Disparities in Cancer Outcomes Due to COVID-19—
A Tale of 2 Cities

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The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which causes the disease coronavirus 2019 (COVID-19), has ravaged the United States since the first case was documented in Washington State in January 2020. By early March, the first case of COVID-19 was confirmed in New York. From the very first case to present day, it has become increasingly clear that densely populated cities bear the brunt of this disease. In New York City as of July 7, 2020, approximately 214,000 cases and 18,000 deaths have been documented. While COVID-19 has had a worldwide impact, suspicions about its disproportionate effects on minority populations have now been confirmed with the release of data stratified by race and ethnicity. Within New York, we are witnessing 2 distinct trajectories and risk groups defined along the lines of race and socioeconomic status. As of July 7, 2020, the age-adjusted death rate for Hispanic and Black patients is twice that of White patients.1 Additionally, the Bronx, Queens, and Brooklyn each have twice the number of cases per 100,000 individuals as Manhattan and 3 to 4 times the number of cases as Staten Island. The reasons for these disparities have been discussed at length and include rates of preexisting comorbidities, a majority of the population employed in essential blue-collar jobs, living conditions, health literacy, and access to health care.2

The impact of these changes on already well-established cancer care disparities is unknown but potentially devastating. At this time, oncologists have had to make difficult decisions weighing the benefits of treatment against the risks of COVID-19 infection and the increased risk of death among patients with cancer. Surgeries have been postponed, and chemotherapy and radiotherapy regimens have been delayed or altered to expedite treatment and minimize risk of exposure to coronavirus. It remains unclear the extent to which active or prior cancer diagnosis influences one’s risk of COVID-19 infection. In a study of 1099 Chinese patients, cancer patients comprised 1% of COVID-19 cases. However, in initial reports from New York City, patients with cancer represent 6% of COVID-19 cases and 8% to 9% of those deemed critically ill or requiring mechanical ventilation. Moreover, patients with non-small cell lung cancer comprised more than half of COVID-19 cancer cases, suggesting differing susceptibilities based on the primary disease.3

Nationwide, the breast cancer mortality rate is 40% higher for Black patients compared with White patients. In New York City, this inequity has worsened over time, increasing from 19% to 27% between 2005 to 2014. Similarly, the cervical cancer mortality rate is 23% higher for Hispanic women and 71% higher for Black women as well as for those residing in poorer neighborhoods. Black men are also more likely to die of a multitude of malignant conditions including prostate, lung, and colon cancer.4

As academic clinicians working within underserved communities, we are convinced that the COVID-19 pandemic will exacerbate preexisting cancer disparities and define distinctly different trajectories along race and socioeconomic divisions for patients with cancer in the same city. Our concerns are based on realities such as minorities being more likely to have essential blue-collar jobs without the luxury of working from home. The need to work outside the home at this time increases one’s risk of exposure to SARS-CoV-2, developing COVID-19, and dying of the disease. Minorities are also more likely to work lower-income jobs that provide minimal or no health insurance coverage. Both the currently employed patient who has to go outside the home to work during a pandemic and risk developing COVID-19 and the underinsured patient who may lose their job and health insurance as a result of the pandemic are at risk of having their cancer care further delayed.

The current health crisis has increased the use of telemedicine, but barriers such as inequity in access to technology put minority patients at risk of fractured care and being lost to follow-up. Although Pew research reports that 81% of Americans own smartphones,5 studies have demonstrated that minorities, individuals with less education, and those in lower socioeconomic classes are less likely to engage in telemedicine activities.6 Other barriers, such as lower rates of health care literacy, prevent patients from effectively advocating for themselves. All these variables and stressors are likely to worsen their cancer outcomes. Even though the current health crisis is caused by an infectious disease and most patients will recover, the increased rates of the infection among minority populations increases the risk of patients with cancer developing COVID-19, leading to cancer treatment delay and likely worsening outcomes.

To mitigate the potential detrimental effects of COVID-19, we have to be proactive. First, we must commit to completing the cancer care of patients whose treatment was delayed as soon as feasible. The economic ramifications of COVID-19 will disproportionately affect those in lower-income blue-collar jobs; job loss frequently comes with a loss of health insurance. We cannot allow patients already within our system at the time of the pandemic to experience treatment delays due to an abrupt change in their employment status. Through judicious use of patient navigation and tracking systems, we can closely follow all patients. For patients with a suspect mammogram...
result, diagnosis of cancer on biopsy, or surgery or chemotherapy previously scheduled, it behooves us to administer the appropriate care even though they may have lost their insurance and the ability to pay. Some of this cost may be absorbed through funding at the federal, state, or hospital level.

Second, mechanisms must be established to track patients within our systems. As stated earlier, in the midst of the pandemic, there was a rapid adoption of telemedicine with routine in-person follow-up visits postponed or converted to telephone or telemedicine appointments. However, telemedicine is not equally accessible, and patients without internet access or the technological know-how to use these platforms can be easily lost to follow-up. It will be important to implement aggressive follow-up strategies using nurse navigators, community liaisons, social workers, and other capable parties. It is not uncommon for patients to assume all is well because no one followed up with results or to schedule appointments. Sadly, this is particularly true for minority patients, who are already less likely to receive follow-up for abnormal test results.7

Finally, we must address the psychological toll that all patients are likely to suffer. Stress worsens cancer outcomes and efforts must be made to mitigate the emotional toll of the pandemic. Patients may be suffering from anxiety due to treatment delay, trauma caused by the deaths of family and friends due to COVID-19, and appropriate concerns about their risk of infection and subsequent morbidity and mortality. Screening for depression, anxiety, and other psychological conditions as well as referring patients for appropriate counseling will be key, especially for patients who are reluctant to voice their concerns during cancer treatment.

We call on our colleagues in other cities and states to join us in advocating locally and nationally for measures to mitigate the potential impact of COVID-19 on preexisting cancer treatment disparities. We also urge our peers to engage in research efforts to analyze this impact within their institutions or through registries like that launched by the American Society of Clinical Oncology. We cannot afford to simply watch this tragedy of inequity unfold and further divide our city. We must be proactive.

ARTICLE INFORMATION
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REFERENCES