**Results:** Through effective coordination, SUNY Downstate reduced downed workstations from 3,500 to 1,500 within hours. Critical systems, including EMR and radiology, were restored by the next day, allowing continued care despite manual lab operations and limited access to certain tests.
**Conclusion:** This incident reinforced the need for robust emergency and cybersecurity protocols in healthcare. SUNY Downstate's response minimized patient impact and highlighted the importance of preparedness, clear communication, and resilient systems for future incidents.

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## Developing Representative Complex Casualty Cases for Modeling Healthcare System Throughput

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**Introduction:** The congressionally directed NDMS Pilot Project evaluates civilian medical system readiness to manage 1,000 repatriated casualties daily over 100 days from a conventional near-peer conflict. This component simulated patient throughput in NDMS-enrolled healthcare facilities within the National Capital Region (NCR) to assess capacity and identify constraints. Researchers developed projected combat casualty cases to accurately predict healthcare resource needs, treatment phases, and patient throughput under high-volume conditions.
**Methods:** Emergency Medicine physicians conducted a literature search and analysis incorporating recent US military experience and peer-reviewed medical literature to project likely injury patterns. Researchers analyzed 1,817 de identified trauma cases from GWU Hospital (2018-2022) and 989,989 cases from the National Trauma Data Bank (2016-2021) to capture similar injury profiles. A prospectively developed Combat Casualty Case Data Tool tracked demographics, ICD-10 codes, medical specialty requirements, bed types, and timelines for sequential treatment phases. Formatted in Excel, the tool enables simulation operators to adjust casualty types and prevalence, examining impacts on resource availability and patient flow. Each case includes an "Arrival Severity Designation" for triage priority, while patient journey maps outline "Optimal Patient Journey Time" and resource needs.
**Results:** This approach produced 204 casualty cases, representing a distribution of anticipated injury types and resource demands. This case collection promotes realistic modeling to assess NDMS capacity, with structured data supporting precise tracking through patient care phases from airfield arrival and case distribution, care throughput, recovery, and indicated rehabilitation until NDMS discharge.
**Conclusion:** The detailed casualty cases are essential for understanding and planning the NDMS surge capacity that respects clinical standards. By capturing phase-by-phase patient care needs that are matched to healthcare facility capabilities, this model supports accurate healthcare resource assessment and guides future NDMS projects on patient throughput and resource allocation. Future versions could incorporate more detailed rehabilitation and residential care needs for more accurate end-to-end healthcare throughput projections.

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## Harnessing the Power of Mobile and Messaging Apps for Risk Communication and Intervention During the COVID-19 Pandemic: Lessons from the Western Pacific

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**Summary:** The spread of mis- and disinformation on mobile and messaging apps during the COVID-19 pandemic not only fuelled anxieties and mistrust in health authorities but also undermined the effectiveness of the overall public health response. For context, mobile and messaging apps help users stay informed and connected to their families, friends, colleagues, and communities. However, during the COVID-19 pandemic, these apps were also one of the primary channels where misinformation and disinformation circulated.

Recognizing the importance of including mobile and messaging apps in risk communication and emergency response strategies, the World Health Organization (WHO) and some countries in the WHO Western Pacific Region independently piloted initiatives to reach messaging app users, meet their evolving information needs, and streamline health ministry communication.

The enhanced use of mobile and messaging apps enabled consistent and timely communication, improving coordination during the COVID-19 pandemic. Leveraging their features also helped identify and potentially fill crucial information gaps, mitigating the harms of mis- and disinformation and fostering stronger trust in health authorities.

The findings from the work carried out by WHO and countries in the Western Pacific Region identified some promising innovative communication interventions using mobile and messaging apps. While these interventions should be further explored and evaluated, they have demonstrated that interventions need to be proactive, flexible, and able to adapt to changes in misinformation and disinformation content shared through messaging apps.

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