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pediatric major index cases for urology residents, although the minimum case volume requirements (30 minor, 15 major) were still being met and exceeded.¹

While it is reassuring that, for the most part, COVID did not adversely affect urology resident case log volumes, this is but one part of the educational content of residency training that was disrupted during the pandemic. Rosen et al demonstrated via a questionnaire study of urology program directors that multiple aspects of training were affected by COVID including patient contact time, redeployment into other areas of the hospital, didactics, and resident wellness.² While not a primary focus of this study, previous studies have questioned the relationship between case log minimum volumes and eventual surgical proficiency and competency. In a correlative study, Cruz et al demonstrated that ACGME minimum case log volumes do not guarantee surgical competency in independent surgical practice after training and may not reflect current urologic procedural demand.³ We are all striving to slowly recover from the profound effects of COVID and seek a return to normalcy, both in the world in general and specifically in this study, for urologic residency training. For those of us involved with graduate medical surgical training programs, we will need to carefully assess and balance not only volume-based case log requirements but also competency-based requirements, in order to ideally prepare graduates for eventual independent practice in the future.

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EDITORIAL COMMENT



The COVID-19 pandemic has affected many aspects of our lives, both big and small, over the past 2+ years. During the initial wave of worldwide infections prior to a vaccine becoming available, most, if not all, hospitals in the United States temporarily halted all elective, nonemergent surgical procedures for several months. This included the teaching hospitals of Accreditation Counsel for Graduate Medical Education (ACGME)-accredited surgical residencies and presumably may have had an effect on total surgical index case volumes for trainees during this time period. In this timely study by Daily et al, the authors obtained case log data for graduating urology residents in the US before and during the COVID pandemic to compare total volumes in order to objectively assess the possible impact of the virus on trainees' surgical experience. Their results showed that there were no statistically-significant decreases in case volumes for all adult index categories and pediatric minor cases; there was a decrease in the case volumes for pediatric major index cases during COVID as compared to before COVID. It is unclear, however, whether this decline in pediatric major index cases was either clinically-significant or a direct result of COVID, since the absolute numerical differences were only in the single-digits: minor cases (6 fewer cases on average) and major cases (4 fewer cases). As the authors acknowledge, one study published a year prior to COVID had already shown a decrease in overall

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The COVID-19 pandemic has been an unprecedented event in the modern world with ramifications felt throughout healthcare, economies, global relations, and society in general. The effect on healthcare cannot be understated. Within our relatively small world of urology resident education the anxiety was palpable as many hospitals reduced the number of operations, sometimes completely stopping all elective surgeries. In some hard-hit areas, urology residents were pulled to cover other services in need of help.

Thankfully, Daily et al have demonstrated that in adult urology there was no significant difference in surgical volume for graduating urology residents before vs during the COVID-19