SIP Position Paper on Employment and the Economic Considerations of Pain

2026

This statement outlines the joint position of the European Pain Federation EFIC and Pain Alliance Europe (PAE) on employment and economic considerations of pain. It frames chronic pain as a major public health, social, and economic challenge, highlighting its substantial direct and indirect costs for individuals, labour markets, and public finances across the EU.

Policy Recommendations

1. Integrate chronic pain into EU and national NCD strategies, health funding frameworks, and social policy initiatives to reduce its direct and indirect impacts on individuals, employers, and society.
2. Develop public health campaigns to promote physical activity among healthcare professionals, patients, and the public, as a primary intervention to reduce the prevalence of musculoskeletal pain, and to prevent conditions with high risk of developing secondary chronic pain (e.g. stroke, diabetes).
3. Improve access to timely, multidisciplinary, and patient-centred services for the effective management of both acute and chronic pain.
4. Ensure early access to biopsychosocial rehabilitation for individuals with acute pain, with particular attention to those at high risk of poor outcomes (e.g. depression, low recovery expectations, socio-economic disadvantage) [1].
5. Expand dedicated funding streams for chronic pain research under the EU and national research frameworks, covering both prevention and treatment.
6. Develop inclusive employment policies and support workplace-based interventions that enable job retention and where appropriate return to work for individuals with or at risk of chronic pain.
7. Establish mechanisms for financial and rehabilitation support for workers with chronic pain.

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The 'Societal Impact of Pain' (SIP) platform is a multi-stakeholder partnership led by the European Pain Federation EFIC and Pain Alliance Europe (PAE), which aims to raise awareness of pain and change pain policies. The scientific framework of the SIP platform is under the responsibility of EFIC, and the strategic direction of the project is defined by both partners. The pharmaceutical companies Haleon, Grünenthal GmbH, and GSK are the main sponsors of the Societal Impact of Pain (SIP) platform.

8. Strengthen the prevention of chronic pain within occupational health and safety policies across the EU and Member States, in particular through the forthcoming Quality Jobs Act.

The Case for Greater Investment in Chronic Pain Prevention and Management

Chronic pain represents a structural challenge for labours markets, productivity and economic growth and should be addressed as such in EU and national policy initiatives, as it is first and foremost a condition that significantly impacts daily functioning and quality of life.

Chronic pain, defined as pain lasting longer than three months, is the most prevalent health condition in Europe and the number one cause of disability and reduced quality of life. One in five Europeans (approximately **150 million people)** live with moderate to severe chronic pain, equivalent to the combined populations of Germany and France.

Common chronic pain conditions include musculoskeletal pain (e.g., low back and neck pain and osteoarthritis), cancer-related pain, neuropathic pain, postsurgical chronic pain, and headache disorders such as migraines. Musculoskeletal conditions are among the most widespread, with osteoarthritis alone affecting more than **40 million** people across Europe. Cancer-related pain is also highly prevalent: approximately **40% of cancer survivors** and at least **66% of adults** with progressive or advanced cancer experience significant pain. Neuropathic pain affects an estimated **7–10% of the population**, while postsurgical chronic pain occurs in around **10% of patients** who undergo surgery. Chronic migraine affects around **1–4% of the population,** and chronic tension-type headaches approximately **2.2%**.

Chronic pain can **take hold of a person's life**, interfering with patients' ability to work, walk, sleep, or concentrate. This means struggling with basic daily activities, maintaining relationships, and participating fully in society. Mental health conditions and chronic pain frequently co-occur and influence each other, creating a vicious cycle of disability. It thereby severely reduces quality of life, limits participation in work and society, and increases the risk of mental health conditions, social isolation, and other chronic conditions.

Despite its devastating effects, current treatments for acute pain often provide limited and temporary relief, failing to prevent the condition from becoming chronic or progressively disabling, while nearly 40% of chronic pain patients report inadequate pain management [2].

Therefore, it is imperative to implement improved, integrated and patient-centred approaches.

Beyond the impact on individuals, chronic pain imposes a significant **economic burden** on society, through healthcare costs, productivity losses, and pressures on social security systems, particularly in the context of an ageing population. Recent studies in the European Union (EU) have estimated that the combined national direct and indirect costs of chronic pain range from **3% to 10% of GDP per year** [3, 4 ,5] in EU Member States, with **back pain, cancer-related pain, and neuropathic pain** identified as the most costly pain types [4, 6].

Notably, the economic costs of chronic pain conditions are partly explained by their negative association with labour force participation, absenteeism and presenteeism. Evidence from five European countries (the UK, France, Spain, Germany and Italy), for instance, indicates that severe and moderate daily pain contribute to a **20- and 10-percentage-point reduction**, respectively, in the probability of full-time employment, and have a **greater impact on absenteeism and presenteeism** than other health status factors [7] (e.g., chronic comorbidities and body mass index).

Taken together, these findings underscore the importance of implementing appropriate primary, secondary and tertiary prevention interventions to reduce the prevalence of chronic pain conditions [8], as well as evidence-based pain management approaches that acknowledge the combined contribution of biological, psychological, and social factors to the pain syndrome.

Further, actions such as **public health campaigns**, to increase public and professional health literacy around pain, its risk factors, common myths, the stigma of pain, and cultivate healthy responses among clinicians, patients, and the public; **structured exercise** (guided professionally) and **education programmes** in both clinical and workplace settings; focused **efforts to implement evidence-based standards and guidelines** for the management of acute and chronic pain conditions; **integrated health and occupational interventions**; and **vaccination** in cases where chronic pain conditions result from infectious diseases, such as post-herpetic neuralgia (PHN) resulting from herpes zoster infection, illustrate promising approaches to preventing chronic pain by targeting modifiable biopsychosocial risk factors. The Societal Impact of Pain (SIP) acknowledges that the EU has made significant progress in advancing the **European Health Union** since the onset of the COVID-19 pandemic. However, chronic pain remains under-recognised in policy and underfunded in research. As the EU moves forward under a renewed priority framework emphasising the **strong link between health policy measures and economic**

performance, the economic and societal **costs of inaction** on chronic pain cannot be overlooked.

Because indirect costs associated with reduced labour supply and productivity account for a significant share of the total economic burden, improving pain prevention and management emerges not only as a **public health priority** but also a **fundamental employment issue**. This is especially true at a time of widespread **labour shortages**, expected to be exacerbated by **demographic change** [9].

EU Policy Landscape

Investing in pain prevention and management is essential to enhance labour productivity and safeguard fiscal sustainability

Since the publication of the Draghi report [10], the European Commission has stepped up efforts on multiple fronts to boost Europe's economic growth and attractiveness. EU health policy, under this new set of priorities, is being reoriented around a model that positions health and strong health systems as the foundation for social wellbeing, economic prosperity, and competitiveness.

Some of the challenges potentially hindering productivity growth are related to labour market tightness and skills mismatches, one of them being persistent labour shortages in various sectors and occupations, driven by structural factors such as ageing populations, technological advancements, the green transition, and geographical dispersion [9].

Closely linked to labour shortages, job quality has recently become a focus for the EU, as reflected by the publication of the Quality Jobs Roadmap and the announcement of the Quality Jobs Act, which potentially features an update of health and safety considerations at work that is fit for a new reality.

Another employment-related EU initiative, the European Pillar of Social Rights Action Plan [11], sets the ambitious target of achieving an employment rate of at least 78% among people aged 20 to 64 by 2030. Its implementation, as well as the Employment Equality Framework Directive [12], offers opportunities for people to stay in education, and drive equitable access to employment and non-discrimination at work. Importantly, these implementation efforts also extend to improving occupational safety and health standards, as reflected in the EU Strategic Framework on Health and Safety at Work 2021–2027 [13], which identifies the prevention of work-related accidents and diseases as a key priority.

Moreover, in 2021, the European Commission adopted the Strategy for the Rights of Persons with Disabilities 2021-2030 [14], which is currently being updated. The Package to Improve Labour Market Outcomes of Persons with Disabilities [15] was one of its seven flagship initiatives, containing actions focusing on the improvement of the employment rate and quality of employment of people with a disability (e.g., guidelines on reasonable accommodation at work, chronic disease management and workplace disability prevention).

In this context, prioritising pain prevention and management is not only critical to improving population health outcomes, but also to **enhancing labour productivity and competitiveness**, and ultimately building a more **resilient European economy.**

Moreover, as highlighted in the 2026 European Macroeconomic Report [16] and recognised in the subsequent Commission proposal for a Council Recommendation on the economic policy of the euro area [19] prepared in the new European Semester cycle, EU governments' debt dynamics are becoming increasingly challenging amid rising defence spending requirements, investment needs related to the digital and decarbonisation transitions, and mounting pressures on pension, health, and long-term care systems stemming from demographic ageing. This underscoring the need, among other things, for stronger prioritisation of public expenditure and a reassessment of the quality of spending programmes.

Against this backdrop, taking decisive action on pain prevention and management stands a **cost-effective measure** crucial to **alleviating pressure on social protection systems** and **safeguarding fiscal sustainability**.

Key Concepts and Definitions

The societal costs of a disease or health condition in a defined population can be measured in **direct** and **indirect costs**. In health economics, the first term refers to expenditures arising from resource use that are completely attributable to an illness [18], while the latter encompasses all the less visible costs to the national economy resulting from productivity loss [17].

To put the substantial economic toll of chronic pain into perspective, it is paramount to contextualise it within the current EU labour market dynamics, characterised by labour shortages and an ageing population:

- Labour shortages: situation in which there are individuals with the required skills, but an insufficient number takes up employment in the specific occupation and location [20].
- Ageing population: demographic shift characterised by a rising proportion of elderly individuals [20].

Moreover, tackling the economic burden of chronic pain requires a clear understanding of both the distinction between primary and secondary prevention and the biopsychosocial model of pain.

Preventive strategies can be broadly divided into two categories:

- Primary prevention, which focuses on preventing the onset of chronic pain, such as through the promotion of healthy behaviours in the general population and among individuals experiencing acute or subacute pain.
- Secondary prevention, which focuses on early detection and timely intervention to prevent recurrence or progression to disabling pain.
- Tertiary prevention, which aims to reduce secondary effects of those suffering from chronic pain. Models such as the fear avoidance model or the avoidance and endurance model, incorporate the functional, psychological and social impairment in leading a satisfying life by the affected individuals.

The biopsychosocial model conceptualises pain as a subjective experience arising from the dynamic interplay between biological, psychological, and social factors. Accordingly, effective pain prevention and management strategies must address this biopsychosocial complexity.

Direct and Indirect Costs of Chronic Pain

The economic burden of pain is estimated to range from **3% to 10% of GDP** annually in EU countries. A case in point is a 2012 study conducted in Ireland, which estimated that the cost of chronic pain was equivalent to €5.34 billion or **2.86% of Irish GDP per year** [3].

Similarly, a Swedish study from the same year found that the socio-economic burden associated with diagnoses related to chronic pain amounted to €32 billion annually, or about **a tenth of Sweden's GDP [4]**. More recent estimates from a 2024 Norwegian study point to annual costs of chronic pain, driven by healthcare use and productivity losses, of €12 billion, or approximately 4% of GDP [21]. These economic impacts reflect not only system-level costs, but also the personal challenges and unmet needs experienced by individuals living with chronic pain.

The latter macro-level economic figures result from both **direct and indirect costs borne by individuals, their employers, and society as a whole**, which broken down as follows:

- **Direct healthcare system costs** for an individual living with chronic pain span from inpatient admission, outpatient care and prescription medications to consultations with an array of healthcare providers (including psychologists, general practitioners, physiotherapists). Additional costs might arise from accident and emergency visits, non-prescription medications, and alternative interventions (e.g., chiropractors) [3].

- **Indirect costs** for the **individual** with chronic pain may stem from loss of wages, home adaptations, informal care required, family and home responsibilities (e.g., childcare, cleaning), transport and other needs [3]. On the **employer level**, indirect costs relate to loss of productivity and sick leave payment while at the **societal level**, these take the form of annual social benefits, including disability allowance, unemployment benefits, and disability pensions.

Employment and Labour Productivity Considerations

The experience of pain is associated with **reduced labour supply** and **increased absenteeism** (time away from work) and **presenteeism** (being at work while unwell), representing some of the **largest sources of indirect costs of chronic pain** due to its negative impacts on productivity. The economic burden is even greater when psychological co-morbidities accompany chronic pain [3, 22] or when pain occurs in multiple body sites, and it is further exacerbated by the fact that reduced labour market engagement can persist for years before patients begin multidisciplinary pain treatment.

In Europe, approximately **half of those living with chronic pain** report that **it interferes with their work**, which might take the form of employment cessation (occurring in up to 20% of

patients with chronic pain [2]), periods of self-certified and medically-certified sickness absence, reduced hours, or reduced ability while at work [24]. A large Finnish study found, for instance, that up to **30% of medically certified absences** lasting more than two weeks were attributable to chronic pain [25].

People living with chronic pain also face **barriers when returning to work after sick leave or unemployment** due to difficulties in managing pain while at work, navigating workplace relationships and expectations, and accessing appropriate workplace adjustments. Moreover, psychological factors such as low self-efficacy and self-confidence can hinder the return, particularly after a prolonged absence [26, 27].

Considering all the above, chronic pain is a major contributor to **early retirement** and **disability pensions [5, 28]**, **reducing labour productivity** and placing additional **pressure on social security systems**.

The broader impact of chronic pain employment-related indirect costs on European economies is reflected in existing national data. The previously mentioned 2012 study in Ireland, for example, reported that the mean **annual economic burden of indirect costs** of chronic pain (including disability allowance, unemployment assistance, loss of wages, and changes to home and equipment) amounted to **1.37% GDP annually**. A similar Portuguese study conducted in 2016, which examined indirect costs such as **work absenteeism, early retirement, and job loss**, found a mean annual economic burden of €2.64 billion nationwide, equivalent to **1.55% GDP annually [29]**. More recently, a 2024 study in Sweden estimated the productivity losses due to chronic pain, measured by the **costs of work absence alone**, to be much higher, reaching **3.2% of Swedish GDP [21]**.

The relation between chronic pain and employment also runs in the opposite direction. **Ergonomic risks**, closely linked to musculoskeletal disorders (MSDs) and pain, represent a major challenge for workers' health and can lead to many of the adverse employment outcomes described above. At present, MSDs are the **most common health issue reported by workers in the EU**, with 52% of workers experiencing back pain and upper limb pain [30]. Prolonged sitting and repetitive movements are the two most frequently reported MSDs risk factors, both of which are strongly associated with digitalisation processes [31].

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A more nuanced understanding of the issue at hand can be gained by examining how various chronic pain conditions impact work outcomes.

Musculoskeletal disorders (MSDs), which affect 1.71 billion people worldwide, are the leading cause of disability in Europe. Among them, low back pain (LBP), impacting around 600 million workers globally, is the most prevalent and disabling condition and accounts for a large share of work-related absenteeism [32]. Moreover, a number of high-quality studies also consistently show that chronic knee pain and knee osteoarthritis are associated with increased absenteeism [33] and that lower limb osteoarthritis (OA), specifically hip and knee OA, are linked to poor work outcomes (employment status, absenteeism, presenteeism, and physical capacity) [34].

The influence of cancer-related symptoms on work outcomes among patients and survivors provides another important example, with numerous studies identifying chronic pain as one of the major challenges for job retention and return to work [35, 36].

The impact of migraine on people's professional lives further illustrates the link between chronic pain conditions and reduced workplace productivity. Studies have found, for instance, that most migraine-related productivity loss (89%) is due to presenteeism, with individuals reporting to be 46% effective when working during a migraine attack [37].

Conclusion

Chronic pain inflicts a **substantial toll on individuals, economies, and societies as a whole**. The economic burden of chronic pain includes all types of resource consumption incurred as a consequence of prevalent pain conditions, as well as potential productivity losses stemming from reduced labour supply. These encompass publicly financed healthcare costs and indirect costs such as absenteeism, presenteeism, sickness absence, loss of wages, disability allowance, unemployment assistance, among others.

Current estimates indicate that the direct and indirect costs of chronic pain account for 3% to 10% of GDP annually in EU countries. In a context where EU public health is being increasingly understood under a **competitiveness-driven model**, addressing the economic burden of chronic pain should be understood as an **EU public health priority** and **strategic investment** in social-wellbeing, productivity and economic resilience. As such, it is

paramount that chronic pain considerations are integrated into new or updated EU-level NCD-focused plans.

Additionally, beyond EU health policy, the Jobs Quality Act offers a good opportunity to tackle the high prevalence of musculoskeletal disorders and benefit the more than half of European workers affected by these conditions.

Lastly, in light of pressures threatening the EU's fiscal position, noted in the Commission proposal for a *Council Recommendation on the economic policy of the euro area* [17], investing in pain prevention and management **at the national level** arises as a **cost-effective measure** that can **enhance the efficiency and quality of public spending** and therefore support EU Member States' long-term fiscal sustainability.

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SIP remains available for further discussions with the European Commission, Members of the European Parliament, the Council of the European Union, and civil society stakeholders for future cooperation to ensure our recommendations are implemented in the area of employment and economic considerations of pain.

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