

Recovery rates of Diagnostic Cardiac Procedural Volume in Oceania 1 Year Into COVID-19: The IAEA Non-Invasive Cardiology Protocol Survey on COVID-19 (INCAPS COVID 2)

Anver Sethwala, Cole B Hirschfeld, Patricia O'Sullivan, Mohamed Akbarally, John Younger, Niels Van Pelt, Michael Randazzo, Dora Lenturut-Katal, Joao V Vitola, Rodrigo Cerci, Michelle C Williams, Leslee J Shaw, Ganesan Karthikeyan, Todd C Villines, Sharmila Dorbala, Andrew D Choi, Yosef A Cohen, Eli Malkovskiy, Thomas N B Pascual, Yaroslav Pynda, Maurizio Dondi, Diana Paez, Andrew J Einstein, Nathan Better, INCAPS COVID Investigators Group

Aim

The aim of this study was to assess the recovery rates of diagnostic cardiac procedure volumes in the Oceania Region, midway through the COVID-19 pandemic.

Method

A survey was performed comparing procedure volumes between March 2019 (pre-pandemic), April 2020 (during first wave of COVID-19 pandemic) and April 2021 (1 year into the COVID-19 pandemic).

31 health care facilities within Oceania that perform cardiac diagnostic procedures were surveyed, including a mixture of metropolitan and regional, hospital and outpatient, public and private sites as well as teaching and non-teaching hospitals.

Comparison was made to 549 centres in 96 countries in the rest of the world (ROW) outside of Oceania.

The total number and median percentage change in procedure volume was measured between the three timepoints, compared by test type and by facility.

Results

A total of 11,902 cardiac diagnostic procedures were performed in Oceania in April 2021 as compared to 11,835 pre-pandemic in March 2019 and 5986 in April 2020, whereas in the ROW, 499,079 procedures were performed in April 2021 compared to 497,615 pre-pandemic in March 2019 and 179,014 in April 2020.

There was no significant difference in the median recovery rates for total procedure volumes between Oceania (-6%) and the ROW (-3%) ($P = 0.81$).

Whilst there was no statistically significant difference in percentage recovery been functional ischemia testing and anatomical coronary testing in Oceania as compared to the ROW, there was, however, a suggestion of poorer recovery in anatomical coronary testing in Oceania as compared to the rest of the world. (CT coronary angiography -16% in Oceania vs -1% in ROW and invasive coronary angiography -20% in Oceania vs -9% in ROW).

There was no statistically significance different in recovery rates in procedure volume between metropolitan vs regional ($p=0.44$), public vs private ($p=0.92$), hospital vs outpatient ($p=0.79$), or teaching vs non-teaching centres ($p=0.73$).

Conclusion

Total cardiology procedure volumes in Oceania normalized one year post pandemic compared to pre-pandemic levels with no significant difference compared to the ROW and between the different types of health care facilities.