The Asia-Pacific region is home to 60% of the world’s population, and includes some of the most densely populated countries in the world. But the region reported just 27% of the world’s reported COVID-19 cases. With the exception of India, most of the countries in this region have fared better than the Americas and European countries in terms of the number of patients with COVID-19 and death rate per 100,000 people [2, 17]. But there are no winners here and let’s not mince words: Despite better statistical figures, orthopaedic practices in the Asia-Pacific region were greatly impacted by the pandemic [1, 5].

The Asia-Pacific region presents a unique set of challenges regarding combatting COVID-19: limited awareness of safety precautions against the spread of COVID-19, limited access to care and proper personal protective equipment (PPE), and poor healthcare infrastructure [8]. Indeed, sustaining an orthopaedic practice during the pandemic, like most businesses around the world, can feel like a daily struggle. How did orthopaedic surgeons in this region stay afloat during the pandemic? What strategies can we take from and apply to our preparations for a potential second wave of COVID-19 in the region or for future [13] global health crises?

Owing to densely populated cities and overall poor healthcare infrastructure in developing countries of the Asia-Pacific region, regional governments relied on strict stay-at-home orders to prevent the spread of COVID-19 infection. The stay-at-home orders meant only emergency medical services were functional in these countries to redirect the already strained healthcare resources to COVID-19 patient care [10]. For orthopaedic surgeons in the Asia-Pacific region, like in the United States, this meant an overhaul of our day-to-day activities, including a substantial reduction in or complete shutdown of routine clinic visits and nonemergency surgical procedures, as well as learning (many of us on-the-fly) how to use telecommunication to meet with patients. The resumption of routine outpatient services and elective surgeries was slow and still has not reached the full pre-pandemic level.

So how did the more successful ones pull it off?

Before I discuss that, I would like to recognize that although I’ll be discussing practice-management issues here, it’s important not to lose sight of the human face of this pandemic. Many of us have lost family members, professional colleagues, and close friends to COVID-19. It’s been a wrenching year, and it may be a couple of years before it’s all over. I hope that the fact that I’m writing about business in no way deemphasizes the human costs—and the individual pain that so many have felt—that have been so central to the last year or more of our lives. Still, because providing musculoskeletal care is itself a compassionate gesture, I believe it’s reasonable—even in this moment—to talk about what it will take to help those who provide it stay afloat.

With that in mind, I believe the key strategies for financially surviving the pandemic—which may help others in a second wave of COVID-19 or another such crisis—involves preparation, modification, and execution.
**Preparation: More PPE and Vaccines, Less Patients**

Clinic administrative departments should be trained to coordinate the patient hospital visits and employee shifts to maintain a minimum number of personnel (usually directed by local government) on site [10]. While the goal of the clinical practice is to efficiently attend to as many patients as possible [6], during the COVID-19 pandemic, local practices must screen patients before allowing in-person consultations, which are generally limited to patients who need a preoperative screening, immediate postoperative visit, or have a suspected postoperative complication [9]. This sounds simple, but hospitals in the Asia-Pacific region rely on patient volume, and so the reduction in clinic and operating room cases seriously affected hospitals’ incomes [8]; this represents a grave concern because two-thirds of the orthopaedic surgeons in the region are engaged in private practice [7]. Many such practices—especially smaller ones owned by an individual or small group of physicians—were vulnerable, and some have closed permanently. Even corporate-owned private hospitals suffered substantial loss of income. One such hospital in Pakistan reported a 50% loss in orthopaedic department income during the pandemic [3]. But some survived, and a smaller number may thrive.

At the onset of pandemic, the Asia-Pacific region, like most of the world, faced a severe shortage of PPE. Even China, which manufactures most of the PPE in the world, faced acute shortages of PPE and testing kits. But starting in March 2020, countries like China, India, Vietnam, and Cambodia remarkably boosted their capacity to produce PPE. In 2 months, India became the second largest supplier of PPE in the world and remains the key exporter of low-cost PPE for developing countries in the region. Therefore, elective clinic and surgical teams should have an easier time securing an adequate supply of PPE and testing kits should a second wave of COVID-19 hit the region [12, 15]. With PPE distribution secured in most of the region, our attention now turns to the delivery of COVID-19 vaccines. Moody’s Analytics reported that the Indian government plans to inoculate nearly 300 million high-priority people, including health workers, the elderly, and those with higher comorbidities, by August 2021 [16]. This is a key development in the fight against COVID-19. Local immunization will help “soften the severity of the pandemic within the region” [16].

**Modification: Adopting Telemedicine and Accepting Social Media**

One of the key factors that can help maintain patient volume includes the adoption of telemedicine into routine practice. Research shows that telemedicine is efficacious and cost-effective, with comparable levels of patient satisfaction to an outpatient visit for patients with joint arthroplasty and those with sports injuries, spine disorders, and fractures undergoing nonoperative treatment [4, 11, 14]. My practice rarely used telemedicine prior to the pandemic. However, telemedicine is rapidly catching on in developed countries in the region. Indeed, most of my patients like the convenience and enjoy not being burdened with an unnecessary visit to a clinic. Although the present pandemic is the biggest healthcare crisis of our lifetimes, orthopaedic leaders responding with preparedness, effective protocol implementation, and use of telemedicine can help sustain clinical practices and even allow them to flourish. Telemedicine, however, remains an uncommon practice in developing countries in the region. We see its use namely in private/corporate hospitals, which cater to patients in the middle and upper economic brackets. To reach patients in rural areas, practices need to better utilize their social media feeds. Videos emphasizing COVID-19 safety measures at your hospital and patient testimonials could relieve anxiety among prospective patients. Providing customized patient education material online through YouTube, Facebook, and Instagram not only acts as an effective aid to telemedicine practice, but it attracts future patients who may live in rural areas where access to care remains a struggle.

**Execution: Logistics and Leadership**

In the Asia-Pacific region, keeping a clinic financially viable involves the ability to plan for the long-term while also having the capacity to adapt to unanticipated short-term changes. Not only does your clinic need the equipment to fight a pandemic, your staff needs to be properly prepared on how to run the clinic in the midst of one. Setting up logistics for proper amounts of PPE, vaccine distribution, telemedicine technology, and maintaining a prominent online presence are critical to sustaining a clinic’s financial stability. More than anything, managing a crisis in clinical practice requires planning, resilience, and effective leadership.

**Acknowledgment** The author would like to thank Dr. Prashant Meshram for his assistance in researching this topic.

**References**

1. Chan CYW, Chiu CK, Cheung JPY, Cheung PWH, Gani SMA, Kwan MK.
The impact of COVID-19 pandemic on spine surgeons: an Asia Pacific Spine Society (APSS) Survey. *Spine (Phila Pa 1976).* 2020;45:1285-1292.

2. Denyer S, Achenbach J. Researchers ponder why COVID-19 appears deadlier in the U.S. and Europe than in Asia. Available at: https://www.washingtonpost.com/world/researchers-ponder-why-covid-appears-more-deadly-in-the-us-and-europe-than-in-asia/2020/05/26/81889d06-8a9f-11ea-9759-6d20ba0f2e0e_story.html. Accessed March 8, 2021.

3. Hashmi P, Fahad S, Naqi Khan H, Zahid M, Sadruddin A, Noordin S. COVID-19 pandemic: economic burden on patients with musculoskeletal injuries in a tertiary care hospital of LMIC; retrospective cross sectional study. *Ann Med Surg (Lond).* 2020;60:5-8.

4. Jenkins JM, Halai M. CORR Synthesis: What evidence is available for the continued use of telemedicine in orthopaedic surgery in the post-COVID-19 era? *Clin Orthop Relat Res.* Published online August 06, 2020. DOI: 10.1097/CORR.0000000000001444.

5. Keshav K, Kumar A, Sharma P, Baghel A, Mishra P, Huda N. How much has COVID-19 pandemic affected Indian orthopaedic practice? Results of an online survey. *Indian J Orthop.* 2020;54:1-10.

6. Kim J, K. CORR® International—Asia-Pacific: 100 patients a day: teaching our rising stars how to be both busy and excellent. *Clin Orthop Relat Res.* 2017;475:1553-1556.

7. Kim TK. CORR® International - Asia-Pacific: Moving from university to private practice. *Clin Orthop Relat Res.* 2019;477:1796-1799.

8. Kim TK. CORR® International - Asia-Pacific: Poverty and its implications on orthopaedic care. *Clin Orthop Relat Res.* 2018;476:1154-1156.

9. Lal H, Sharma DK, Patralekh MK, Jain VK, Maini L. Outpatient department practices in orthopaedics amidst COVID-19: the evolving model. *J Clin Orthop Trauma.* 2020;11:700-712.

10. Meshram P. CORR Insights®: How did the number and type of injuries in patients presenting to a regional level I trauma center change during the COVID-19 pandemic with a stay-at-home order? *Clin Orthop Relat Res.* 2021;479:276-279.

11. Murphy EP, Fenelon C, Murphy RP, et al. Are virtual fracture clinics during the COVID-19 pandemic a potential alternative for delivering fracture care? A systematic review. *Clin Orthop Relat Res.* 2020;478:2610-2621.

12. Parvizi J, Gehrie T, Krueger CA, et al. Resuming elective orthopaedic surgery during the COVID-19 pandemic: guidelines developed by the International Consensus Group (ICM). *J Bone Joint Surg Am.* 2020;102:1205-1212.

13. Reardon S. The most worrying mutations in five emerging coronavirus variants. Available at: https://www.scientificamerican.com/article/the-most-worrying-mutations-in-five-emerging-coronavirus-variants/. Accessed March 8, 2021.

14. Rubinger L, Bhandari M. Cochrane in CORR®—Interactive telemedicine: effects on professional practice and health care outcomes. *Clin Orthop Relat Res.* 2020;478:1971-1973.

15. The Hindu. India becomes world’s second largest manufacturer of PPE body coveralls, next to China: Government. Available at: https://www.thehindu.com/news/national/india-becomes-worlds-second-largest-manufacturer-of-ppe-body-coveralls-next-to-china-government/article31643400.ece. Accessed March 8, 2021.

16. The Hindu. India, China set to lead vaccine distribution in APAC region: Moody’s Analytics. Available at: https://www.thehindu.com/business/Industry/india-china-set-to-lead-vaccine-distribution-in-apac-region-moodys-analytics/article33601529.ece. Accessed March 8, 2021.

17. Worldometer. COVID-19 coronavirus pandemic. Available at: https://www.worldometers.info/coronavirus/. Accessed March 8, 2021.