

Drop in Echocardiography Studies Preformed at the University Hospital Dubrava due to COVID-19 Pandemic

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COVID-19 pandemic has resulted in a multidimensional strain on the health care system and to critically evaluate clinical workflows and how care is delivered, which is especially true for dedicated COVID-19 centers. University Hospital Dubrava has been in its entirety repurposed as the dedicated COVID-19 center for all of Central Croatia, thus closing it for all other patients over extended periods during 2020 and 2021. In this retrospective study we wanted to estimate the amount of unperformed transthoracic echocardiography (TTE) studies due to the COVID-19 pandemic at our center.

We conducted a single center study using hospital electronic record system by collecting data of TTE studies for the period from 2011 to 2020. We established that the compound annual rate of growth (CARG) in that period was 12.1%, notwithstanding the expected drop in numbers during the pandemic. Taking into account the following CARG, anticipated normal numbers of TTE studies at our center for 2020 and 2021 would be 5471 and 6135 studies respectively.

Therefrom we have established that there is in total a predicted burden of about 5500 unperformed TTE studies due to the COVID-19 pandemic as of March 2021 at our center. All these affected patients have either been put on waiting lists, delaying their work-up, or diverted to other echocardiography centers, increasing the local burden of work.

The results of this study urge that it is of utmost importance to reinstate the TTE diagnostic facilities of our center as soon as possible, in order to work off the accumulated recess TTE studies on waiting lists. Also, every week of idling cycle due to the extended hospital lockdown generates a further anticipated deficit of 118 unperformed TTE studies in 2021 at our center alone.

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