

2020 (34%), a quality improvement project was undertaken to optimize imaging pathways for head trauma.

Method: 94 head trauma CT scans were analyzed over a two-month period (June 14, 2022–August 14, 2022) from the NIMIS and IPMS databases to establish current time compliance and median wait times for CT.

Following the implementation of a head injury assessment proforma at triage to prompt earlier evaluation of high-risk head injuries, 108 head trauma CT's were reviewed over a two-month period (August 15, 2022–October 15, 2022) to determine if these parameters improved.

Unpaired, two-tailed Mann-Whitney's test was used to compare median wait times from triage to CT. Two-tailed Chi-square test was used to compare overall compliance rates.

Results: Overall ED compliance to NICE time standards improved following implementation of the proforma (43% vs. 36%, $p=0.401$).

For CT scans that were indicated within one hour, there was a statistically significant decrease in median wait time from triage to CT (134mins vs. 186mins, $p=0.046$). There was also a decrease in median wait time for scans indicated within 8 hours; however, this did not reach the threshold for statistical significance (216mins vs. 275mins, $p=0.230$).

Conclusion: Although there was an overall reduction in wait times for CT, this did not translate to a significant improvement in compliance rates to NICE CG176 time standards. This suggests that, despite earlier identification of these high-risk head injuries at triage, other systemic barriers to obtaining head CT are present and warrant further investigation.

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From Crisis to Challenges: The Use of ECMO During COVID-19 Outbreak in Israel

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Introduction: The use of ECMO devices began about 50 years ago. The purpose of the ECMO device is to enable gas exchange (oxygen and carbon dioxide) and/or hemodynamic support in situations of pulmonary or heart failure to recover or to serve as a bridge in a waiting period for heart pulmonary, heart, or artificial heart transplantation. The COVID-19 outbreak increased the need for the use of ECMO as a life-saving treatment. As a result, there was an increasing demand for qualified personnel in overloaded hospitals' ICUs to care for COVID-19 patients in general, specifically for those who required ECMO treatment. These required rapid team training and new methodology development collaboration between the Ministry of Health (MOH), multi-disciplinary teams, and a national professional committee that set the treatment protocols based on universal standards.

Method: A professional national committee was appointed by the MoH. The committee included Physicians, Nurses, Cardiopulmonary Bypass Machine Operators/Perfusionists as well as MoH representatives. The role of the committee was to

establish guidelines and standards for operating ECMO services. These guidelines were adopted by the MoH and are the basic recommendations for operating ECMO units in Israeli hospitals.

Results: The whole process had a dual challenge. One challenge was establishing new ECMO units according to the guidelines and the universal standards created by the committee. The other challenge was to motivate the old and experienced ECMO units to adopt and work according to the official standards set by the committee.

Conclusion: These days the committee started the evaluation of the old ECMO Units to bring all ECMO units in Israel to work by the same guidelines and standards.

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Community-Based Response to Pandemic: Case Study of Home Isolation Center using Flexible Surge Capacity

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Introduction: The SARS-CoV-2 virus 2019 (COVID-19) has consumed many available resources within contingency plans, necessitating new capacity surges and novel approaches. This study aimed to explore the possibility of implementing the Flexible Surge Capacity concept in relieving hospitals by focusing on the community resources to develop "Home Isolation Centers" in Bangkok, Thailand.

Method: This is a qualitative study consisting of observational and semi-structured interview data. The development and activities of Home Isolation Centers were observed, and interviews were conducted with leaders and operational workforces. Data

were deductively analyzed and categorized based on the practical elements necessary in disaster and emergency management.

Results: The obtained data could be categorized into the seven collaborative elements of the major incident medical management and support model. The command-and-control category demonstrated four subcategories: 1) coordination and collaboration, 2) staff engagement, 3) responsibility clarification, and 4) sustainability. Safety presented two subcategories: 1) patients' information privacy and treatment, and 2) personnel safety and privacy. Communication showed internal and external communications subcategories. Assessment, triage, treatment, and transport followed the processes of the COVID-19 treatment protocols according to the World Health Organization guidelines and hospital operations. Several supplies and patient-related challenges were identified and managed during center development.

Conclusion: The use of community resources, based on the flexible surge capacity concept, was feasible under restricted circumstances and enabled the relief of hospitals during the pandemic. Continuous education among multidisciplinary volunteer teams facilitated their full participation and engagement. The concept of flexible surge capacity may promote an alternative community-based care opportunity, irrespective of the emergencies' etiology.

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Assessing Trends and Severity of Emergency Department Access Block by Measuring Median ED Length of Stay for Admitted Patients

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Introduction: The Emergency Department (ED) is the hospital's main gateway, as well as the initial site for diagnosis and emergency medical care. In recent years, ED overcrowding is worsening in Israel and world-wide. Overcrowding has been shown to adversely affect patient service and care, fostering patient and caregiver dissatisfaction, as well as lowering quality of care and even increasing mortality. A main driver of ED overcrowding is ED patient boarding due to limited inpatient bed availability in conjunction with hospital policy. Measuring median length of ED stay (LOS) for admitted vs. discharged patients can serve as a simple indicator for the severity of the access block over time and between facilities.

Method: ED operational data from the computerized system of four hospitals in Israel were collected over a year and analyzed. In parallel data was collected regarding hospital capacity and ED volumes. Data were analyzed using SPSS.

Results: The Mean ED LOS was significantly higher for ED patients needing admission in all hospitals. Mean ED LOS for admitted vs. discharged patients was 227 min vs. 431 in hospital A, 215 min vs. 222 in hospital B, 198 min vs. 440 in hospital C and 167 min vs. 190 in hospital D. The discrepancy in LOS for admitted patients was not related to the total hospital bed capacity or the hospital ED patient volume.

Conclusion: ED boarding is a major challenge for ED's and hospitals worldwide and a significant contributor to ED overcrowding. A tool to assess boarding is proposed. The tool calculates the ratio of median ED LOS between patients admitted to the hospital and those discharged. Slightly higher LOS among those admitted is to be expected, considering the fact that they usually present with more complex medical problems. In this study the LOS ratios were 1.03, 1.12, 1.90 and 2.22.

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