Introduction

The COVID-19 pandemic has rapidly become the defining global health crisis of our time. With more than 1,300,696 cases, the United States leads the world among all countries impacted by this deadly disease. The pandemic has challenged the U.S. healthcare system like never before. It has impacted every aspect of the healthcare ecosystem dramatically affecting the availability of resources to treat patients as well as the health and well-being of medical professionals. Further, the widespread suspension of elective surgeries has severely impacted thousands of medical specialists, including musculoskeletal healthcare providers.

Recently, AAOS conducted a multi-pronged research study in an effort to better understand how the emergence of COVID-19 has impacted orthopaedic surgeons. Ultimately, the Academy will be guided by the qualitative and quantitative data from this research to meet the current and future needs of its members.
Research

This report is the distillation of three surveys conducted during the month of April 2020.*

1. **COVID-19 Member Pulse Check Survey**
   - A large-scale, online survey administered by the AAOS Market Research Team
   - Conducted among all domestic AAOS member categories
   - Data collection occurred April 10 through April 17
   - A total of 3,690 complete responses

   **Respondent Composition**
   - 76% Fellow
   - 10% Emeritus
   - 9% Candidate
   - 3% Resident
   - 1% Candidate Fellowship
   - 1% Physician Assistant

   **Respondents by Specialty (Top Five)**
   - 20% Sports Medicine
   - 17% General Orthopaedics
   - 12% Adult Reconstruction
   - 11% Hand
   - 8% Spine

2. **COVID-19 Advocacy Poll**
   - A brief, six-question, online poll administered by the AAOS Office of Government Relations
   - Members were invited to “share their story” about how COVID-19 has impacted orthopaedic surgeons from an economic standpoint
   - Data collection occurred April 2 through April 16
   - A total of 170 complete responses

3. **COVID-19 Council / Committee Survey**
   - A survey administered by AAOS staff liaisons
   - Academy leaders were invited to provide additional feedback to augment the findings from the previous research
   - Conducted among AAOS council and committee members
   - Data collection occurred April 17 through April 24
   - A total of 285 complete responses

*Report respondents consisted of domestic AAOS members.
Summary

The COVID-19 pandemic has had a significant, negative impact on AAOS members, severely reducing both their patient and surgery volume – with the most affected members in private solo practice.

A majority of orthopaedic practices reduced office hours while many were forced to institute salary cuts and/or lay off or furlough staff. Although few practices have closed permanently, some have closed on a temporary basis. Some surgeons have focused on doing more administrative work and providing more non-surgical care while relatively few reported being redeployed to assist other departments with patients.

The challenges facing orthopaedic surgeons reflect several broad themes: Practice/Professional, Financial, Personal and Future Outlook. The specific challenges most frequently reported:

- Keeping family, employees and patients safe
- Providing patient care, support and education (e.g., telehealth)
- Covering expenses (e.g., overhead, payroll, bills)
- Managing decreased cash flow, income and revenue

When asked about ways the Academy might best support members, the most common response was AAOS continuing to advocate on their behalf. Aside from advocacy, a majority want resources to help navigate federal legislation and critical information about how surgeons can support their patients. Many of the “other” comments focused on how to return to practice and safely restart elective surgeries.

When asked about challenges members expect to experience in the coming months, most respondents indicated handling the anticipated “catch-up” demand when elective surgeries resume to be their primary challenge. A majority also considered patient retention to be a critical issue. Some members also identified the need for making up lost revenue and/or rebuilding their practices.

When asked about the communication channels they prefer to receive COVID-19-related information, most members feel email is the most effective way to communicate followed by the online AAOS COVID-19 Member Resource Center, AAOS Headline News Now and the special AAOS Now Headline News Now COVID-19 Editions.

79% of respondents considered their biggest challenge to be “catch-up” in the next three to four months.
Implications

The Academy moved quickly to listen to its members and respond during this unprecedented time. It immediately created a wide range of resources and tools with open access to members via the online COVID-19 Member Resource Center. The site’s most sought after features include guidance on elective surgery and AAOS leadership updates that demonstrate the Academy’s efforts in advocating for members, primarily lobbying in Washington, D.C., for more relief funding.

As the effects of the pandemic continue to evolve, it is clear that members are beginning to look to the future. They will need continued guidance in respect to navigating current and future federal legislation, along with support to provide their patients with the highest quality of musculoskeletal care while also managing the ongoing pandemic.

More than half of respondents indicated patient-retention as a challenge ahead.

Connect with AAOS

The COVID-19 Member Resource Center includes the most up-to-date information and resources

For additional information, or specific questions related to this report, please email COVID19@aaos.org

Follow AAOS on social media
Key Challenges

More than 3,000 members commented on their current and future challenges. Responses were categorized across four broad themes:

**Larger Themes**

- **64%** Practice and Professional Challenges
- **48%** Financial Challenges
- **38%** Personal Challenges
- **34%** Future Challenges

**Specific Issues**

- **29%** Cash flow | Income | Finance | Revenue
- **25%** Avoiding Infection | Staying Healthy | Keeping Family, Staff and Patients Safe
- **23%** Providing Patient Care | Support | Education; Managing Patients; Telemedicine
- **19%** Covering Expenses (Overhead, Payroll, Bills)

*Themes and issues will not total to 100% as respondents provided multiple answers.*

How can I keep my business financially solvent and cover overhead?

Will a loss of health insurance or loss of employment for our patient populations have long-term consequences?
Impact on Practice

The COVID-19 pandemic has created a new normal. Nearly 9 out of 10 members indicated that their volume of patients decreased.

Residents are more likely than other member groups to indicate they are helping other departments:

- 27% with COVID-19 patients
- 19% of non-COVID-19 patients
- 117n

How are AAOS members spending their time?

- 40% are doing more administrative work
- 5% are assisting other departments with COVID-19 or non-COVID-19 patients
- 31% are providing more non-surgical care
Impact on Practice (cont.)

Practice Setting Plays a Role

Salary cuts, layoffs and furloughs were more common in a group practice, compared to practices in academic or hospital settings:

- **Group practice (single specialty)**
  - 70% instituted salary cuts
  - 65% laid off or furloughed staff

- **Group practice (multi-specialty)**
  - 65% instituted salary cuts
  - 53% laid off or furloughed staff

Question: As a result of the COVID-19 pandemic, has your practice been forced to...?

- **Change office hours**
- **Institute salary cuts**
- **Layoff / furlough staff**
- **Close temporarily**
- **Close permanently**

Telemedicine Is Expanding

Respondents are encouraged by their ability to deliver care via telehealth

- **88%** use telemedicine to provide follow-up consultation to a prior visit
- **74%** use telemedicine after surgical procedures
- **65%** use telemedicine for patient education
- **23%** use telemedicine to provide prevention services
- **14%** use telemedicine for new patient visits
As their partner in leading musculoskeletal health forward, the Academy asked members to identify the ways AAOS could best provide support during these challenging, unprecedented times:

83% want AAOS to advocate on their behalf for financial relief

60% want AAOS to provide critical information and resources to support surgeons and their patients

52% want AAOS to provide resources for navigating federal legislation

Provide clear recommendations and guidelines as to how practices should be operating at this time; support surgeons who are delaying cases; help define what is characterized as elective surgeries; provide guidance as to how we should progressively restart our practices.

Question: What can the Academy do to support you during these challenging times?
Future Challenges

Nearly 80% of members considered handling the “catch-up” demand to be a significant challenge in the next few months.

More than half of respondents are worried about retaining existing patients, acquiring enough continuing medical education or other challenges.

“COVID-19 has also dramatically impacted research, which is paramount to advancing orthopaedic care.”
When asked about preferences to receive COVID-19-related information and updates, 84% of respondents preferred email.

- **84%** Email
- **36%** AAOS COVID-19 Member Resource Center
- **35%** AAOS Headline News Now
- **27%** Webinars
- **17%** AAOS Now
- **7%** Social Media
- **2%** Other channels

"I do appreciate the news and information we receive from several sources – including the AAOS."
Life returning to the way it was prior to the COVID-19 pandemic is not a realistic expectation. The world has changed but, in time, there will be a new normal. The timeline, however, is unclear. Stabilization will occur as testing becomes more available and large-scale contact tracing is deployed.

Although much attention is focused on a vaccine, most projections indicate it will take six to 18 months to develop and that does not include time required for manufacturing or worldwide distribution. However, treatment therapies and herd immunity could offset the dire need for a vaccine. And with all these moving parts, local, state and federal government agencies will also continue to release new guidance and protocols. But if just one thing is certain, it is that COVID-19 is not going away any time soon.

To that end, the Academy will be in lockstep with its members for the duration. More specifically, as states, counties and cities across the United States begin to ease restrictions and explore resuming normal activity through various phased approaches, the AAOS will continue to advocate on behalf of members. As the COVID-19 pandemic evolves, so will the needs of orthopaedic surgeons. The Academy will continue to respond accordingly, offering members the education, tools and resources required to enable them to safely provide the highest-quality, evidence-based treatment options for their patients.

Together, we will prevail and be better than we were before the pandemic.

Additional COVID-19 Resources

Primary Resources

- COVID-19: Member Resource Center
- AAOS Leadership Updates
- AAOS Now COVID-19 On-going Coverage
- Journal of the AAOS @ COVID-19 Special Edition

Other Resources

- AAOS Summary of COVID-19 Loan and Grant Programs
- AAOS Clinical Considerations During COVID-19
- Telemmedicine Quick Guide – An accessible guide for quick access of CPT & CMS allowable codes for telemedicine services
- Policy Tracker for Telemmedicine Visits – A comprehensive list of commercial health plan payers and their coverage policies for telemedicine services during this COVID-19 pandemic
- AAOS Member Alert on Telemmedicine Coding – The latest information and guidelines regarding telemedicine via telephone and video conferencing
- COVID-19 Telemmedicine Guidelines – For the latest information and guidelines regarding telemedicine via telephone and video conferencing
- OrthoInfo COVID-19 Information for Patients – Find articles and Ortho-pinions written by AAOS member surgeons on important topics relating to coronavirus, including telemedicine, bone and joint health, and how orthopaedic surgeons continue to provide care during the pandemic.
- Questions and Answers for Patients Regarding Elective Surgery and COVID-19 – Developed by AAOS member surgeons, these FAQs address concerns that your patients may have about the impact of COVID-19 on their rescheduled orthopaedic procedures.

For additional information, or specific questions related to this report, please email COVID19@aaos.org.
About AAOS

With more than 39,000 members, AAOS is the world’s premier medical association of musculoskeletal specialists. The AAOS provides education programs for orthopaedic surgeons and allied health professionals, champions and advances the highest quality musculoskeletal care for patients and serves as the authoritative source of information on bone and joint conditions, treatments and related issues.

About American Academy of Orthopaedic Surgeons

Founded in 1933, the Academy is the preeminent provider of musculoskeletal education to orthopaedic surgeons and others in the world. Its continuing medical education (CME) activities include a world-renowned Annual Meeting, multiple CME courses held around the country and at the Orthopaedic Learning Center, and various medical and scientific publications and electronic media materials.

About American Association of Orthopaedic Surgeons

Founded by the Academy Board of Directors in 1997, the Association engages in health policy and advocacy activities on behalf of musculoskeletal patients and the profession of orthopaedic surgery. The Political Action Committee of the American Association of Orthopaedic Surgeons, or “The Orthopaedic PAC,” is the only national political action committee in Washington, D.C., representing orthopaedic surgeons before the U.S. Congress.