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## Commentary: A pandemic blueprint for planning your act and acting your plan

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The United States has emerged as a focal point in the coronavirus disease 2019 (COVID-19) pandemic, with more than 6.3 million cases and 190,000 deaths.<sup>1</sup> The aftermath against COVID-19 has not begun yet; however, there are lessons learned that should be shared to help fight with the ongoing COVID-19 pandemic and with another surge. In this issue of the *Journal*, Bansal and colleagues<sup>2</sup> bring expert opinions from their experiences at 6 US academic centers, spanning geography, size, resources, and density of infection encountered, as well as the multiple disciplines involved in the care of these complicated patients, including cardiac surgeons, cardiologists, critical care anesthesiologists, and ventricular assist device (VAD) coordinators. The best practices during crisis situations are summarized as the “4Cs”: capacity, cohort, care, and collaboration.

We also learned that readiness is the key.<sup>3</sup> In general, patients with advanced heart failure can be divided into 2 large groups; first, patients with heart failure managed medically or waiting for heart transplantation/left VAD implantation, and second, patients who had already received heart transplantation or left VAD. We found that these patients are at high risk for significant COVID-19 disease.<sup>4</sup> In this paper, we suggested that each heart failure program needs to have a comprehensive and detailed plan to take care of both types of patients.

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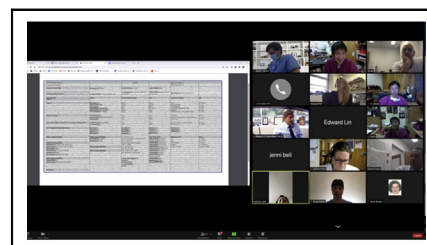
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Multidisciplinary heart transplant meeting.

### CENTRAL MESSAGE

Authors from 6 US institutions offer recommendations for care of heart failure, mechanical circulatory support, and heart transplant patients in a pandemic.

This plan should be executed at every level of the medical team. Regular and uninterrupted communication with full transparency on the current status, data analysis, and future prediction further empowers the team.<sup>5</sup> As an example, an analysis at our center showed that the rate of in hospital transmission in a non-COVID-19 cardiothoracic intensive care unit was extremely low. This information was promptly disseminated among the medical teams and helped reassure the safety and effectiveness of our plan. Recently, we reported our experience across New York Presbyterian Hospitals network.<sup>6</sup> Again, we concluded that having a plan and acting by the plan with transparency and communication are the key. The plan, however, is to be modified and updated through constant data and situation analysis.

As the authors astutely point out, one should not risk a patient dying from heart disease to save someone dying of COVID-19—a principle we could not agree with more. Finding the balance was not easy, though. Our program was required to understand and react to the ever-changing reality. We had to transform ourselves for the care of our patients heart failure. In retrospect, the resilience of the program was tested by this pandemic. Note that Bansal and colleagues offer no uniform protocol; each program developed protocols specific to their own program and local situation. In this context, the importance of team building in non-pandemic times cannot be underestimated, and perhaps such effort is more essential than attempting to forecast the unpredictable. It requires a true integration of multidisciplinary and collaborative

behavior, visionary leadership, and fluent communications with the governance system at multiple levels.

Many of the changes/innovations introduced during this pandemic are here to stay; telehealth, remote patient monitoring, video meetings, and more. With proper preparation, planning, and leadership, we would be better prepared next time.

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