

# Letters of Correspondence: COVID-19 and Student Advocacy, Medical Education, Surge Response, and Testing

## The COVID-19 Crisis Response Will Benefit From Student Advocacy

Ryan Koski-Vacirca, Danish Zaidi

Address correspondence to Ryan Koski-Vacirca, Wake Forest School of Medicine, 475 Vine St, Winston-Salem, NC 27101 (rkoskiva@wakehealth.edu).

**To the Editor**—The novel coronavirus pandemic accelerated the development of overdue health care solutions in the United States. Proposals have included a new public insurance program, a plan to permanently shore up the national equipment stockpile, and new funding for rural hospitals, among many others. But a glut of interest groups has lobbied aggressively to shape the pandemic response [1, 2].

As future practitioners of public health, bioethics, and medicine, we know that one principle is clear: students should lead the charge in this critical moment to enact lasting federal, state, and local policy improvements for all Americans. Ultimately, students are best positioned to advocate for the most important stakeholder: the patient.

The best public health practice uses a moment of crisis as an opportunity for long-term change. This is the “triple axel” of public health practice: establishing credibility, explaining a problem, and fighting for a realistic solution [3]. Academics, reporters, and others have established credibility at a moment when messaging from government officials is confused and sometimes contradictory. Experts have also explained the overflowing cornucopia of latent problems in our health care system that COVID-19 brought to the fore: underfunded rural hospitals, treatments that patients cannot afford, and dismantled city and county public health infrastructure [4]. The American public now deserves public policy solutions to support population health—Medicaid and Medicare expansion, surprise billing regulation, and appropriately funded public health agencies.

But the third element of the triple axel, fighting for realistic policy solutions, is the most difficult to land. It is here that students and student groups should lend their voices to guide elected leaders’ actions. To the public, students are unsullied by negative behaviors that are often a result of training and practicing in our health care system, and they are less likely than other groups to face conflicts of interest [5]. Additionally, in the last decade advocating through social media became increasingly common, and students are using social media platforms to more actively work toward social justice causes [6]. Recently, the American Medical Association formally left a lobbying group prevent-

ing Medicare expansion [7]. The decision came after the AMA’s Medical Student Section introduced a resolution demanding the organization change its position [8]. More advocacy efforts like this one from students could increase health care access and affordability for all Americans.

It has been said that one should never let a serious crisis go to waste. By any measure, the novel coronavirus pandemic is the largest public health crisis of our lifetimes. In this moment, students should trust in their unique ability to advocate for the public. It is their voices that are so often lost. *NCMJ*

**Ryan Koski-Vacirca, MPH MD candidate**, Wake Forest School of Medicine, Winston-Salem, North Carolina.

**Danish Zaidi, MD, MTS, MBE** resident physician, Yale-New Haven Hospital and Yale School of Medicine, New Haven, Connecticut.

### Acknowledgments

Potential conflicts of interest. The authors report no conflicts of interest.

### References

- Mullins B, Mann T. Lobbyists Pile On to Get Wins for Clients Into Coronavirus Stimulus Package. *WSJ.com*. <https://www.wsj.com/articles/lobbyists-pile-on-to-get-wins-for-clients-into-coronavirus-stimulus-package-11584792000>. Updated March 21, 2020. Accessed May 30, 2020.
- Vogel KP. The Race for Virus Money Is On. Lobbyists Are Standing By. *NYTimes.com*. <https://www.nytimes.com/2020/03/28/us/politics/coronavirus-money-lobbyists.html>. Published March 28, 2020. Accessed May 30, 2020.
- Sharfstein JM. *The Public Health Crisis Survival Guide: Leadership and Management in Trying Times*. New York, NY: Oxford University Press; 2018.
- Specter M. The Coronavirus and the Gutting of America’s Public-Health System. *NewYorker.com*. <https://www.newyorker.com/news/daily-comment/coronavirus-and-the-gutting-of-americas-public-health-system>. Published March 17, 2020. Accessed May 30, 2020.
- Mahood SC. Medical education: Beware the hidden curriculum. *Can Fam Physician*. 2011;57(9):983-985.
- Anderson M, Toor S, Rainie L, Smith A. Activism in the Social Media Age. Pew Research Center website. <https://www.pewresearch.org/internet/2018/07/11/activism-in-the-social-media-age/>. Published July 11, 2018. Accessed May 30, 2020.
- Diamond D, Cancryn A. AMA drops out of industry coalition opposed to Medicare expansion. *POLITICO.com*. <https://politi.co/2yZHLwc>. Published August 15, 2019. Accessed May 30, 2020.
- Carr D. Why Doctors Are Fighting Their Professional Organization Over Medicare for All. *TheNation.com*. <https://www.thenation.com/article/politics/ama-medicare-insurance/>. Published February 6, 2020. Accessed May 30, 2020.

Electronically published January 4, 2021.

*N C Med J*. 2021;82(1):83-86. ©2021 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved. 0029-2559/2021/82119

## Impact of the First Case of COVID-19 and Statewide Executive Orders on Regional “Code Stroke” Trends During North Carolina’s First COVID-19 Surge

Lauren Macko, Tanushree Prasad, Rahul R. Karamchandani, Sam Singh, Andrew W. Asimos

Address correspondence to Lauren Macko, Atrium Health’s Carolinas Medical Center, 1000 Blythe Blvd, Charlotte, NC 28203 (lauren.macko@atriumhealth.org).

**To the Editor**—Atrium Health’s Stroke Network experienced the same decreased trend in suspected acute stroke (“code stroke”) presentations during the first wave of COVID-19 as has been widely reported [1, 2]. Previous reports speculated that state emergency declarations may have caused the decrease and rebound in trends experienced. We sought to explore the relationship between North Carolina’s statewide executive orders and our code stroke activation volume to better understand what contributes to our population’s decisions about whether to seek emergency treatment for a suspected stroke.

We conducted an interrupted time series analysis to determine the impact of the first reported case of COVID-19 in North Carolina and the ensuing statewide executive orders on weekly code stroke trends across our regional stroke network’s 20 facilities during a 33-week period (3,740 code stroke activations from December 8, 2019 to July 25, 2020).

We performed two interrupted time series analyses using different starting points for the first intervention. Starting point 1 was the first COVID-19 case. Starting point 2 was the first statewide executive order, which prohibited mass gatherings and closed public schools. For both models, the first time interval ended with the second statewide executive order, which increased social restriction (the so-called “stay-at-home” order). Most of the downward trend in code stroke activation volume occurred after the first COVID-19 case ( $p = .0029$ ), not after the first executive order. After the second executive order, which increased social restrictions, there was a significant increased trend in code stroke activations ( $p = .0047$ ), while the phase 1 and 2 reopening executive orders were not associated with significant increases in weekly code stroke activations.

Our analysis indicates the decreased trend in code stroke activations was seen prior to the first statewide executive order; rather, the decrease began after the first reported COVID-19 case in North Carolina. The decreases in code stroke activation volume were not significantly associated with the restrictive executive orders. Similarly, the lessening of those restrictions was not associated with a significant rebounding trend. One can conclude the population’s decisions about whether to seek emergent medical attention for a suspected acute stroke during the first surge of the COVID-19 pandemic were not driven by state-mandated declarations. Alternatively, our analysis suggests the community’s perception of the pandemic is more influential than

governor-issued executive orders. Having knowledge of these influences provides the opportunity for more directed community education on the importance of seeking emergent medical care during a pandemic. NCMJ

**Lauren Macko, MSN, RN, ACCNS-AG, CCRN, SCRN** clinical nurse specialist, Neurosciences Institute, Atrium Health, Charlotte, North Carolina.

**Tanushree Prasad, MA** senior statistician, Atrium Health, Charlotte, North Carolina.

**Rahul R. Karamchandani, MD** neurologist, Department of Neurology, Neurosciences Institute, Atrium Health, Charlotte, North Carolina.

**Sam Singh, MS** senior clinical analyst, Atrium Health, Charlotte, North Carolina.

**Andrew W. Asimos, MD** medical director, Carolinas Stroke Network, Neurosciences Institute, Atrium Health, Charlotte, North Carolina.

### Acknowledgments

Potential conflicts of interest. The authors report no conflicts of interest.

### References

1. Hsiao J, Sayles E, Antzoulatos E, et al. Effect of COVID-19 on emergent stroke care. *Stroke*. 2020;51(9):e2111-e2114. doi: 10.1161/STROKEAHA.120.030499
2. Uchino K, Kolikonda MK, Brown D, et al. Decline in stroke presentations during COVID-19 surge. *Stroke*. 2020;51(8):2544-2547. doi: 10.1161/STROKEAHA.120.030331

---

## COVID-19 Impacts University of North Carolina Medical Students’ Perception of the Future

Fei Chen, Robert S. Isaak, Beat D. Steiner, Susan M. Martinelli

Address correspondence to Susan M Martinelli, University of North Carolina, N2201 UNC Hospitals CB #7010, Chapel Hill, NC 27599 (smartinelli@aims.unc.edu).

**To the Editor**—The clinical clerkship is a crucial transition point in a medical student’s training. Unfortunately, senior medical students have been limited in their clinical exposure in the face of the COVID-19 pandemic [1]. In April 2020, we sent surveys to third-year medical students at the University of North Carolina School of Medicine and their family members. We observed a drastic change in students’ perceptions of the impact of the pandemic health crisis on their career. Prior to COVID-19, 44.7% of students did not think a pandemic would have an effect on their medical education and 29.8% perceived a minimal negative effect. When COVID-19 was in the early outbreak stage in the United States, more than half of the same group of students perceived the negative effects would be moderate, while only 2.1% perceived COVID-19 would have no effect on their educational experience. In terms of potential future pandemics, 72.9% of students felt the effect on their career would be negative. Similar results and changes in perception were observed from the medical students’ family members.

Our small-scale survey findings reveal an important message: concerns over the influence of a potential pandemic on medical students’ education and careers were not on the radar prior to the COVID-19 outbreak. Yet, our students are

concerned about both the effects of COVID-19 on their education and the possible threats of a future pandemic affecting their medical career.

Despite notable increases in clinical teachers' comfort level with virtual learning environments due to the educational adaptations put into place as a result of the pandemic [2, 3], our students' concerns over their medical education are substantial. The movement to a virtual learning environment preferentially affects preclinical students. However, we must commit to providing strong clinical experiences for students in this challenging time as well. One of the key challenges is how to instill a public health mindset in our students. Behavioral change is difficult, but it is critical that students learn to help change behavior both among each other and among patients. Providing mental health support to students as they face an uncertain world is more important than ever, as there is a danger that anxiety could significantly interfere with students' learning if we do not provide them with adequate resources. We also need to remember the lessons learned from COVID-19 so that we have a way to maintain a stable learning environment if we are to face something as disruptive in the future. **NCMJ**

**Fei Chen, PhD** assistant professor, Department of Anesthesiology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

**Robert S. Isaak, DO, FASA** associate professor of anesthesiology and assistant residency program director, Department of Anesthesiology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

**Beat D. Steiner, MD, MPH** professor and senior associate dean for medical student education, Department of Family Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

**Susan M. Martinelli, MD, FASA** professor of anesthesiology and residency program director, Department of Anesthesiology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

### Acknowledgments

This project received funding through the Group on Educational Affairs National Grant Program as well as through the University of North Carolina Department of Anesthesiology.

Potential conflicts of interest. The authors report no conflicts of interest.

### References

1. Whelan A, Prescott J, Young G, Catanese VM, McKinney R. Guidance on Medical Students' Participation in Direct In-person Patient Contact Activities. Washington, DC: Association of American Medical Colleges; 2020. <https://www.aamc.org/system/files/2020-04/meded-April-14-Guidance-on-Medical-Students-Participation-in-Direct-Patient-Contact-Activities.pdf>. Published August 14, 2020. Accessed September 28, 2020.
2. Emanuel EJ. The inevitable reimagining of medical education. *JAMA*. 2020;323(12):1127-1128. doi: 10.1001/jama.2020.1227
3. McMaster D, Veremu M, Santucci C. COVID-19: Opportunities for professional development and disruptive innovation. *Clin Teach*. 2020;17:238-240. doi: 10.1111/tct.13175

---

## Preoperative Screening for COVID-19

*E. Hope Weissler, Melina R. Kibbe, John W. F. Mann, Harry Caulfield, Charles Harr, Amy N. Hildreth, John F. Krahnert, Caroline E. Reinke, Jonathan R. Snyder, Janet E. Tuttle-Newhall, Jay Wyatt III, Cynthia K. Shortell*

Address correspondence to C. K. Shortell, DUMC Box 3538, Durham, NC 27710 (Cynthia.shortell@duke.edu).

**To the Editor**—As surgical leaders at 11 North Carolina health systems, we write to draw your attention to the matter of safe surgical care during the ongoing SARS-CoV-2 pandemic. The ongoing spread of SARS-CoV-2 has required health care systems to balance caring for patients with SARS-CoV-2 with community need for surgical care. By North Carolina executive order, all preoperative patients must be screened for symptoms of SARS-CoV-2 prior to surgery, but serological testing of asymptomatic patients is not required [1]. Health care institutions must therefore decide how to balance allocation of limited testing resources, protection of perioperative staff, and provision of needed surgical care.

We sought to understand how North Carolina health systems were approaching this dilemma by describing preoperative testing strategies and results through a survey of 14 North Carolina health systems. We received 11 responses: nine health systems were systematically screening asymptomatic patients for SARS-CoV-2 prior to non-time-sensitive surgeries and could provide the number of tests done and proportion of positive test results.

We divided the reporting period in two in response to an increase in the background prevalence of SARS-CoV-2 in North Carolina in late May of 2020 to assess whether the proportion of positive preoperative tests reflected the broader increase. The first reporting period began when each institution implemented its asymptomatic testing policy and ran through late May; this period spanned a median of 16 days with a range of 12-55 days. Nine institutions provided preoperative testing data in the first reporting period. The second reporting period ran from late May through late June/early July, spanning a median of 41 days (range 36-42 days) and including data from seven institutions.

During the first reporting period, 28,353 tests were reported, with positivity rates ranging from 0% to 1.43% (average across all health care systems: 0.65%). During the second reporting period, 53,745 tests were reported, with positive rates ranging from 0.31% to 1.35% (average: 0.61%). Four of seven institutions reported higher positive test rates during the second time period, while 3 of 7 institutions reported lower positive test rates.

Timely performance of non-urgent/non-emergent surgeries must be balanced against preventing markedly worse outcomes among patients with unknown SARS-CoV-2 infections who undergo surgery [2, 3]. Building preoperative testing capacity is one strategy for achieving both. Decisions about preoperative asymptomatic SARS-CoV-2 testing are complex and will continue to be reassessed over time.

The descriptive results presented here are limited by data availability and the heterogeneity of testing policies between institutions; they are therefore not sufficient to provide support for or against a specific preoperative testing strategy, but are rather intended to stimulate institutional introspection. Evidence suggests that SARS-CoV-2 will continue to affect health care delivery through winter, into spring, and

possibly beyond [4]. We suggest that North Carolina health care systems collaborate to further investigate the role of preoperative testing in the safe provision of surgical care in order to generate more consistent testing policies that are responsive to changes in local SARS-CoV-2 incidence. **NCMJ**

**E. Hope Weissler, MD** resident, Department of Surgery, Duke University School of Medicine, Durham, North Carolina.

**Melina R. Kibbe, MD, FACS, FAHA** chair, Department of Surgery, University of North Carolina School of Medicine, Chapel Hill, North Carolina.

**John W. F. Mann, MD, FACS** president and COO, Novant Health Clemmons Medical Center, Novant Health Medical System, Winston-Salem, North Carolina.

**Harry Caulfield, MD, FACS** surgery service line physician administrator, CaroMont Regional Medical Center, Gastonia, North Carolina.

**Charles Harr, MD, FACS** chief medical officer, WakeMed Health and Hospitals, Raleigh, North Carolina.

**Amy N. Hildreth, MD, FACS** general surgery residency program director, Department of Surgery, Wake Forest School of Medicine, Winston-Salem, North Carolina.

**John F. Krahnert, MD, FACS, FACC** chief medical officer, FirstHealth of the Carolinas, Pinehurst, North Carolina.

**Caroline E. Reinke, MD, FACS** surgery quality officer, Atrium Health, Charlotte, North Carolina.

**Jonathan R. Snyder, MD** chief medical officer, Hugh Chatham Memorial Hospital, Elkin, North Carolina.

**Janet E. Tuttle-Newhall, MD, FACS** chair, Department of Surgical Immunology and Transplantation, Brody School of Medicine, East Carolina University, Greenville, North Carolina.

**Jay Wyatt III, MD, FACS** chief medical officer, The Moses H. Cone Memorial Hospital, Cone Health, Greensboro, North Carolina.

**Cynthia K. Shortell, MD, FACS** executive vice chair, Department of Surgery and chief, Division of Vascular and Endovascular Surgery, Duke University School of Medicine, Durham, North Carolina.

### Acknowledgments

Funding sources. E.H.W. was supported in this work by the Duke Resident Physician-Scientist Program - NHLBI (1R38HL143612)

Potential conflicts of interest. The authors report no conflicts of interest.

### References

1. Cohen MK. Letter to Hospital and Ambulatory Surgery Center Leaders. Raleigh, NC: North Carolina Department of Health and Human Services; 2020. <https://files.nc.gov/covid/documents/guidance/healthcare/COVID-19-Elective-Surgeries-Final.pdf>. Issued May 1, 2020. Accessed October 20, 2020.
2. COVIDSurg Collaborative. Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection: An international cohort study. *Lancet*. 2020;396(10243):27-38. doi: 10.1016/S0140-6736(20)31182-X
3. Doglietto F, Vezzoli M, Gheza F, et al. Factors associated with surgical mortality and complications among patients with and without coronavirus disease 2019 (COVID-19) in Italy. *JAMA Surg*. 2020;155(8):1-14. doi: 10.1001/jamasurg.2020.2713
4. Centers for Disease Control and Prevention. COVID-19 Forecasts. Cases. CDC website. <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/forecasts-cases.html>. Updated October 15, 2020. Accessed October 20, 2020.