

Why Pain Research Matters

Introduction: What is the problem?

Over 150 million people in Europe experience chronic pain, making it a major public health issue. Chronic pain affects people of all ages and can seriously affect a person's quality of life. It impacts not only physical and mental health but also work, education, and relationships. However, current care is often fragmented, and treatments can fail to meet people's needs. As a result, many people do not receive effective or coordinated care. Pain also creates major challenges for society across Europe. It affects the economy because people living with pain may find it difficult to work or may have to retire early. Chronic pain is estimated to cost European countries between 1.5% and 3% of their gross domestic product (GDP) each year, mainly due to lost productivity and increased healthcare use.

Pain Research – gaps and challenges

Even though chronic pain is very common and the impact is tremendous to patients, their relatives and the society, the underlying mechanisms of chronic pain are still not well understood. There are in fact major research gaps which have not yet been solved. Therefore, pain research is of major importance. However, pain research is still underfunded and the coordination of research efforts are not optimal yet. Yes, scientists have made big discoveries about molecules, genes, and many pathophysiological mechanisms underlying pain. However, these findings often don't lead to new treatments. Research done in animal models doesn't always apply well to humans, which slows down the development of new therapies. Many clinical studies use different measures and outcomes, making it hard to compare results or draw clear conclusions. In addition, pain research is not making full use of new tools and technologies. For instance, machine learning has been used to predict when back pain might return, but these tools are not yet used in most clinics. This means helpful innovations aren't reaching the people who need them. Therefore, a major challenge of the future will be the coordination of excellent pain research that – at the end – has an impact on chronic pain in patients.

The Pain Research Strategy for Europe (PRiSE)

To respond to these challenges, the European Pain Federation (EFIC) developed a detailed plan called the Pain Research Strategy for Europe (PRiSE). The PRiSE strategy is designed to create a more coordinated approach to pain research in Europe. It was developed with input from healthcare professionals, researchers, and people who live with pain. The goal is to focus research efforts on the most important issues and improve how pain is studied and treated. Without a shared plan, pain research is often repeated or doesn't focus on what matters most. Resources may be wasted, and improvements are slow. PRiSE aims to solve these problems by bringing together different countries, research groups, and fields of study. This will help guide future funding and support more effective healthcare solutions for chronic pain. Together, this strategy outlines the key steps needed to prioritise pain research and make sure it leads to real changes in policy and healthcare.

Strategic priorities

PRiSE has identified five main research goals:

- Understand pain better by studying the many factors that influence it, including biological, psychological, and social factors.
- Study conditions that impact or are impacted by pain like depression, sleep problems, and obesity and learn how they affect pain and treatment outcomes.
- Evaluate current and newly emerging treatments, including medications, physiotherapy, and behavioural approaches, to find out what works best.
- Develop new personalised treatments that match care to the needs of individual patients, using new technologies.
- Study how pain affects society and the economy, to support better health planning and funding decisions.

These goals were shaped by a large European survey and expert input. They are designed to work alongside other major health research efforts, including mental health and long-term disease management.

From Strategy to Impact

One of the most important parts of the PRiSE strategy is making sure research leads to real change. That means studies should be useful to healthcare providers, policymakers, and people with pain. Research should also be easier to compare by using standard outcome measures and involving patients in the design of studies.

Recent research shows that using a mix of information (like clinical data, mental health scores, and brain imaging) can help predict how pain will develop. But to make this happen, researchers need good data systems and better connections between research and clinical practice.

To support this, PRiSE recommends:

- Using shared standards to measure pain
- Involving patients in research planning
- Aligning studies with international systems, like ICD-11

Conclusion: From strategy to action

Pain affects millions of people across Europe and causes major personal, social, and economic problems. With a strong research strategy, better policies, and teamwork between researchers, clinicians, and people living with pain, we can make real progress.

The PRiSE strategy provides a roadmap for achieving this. You can read the full research strategy in the European Journal of Pain [here](#).

References

- Berger, Sara E, and Alexis T Baria. "Assessing Pain Research: A Narrative Review of Emerging Pain Methods, Their Technosocial Implications, and Opportunities for Multidisciplinary Approaches." *Frontiers in Pain Research* 3 (2022): 896276.
- Breivik, Harald, Elon Eisenberg, and Tony O'Brien. "The Individual and Societal Burden of Chronic Pain in Europe: The Case for Strategic Prioritisation and Action to Improve Knowledge and Availability of Appropriate Care." *BMC Public Health* 13 (2013): 1-14.
- Cohen, Steven P, Lene Vase, and William M Hooten. "Chronic Pain: An Update on Burden, Best Practices, and New Advances." *The Lancet* 397, no. 10289 (2021): 2082-97.
- Deckert, Stefanie, U Kaiser, Christian Kopkow, F Trautmann, Rainer Sabatowski, and JJEJOP Schmitt. "A Systematic Review of the Outcomes Reported in Multimodal Pain Therapy for Chronic Pain." *European journal of pain* 20, no. 1 (2016): 51-63.
- Gatchel, Robert J, Yuan Bo Peng, Madelon L Peters, Perry N Fuchs, and Dennis C Turk. "The Biopsychosocial Approach to Chronic Pain: Scientific Advances and Future Directions." *Psychological bulletin* 133, no. 4 (2007): 581.
- Huang, Yilong, Chunli Li, Jiaxin Chen, Zhongwei Wang, Derong Zhao, Lei Yang, Zhenguang Zhang, Yuanming Jiang, Xiaolina Zhang, and Bo He. "A Multidimensional Regression Model for Predicting Recurrence in Chronic Low Back Pain." *European journal of pain* 29, no. 3 (2025): e4793.
- Mäntyselkä, Pekka T, Esko A Kumpusalo, Riitta S Ahonen, and Jorma K Takala. "Direct and Indirect Costs of Managing Patients with Musculoskeletal Pain—Challenge for Health Care." *European journal of pain* 6, no. 2 (2002): 141-48.
- Mouraux, André, Kirsty Bannister, Susanne Becker, David P Finn, Gisèle Pickering, Esther Pogatzki-Zahn, and Thomas Graven-Nielsen. "Challenges and Opportunities in Translational Pain Research—an Opinion Paper of the Working Group on Translational Pain Research of the European Pain Federation (Efic)." *European journal of pain* 25, no. 4 (2021): 731-56.
- Oliveira, CB, GE Ferreira, R Buchbinder, GC Machado, and CG Maher. "Do National Health Priorities Align with Global Burden of Disease Estimates on Disease Burden? An Analysis of National Health Plans and Official Governmental Websites." *Public Health* 222 (2023): 66-74.
- Phillips, Ceri J. "The Cost and Burden of Chronic Pain." *Reviews in pain* 3, no. 1 (2009): 2-5.
- Pickering, Gisèle, Mary O'Keeffe, Kirsty Bannister, Susanne Becker, Sonia Cottom, Felicia J. Cox, Elon Eisenberg et al. "A pain research strategy for Europe: A European survey and position paper of the European Pain Federation EFIC." *European Journal of Pain* 29, no. 1 (2025): e4767.
- Stubhaug, Audun, Johan Liseth Hansen, Sara Hallberg, Anders Gustavsson, Anne Elise Eggen, and Christopher Sivert Nielsen. "The Costs of Chronic Pain—Long-Term Estimates." *European journal of pain* 28, no. 6 (2024): 960-77.
- Treede, Rolf-Detlef, Winfried Rief, Antonia Barke, Qasim Aziz, Michael I Bennett, Rafael Benoliel, Milton Cohen, Stefan Evers, Nanna B Finnerup, and Michael B First. "Chronic Pain as a Symptom or a Disease: The IASP Classification of Chronic Pain for the International Classification of Diseases (Icd-11)." *Pain* 160, no. 1 (2019): 19-27.
- Tuyl, L, N Zinger, and I Heide. "Scoping Study on Evidence to Tackle High-Burden under-Researched Medical Conditions—Discussion Paper." *Publications Office of the European Union* (2023).
- Vos, Theo, Stephen S Lim, Cristiana Abbafati, Kaja M Abbas, Mohammad Abbasi, Mitra Abbasifard, Mohsen Abbasi-Kangevari, Hedayat Abbastabar, Foad Abd-Allah, and Ahmed Abdelalim. "Global Burden of 369 Diseases and Injuries in 204 Countries and Territories, 1990–2019: A Systematic Analysis for the Global Burden of Disease Study 2019." *The Lancet* 396, no. 10258 (2020): 1204-22.