

# Fit For Duty



Musculoskeletal pain:  
Helping employers and employees  
take control and relieve the burden

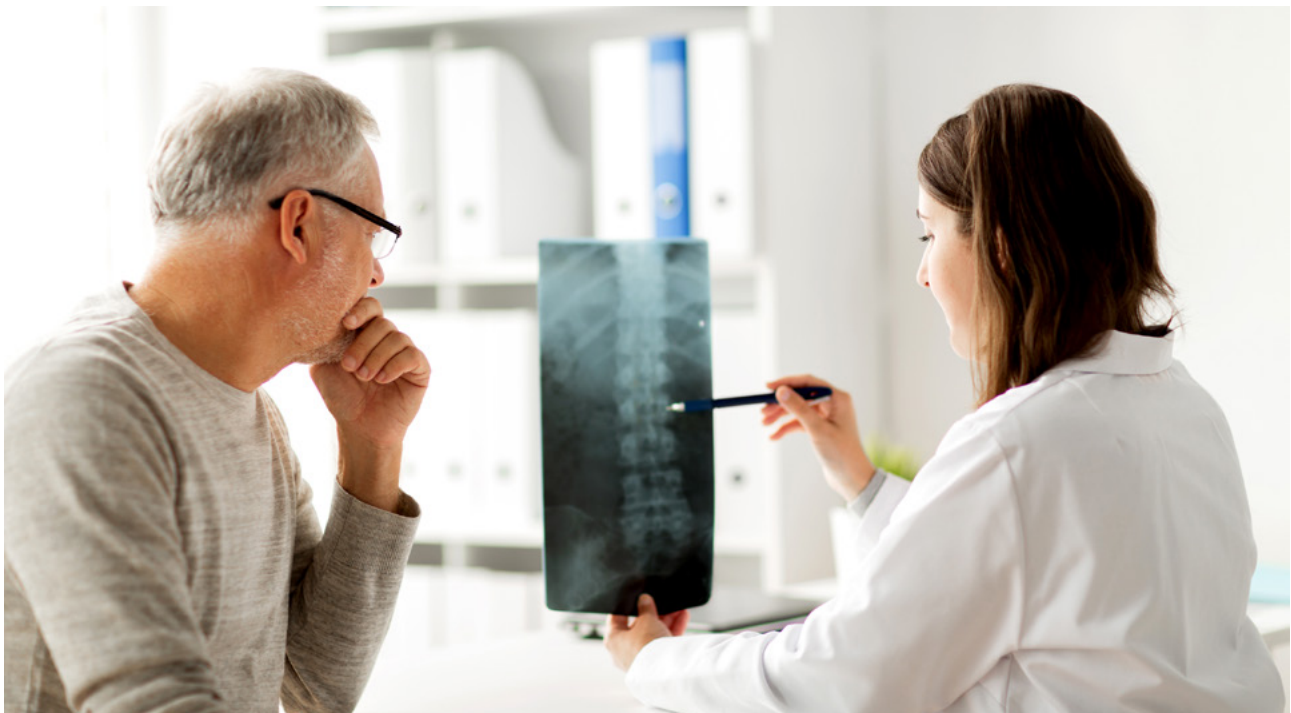


**T**oward the end of a book tour in 2008, American journalist and author Cathryn Jakobson Ramin found herself enduring persistent, debilitating leg and back pain. Often, she had to hobble on one foot to the lectern when giving speeches. Knowing she needed relief – and quickly – she opted for the ‘miracle’ of laser spine surgery. It didn’t work for her, nor, as she discovered, did it work for many patients she shared waiting rooms with, some of whom were returning for their second or even third surgeries.<sup>1,2</sup>

Ramin eventually found relief through someone she calls a “back whisperer” (a physical therapist who prescribed an exercise routine that she still follows), but she also found something else: the genesis of a new book. In 2017, she published *Crooked: Outwitting the Back Pain Industry and Getting on the Road to Recovery*. The book explores a \$100-billion-per-year industry she describes as mostly a hoax. While it hasn’t made Ramin popular at back pain conferences – at one she was threatened with expulsion – it has shone a light on the cost of treating musculoskeletal disorders, or MSDs.<sup>3,4</sup>

Those costs are already familiar to many employers. A 2018 survey of leading global insurers found that 49 percent of respondents identified musculoskeletal conditions as the leading cause of high claims incidence and highest claims costs in their medical client portfolios. In the EU, direct and indirect costs associated with MSDs total some €240bn per year, or up to 2 percent of gross domestic product (GDP). In 2017, Willis Towers Watson reported musculoskeletal/back illness as accounting for 44 percent of health claim costs – following cancer (82 percent) and cardiovascular disease (72 percent) in Asia Pacific.<sup>5</sup> In the U.S., MSDs cost an estimated \$213bn in health care costs and lost wages per year, or about 1.4 percent of GDP. Those costs do not factor in the pain and suffering workers endure.<sup>6,7,8</sup>

For those reading a printed version of this PDF, head to [aetnainternational.com/en/about-us/explore/fit-for-duty-corporate-wellness](https://aetnainternational.com/en/about-us/explore/fit-for-duty-corporate-wellness) to access the musculoskeletal disorder related articles.



1: <https://tincture.io/oh-my-aching-back-our-5q-with-cathryn-jakobson-ramin-bb7cad24940c>  
 2: <https://www.centerforhealthjournalism.org/blogs/2012/01/24/qa-cathryn-jakobson-ramin-billion-dollar-back-pain-industry>  
 3: <https://qz.com/1010259/the-100-billion-per-year-back-pain-industry-is-mostly-a-hoax/>  
 4: <https://www.cathrynjakobsonramin.com/blog/2017/10/6/telegraph-article>  
 5: <https://www.willistowerswatson.com/en/press/2017/08/rising-health-care-benefit-costs-show-no-sign-of-abating-in-asia-pacific>  
 6: <https://www.willistowerswatson.com/-/media/WTW/PDF/Insights/2018/11/2019-global-medical-trends-survey-report.pdf>  
 7: [https://www.sip-platform.eu/files/structure\\_until\\_2016/Events/2016/SIP%20Factsheet\\_Work.pdf](https://www.sip-platform.eu/files/structure_until_2016/Events/2016/SIP%20Factsheet_Work.pdf)  
 8: <https://www.usbji.org/news/releases/one-two-americans-have-musculoskeletal-condition-costing-estimated-213-billion-each>

“Among the causes of back pain listed by the UK’s Health and Safety Executive are sitting at a poorly arranged workstation and spending prolonged periods of time in one position”

**Pamela Berger**

Director of Health and Wellness,  
Aetna International



“Musculoskeletal disorders are a significant cost driver for employers in terms of both direct and indirect costs,” says Dr Lori Stetz, Senior Medical Director, Aetna International. “Developing a comprehensive strategy to prevent and reduce them – and promoting overall workplace health – is beneficial to employers and employees alike.”

“musculoskeletal conditions are prevalent in one third to one half of multi-morbidity presentations.”<sup>10</sup>

On the other hand, since MSDs rarely lead to death, they get less attention than other conditions. As the Fit for Work Europe Coalition notes, “Crudely, this makes it hard to get much serious or sustained attention from policymakers or practitioners, and so the problem persists.”<sup>11</sup>

## The prevalence of musculoskeletal disorders

MSDs comprise more than 150 diagnoses that affect the body’s muscles, bones, joints and connective tissues like ligaments and tendons. Dr Stella George, Senior Medical Director, Aetna International says, “Virtually everyone on the planet will experience musculoskeletal pain at some point in their lives. Those who are lucky will only sprain an ankle or suffer transitory back pain after working too long in the garden; those who are unlucky will develop chronic conditions like osteoarthritis which cause persistent pain and limit mobility, dexterity and functional ability.”<sup>9</sup>

Many MSDs have no connection to the workplace, aside from the direct and indirect costs involved. However, back pain in general, and low back pain in particular, is often the result of workplace conditions and activities. Few are surprised when low back pain affects a factory worker who must do repetitive tasks all day or a lorry driver who must spend long hours on the road and must handle heavy, awkward parcels. Employees in sectors such as oil drilling, IT and business process outsourcing (BPO) are also exposed to stressors that may adversely affect their musculoskeletal system and quality of life.<sup>12,13</sup>

According to the World Health Organization, MSDs are the second largest contributor to disability in the world, with low back pain being the single leading cause. MSDs often occur in concert with conditions ranging from obesity to depression. In fact, the WHO reports,

But back pain affects other workers as well. As Pamela Berger, Director of Health and Wellness, Aetna International, points out, “What is less well known is that office work can cause or exacerbate back pain as well. Among the causes of back pain listed by the UK’s Health and Safety Executive are sitting at a poorly arranged workstation and spending prolonged periods of time in one position.”<sup>14</sup>

9: <https://www.who.int/news-room/fact-sheets/detail/musculoskeletal-conditions>

10: <https://www.who.int/news-room/fact-sheets/detail/musculoskeletal-conditions>

11: <https://www.bl.uk/collection-items/reducing-temporary-work-absence-through-early-intervention-the-case-of-msds-in-the-eu>

12: <https://pdfs.semanticscholar.org/c29e/6da93c756ffb1e74e5289ce22585be1a8338.pdf>

13: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3669474/>

14: <http://www.hse.gov.uk/msd/backpain/employers/intheworkplace.htm>

## The ideal posture for supporting your back when sitting



### New factors in back pain

And it's not just the office that's the problem, in part because technology has made it easy for professionals to work virtually anywhere: at the kitchen table, in a coffeeshop, on an airplane or at the seashore. "When you're talking to people in the workplace, what they're doing outside the workplace may be much more significant," said Nigel Heaton, Director, Human Applications, Osmond Group Limited, a UK-based supplier of workplace ergonomic solutions, in a 2015 webinar. Heaton once tried to help a woman who was suffering persistent pain even though everything about her workstation and work processes was ergonomically appropriate. "I couldn't figure out what was going on," he explained. "Then she told me definitively she knew it was work that was giving her the problem because she could easily spend three or four hours at night writing up her Ph.D. on her dining room chair and that didn't give her any problem at all." What that woman didn't realise was that the impact of bad habits (in other words, sitting for prolonged periods on her dining room chair) is cumulative. In effect, her bad habits at home were negating the effects of her good habits at the office.<sup>15</sup>

Dr George states, "It's important for individuals to assess the ergonomic factors in their life holistically. Your place of work might be perfectly set up for good ergonomics,

but if you spend more time working at home than in the office, it's important to take steps to arrange a suitable work space to stay healthy and avoid developing conditions."

Before it designed its high-end Gesture office chair, furniture provider Steelcase conducted a global posture study that looked at the work habits of 2,000 people across 11 countries in North America, Europe and Asia. The study uncovered two key factors: 1) the physiology of work has changed, yet many workstations are designed to support an outmoded "one-task, one-technology, one-posture experience"; and 2) the sociology of work has changed as workers have become more adept at (or at least accustomed to) rapidly shifting between individual and collaborative work. Steelcase says those factors have created nine totally new postures that can cause musculoskeletal pain. Consider, for example, the impact of a posture dubbed the 'strunch':

The 'strunch' (stretched-out hunch) is a very common posture with laptops. As people become fatigued, they gradually push the laptop further from the edge of the worksurface, which causes them to reach for everything. Since the back and neck cannot sustain the reach and hunch posture for a long time the person begins to prop themselves up with their non-tasking arm. Because this

15: <https://www.youtube.com/watch?v=cPJCUv4z7Y>

posture is synonymous with long duration sitting, it puts people at high risk for discomfort and over time back, arm, wrist, neck and shoulder injury.<sup>16</sup>

## A generation in pain

The changes Steelcase identified are one reason MSDs are increasingly common among millennials, a group who've been using technology all their lives. As the Northeast Business Group on Health notes, "Technology was already revolutionising the workplace but millennials, having been on screen since the age of five (or four or three), have hastened the change."<sup>17</sup>

“As of 2013, MSDs accounted for 10 percent of health care spending in the U.S., third only to circulatory disorders and, again, ‘ill-defined conditions’”

Guy Osmond, Managing Director, Osmond Group Ltd., has watched the average age of workers in pain steadily drop since the early 1990s. (Back then, he says, musculoskeletal pain among office workers was typically found in women 50 years of age or older who were doing secretarial work.) He predicts an “ergonomic tsunami” will soon overtake companies worldwide. “It’s coming, it’s enormous, it’s unstoppable and it’s potentially overwhelming,” he says.<sup>18</sup>

In fact, it’s already here. Cardinus Risk Management has heard from many clients whose young workers are seeking treatment for MSDs as soon as they are eligible for health insurance. One energy company executive said, “We have hired engineers straight out of college and they are requesting a half-day off on their 91st day to see a doctor for what we see as textbook early neck or other musculoskeletal disorders.”<sup>19</sup>

Add in an ageing population, and you can see why MSDs contribute more to the rise in health care spending in the U.S. than any category but the nebulous ‘ill-defined conditions’. As of 2013, MSDs accounted for 10



16: <https://www.steelcase.com/content/uploads/2015/01/global-posture-study.pdf>

17: [https://nebh.org/wp-content/uploads/2017/09/NEBGH\\_MSD-Report\\_FINAL.pdf](https://nebh.org/wp-content/uploads/2017/09/NEBGH_MSD-Report_FINAL.pdf)

18: <https://www.youtube.com/watch?v=cPJCUv4z7Y>

19: <http://www.hsmsearch.com/orgfiles/ZORG000011/HSM/ENHANCED%20PROFILES/Cardinus/Cardinus%20Fleet%20&%20Ergonomics%20Magazine%20UK%202016%20online.pdf>

“High-value workers often don’t have time to leave the office for physical therapy, delaying treatment that could alleviate their symptoms.”

percent of health care spending in the U.S., third only to circulatory disorders and, again, ‘ill-defined conditions’. By comparison, cancer – which gets far more attention – accounted for 7 percent of spending.<sup>20</sup>

“MSDs are consistently among the top five health conditions that drive costs for employers,” says Dr Lori Stetz. “Without thoughtful, intentional interventions, they will surely move up the list. For example, neck and back pain is by far the most common complaint in the oil and energy vertical. This can be caused by an injury, such as a fall or lifting something the wrong way, which leads to or exacerbates this kind of pain and can result in significant treatment claims.”

And again, those are just direct costs. A study of Scottish health care workers published in 2017 found that MSDs accounted for 27 percent of sickness absences and 23.7 percent of work days lost. A broader 2014 study in the U.S. said back and neck pain account for a third of medically related lost work days. The Work Foundation has also reported that MSDs cause almost half of work absences in the EU that last three days or longer.<sup>21,22,23</sup>

## Combating MSDs

Of course, days lost and medical costs both increase when people suffering back pain must undergo surgery. That’s not to say surgery is never warranted, but in most cases it should be a last resort. (It’s also worth noting that an astonishing 99 percent of surgeons at one medical conference said they personally wouldn’t undergo lumbar fusion surgery.)<sup>24</sup>

The key is to start with prevention and education efforts, which are especially important since off-the-job habits



contribute so much to MSDs. Beyond that, then explore nonsurgical means like physical therapy before resorting to surgery.

Given the high direct and indirect costs of back pain, employers have a vested interest in helping their workers learn to live pain free. Here are six actions organisations can implement to help their employees:

**Promote movement:** While bad posture contributes to MSDs, Nigel Heaton of Osmond Group Limited notes that “any posture that you hold for long enough is a bad posture.” Encourage workers to take active breaks instead of spending their breaks hunched over their mobile devices or promote the concept of standing or walking meetings. (Of course, physical activity also helps in the fight against obesity and other lifestyle disorders.)<sup>25</sup>

20: <https://www.healthsystemtracker.org/chart-collection/much-u-s-spend-treat-different-diseases/#item-top-five-disease-categories-account-roughly-half-medical-service-spending>

21: <https://bmjopen.bmj.com/content/bmjopen/8/1/e018085.full.pdf>

22: <https://www.boneandjointburden.org/2014-report/via5/bed-and-lost-work-days-due-musculoskeletal-injuries>

23: <https://www.bl.uk/collection-items/reducing-temporary-work-absence-through-early-intervention-the-case-of-msds-in-the-eu>

24: <https://qz.com/1010259/the-100-billion-per-year-back-pain-industry-is-mostly-a-hoax/>

25: <https://www.youtube.com/watch?v=cPJCUv4z7Y>



**2 Expand your view of ergonomics:** Ergonomics – the study of people’s efficiency in the workplace – includes both physical risk factors (e.g., avoiding repetitive tasks) and psychosocial risk factors (e.g., reducing stressful working conditions). Cardinus Risk Management notes that addressing physical factors alone yields a 10 to 25 percent improvement in productivity or accident prevention, but addressing both physical and psychosocial factors yields a 50 to 90 percent improvement.<sup>26</sup>

**3 Encourage early intervention:** MSDs don’t go away on their own, so encourage workers to seek appropriate treatment early. A Spanish programme two decades ago showed the advantage of early intervention (after just five missed workdays) which paired conventional treatment with patient education. The program resulted in a 39 percent decrease in temporary work disability, a 50 percent decrease in permanent disability and a high patient satisfaction rate. Moreover, every \$1 spent on care yielded \$15 in saved productivity.<sup>27,28,29</sup>

**4 Offer onsite physical therapy:** High-value workers often don’t have time to leave the office for physical therapy, delaying treatment that could alleviate their

symptoms. When one large New York City law firm began offering onsite physical therapy, its claims costs dropped from \$470,000 to just \$93,000. As one employee noted, “[Previously] I would need to leave as early as 2:30pm to get to my appointment on time (and this would be their last appointment). Having it at this facility at 7:45am is extremely convenient and less stressful.”<sup>30</sup>

**5 Explore innovative options:** Aetna International offers its customers SimpleTherapy, the world’s first completely online alternative to physical therapy. A study of SimpleTherapy’s use by employees of a large international customer demonstrated the service’s potential. Among employees who completed at least two sessions – which lasted an average of just 24 minutes – 89 percent reported a decrease in pain. Those who completed four sessions reported that their pain level had dropped an average of a full point on a 10-point scale.

**6 Share tips and advice:** Regularly sharing articles and information with employees can prompt them to make small adjustments to their behaviours, gradually helping to improve their well-being over time. As an example, read and share [Strengthen your back: 12 easy exercises for lower back pain](#).

26: <http://www.hsmsearch.com/orgfiles/ZORGF000011/HSM/ENHANCED%20PROFILES/Cardinus/Cardinus%20Fleet%20&%20Ergonomics%20Magazine%20UK%202016%20online.pdf>

27: <https://annals.org/aim/article-abstract/718733/health-system-program-reduce-work-disability-related-musculoskeletal-disorders?volume=143&issue=6&page=404>

28: <https://annals.org/aim/fullarticle/718750/intervention-program-decrease-duration-cost-work-disability-related-musculoskeletal-disorders>

29: <https://www.bl.uk/collection-items/reducing-temporary-work-absence-through-early-intervention-the-case-of-msds-in-the-eu>

30: [https://nebg.org/wp-content/uploads/2017/09/NEBGH\\_MSD-Report\\_FINAL.pdf](https://nebg.org/wp-content/uploads/2017/09/NEBGH_MSD-Report_FINAL.pdf)

## How Aetna can help employers and employees

### Low back pain assessment and coaching:

Aetna's Care and Response Excellence (CARE) team offers low back pain assessment and support for our members. The service helps people ensure that they're keeping healthy and preventing an injury or condition from developing or becoming worse. Members can expect a clinician to assess their symptoms, get an understanding of the risk factors at work and home which is leading to pain or injury. Post assessment, members are provided with online resources as well as support from a licensed coach. We advocate for taking breaks, advocate regularly getting up and walking around to avoid sitting for prolonged periods of time, as well as activities such as chair yoga and stretching. Members can contact the CARE team to enquire about an assessment and coaching via their secure member website - [Health Hub](#).

### Low back pain and chronic pain management wellness webinars:

Aetna International also provides customers and their employees with wellness webinars on managing low back pain. Later this year, one of the webinars will focus specifically on holistic pain management. To find out how to access the webinars, email the Aetna CARE team [here](#).

### Employee Assistance Program (EAP):

To help your employees handle their stressors so that they don't spill over into the workplace or impact their work-life balance, find out more about Aetna International's EAP service. Contact your sales or account manager for more information. To provide eligible employees with access to EAP to help them stay productive while taking care of personal issues, direct your employees to log in to (or register for) the [Health Hub](#) – the online member portal.

### Corporate health and wellness programs:

From smoking cessation to mindful eating, we often work with customers to design and roll out in-office health and wellness programmes. These are designed to help employees adopt healthier behaviours, thereby improving their overall well-being.

Don't hesitate to contact our **team of sales consultants** for more information on how Aetna International can help support your employees in building healthier habits to keep them happy, healthy and more productive.

<https://www.aetnainternational.com/en/brokers/support-resources/contact-us.html>

## Want more information?

Read [Strengthen your back: 12 easy exercises for lower back pain](#) or share it with your employees to provide clear guidance on how people can prevent or overcome back problems that affect their quality of life and impact their performance at work.

You can also find more Fit For Duty materials [here](#).





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