

ASO Author Reflections: Same but Different: Implications of Surgical Delays for Breast Cancer Patients Treated in NYC Public Hospitals During the COVID-19 Pandemic

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It is widely known that increased time to surgery increases patient mortality for patients with breast cancer.^{1,2} During the first wave of the COVID-19 pandemic, there was a government-mandated, operating-room shutdown in the spring of 2020. As a result, there was great concern about increased mortality in breast cancer patients and the impact of this mandate on safety-net hospitals. In the spring of 2020, New York City was the epicenter of the pandemic, and one of the safety-net hospitals was located in the epicenter of the epicenter in Queens, NY. As a result, the NYC hospitals were overwhelmed during this time with COVID-19 patients, especially the public hospitals. In this multicenter analysis, we examine the effect of the mandated operating-room shutdowns on time to surgery for patients at four New York City safety-net hospitals that are part of the NYC Health + Hospital Systems across the five boroughs.

In our study, "An Analysis of COVID-19 on Surgical Delays in Breast Cancer Patients in NYC Public Hospitals: A Multi-Center Study," we compared 51 patients diagnosed with breast cancer at four NYC public hospitals between January-June 2020 to 353 patients diagnosed with breast cancer between January-June 2017 and 2018. By examining demographics, tumor characteristics, and treatment regimens, we found a nonstatistically significant increase in median time to surgery (TTS) from 59 days in the pre-

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K.-A. Joseph, MD, MPH e-mail: Kathie-Ann.Joseph@nyulangone.org COVID period to 65 days during COVID (p = 0.9).³ There was, however, meaningful variation across sites. At center A, the median TTS decreased from 57 to 51 days, Center C's TTS decreased from 83 to 64 days, and at Center D, TTS increased from 42 to 129 days. In a multivariable cox proportional hazards model for the pre-COVID versus COVID period effect on TTS, the center was an important confounding variable, with notable differences for Centers C and D compared with the referent category of Center A (p = 0.04, p = 0.006).³

This study highlights that even within a unified health system, there are disparities in outcomes. For medically underrepresented patients treated at safety net hospitals, existing barriers to care were only magnified during the COVID-19 pandemic. Purposeful delays imposed by the COVID-19 pandemic only served to exacerbate underlying time to surgery disparities and existing barriers to diagnostic and treatment services for minority and low-income populations.⁴ It has been widely documented that there are disparities present in the care of patients with COVID-19 and that both black and Hispanic patients have a higher incidence of infection and increased mortality.⁵⁻⁸ Moreover, due to a multitude of reasons, such as lack of access, insurance, and socioeconomic status, underrepresented patients with breast cancer diagnoses are more commonly diagnosed at more aggressive cancer stages and face increased mortality rates compared with insured, white patients with breast cancer. $^{9-14}$ These patients often receive care at smaller public hospitals that have fewer resources than larger public hospitals and private hospitals. Thus, the significant difference between New York City public hospitals and time to surgery in our analysis serves as a call to action to ensure that all public hospitals, no matter their

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size or location, should be given adequate resources to ensure its ability to safely provide care for their particularly vulnerable patients.

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