

Professor Karen Saunders

CV

PRINCIPAL PROFESSIONAL SPECIALISMS

Clinical Specialist Physiotherapist in Neurology

Acquired & traumatic brain injury and stroke,
CSP & HCPC Registered, Professor (Honorary)
BSc (Hons) Physiotherapy, MCSP

QUALIFICATIONS & ACCREDITATION

Qualitative Research Methods MSc Module,
University of Oxford, 2017
BSc (Hons) Physiotherapy Degree, University
of Salford, 1998
Diploma in Social Sciences, University of
Dundee, 1989
BSc (Hons) Biology Degree, University of York,
1987

EXPERT WITNESS EXPERIENCE & TRAINING

Completion of medico-legal expert client
assessment and report experience.

Participation in medico-legal training courses
organised by the Medico-Legal Association of
Chartered Physiotherapists, 2012 and 2016.

PAST & PRESENT POSITIONS

**Director and Clinical Specialist Physiotherapist in
Neurology**, Da Vinci in Motion Educational, Research and Clinical
Neuro-physiotherapy Services, 2011 – *present*

Review Editor, Rehabilitation in Neurological Conditions Journal
(Frontiers Open Science platform) 2022 - *present*

Consultant Research Fellow, core member of the Cross
Specialty Research Team, led by Professor and Dr Mohamed Sakel,
MRCP (UK), Consultant in Rehabilitation Medicine, 2015 – *present*

PhD doctoral research student, University of Kent
Topics: Traumatic Brain Injury and Co-production, 2020 – 2025

Professional Lead (Rehabilitation) Cotswolds,
Gloucestershire Care Services National Health Service (NHS) Trust-
permanent part-time contract (Band 7) 2013 – 2017

Specialist Physiotherapist in Neurology (Band 7) at the
Oxford Centre for Enablement (OCE), Nuffield Orthopaedic Centre,
Oxford University Hospitals NHS Trust, Oxford. 10 months
temporary maternity cover contract, 2011 - 2012

Clinical Specialist Physiotherapist in Neurology at
Manchester Neurotherapy Centre, 2005 – 2011

Senior Physiotherapist in Rehabilitation at BMI The
Alexandra Hospital, Manchester, 2003-2009

Senior Neuro-physiotherapist, Salford Royal Hospitals NHS
Trust, Hope Hospital, Salford, 2001-2005

Junior Physiotherapist, Central Manchester & Manchester
Children's University Hospital NHS Trust, Manchester, 1998-2001

MEMBERSHIPS OF PROFESSIONAL ORGANISATIONS

The Chartered Society of Physiotherapy (No: 60119)

Sir William Beveridge Foundation

Health and Care Professions Council (No: PH54173)

AWARDS

Certificate Award for Research poster presentation at Levelling the
Field conference - Championing Ethnic Diversity in the NHS, 2021

Highly Commended Team Award for Exceptional Contribution with
Certificate awarded to the Neuro-rehabilitation Clinical Research
Team in Research & Innovation Awards (EKHUFT), 2020

Professor Karen Saunders

RESEARCH AND INNOVATION

Co-Investigator for current clinical research trial: Home-based EEG neurofeedback to reduce chronic neuropathic pain, a cohort clinical trial. NCT Registration: NCT05464199.

I have completed 8 research projects comprising clinical research and qualitative studies from 2015 onwards to date

SELECT CONFERENCE PRESENTATIONS

Keynote presentation on 'Traumatic Brain Injury: Epidemiology, survivorship of moderate to severe TBI and long term impacts and co-design research of a resource with survivors, clinicians and charity stakeholders' at the NeuroConvention conference (NEC, Birmingham) 17/03/2025. Attended by 160 people.

•Keynote presentation on 'Neuropathic pain – management and research' at the NeuroConvention conference, Birmingham 18/03/2025

Research poster presentation of 'What is the impact of living with a moderate to severe traumatic brain injury and how can co-design of a resource with moderate to severe traumatic brain injury survivors, expert clinicians and professional stakeholders be achieved?' at the 13th World Congress of Neurorehabilitation (WCN) in the topic area of Traumatic Brain Injury research (22-25 May 2024) in Vancouver, Canada.

Research poster presentation of 'A research-based evaluative survey to gain insight into knowledge, learning and potential for implementation of new knowledge presented in an interactive educational workshop on mental capacity, mental health and medico-legal practice in relation to the legal system in Bangladesh.' at the 13th WCN (22-25 May 2024) in Vancouver, Canada.

Research poster presentation of 'Living with spasticity during the COVID-19 pandemic. A qualitative research study of patient, carer and physician experiences.' at the 13th WCN (22-25 May 2024) in Vancouver, Canada.

Oral presentation of 'Co-creating system wide improvement for people with traumatic brain injury across one integrated care system in the UK to initiate a transformation journey through co-production' at 17th World Congress of International Society of Physical and Rehabilitation Medicine (ISPRM) 2023, Cartagena, Colombia (04/06/23 – 08/06/23).

Two keynote lectures at the NeuroConvention Birmingham NEC (July 2022) – PhD research into the long term health challenges of people who have survived traumatic brain injury & Rehabilitation research into balance using a robotic exoskeleton.

Keynote on Innovative Balance rehabilitation in Multiple Sclerosis: Robotic exoskeleton clinical research. (12/5/2022). Primary Care & Public Health Conference, Birmingham NEC.

Rehabilitation research into balance using a robotic exoskeleton in Canterbury (26/11/2021). Invited lecture seminar for the University of Kent and EKHUFT.

Co-ordination, organisation, participation and presentation of research in 7 live Cross Specialty Research Team webinar events (Oct 2019 to Oct 2022). These events were based on the theme of 'Unequal impact of COVID-19 on vulnerable communities' and were broadcast live using Webex Cisco video software.

Poster presentation of my clinical case report on neuro-physiotherapy for movement recovery after basal ganglia stroke with one of my patients at ISPRM (International Society of Physical and Rehabilitation Medicine) Conference in Paris (2018). www.linkedin.com/pulse/neuro-physiotherapy-focused-sensory-stimulation-system-karen-saunders/

Poster presentation of my clinical case report on the identification of effective neuro-physiotherapy treatment of spasticity post-stroke focused on patient centred goals, carer support and use of botulinum toxin, with one of my patients at ISPRM, Argentina (2017). www.linkedin.com/pulse/11th-international-society-physical-rehabilitation-world-saunders/

Oral platform presentation at the XXII World Congress of Neurology in Santiago, Chile in October 2015 on "Does interactive live music enhance wellbeing, mobility and quality of life for brain and spinal injured patients? A feasibility study".

Poster presentation at 92nd Annual Conference for the American Congress of Rehabilitation Medicine in Dallas (US), October 2015. Unusual progression of Miller Fisher syndrome with bilateral facial palsy.

Poster presentation at the XXII World Congress of Neurology in Santiago, Chile in October 2015. Evaluation of homecare service for older people in Dhaka, Bangladesh.

Invited keynote speaker for the Sir William Beveridge Foundation on "Creating Global Change" at the 6th East Kent Brain Injury Neuro-rehabilitation Conference in Canterbury, 2015.

Presentation at the 34th scientific conference meeting of the Physiotherapy Research Society titled "Bridging Gaps in Research", Leicester, April 2015. A shared clinical case report through clinical supervision to ascertain the potential for recovery of upper limb function after thalamic stroke.

Poster presentation at the first annual conference of the West of England Academic Health Science Network in October 2014.

Clinical case study presentation in March 2008 to the Greater Manchester Multiple Sclerosis (MS) Special Interest Group.

Professor Karen Saunders

RESEARCH PUBLICATIONS

·A home-based EEG neurofeedback treatment for Chronic Neuropathic Pain - A pilot study. (2025) Sakel M, Saunders K, Ozolins C, Biswas R. *Frontiers in Pain Research*. DOI=10.3389/fpain.2025.1479914

·Living With Spasticity During the COVID-19 Pandemic: A Qualitative Study of Patient, Carer and Physician Experiences (September 2024). Sakel, M, Saunders, K., Faruqui, R, Keene, J and Wilkinson, D. *Journal of Health Expectations*. <https://doi.org/10.1111/hex.70032>

·Feasibility and safety of a home-based EEG neurofeedback intervention to reduce chronic neuropathic pain, a cohort clinical trial. (September 2024). Sakel M, Saunders K, Ozolins C, Biswas R. *Archives of Rehabilitation Research and Clinical Translation*, Volume 6, Issue 3, 100361. [https://www.archives-rrect.org/article/S2590-1095\(24\)00059-4/fulltext](https://www.archives-rrect.org/article/S2590-1095(24)00059-4/fulltext)

·Effect of Skin Pigmentation and Finger Choice on Accuracy of Oxygen Saturation Measurement in an IoT-Based Pulse Oximeter. (May 2024). Haxha S, Sakel M, Saunders K, et al. *Sensors*. 24 (11), 3301; <https://doi.org/10.3390/s24113301>

Is it time for a paradigmatic shift in relation to healthcare in the UK? A reflection. (May 2023). Saunders, K, Sakel, M and Cooper, CL. *BMJ Leader*. <https://dx.doi.org/10.1136/leader-2023-000762>

Remote Health Monitoring System for the Estimation of Blood Pressure, Heart Rate and Blood Oxygen Saturation Level. *IEEE SENSORS JOURNAL*, 2023. <https://ieeexplore.ieee.org/document/10017171>
Nwibor C, Haxha S, Ali M, Sakel, M, Haxha AR, Saunders Karen and Nabakooza S.

Co-creating system-wide improvement for people with traumatic brain injury across one integrated care system in the United Kingdom to initiate a transformation journey through co-production. Manley K, Saunders K, Wilkinson D, Faruqui R, Sakel M. *Journal of Health Expectations*. Jan 2023. <https://onlinelibrary.wiley.com/doi/full/10.1111/hex.13712>

Feasibility and Safety of a Powered Exoskeleton for Balance Training for People Living with Multiple Sclerosis: A Single-Group Preliminary Study (Rapper III). Sakel M, Saunders K, Hodgson P, Stephensen D, Phadke CP, Bassett PA, Wilkinson D. *J Rehabil Med*. Dec. 2022 Dec <https://pubmed.ncbi.nlm.nih.gov/36484722/>

Saunders, Karen. Determinants of Health. *Rapid Response*. 14/04/2022. *British Medical Journal (BMJ)* <https://www.bmj.com/content/377/bmj.o938/rr>

Saunders, Karen. NHS Organisational workplace inequalities. *Letter. BMJ*. 2022; 377 doi: <https://doi.org/10.1136/bmj.o868> (Published 06 April 2022)

Saunders, Karen. NHS Organisational workplace inequalities. *Rapid Response*. 22/02/2022. *BMJ*. <https://www.bmj.com/content/376/bmj.o424/rapid-responses>

Hossain KMA, Sakel M, Saunders K, Kabir MF and Hasnat AK. Rehabilitation of a young girl with acute transverse myelitis and prolonged lower motor neuron features: a longitudinal case report over 12 months. *Int Journal of Therapy and Rehab*. Issue: February 2022. <https://www.magonlinelibrary.com/doi/abs/10.12968/ijtr.2020.0049>

Hossain MA, Hossain KMA, Saunders K, et al Prevalence of Long COVID symptoms in Bangladesh: a prospective Inception Cohort Study of COVID-19 survivors. *BMJ Global Health* 2021;6:e006838. <https://gh.bmj.com/content/6/12/e006838>

Virtual online consultations: advantages and limitations (VOCAL) study. Time to act. (02/02/2016). E letter response. Karen Saunders & Dr Mohamed Sakel (SWBF) http://bmjopen.bmj.com/content/6/1/e009388.full/reply#bmjopen_el_9552

A completed audit loop of a botulinum toxin therapy service for adult spasticity. M Sakel and Karen Saunders. *International Journal of Therapy and Rehabilitation* 12/2015; 22(12):561-565. DOI: 10.12968/ijtr.2015.22.12.561 bit.ly/1IPkCoZ

Unusual progression of Miller Fisher syndrome with bilateral facial palsy. M Sakel, Karen Saunders, H Khan, M Mazen, J Sivagnanasunaram, P Pulicino. [http://www.jns-journal.com/article/S0022-510X\(15\)01214-9/pdf](http://www.jns-journal.com/article/S0022-510X(15)01214-9/pdf)

The Evaluation of a Homecare Service for Older people in Dhaka, Bangladesh. M Sakel, Karen Saunders, R Jilani, S Hussain, D Biswash, J Das, J & M O'Keefe. [http://www.jns-journal.com/article/S0022-510X\(15\)00793-5/pdf](http://www.jns-journal.com/article/S0022-510X(15)00793-5/pdf)

Variations in public and professional stakeholders awareness and attitudes on diagnosis and care provisions for dementia – A National survey. M Sakel, Karen Saunders, S Hussain, R Jilani, D Biswash, J Das, G Sarker & M O'Keefe. [http://www.jns-journal.com/article/S0022-510X\(15\)00598-5/pdf](http://www.jns-journal.com/article/S0022-510X(15)00598-5/pdf)

Does interactive live music enhance wellbeing, mobility and quality of life for brain and spinal injured patients? A feasibility study. M Sakel and Karen Saunders. Abstract published. [http://www.jns-journal.com/article/S0022-510X\(15\)00792-3/pdf](http://www.jns-journal.com/article/S0022-510X(15)00792-3/pdf)

Co-authored commentary letter in the *British Medical Journal* entitled "Non-regulated Interventions are here to stay, time to regulate?" (March 2015): M Sakel and Karen Saunders <http://www.bmj.com/content/350/bmj.h1323/rapid-responses>

Case report abstract "Recovery of arm function after thalamic stroke: A shared case report through clinical supervision" Karen Saunders. *International Journal of Therapy and Rehabilitation* August 2015. Vol. 22. No. 8.