COVID-19 Moves Medicine into a Virtual Space

A Paradigm Shift From Touch to Talk to Establish Trust

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 \mathbf{S} urgical training and culture highlight the importance of the physical examination, of the power of touch, to determine diagnosis and treatment plans and to solidify the doctor-patient relationship. Despite the advent of technology capable of providing a secure platform for remote consultations, surgeons have been reluctant to abandon the physical examination and move into the realm of telehealth and virtual medicine. The COVID-19 pandemic, however, has forced surgeons to reevaluate their traditional paradigms of practice to provide appropriate care for surgical patients in the safest way possible. The pandemic has demonstrated the potential for virtual consultations; in doing so, it has highlighted that visits can occur remotely without necessarily limiting the quality of care that surgeons provide. This lesson should transform surgical practice even after the resolution of COVID-19.

Physical examination has played an integral part in diagnosis for centuries—to differentiate sources of abdominal pain, to palpate crackles of subcutaneous gas, or to feel an abnormal lump on a patient's neck. But, when Niels Thorkild Rovsing and Charles Benjamin Murphy described their eponymous physical examination signs, the computed tomography scan was still 70 years from development. Now, by the time patients reach their surgeon, the majority have undergone some sort of diagnostic test or imaging to narrow a differential diagnosis and to guide treatment. Although certain conditions still require a physical examination, the inconvenience and expense of office visits burden patients and may counterbalance the value of an in-person examination. During the pandemic, the added risk of exposure to SARS-CoV-2 tips the scales further in favor of virtual visits.

The doctor-patient relationship hinges on mutual respect and trust. In a world where online dating dominates the singles scene and video chatting with licensed therapists allows patients critical access to mental health care, surgeons should believe that their ability to establish a relationship based on trust does not require physical contact. Shouldn't it be possible for a surgeon to inspire her patients to believe in her ability during virtual visits where she faces the patient, his caregivers, and the electronic health record simultaneously? Might it, in fact, be easier to make meaningful connections with patients when one can see them on time, in the convenience of their home or place of

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work? Wouldn't it be more respectful and financially responsible to offer a visit free from wasted travel and waiting-room time?

Before the COVID pandemic, with diminishing reimbursements and the advent of the electronic health record, physicians were already spending less face-to-face time with patients in favor of more face-to-screen time. In addition, expensive parking fees or transportation costs, coupled with crowded waiting rooms, were the norm.2 To make time for medical visits, patients often needed to take time off from work, and some have faced the threat of unemployment to meet the demands of their medical needs.³ Telehealth dramatically reduces the time and economic burden of routine medical care^{2,4} and, in times of contagion, eliminates the risk of transmission of infectious diseases in overcrowded waiting rooms.

Medicine, like life, is a series of choices and trade-offs, and decisions are always made in the context of current societal norms. Practicing medicine in the unprecedented times of the current COVID-19 pandemic has changed the way doctors interact with their patients. The majority of states in the United States have issued "stay at home" orders, limiting citizens from anything other than essential activities. "Social distancing," or maintaining at least 6 feet of separation from others, and limiting interactions whenever possible, is the new norm. And, although seeking medical care is certainly considered essential, surgeons must reevaluate their traditional paradigms of practice to make medical care as safe as possible for their patients, their staff, and themselves.

Before the COVID-19 pandemic, the use of telemedicine in surgery was slowly starting to expand—from remote surgical consultations to postoperative care aimed at shortening hospital stays.^{5,6} By utilizing current remote technologies, including video-chats, phone calls, text messaging, and electronic medical records, surgeons are increasingly able to recreate almost every aspect of a patient visit aside from the physical examination. Yet, before the pandemic, telemedicine was neither widely available nor covered by insurance. Now, the need to reduce in-person patient interactions has accelerated the pace of its adoption. With the Centers for Medicare and Medicaid Services leading the way, parity between virtual and inperson visits is now, at least temporarily, a reality.

Moving to the virtual space has recognized limitations. For example, telehealth is likely inappropriate for patients in need of emergent or intensive services. Furthermore, access to care in the virtual space requires that the patient has a knowledge of and access to the needed technology. These constraints might widen health disparities that disproportionately affect disadvantaged communities. However, deliberate preparation and innovation could easily establish local points of access within senior centers, local pharmacies, or community centers complete with (properly protected) health care workers to offer basic technical and medical services. Reduced demands for medical assistants and office staff in the era of telemedicine will create a supply of available medical personnel. Such advances might even result in the secondary benefit of improved access for at-risk populations.

COVID-19 has forced routine medical care, including nonoperative surgical care, into a virtual space reliant on telemedicine. This move to telemedicine, imposed on us by circumstance, may

TABLE 1. Medicine in the Virtual Space: A Paradigm Shift From Touch to Talk

I greeted Mrs X promptly at 8:00 AM, she seemed relaxed as we introduced ourselves. She had an easy smile that extended from her mouth and out across her eyes. I could see the bulge in her neck. I was able to watch it move as she swallowed. Her voice was clear and strong, her breath nonlabored. We had never met before and yet, we were both comfortable discussing life's mysteries and working through the fears and anxieties of intimate life events. We adjusted the camera, and discussed her upcoming surgery...

ultimately facilitate a transition to a safer, more efficient approach to care. A paradigm shift from touch to talk to establish trust can liberate surgery, at least in part, from the inefficient and costly bricksand-mortar business of medical care in favor a new normal that includes the efficiencies and advantages of telehealth as a routine approach. Telemedicine cannot replace the lives of patients and health care workers lost to the COVID-19 pandemic but, perhaps it will allow us to emerge from the devastation with a safer, more efficient approach to care (Table 1).

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