Covid-19 and Racial Disparities: Moving Towards Surgical Equity

Sidra N. Bonner, MD, MPH\textsuperscript{1}, Glenn K. Wakam, MD\textsuperscript{1}, Gifty Kwayke, MD, MPH\textsuperscript{1}
John W. Scott, MD,MPH\textsuperscript{1,2}

\textsuperscript{1}Designates equal contribution to authorship
\textsuperscript{1}Department of Surgery, University of Michigan, Ann Arbor, MI
\textsuperscript{2}Center for Healthcare Outcomes and Policy, Ann Arbor, MI

Correspondence:
Glenn K. Wakam, MD
Department of Surgery, University of Michigan
1500 E. Medical Center Dr.
Ann Arbor, MI 48109
Phone: 805-907-1260
E-mail: gwakam@med.umich.edu

Manuscript word count:1,206
Figures: 1
References: 12

The authors do not report any conflicts of interest related to this study.
The COVID-19 pandemic has resulted in dramatically disproportionate death rates among African American and Latino communities. While the numbers are alarming, they should not surprise surgeons. There are decades of data demonstrating worse surgical outcomes for racial minorities. The past has been an unfortunate predictor for how an acute shock like COVID-19 would manifest within chronically marginalized communities in the form of delayed access and poor outcomes. The pandemic has created a large scale disruption in the health care delivery and as surgeons, it is imperative we evaluate our potential to either perpetuate or mitigate longstanding racial disparities as we rebuild our surgical delivery systems. In this viewpoint, we provide a brief overview of surgical disparities and highlight actionable interventions for surgeons, surgical departments, and surgical delivery systems to promote more equitable surgical care.

At the onset of the pandemic, COVID-19 was thought to be the “ultimate equalizer”—affecting all races, religions, and communities equally. Instead, COVID-19’s disproportionate impact on African American communities has illuminated the vast disparities in United States healthcare. Alarming data has emerged from two early “hot spots,” in Michigan, African Americans make up 14% of the population, but account for 40% of the state’s Covid-19 deaths. In Louisiana African Americans make up 40% of the population, but account for a shocking 70% of the state’s COVID-19 deaths. These racial disparities are not a result of differential pathophysiology of COVID-19, but rather, a reminder of long-standing disparities. The 2002 landmark Institute of Medicine report, Unequal Treatment, clearly demonstrated that racial and ethnic minorities receive lower quality of healthcare, even when controlling for access-related factors, such as insurance status or income.

Over the last 20 years, numerous studies have demonstrated disparities among surgical patient populations ranging from children with appendicitis to adults with pancreatic cancer. The forces driving the disparities seen with COVID-19 infections and deaths are the very same forces behind the disparities in access and outcomes occurring in our clinics and operating rooms every day. Social determinants of health, access to care, and implicit bias are not distributed equally in the United States, so it is unsurprising that the consequences of the pandemic are not distributed equally either. As COVID-19 threatens to completely upend the way we deliver surgical care, we have an opportunity to rebuild our system to promote health equity. The redesign we propose will require accountability and action at the level of individual surgeons, surgical departments, and entire healthcare delivery system (Figure 1).

Surgeon-Level Actions:
Despite decades of literature highlighting surgical disparities, only 37% of surgeons surveyed thought that racial/ethnic disparities exist within healthcare and only 4% reported witnessing disparities within their own practice. While 37% is disappointingly low, it does show a substantial amount of surgeons acknowledge disparities, but only a minuscule amount believe this disparities are present in their personal practice. This pandemic is a reminder these disparities are ubiquitous and almost certainly affect the majority of surgical care. Disrupting
this discordance between the reality of our patients’ outcomes and our own beliefs can be
difficult because it requires admitting that we are either actively or passively a part of the
problem. Surgeons must actively seek out data to identify potential disparities among their own
patient populations, participate in targeted efforts to mitigate them, and learn from national
collaboratives. Surgical inequity should be viewed through the same quality improvement lens
our profession uses to monitor other outcome metrics (e.g. surgical site infections, anastomotic
leaks). The first step in any quality improvement process is collecting pertinent data.

Tangible interventions could include (1) assessment of baseline awareness of disparities using
the Awareness, Reflection, Engagement, Action (AREA) Survey7, (2) evaluation of our individual
patient outcomes by race, and (3) engagement with the American College of Surgeons’
MEASUR (Metrics for Equitable Access and Care in Surgery) collaborative aimed at reducing
disparities in surgical care.

**Surgical Department and Practice-Level Actions:**

Leaders of surgical departments and provider groups should make mitigating disparities
a strategic priority for sustainable change. This must begin with data collection and monitoring
of disparities within departments and surgical divisions, paired with equally rigorous evaluation
of intervention effectiveness. These efforts can build on previously established infrastructure
utilized for departmental quality and safety improvement initiatives. At multiple Cancer centers
an intervention including Electronic Health Record alerts, feedback of data stratified by race to
teams, and expanded nursing reduced the Black-White treatment gap and improved care for all
patients with early stage non-small cell lung cancer.8 Surgery departments and provider groups
should also work to ensure the diversity of their providers reflect the population being served.
Data show that increasing the diversity of providers, improves the comfort level of white
providers in treating minority patients.9 Furthermore, evidence shows minority patients are
more satisfied with race-concordant visits, report their physicians as more engaged and
responsive to their needs, and more likely to agree to more invasive and non-invasive
preventative care with race-concordant doctors.10,11 A randomized control trial concluded
increasing diverse doctors could reduce disparities in cardiovascular mortality by 19%.11

Surgical leaders can advance equity by: (1) collecting department/division-level data on surgical
outcomes and patient experience and stratifying by race, income, insurance status, (2) creating
surgical equity committees to implement and evaluate equity-centered interventions, and (3)
prioritizing recruiting/retaining diverse faculty, and consider health equity focused research and
organizational diversity work in promotion equivalent to traditional metrics.

**System-Level Actions:**

Collaboration between surgical delivery systems and public health institutions are
needed to take on the social determinants of health disparities and to re-imagine the meaning
of “access” to care. As surgeons, we may often view ourselves as insulated from the impact that
unstable housing, neighborhood poverty, or limited access to transportation have on our
patients. However, we encounter the downstream impacts of these issues in the form of delayed diagnoses, missed clinic appointments, and hospital readmissions. Innovative programs such as the San Francisco General Hospital Wraparound Project, which provides high risk patients following intentional injuries intensive case management and connection to community based resources, exemplifies a model of what is possible at the juncture of surgery and public health\textsuperscript{12}

Systems-level actions should include: (1) creation of regional surgical collaboratives to mitigate disparities in access to surgical services and outcomes, (2) use of the Community Health Needs Assessment mandated under the Affordable Care Act to build community based partnerships that reduce financial and non-financial barriers to surgical care, and (3) establishment of relationships with public health and insurance agencies to assess referral networks, geographical distribution of sub-specialists, and utility of telemedicine to improve access to surgical care.

As conversations regarding transformation to a more equitable health system occur in the aftermath of the COVID-19 pandemic, surgeons cannot be idle bystanders. The same patients dying disproportionately of COVID-19 are our same patients, who present with locally advance colorectal cancer, are listed less frequently for kidney transplants, and who are more likely to receive an amputation for peripherally arterial disease. We must acknowledge that our individual and collective passiveness towards eliminating these disparities has contributed to their persistence across the decades. The root causes of disparities in hospitalizations and deaths related to COVID-19 are not new and we cannot miss the opportunity to emerge from our current crisis and redesign a more just and equitable system of surgical care.
Figure 1. Potential Actions to Mitigate Surgical Disparities at the Surgeon, Departmental, and Systems Levels

**Surgeon**
- Assess Baseline Awareness of Health Disparities
- Evaluate Patient Outcomes by Race
- Explore ACS MEASUR Collaborative

**Surgical Department**
- Implement Data Collection and Monitoring System
- Develop Surgical Equity Committee
- Prioritize Workforce Diversity and Value Equity Related Work

**System Wide**
- State Level Surgical Equity Collaboratives
- Community Health Needs Assessments for surgical care
- Partnerships with local Public Health and Insurance Agencies
References:


