Cyberattack study highlights impacts on regional hospitals

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A new University of California San Diego School of Medicine study spotlights the significant reach that an individual health care cyberattack, such as ransomware, can have on regional hospital operations and patient

care.

The study, published in the May 8, 2023 online edition of *JAMA Network Open*, analyzed data from two emergency departments that were adjacent to a month-long health care ransomware attack on neighboring hospitals.

"Cyberattacks on health care organizations are growing in frequency and sophistication, which can have real patient care impacts that extend far beyond a single effected hospital," said Christian Dameff, MD, first author of the study, assistant professor of medicine, emergency medicine and computer science and engineering at UC San Diego School of Medicine, and emergency medicine physician at UC San Diego Health.

The study identified that adjacent hospitals to ransomware attacks may experience resource constraints from increases in patient volumes and ambulance arrivals, as well as increased waiting room times, patients leaving before being seen by a clinician, longer patient stays and increases in critically ill patients such as stroke victims.

The study's authors suggest that targeted hospital cyberattacks may be associated with disruptions of non-targeted hospitals within a community and should be considered a regional disaster.

"Recognizing that cybersecurity attacks can impact adjacent hospitals is a step towards realizing the need for regional cooperation just like a natural disaster or other major emergency," said Christopher Longhurst, MD, senior author of the study, clinical professor of medicine at UC San Diego School of Medicine and chief medical officer and chief digital officer at UC San Diego Health.

More information: Christian Dameff et al, Ransomware Attack Associated With Disruptions at Adjacent Emergency Departments in the

US, *JAMA Network Open* (2023). [DOI: 10.1001/jamanetworkopen.2023.12270](DOI:10.1001/jamanetworkopen.2023.12270)

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