

Medtronic

Engineering the extraordinary

Painful pandemic:

How a healthcare system under strain impacts chronic pain patients

One of the many negative consequences of the ongoing COVID-19 pandemic has been its impact on already vulnerable patient populations, including those who suffer from chronic pain. Daily pain, delayed care, an inability to partake in or enjoy everyday activities, strains on mental health - these are just some of the realities of living with chronic pain amid a global pandemic that continues to put tremendous stress on the American healthcare system. This is according to a new survey, *"Painful Pandemic: How a Healthcare System Under Strain Impacts Chronic Pain Patients,"* commissioned by Medtronic, a global leader in healthcare technology, and conducted by public opinion research firm The Harris Poll.

Conducted online among 810 U.S. adults who experience chronic back and/or leg pain, the survey finds nearly half (44%) of current chronic back and leg pain sufferers have needed to cancel or postpone their pain-related procedures or appointments since the pandemic began. Those living with chronic back pain report that it has a significant negative impact on their quality of life, affecting everything from their sleep to mental health. Yet many patients aren't aware of all treatment options available to them that might provide lasting relief and haven't been referred to specialists that could offer them more options.

Importantly, the survey finds the global COVID-19 pandemic has only exacerbated care delays, leaving many to continue suffering through the pandemic in pain. The results point to a growing, unmet need and a potential opportunity to introduce these patients to treatment options like spinal cord stimulation and targeted drug delivery, especially once the pandemic begins to abate.



Chronic pain in the U.S.

50 million adults
with chronic pain

19.6 million Americans have high-impact chronic pain that has limited their work activities on most days or every day for six months. **Chronic pain contributes to an estimated \$560 billion each year in direct medical costs, lost productivity, and disability programs.**¹ The most common causes of chronic back pain can include herniated disc, degenerative disc disease, spinal stenosis,² and post-laminectomy or failed back surgical syndrome.³ According to the National Institutes of Health (NIH), approximately 20% of back pain patients have a chronic condition.⁴

Pandemic delays access to effective chronic pain treatment



As waves of COVID-19 patients filled hospital emergency departments and strained Intensive Care Units, some overstretched hospitals and ambulatory surgery centers paused all but the most urgent procedures. For many with chronic pain, that has left them on the outside looking in. According to the survey, nearly half (44%) of chronic pain patients have experienced care delays since the pandemic began. That includes 17% of chronic back/leg pain respondents who have canceled an appointment or procedure without rescheduling. The primary reason for those canceling or postponing appointments is worry about COVID-19 exposure (55%).

Moreover, only one-third of surveyed patients (34%) currently feel comfortable going into a healthcare provider's facility for an appointment or procedure. Notably, 5% say they will never feel comfortable returning to their provider.

Respondents who canceled or postponed a procedure may be at greater risk of their chronic pain worsening or not improving. Throughout the pandemic, the majority of pain sufferers (87%) report that the severity of their chronic back or leg pain has worsened (36%) or remains unimproved (51%). In fact, 9% of total respondents report their pain has become much worse since the onset of the pandemic in March 2020.

Nearly half of those whose condition has worsened over the course of the pandemic attribute it to being under greater stress (48%) and/or not being as active (43%). Another 37% blame lack of exercise for their pain getting worse.

Key survey findings include:

- **Nearly half (44%) of current chronic back and leg pain sufferers have experienced care delays during the COVID-19 pandemic.**
- **Many (55%) worry about virus exposure as the reason for missing an appointment or procedure, but 43% say their healthcare provider canceled or postponed care.**
- **87% say their pain has worsened or remains unimproved since the start of the COVID-19 pandemic.**
- **Nearly one in four chronic pain sufferers indicate their pain level is severe (23%).**
- **More than 60% believe their pain has negatively affected their mental health.**
- **While most patients are aware of traditional treatment options, far fewer are familiar with options such as targeted drug delivery (38%) or spinal cord stimulation (34%).**
- **When listing physical challenges associated to living with chronic pain, sleep (63%), exercise habits (53%), sense of mobility/function (51%), and ability to enjoy hobbies (44%) are aspects of life most negatively impacted.**

Pandemic's impact on chronic pain treatment

87%

of pain sufferers report that the severity of their chronic back or leg pain has **has worsened or remained unimproved since the pandemic began**

44%

of surveyed patients blamed their worsening pain level on having to **cancel or postpone a procedure due to the pandemic**

Nearly half of those whose condition has worsened over the course of the pandemic attribute it to being under greater stress and/or not being as active.

Only one-third of respondents currently feel comfortable going into a healthcare provider's facility for an appointment or procedure.

Chronic pain sufferers already wait years for effective treatment

Even before the pandemic, many people with chronic pain suffered for years without relief. The survey finds that those who have seen or talked to a physician about their pain first did so about 7 years ago, on average. Most sufferers visit their primary care provider because the pain simply wouldn't go away (67%) and/or the pain started impacting their daily life (60%). 41% of respondents say they had to see a healthcare provider because over-the-counter (OTC) medications failed to relieve their pain.

7
years

average length of time since respondents first talked to a physician about their pain



Chronic pain impacts daily life

Chronic pain isn't just a nuisance - it impacts nearly every aspect of life for those who suffer with it. Pain is constantly on the minds of sufferers, according to the survey. Nine in 10 say their pain impacts them on a daily basis, with sleep (63%) being the biggest reported problem.

About half of respondents experience negative effects on their exercise habits (53%) and on their sense of mobility/function (51%). Additionally, one-third of chronic pain sufferers (32%) say their social life has been negatively impacted by their pain. Moreover, for two-thirds of surveyed patients (67%), chronic back or leg pain makes it hard for them to enjoy spending time with their family. Romantic relationships and intimacy are another area affected by chronic pain, with 22% noting it has had a negative impact on their romantic relationships, including being intimate with their partner or spouse.

Further, about 3 in 10 (31%) say some aspect of their occupation has been negatively affected by their chronic back or leg pain. And nearly three quarters (72%) believe their chronic pain has taken opportunities away. As a result, many respondents reported thoughts of frustration (65%), exhaustion (49%), and depression (36%).

For those who suffer

76%

feel like they can never get a good night's sleep **because of their chronic back or leg pain**

9 in 10

say **chronic pain impacts their daily life**

The effects of chronic pain at work:

- **3 in 10** say some aspect of their occupation has been negatively affected by their chronic back or leg pain
- **Nearly three quarters (72%)** believe their chronic pain has taken opportunities away from them
- Chronic back or leg pain causes sufferers to feel:

 Frustrated (65%)

 Annoyed (53%)

 Exhausted (49%)

 Depressed (36%)



Few pain sufferers aware of all available treatment options

Despite living in a constant, chronic state of pain, only half (53%) of respondents have visited a pain specialist. Of those who haven't visited a pain specialist, nearly one-third say their primary healthcare provider has not referred them to one (28%). One quarter (24%) are worried their insurance won't cover the visit, while 10% are unaware such a specialty exists. However, satisfaction with their current chronic pain care isn't holding them back from visiting a specialist. Less than 1 in 5 (15%) indicate it as the reason.

Given these results, it is not surprising that **89% of respondents wish they could find a better solution to address their chronic back or leg pain.** Despite a multi-decade history of treating patients with chronic pain, device-based therapies such as spinal cord stimulation (SCS) and targeted drug delivery (TDD) are relatively unfamiliar to respondents.

TDD delivers medication directly to the spinal cord via an implantable drug pump, while spinal cord stimulation is thought to disrupt pain signals traveling between the spinal cord and the brain. Both technologies have been available for decades, yet the survey data shows that many patients are unfamiliar of these treatment options which can be used as adjuncts or alternatives to opioid therapy. Two percent of surveyed patients have already tried SCS, and 2% have tried TDD. Two retrospective claims analyses even found that 43 and 51 percent, respectively, of chronic non-malignant pain patients eliminated systemic opioids within one year of TDD therapy.^{5,6} Not every patient is a candidate for these treatments, and these decisions should be made in consultation with a doctor.

Care needs persist and options abound

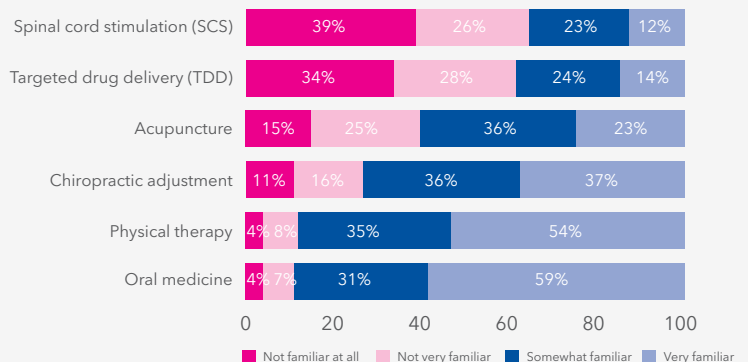
Two years later, the pandemic continues to weigh on chronic pain patients by making access to care more difficult. **A variety of treatment options exist which may help to alleviate pain, but care delays and an awareness gap suggest there is continued pent-up demand to be addressed, especially once the pandemic begins to retreat.**



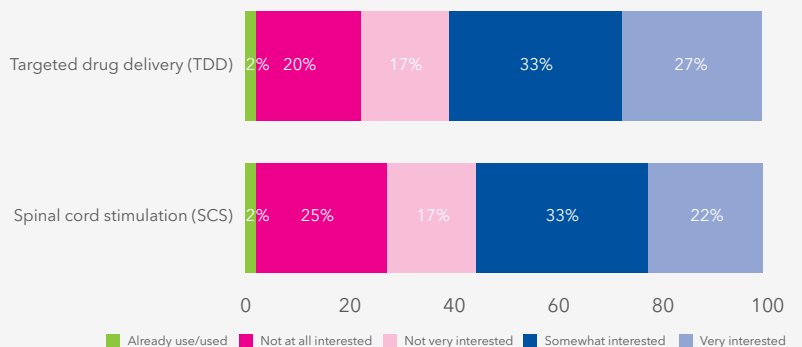
9 in 10

wish there were more treatment options available

Familiarity with each treatment



Level of interest in trying each treatment



Complete research method

This survey was conducted online within the United States by The Harris Poll on behalf of Medtronic from October 28 - November 9, 2021, among 810 U.S. adults ages 18+ who currently experience chronic back and/or leg pain. Figures for age, sex, race/ethnicity, education, region, and household income were weighted where necessary to bring them into line with their actual proportions in the population. Propensity score weighting was used to adjust for respondents' propensity to be online.

All sample surveys and polls, whether or not they use probability sampling, are subject to multiple sources of error which are most often not possible to quantify or estimate, including sampling error, coverage error, error associated with nonresponse, error associated with question wording and response options, and postsurvey weighting and adjustments. Therefore, Harris Poll avoids the words "margin of error" as they are misleading. All that can be calculated are different possible sampling errors with different probabilities for pure, unweighted, random samples with 100% response rates. These are only theoretical because no published polls come close to this ideal.

Respondents for this survey were selected from among those who have agreed to participate in online surveys. All responses are anonymous and analyzed only in the aggregate; no personally identifiable information is shared with the research sponsor, and the sponsor is not disclosed to survey respondents.

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