods: The Post-PMEP Valued Roles Questionnaire was administered after programme completion. Items covered role status, uptake of new roles, confidence in self-management (0–10), use of strategies, and perceived barriers/supports. Data were collected as a clinical audit to inform service development. Responses were anonymised and analysed descriptively.

Results: Preliminary findings indicate participants reported greater confidence in managing pain within valued roles and uptake of new activities (employment, volunteering, caregiving, hobbies). Many used PMEP strategies such as pacing, flare-up planning, and relaxation. Common barriers included pain severity, fatigue, and fear of flare-ups; supports included workplace adjustments, healthcare input, and peer/community networks.

Discussion: Findings suggest PMEP may strengthen confidence and role engagement, though barriers persist. Role-focused outcome measures should be embedded in PMEP evaluation. Multi-layered supports, including workplace and healthcare interventions, are essential to sustain participation.

Ethics: Conducted as part of a clinical audit at Sligo University Hospital; exempt from formal ethics approval.

Acknowledgements: No external funding.

Disclosures: No conflicts of interest.

Key Words: Chronic pain, PMEP, Valued roles, Patient outcomes, Self-management

Abstract No. 14

Title: AN AUDIT OF ENTERAL VERSUS INTRAVENOUS PARACETAMOL USE IN AN IRISH INTENSIVE CARE UNIT

Authors: Eithne Hudson[1]; Cliona Heneghan[2]; Louise Mullen[2].
Affiliation: ICU, Saint James' Hospital, Dublin, Ireland.

Introduction: The impetus for the audit was observed high levels of IV Paracetamol use by ICU staff. There is insufficient evidence to justify the use of IV Paracetamol when the enteral route is available. In the interest of providing evidence – based care, cost – effectiveness and sustainability the usage of IV versus enteral Paracetamol within ICU was audited, with a view to rationalisation of IV Paracetamol use.

Aim of Investigation: To determine the extent of enteral versus IV Paracetamol use in the ICU over an average month.

Methods: IV Paracetamol use for all ICU patients in January 2025 was audited. Data was obtained from patients' electronic healthcare record.

Results: 74 patients were audited. 1219 Paracetamol doses were administered; 885 IV, 334 enterally. 59.4% of patients did not have enteral Paracetamol prescribed, with no reason documented. The mean time from enteral route availability to prescribing of enteral Paracetamol was 53.6 hours. The mean time from admission to enteral route availability was 15.4 hours. Prescription/administration of other enteral medications did not appear to be a trigger to prescribe/administer paracetamol enterally. IV Paracetamol was frequently preferentially administered if both IV and enteral routes were prescribed.

Results were presented departmentally with a plan for staff education. A poster campaign was designed as a visual prompt throughout the ICU. Re-audit will occur in January 2026.

Conclusions: IV Paracetamol administration is associated with increased cost (drug, consumables, staff time); increased environmental impact and risk of infection/phlebitis. Audit findings demonstrate annual mean predicted cost savings of €70,000 – €84,000 and environmental savings of 11,164kgCO2e – 13,692kgCO2e.

Ethical Approval: not required.

Acknowledgements: N/A.

Disclosures/Conflict of Interest: None to declare.

Key words: Paracetamol; ICU; Sustainable Healthcare; Quality Improvement.

Abstract No. 15

Title: METHODOLOGICAL APPROACHES TO THE INCLUSION AND STUDY OF SEX AND GENDER IN PAIN RESEARCH - RECOMMENDATIONS FROM THE INTERNATIONAL PAINDIFF NETWORK

Authors: David P. Finn[1,2*], Brian E. McGuire[2,3*], Simon Beggs[4], Katelynn E. Boerner[5], Karen D. Davis[6], Ruth Defrin[7], Yves De Koninck[8], Hemakumar Devan[9], Brendan Ryan Donovan[2,3], Eleonora Fetter[2,10], Herta Flor[11], Brona M. Fullen[12], Catherine Healy[1,2], Edmund Keogh[13], Rohini Kuner[14], Miriam Kunz[15], Rebecca Lane [1,2], Stefan Lautenbacher[16], Emeran A. Mayer[17], Jeffrey S. Mogil[18], Siobhain M. O'Mahony[19], Kieran O'Sullivan[20], Louise Riordan[21], Michael W. Salter[22], Francesco Scarlatti[11], George Shorten[23], Kathleen A. Sluka[24], Jennifer N. Stinson[25], Kevin E. Vowles[26], Suellen M. Walker[4], Ipek Yalcin[27], Michelle Roche[2,10+]

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Background and Aims: The importance of sex and gender as variables in research is well recognised but inconsistently explored. To maximize progress in this critically important area, it is essential to adopt consistent approaches to study, evaluate and disseminate research findings. The PAINDIFF Network is a group of leading international experts and patient advocates who have developed recommendations on methodological approaches for the inclusion and best practice study of sex and gender as variables in pain research

Methodology: Recommendations and guidelines were developed based on the findings from three complementary methodological approaches: (i) a literature review on approaches used to study sex and gender differences in pain research, (ii) an international cross-sectional survey of pain researchers on current practices and opinions in the field, informed by the literature review, and (iii) multi-disciplinary network meetings, discussion and consensus.

Results: Thirteen recommendations were identified. Five of the recommendations identified apply to preclinical, translational and human/clinical research studies on pain: 1) Include males and females as standard practice, 2) Account for sex in randomization/counterbalancing and testing order, 3) Power for sex differences when it is primary experimental variable or data suggests sex-specific effects, 4)

Include detailed reporting of experimental design including sex of the experimenter when possible and 5) Conduct sex disaggregated analysis and reporting. These recommendations also apply to the inclusion and study of gender in human/clinical pain research. Three additional recommendations apply specifically to preclinical studies and an additional five recommendations are specifically applicable to studies with human participants. Recommendations for key stakeholders such as editors, reviewers, funding bodies, policy makers have also been identified.

Conclusion: Wide adoption and implementation of these recommendations will reduce variability, improve reproducibility, and enhance translatability of research findings within and beyond the field of pain, ultimately leading to better outcomes for all.

Ethics Approval: Ethical approval for this study was obtained from the Research Ethics Committee (REC), University of Galway (2024.01.013)

Acknowledgements: Funding for this project was provided by ERA-NET NEURON (NG- 2022-2) and Health Research Board of Ireland.

Conflict of interest disclosure: None

Key Words: Recommendations, Guidelines, Sex, Gender, Pain, Translational Research

Abstract No. 16

Title: FACTORS AFFECTING THE HEALTHCARE ACCESS FOR DYSMENORRHEA IN HIGH-INCOME COUNTRIES: A SCOPING REVIEW.

Authors: Fódhla Ní Chéileachair[1], Line Caes, Sophie Belfield[2], Marion Bartl[3], Hannah Durand[1]

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2. Department of Psychology, Cornell University, Ithaca, New York USA
3. Insight Research Centre for Data Analytics, University College Dublin, Ireland

Introduction: Dysmenorrhea (period pain) affects 16–91% of the 1.8 billion menstruators globally and can severely impact daily functioning. Individuals with dysmenorrhea report delaying or avoiding healthcare, as well as experiencing trivialisation and diagnostic delays from healthcare systems. This may leave underlying conditions (e.g., endometriosis, PCOS) untreated and limit access to evidence-based management. Understanding the multifactorial challenges in accessing care across high-income countries (HICs) is essential to improving these gaps.

Aim of the investigation: To comprehensively map influential factors affecting healthcare access and its consequences for individuals with dysmenorrhea in HICs.

Methods: This scoping review followed the JBI's guidance and the PRISMA-ScR guidelines. Sources were drawn from four peer-reviewed databases and from grey literature across OECD countries using webscraping. Levesque and colleagues' (2013) Conceptual Framework of Access to Healthcare guided extraction and synthesis, illustrating a pathway of factors affecting healthcare access and its consequences.

Results: From n = 198 studies across over 22 OECD countries, common factors were identified at individual, social, and healthcare system levels. These include menstrual stigma and the normalisation of painful periods, fear of negative social perceptions, the financial burden of repeat consultations and access to specialist care. Healthcare experiences were shaped by trivialisation, testimonial injustice, and dissatisfaction with treatment and continuity of care.

Discussion: Despite its impact, dysmenorrhea is often shaped by menstrual stigma at both individual and societal levels. Addressing harmful norms and improving access to specialist services and continuity of care are critical to closing care gaps for individuals with dysmenorrhea in HICs.

Ethics Approval: Not Applicable (Review Study)

Acknowledgements: This work is financially supported by the Scottish Graduate School of Social Sciences (ESRC Grant number: ES/P000681/1). This publication has also emanated from research conducted with the financial support of Science
Foundation Ireland under grant number 12/RC/2289_P2.

Disclosures/Conflicts of Interest: None declared

Key words: Period Pain, Dysmenorrhea, Healthcare Access

References:

Levesque, J., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: Conceptualising access at the interface of health systems and populations.
International Journal for Equity in Health, 12 (18), 1-9. DOI: 10.1186/1475-9276-12-18

Abstract No. 17

Title: EVALUATION OF MENTAL-WELL BEING IN PATIENTS UNDERGOING INJECTION THERAPY FOR BACK PAIN

Authors: Gul Helin Ozgokce, Ms.Bridget Hughes, Joanna Fahey
Mayo University Hospital

Introduction: Lower back pain can significantly affect mental well-being, often contributing to anxiety and depression. Many pain management programs therefore incorporate psychological support as part of a multidisciplinary approach. This study aims to evaluate changes in the mental well-being of patients undergoing injection therapy for lower back pain using the WHO-5 Well-Being Index.

Methods: A prospective study was conducted involving 90 patients (mean age 45) undergoing injection therapy for lower back pain. The cohort included both male and female patients across a broad age range. Mental well-being was assessed using the WHO-5 Well-Being Index before the procedure and again six weeks post-injection. The WHO-5 comprises five positively phrased items, scored on a Likert scale from 0 (none of the time) to 5 (all of the time). Scores are converted to a 0–100 scale, with lower scores reflecting poorer well-being. A score ≤50 indicates poor well-being and possible depressive symptoms, while ≤28 strongly suggests depression. Paired t-tests were used to analyse pre- and post-injection differences.

Results: Baseline WHO-5 scores showed that a significant proportion of patients scored below 50, indicating poor mental well-being. At six weeks post-injection, many patients demonstrated improved scores, although the extent of improvement varied. Paired t-tests revealed a statistically significant improvement in WHO-5 scores following injection therapy.

Conclusion: Injection therapy for lower back pain appears to improve not only physical pain but also aspects of mental well-being. However, given the varied psychological responses, additional psychological support may be beneficial to optimise longterm outcomes in chronic pain management.

Ethics Approval: This study was conducted in accordance with the Declaration of Helsinki. Ethical approval was obtained from the Mayo University Hospital Research Ethics Committee.

Disclosures / Conflicts of Interest: The authors declare no conflicts of interest related to this study.

Acknowledgements: The authors would like to thank the Pain Management Department staff at Mayo University Hospital for their support in patient recruitment and data collection.

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2. Bech P. Clinical Psychometrics. Wiley-Blackwell, 2012

Abstract No. 18

Title: BEYOND THE PATCH: IMPROVING PROCEDURAL PAIN MANAGEMENT IN CHILDREN

Authors: Dr Hanna Balytska[1], Naomi Quigley [1,3], Kieran Moloney[1], Dr Elmaz Aktachynska[2],

1. Department of Anaesthesia, University Hospital Limerick
2. Department of General Internal Medicine
3. Consultant Anaesthetist, UHL

Introduction: Paediatric patients undergoing surgery are uniquely vulnerable to procedural pain and perioperative anxiety. Intravenous cannulation, though routine, remains a highly distressing experience for children. Eutectic mixture of local anaesthetics(EMLA cream)—an evidence-based topical anaesthetic—has the potential to mitigate this, yet real-world application often falls short of protocol. Bridging this implementation gap is critical to improving the quality of paediatric pain care.

Aim of the Investigation: To evaluate compliance with EMLA application guidelines in the paediatric perioperative setting and to determine the effect of timing and placement on indicators of pain, distress, and cannulation success.

Methods: A prospective audit was conducted over four weeks at University Hospital Limerick. Data were collected from 43 surgical patients aged 4–12 years. Key metrics included timing of EMLA application, correct anatomical placement, cannulation success on the first attempt, and presence of observable distress. Optimal use was defined as application ≥60 minutes prior to cannulation at the intended IV site.

Results: EMLA was applied in 88% of cases. Only 28% received it within the optimal time window. First-attempt cannulation was successful in 70% of patients. Overall, 49% of children were distressed. Distress was 25% in those with optimal timing versus 58% with suboptimal timing. Correct site application occurred in 65% of cases. These findings demonstrate a clear association between protocol adherence and pain-related outcomes.

Conclusion:This audit highlights an opportunity to reduce paediatric procedural pain through consistent EMLA practice. Timely, site-specific application enhances both comfort and efficiency.

Summary and Recommendations: Children should be prioritised for early EMLA application at pre-assessment or ward admission. Local guidelines must be reinforced through nurse and parent education. Improved monitoring and timely anxiolysis can further reduce procedural distress. Embedding these measures into standard protocols represents a simple, high-impact step toward safer and more compassionate paediatric care.

Ethics
Audit registered with UHL Clinical Audit Department (CLN-464). Ethical approval not required.
Disclosures
No conflicts of interest or external funding.

Abstract No. 19

Title: PAIN IN SILENCE: AUDITING DISTRESS AND ANALGESIA IN NEURODIVERSE CHILDREN UNDERGOING SURGERY

Authors: Hanna Balytska[1], Naomi Quigley[1,3], Kieran Moloney[1], Elmaz Aktachynska[2],

1. Department of Anaesthesia, University Hospital Limerick
2. Department of General Internal Medicine
3. Consultant Anaesthetist, UHL

Introduction: Neurodevelopmental disorders affect up to 1 in 44 children worldwide, with autism spectrum disorder (ASD) the most common. Hospital environments intensify sensory and behavioural sensitivities, often resulting in atypical, exaggerated, or silent pain responses. Such presentations complicate recognition and delay intervention. Missed opportunities in monitoring, early parent education, and tailored analgesia risk unnecessary distress and unsafe perioperative care.

Aim: To evaluate perioperative pain practices—including premedication, eutectic mixture of local anaesthetics (EMLA), monitoring, and caregiver presence—and their impact on distress in neurodiverse paediatric patients.

Methods: Nineteen children aged 6–16 years with ASD, attention-deficit/hyperactivity disorder (ADHD), intellectual disability, or global developmental delay were audited during elective and emergency surgery. Variables included premedication, EMLA use, parental presence, monitoring practices, and distress scores (scale 0–5)(FLACC scale).

Results: 53% (10/19) received no premedication. Distress ≥3 occurred in 63% (12/19); mean scores were similar with (3.22) or without (3.4) premedication. EMLA was applied in 89% (17/19), yet distress remained high. Distress did not differ between intravenous (3.29) and inhalational induction (3.33). Parental presence was universal but insufficient (mean 3.32). Monitoring was absent in 58%, limiting early recognition of rising anxiety or pain.

Conclusion: Despite standard measures, neurodiverse children experience significant perioperative distress. Improving monitoring, parent education, timely anxiolysis, and structured behavioural planning are essential for early recognition and effective care.

Summary and Recommendations: Neurodiverse patients should be scheduled early in theatre lists to reduce waiting-related anxiety. Development of local guidelines can standardise management. Education for nurses and parents on recognising distress behaviours should be prioritised. Finally, a proactive, multidisciplinary approach—linking anaesthetists, nurses, psychologists, and child-life specialists—offers the best pathway to safer, equitable, and compassionate care.

Ethics: Audit registered with UHL Clinical Audit Department (CLN-463, CLN-464). Ethical approval not required.

Disclosures: No conflicts of interest or external funding

Abstract No. 20

Title: RETROSPECTIVE AUDIT ON THE PATIENT/ NURSE CONTROLLED RECORD SHEET DOCUMENTATION IN THE FIRST 24 HOURS OF PCA/NCA RUNNING.

Authors: Hannah McLoughlin [1], Geraldine Murray [1] & Norma O'Keeffe [1]

1. Department of Acute Pain Nursing, Children's Health Ireland at Temple Street, Dublin, Ireland.

Introduction: Post-operative pain is ongoing issue in the paediatric population. Poorly managed pain during post-operative period can lead to a number of consequences including impaired recovery & prolonged admission. Opioid infusions are often used to manage post- operative pain. This infusion is delivered via a patient-controlled analgesia (PCA) where the child self-administers small amount of medication (bolus) by using a handset or a nurse-controlled analgesia (NCA) in which a nurse administered a bolus. There has recently been incidents involving P/NCA infusions and it was felt these could have been prevented had appropriate monitoring and documentation completed.

Aim of the investigation: To maintain patient safety and adequate pain control while a patient is on a P/NCA. Aim for documentation and patient monitoring in the first 24 hours of a P/NCA infusion to be 90% compliant with standards identified in the Standard Operating Procedure (SOP) for management of P/NCA.

Methods: Retrospective audit. A sample size of 40 patient's; 20 from CHI at Crumlin & 20 from CHI at Temple Street. An audit tool was devised based off of 6 standards identified in the SOP.

Results: Only 5/40 patients were >90% compliant with the standards identified. Overall compliance with standards = 72%. Checking of infusion settings and prescription by two staff members at identified times was one of the lowest standard met overall. These are vital components to ensuring the patient safety.

Discussion: Areas of improvement & correction were identified. This will help guide education sessions for implementing updated documentation. I plan to re-audit 6 months post implementation of same.

Ethics Approval: This audit was approved by the CHI clinical audit team.

Acknowledgments: NA

Disclosure/ Conflict of Interest: NA

Key words: Ensuring patient safety & adequate pain control while on an opioid infusion. Are we doing enough?

Abstract No. 21

Title: A CRITICAL REVIEW OF WEBSITE INFORMATION PROVIDED BY PAIN CLINICS IN MAJOR HOSPITALS IN IRELAND

Author: Islam Nazmy[1], Abubakr Idris[2], Ahmed Abbas[1]

1. Department of Anaesthesiology, St Vincent University Hospital, Dublin, Ireland
2. Intern, Beaumont Hospital, Dublin, Ireland

Introduction: Hospital websites provide an important source of information for patients, to aid them in preparing for clinic appointments or in making decisions that will influence their care. There is no standardised tool universally accepted to measure the quality of medical service providers' websites.

Aim of the investigation: To analyse and evaluate the online content and performance metrics of the 16 pain clinics' websites listed in the Irish Pain Society (IPS) website.

Methods: Google search was performed of the 16-pain medicine centres. A five-item checklist was developed to evaluate the website contents under 5 main subheadings: Contact, Doctors, Services, FAQ and information leaflets. Performance metrics were assessed using Google Page Speed Insights (PSI) for both the mobile and desktop versions.

Results: We found that 9 centres had a specific pain medicine section in their website. Inconsistent page titles were used, including pain management, pain service, pain medicine and pain clinic. 8 websites provided phone numbers, 4 also included an email address. 5 websites listed their doctors, 3 provided pictures. 6 of the websites outlined the services they provide. 2 websites provided links to patient information leaflets. None of the websites contained an FAQ page. 7 of the 9 websites passed the Google PSI Core Web Vitals Assessment.

Discussion: The internet presence of Irish pain clinics is very limited, with almost half of the clinics having no web presence. There was poor availability of service information and patient information leaflets were scarce. Findings suggest that an improvement and increase in internet presence of Irish pain clinics is needed.

Ethics Approval: Not required

Acknowledgements: N/A **Funds:**
N/A

Disclosures/Conflicts of Interest: N/A
Key wards: Pain clinic, Patient Information, Websites

Abstract No. 22

Title: A TWO-CYCLE CLINICAL AUDIT AND Q.I.P. OF PCOC SYMPTOM ASSESSMENT SCALE RATING COMPLETION IN A SPECIALIST PALLIATIVE CARE INPATIENT UNIT.

Authors: Islam Nazmy[1], Martin Ryan[2], Denise Hayes[2]

1. Department of Anaesthesiology, St Vincent's University Hospital, Dublin, Ireland (Intern, University Hospital Waterford 2024-25)
2. Department of Palliative Care Medicine, University Hospital Waterford, Waterford, Ireland

Introduction: Pain is highly prevalent in palliative care; therefore, regular and correct monitoring is essential to ensure adequate management. Our Southeast Palliative Care Centre uses the Palliative Care Outcomes Collaboration (PCOC) symptom assessment scale (SAS) to measure patient reported outcomes of severity of distress caused by pain and other symptoms, on a scale rated from 0-10.

Aim of the investigation: This study aims to evaluate the consistency of documentation using the Symptom Assessment Scale within a specialist palliative care setting.

Methods: A point survey of PCOC SAS document sheets was recorded on a single day. All SAS scores documented on these sheets were included. The breakdown of frequencies of ratings being completed by patient, family and clinician was recorded, as was reasons scores were not patient rated (unwilling, unresponsive, unable to understand). Descriptive analysis was performed.

Results: Cycle 1: 15 patients' active PCOC score sheets were reviewed, providing a total of 106 SAS scores. 40 scores were not patient-rated, 17 (42.5%) of which had no documented reason. Educational session highlighting the importance of patient rated outcomes was carried out. Reinforced the need to document reasoning when this is not possible.
Cycle 2: 19 patients' active PCOC score sheets were reviewed, providing a total of 133 SAS scores. 68 scores were not patient-rated, 46 (67.6%) of which had no documented reason.

Discussion: Educational intervention was insufficient to improve utilisation of SAS score sheet, possibly due to staffing rotation (non-attendees at teaching). Further service improvement initiatives are to include consistent teaching, multidisciplinary approach and 'PCOC Champion' roles; members of staff specially trained in monitoring pain and other symptoms.

Ethics Approval: Not Required
Acknowledgements: N/A
Disclosures/Conflicts of Interest: N/A
Key Words: Pain Monitoring, Palliative Care, Service Improvement

Abstract No. 23

Title: HUMAN DISC-ON-A-CHIP: A MICROFLUIDIC AND HYDROGEL-BASED SYSTEMS FOR MODELLING INTERVERTEBRAL DISC DEGENERATION

Authors: Izzat Zulkiflee[1], Zaim Razak[1,2], Sobeerat Adekola[1], Harry Revill[1], Andrew Daly[1], Abhay Pandit[1] and Isma Liza Mohd Isa[1,2,3*]

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Introduction: Discogenic back pain is primarily caused by intervertebral disc (IVD) degeneration, mediated by imbalance of extracellular matrix (ECM), inflammation, and sensory hyperinnervation. Studies relied on animal and *in vitro* 2D models, but these approaches remain limited in replicating the human IVD phenotype within the 3D microenvironment. This study aimed to develop an IVD model integrating a microfluidic gradient device with ECM-based hydrogels, mimicking the heterogeneous IVD.

Methods: Disc-on-a-chip was fabricated using stereolithography by varying microfluidic channel and chamber geometries, with hydrogel concentrations and compositions, to mimic the NP, AF, and sensory regions integrated with a microelectrode array. Microfluidic system was computationally simulated for flow rate and velocity. Microfluidic slab was evaluated for surface hydrophilicity and roughness. Hydrogels were characterised for mechanical properties. The inner core hydrogel consisted of HA/COLII for NP, surrounded by COLI hydrogel for AF, with iPSC-derived sensory neurons positioned peripherally. Cell- encapsulated hydrogels were assessed for viability, metabolic activity, phenotypic marker expression, and local field potentials.

Results: Computational simulations showed that higher pressure increased shear stress and velocity, while curved-microchannel designs produced uniform flow and reduced pressure. HA/COLII hydrogel at 3 mg/mL exhibited greater stiffness, viscosity, and shear stress, while 2 mg/mL of hydrogel provided optimal viscosity with lower resistance. Morphologically, NP cells demonstrated a rounded shape and were evenly distributed throughout the hydrogel. They exhibited higher expression of COL2A1, KRT19, ACAN, and Brachyury, whereas AF cells expressed COL1A1 and FN, confirming the maintenance of region-specific phenotypes.

Conclusion: Disc-on-a-chip provides a physiologically relevant *in vitro* 3D model, mimicking the human IVD for disease modeling.

Ethical Approval: C.A. 3235 Molecular profiling of intervertebral disc degeneration underlying inflammatory pain in humans.

Acknowledgement: This study is funded by the Health Research Board, Ireland, under the Emerging Investigator Award for Health (EIA-2022-010).

Disclosures/Conflict of Interest: The authors declare no conflict of interest.

Keywords: Intervertebral disc, Disc-on-a-chip, Microfluidic, 3D Printing, Hydrogel

Abstract No. 24

Title:
EVALUATING THE ACUTE PAIN SERVICE: A REVIEW OF CONTINUOUS EPIDURAL INFUSION PROVISION AT GALWAY UNIVERSITY HOSPITAL

Authors: Andrew Kelly[1], Leanne Gaule[1], Michelle Healy[1], Mairead Finn[1], Róisín Cassidy[1], Hiliary Regan[1], Jemima Nilan[1] Emer Curran [1]Olivia Finnerty[1]

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Introduction: The European Society for Regional Anaesthesia and Pain Therapy developed Procedure Specific Postoperative Pain Management Guidelines which collate evidence for the best pain management strategies. For open major abdominal surgery, Continuous Epidural Infusion (CEI) is the first line analgesic choice. Galway University Hospital (GUH) is a centre for colorectal, upper gastroenterological, urological and gynae-oncological surgery, and utilises CEI on a regular basis.

Aim of the investigation: To assess current CEI rates at GUH, duration of usage, the degree of physician management of the infusions and need for co-administration of patient controlled opioid analgesia.

Methods: A retrospective review of all CEIs at GUH from April to May 2025, excluding obstetric patients. Collecting the following data points:

- Level of Epidural Insertion
- Duration of CEI
- Number and type of clinician interventions required; additional boluses and/or intravenous opioid via Patient Controlled Analgesia infusion (PCA).

Results: Over two months, there were 45 CEIs in use. 39/45 (86.6%) were thoracic epidurals. Average duration of use was 3.6 days. 51% of CEIs (23/45) required intervention during this time; review by anaesthesiologists were required for boluses in 14 cases (31%), with 5 of these requiring multiple reviews. For 21 patients (46%), a PCA was prescribed for additional analgesia. Reasons for epidural ineffectiveness was not specifically documented. The epidural catheter became dislodged in 9% of cases.

Discussion: The results of this review show there are a large number of CEIs being managed in GUH. It highlights areas for improvement with administration of CEIs, specifically around clearer documentation for reasons additional boluses or PCA are added.

Ethics Approval: not required

Acknowledgements, Disclosures/Conflicts of Interest: No funding to declare, No COIs to declare

Key Words: Epidural analgesia, patient-controlled analgesia, regional anaesthesia

Abstract No. 25

Title: AN AUDIT OF THE EFFECTIVENESS OF REVISED ANALGESIA PROTOCOL FOR ELECTIVE KNEE/HIP JOINT ARTHROPLASTY SURGERY IN A MODEL 3 HOSPITAL.

Authors: Joanna Fahey; Larisa Di Lucia, Michelle Duggan, Rachel O'Neill

Affiliation: Orthopaedic Ward, Mayo University Hospital, Mayo, Ireland

Background: Effective postoperative analgesia is critical to enhance recovery, improve patient satisfaction, and reduce complications following elective hip and knee arthroplasty. In 2024, a revised multimodal analgesia protocol was introduced in a Model 3 hospital with the aim of optimizing pain control, improving patient outcomes and reduced length of stay.

Aim: To audit the effectiveness of the revised implemented analgesia protocol in patients undergoing elective total hip and knee arthroplasty.

Methods: A prospective audit was conducted over a 6-month period. All patients undergoing elective knee / hip arthroplasty were invited to take part, consent and ethical approval was obtained. Data collected included postoperative pain scores, opioid requirements, time to first mobilization, and length of hospital stay.

Results: N=147 (53 Knees / Hips 94). Average pain scores at Day 1 and Day 2= 5.83 /4.6 Knees postoperatively and in the Hips 4.81/ 3.66.

Conclusion: Implementation of a multimodal analgesia protocol in a Model 3 hospital improved postoperative pain control and facilitated enhanced recovery after elective joint arthroplasty. Continued monitoring and refinement of the protocol are recommended to maintain these benefits.

Ethical Approval: Granted

Acknowledgements: N/A.

Disclosures/Conflict of Interest: None to declare.

Key words: Pain scores; analgesia, length of stay

Abstract No. 26

Title: A NOXIOUS INFLAMMATORY INSULT ELICITS SOCIAL IMPAIRMENTS AND ALTERED INFLAMMATORY RESPONDING IN THE VALPROIC RAT MODEL OF AUTISM

Authors: Jonathan A Costello[1,2,3], Hong Su[1,2,3], David P Finn[2,3.4], Michelle Roche[1,2,3]

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4. Pharmacology & Therapeutics, School of Pharmacy and Medical Science University of Galway, Ireland.

Background: Altered pain responses are reported in autistic individuals, though the underlying mechanisms remain unclear. In the valproic acid (VPA) model of autism, our lab has shown elevated nociceptive thresholds to mechanical and thermal stimuli, with or without inflammatory pain. We investigated whether a noxious inflammatory insult alters social behaviour and immune mediator expression in VPA-exposed female rats.

Methods: Female Sprague-Dawley rats (6-9/group) prenatally exposed to VPA or saline received complete Freund's adjuvant (CFA; 50uL i.pl.) or sham injection. Social behaviour was evaluated using the three-chamber test on day 3 post-CFA, and inflammatory gene expression in spleen, spinal cord, and prefrontal cortex (PFC) quantified via RT-qPCR on day 7 post-CFA.

Results: All females demonstrated a preference for sociability and social novelty in the 3- chamber test. However, CFA reduced social novelty preference in VPA-exposed females relative to saline-exposed controls. Prenatal VPA exposure was associated with reduced splenic *Socs1* expression and lower *Irf7* expression in the spinal cord and PFC. CFA increased *Il1b* expression in the spleen and spinal cord of both groups and decreased splenic *Socs1* expression in saline- exposed rats only. Notably, CFA-induced splenic *Il1b* upregulation was blunted, and spinal cord CFA-induced *Irf7* downregulation was more pronounced, in VPA-exposed rats compared to saline-exposed controls.

Conclusion: Female rats prenatally exposed to VPA and injected with CFA, to model chronic inflammatory pain in autistic individuals, exhibit social deficits and immune alterations. Further work is needed to assess whether these effects extend to males and whether immune changes drive social and nociceptive behavioural changes.

Acknowledgements: This research is supported by the University of Galway Hardiman Scholarship and School of Medicine.

Conflicts of Interest: The authors declare no conflicts of interest.

Key Words: Autism model, Inflammatory pain, Behaviour

Abstract No. 27

Title: THE EFFECTS OF CHRONIC STRESS AND/OR INCISIONAL INJURY ON EXPRESSION OF GENES INVOLVED IN CELL SIGNALLING AND NEUROINFLAMMATION IN THE ROSTRAL VENTROMEDIAL MEDULLA OF MALE RATS

Authors: Julia Cichy[1], Ariadni Bella[1,2,4], Daniela Rodrigues Amorim1[,2], Eleonora Fetter[1], David P. Finn[2,3] , Ipek Yalcin[4] and Michelle Roche[1,2]

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Introduction: Pre-surgical psychological stress is a key risk factor in the development of persistent and prolonged post-surgical pain. The rostral ventromedial medulla (RVM), a critical brainstem region in the descending pain modulatory system, regulates both pain facilitation and inhibition. Altered neuroimmune signalling has been reported in both chronic pain and chronic stress conditions, such as depression. However, it is unknown what effects chronic stress and/or surgery have on the expression of markers of cell signalling or neuroinflammation in the RVM.

Aim: This study investigated the effects of chronic repeated restraint stress (RRS) on post- surgical pain behaviour and associated alterations in gene expression in the RVM.

Methodology: Adult male Sprague-Dawley rats underwent RRS (6 h/day for 21 days) or daily handling without RRS, followed by plantar paw incision or sham surgery, creating four groups: no RRS + sham (n=8), RRS + sham (n=8), no RRS + paw incision (n=8), and RRS + paw incision (n=8). Mechanical response thresholds were assessed using von Frey testing on post-surgical day 5, followed by RVM tissue collection. Real-time quantitative PCR (RT-qPCR) was performed to assess gene expression in the RVM, and data were analysed by 2-way ANOVA followed by *post hoc* analysis where appropriate. $P<0.05$ was deemed significant.

Results: RRS potentiated paw incision-induced mechanical hypersensitivity on day 5. Paw incision significantly reduced expression of the immediate early gene *cfos* ($P<0.05$) but not *egr1,* in the RVM, an effect not altered by chronic stress. Gene expression of markers of glial activity (*cd40, itgam, p2ry12, gfap*), IL-1β signalling (*Il-1β, nlrp3*), and Wnt signalling (*ryk, wnt5b*) did not show statistically significant changes across the groups.

Conclusions: Paw incision is associated with reduced *cfos* expression in the RVM, although no changes were observed in genes associated with neuroimmune signalling. Further studies are required to determine the role of the RVM in the interactions between chronic stress and postsurgical pain.

Ethics Approval: Ethical approval for this study was obtained from Animal Care Research Ethics Committee, University of Galway and from the French Minister of Research, Education and Innovation and research carried out under license from the Health Products Regulatory Authority Ireland

Acknowledgements: This work is funded by School of Medicine Summer Research Scholarship to Julia Cichy. Funding provided by European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 955684 and Research Ireland – Grant number 13/RC/2073_P2 & and Co-funded by the European Union (EU) Grant Agreement n°101081457.
Conflict of interest: none

Key words: post-surgical pain, rostral ventromedial medulla (RVM), stress, depression

Abstract No. 28

Title: QUALITATIVE EXPLORATION OF CHALLENGES AND POTENTIAL SOLUTIONS TO DEPRESSION SCREENING IN LOW BACK PAIN BY IRISH MUSCULOSKELETAL TRAIGE PHYSIOTHERAPISTS.

Authors: Julie Sugrue[1], Sean McKenna[1], Siobhan MacHale[2], and Kieran O Sullivan[3]

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3. **School of Allied Health, University of Limerick, Limerick, Co. Limerick**

Introduction: Comorbid depression in people with low back pain (LBP) is associated with poorer prognosis.

Aim of Investigation: To understand the challenges faced by musculoskeletal triage physiotherapists when screening for depression in LBP populations, and to generate actionable recommendations for overcoming these challenges

.

Methods: Using a pragmatic hybrid descriptive qualitative approach, this study integrated elements of ethnography and action research. Set in the Republic of Ireland, purposive sampling recruited physiotherapists working in musculoskeletal triage roles. Semi-structured interviews were employed, with data analysis following a Reflexive Thematic Analysis framework.

Results: Fourteen physiotherapists participated. Final data analysis resulted in three themes relating to challenges: capacity, culture, and circuitousness. Capacity had three subthemes; personal, professional, and system capacity. Culture had two subthemes; clinic and societal culture. Five themes were established concerning potential solutions, with direct recommendations around screening tools, normalising screening, training, pathways, and resources.

Conclusions: This qualitative research offers novel insights into the challenges CSPs face when screening for depression in people with LBP. Importantly, it proposes actionable solutions with participants contributing as subject matter experts. Their pragmatic solutions can help facilitate consequential change and help normalise depression screening equivalent to red flag screening. The findings highlight capacity, cultural, and circuitous communication challenges, and pave the way for implementation research to explore the potential solutions of screening tools, training, and onward referral pathways to improve depression screening for people with LBP.

Ethics Approval: University of Limerick Ethical Approval received [2024_02_06_EHS].

Acknowledgements: This work received no direct funding. Julie Sugrue is the recipient of part-time Professional Doctorate Fees from the University of Limerick Hospital Group.

Disclosures/Conflicts of Interest: The authors have no financial interests to declare relevant to the content of this study.

Key words: Depression, Screening, Low Back Pain, Musculoskeletal Triage, Physiotherapists

Abstract No. 29

Title: THE POWER OF PARTNERSHIP: CO-CREATING HELP, A DIGITAL TOOL FOR CHRONIC PAIN

Authors: Kate Sheridan[a,*], Siobhán O Connor[a,], Sinéad O'Keeffe[a,], Fionnuala Fildes[c] and Enda Whyte[a,]

[a] School of Health and Human Performance, Dublin City University, Dublin, Ireland
[c] Patient and Public Involvement (PPI) Contributor

Introduction: In Ireland, digital health resources present an opportunity to expand chronic pain services, particularly where current infrastructure and service availability limit reach and effectiveness.

Aim of the investigation: To co-design the HELP intervention (**H**ealing and **E**mpowering **L**ives with **P**ain), a PPI-led, theory based digital resource supporting self-management in adults with chronic non-cancer pain.

Methods: A three-step co-design approach was implemented with continuous input from individuals living with chronic pain (n=14) and healthcare professionals from a specialist pain multidisciplinary team (n=7). Step 1 involved content design, Step 2 heuristic evaluation, and Step 3 usability testing.

Results: Eight key determinants of well-being in the context of chronic pain were identified in Step 1, with *"The Challenge of Living with Pain"* and *"My Role in Management"* emerging as the most important. These determinants directly informed the structure and content of the eHealth prototype, ensuring it addressed the priorities and needs identified by patient partners. The resulting HELP prototype received an average System Usability Scale score of
96.5 ± 7.8, indicating excellent usability.

Discussion: By actively partnering with individuals living with chronic pain and healthcare professionals working in pain services, this project placed lived experience and clinical insight at the heart of development. The result is a user-centred, theory-informed digital prototype that reflects the real-world needs, values, and priorities of those it aims to support, addressing critical gaps in current pain care. Further research is now needed to evaluate the intervention's feasibility, acceptability, and preliminary efficacy among both people living with pain and clinicians.

Ethics Approval: Ethical approval was granted by both Dublin City University Research Ethics Committee (DCUREC/2024/152) and the Mater Hospital Institutional Review Board (1/378/2475)

Acknowledgements: This work was supported by a PPI seed funding bursary from the PPI Ignite Network DCU.

Disclosures/Conflicts of Interest: The author(s) declare no potential conflicts of interest Key Words: Public Patient Involvement, Shared-Partnership, Digital Health, Chronic Pain

Abstract No. 30

Title: INTEGRATING MUSIC THERAPY INTO A PSYCHOLOGY-LED PAIN MANAGEMENT PROGRAMME: EARLY FINDINGS AND CHALLENGES.

Authors: Katie Fitzpatrick[1], Clíona Hallissey[1], Róisín Hosie[1]

Affiliation: 1. Pain Excellence Centre, Croom Orthopaedic Hospital, HSE Mid-West.

Introduction: Interdisciplinary pain management programmes typically combine psychology, physiotherapy, and medical input. Despite evidence supporting the role of music therapy in chronic pain, it is rarely embedded within such structured programmes.

Aim of the Investigation: To describe the integration of music therapy into a psychology- led, group-based pain management programme and to present early findings on feasibility, participant engagement, and challenges in implementation.

Methods: A ten-week group programme (n=8) will be facilitated by a psychologist, physiotherapist, and music therapist. Music therapy components include active music- making, guided music listening and relaxation, and song writing, aligned with principles of Acceptance and Commitment Therapy and compassion-focused approaches. Data collection will involve facilitator field notes, participant feedback forms, and thematic analysis of group discussions.

Results: Preliminary findings suggest that group music therapy can:

- Enhance emotional expression and peer connection;
- Support pacing and relaxation strategies;
- Provide an accessible medium for reflecting on values and identity beyond pain.

Challenges may include varying levels of participant confidence in music-making, time constraints within the weekly 4-hour programme, and the need for facilitator collaboration to balance psychological and creative elements.

Conclusions: Integrating music therapy within a psychology-led programme offers unique pathways for emotional processing and behaviour change. Early findings highlight the potential value of creative approaches in multidisciplinary pain management, though ongoing evaluation is required to refine delivery and assess impact on patient outcomes.

Ethics Approval: Service evaluation approved by Croom Orthopaedic Hospital.

Acknowledgements: NA.

Disclosures/Conflicts of Interest: None.

Key Words: Music therapy; chronic pain; interdisciplinary care; behaviour change; psychosocial interventions.

Abstract No. 31

Title: ASSOCIATION OF TOBACCO USE WITH PAIN SEVERITY AND LOCATION IN AN INTERNET SURVEY OF JAPANESE RESPONDENTS

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Introduction: The Japan "Society and New Tobacco" Internet Survey (JASTIS) is an annual online survey which records the use of conventional tobacco, e-cigarettes and heated tobacco products.

Aim of Investigation: We evaluated associations between tobacco use and pain intensity and location in a Japanese cohort.

Methods: Amongst 28,000 respondents in the 2025 cohort, we included 23,228 individuals with valid responses. We used generalised ordinal logistic regression to model the main effects of how smoking status, sex and age influences the chances of reporting different levels of pain (past week). We also modelled the most painful body site (past month) with similar predictors using multinomial regression.

Results: Compared to never smokers, current (ORs 1.17-1.47) and former (1.25-1.30) smokers have higher odds of reporting more severe pain. Females were more likely (1.25- 1.45) to report higher pain across all smoking categories. An increase in age was associated with lower pain (0.98-0.99). For most painful location, current (1.05-1.72) and former (1.21- 2.60) smokers had higher odds across all body sites. Females had higher odds across all sites (1.26-2.69), with over double for the head, chest/abdomen and pelvic area. With age, the head, chest, upper back, genital/anal area had lower odds (0.97-0.98), while the neck/shoulder, lower back, pelvic area and limbs had higher odds (1.01-1.04).

Discussion: This study is the first to model the impact of smoking on pain with such a large Japanese cohort. We plan to expand the model with other predictors such as comorbidities, socioeconomic status, type of tobacco product and use frequency.

Ethical approval: Reviewed and approved by the Research Ethics Committee of the Osaka International Cancer Institute (no. 1412175183) and the National Institute of Public Health, Japan (NIPH-IBRA#12112).

Acknowledgements: Supported by Research Ireland – Grant Number 13/RC/2073_P2 and co-funded by the EU Grant Agreement No. 101081457. Also supported by Health Labor Sciences Research Grants (22FA1002, 23FA1004), the Japan Society for the Promotion of Science (JSPS) KAKENHI Grants (JP20K19633; JP23K21579; JP24H00663; JP21H04856; JP25H01079), and the intramural fund of the National Institute for Environmental Studies.
Disclosures/Conflicts of Interest: Dr. Tabuchi received financial support for research, (consulting fees and lecture fees) from Daiichi Sankyo Healthcare Co., Ltd., Johnson & Johnson K.K., Data Seed Inc., and Workout-Plus LLC (in the last 36 months), and grants from the Ministry of Health Labour and Welfare (Health Labour Sciences Research Grant: grant number 23FA1004, 23EA1001).
Keywords: smoking, human participants, sex differences, risk factors, nicotine, computational pain modelling

Abstract No. 32

Title: MIND THE GUT: AN AUDIT OF PERI-OPERATIVE OPIOID AND LAXATIVE CO- PRESCRIBING PRACTICES IN A TERTIARY CENTRE

Authors: Leanne Gaule[1], Andrew Kelly[1], Róisín Cassidy[1], Hilary Regan[1], Euan O'Mathúna[2]

[1]Department of Anaesthetics, University Hospital Galway, Ireland
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Introduction: The Association of Anaesthetists and the British Pain Society's statement on Peri-operative pain management in adults outlines the necessity of co-prescribing laxatives and anti-emetics if opioids are being utilised at any stage of the peri-operative pathway[1]. Side effects from opioids such as constipation, nausea and vomiting contribute significantly to morbidity, and can result in prolonged hospital admission, poorer patient satisfaction, and increased costs.

Aim: To assess the frequency of co-prescription of laxatives and anti-emetics with opioids peri-operatively

Methods: A retrospective chart review of 46 drug charts of surgical patients was conducted across three surgical wards in University Hospital Galway (UHG).

Results: 54% (n= 25) of patients audited were prescribed an opioid regularly. Of those prescribed a regular opioid, 56% (n = 14) of patients were co-prescribed a regular laxative, whilst 24% (n =6) of patients who were prescribed a regular opiate were prescribed PRN laxative. Notably, 36% (n= 9) of patients who were prescribed a regular opioid were not prescribed any form laxative (PRN or regular). 60% of patients prescribed a regular opioid did not have a bowel chart present. 44% of patients prescribed a regular laxative were not prescribed any anti- emetic.

Conclusion: Co-prescription of adjunct laxatives and anti-emetics to mitigate side effects associated with opioid use is sub-optimal in UHG. Improvement in prescribing practices would improve patients' satisfaction and outcomes.

Ethics: N/a **Disclosures**: N/a **Acknowledgments**: N/a

Keywords: Opioids, laxatives, prescribing, anti-emetics

References:
1. El-Boghdadly K, Levy N, Fawcett W, Knaggs R, Laycock H, Baird E, et al. Peri-operative pain management in adults: a multidisciplinary consensus statement from the Association of Anaesthetists and the British Pain Society. Anaesthesia. 2024 Sept;79(11):1220–36.

Abstract No. 33

Title: COMMUNITY-BASED EXERCISE (COMEX PAIN) FOR OLDER ADULTS WITH CHRONIC MUSCULOSKELETAL PAIN: A PROTOCOL FOR A RANDOMISED CONTROLLED FEASIBILITY TRIAL

Authors: Mairead, Conneely[1] Kieran, O' Sullivan[1] Cormac, Ryan[2] Amanda, Clifford[1] Susan,Coote[3] Zohreh, Eshghimanesh[4] Vincent, O' Sullivan[5] Katie, Robinson[1] Frances, Shiely[6] Liam, Glynn[7] Catherine, Woods[8] Dominic, Harmon[9] Phelim, Macken[10] Ryan, Meaney[10] Martina, Phelan[11], Public and Patient Involvement Panel of Aging Research Centre[1], Karen, McCreesh

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Introduction: Chronic musculoskeletal pain is a key societal challenge in Ireland, affecting one in three adults over the age of 50, with societal and healthcare costs of €5.34 billion per year. Physical activity can form a key part of the management of people living with chronic pain; however, pain can limit engagement in physical activity, leading to the negative effects of chronic pain in older adults. Public and Patient involvement in this study identified that people with chronic pain fear exacerbation of their symptoms with exercise, and value having an experienced exercise leader who understands their needs.

Aim of the investigation: The primary aim of this study is to examine the feasibility and acceptability of a community-based exercise intervention, ComEx Pain, specifically tailored to older adults with chronic musculoskeletal pain.

Methods: ComEx Pain is a randomised controlled feasibility trial with embedded process evaluations. Community-dwelling adults aged ≥50 years living with chronic musculoskeletal pain were recruited in the mid-western region of Ireland. Randomisation was conducted using a 1:1 allocation ratio into two groups: (1) an intervention group receiving a community- based exercise program led by trainers educated in supporting people with chronic pain and
(2) a control group who received a paper-based education manual. Primary outcomes for feasibility included recruitment rate, retention rate and adherence.

Results: 92 people were recruited and there was 80% adherence to classes, with a trend towards improved quality of life in the intervention group. Final data collection is July 31st.

Discussion: ComEx Pain is feasibility and acceptable to older adults living with pain.

Ethics Approval: This trial was registered at Clinical Trials. gov (NCT06535633). The ethics of the study conformed to the 1964 Declaration of Helsinki and its later amendments and was reviewed

and approved by the University of Limerick Faculty of Education and Health Sciences Research and Ethics Committee (2024_02_23_EHS) on 10th April 2024.
Acknowledgements: The ComEx Pain Trial is funded by the Republic of Ireland's Health Research Board (HRB) Definitive Intervention and Feasibility Awards (DIFA-2-23-024). Disclosures/Conflicts of interest: None

Keywords: chronic musculoskeletal pain, exercise, community, feasibility randomised controlled trial

Abstract No. 34

Title: A REVIEW OF PARACETAMOL DOSING AT MERCY UNIVERSITY HOSPITAL.

Authors: Mark McCarthy1 and Michelle O'Mahony2
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Introduction: Safe dosing of paracetamol requires adjustment based on body weight and liver function. When IV use is indicated, the BNF recommend 1g QDS for patients ≥50kg (max 4g/day), and 15mg/kg every 4–6 hours for those <50kg (max 60mg/kg/day). Additionally, oral paracetamol intake should be reduced from a maximum of 4g/day to 2g/day in patients with cirrhosis, according to the Irish Liver Foundation.

Aim of Investigation: This audit aimed to assess adherence to paracetamol weight-based dosing guidelines, and whether dose adjustments were made in patients with history of hepatic impairment.

Methods: A point-prevalence review was conducted on thirty inpatient medication charts, selected at random from medical and surgical wards. Data were collected on documented weight, route of administration, appropriateness of IV use, accuracy of dosing, and whether adjustments were made in the context of hepatic impairment. Data were recorded and analysed using Excel.

Results: Of the 30 medication charts reviewed, 12 patients (40%) had no recorded weight. Five patients (16%) were prescribed IV paracetamol; of these, 3 (10%) had appropriate indications, while 2 (6%) had no identifiable reason for IV use. Four patients (13%) weighed less than 50kg, and 1 patient (3%) in this group was incorrectly prescribed 1g IV paracetamol QDS. Additionally, 3 patients (10%) with cirrhosis were inappropriately prescribed full-dose paracetamol (1g QDS to a max of 4g), without dose adjustment.

Conclusions: This audit identified areas for improvement in adherence to paracetamol dosing guidelines. Educational posters will be introduced on all wards to promote more consistent paracetamol prescribing.

Ethical Approval : As this was a clinical audit and no patient identifiers were recorded, ethical approval was not required.

Disclosures/conflicts of interest: I have no conflicts of interest to declare.

Keywords: paracetamol, weight-based dosing, Irish Liver Foundation.

Abstract No. 35

Title: PAIN MANAGEMENT IN MAJOR SURGERY: ARE WE BETTER INTRAOPERATIVELY OR POSTOPERATIVELY?

Authors: Mark McCarthy[1], Fyed Zulquernain[1], Gabriella Iohom[2,3], Brian 'Donnell[2,31]

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[3]Department of Anaesthesia, Cork University Hospital, Cork, Ireland.

Introduction: Efective perioperative pain management is essential for patient outcomes. This study compared adherence to the ESRA PROSPECT guidelines for three surgical procedures: median sternotomy (MS), total hip arthroplasty (THA), and total knee arthroplasty (TKA).
Aim of Investigation: Conducted across two elective care hospitals in Cork, the primary objective was to compare and assess if trends in adherence between intra- and postoperative phases carried across procedures.

Methods: A prospective chart review was conducted on the first 41, 34 and 30 patients who had elective THA, TKA and MS respectively in June 2024. Pre-, intra- and postoperative analgesia were recorded. Data were analysed using Excel, comparing adherence across the three disciplines.

Results: Intraoperatively, the weakest points of adherence in THA and TKA were the use of dexamethasone (68.3% and 73.5%) and NSAIDs/COX inhibitors (94.1% and 82.9%). In MS, only 1 (3.3%) patient received paracetamol or NSAIDs, and 2 (7%) received magnesium sulphate, with opioids as the primary analgesic. All MS patients received IV morphine, and 93% (28/30) received IV fentanyl. No MS patients received parasternal block, wound infiltration, or dexmedetomidine. In contrast, adductor canal nerve blocks were performed in 97% (33/34) of TKA cases. Postoperatively, all THA and TKA patients received short-acting oxycodone, with 82.9% (THA) and 79.4% (TKA) also receiving long-acting oxycodone. All MS patients received paracetamol, an NSAID (aspirin), and morphine while intubated, with short-acting oxycodone for rescue analgesia post-extubation.

Conclusions: Post-operative adherence was higher across all three procedures. To investigate this, anaesthetist attitudes to guidelines, department-wide discussions and education will be carried out, with a plan to re-audit thereafter.

Ethical Approval: As this was a clinical audit and no patient identifiers were recorded, ethical approval was not required.

Disclosures/conflicts of interest: I have no conflicts of interest to declare.

Keywords: perioperative pain, ESRA, PROSPECT guidelines.

Abstract No. 36

Title: ANTINOCICEPTIVE EFFECTS OF FAAH OR MGL INHIBITION IN A PRECLINICAL MODEL OF LOW BACK PAIN

Authors: Mary A. Hopkins[1,2,3], Maria C. Redmond[1,2,3,4], Catherine R. Healy[1,2,3,4], David P. Finn[1,2,3,4]

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Introduction: Chronic low back pain (CLBP) is an unmet clinical need with significant socioeconomic impact. Endocannabinoid system (ECS) alterations have been reported in patients with CLBP.

Aims: We investigated the effects of inhibitors of the endocannabinoid-catabolising enzymes fatty acid amide hydrolase (FAAH) and monoacylglycerol lipase (MGL) on nociceptive behaviour in a novel rat model of CLBP following intervertebral-disc-injury (IVDI).

Methods: Forty Male Sprague-Dawley rats (7-8 weeks, 245-335g on arrival, n=10/group) underwent IVDI or sham surgery under isoflurane anaesthesia. Base-of-the-tail mechanical withdrawal thresholds were assessed at baseline, post-surgical days (PSD) 2, 7, 14, 20, and 21 via electronic von Frey (VF). One hour before VF on PSD21, a single dose of URB597 (1 mg/kg i.p.), MJN110 (5 mg/kg i.p.) or vehicle (ethanol:Kolliphor:saline (1:1:18)) was administered. Rats were euthanised 90min after drug administration, and levels of anandamide (AEA), 2-arachidonoyl glycerol (2-AG), *N*-palmitoylethanolamide (PEA) and *N*- oleoylethanolamide (OEA) were measured in discrete brain regions, spinal cord and plasma using LC-MS/MS.

Results: Rats developed mechanical hypersensitivity at the base-of-the-tail from PSD2 onwards following IVDI. URB597 and MJN110 attenuated mechanical hypersensitivity 60min post-administration compared to vehicle-IVDI controls. URB597 increased levels of AEA, OEA and PEA in all brain regions assayed, and in the spinal cord and plasma. MJN110 increased levels of 2-AG in all brain regions assayed, but not in the spinal cord or plasma.

Conclusions: These results provide the first preclinical evidence that modulation of the ECS (via pharmacological inhibition of FAAH or MGL) may represent a viable analgesic approach for CLBP associated with IVDI.

Ethical Approval: Experimental procedures were approved by the Animal Care and Research Ethics committee, University of Galway. The experiments were completed under licence from the Health Products Regulatory Authority in the Republic of Ireland, in accordance with the EU Directive 2010/63. The study was designed in accordance with the ARRIVE guidelines.

Acknowledgements: Funding was provided by the Taighde Éireann – Research Ireland Government of Ireland Postgraduate Scholarship (GOIPG/2020/1496)

Disclosures/Conflict of Interest: None

Key words: Endocannabinoid System, Low Back Pain, Novel Analgesics

Abstract No. 37

Title: CHRONIC NON-FLUCTUATING PAIN FROM A MEDULLARY CAVERNOMA

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Abstract

Presentation: A 58-year-old woman with type 2 diabetes, hypertension, and cardiopulmonary sarcoidosis presented with diplopia, nausea, vertigo, and malaise. Initial non-contrast CT was normal; contrast CT identified a medullary lesion.

Diagnosis: MRI confirmed a 21x20x15 mm medullary cavernoma with classical 'popcorn' feature within the inferior portion of the medulla with distortion of the surrounding anatomy. Conservative management was chosen due to surgical risks. She was referred to in-patient rehabilitation services in the National Rehabilitation Hospital. Chronic pain was identified with a complex distribution and constellation of
symptomatology during admission. Previous work-up for pain included EMG and MRI Spine which found no other neurological lesions.

Treatment: Paracetamol, gabapentin and duloxetine were up-titrated to the maximum doses; multidisciplinary rehabilitation was implemented, yielding functional improvement but persistent, non-fluctuating multifocal pain. After discharge, this pain presentation remained on follow-up and referral to Pain Medicine was offered and ultimately declined.

Discussion: This case emphasises treatment-resistant pain despite optimal care, likely due to involvement and compromise of pain-associated medullary nuclei. Highlighting the need for patient-centred pain
management strategies, it underlines the importance of balancing clinical metrics with patient-reported experiences for comprehensive care.

Ethics approval: This case study did note require ethics committee approval. Verbal consent for the academic works was obtained during in-patient stay. All details were anonymised within the discussion and text.

Acknowledgements: N/A, no grant funding was used to produce this work.
Disclosures: The authors declare no conflicts of interest.

Key Words: Cavernoma; Chronic Pain; Neuropathic; Medulla

Abstract No. 38

TITLE: UNDERSTANDING THE EXPERIENCES OF PARTICIPANTS IN A DIGITAL PAIN EDUCATION PROGRAMME- AN INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS.

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Introduction: The use of videoconferencing for delivering health education programmes has grown, with potential to improve accessibility and scalability of interventions. However, little is known about how patients experience these remote sessions and how they impact on health management, in particular with regard to chronic pain. As digital health interventions become more frequently used, it is essential to understand how patients engage with and make sense of them in their daily lives.

Aim of the investigation: This qualitative study employs Interpretative Phenomenological Analysis (IPA) to explore patients' lived experiences of participating in a novel pain education programme.

Methods: Semi-structured interviews were conducted with ten patients who had completed a six-week chronic pain education programme, delivered by an interdisciplinary team in a group setting via Microsoft Teams. Data were analysed using IPA, capturing an idiographic exploration of individual patient experiences while identifying shared meaning. A patient and public involvement partner was involved throughout. The study was pre-registered on the Open Science Framework.

Results: Two Group Experiential Themes were generated: (1) "It was a stretch but…" and (2) "And now I can move on", along with four related subthemes.

Discussion: The data indicate that while participants initially found the education programme challenging, it ultimately provided a valuable framework for reorienting toward new approaches to understanding and managing chronic pain. This study contributes to the integration of patient voices in the evaluation of this new digital pain education programme with the insights having implications for the design of future interventions.

Ethics Approval: NHS Health Research Authority East Midlands-Derby Research Ethics Committee (REC reference: 24/EM/0027)

Acknowledgements: This work is funded by a Northern Ireland Department for the Economy Research PhD studentship

Disclosures/Conflicts of Interest: none

Key Words: chronic pain, education, digital, qualitative

Abstract No.39

Title: PAIN EXPERIENCES AND PAIN BURDEN IN CHILDREN AND ADOLESCENTS WITH PHYSICAL DISABILITIES BASED ON CAREGIVER REPORT

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Introduction: Pain is a significant health concern for children and adolescents with physical disabilities, yet research on their pain experience remains limited.

Aim of the investigation: This study explored pain experience and burden in children and adolescents with physical disabilities (aged 5–17 years), based on caregiver report. Specifically, it examined chronic pain status, pain location and frequency, interference with daily functioning and emotional well-being, and treatments utilised.

Methods: A total of 211 parents/caregivers completed an online survey via Qualtrics. Measures included the Modified Brief Pain Inventory (mBPI), PROMIS Pain Interference Scale-Proxy (PROMIS PIS-Proxy), and the Fear of Pain Questionnaire-Parent Proxy (FOPQ- P). Demographic and diagnostic information was also collected. Participants were recruited through clinical services, charities, social media, parent groups, and the Prolific.

Results: Parents/caregivers reported that 60.2% of children experienced chronic pain while 39.8% reported intermittent acute pain. Children with chronic pain reported significantly higher pain interference and fear of pain, reflecting greater functional and emotional burden. They were also twice as likely to have a co-occurring mental health condition (23%) compared to those with acute pain (12%). Pain burden was significantly associated with co-occurring mental health conditions, intellectual disability, and multi-site pain. Multi-site pain was consistently associated with higher interference across chronic and acute pain groups.

Discussion: Results highlight the high prevalence of chronic pain among children with physical disabilities and its complex impact on functioning and well-being. The findings highlight the importance of tailored, multidisciplinary approaches to better address the needs of this population in clinical practice.

Ethical Approval: Ethical approval was granted by the School of Psychology Research Ethics Committee at the University of Galway, Ireland; the University Hospital Galway, Ireland; and the Central Remedial Clinic Dublin.

Acknowledgements: This research was conducted in fulfilment of the requirements for the Doctor of Psychological Science (Clinical Psychology) degree at the University of Galway.

Disclosures/Conflicts of Interest: The author reports no conflicts of interest.

Keywords: Chronic Pain, Children and Adolescents, Physical Disabilities, Pain Burden

Abstract No. 40

Title: MANAGEMENT OF ACUTE PAIN IN SICKLE CELL VASO-OCCLUSIVE CRISES: OUTCOMES FOLLOWING PATHWAY IMPLEMENTATION

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Introduction: Vaso-occlusive crises (VOC) are the most common reason for emergency department (ED) visits among patients with sickle cell disease (SCD), often leading to prolonged hospitalisation. Despite international guidelines recommending opioid administration within 30 minutes, achieving this target remains difficult in busy EDs. In 2022, a structured pain pathway was introduced at St. James's Hospital to expedite VOC management aligning with NICE and ASH recommendations [1,2].

Aim of the investigation: To evaluate the effectiveness and real-world implementation of the pain management pathway at Saint James Hospital, an Irish SCD referral centre.

Methods:
This retrospective quality improvement study (December 2024–May 2025) analysed 74 VOC admissions from 50 patients, selected from 257 reviewed admissions post-pathway implementation. Key outcomes included time to analgesia, morphine equivalent dose (MME), PCA use, and pathway adherence.

Results:
Median time to first analgesia was 41 minutes; 51.4% received opioids by 45 minutes. IV opioids were the predominant route (69.2% at 15 minutes, 79.1% at 45 minutes). VAS scores improved significantly at 45 minutes (9.05 to 8.38, $p<0.001$). PCA was used in 36.5%, initiated at median 5.5 hours, lasting 4 days. Hospital stay (median 6 days) positively correlated with pain scores, opioid use, PCA duration, and time to pain control.

Discussion and Conclusion:
Analgesia timing exceeded previous benchmarks (Mathias 27%, Tanabe 80 min delay) [3,4], demonstrating pathway benefit. However, adherence did not predict outcomes, likely due to ED variability, documentation gaps, and patient complexity. Continued refinement, staff training, and audit tools are essential for consistent, guideline-based VOC care.

Ethics Approval: This study was approved by the **Research & Innovation Office, St. James's Hospital.** The ethical approval reference number is **9259**, and the approval was granted on **07/11/2024**. The study adhered to the **General Data Protection Regulation** and all data were anonymized according to the hospital's ethical guidelines.

Acknowledgements: this work did not need any special fund, and the research team used their non-clinical time to collect data.

Disclosures/Conflicts of Interest: there was not any conflict of interest to disclose

Key Words: Sickle cell disease, vaso-occlusive crisis, pain management, opioid timing, clinical pathway

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Abstract No. 41

Title: REMIFENTANIL PCA FOR LABOR: A RETROSPECTIVE AUDIT OF PATIENT SATISFACTION AND CLINICAL OUTCOMES

Authors: Nabiha Chaudhary (SHO)[1], Sana Urooj (Registrar)[1], Vikash Singh (Consultant)[1],
1. Anesthesia Department, Our Lady of Lourdes Hospital, Drogheda Co.Louth, Ireland

Introduction: Remifentanil PCA is used in our unit for labor analgesia only when epidural is contraindi cated, refused, or has failed. An audit conducted in 2019 found it safe and effective.

Aim of investigation: To reassess Remifentanil PCA use during labor, incorporating clinical outcomes and patient satisfaction.

Methods: Retrospective Data collected from Feb 2024– Feb 2025. Data included indications, side eff ects, delivery mode, neonatal outcomes, and patient-reported pain/satisfaction via phone call follow-up.

Results:
23 cases reviewed.
Indications included failed epidural (6), coagulopathy (5), infection risk (4) Miscellaneous (5). Average sedation score: 1.32/5. One case of hypotension, no apnea/desaturation.
Nausea/vomiting in 4 patients.
Average observed pain score: 1.15/5.
Average Neonatal APGARs score: 1-min 8.56, 5-min 9.8.
NICU admissions (4): 2 Low Apgars, 1 prematurity, 1 pneumonia.
Delivery mode: vaginal (11), cesarean (6), assisted (6)
Phone survey (n=21): average pain 2.95/5, satisfaction 2.38/5. 57.1% of patients stated they would use it again.

Discussion: Remifentanil PCA remains a safe and effective option for labor analgesia with acceptable maternal and neonatal outcomes. Patient satisfaction was moderate. Further study may help improve experience.

Keywords: Remifentanil PCA, patient satisfaction, clinical outcomes

References

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3. The efficacy and safety of remifentanil patient-controlled versus epidural analgesia in labor: A meta-analysis and systematic review Xiuzhen Lei, Yang Yu, Mei Li, Peng Fang, Shuyuan Gan, Yongxing Yao, Yanfeng Zhou, Xianhui Kang (2022)

Abstract No. 42

Title: EVALUATING POST-OPERATIVE OPIOID CONSUMPTION IN ELDERLY HIP FRACTURE PATIENTS WHO RECEIVED REGIONAL ANAESTHESIC BLOCK VS. NO REGIONAL NERVE ANAESTHETIC BLOCK

Authors: Nabiha Chaudhary[1], Ivan Tong[1], Gerard Kavanagh[1]

1. Department of Anaesthesiology, Our Lady of Lourdes Hospital, Drogheda, Ireland

Introduction: Orthopaedic Hip fracture surgery is a common procedure in the elderly population and effective analgesia is essential. This group is often susceptible to opioid side effects such as delirium and respiratory depression. Regional nerve blocks (RNB) are a well established recommendation for hip fracture analgesia.

Aim of the investigation: Evaluate the frequency of RNB being performed and compare opioid consumption in those with and without RNB over the first 24 and subsequent 48 hours post-operatively.

Methods: Over July 2025, data collected on all elderly patients undergoing surgery for proximal femoral fractures was included. Post-operative opioid consumption was assessed within the first 24 hours and again at 24–48 hours. Results were compared between patients who received a regional nerve block and those who did not.

Results: Total patients: 24 elderly undergoing proximal hip fracture surgery
Regional Nerve Block (RNB): 8 patients (33%) received a block; 16 patients (67%) did not.
Postoperative opioid consumption (Oxynorm):

- 0–24 hours: Median 5 mg (RNB) vs 10 mg (no RNB)
- 24–48 hours: Median 6.25 mg (RNB) vs 6.88 mg (no RNB)

Anaesthetic type with RNB: 4/24 (16%) received spinal + RNB. 4/24 (16%) received general anaesthetic + RNB. Anaesthetic without RNB: 15/24 (62%) received spinal only

Discussion: The audit demonstrated that only **33% (8 of 24)** of elderly patients undergoing hip fracture surgery received a regional nerve block. Patients who received a block had reduced opioid consumption in the first 24 hours postoperatively. No significant difference was observed in the 24–48 hour period. To improve practice, we plan to deliver departmental teaching and incentivise increased RNB usage. A follow-up audit will assess whether these measures lead to more widespread use of RNB in line with PROSPECT guidelines recommending them as the gold standard for postoperative analgesia in hip fracture repair.

Ethics Approval: Approval sought from local audit committee

Acknowledgements

Disclosures/Conflicts of Interest: Nothing to disclose

Key Words: opioid consumption elderly post-op hip fractures, regional anaesthetic block

Abstract No. 43

Title: DEVELOPMENT OF AN ALGORITHM FOR THE MANAGEMENT OF ACUTE PAIN IN MEDICAL INPATIENTS AGED 65YRS AND OLDER IN THE ACUTE HOSPITAL SETTING.

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3. Department of Anaesthesia & Pain Medicine, University Hospital Limerick Group & St. John's Hospital, Limerick, Ireland.

Introduction: Current research indicates that patients aged over 65yrs have a 10% risk of developing frailty, with this number increasing up to 50% in patients over 85yrs of age. The management of acute pain within this group of patients is challenging owing to the increased risk of delirium if pain, or medications used to relieve pain, are poorly managed.

Aim of the investigation: To evaluate current practice in keeping with national opioid prescribing recommendations and stewardship.

Methods: A snapshot audit using point prevalence methodology was undertaken in 2024. All patients meeting the inclusion criteria; ≥ 65yrs and able to self-report, were assessed by the Clinical Nurse Specialist in Pain Medicine, using The Pain Assessment Documentation Tool (PADT).

Results: Over half (54%, n=48) of inpatients met the inclusion criteria. Overall there was a 35% incidence rate of severe pain. Pain related physical functional decline was reported by 23% of patients, and 12.5% reported pain interference with sleep. A total of 46% of patients were prescribed opioids, in line with HSE guidance. However, of this cohort, 33% received no dose of prescribed short-acting opioid.

Discussion: This audit identified crucial areas for immediate improvement. Notably, the need for a tailored algorithm for the management of acute pain in patients ≥ 65yrs. This led to the formation of a working group, including the CNS in Pain Medicine, Clinical Pharmacist, and Consultant in Pain Medicine. Two algorithms were developed aiming at addressing both acute nociceptive and neuropathic pain informed by best practice and an extensive literature review.

Ethics Approval: Audit approval was acquired from the Clinical Audit Committee within St. John's Hospital.

Acknowledgements: N/a

Disclosures/ Conflicts of interest: N/a

Key words: Acute Pain, Adults, Aged ≥65yrs, Pain Management, Algorithm Development, Audit, Opioids, High Risk Medications, Quality Improvement, Patient Safety.

Abstract No. 44

Title: EXPLORING THE PERSPECTIVES OF ADOLESCENTS, PARENTS AND HEALTHCARE PROFESSIONALS ABOUT THE UTILITY OF A PAIN SELF-MANAGEMENT SMARTPHONE APPLICATION (ICANCOPE POSTOP) IN THE CONTEXT OF ADOLESCENT IDIOPATHIC SCOLIOSIS AND SCOLIOSIS CORRECTIVE SURGERY

Authors: Katie Curran[1], Paul M. O'Reilly[1], Brid O'Dwyer[1], Mary-Rose Mulry[1], Blaithin.O'Grady[1], Caroline Heary[2], Kevin McCarthy[3], Patrick Kiely[3], Lauren Harris[4], Amos Hundert[4], Chitra Lalloo[4], Kathryn A. Birnie[6], Line Caes[5], Jennifer Stinson[4] & Brian E. McGuire[1]

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Background. The iCanCope smartphone app has been used to support self-management of pain and other symptoms in young people with chronic pain, sickle cell disease and arthritis. The aims of this study were to (a) explore the experience of adolescents who have had corrective spinal surgery for
adolescent idiopathic scoliosis to determine if the iCanCope app would have been relevant to their needs before and after surgery; and (b) seek feedback from adolescents, parents, and health care professionals regarding the architecture and features of the app in terms of its content and interface, to determine what modifications might be needed for this surgical population.

Method. Through focus groups and individual semi-structured telephone interviews we spoke with adolescents aged between 13 and 16 years who had surgery in the previous 6 months, their parents and relevant health professionals regarding the problem of pain in the context of scoliosis surgery. Participants also reviewed the app content and architecture to determine which features would be most helpful for supporting adolescents undergoing scoliosis surgery.

Results. The adolescents and their parents described a challenging postoperative journey in which pain, nausea and dizziness were encountered at a level they had not anticipated and where basic
everyday activities were experienced as more difficult than they had been prepared for. They highlighted the importance of being able to consult with other families with adolescents who had also been through scoliosis surgery for information and peer support. All participants believed the features were relevant and that the interface was engaging.

Conclusion. Participants emphasised the importance of providing clear information to adolescents and their parents so that they are well-prepared for the level of pain and other difficulties they may experience. All participants thought the existing app, with the addition of scoliosis-specific information, would be a useful coping tool for adolescents.

Abstract No. 45

Title: ENDOCANNABINOID SYSTEM MODULATION FOR VISCERAL ABDOMINAL PAIN IN INFLAMMATORY BOWEL DISEASE AND IRRITABLE BOWEL SYNDROME: A SYSTEMATIC REVIEW AND META-ANALYSIS

Author: Rebecca M. Lane[1,2,3], Kevin K. W. Ng[1,2,3,7], Kevin Murray[1,2,3], Laurence J. Egan[1,4,7], Brian E. McGuire[2,3,5], Declan P. McKernan[1,2,3], Siobhain M. O'Mahony[6], David P. Finn[1,2,3,7].

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Introduction: The endocannabinoid system (ECS) is a prime target for alleviation of visceral abdominal pain in inflammatory bowel disease (IBD) and irritable bowel syndrome (IBS), given its prominence in gastrointestinal homeostasis, and presence along peripheral and central pain pathways.

Aim of the Investigation: To evaluate the benefits and harms of pharmacological modulation of the ECS for visceral abdominal pain, compared to placebo or other interventions.

Methods: We are conducting a systematic review of randomised control trials (RCTs) of any preparation of cannabis, cannabinoids, cannabis-based medicines, or other ECS modulator, in IBS or IBD patients. The primary outcomes are the proportion of people with (a) at least a 30% reduction and (b) at least a 50% reduction, in pain intensity. Key secondary outcomes include changes in physical and emotional functioning, fatigue, quality of life, gastrointestinal symptoms, and adverse effects. We will assess risk of bias using the Risk of Bias 2 tool. Where possible, we will conduct meta-analysis, otherwise we will synthesise results narratively. We will use GRADE to assess certainty of evidence for each outcome.

Results: Our search (29th of July 2025), across CENTRAL, PubMed, EMBASE and Web of Science databases, and the WHO ICTRP and ClinicalTrials.gov Trials Registry yielded 817 records after de-duplication, which are undergoing screening presently. We will extract data on outcomes of interest from the final set of included records.

Discussion: This review will synthesise the available evidence on ECS modulation for the treatment of visceral abdominal pain and its related comorbidities in IBS and IBD patients.

Acknowledgements: This review is funded by the University of Galway Hardiman Research Scholarship and the Research Ireland Postgraduate Scholarship (GOIPG/2024/4981).
Key words: Visceral Pain, Irritable Bowel Syndrome, Inflammatory Bowel Disease, Endocannabinoid System Modulation

Abstract No. 46

Title: PREDICTING PAIN: USE OF MACHINE LEARNING IN CHRONIC PAIN DATA ANALYSIS

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Aim of the investigation: to explore the determinants of chronic pain, understanding the weight of contributors to its development, with the intent that outcomes will aid future researchers in developing an objective assessment tool. Due to their ability to read large datasets and recognise patterns which often surpass human performance, a machine learning program was utilised. Therefore, a machine learning tool was used on generalised data to predict factors which are most important in the development of chronic pain.

Methods: the dataset from "Health Survey England 2017" was used with 4973 valid entries for the chronic pain variable. The features of interest were encoded into integer and float values to be interpreted by the machine learning model primarily using scikit-learn and coded in Python. 70% of data was used as training data and 30% as validation. A decision tree was used as the base learning model and the results analysed and summarised.

Results: The random forest classifier was able to accurately predict people with chronic pain 63.1% of the time and accurately exclude those without chronic pain 71% of the time. Musculoskeletal system complaints were identified as a key driving force weighting 27% to the final decision.

Discussion: The feature importance showed the presence of Musculoskeletal complaints as the driving force, and age. This machine learning model has shown potential in supporting the creation of an objective diagnostic tool to predict chronic pain. Sn and Sp are likely to improve when using a better data source, such as that from a Pain management clinic or hospital.

Ethics Approval: all data was publicly available, already anonymised before use, therefore ethics approval was not required.

Acknowledgements: There was no funding. I would like to acknowledge Jame Gregory, Computer Scientist for their advice on using Machine learning tools.

Disclosures/Conflicts of Interest: nil

Key Words: chronic pain, predictors, machine learning, artificial intelligence, comorbidities, musculoskeletal.

Abstract No. 47

Title: ANTINOCICEPTIVE EFFECTS OF NOVEL CAPSAICIN-BASED INJECTABLE HYDROGELS IN A RAT MODEL OF OSTEOARTHRITIS PAIN

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Introduction: Osteoarthritis (OA) is a prevalent condition 74ehavior74zing by pain from peripheral joint structures and involving central neurological mechanisms[1–3]. The complex interplay of nociceptive and neuropathic components complicates effective pain management[4,5]. Hyperinnervation of joint structures by TRPV1-positive nociceptive terminals is a key pathological feature. Capsaicin has drawn particular attention for inducing 74ehavior74zing74n and nerve terminal ablation via TRPV1 activation, but its clinical use is limited by acute burning pain[6–8].

Aim: This study evaluated slow-release capsaicin-based hydrogels designed for intra-articular injection, 74ehavior74zing reduced acute nociception and prolonged antinociceptive effects in the monoiodoacetate (MIA)-induced OA model[9].

Methods: Female Sprague-Dawley rats (n=6–11/group, 8–9 weeks old) received intra-articular MIA (2mg/50µL) or saline (Day 0). On Day 18, treatments (vehicle, free capsaicin, or capsaicin-based hydrogels) were administered intra-articularly. Acute nociceptive responses were monitored for 20 min post-injection. Weight-bearing asymmetry and hind paw mechanical hypersensitivity were assessed up to 10 weeks post-treatment.

Results: MIA rats developed weight-bearing asymmetry and increased ipsilateral mechanical hypersensitivity by Day 7, compared to shams. Free capsaicin (10µg) reduced weight-bearing asymmetry for 14 days, not ameliorating mechanical hypersensitivity, and inducing acute nociceptive behaviours post-injection. Conversely, capsaicin-based hydrogels (10-50µg) produced dose-dependent, long-term antinociception without increasing acute nociceptive 74ehavior. Two prototypes showed prolonged weight-bearing asymmetry reduction (up to 28 days) compared to free capsaicin. Additionally, the slower-release prototype attenuated mechanical hypersensitivity in MIA rats for 14 days.

Conclusions: These results support the contention that innovative slow-release capsaicin- based hydrogels may be promising for long-lasting OA pain relief without inducing acute pain.

Abstract No. 48

Title: EXPLORING LIVED EXPERIENCES OF COMMUNITY-BASED EXERCISE FOR CHRONIC PAIN (ComExPain): A QUALITATIVE PROCESS EVALUATION

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Introduction: Chronic musculoskeletal (MSK) pain is a leading cause of disability among older adults in Ireland, linked to limited physical activity and poor health outcomes. The ComExPain study is a randomised controlled feasibility trial evaluating a community-based exercise intervention for older adults with chronic MSK pain. This qualitative process evaluation explored the acceptability, feasibility, and contextual factors influencing engagement with such interventions.

Aim of Investigation: To explore the lived experiences of older adults participating in a community-based exercise intervention for chronic MSK pain delivered by instructors trained in chronic pain, and to identify key factors influencing feasibility, acceptability, and perceived impact.

Methods: Semi-structured interviews and focus groups were conducted with 22 older adult participants (both intervention and control groups) and three trained exercise instructors. Six exercise classes were observed to assess fidelity, engagement, and contextual influences. Data were analysed using collaborative reflexive thematic analysis. A Public and Patient Involvement (PPI) representative contributed to theme development and interpretation.

Results: Participants reported positive experiences, including improvements in physical function, mental well-being, and social connectedness. Instructor empathy and understanding of chronic pain were crucial for engagement. A consistent contact person throughout the intervention fostered trust and continuity. Initial apprehension diminished over time.
Participants valued the group dynamic for reducing isolation and fostering shared understanding and expressed interest in learning more about exercise benefits as well as contributing to research.

Conclusions: This community-based exercise intervention was feasible and acceptable to participants. Empathetic instruction, relational support, and group-based delivery were key facilitators of engagement.

Ethics Approval: The ethics of this study conform to the 1964 Declaration of Helsinki and its later amendments and was reviewed and approved by the University of Limerick Faculty of Education and Health Sciences Research and Ethics Committee (Reference 2024_02_23_EHS) on 10th April 2024.

Disclosures/Conflicts of interest: The ComExPain Trial is funded by the Republic of Ireland's Health Research Board (HRB) Definitive Intervention and Feasibility Awards (DIFA-2-23-024). The funders had no role in the study design, collection, management, analysis, interpretation of the data, decision to publish or preparation of manuscripts.
There are no conflicts of interest to disclose.

Keywords: Chronic musculoskeletal pain; Community-based exercise; Older adults

Abstract No. 49

Title: ADOLESCENTS WITH CHRONIC MUSCULOSKELETAL PAIN: WHO AND WHAT IS BEING INCLUDED IN RANDOMISED TRIALS? A SCOPING REVIEW.

Authors: Ms. Sarah Crowley [a,b], Email: Crowley.sarah@ul.ie, Dr. Seán McAuliffe[a,b], Dr Jennifer McMahon[c], Dr Joshua Pate[d], Ms. Nicola Lyden[e], Mr. Cormac Woulfe[a,b], Mr. Oisín Ó Ceallaigh[a,b], Prof. Kieran O'Sullivan[a,b],

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Introduction: Chronic musculoskeletal pain (CMP) is common in adolescents, costly for healthcare systems and is linked to varying functional and emotional difficulties. To provide targeted biopsychosocial intervention it is essential to understand the profile of adolescents with CMP. Internationally recognised recommendations for the biopsychosocial domains which should be reported in studies of adolescents with chronic pain, provide a useful benchmark for profiling adolescents.

Aim of the Investigation: The primary aim of this review is to describe the profile of adolescents that have been included in randomised trials of CMP using recommended reporting domains.

Methods: This scoping review methodology was informed by the Joanna Briggs Institute Framework and the "PRISMA extension for scoping reviews (PRISMA-ScR)". A pre-registered protocol was published in December 2024. Database searching was carried out across 10 databases using a predetermined search strategy. Studies title, abstract and full text were screened by two independent reviewers. Data of included studies were extracted, with extraction headings in line with recommendations for reporting pain domains.

Results: 13,030 studies were identified following the database and citation searching, with 8,986 screened after duplicate removal. 17 studies were included in the final review, involving 1,576 adolescents. Basic demographic and pain data including age, sex and pain intensity were well reported in most studies. In contrast, adolescent ethnicity was reported in just 23% of studies and where reported, adolescents were from highly educated, and Caucasian backgrounds. Other emerging factors of interest such as neurodivergence were not reported in any study. Role functioning, including school absenteeism was reported in less than half of the studies while less than a third of the overall included studies reported on sleep or wellbeing.

Conclusions: Despite the existence of clear recommendations for domain reporting in CMP trials, adherence to these is often poor. This review highlights the need for researchers and clinicians to consider more than just the basic demographics when planning intervention trials and report on other key factors such as wellbeing, sleep and role functioning. Adolescents from ethnically and socioeconomically diverse backgrounds are under-represented in this research area and their recruitment needs to become standard practice. These factors need to be implemented to truly understand the profile of adolescents seeking support for CMP and ensure a biopsychosocial approach to adolescent CMP care.

Ethics Approval: Ethical approval was not required for this review.

Acknowledgements: The lead author is funded by the Research Ireland [GOIPG/2024/3940] for the duration of the PhD research.

Key Words: adolescent, teenager, pain, musculoskeletal, biopsychosocial

Disclosures: One author (KOS) has provided continuing professional development training for clinicians on the treatment of low back pain. The remaining authors have no competing interests to declare

Abstract No. 50

Title: MAGNETIC RESONANCE IMAGING SAFETY IN NONCONDITIONAL SPINAL CORD STIMULATOR PATIENTS: SYSTEMATIC REVIEW

Authors: Dr Sean N Rooney[1] and Dr Cormac F Mullins[2]

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Introduction: Spinal cord stimulation (SCS) is an established therapy for chronic neuropathic pain. Many patients with SCS systems require magnetic resonance imaging (MRI), with over 80% undergoing a scan within 5 years of implantation. However, a substantial proportion of systems remain non-conditional, owing to implantation prior to MR conditional models, abnormal lead impedance, or clinical need for off-protocol scanning. MRI in this context raises safety concerns including device heating, malfunction or neurological injury.

Aim of the Investigation: To systematically review safety outcomes of MRI performed in patients with non- conditional SCS systems.

Methods: A systematic search of MEDLINE (via PubMed) and Embase was conducted to July of 2025. Eligible studies reported MRI performed in patients with non-conditional SCS devices. Due to heterogeneity, a narrative synthesis was undertaken.

Results: A Nine studies were included: five observational studies and four case reports/series, encompassing 247 patients undergoing 405 MRI scans between 1990 and 2025.
Adverse events were infrequent but present, including three cases requiring surgical revision of the system. Reported events included unintended stimulation, device malfunction and heating. We describe the substantial variability that existed in MRI protocols, reporting of adverse events, and device management practices.

Discussion: MRI in patients with non-conditional SCS devices has been performed with relatively few but clinically relevant complications. Evidence is limited by heterogeneity and under-reporting. Standardised registries, and careful risk-benefit assessment strategies are needed to guide safe clinical practise.

Ethics Approval: Not applicable. This study did not involve human participants, animals, or identifiable personal data.

Acknowledgements: The Authors appreciate institutional support for this work.
Disclosures / COI: The Authors declare no conflicts of interest relevant to this work.
Key Words: Neuromodulation, MRI Safety, Off-label Imaging, Patient Safety

Abstract No. 51

Title: KNOWLEDGE, ATTITUDES AND PRACTICES OF PAIN MANAGEMENT IN DIABETIC NEUROPATHY IN PRIMARY CARE: A CROSS-SECTIONAL STUDY

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Introduction: Painful diabetic neuropathy (PDN) affects 20% of all diabetics and can be quite a debilitating chronic pain condition. Significant improvement in quality-of-life can be achieved with appropriate pharmacological and non-pharmacological management. General practitioners (GPs) are pivotal in the early identification and management of PDN, yet the evidence suggests PDN is underdiagnosed and undertreated in primary care.

Aim of the Investigation: To determine the knowledge, practices, and attitudes regarding PDN among primary care physicians.

Method: With Ethical approval a cross-sectional study of GPs was undertaken using a modified version of an existing, validated questionnaire consisting of four sections: (i) GP demographics, (ii) GPs attitudes and practices regarding PDN, (iii) Assessment of PDN management, (iv) Enquired about barriers of care for PDN patients in primary care.

Results: 250 questionnaires were distributed, with a 26.4% response rate (n=66). Equal proportions of rural and urban respondents replied (50%). The median years in practice of GPs was 14.5 years. 80.3% of respondents scored well in the knowledge sections indicating a good knowledge base but 72.7% reported inadequate practices. A negative correlation was noted between number of years in practice and knowledge of PDN management (r = -0.256, p=0.038). Fewer years in practice predicted better knowledge scores (OR=0.933, 95% CI 0.880 - 0.989, p=0.019).

Conclusion: This study showed there was reasonable knowledge of PDN among GPs, but clinical practice and attitudes were less favorable. This study highlights the need for continuous medical education among GPs to bridge the knowledge-practice gap in PDN management.

Ethics Approval: Approved by Clinical Research Ethics Committee of the Cork Teaching Hospitals (CREC); Approval number: ECM 6 (r) 09/04/2024; Date of approval: 06/04/2025

Acknowledgements: This work is funded by the Health Research Board (HRB) (Grant number: SS-2025-073).

Disclosures/Conflicts of Interest: None declared.

Key Words: painful diabetic neuropathy, pain management, primary care

Abstract No. 52

Title: SUBCUTANEOUS CEREBROSPINAL FLUID HYGROMA FROM AN OLD INTRATHECTAL CATHETER IN A PATIENT WITH A NEW INTRATHECAL PUMP

Authors: Shashikant Swami[1], Dr Paul Murphy[1]

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Introduction: Intrathecal drug delivery systems (IDDS) are effective for refractory pain and spasticity. Complications include infection, catheter malfunction, and CSF leak. Subcutaneous CSF hygroma from abandoned catheters is rare and may mimic infection or seroma.

Case Discussion: 77-year-old female with chronic pain and functioning intrathecal pump presented with a fluctuant lumbar swelling. She had Old IT pump removed and catheter clamped, with new IT system implanted 2 years ago for Chronic low back pain. Initial aspiration reduced the swelling and revealed CSF but it became evident after few weeks.
Operative exploration concluded CSF leak from old catheter. The old catheter was isolated and securely clamped with clips. Postoperative course was uneventful, no recurrence and new pump function preserved.
Hygroma formation can occur from abandoned catheters due to persistent CSF communication. Conservative measures (aspiration) may help some leaks, but persistent symptomatic hygromas require surgery. Surgical exploration and clamping of old catheter are effective and prevents recurrence.

Conclusion: Subcutaneous CSF hygroma is a rare but important complication of IDDS. Abandoned catheters can act as persistent CSF fistulae. Highlights importance of securing closure of old tracts during pump revision.

Ethics Approval: Not applicable

Acknowledgements: N/A

Disclosures/Conflicts of Interest: None

Keywords: Intrathecal pump, CSF hygroma, Catheter complication, Pain management

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Abstract No. 53

Title: COMPARATIVE ANALYSIS OF RECTUS SHEATH CATHETER (RSC) VERSUS NON-RSC ANALGESIA IN POSTOPERATIVE PAIN MANAGEMENT FOLLOWING LAPAROTOMY.

Authors: Shourya Neema, Joanne Fahey, Dr. Colm Keane
Department of Anaesthesiology, Mayo University Hospital, Castlebar, Ireland

Introduction: Postoperative pain after major abdominal surgery can delay recovery, prolong hospital stay, and increase opioid-related complications. Rectus sheath catheters (RSCs) provide continuous local anaesthetic infusion into the rectus sheath, offering targeted analgesia. This study compares RSC use with standard non-RSC analgesia in laparotomy patients.

Aim of the Investigation: To assess whether RSCs improve pain control, reduce opioid use, promote earlier mobilization, and shorten hospital stay compared with standard postoperative analgesia.

Methods: A retrospective review of 25 patients undergoing midline laparotomy was performed. Patients were grouped as RSC (n=12) and non-RSC (n=13). Outcomes measured included pain scores (0–10), opioid consumption, time to mobilization, and hospital length of stay. Adverse events linked to RSC placement were also assessed.

Results: RSC patients had lower pain scores, required less opioid analgesia, and demonstrated faster recovery. Mobilization was earlier in the RSC group, and average hospital stay was reduced. No RSC-related complications were reported.

Discussion: RSCs provide effective, safe, and targeted postoperative analgesia, reducing opioid dependence and supporting faster recovery. Incorporation into multimodal protocols for major midline laparotomies may enhance outcomes and align with ERAS strategies.

Ethics Approval: This audit did not require formal research ethics approval.

Acknowledgements: This work received **no grant or funding (NA)**.

Disclosures/Conflicts of Interest: None declared.

Keywords: Rectus sheath catheter, laparotomy, ERAS

Abstract No. 54

Title: ERECTOR SPINAE PLANE CATHETER IN PECTUS EXCAVATUM REPAIR - A CASE REPORT

Authors: Dr Yeong Yeou Yew1, Dr Su Cheen Ng1, Alexandra Clare Omara1

1. Department of Anaesthesiology, Beacon Hospital, Dublin, Ireland.

Introduction: Pectus excavatum, the most common congenital chest wall deformity, is typically repaired in childhood. Our center recently introduced the Modified Nuss procedure in adults, causing significant postoperative pain1. Thoracic epidural analgesia(TEA) is the gold standard but resource-intensive. With cryoablation unavailable, we are evaluating the erector spinae plane(ESP) block as a practical component of multimodal analgesia.

Case: A 26-year-old female (ASA I, 57kg, BMI18.2, Haller Index 4.5) underwent Park-modified Nuss repair under general anesthesia. Bilateral ESP catheters placed at T5/6 intraoperatively. Two bars were inserted. Postoperatively, levobupivacaine 0.1% was infused at 5ml/h per side, alongside oral paracetamol 1g QDS, ibuprofen 400mg TDS, gabapentin 300mg OD, nefopam 60mg TDS, and PCA oxycodone. Visual analog pain scores(VAS), opioid requirement in morphine milligram equivalent(MME), and adverse events were recorded.

Results:
Day 0: 13.5MME; VAS rest/movement 5/10; 5/10.
Day 1: Commenced physiotherapy. 114MME; VAS 4/10; 5/10.
Day 2: PCA and ESP infusion discontinued; converted to oral oxycodone. 96MME; VAS 4/10; 4/10.
Day 3: 67.5MME; VAS 4/10; 4/10.
Day 5 (discharge): 15MME/day; VAS 3/10; 3/10. No adverse events.

Discussion: Adult age, Haller Index 4.5, and elevated Revised Depression Index indicate severe deformity and higher postoperative opioid needs[2]. Yet, our patient's opioid use was lower than the reported 130 MME/day with TEA3. Increased analgesic needs on Day 1 coincided with mobilization and intensive physiotherapy, though peak VAS remained 5. Hence, extending ESP infusion by 24–48 hours will be considered in future cases.

Conclusions: ESP block provides effective analgesia and may be a practical, opioid-sparing alternative to TEA in adult Nuss repairs.

Ethics Approval: Not required for anonymized single-patient case reports under institutional policy.

Acknowledgements: NA

Disclosures/Conflicts of Interest: No conflicts of interest to declare
Key Words: Erector Spinae Plane Block (ESP). Thoracic epidural analgesia(TEA), Patient Controlled Analgesia (PCA), Morphine milligram equivalents (MME)

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Early Career Investigators Short Oral Presentation Abstracts

Abstract No. 1

TITLE: DEVELOPMENT OF A TRPV1 AGONIST RELEASE ASSESSMENT MODEL FOR LONG-TERM PAIN RELIEF IN KNEE OSTEOARTHRITIS

Authors: Jara M. Baena-Montes[1], Yajaira Feller-Sanchez[1], Sahar Avazzadeh[2], Christophe Labriere[1], Simona Cacciapuoti[1], Martin O'Halloran[3], Leo R. Quinlan[1]

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Introduction: Osteoarthritis affects over 500 million people globally, leading to joint deterioration, swelling, pain, and impacting quality of life. Current treatments offer only short- term relief and are often associated with significant side effects, highlighting the need for safer, more effective options. The transient receptor potential vanilloid 1 (TRPV1) channel,
present in sensory neurons, plays a key role in nociception. High doses of TRPV1 agonists can desensitise the channel, causing axonal degeneration and prolonged pain relief.
Repeated low-dose application may offer similar benefits without side effects.

Aim of the investigation: This study develops an *in vitro* model to investigate the release kinetics of a TRPV1 agonist from in-house synthesised prototypes.

Methods: Release kinetics of the TRPV1 agonist from prototypes and their individual components were assessed using Automated Patch Clamp (APC) with a voltage ramp
protocol in TRPV1-expressing CHO cells. Variables such as temperature, agitation, solvent composition, and synovial fluid were tested to mimic the knee joint environment.

Results: Kinetic analysis showed a controlled release of the TRPV1 agonist, with a rapid initial release in the first 24 hours followed by stabilisation. Solvent pH, agitation, and temperature significantly influenced the release profile, which was further enhanced by synovial fluid enzymes. Other prototype components alone did not activate TRPV1 or interfere with the agonist response.

Discussion: The prototypes demonstrated promising release characteristics, suggesting potential for TRPV1 channel desensitisation and long-term pain relief. These results support further exploration of controlled TRPV1 agonist delivery systems for osteoarthritis treatment.

Ethics Approval: Ethics approval was not required for this study

Acknowledgements: This work is funded by Horizon EIC Grant: ARTRIGEL Project (number 101058000)

Disclosures/Conflicts of Interest: None

Key Words: TRPV1, Osteoarthritic Pain, Sustained release

Abstract No. 2

Title: PATIENT-CONTROLLED ANALGESIA (PCA): A CROSS-SECTIONAL STUDY OF PATIENT EDUCATION AND SATISFACTION IN A POSTOPERATIVE SURGICAL COHORT

Authors: Moustafa Moustafa[1], Shankar Lal[1,2], Robert Lynch[1] , Rahiman Rahim[1] and Hari Gopal[1]

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Introduction: Patient-controlled analgesia (PCA) provides effective postoperative pain control by empowering patients, but its success depends on adequate education and patient confidence.

Aim of the Investigation: To evaluate PCA education, patient understanding, satisfaction, and confidence, and to identify clinical and educational factors influencing these outcomes in surgical patients.

Methods: A cross-sectional survey was conducted from March 2024 to July 2025 in MMUH and OLOLH. A total of 260 postoperative adult patients who received intravenous PCA for ≥24 hours completed a 25-item questionnaire. Data included PCA education, satisfaction (0–10), confidence (0–10), pain scores, opioid type, and 24-hour morphine milligram equivalent (MME) dose. Statistical analysis included medians, percentages, and non-parametric comparisons using SPSS version 26.

Results: Among 260 respondents, 67.7% reported receiving PCA education, 75.7% of whom were educated by nurses, all postoperatively. The most common PCA opioid was morphine (75.6%), followed by fentanyl (13.3%) and oxynorm (10.6%). The median 24-hour MME was 104 mg (IQR: 63.8–153.0), and median PCA duration was 2 days (IQR: 1–3).
Satisfaction and confidence scores were skewed toward the maximum, with medians of 10 (IQR: 8–10) and 10 (IQR: 9–10), respectively. Education improved confidence ($p = 0.039$) but not satisfaction ($p = 0.307$). Pain score negatively correlated with both outcomes, while PCA duration showed a positive correlation. Educator type (nurse vs. anaesthesiologist) had no impact.

Conclusion: PCA use is associated with high satisfaction and confidence. Pain intensity and PCA duration influence patient-reported outcomes more than education timing or provider role.

Ethics Approval: This study was approved by the **Clinical Audit and Effectiveness Committee, Mater Miscericordiae University Hospital** and **Our Lady of Lourdes Hospital**. The project was approved from both sites under the reference **CA24-045** and LH2024/19, respectively, on 19/03/2024. The study adhered to the **General Data Protection Regulation** and all data were anonymized according to the hospital's ethical guidelines.

Acknowledgements: this work did not need any special fund, and the research team used their non-clinical time to collect data.

Disclosures/Conflicts of Interest: there was not any conflict of interest to disclose

Key Words: PCA, postoperative pain, satisfaction, opioid analgesia, patient education, confidence, morphine

Abstract No. 3

TITLE: EXPLORING THE BARRIERS TO AND FACILITATORS OF SELF-MANAGEMENT OF SHOULDER PAIN FROM A LIVED EXPERIENCE PERSPECTIVE

Authors: Aidan O'Shea[1], Jonathan Drennan[2], Chris Littlewood[3], Helen Slater[4], Julius Sim[5], Joseph G. McVeigh[1]

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Introduction: Self-management is commonly promoted for musculoskeletal conditions such as shoulder pain, yet its effectiveness remains inconsistent. Understanding the factors that influence self-management from the patient's perspective is essential to improve outcomes.

Aim: To explore barriers to and facilitators of self-management of shoulder pain from the perspective of individuals living with the condition.

Methods: Five online focus groups were conducted with 17 participants experiencing shoulder pain. Discussions were guided by a semi-structured topic guide informed by the Theoretical Domains Framework and findings from a prior systematic review. Data were analysed deductively using reflexive thematic analysis.

Results: Four themes were identified that influenced self-management: (1) Support for Self-management (subthemes related to knowledge, self-management skills, role of the clinician, and personalised care); (2) Environmental and Social Factors (subthemes related to environmental context and resources, and social influences); (3) Motivation and Goals (subthemes related to patient beliefs, reinforcement, intentions, and goals; and (4) Impact of Pain (subthemes related to emotional impact and impact on daily activities). Key barriers included unclear diagnosis, limited long-term clinician support, time constraints, low motivation, and high pain levels. Facilitators included having a tailored programme, easy access to facilities, positive response to treatment, and enjoyable exercise experiences.

Conclusion: This study identified barriers and facilitators that were perceived to influence self-management of shoulder pain. These findings may help explain the limited success of some existing programmes and at the clinical level point to the need for greater clinician support and the integration of behaviour change strategies tailored to individual needs.

Ethics Approval: This study was approved by the Clinical Research Ethics Committee of the Cork Teaching Hospitals.

Disclosures/Conflicts of Interest: The authors declare that there is no conflict of interest.

Abstract No. 4

Title: ANTINOCICEPTIVE EFFECTS OF CANNABIDIOL AND CANNABIGEROL IN AN INCISIONAL WOUND MODEL

Authors: Maria C. Redmond[1,2,3,4], Catherine R. Healy[1,2,3,4], Rosmara Infantino[1,2,3], Mary Hopkins[1,2,3], Georgina Gethin[4,5,6], Abhay Pandit[4], David P. Finn[1,2,3,4]

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Introduction: Wound-related pain is common yet poorly managed, and there is a need to identify new therapeutic approaches. Limited evidence suggests that cannabis and phytocannabinoids may reduce wound-related pain, but further study is warranted.

Aim: We investigated the effects of systemic administration of cannabidiol (CBD) or cannabigerol (CBG) on nociceptive behaviour following back incision (BI) and on endocannabinoid and *N*-acylethanolamine levels.

Methods: Male Sprague-Dawley rats (150-200g on arrival, n=8-9/group) underwent BI or sham surgery. Back and hind paw mechanical withdrawal thresholds were assessed at baseline and post-surgical days (PSDs) 1, 4, 7, and 8 via manual and electronic von Frey tests, respectively. A single dose of CBD (3, 10, or 30 mg/kg i.p.), CBG (5, 10, or 20 mg/kg i.p.), or vehicle was administered one hour before the von Frey test on PSD 8. Rats were euthanised 90 minutes after CBD or 120 minutes after CBG administration.

Results: Following BI, rats developed primary and secondary mechanical hypersensitivity in the dorsum and hind paws, respectively. CBD (3 mg/kg) attenuated primary, but not secondary, hypersensitivity compared to vehicle-treated BI controls. CBG (10 and 20 mg/kg) attenuated primary hypersensitivity in the dorsum and secondary hypersensitivity in the ipsilateral paw. CBG increased circulating levels of palmitoylethanolamide and oleoylethanolamide, and increased palmitoylethanolamide levels in the rostral ventromedial medulla.

Conclusions: CBD and CBG can attenuate wound-related nociceptive behaviour in a dose- specific manner. Further research will investigate the mechanisms underlying CBD and CBG's antinociceptive effects and explore the potential of other cannabinoids in this incisional wound model.

Ethical Approval: Experimental procedures were approved by the Animal Care and Research Ethics Committee, University of Galway. These experiments were completed under licence from the Health Products Regulatory Authority in the Republic of Ireland, in accordance with EU Directive 2010/63. These studies were designed and conducted in accordance with the ARRIVE 2.0 guidelines.

Acknowledgements: Funding was provided by the Taighde Éireann - Research Ireland Government of Ireland Postgraduate Scholarship, Taighde Éireann - Research Ireland, and
B. Braun Hospicare and is co-funded under the European Regional Development Fund under Grant Number 13/RC/2073-P2.
Disclosures: None to declare

Key words: Wound-related pain, phytocannabinoids, endocannabinoids

Abstract No. 5

TITLE: CAN VIRTUAL REALITY ENHANCE THE QUALITY OF STUDENTS' LEARNING EXPERIENCE IN PHYSIOTHERAPY PAIN SCIENCE EDUCATION?

Authors: Mairead O'Donoghue[1,5], Eoghan O'Riain[2,3], Orla Deegan[4,5], Keith M Smart[1,5,7], Sinead McMahon[1], Catherine Blake[1,5], Tara Cusack[1,5], Catherine Doody[1,5], Trish O' Sullivan[2], Marta Moreno Ligero[8], Declan O'Sullivan[2], Ciara Hanrahan[2], Denis Martin[6], David Murphy[3], Joseph G. McVeigh[2], Brona M Fullen[1,5].

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Introduction: Pain science is complex, requiring a deep understanding of neurophysiological and psychological components of pain, which can be challenging to convey through traditional teaching methods. Virtual Reality (VR) technology provides an immersive, interactive environment that allows learners to visualize and experience pain pathways, brain-pain interactions, and mechanisms underlying chronic pain.

Aim of the investigation: To investigate the effectiveness of Reality Health™: a VR pain science education programme as a teaching tool to support learning in physiotherapy pain science education to undergraduate physiotherapy students.

Methods: A mixed-methods design was employed to evaluate the impact of a VR-based educational intervention on 2nd year BSc Physiotherapy students at University College Dublin. Quantitative data were collected to assess changes in knowledge retention using a multiple- choice questionnaire. Learning satisfaction and confidence were assessed using the Student Satisfaction and Self-Confidence in Learning questionnaire (Jeffries & Rizzolo, 2006), and technology acceptance was assessed using the Technology Acceptance Model (Davis, 1989). Qualitative data were obtained through open-ended survey questions immediately following the final VR session. Responses were analysed using Braun and Clarke's (2006) six-step thematic analysis framework.

Results: Twenty-two undergraduate physiotherapy students participated in the study. Participants reported high satisfaction (22.59 ± 2.46) and self-confidence (33.36 ± 4.31) in learning post-intervention. The VR module was found to be useful (17.09 ± 2.50) and easy to use (12.18 ± 2.17), with strong intention for future use (13.59 ± 2.25). Thematic analysis revealed key themes: enhanced learning through immersion, increased communicative confidence, collaborative learning, and the role of technology as a teaching medium.

Discussion: The integration of VR into pain science education significantly enhanced student engagement, conceptual understanding, and confidence in clinical communication. The findings support VR as a scalable, effective tool for physiotherapy education.

Ethical approval: Ethics was granted from University College Dublin's Human Research Ethics Board [LS-C-24-355].

Acknowledgements: This work is funded through the Interreg north-west Europe project 'Scaling-up virtual rehabilitation in the NWE-region-Scale-Up4Rehab', approved and funded by the European Commission [NWE0100082].

Disclosures: None.

Keywords: Virtual Reality, Chronic Pain, Pain Education, Physiotherapy Education

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Abstract No. 6

Title: ASSESSING THE EFFECTIVENESS OF *FEELING BETTER ASD* PAIN MANAGE MENT PROGRAMME FOR AUTISTIC CHILDREN: A PILOT EFFECTIVESS AND FEASIBILITY STUDY.

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Introduction: *Feeling Better* is a cognitive behaviour therapy-based pain management manual which was developed for carers of individuals with chronic pain and intellectual disabilities (McManus & McGuire, 2010). The current *Feeling Better* programme was evaluated by the authors to examine the acceptability, relevance and usability of Feeling Better for autistic children. The findings from that study informed the development of *Feeling Better ASD. Feeling Better ASD* is designed to enhance pain communication and pain management for autistic children who experience recurrent or chronic pain. The programme targets three core skills; (i) body location using a body map, (ii) communication of pain using a pain scale and (iii) pain management strategies to help cope with pain.

Aims of the Investigation: This study aimed to assess the feasibility and preliminary efficacy of *Feeling Better ASD* programme for autistic children aged 5-17 years who experience recurrent or chronic pain. The primary outcome measures were; pain communication and pain coping strategies.

Methods: This study was an exploratory, pilot and feasibility study to assess the effectiveness of the *Feeling Better ASD* programme for autistic children. Participants were assigned at random by the research team to one of the two groups: (i) Internet Intervention Condition [i.e. Feeling Better ASD] or the Waitlist Control Group.

Results: Children in the treatment group showed significant improvements in their ability to communicate the presence and location of pain compared to the waitlist control group. They also had significant improvements in pain coping strategies and parental catastrophising. Positive experiences with participating in the study and high satisfaction with the overall efficacy of *Feeling Better ASD* were expressed. No adverse events were reported.

Discussion: The findings from this study indicate that *Feeling Better ASD* was effective in increasing pain communication and pain management among autistic children with recurrent or chronic pain in the internet intervention group. These improvements were accompanied by reductions in parental pain catastrophising and increased parental confidence in their child's ability to communicate pain. Access to a behavioural pain management programme for autistic children, tailored to their individual communication and cognitive needs, appears to be beneficial in assisting autistic children to express and manage pain.

Ethical Approval:
Ethical approval was received from the University of Galway's Research Ethics Committee

(Reference Number: 2023.02.007) and from the ethics committee of two service providers. A Data Protection Impact Assessment (DPIA) was also completed and received approval (Reference Number: 202300003).

Acknowledgements:
The findings from this study were presented at EFIC 2025 in Lyon in which RF received the Irish Pain Society bursary to attend this conference.

Disclosures/ Conflicts of Interest:
No conflict of interests.

Keywords:
Feeling better, pain, autism, pain communication, coping strategies

Abstract No. 7

Title: THE PREVALENCE OF WORK-RELATED MUSCULOSKELETAL DISORDERS AMONG NURSES AND MIDWIVES IN IRISH HOSPITALS

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Introduction: Work-related Musculoskeletal Disorders (WMSDs) are complaints of the musculoskeletal system that arise while performing routine duties and hinders performance. WMSDs are reported to cause pain and discomfort that increases disability and can result in absenteeism, particularly in the health sector. Nurses and midwives constitute the highest number of professionals within this sector and represent the greatest number at risk of WMSDs. However, literature on the prevalence of WMSDs among this specialty is scare in Irish setting. Therefore, current data on the prevalence of WMSDs will enhance insight into the Irish context to guide the focus of interventions.

Aim: To investigate the prevalence of WMSDs among nurses and midwives in a group hospital in Ireland.

Methods: Ethical approval was obtained from the HSE. A cross-sectional descriptive study was conducted involving 2287 respondents, using a random sampling method. An adapted questionnaire was used for data collection in six hospitals.

Results: A high prevalence (92%) was reported, and the most prevalent body part was the lower back (74%). There was 90.9% prevalence among those who work 12 hours shifts, and 91.7% among those who work day/night shifts. The staff grade with the highest prevalence was Clinical Nurse/Midwife Managers (93.1%). In addition, 58.8% reported limited activities while 47.1 % reported absenteeism of above 4 days at a time, within a 12-month period.

Conclusions: These findings enhance knowledge on the prevalence of WMSDs among nurses and midwives and brings the Irish literature at par with other countries, which could inform policies and practice.

Acknowledgement: No funding was received for this study

Conflict of interest: No conflict of interest has been declared by the authors

Key words: Work-related, Musculoskeletal disorders, and Nurses.

Abstract No. 8

Title: BASELINE CIRCULATING ENDOCANNABINOID AND *N*-ACYLETHANOLAMINE LEVELS ARE ASSOCIATED WITH INDIVIDUAL DIFFERENCES IN HEAT PAIN SENSITIVITY IN HEALTHY INDIVIDUALS

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Introduction: Individual differences in neuromodulatory systems within nociceptive pathways may explain some of the variability in pain sensitivity. The endocannabinoid (eCB) and opioid systems represent major neuromodulatory networks that influence the pain experience. However, limited evidence exists regarding how baseline circulating eCBs/*N*- acylethanolamines (NAEs) and beta-endorphin (BE) relate to individual differences in human pain sensitivity.

Aim of the Investigation: To determine whether baseline circulating eCB/NAE and BE levels are associated with individual differences in heat pain sensitivity in healthy participants.

Methods: 49 healthy participants (24 female, 25 male) provided baseline fasted blood samples before undergoing a thermal calibration procedure. Participants received 24 heat stimuli of varying temperatures across eight discrete forearm sites and rated pain intensity for each, as part of a larger study. Linear mixed models explored associations between baseline levels of eCBs/NAEs (measured by LC-MS/MS) or BE (measured by ELISA) and heat pain sensitivity, with participant ID and temperature as random effects. Participants were also genotyped for the *FAAH* C385A single nucleotide polymorphism (SNP).

Results: A significant interaction between the NAEs (derived from principal component analysis of anandamide (AEA), *N*-palmitoylethanolamide (PEA), and *N*-oleoylethanolamide (OEA)) and stimulus temperature was observed (p=0.036). After correcting for multiple comparisons, post-hoc analyses revealed a significant effect of stimulus temperature-by- PEA (p=0.012). This effect remained significant in a combined PEA/BE model (p=0.014).
There were no further significant effects involving BE (p>0.05).

Discussion: Baseline eCB/NAE levels moderated the temperature-pain relationship, with higher circulating PEA levels associated with reduced heat pain sensitivity. Individual differences in pain sensitivity may be partially explained by variations in eCB system tone.

Ethical Approval: Granted by the University of Toronto's Human Research Ethics Board (Protocol #45552).

Acknowledgements: This work was supported by a Canadian Institutes of Health Research Project Grant (PJT 183703).

Disclosures/Conflicts of Interest: The authors declare no conflicts of interest.

Keywords: pain sensitivity, thermal nociception, endocannabinoid system, FAAH substrates, beta-endorphin, individual differences, neuromodulation, biomarkers