



Rise of a New Virtual “Reality” for Orthopaedic Surgeons: Boom or Bubble?

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Insights

- Physical distancing policies worldwide have transformed surgical practices and surgeon peer-to-peer interactions.
- Our analysis confirms 9 in 10 surgeons have adopted current daily practices to include virtual telehealth and conferencing.
- Prior evidence informs that sustainability of virtual health and conferencing is limited.
- Integrated models of care may yield greater sustainability and endorsement.
- As virtual conferences get bigger, disruptors will lead by going smaller and creating more meaningful online experiences.

The End of Traditional Surgical Practice

The declaration of a Global Pandemic on March 11, 2020 has informed policy around the world towards risk mitigation ⁽¹⁾. The novel coronavirus disease 2019 (COVID-19) pandemic has now surpassed 2 million documented cases globally and has forced physical distancing measures and cancellation of non-essential services on an unprecedented scale ⁽²⁾. Best Practices reviews (see OE Best Practices for Surgical Care) (1) endorse a global move towards the cancellation of all non-essential surgery or medical procedures, and face-to-face patient clinic follow up examinations.

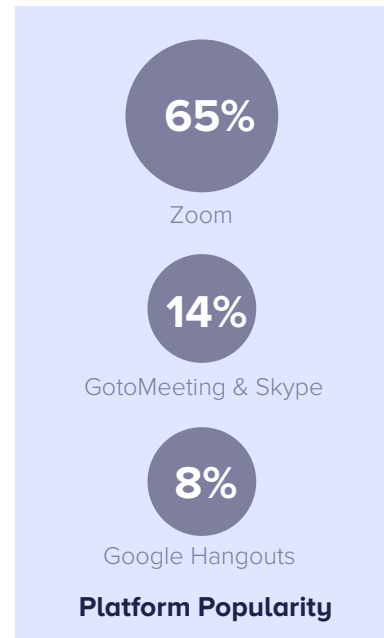
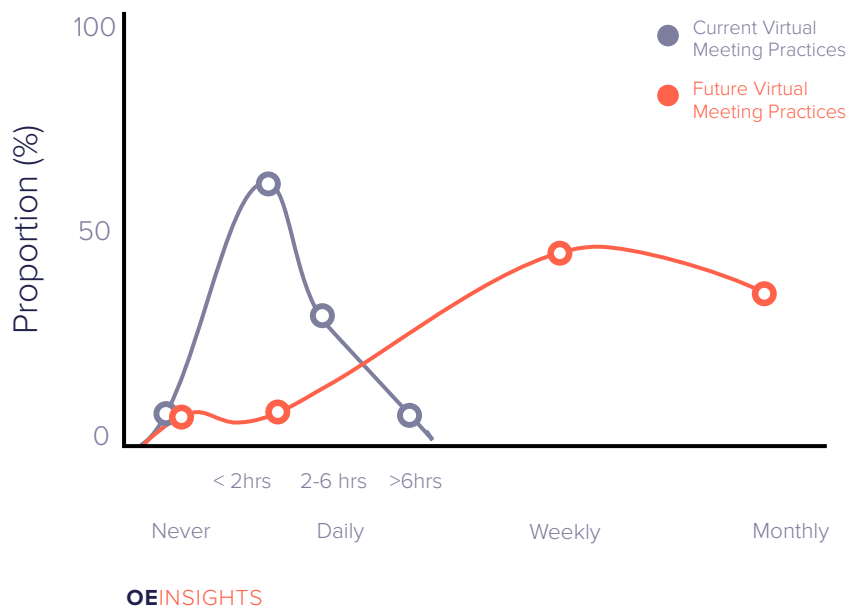


Exhibit 1: Surgeon present and future intended use of the virtual communication platforms
[Random sample from OrthoEvidence Polls, N=218]

Our analysis suggests the overwhelming majority of surgeons (95%) are using virtual meetings on a daily basis in their lives (Exhibit 1). From a few hours a day (65%) for most, to those hyper-users adopting virtual meetings for 6 or more hours each day (5%). Two in three surgeons endorse the Zoom platform with 14% choosing prior traditional platforms like GoToMeeting and Skype. Sustainability is a concern with 95% of surgeons anticipating foregoing daily use once physical distancing mandates are relaxed. The majority of surgeons view virtual communications as an occasional (once a week, 47%), or monthly actively (once a month, 44%).

The Sudden Rise of Virtual Communication: An Uncomfortable Transition

The virus has accomplished in a few weeks for the telehealth industry what promoters and organizations have been unable to do for decades. It is estimated that nearly all patient consultations in the United States, and for that matter any country impacted by the SARS-CoV2-virus, are occurring virtually ⁽³⁾. Arguably the single largest healthcare transformation in the history of most countries. Despite the 1.77 million websites on Google associated with the term “Virtual Healthcare during COVID-19”, the transition for orthopaedic surgeons, and many allied health care practitioners, has been far from facile. As surgeons, institutions and associations around the world race to adopt virtual communication, whether as a tool to interact with patients, or a tool to interact with each other, there remains an undertone of quiet discomfort about this whole process. What does this mean for the future?

“I do wonder about the future. I suppose that the faculty at my institution will be more likely to question the need to meet at my office or our conference space. I expect that the many national organizations whose business meetings I attend will reassess the need to fly me to their cities, both from a practical and budgetary standpoint. And, we may see the many large conferences that we so enjoy during the year as unnecessary and even hazardous, a luxury from a bygone era.” ⁽⁵⁾

— Robert Boland —

Vice-Chair Education, Associate Professor
Harvard Medical School, Psychiatric Times, March 2020

An Illusion of Care

The counter-argument among concerned physicians remains the trade-off between the rapid rise of virtual patient communications and the quality of clinical care. Surgeons now rushing to video and telephone consultations to manage their growing surgical waitlists and follow their post surgical patients have mixed emotions about the whole process. Several surgeons, in our OrthoEvidence network ⁽⁶⁾ have articulated more or less the same narrative. Yes, virtual communication is both inexpensive and efficient. Follow up examinations are straightforward and patients are almost uniformly appreciative for the communications. Non-complicated follow ups don't need to be seen and offer considerable time and cost saving benefits to both parties. Surgeons, however, were generally uniform in their concerns about the new consultations. One surgeon summarized the views of most in saying “there is no substitute for a clinical examination and virtual patient interactions are reasonable in the present, but not an effective strategy when physical distancing regulations allow return to in-person visits for all.” Another surgeon echoed, “virtual consultations are low yield. We aren't doing anything for patients other than letting them know we haven't forgotten about them.” Surgeons were unanimous in their assertion that pre-operative virtual consults would unlikely replace face to face examinations in those patients requiring surgical treatment.

“But with the absence of a physical exam and the absence of testing, all that telehealth can really offer patients right now is increased surveillance and an illusion of care that poses new risks for our future health and well-being, as well as the loss of privacy.” ⁽⁷⁾

— Kirsten Ostherr —

March 19, 2020

www.statnews.com

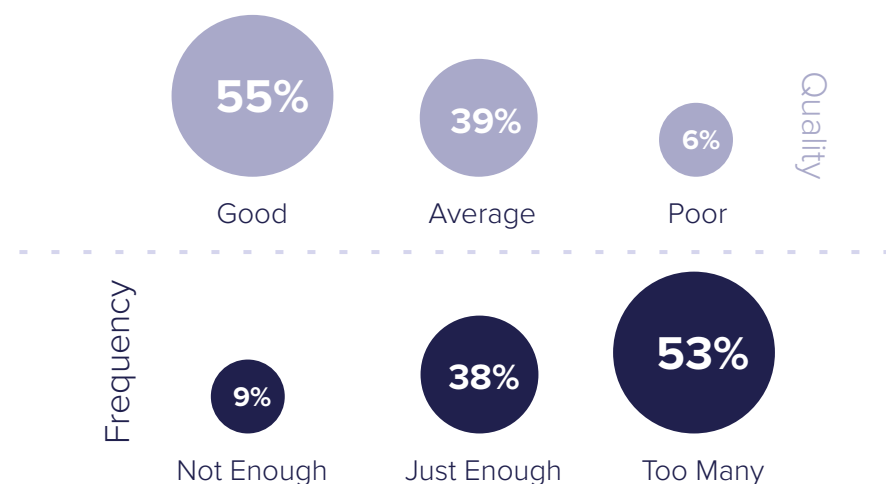
While most surgeons shy away from overtly discussing financial implications of virtual consultations and follow up interactions, physicians are indeed worried about the longer-term financial impact of the new world of virtual healthcare ⁽⁸⁾. One orthopaedic surgeon articulated the following, “I spend 10 minutes chatting on the phone and it's a way to make some money and patients feel good that they have a plan going forward.”

Everybody's Talking Virtual Conferences

The burgeoning demand of virtual communication in peer to peer communications among surgeons and health care practitioners has seemingly become the 'new normal'. With nearly all orthopaedic surgical meetings around the world cancelled, or postponed, there has been an exponential rise in virtual conferences. Roopam Jain writes, “this isn't the first time that the video conferencing industry has seen a spike in demand. In years past, events such as September 11, 2001 and the SARS outbreak have prompted businesses to use video meetings in lieu of travel.”⁽⁹⁾ The issue is less about whether virtual meetings make sense in the context of travel bans and physical distancing enforcements; rather, is it a sustainable strategy once things return to business as usual. Jain elaborates, “past surges failed to leave a lasting impact on the industry.”⁽⁹⁾ maybe COVID-19 is different. Maybe the scale of the impact on our lives is so indelible that we are unlikely to drift back to old ways, and old habits.

Virtual Fatigue

With screen time at an all time high, surgeons are expecting more from healthcare webinars and live streams. Engagement is suffering and most offerings are insufficiently innovative. As surgical associations, medical device manufacturers, and pharmaceutical companies race to develop, and license virtual platforms to manage the tsunami of expected online content delivery, they may very well be underwhelmed with the results, and their investments.



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Exhibit 2: Surgeon views on frequency and quality of virtual meetings
[Random sample from OrthoEvidence Polls, N=218]

The majority of surgeons (53%) seem overwhelmed by the number of online educational webinars and live streams. It's not that surprising, that almost half also feel unimpressed (45%) with the quality of online content being delivered. What's missing?

The Allure of Personal Connections and Networking

Over 1,000,000 attendees attend approximately 100,000 conferences per year. While healthcare practitioners often lament a long list of drawbacks including, but not limited to, the costs of travel, accommodations, conference fees, and ‘not so’ great presentations. Swash and Lees unsubtly characterized the conference experience as “self-congratulatory echo chambers rather than forums for new knowledge.”¹⁰ So, why bother? The answer is rather simple and intuitive. Conferences are, at their core, social events. Whether during, or in between lectures, surgeons network and socialize. In fact, these interactions are often cited as the greatest value to conferences.

“The best moments often weren't the keynote speeches, but the breakout sessions or coffee breaks when conference attendees could bump into one another. When people met someone at a conference whose work was relevant to them, it made the \$1,000 ticket worth it. When they didn't, conferences sometimes felt like a waste of time.”

—— Xiaoyin Qu Run the World ——

Article in Wired, March 2020 by Arielle Pardes

The Way Forward: While Others Go Big, Disruptors Will Go Small.

The way forward post COVID-19 is not about going big; rather, it's about going small enough to engage and create a meaningful experience. We should avoid a blinkered adherence to uninformative success metrics such as total attendees to a webinar (or live stream). These are common traps and false assurances of a successful event. Why? They say absolutely nothing about meaningful engagement. When you can't see your audience, you have no insight on their level of interest or engagement. It's hard enough to engage an audience of a few hundred surgeons on a live stage for more than a few minutes. Now imagine trying to engage that same group remotely during a 1-hour webinar lecture series.

“Small symposia and focused workshops and seminars, on the other hand, can be transcendental in their effect. Such symposia are at their most influential when only small numbers attend. Genuine, informed exchange of information and ideas is then facilitated.” ⁽¹⁰⁾

—— Michael Swash and Andrew Lees ——

Swash and Lees argue whether virtual attendance through the internet can substitute for real attendance has not yet been adequately tested ⁽¹⁰⁾. Social media content developers have long understood the perils of online engagement. The top 10 most popular videos on YouTube range from 42 seconds to about 9 minutes with an average length of approximately 4 minutes ⁽¹¹⁾. Long keynotes and multi-hour academic sessions at most conventional orthopaedic meetings face real challenges on virtual meeting format.

Virtual meetings need to be re-imagined. Bernard Marr, a leading strategist and big data expert believes we need to “bridge the gap between in-person events and virtual ones with platforms that combines video, networking, and more to try to capture the benefits of networking at an in-person event and the content and technology of virtual tools.” ⁽¹²⁾. The most popular current platforms during COVID-19 may not actually be sufficiently positioned to meet this new challenge. Zoom, for example is currently the most popular video conferencing platform in use by orthopaedic surgeons. At the declaration of the pandemic, March 11, 2020, 343,000 people worldwide downloaded the application with a resultant 58% surge in stock price ⁽⁹⁾.

This rapid growth in virtual conferencing has led to a proportional increase in new start up companies with targeted goals to ‘think differently’. New enterprises are rising to the challenge of a truly integrated conference experience. Silicon Valley Venture Capital Giants Andreessen-Horowitz are investing millions in the new wave of entrepreneurs re-inventing the conference experience from ticketing, interactivity and of course, “virtual” networking ⁽¹²⁾.

References

1. OrthoEvidence Resource Center: <https://myorthoevidence.com/covid19>
2. WorldOMeter: <https://www.worldometers.info/coronavirus/>
3. Webster P. Virtual health care in the era of COVID-19. Lancet. 2020;395(10231):1180–1181.
5. <https://www.psychiatrictimes.com/coronavirus/covid-19-virtual-meetings-and-anticipating-futures-new-normal>
6. OrthoEvidence (www.myorthoevidence.com)
7. <https://www.statnews.com/2020/03/19/telehealth-overpromises-during-the-covid-19-pandemic/>
8. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0091>
9. <https://www.nojitter.com/technology-trends/covid-19s-long-term-impact-remote-work-and-learning>
10. Swash M, Lees A JNeurol Neurosurg Psychiatry. 2019;90:483-48
11. MiniMatters. www.minimatters.com
12. <https://www.forbes.com/sites/bernardmarr/2020/03/17/how-the-covid-19-pandemic-is-fast-tracking-digital-transformation-in-companies/#3b0654aca8ee>



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