Responses to the COVID-19 Pandemic in Australasian EDs

Drew Richardson¹, Peter Jones², Daniel Fatovich³, Gerry FitzGerald⁴

¹ Professor, ANU Medical School, Canberra 2 Associate Professor, Department of Surgery, University of Auckland 3 Professor of Emergency Medicine, University of Western Australia 4 Emeritus Professor, Queensland University of Technology

BACKGROUND

• The COVID-19 pandemic was associated with rapid changes in Emergency Department (ED) structure and function worldwide in anticipation of increased patient load

OBJECTIVES

• To describe the reported pandemic-related changes in Australasian EDs

METHODS

• Voluntary survey of all EDs accredited by the Australasian College for Emergency Medicine in Australia and New Zealand in July 2020
• Answers were received by fax and email with telephone follow-up
• Analysed with descriptive statistics categorizing hospitals by jurisdiction and role delineation

RESULTS

• Seventy of 152 eligible EDs (46%, 95%CI 38-54) returned the survey, representing all jurisdictions and role delineations, with a minimum response rate of 25% (95%CI 4-64) in one Australian State and 33% (95%CI 22-46) in Urban District hospitals
• Returned surveys indicated a wide range of hospital approaches to the pandemic
• Free text submissions indicated that an opening date - closing date model for interventions such as “Hot Zones” was simplistic
• Most, 65/70, 93% (95%CI 83-97) EDs reported setting up a dedicated “Hot Zone” for care of suspected or proven COVID-19 patients (all major referral and paediatric hospitals)
• The majority (53/61) of Hot Zones were established between 1-Mar-2020 and 14-Apr-2020, although 5 were earlier and 3 later, and 14 had closed by the end of June 2020.
• Thirty-one of 70 44% (95%CI 33-57) reported opening a “Fever Clinic” in the ED at least briefly, although the survey answers did not always clarify whether these patients or the staff involved were regarded as part of ED workload
• Sixty EDs (86%, 95%CI 75-93) reported having an Observation Unit in February 2020 (all Major Referral Hospitals reported one)
  ◦ Nine (15%, 95%CI 8-27) of these were completely closed and seven (12%, 95%CI 5-23) partially closed in order to accommodate pandemic-related changes
• Overall, 13 departments reported fewer patient spaces (ED plus observation Unit) on 30-Apr-2020 than 1-Mar-2020, and 14 reported more
  ◦ The largest changes occurred in the largest hospitals: the greatest increase was 15 ED spaces and the greatest decrease was 17 Observation Unit spaces
  ◦ Nine of 18, 50% (95%CI 27-73) of major referral hospitals reported a change in patient spaces compared to 8/27, 30% (95%CI 14-50) of regional/remote hospitals
• Additional medical staff were employed by 26 EDs (37%, 95%CI 26-50) and more nursing staff by 35 (50%, 95%CI 38-62)
  ◦ This was more common in Major Referral hospitals (56% for both, 95%CI 31-78)

LIMITATIONS

• Possible participation bias
• Survey data with no external validation
• No data on changes outside ED including dedicated construction

CONCLUSIONS

• The onset of the pandemic was associated with a wide range of preparatory responses in Australasian EDs
• The pandemic itself did not conform to expectations and further follow-up data is required to understand which changes were reversed and which were maintained
• Given the impact on ED flow and even counting of presentations, any description of pandemic workload requires an understanding of how each ED changed