



**United Kingdom and Ireland ActiPatch® Consumer  
Long-Term Pain Management Survey**

# The Extent of Chronic Pain in Europe

Please Note: The following data is taken from the Pain In Europe website <http://www.paineurope.com/articles/assessing-chronic-pain-in-europe> and the data are also published in the European Journal of Pain:

Reference: Harald Breivik, Beverly Collett, Vittorio Ventafridda, Rob Cohen, Derek Gallacher (2006) Survey of chronic pain in Europe: Prevalence, impact on daily life, and treatment. European Journal of Pain 10 (2006) 287–333

The Survey of chronic pain in Europe was a telephone survey conducted in 16 countries. Approximately 3,000 adult men and women from each country were screened to identify at least 300 chronic pain sufferers, who subsequently undertook a detailed questionnaire.

## Chronic pain – a widespread problem

On average nearly one-fifth (19 per cent) of adults across Europe suffer from chronic pain, but in Norway, Poland and Italy this number rises to just over one-quarter. Spain has the lowest proportion of adults with chronic pain where the number is only approximately 11 per cent.

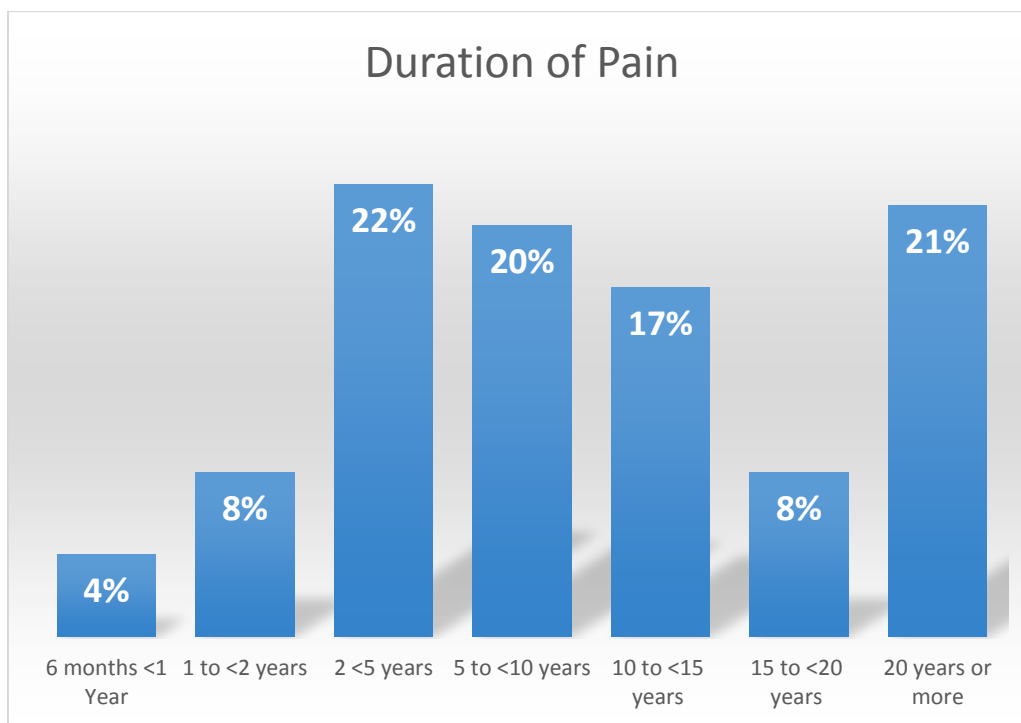
The average age of chronic pain sufferers was 50 years and there were slightly more women than men (56 per cent and 44 per cent, respectively) who reported they suffered chronic pain. One-third of the patients questioned reported that their pain was severe (8, 9 or 10 on the 0 to 10 pain intensity scale).

When considering the location of the pain and its associated condition, back pain was the most common (24 per cent) and the most common cause of pain was attributed to arthritis (35 per cent).

## The magnitude of chronic pain in Europe

*Pain in Europe* revealed some alarming results with regards to the duration of chronic pain. On average, the adults surveyed had suffered from pain for 7 years, but surprisingly, 21 per cent of individuals had experienced moderate to severe pain for more than 20 years (see Figure 1).

**Figure 1.** Duration of pain reported by chronic pain sufferers



**Data from this European wide survey on chronic pain shows it to be a wide spread problem and which is inadequately treated by current methods of pain management includes analgesic drugs.**

## **ActiPatch® Survey – Assessment of Purchase Extent and Long Term use Relating to Control of Chronic Pain and Improvements in Quality of Life.**

The purpose of this survey was to collect data on the clinical benefit of ActiPatch® over a 3 month period after the use of the 7 Day Trial sample and the extent of purchasing the 720 hour medical device from a retail outlet. Consumers who had previously used the 7 Day sample and responded to the 7 Day Trial survey, were surveyed again after a minimal 3 month interval. This new survey was limited to consumers who had responded on the 7 Day trial survey and stated an intention to, or maybe purchase the full version of the ActiPatch® device from a commercial location. The first goal was to assess if these people had indeed purchased a commercial ActiPatch®, their location of purchase and how many devices had been purchased.

The second goal was to determine if continued use of ActiPatch® had long term benefit for users and how it had impacted their pain, quality of life and pain medication use. The survey questions and data from the consumer responses are shown be below.

*Note the survey was sent to 1384 consumers and had a response of 368 or 27%.*

**Q1. Have you purchased ActiPatch® since trialing the 7-day ActiPatch sample?**

- Yes
- No

There were 335 answers to this question:

Data from question 1 indicates that over 77% of the consumers who had marked intent to purchase or maybe purchase had purchased an ActiPatch® from a commercial location. Since the number of intent to, or maybe purchase the ActiPatch® device from the initial 7 Day survey was on average around 75%, it can be concluded that approximately 60% ( $=.77 \times .75$ ) who tried the 7 Day sample device purchased the full commercial ActiPatch® device.

**Table 1.** The number of responses and percent indicating a purchase of a commercial ActiPatch device.

Answer	Number of Responses	Percent of Total Responses
Yes	282	77%
No	86	23%

**Q2. If Yes, can you please indicate where you made your purchase after trialing the sample:**

- A. Boots Store
- B. Boots Online ([www.boots.com](http://www.boots.com))
- C. Amazon.com ([www.amazon.co.uk](http://www.amazon.co.uk))

There were 284 answers to this question:

**Table 2.** Location of the purchase of ActiPatch

Answer	Number of Responses#	Percent of Total Responses
Boots Store	180	63%
Boots online ( <a href="http://www.boots.com">www.boots.com</a> )	63	22%
Amazon ( <a href="http://www.amazon.co.uk">www.amazon.co.uk</a> )	46	16%

#multiple locations of purchase was indicated in some responses

**Q3. If No, can you comment on why you did not purchase ActiPatch®?**

- Comment field

(Note there were 86 answers to this question. Since they had not used the regular ActiPatch® device these respondents finished the survey after commenting on why they did not purchase ActiPatch®. This means that the effective sample for the remaining part of the survey was 282).

Of those who provided comments (Appendix 1), 35% indicated that they had not purchased ActiPatch® for financial reasons. 14% indicated that they could not locate the ActiPatch® in a chemist. Another 38% indicated they had not needed to purchase it or it did not work well enough to merit a purchase, with a further 14% indicating a purchase soon. Thus it appears that of those that indicated “No” to a purchase only 38% appear to never buy ActiPatch® in the future (assuming that they find enough money in their budget to purchase the device).

Overall 77.5% already purchased the device. However it appears that 62% of the “No” responses might eventually be in the market for ActiPatch®. This implies a potential customer base of up to 91% from those who marked intent to or maybe purchase the ActiPatch® device.

**Q4. In the past 3 months or so how many ActiPatch® devices have you purchased:**

- 1
- 2
- 3
- 4 or more

There were 279 answer to this question:

The total number of devices purchased by the consumers was approximately **476**, equating to approximately 170 ActiPatch® devices per hundred survey responders over a three month period (Table 3). The number of devices purchases per individual is therefore on average 1.70.

**Table 3.** The Individual purchase number of ActiPatch®

Answer	Number of Responses	Number Devices
1	135	135
2	95	190
3-4	47	141
5 or more	2	10
<b>Total</b>		<b>476#</b>

# estimated total the 47 who marked 3-4 were counted as 3.

**Q5. Where do you mainly use ActiPatch?**

- **Back**
- **Knee**
- **Neck**
- **Shoulder**
- **Hip**
- **Other**

The most common place of use of ActiPatch® was the back, followed by the knee, shoulder, neck and hip (Table 4). The pattern of ActiPatch® use matches the prevalence of these musculoskeletal pain in these areas.

**Table 4.** ActiPatch® was used in all the major areas of musculoskeletal pain

Answer	Number of Responses	Percent
<b>Back Pain</b>	178	62
<b>Knee Pain</b>	74	26
<b>Neck Pain</b>	32	11
<b>Shoulder Pain</b>	52	18
<b>Hip Pain</b>	38	13
<b>Other#</b>	17	6

# foot, arm pain, fibromyalgia, muscle and joints, elbow, neuropathy, jaw pain, rotator cuff, upper arm, all body pain, legs

**Q6. After long term use of ActiPatch® Therapy has your pain:**

- **Improved a lot**
- **Improved a moderately**
- **Improved a little**
- **Stayed the same**
- **Worsened**
  - **Plus a comment field**

There were 277 answers to this question: Also see Appendix 2 for detailed comments

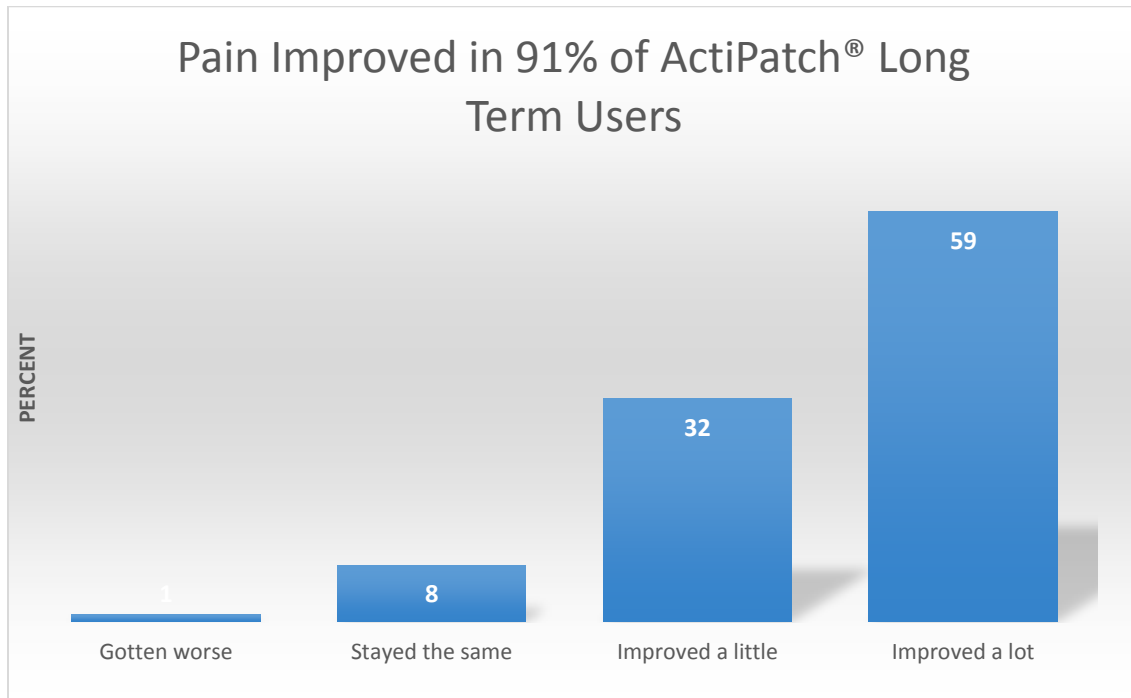
Asked a simple questions as to whether their pain had improved with the long term use of ActiPatch® over 91% indicated that their pain had improved (Table 5. Figure 1.). Eight percent (8%) indicated that it had stayed the same and 1% indicated that it had gotten worse. This data indicates that ActiPatch® is a viable long term pain therapy for the majority of long term users

**Table 5.** A total of 91% of the long term users of ActiPatch® reported an improvement in their pain.

<b>Answer</b>	<b>Number of Responses</b>	<b>Percent of Total Responses</b>
<i>Improved a lot</i>	164	59%
<i>Improved a little</i>	89	32%
<i>Stayed the same</i>	21	8%
<i>Gotten worse</i>	3	1%



**Figure 1.** Over 90% responded that long term use of ActiPatch® had improved their pain



**Q. 7. On average what pain scores were you experiencing BEFORE you started the ActiPatch® trial and using ActiPatch®? The scale is 0 = being no pain and 10 = being the worst pain.**

**1 = 0 , 2 = 1 , 3 = 2 , 4 = 3 , 5 = 4 , 6 = 5 , 7 = 6 , 8 = 7 , 9 = 8 , 10 = 9 , 11 = 10**

On an average basis what levels of pain are you experiencing NOW when you are using ActiPatch® for your pain? The scale is 0 = being no pain and 10 = being the worst pain.

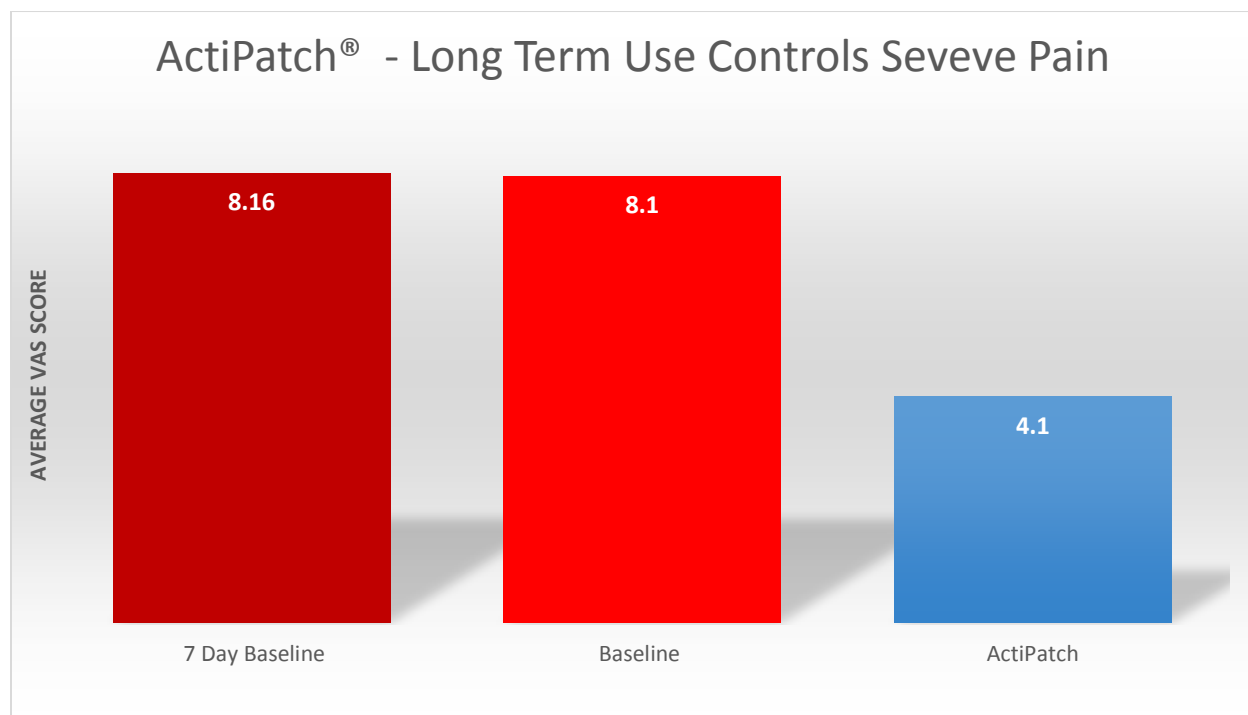
**1 = 0 , 2 = 1 , 3 = 2 , 4 = 3 , 5 = 4 , 6 = 5 , 7 = 6 , 8 = 7 , 9 = 8 , 10 = 9 , 11 = 10**

**#Note question introduced in latter surveys.**

There are 82 responses to this question

The Baseline pain score recorded in the second 3 month follow up survey is very close to the baseline pain score recorded in the 7D survey which was 8.16. The consistency of the baseline VAS pain scoring by the survey responders helps validate the VAS scoring in these survey reports. After long term use with ActiPatch®, > 3 months, the average VAS score was 4.1. This is on average a 4.0 VAS point drop in pain score or 49%.

**Figure 2.** Long term use of ActiPatch is found to control severe pain.



**Q8. How would you rate overall how ActiPatch® has improved your quality of life?**

- ***No change or it got worse***
- ***Almost the same – hardly any change at all***
- ***Somewhat better – but the change has not made any real difference***
- ***Moderately better – a slight but noticeable change***
- ***Better – a definite improvement that has made a real and worthwhile difference***
- ***A great deal better - and a considerable improvement that has made all the difference***

***comments***

There were 278 answers to this question on the patients global impression of change in the quality of life scale (PGIC): See Appendix 3 for detailed comments.

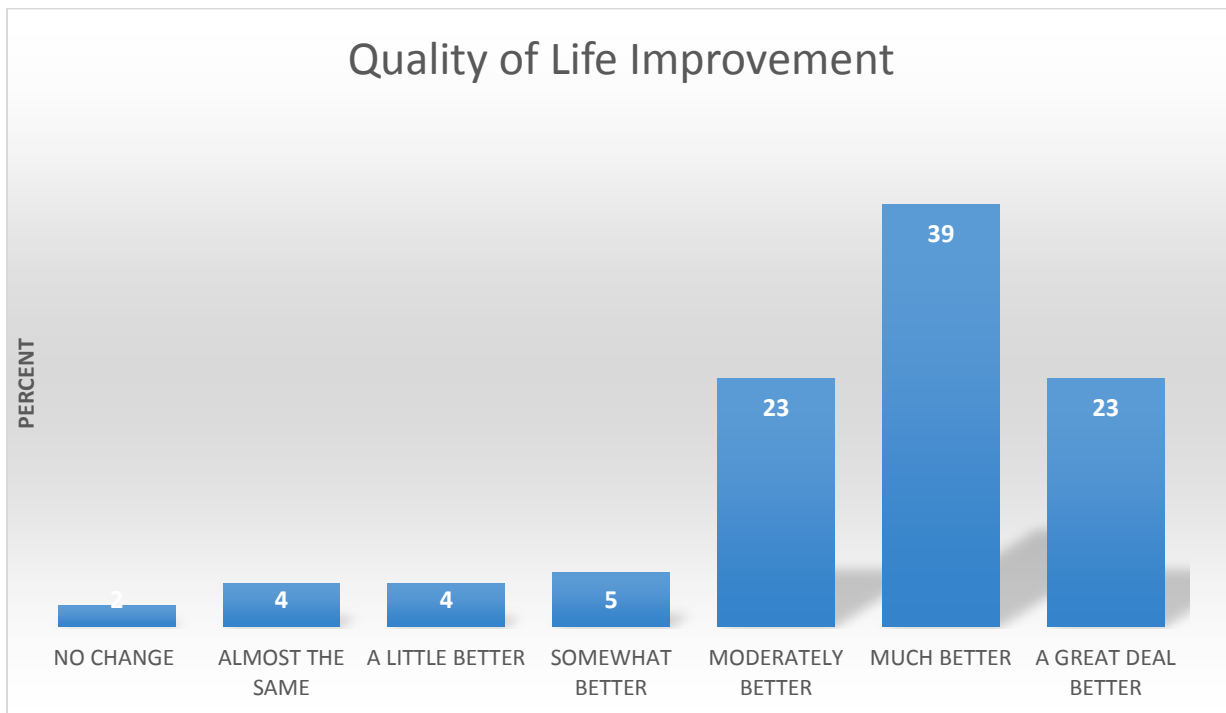
It is well known that reductions in pain, increased activity and function, as well as decreased side effects from pain medications will contribute to improvements in quality of life. Long term use of ActiPatch® appears to be beneficial for improvement in patient quality of life (Figure 2, Table 6). With 85% marking a moderately better to great improvement in quality of life, 62% indicating that using the device made life much better difference or made the quality of their life a great deal better. These data, along with the pain scores demonstrates that ActiPatch® is a valuable long term chronic pain

management therapy that results in demonstrated improvements in quality of life for the ActiPatch® user.

**Table 6. Long term use of ActiPatch® is demonstrated to have a positive impact on quality of life**

Answer	Number of Responses	Percent of Total Responses
<i>A great deal better</i>	64	23%
<i>Much Better</i>	109	39%
<i>Moderately Better</i>	64	23%
<i>Somewhat better</i>	13	5%
<i>A little</i>	10	4%
<i>Almost the same</i>	12	4%
<i>No change</i>	6	2%

**Figure 2.** Long term use of ActiPatch® has a meaningful improvement on quality of life.



Note questions 9A and 9B were added to the questionnaire therefore have fewer response than question 9C.

**Q9.A Before using ActiPatch® did you use any pain medications?**

There were 124 responses to this question (recently added to the survey)

Of the responses 95% reported using pain medications before the introduction of ActiPatch® as a pain therapy Table 7. These consisted of NSAID's, Paracetamol, Cox-2 inhibitors, weak opioids and strong opioids (Table 8).

**Table 7.** Of the responses 91% reported using pain medications.

Answer	Number of Responses	Percent of Total Responses
Yes	118	95%
No	6	5%

**Q9B. If YES, what type of pain medication did you use? (select all that apply)**

**Table 8.** The types of analgesics used by the survey responders. There were 124 answers to this questions:

Of the 118 responses, 61 marked using two or more analgesics. Seventy (70) or 59% reported using a weak or strong opioid alone, or in a combination, or in a combination of one or more non-opioid analgesics.

Analgesic	Marked as Using	Percent Using
Paracetamol (acetaminophen)	54	46
NSAID's	63	53
Cox-2 inhibitors	5	4
Weak Opioids	37	31
Strong Opioids	33	28

**Q9C. Has ActiPatch use helped you reduce the amount of pain medications you take?**

- *Had no effect*
- *Reduced the use of pain medication a little*
- *Reduced the use of pain medication a moderate amount*
- *Reduced the use of pain medication a large amount*
- *Eliminated the need for using pain medication*

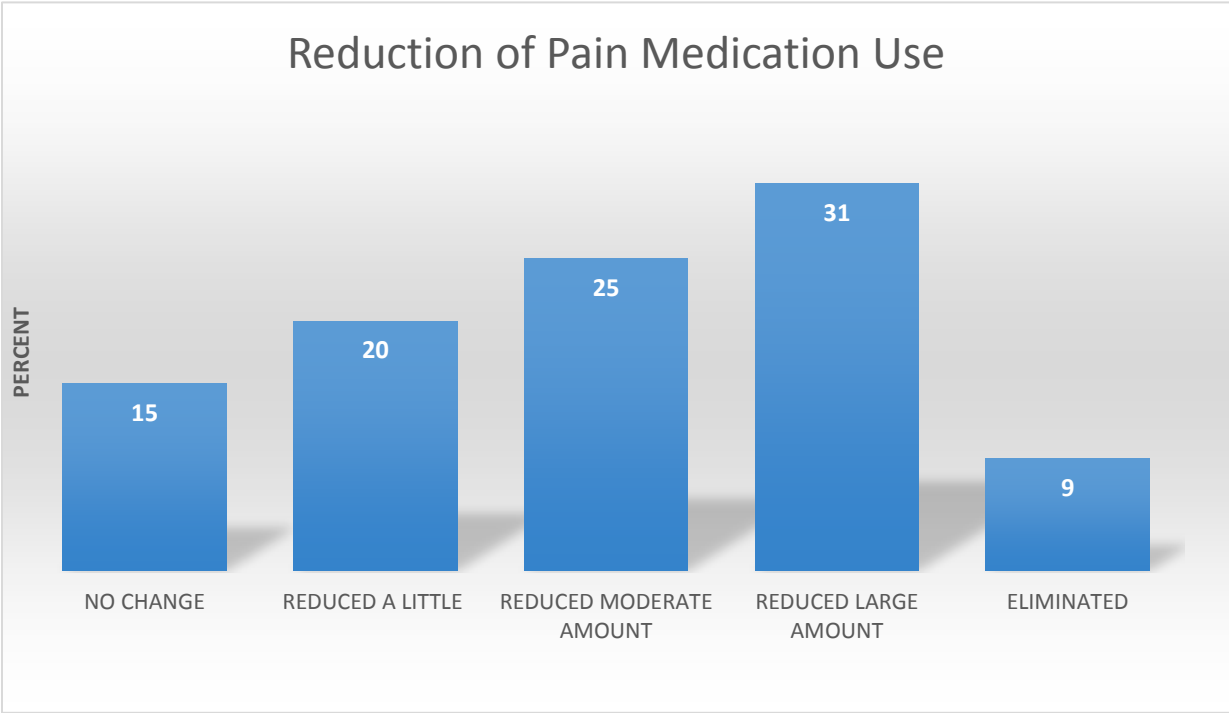
There were 274 answers to this question:

The results indicate that ActiPatch® decreases the reliance on systemic pain medication with 65% reporting a moderate reduction to total elimination in the use of pain medications (Table 8, Figure 3). Reducing the use of pain medications will also translate into improved quality of life with a reduction of the potential of significant adverse events associated with most analgesic medications.

Table 8. Most individuals 85% whose use the ActiPatch® long term report a decrease reliance on analgesic drugs to manage their pain.

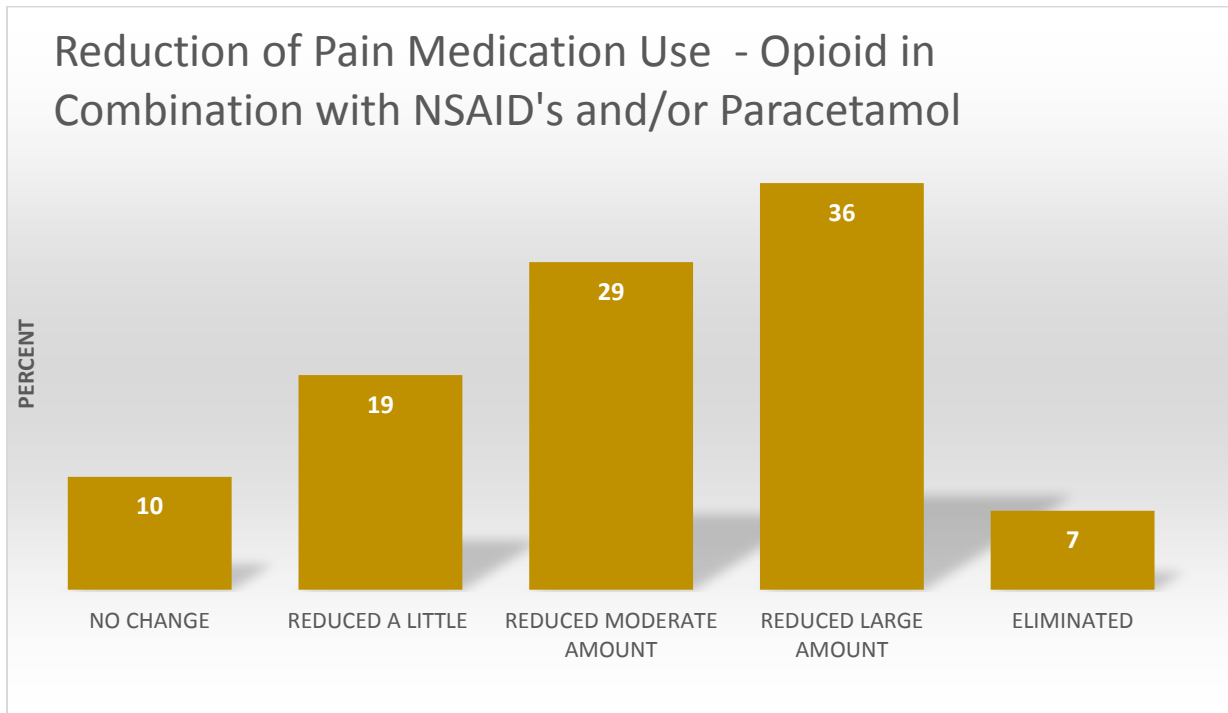
<b>Answer</b>	<b>Number of Responses</b>	<b>Percent of Total Responses</b>
<i>Eliminated</i>	24	9%
<i>Reduced a large amount</i>	86	31%
<i>Reduced a moderate amount</i>	68	25%
<i>Reduced a little</i>	54	20%
<i>Had no effect</i>	42	15%

**Figure 3.** Long term use of ActiPatch® reduces pain medication use in the majority of users.

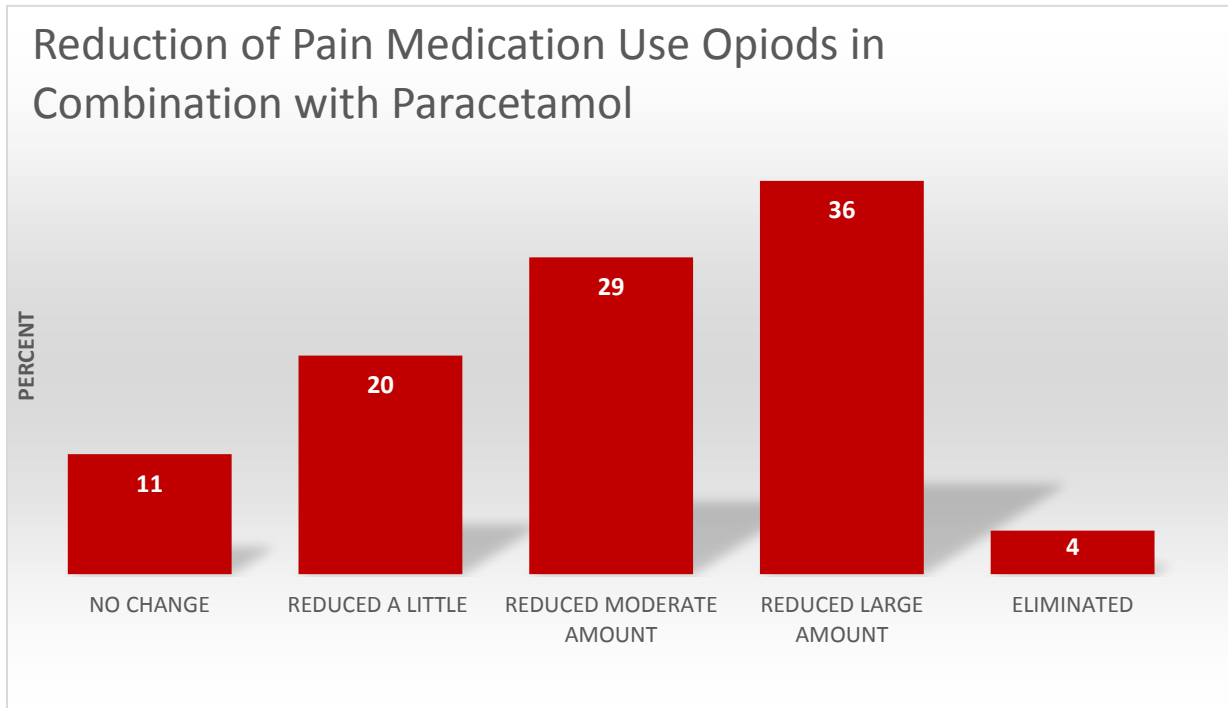


When the uses of weak and strong opioids were separated out the, of which there were 69, the data shows a similar reduction in medication use to the overall profile presented in Table 8 and Figure 3. Together 72% of opioid analgesic medication users reported a moderate to complete elimination of the use of these analgesic medication. However, close to 50% of opioid analgesic users reported using a combination of medication including NSAID's and paracetamol. Opioid analgesic users who marked using opioid medication in combination with paracetamol only (45) is shown in Figure 5. And the responders (35) who reported only using opioid analgesics, either weak or strong is shown in Figure 6. Of those who reported only using opioid medications 76% reported a moderate to complete elimination of pain medication use.

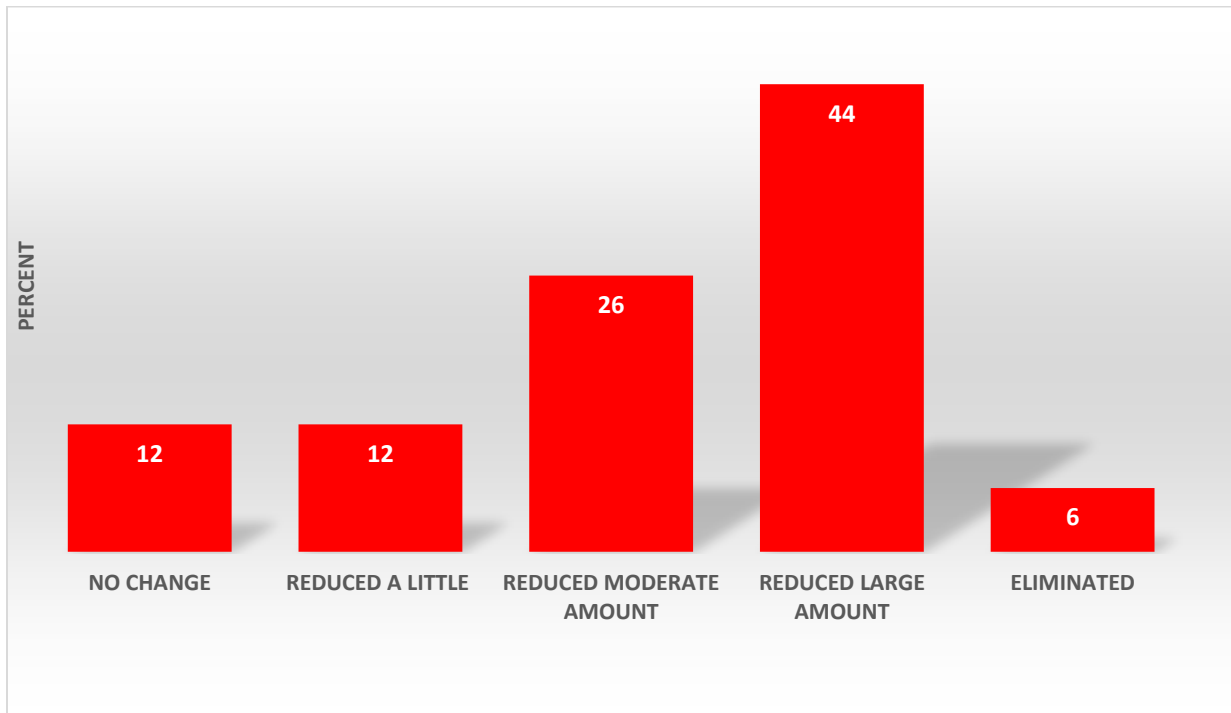
**Figure 4.** In responders reporting opioid medication as well as NSAID's and/or Paracetamol, ActiPatch® reduces the use of pain medications with 72% reporting a moderate to elimination of their use.



**Figure 5.** In responders reporting opioid medication and Paracetamol only (45), ActiPatch® reduces the use of pain medications with 69% reporting a moderate to elimination of their use.



**Figure 6.** In responders reporting opioid medication use only (35), ActiPatch® reduces the use of these pain medications, with 76% reporting a moderate to elimination of their use.



**Q9. Please add any additional comments on how has the use of ActiPatch helped control your pain?**

- Comment field

**See Appendix 4 for detailed comments**

**Q10. Have you recommended the ActiPatch to a friend or family member?**

- Yes
- No
- Comment Field

Of the 193 who reported buying ActiPatch 178 – 93% marked that they had recommended to friends and family. See Appendix 5 for detailed comments.

**Q11. Final Comments**

- Comment field



**See Appendix 6 for detailed comments.**

## **Conclusion**

The results from the survey indicate that consumers who initially suffer from chronic pain and decide to use ActiPatch® over an extended period of time that is at least three months, experience on average a large decrease in their pain (about 45%), a substantial improvement in the global quality of their life and a decreased reliance on pain medications, including opioid based pain medications. Taking these three assessment tools together, it can be concluded that ActiPatch® is an effective pain therapy for an array of musculoskeletal pain conditions.

Furthermore sustained improvements in chronic pain, quality of life improvements and reduction of medication use strongly indicates that the consumers will continue to use and purchase the ActiPatch® device.

**Appendix 1. Those that marked No to Q1.**

**Appendix 2 Comments from Q6: Please rate your pain after long term use of ActiPatch Therapy:**

**Appendix 3. Comments - Overall how has ActiPatch use improved your quality of life?**

**Appendix 4. How has the use of ActiPatch helped control your pain? For example: "Overnight use of ActiPatch controls my back pain during the day.**

**Appendix 5 Have you recommend the ActiPatch to a friend or family member?**

**Appendix 6: Additional Comments:**