

Please note that this summary only contains information from the full scientific article:

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Healthcare visits and costs are higher in people living with moderate to severe osteoarthritis pain than in those without osteoarthritis in Salford (UK)



Coronary

<KOR-uh-NAYR-ee>

Diclofenac

<dy-KLOH-feh-nak>

Ibuprofen

<l-byoo-PROH-fen>

Morphine

<MOR-feen>

NSAID

<EN-sed>

Opioid

<OH-pee-OYD>

Osteoarthritis

<OS-tee-oh-ar-THRY-tis>

Osteoporosis

<OS-tee-oh-pore-O-sis>

Uric

<YOO-rik>

Date of summary: August 2021

Analysis conducted: 2021

The full title of this article: A noninterventional retrospective matched cohort study of healthcare resource utilisation and costs in UK patients with moderate to severe osteoarthritis pain using the Salford Integrated Record

The authors of the article are: Lucy Abraham, Kate Halsby, Norman Stein, Bozydar Wrona, Birol Emir, and Hannah Stevenson.

- Lucy, Kate, Birol, and Hannah work at Pfizer, which funded the study.
- Norman and Bozydar work at NorthWest EHealth, which is the company that Pfizer paid to help conduct this study.

The purpose of this plain language summary is to help you to understand the findings from recent research.

- The results of this study may differ from those of other studies. Readers should make decisions based on all available evidence and not on the results of a single study.

More information can be found in the scientific article of this study, which you can access here: [View Scientific Article](#)

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What did this study look at?

- Osteoarthritis is a common condition that causes joint inflammation and pain.
 - It develops when joints break down over time.
 - It most commonly affects knees and hips.
 - It is a long-term condition that often becomes worse.
- Healthcare visits and treatments used to help people manage their osteoarthritis pain can be costly.
 - There is a lack of information on the healthcare costs for people living with moderate to severe osteoarthritis pain in the United Kingdom.
 - Costs may vary in different parts of the United Kingdom.

In this study, researchers looked at healthcare information from people living in Salford, United Kingdom.

The Salford Integrated Record is a database containing healthcare information pooled from general practice surgeries and the local regional hospital in Salford.

It contains detailed healthcare data for around 251,000 people.



Researchers compared yearly healthcare visits and costs between people living with moderate to severe or severe osteoarthritis pain and similar people without a diagnosis of osteoarthritis.

- The study looked at information collected between 2009 and 2018.
- Researchers did not have a direct measure of each person's osteoarthritis pain, so they instead looked for indicators in their medical records.
 - People were defined as living with chronic osteoarthritis pain if they had visited doctors for that pain multiple times over a year.
 - Researchers defined a person's chronic osteoarthritis pain as moderate to severe (and maybe also severe) if they had:
 1. A referral or visit to a medical specialist in rheumatic diseases (such as osteoarthritis), the musculoskeletal system, or pain management.
 2. Surgery or joint injection for osteoarthritis (indicates severe pain).
 3. Multiple prescriptions for pain medications over a 3-month period. Use of particular medications indicates moderate to severe or severe pain.
 4. A visit to Accident and Emergency (also known as the emergency room) due to pain, followed by a general practitioner visit due to osteoarthritis pain (indicates severe pain).
- People meeting any one of the four criteria were included in the moderate to severe osteoarthritis pain group.
 - People identified as living with severe osteoarthritis pain were additionally included in a subgroup.
- Each person's healthcare visits and costs were summarised for the year after they were included.

Additional information

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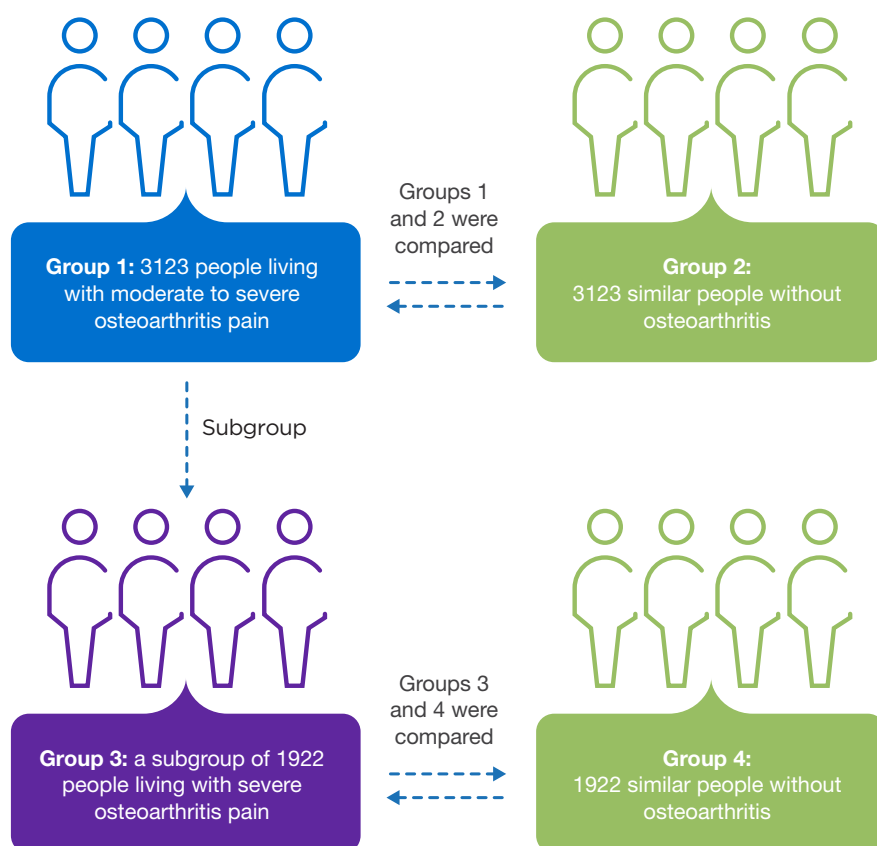
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Who was included in this study?

4 groups of people were identified from the Salford Integrated Record:



- In each group of people living with osteoarthritis pain, researchers matched a similar person without osteoarthritis as closely as possible based on age, sex, and overall health. This improved the accuracy of the comparisons.
- The same people living with severe osteoarthritis pain (group 3) were also included in the group of people living with moderate to severe osteoarthritis pain (group 1), so there were no comparisons between these groups.
- In all groups:
 - around 6 in 10 people were female.
 - the average age when joining the study was around 64 years.
 - around 9 in 10 people with known ethnicity were White.

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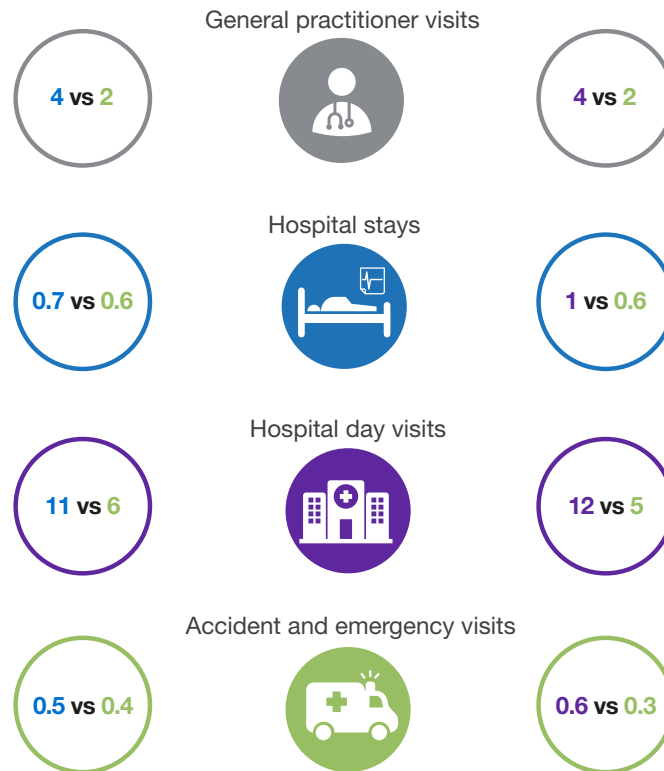
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What were the results of the study?

Average number of healthcare visits per year

People living with osteoarthritis pain had a higher average number of healthcare visits during the year than people without osteoarthritis.



In general, the subgroup of people living with severe osteoarthritis pain had higher average numbers of visits than people living with moderate to severe osteoarthritis pain.

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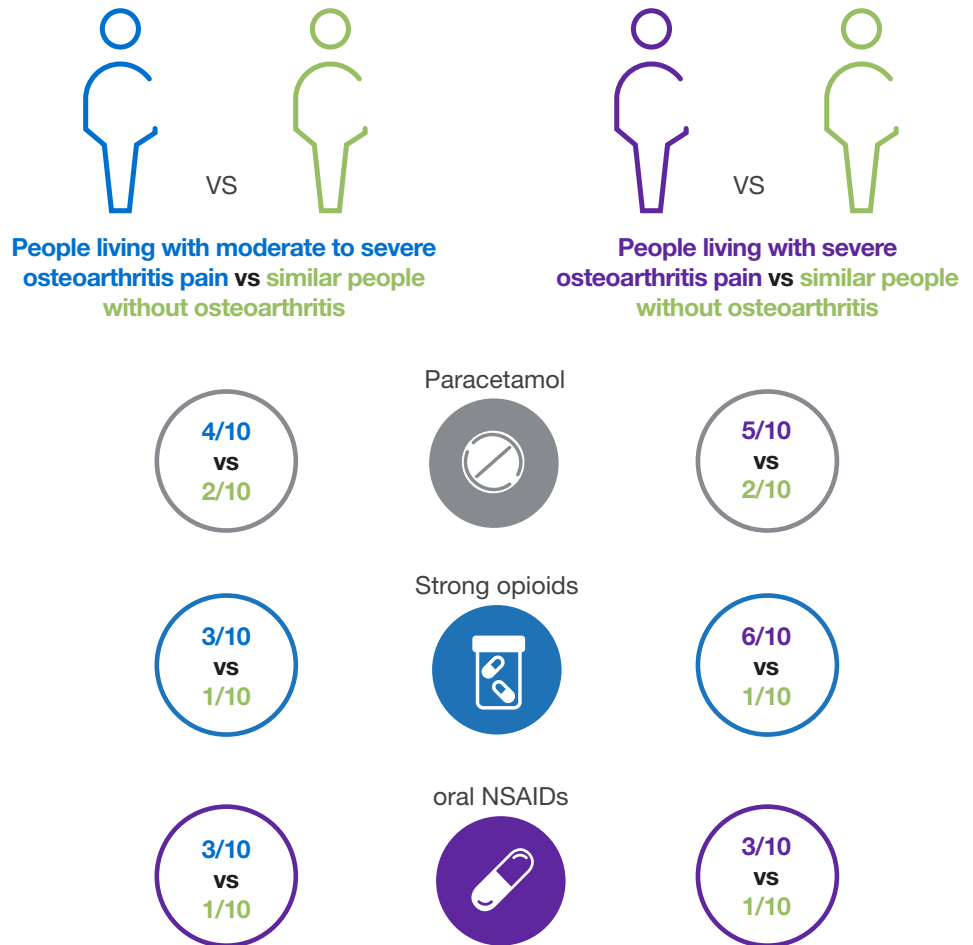
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Proportions of people with pain medicine prescriptions

Over the year, people living with osteoarthritis pain took a broader range of pain medicines than people without osteoarthritis.

The most commonly prescribed pain medicines in people living with osteoarthritis pain were 1) paracetamol, 2) strong opioids (like morphine), and 3) nonsteroidal anti-inflammatory drugs (NSAIDs for short) that you take by mouth, like ibuprofen and diclofenac.

Proportions of people who took:



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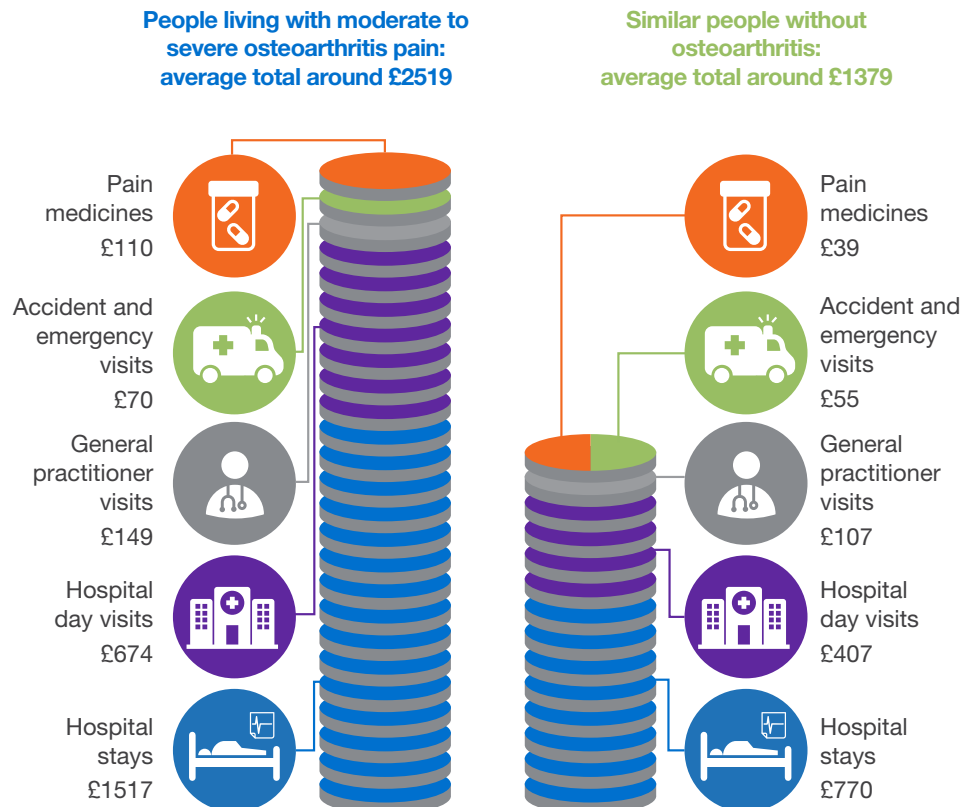
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Average yearly cost of healthcare

- All types of costs were higher in people living with moderate to severe or severe osteoarthritis pain than in similar people without osteoarthritis.
 - Hospital stays were the most costly type of healthcare in all groups.
 - Pain medication costs showed the largest differences between people living with osteoarthritis pain and similar people without osteoarthritis.

The yearly cost of healthcare was almost two-fold higher for people living with moderate to severe osteoarthritis pain than for similar people without osteoarthritis.



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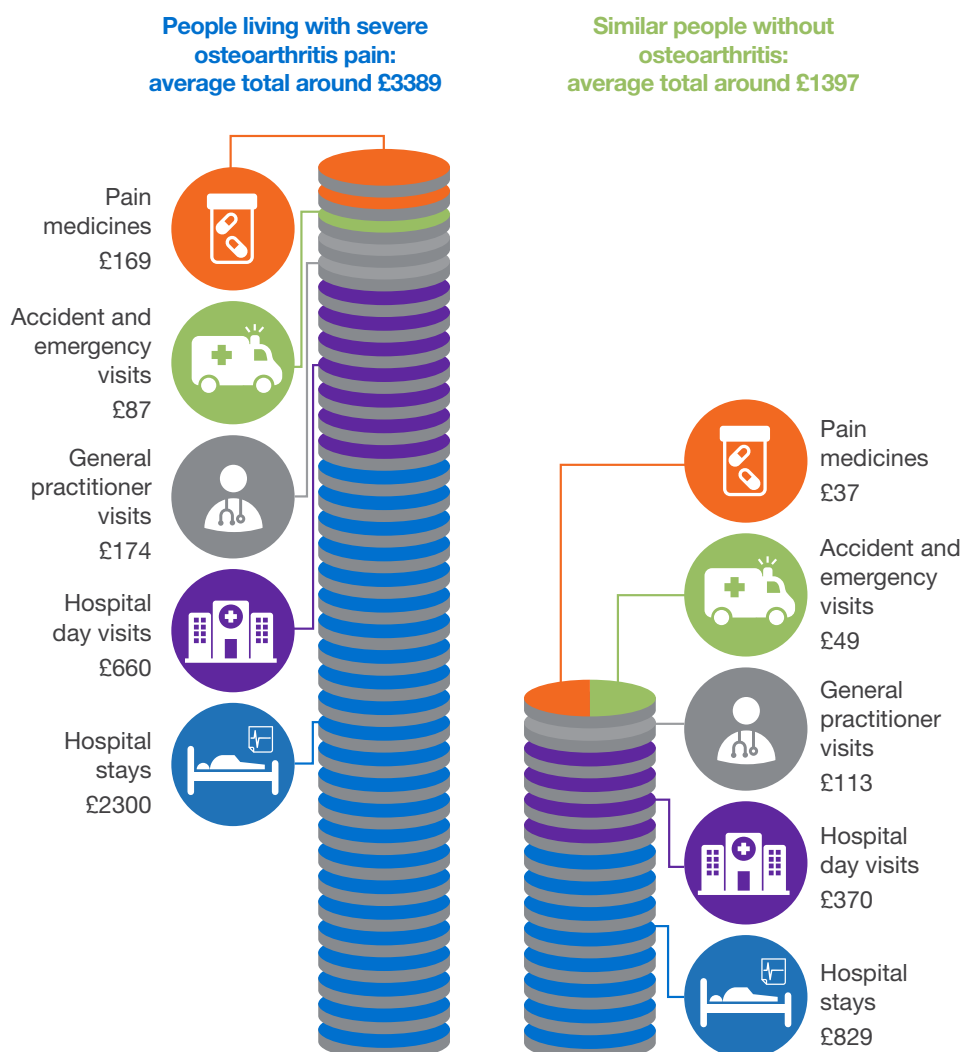
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The yearly cost of healthcare was more than two-fold higher for people living with severe osteoarthritis pain than for similar people without osteoarthritis.



Factors that affected healthcare cost

- Researchers used mathematical models to look for things that increased or decreased the yearly cost of healthcare for people living with osteoarthritis pain and for those without osteoarthritis.
- Several factors were found to increase the cost of healthcare in all groups, regardless of whether they had osteoarthritis or not:
 - Being older.
 - Having gout, which is a condition where uric acid crystals build up in a joint and cause intense pain.
 - Having osteoporosis, which is a condition where bone becomes brittle.
 - Having type 2 diabetes, which is a condition where a person's blood glucose is too high. Type 2 is the most common form of diabetes and is not inherited.
 - Having coronary artery disease, which is a condition where blood vessels supplying the heart become narrow or blocked.

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What were the main conclusions reported by the researchers?

- This study shows that people living with moderate to severe osteoarthritis pain and residing in Salford had:
 - more yearly healthcare visits.
 - almost twice the yearly healthcare costs of similar people without osteoarthritis.
- In general, people with severe osteoarthritis pain had more healthcare visits each year and higher yearly healthcare costs than those with moderate to severe osteoarthritis pain.
- This study shows the significant burden of moderate to severe and severe osteoarthritis pain to the healthcare system in Salford.

Who sponsored this study?

This study was sponsored by Pfizer and Eli Lilly and Company.

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For more information on this study, please visit the open access article:

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Acknowledgements

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