

Persistent Pain in Wales: Prevalence and Healthcare Utilisation from a Population-Scale Retrospective Cohort Study

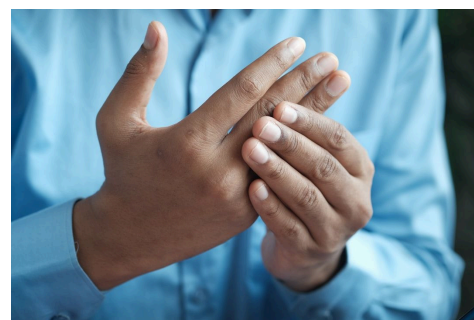
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Helen Daniels, Tim Osborne, Athena McBride, Owen Hughes, Natalie Joseph-Williams, Adrian Edwards, Ashley Akbari, Rowena Bailey, Libby Humphris, Elizabeth Doe, Rhiannon K Owen

Background

Persistent pain is a **major public health concern**. It has a **significant impact on quality of life** and places considerable **demand on the NHS**.

In 2023, Welsh Government published their guidance 'Living with Persistent Pain', marking persistent pain as a **national priority**.



Aim

To provide evidence to **inform decision-making around current and future persistent pain services**, capacity planning, and implementing health policies in Wales.

Study Design

A **cohort study** of routinely-collected Electronic Health Records (EHR) and administrative data during the period 2010-2023.

A **cohort study** is a type of observational study that follows a group of people over time, observing how certain factors influence their health outcomes.

Data

The data analysed in this study included **people living in Wales** that are registered with a GP that provides data to the SAIL Databank, identifying specifically;



Diagnoses | People with a **pain related diagnosis** in their Electronic Health Record (EHR)



Prescriptions | People prescribed opioids or gabapentinoids for **3 months or more**



Pain services | People referred to **specialist outpatient services**



Comparator | A comparator group included people who did **not** meet any of these criteria.

The following healthcare interactions were assessed:



GP appointments
/ prescriptions



Hospital admissions



A&E visits



Outpatient appointments

Key Findings

15% of the population of Wales are living with persistent pain

15%

- 10% had a diagnosis of persistent pain in their health record
- 7.3% were prescribed pain medication for 3 months or more
- 1.85% were referred to specialist outpatient pain services



Demographics

Persistent pain was more common among:

- **older** adults (especially ages 61-70)
- **women**
- individuals living in more **deprived areas**



Healthcare Use

People living with persistent pain had **63% more GP appointments and prescriptions** than those without.



Referrals

Those referred to pain services had more healthcare interactions overall and **were younger and less frail compared to those who were not referred.**



Higher rates of **frailty and comorbid conditions** were seen in those with persistent pain, compared to the general population.

Research Implications

Unmet Need

While we cannot determine this directly from the data, findings may point to unmet need in accessing specialist care, particularly among older adults and individuals from more deprived areas.

Health Inequalities

Patterns of pain prevalence and service use reflect existing inequalities across age, sex, and socioeconomic status.

System Impact

Persistent pain places a significant burden on primary and secondary care services, which has implications for NHS capacity and planning.

Policy and Practice Implications

There is a need to:

- **Better identify and code** persistent pain in primary care settings (e.g. GP surgeries).
- **Explore and address barriers** to healthcare access, **including referral to specialist services in the community for older and more deprived populations.**
- Develop policy and service planning around **patient-reported outcomes and real-world experiences.**

The full report is available to view here:

<https://www.medrxiv.org/content/10.1101/2025.06.28.25330404v1>

