Musculoskeletal Disorders
- Operating can lead surgeons to adopt postures and repetitive motions that have damaging long-term effects on physical health through imparting musculoskeletal fatigue, damaging a surgeon’s muscles, nerves, and/or joints.¹,⁴
- May result in chronic pain for the surgeon, which may lead to other implications including productivity loss.¹

Workplace Injuries
- Many orthopaedic surgeons sustain occupational injuries during their careers.²,³
- The volume of work days missed suggests that occupational injury has economic implications for the healthcare system and providers.²,³
- Occupational injury may impact the quality of surgical care offered to the patient due to performance issues the surgeon may face while dealing with or recovering from the injury.²,³

Emotional and Psychological Health
- Mental health issues and other psychological problems (including anxiety, chronic fatigue, and burnout) are often dismissed as the surgeons do not wish to let their colleagues down.⁵
- There is a misconception that surgeons better cope with stress and are protected from burnout.⁵

Impact of Musculoskeletal Injuries on Orthopaedic Surgeons
Prevalence of the most common musculoskeletal disorders among respondent arthroplasty surgeons.⁶

- 14.2% Shoulder Injury
- 14.2% Elbow Epicondylitis
- 10.9% Wrist/Forearm Tendinitis
- 12.0% Wrist Osteoarthritis
- 27.9% Low Back Pain

2 out of 3 orthopaedic surgeons developed a musculoskeletal disorder from work.⁶
**ABSENTEEISM**
Work absence due to injury or illness

- **23-27%** of injured orthopaedic surgeons required time off from work due to a work-related injury (median time off = 7.3 days ± 21 days)$^2,3,6$

- **8%** of injured orthopaedic surgeons required longer than 3 weeks’ time off due to an injury$^2$

**SURGERY WAS REQUIRED TO TREAT** 31% of cases of musculoskeletal injuries among arthroplasty surgeons$^6$

*Strain injuries* of upper and lower limbs were responsible for 14.8% of work-related injuries among healthcare workers* and resulted in 3,450 lost days of work, with the median duration of work absence being 10.0 days$^7$

**PRESENTEEISM**
Attending work while injured or ill

- **36%** of injured orthopaedic surgeons reported that the pain from an occupational injury “at least minimally impacted” their performance in the operating room$^2$

- **43%** of injured orthopaedic surgeons reported that they were forced to take a break from operating to relieve the pain experienced from their symptoms$^8$

- **35%** of injured surgeons reported performing fewer operations while recovering from an injury$^3$

- **10%** of injured resident orthopaedic surgeons reported “they missed time in the operating room due to their musculoskeletal injuries”$^9$

- **8%** of injured orthopaedic surgeons required longer than 3 weeks’ time off due to an injury$^2$

**PRODUCTIVITY LOSS FROM OCCUPATIONAL INJURIES AND HAZARDS FOR ORTHOPAEDIC SURGEONS**

- **$3,286,764** Annual net revenue generated by an orthopaedic surgeon$^{10}$

- **Surgeon Absenteeism** (7.3 days ± 3 weeks)

- **$92,000-$189,000** Lost revenue for the institution

*Healthcare workers include medical staff (eg, medical specialists or residents), registered nursing personnel, nursing assistants, healthcare technicians (eg, laboratory and radiology technicians), administrative assistants, and other professional groups (eg, hospital managers).