

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Results: The majority of the 50 patients were female (64%, 32/50), identified as Black or African American (44%, 22/50), English speaking (80%, 40/50), insured (70%, 35/50), and screened positive for at least one SDOH screening survey question (74%, 37/50). Among these subjects, 97.9% (47/50) endorsed that one or more SDOH have an impact on overall health and 97.9% (47/48) of subjects agreed or strongly agreed that the SDOH screening tool would enhance overall care. However, only 38.8% (19/48) of all subjects reported having been previously asked about SDOH by a provider. When asked if the institution should dedicate part of its budget to assist patients' SDOH needs, 73% (35/48) of patients interviewed were in support. Screening modality preference varied, with the majority of patients preferring a one-onone interview in a private area within the ED (54.3%, 25/46), versus 26.0% (12/46) preferring a self-administered survey and 19.6% (9/46) preferring a survey after the ED visit via phone or online. Lastly, 77.1% (37/48) of subjects indicated willingness to meet with a social worker if they screened positive for an urgent need on the screening survey, and of those, 73% (27/37) were willing to add time to their ED visit to meet with the social worker.

Conclusion: A majority of patients surveyed identified themselves as high-risk for at least one SDOH, reported interest in ED screening for SDOH, and expressed willingness to meet with a trained social worker to further address any urgent needs in the ED. This study lends to the growing body of literature supporting ED-based screening and the importance of addressing patients' social needs to improve their health outcomes.

Telemedicine at Sea: What Information is Helpful Beyond Voice and Text?



Study Objectives: The maritime environment is austere, with medical care limited to supplies and personnel aboard the vessel. Our academic emergency department has provided telemedical assistance services to mariners for the last 35 years to augment seafarers' on-board medical capability. Telemedicine at sea has evolved over the years from ship-to-shore radio to comprehensive high bandwidth telemedicine kits. Still, most interactions are conducted using voice communication or email. It is not known what other data types would be desired by telemedicine physicians in order to provide more comprehensive advice. To answer this question, we surveyed telemedicine physicians immediately after each new maritime telemedicine consult to determine types of clinical and diagnostic information that were used for decision making, as well as desired but unavailable information.

Methods: Setting: This study took place in the telemedicine command center of an emergency medicine practice providing telemedical advice for ships at sea. Participants: The command center is staffed 24 hours/day by EMT-trained operators who connect incoming telemedicine calls with physicians on call and scribe the interaction. The physicians are a group of seven board-certified emergency physicians who provide telemedical coverage. Design: In this prospective cohort study, the operator completed a 38-item data collection form immediately after each new telemedicine encounter that included demographics and medical details of the case, as well as details from the physician regarding what forms of data they used to make decisions and what other forms of medical data the physicians would have liked to have had available. Data were captured using SurveyMonkey(R) software and exported to a Microsoft Excel database for analysis.

Results: Over the span of one year, 572 separate cases were included in this study. About 75% of cases were managed completely onboard to resolution. See Table for telemedicine data used in decision making as well as unavailable but desired data. Telemedicine physicians most commonly used digital photos followed by laboratory data (eg, urine dipstick) and ECG to augment clinical decision making. The most commonly desired (but unavailable) data were digital photos, video stream of the patient, laboratory data, x-ray, and point-of-care ultrasound.

Conclusion: Even as mariners have increasing access to faster and more reliable connectivity, most telemedicine interactions still utilize only voice or email communication. The most used additional clinical information used to aid decision making were digital photos. Additionally, in cases where digital photography was not available, they were the most commonly desired additional clinical information. Faster, less expensive and more reliable broadband connectivity and lower cost point-of- care diagnostic and laboratory testing have the potential to improve the care of seafarers but require further study.

	Utilized - n (%)	Unavailable but desired - n (%)	Total - utilized and unavailable
Digital photo	92 (16.1)	111 (19.4)	203 (35.5)
Laboratory	39 (6.8)	84 (14.7)	123 (21.5)
Video stream of patient	4 (0.70)	105 (18.4)	109 (19.1)
Xray	8 (1.4)	54 (9.4)	62 (10.8)
ECG	21 (3.7)	24 (4.2)	45 (7.9)
Video stream of physician	2 (0.35)	39 (6.8)	41 (7.2)
Ultrasound	0 (0)	41 (7.2)	41 (7.2)
Glucose level	14 (2.4)	14 (2.4)	28 (4.9)
Pulse oximetry	18 (3.1)	8 (1.4)	26 (4.6)
Secure instant messaging	0 (0)	3 (0.52)	3 (0.52)
Other	8 (1.4)	36* (6.3)	44 (7.7)

*includes full set of vital signs in 10, cross-sectional radiology imaging in 6, eye exam (visual acuity, fluorescein and/or pH paper) in 5, rectal exam in 3, otoscope exam in 3, additional physical examination in 2

50

Depression in Emergency Department Healthcare Workers During the COVID-19 Outbreak in Brooklyn, NY



Gao H, Ma X, Apple S, Cirrone G, Huang A, Kabariti S, Saad A, Yucel R, Gustafson D, Motov S/Temple University, Philadelphia, PA

Study Objectives: emergency department (ED) health care workers (HCW) have experienced extensive mental health burdens in the fight against COVID-19. This study measured depressive symptoms in ED HCW in Brooklyn, New York, at the peak 2020 COVID-19 pandemic.

Methods: An email-distributed survey of ED HCW at Maimonides Medical Center was conducted September 8–December 31, 2020, with reference period March-May 2020. Depressive symptoms were measured by the 10- item depressive symptom scale, Centers for Epidemiologic Studies-Depression (CES-D). CES-D items were summed, with a possible total score of 0-30. A CES-D score >10 was deemed clinically relevant. Our main predictor was HCW status, which was dichotomized as clinical (MD/DO, nurses, ED technicians) vs non-clinical. Covariates included sex, age, race, SARS-CoV-2 testing status (not tested vs +test vs -test), social support (range: 0->=4 people to talk to), number of COVID-related home problems (range: 0-9), mental health care disruption during COVID-19 (yes/no), 3-item Loneliness Brief Survey (LBF) score (range: 3-9), and survey date. General linear regression and logistic regression analysis were used to predict CES-D score (β - coefficient, p-value) and clinically relevant depressive symptoms (Odds Ratio (OR), 95% Confidence Interval (95% CI)), respectively. A p-value<0.05 was considered significant.

Results: Among 222 HCW respondents, the mean age was 38.2 ± 10.8 y; and 59.4% were White, 52.5% were male, 80.1% were clinical HCW (38.5% MD/DO, 29.7% nurses, 31.8% ED technicians), and 61.6% tested for SARS-CoV-2. The mean CES-D score was 11.8 ± 8.2 . A clinically relevant depressive symptom burden was reported by 51.6% of HCW-55.4% of clinical HCW v 36.4% of non-clinical HCW (p=0.024). There was no difference in the odds of clinically relevant depressive symptoms by type of clinical HCW (MD/DO, nurses, ED technicians) compared to non-clinical HCW; and no difference in mean CES-D score by clinical v non-clinical HCW status. Increasing CES-D scores were also observed with increasing age (β =0.12, p=0.01), number of COVID-19-related home problems (β =0.99, p=0.035), and LBF score (β =2.17, p<0.0001). A clinically-relevant depressive symptom burden was also observed with increasing age (OR 1.07, 95% CI 1.03-1.11), among those who reported increasing COVID-19-related home problems (OR 1.46, 95% CI 1.01-2.11), and LBF score (OR 2.08, 95% CI 1.63-2.65).

Conclusions: Over half of clinical HCW experienced a clinically relevant depressive symptom burden during the peak of the COVID-19 pandemic. Age, number of COVID-19-related home problems, and loneliness were also associated with higher depressive symptom burden. To deepen our understanding of mental health outcomes, create effective interventions, and promote mental health-related policy changes, such as expanding insurance coverage for mental health care, temporal associations between mental health outcomes and associated factors must continue to be investigated.