



UNNECESSARY ORTHOPEDIC SURGERY:

Finding the right solution with an expert medical opinion

featuring Dr. John Mayhew, leading sports injury specialist
and part of our expert network

Orthopedic conditions impact a huge segment of the population affecting an estimated 126.6 million Americans (one in two adults), comparable to the total percentage of Americans living with a chronic lung or heart condition:¹

As the population ages, musculoskeletal conditions are becoming a growing burden, with two of the most common orthopedic conditions—arthritis and back pain—affecting an increasing number of Americans.

Between 2013 to 2015, 54.4 million adults were living with arthritis in the U.S.—this number is projected to rise to 78.4 million (26% of the adult population) by 2040² Meanwhile, physician visits for back pain have been steadily increasing over the years. In 2012, more than 52.3 million patients visited a physician with a complaint of back pain, compared to 44.6 million in 2004.³

Chronic orthopedic conditions such as osteoarthritis and back pain affect the musculoskeletal system, most commonly the bones or joints. These conditions cause pain and dysfunction, making normal daily activities difficult.

As orthopedic conditions become increasingly prevalent, the number of orthopedic surgeries performed annually has risen in tandem. There were approximately 5.3 million orthopedic surgeries in the U.S., Japan, France, Germany, Italy, Spain, and the U.K. in 2010—this number is expected to reach 6.6 million by 2020.⁴ Several procedures are being performed at a more frequent rate, such as spinal fusions: Between 1998 and 2011, the number of spinal fusion procedures more than doubled, from 204,000 in 1998 to 457,000 in 2011, a 13-year increase of 113%.⁵

When it comes to a procedure like spinal fusion, the sharp spike in the number of surgeries may be attributed to factors such as technological advances (including the development of new diagnostic techniques), an aging population, and increasing quality-of-life expectations that make patients more apt to seek a surgical solution.

Arthritis is the most common cause of disability in the United States; two-thirds of arthritis sufferers are under the age of 65.

75.7M

or nearly one in three Americans are affected by back and neck pain⁷

10M

Americans are affected by osteoporosis, with 19 million more (mostly women) at risk for the disease⁷

79%

of our members had their treatment modified after using the Expert Medical Opinion service

According to one report, about 10% of all spinal fusions paid for by Medicare in 2011 were unnecessary, either because they had no medical basis or because doctors did not explore non-surgical treatment options.

This makes it more important than ever to weigh the pros and cons of surgery for treating an orthopedic condition, especially when a non-surgical treatment may be just as effective in bringing about a positive outcome. In the most troubling cases, patients end up undergoing unnecessary procedures that leave them no better, or worse off, than before.

In the United States, unnecessary surgeries might account for 10-20% of all operations in some specialties—this figure includes many spinal surgeries and knee replacements. According to one report, about 10% of all spinal fusions paid for by Medicare in 2011 were unnecessary, either because they had no medical basis or because doctors did not explore non-surgical treatment options. A study published in the journal of *Surgical Neurology International* evaluated 274 patients with neck and back complaints over a one-year period and found more than 17% had been told they needed surgery when there was no evidence to indicate an operation was necessary.⁶

According to sports medicine physician and specialist in our expert network, Dr. John Mayhew, the source of the problem is often surgeons who decide to operate on patients based strictly on the findings from an X-ray or MRI.

"The X-ray or scan makes the diagnosis, but the decision for surgery needs to be based on a patient's symptoms," says Dr. Mayhew. "Are we actually going to improve their quality of life? Not just make the X-ray look better."

Dr. Mayhew cites the use of arthroscopic surgery (a procedure that involves inserting a small camera inside the joint) to treat osteoarthritis of the knee as an example of a procedure that is overused, sometimes with negative consequences.

He treats his own patients based on their symptoms, not just on what the X-ray shows.

According to Dr. Mayhew, physicians should first look at non-surgical ways of treating an orthopedic condition. This is especially important considering that surgical intervention comes with several risks, including pulmonary embolism, deep vein thrombosis, and post-operative infections.

"We should be using physical therapy, weight loss, bariatric surgery, and injection-type therapies rather than orthopedic surgery at times," he says.



“My quality of life has really improved since I received the expert's report and recommendations.”

Ian, whose diagnosis and treatment plan for a chronic ankle condition were modified after review by one of our specialists

Getting an accurate diagnosis and the right treatment for a chronic orthopedic condition can make a huge difference in reducing pain, restoring mobility, and improving a person's quality of life.

Several other orthopedic conditions can be successfully treated without surgery, often leading to better patient outcomes, notes Dr. Mayhew. One example is Achilles tendon rupture.

"The available evidence now says that non-surgical treatment of that is as good, if not better, than surgical treatment," says Dr. Mayhew. Other examples of conditions that may fare better with non-surgical treatment include medial ligament tears of the knee, major hamstring tears, and osteoarthritis of the hip, which Dr. Mayhew says is often unnecessarily treated with arthroscopic surgery.

The prevalence of back pain among Americans may encourage many to seek a surgical solution. However, Dr. Mayhew says that spinal fusion (where a number of vertebrae at different levels are fused together) is an overdone procedure that doesn't normally help resolve lumbar spine pain. "For people with non-specific back pain to fuse their disks because they look degenerate on an X-ray is a very poor operation to do, and with a very poor outcome," he says.

In many cases patients would be better served by first seeing another specialist rather than immediately seeing a surgeon, according to Dr. Mayhew.

"People go from a sore knee straight to seeing an orthopedic surgeon and he's really only got one treatment he can offer you," he says. He adds that a physical therapist or other specialist can help a patient explore non-surgical treatment options that may successfully resolve their issue. A patient who

can be successfully treated for an orthopedic condition without surgical intervention does not face the risk of post-surgical complications and can end up with a better outcome.

Getting an accurate diagnosis and the right treatment for a chronic orthopedic condition can make a huge difference in reducing pain, restoring mobility, and improving a person's quality of life.



“My doctor was impressed,” said Nancy after sharing the detailed direction from the expert to her treating doctors. This action plan could change her life.

Nancy, who reached out to our service and discovered she didn't need spinal surgery after all

This is illustrated by the case of a young woman whose treating physician had misdiagnosed her with scoliosis and recommended spinal surgery. After her case was reviewed by one of our leading orthopedic surgeons, the woman was given a different diagnosis.

Not only did she not have scoliosis, the expert advised against spinal surgery and instead recommended pain relief medication along with further testing.

This reinforces the importance of getting the right support and guidance when making a treatment decision for an orthopedic condition. This is especially true when it comes to surgery, with its attendant risks and the possibility of non-surgical alternatives that might be just as—if not more—effective.

"Getting the appropriate advice is paramount," says Dr. Mayhew. "An independent, non-biased opinion on what is best managed is very useful."



**About Dr. John Mayhew, leading sports injury expert
BSc, MBChB, DipObst, DipSpMed(Hon), DOccMed**

Dr. Mayhew is a highly respected sports doctor and alumnus of the faculty of medical and health sciences of The University of Auckland with a diploma in occupational medicine. He shares his experience in the book *Doc Mayhew: Rugby's Medicine Man*. Dr. Mayhew runs a sports medicine practice at Auckland's Millennium Institute, is the doctor for the New Zealand Warriors, and is clinical director at Sovereign Insurance.

¹[https://www.boneandjointburden.org/docs/The%20Burden%20of%20Musculoskeletal%20Diseases%20in%20the%20United%20States%20\(BMUS\)%203rd%20Edition%20\(Dated%2012.31.16\).pdf](https://www.boneandjointburden.org/docs/The%20Burden%20of%20Musculoskeletal%20Diseases%20in%20the%20United%20States%20(BMUS)%203rd%20Edition%20(Dated%2012.31.16).pdf)

²<https://www.boneandjointburden.org/fourth-edition/iii0/arthritis>

³<https://www.boneandjointburden.org/2014-report/ii0/spine-low-back-and-neck-pain>

⁴<http://newsroom.gehealthcare.com/trauma-in-the-or-the-growing-need-for-a-global-orthopedic-solution/>

⁵<https://www.boneandjointburden.org/2014-report/ie1/spinal-fusion>

⁶<https://www.usatoday.com/story/news/nation/2013/06/18/unnecessary-surgery-usatoday-investigation/2435009/>

⁷<https://www.sciencedaily.com/releases/2016/03/160301114116.htm>

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