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Technology, Culture and Coproduction:
Looking to the Horizon of Quality and Safety

Improvement in COVID Case Management through Multidisciplinary Collaboration at the 5th Wave in the Accident and Emergency Department of PYNEH

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Introduction

Hundreds of patients attended A&E each day in which 10 percent presented with COVID in early February 2022, surge of patients were noted in the mid of February and worsen at the end of February, and almost all COVID attendees required admission. Initially were managed well by A&E Colleagues. With the access block issue in March, hundreds of patients were waiting days for admission and scattered everywhere, it overwhelmed the manpower and resources in A&E.

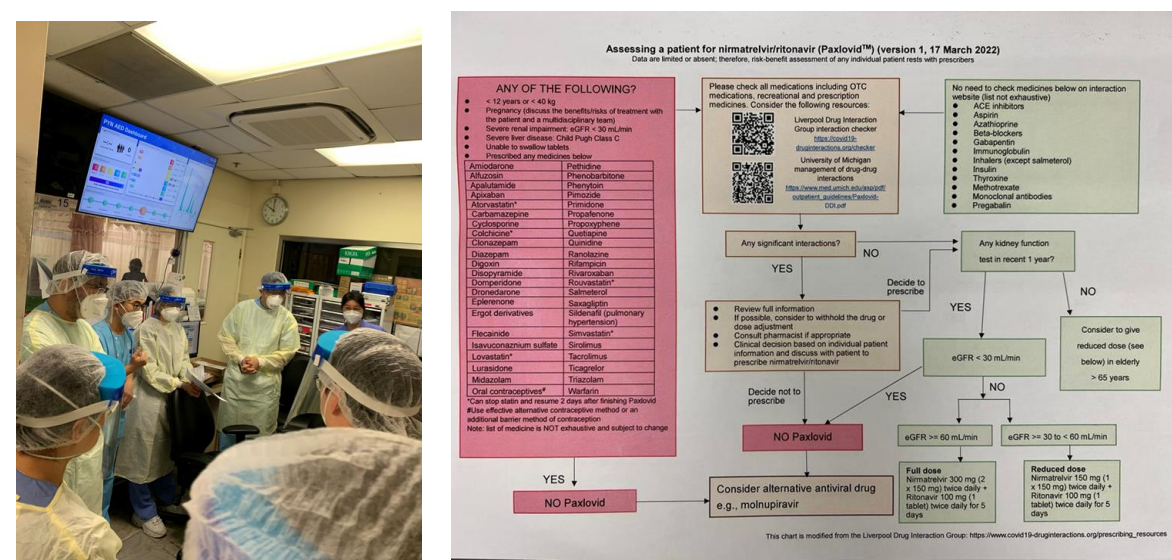
Objective

To report on the implementation of the improvement measures in A&E

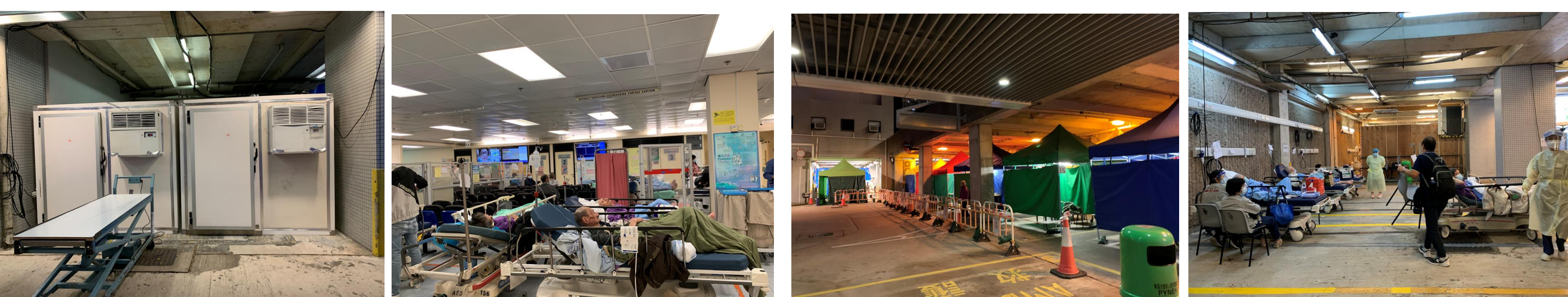
Report to Task Force of COVID-19 of HKEC and Request for Support



Expertise for Patient Care



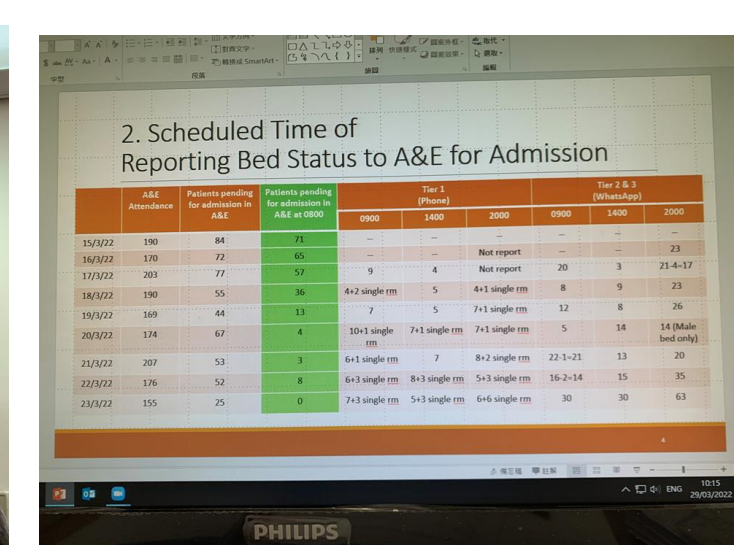
Space for the Live and Dead



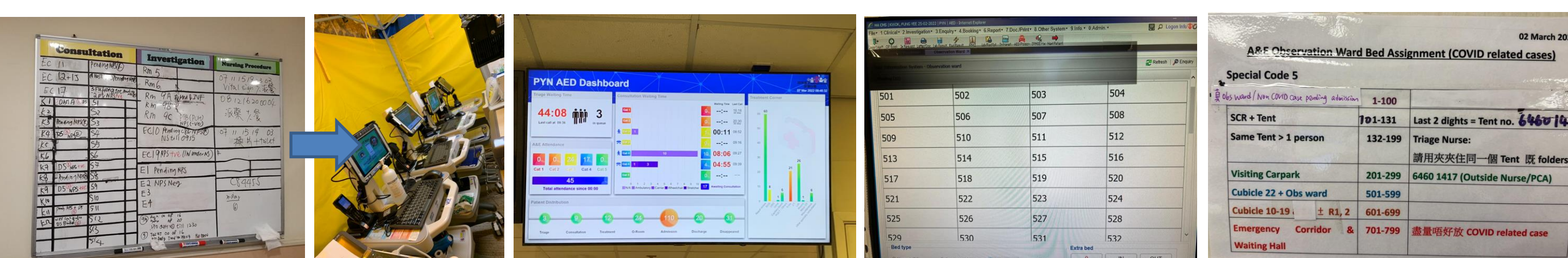
Manpower for Basic Nursing Care and Round



Turnover of Beds



Enhancement of eAED System



Method

The situation was reported to **Task Force of COVID of HKEC** in the mid of February 2022 and meetings were held with various departments, resources were injected to tackle the problems and review periodically in A&E, which included the following:

A) Space for the Live and Dead: with the support of Facility Management, Housekeeping and Administrative Department, besides turning the Ambulance Parking Zone to indoors waiting area, the Visitor Carpark was employed as waiting area for placing the access block patients, both were able to occupy 130 of patients. Stretchers and armchairs, heaters and lightings were borrowed from other departments. Moreover, Ortho Day Ward was turned to pending for admission ward and run by A&E Colleagues from February 18th to March 9th 2022. Dead bodies were another issue, with the support of Mortuary Department and Administrative Department, on top of using the ceremony hall for placing the deceased, four Cold Containers were borrowed and installed at Pathology block to meet the service needs on March 4th 2022.

B) Manpower for Basic Nursing Care and Round: with the support of Allied Health Professionals, Supporting staffs of Special Out-Patient Department and Operating Theatre, Nursing staffs of Gynaecology and Oncology Departments, hundreds of access block patients were cared by all in March.

C) Expertise for Patient Care: there were Anesthetists coming for blood taking and Specialists of Infection Disease Team coming for patient rounds, Nurse Consultants of Renal and Respiratory Care coming for renal dialysis and oxygen concentrators support, the treatment were initiated and carried out together in A&E in March.

D) Turnover of Beds: the bed occupancy was closely monitored by Hospital Management and ensured appropriate turnover at the surge period. Eligible patients were also transferred managing to Hong Kong Infection Control Centre, Asian World Expo and Penny's Bay within days.

E) Enhancement of eAED system: HA IT team was connected and help expanding not only the numbering system (from 99 to 999) but also functions to meet the service needs in A&E within day.

Results

There were 5509 patients attended A&E from February 7th to March 4th 2022, 1498 (27%) were COVID patients. 2232 (40%) patients were discharged home, 2568 (47%) needed admission and 142 (2.5%) were dead. Out of the 1498 COVID admission patients, they had a mean of staying 3 days and range of spending 4 to 8 days in A&E. The Care and treatment were initiated in A&E while waiting for admission.

With the injection of resources to A&E, the access block issue was improved within month. There were 5884 patients attended A&E from March 5th to April 4th 2022, 1068 (18%) were COVID patients. 1862 (32%) patients were discharged home, 3446 (58%) needed admission and 131 (2.2%) were dead. Out of the 1068 COVID admission patients, they had a mean of staying 2 days and range of spending 2 to 4 days in A&E. Month later, the access block issue was solved.

Conclusion

Through multidisciplinary collaboration, the improvement measures were feasible and results in significant improvement in the overall management of COVID patients staying in A&E at the surge period.