Revolutionizing Disaster Response Through Real-Time Data and Evaluation

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Background/Introduction: Meaningful medical data are crucial for response teams in the aftermath of disaster. Electronic Medical Record (EMR) systems have revolutionized healthcare by facilitating real-time data collection, storage, and analysis. These capabilities are particularly relevant for post-disaster and austere environments. fEMR, an EMR system designed for such settings, enables rapid documentation of patient information, treatments, and outcomes, ensuring critical data capture.
Objectives: Data collected through fEMR can be leveraged to perform comprehensive monitoring and evaluation (M&E) of emergency medical services, assess operational needs and efficiency, and support public health syndromic surveillance.
Method/Description: Analyzing these data identifies patterns and trends or assesses treatment effectiveness. This insight facilitates data-driven decision-making and the optimization of medical protocols. fEMR's real-time reports enhance situational awareness and operational coordination among response units. The aggregated data can detect trends, classify case-mix, and facilitate after-action reviews, contributing to continuous improvement in emergency preparedness and response strategies. The system also supports fulfilling reporting requirements for health agencies and funding organizations, ensuring accountability and transparency.
Results/Outcomes: EMRs like fEMR are vital for emergency response teams, supporting immediate patient care and ongoing M&E of disaster response efforts. Its robust data management capabilities support evidence-based practices and strategic planning, improving the effectiveness of emergency medical services in disaster scenarios.
Conclusion: The effective use of fEMR in disaster response scenarios highlights its significance in enhancing operational efficiency, ensuring accountability, and improving the overall effectiveness of emergency medical services through comprehensive data management and real-time reporting.

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Assessment of the Quality of MDS Data Collected by Emergency Medical Teams During Idai Cyclone of Mozambique

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Background/Introduction: The WHO endorsed the Emergency Medical Team (EMT) Minimum Data Set (MDS) as a real-time data collection and reporting tool during health emergencies and disasters in 2017. It was for the first time activated in 2019 during Cyclone Idai in Mozambique. Since then, it has been used in 16 countries during various events. However, no assessment on data quality collected via MDS has been conducted.
Objectives: This study aimed to assess data completeness using data from Cyclone Idai.
Method/Description: We analyzed 282 daily reports containing 18,468 patient consultations from 14 international EMTs between 2019/03/27 and 2019/07/12. We considered data incomplete if inputs for demographic information, health events, outcomes, and relation to disaster were lower than the total number of patient consultations. We calculated the percentage of missing values for MDS items. Logistic regression identified associations between data incompleteness and EMT type.
Results/Outcomes: Completeness of information on team and location was 100%. Incompleteness rates were 7.1% for sex and age, 37.2% for health events, 48.9% for outcomes, and 41.8% for the relation of health events to the disaster. Type 1 Fixed EMTs reported less complete data compared to Type 1 Mobile and Type 2 EMTs. Classified EMTs were more likely to report complete data.
Conclusion: Overall, MDS daily report completeness needs improvement. Type 1 Fixed EMTs may have lower completeness due to busier schedules, while Type 1 Mobile EMTs benefit from more effective just-in-time training. Type 2 teams, being less busy, achieve more accurate data entry. Training for data collection is essential for better data completeness.

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Enhancing Clinical Records: A Continuous Improvement Project by PT EMT

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Background/Introduction: Clinical records are crucial for patient safety, continuity of care, and reflect the quality of care. In disasters, their importance increases due to limited patient information and complex scenarios. PT EMT clinical records

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