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.

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Results: Order entry data not surprisingly revealed significant gaps between order use. Within the labs’ designation, less than ten labs accounted for over 50% of order frequency. Additionally, of the 25 available standard labs at VUMC, six (24%) were ordered less than one percent of the time. Due to these discrepancies, a quartile elimination model was selected for the prototype generation. Of survey data gathered from all respondents, 40 (73%) reported satisfaction with the current quicklist, 54 (86%) stated they used the quicklist at least 50% of the time when placing orders, and 36 (66%) wanted to see the quicklist refined. Thirty-five users (60%) provided additional feedback on the prototype. Key themes from user feedback included: More one-click orders, easier access to frequently ordered medications, and focus on critical orders for female patients. An essential user conflict that could not be resolved was transitioning to all one-click orders as imaging, and some interventions require physician specifications for patient safety and billing/coding.

Conclusion: In this study, we used a mixed-methods approach to optimize our ED quick list. The inclusion of both quantitative usage data with qualitative user feedback facilitated an improved design. The post-implementation analysis will include a quantitative review at one month to assess quick list usage and a repeat survey.

Study Objective: Injury is the leading cause of death and disability for children 1-18 years old, making access to pediatric trauma centers (PTC) crucial to decrease morbidity and mortality. Travel time to a trauma center exceeding the "golden hour" 60-minute transport time is associated with substantially increased mortality. Our objective was to describe the pediatric population with and without access to a PTC by geography and demographics in the United States (US).

Methods: PTC locations were provided by the American Trauma Society. Road network and rotor-wing analysis determined which US Census Block Groups had ground and/or air access to a PTC within the 60-minute "golden hour" out-of-hospital time. Out-of-hospital time analysis incorporated time-to-arrival and on-scene time based on travel method and Block Group urbanicity. Analysis of the pediatric population at the Census Block Group level evaluated racial/ethnic disparities. At the national and state level, we calculated the 2020 pediatric population (<21 years old) with and without PTC access and stratified by race and ethnicity (American Indian, Asian, Black, Hispanic, Pacific Islander, and White).

Results: There are 157 PTC in the US. Of the US pediatric population, 44,811,022 (54.4%) have access to a PTC within a 60-minute ground transport time and 61,049,338 (74.1%) have access by air. Among those who do not have access, the race/ethnic breakdown is as follows (ground, air): American Indian (60.4%, 56.5%), Asian (13.0%, 11.0%), Black (25.6%, 22.0%), Hispanic (27.9%, 23.1%), Pacific Islander (29.4%, 39.0%), and White (35.3%, 28.7%). PTC access is sparse in the western US, by ground and air. No child in Alaska, Louisiana, Maine, Montana, New Mexico, and Wyoming has access to a PTC within 60 minutes. Only 5 states (New Jersey, Massachusetts, Connecticut, Rhode Island, and DC) had >90% of their pediatric population with 60-minute ground or air access.

Conclusion: Significant disparities in access to PTC exist by geography and demographics in the US. The western US and American Indian pediatric population have the lowest percentage of access to a PTC by both ground and air transport. In 2020, over 21 million children in the US are at higher risk for poor trauma outcomes and/or inadequate treatment due to poor PTC access.

Study Objectives: Social determinants of health (SDOH) impact patients' health outcomes, yet screening methods in emergency departments (EDs) are inconsistent. Patients who seek care in EDs may be at greater risk for adverse SDOH than those seen by their primary care physician (PCP), but little comparable data is available. The authors sought to identify SDOH among ED Fast Track patients during the COVID-19 pandemic at an urban, safety-net hospital, measure preferred methods of resource referrals and barriers to accessing resources, and compare the prevalence of adverse SDOH among of ED Fast Track patients to that of adults PCP clinic patients.

Methods: ED Fast Track patients were screened using a validated SDOH screener, and asked about the impact of COVID-19 on their SDOH. This was a convenience sample conducted from 1/15/21 to 4/13/21 and determined to be exempt by the IRB. Trained study staff completed screened and provided a printed resource guide. A two-week follow-up telephone survey assessed for barriers to resource connection. ED Fast Track patient data was then compared to concurrent SDOH data for adult PCP clinic patients, which collected the same validated SDOH screening data but was self-reported.

Results: Among 414 adult ED Fast Track patients, 296 (71.5%) screened positive for at least one adverse SDOH, most commonly education (38.41%), food (35.0%), and housing insecurity (20.5%). Most (56.8%) endorsed COVID-19 affecting their SDOH. Fewer patients (36/156, 23.1%) reported attempting to connect with a resource. Barriers to accessing resources included having no time to call or visit the resource (59%), not recalling being given the resource guidance (41%) or having lost it (28%). When compared to adult PCP clinic patients (Table 1), ED Fast Track patients were 10 times more likely to report at least one adverse SDOH (OR 10.0, 95% CI 6.9-14.4), 13 times more likely to report housing needs (OR 13.1, 95% CI 5.2-32.7), 8 times more likely to have food insecurity (OR 8.2, 95% CI 4.7-14.1) and 11 times more likely to have employment difficulty (OR 11.1, 95% CI 5.7-21.6).

Conclusion: Most ED Fast Track patients reported at least one adverse SDOH negatively impacted by the COVID-19 pandemic. Providing printed resource guides at ED discharge may be insufficient for linking patients to resources. ED Fast Track patients were far more likely to report adverse SDOH than adult PCP clinic patients based on the unadjusted odds ratio analyses. This finding, however, is limited by the negative impact of COVID-19 on ambulatory SDOH screening rate, and a potential selection bias as patients with adverse SDOH may have experienced difficulty accessing their PCP clinics. This finding further emphasizes the need to standardize and expand SDOH screening and strengthen further resources from EDs.
Study Objectives: A non-food-borne hepatitis A outbreak occurred in Michigan between August 2016 and September 2019, resulting in 920 cases, 738 hospitalizations, and 30 deaths. To support the Michigan Department of Health and Human Services’ efforts to increase hepatitis A vaccination rates among high-risk individuals, our multicenter health system implemented an electronic medical record (EMR)-based vaccination intervention across its nine emergency departments (ED). The primary objective of this retrospective cohort and survey analysis was to quantitatively determine whether this intervention was successful in increasing vaccination rates. The secondary objective was to qualitatively assess the attitudes towards, and barriers to use of, the computerized vaccine reminder system.

Methods: All patients 18 years or older who arrived to any of the nine EDs between August 2018 and January 2020 were screened using an electronic nursing questionnaire embedded in the EMR (Epic). If a patient was determined to be high-risk based on the questionnaire (homeless, incarceration history, illicit drug use, liver disease, or a man who has sex with men), an electronic best practice advisory (BPA) would trigger and give the patient’s physician the option to order the hepatitis A vaccine. If consented, patients would receive a one-time dose of the hepatitis A vaccine in the ED. We also administered a survey to physicians and nurses to evaluate perceptions and barriers to use of the EMR intervention.

Results: During the pre-intervention period from August 2016 to July 2018, 885,344 patients visited the EDs. 49 vaccines were ordered (5.5 per 100,000 patients) and 34 were administered (3.8 per 100,000 patients). During the intervention period from August 2018 to January 2020, 774,034 patients visited the EDs and 574,865 were screened (14.8% Hispanic). Nearly half (47.1%) had a priority score of 1 and 19.8% scored 2, such that 66.9% were in the top priority category for resource allocation. 9.4% had comorbidities indicating likely 5-year mortality, while 14.8% had conditions thought to predict death within 1 year. Physicians were initially more compliant with the BPA’s use (301 vaccines in September 2018), but compliance declined over time (67 vaccines in January 2020) (Graph 1). Surveys revealed that two major barriers to consistent BPA use by physicians was lack of time and the perception that vaccinations are low-priority in the ED.

Conclusion: EMR screening tools and BPAs can be utilized in the ED as an effective strategy to vaccinate high-risk individuals. This may be translatable to outbreaks of other vaccine-preventable illnesses like influenza, measles, or SARS-CoV-2. Providing recurrent education about the importance of public health initiatives and eligibility criteria for vaccine administration are needed to sustain compliance. It is essential to frequently audit and provide feedback to physicians on their compliance, and address their concerns about barriers to use.

**Study Objectives:** High volumes of critically ill patients amidst the COVID19 pandemic prompted the development of crisis standards of care (CSC) to guide resource allocation should demand exceed supply. Racial equity in CSC has been discussed widely. This study explores the utility and racial equity implications of CSC when prioritizing critically ill patients for scarce resources across a major metropolitan area.

**Methods:** This multi-site retrospective cohort study included patients admitted to an intensive care unit (ICU) within 20 miles of Boston at the height of the first COVID19 surge (April 18-21, 2020). A priority score (1-8) was calculated for each newly admitted patient based on state CSC using the Sequential Organ Failure Assessment (SOFA) or modified SOFA, as well as predicted 1- or 5-year mortality. Attending emergency physicians reviewed charts to determine likely near-term mortality and reported their confidence (0-100) in this decision. Descriptive statistics were used to characterize the study cohort. Fixed effects linear regression was used to model the effect of race on priority score.

**Results:** Eight hospitals each contributed between 15 and 54 patients for a total cohort size of 257, of whom 130 (50.6%) were white, 52 (20.2%) Black, and 43 (16.7%) Hispanic. Nearly half (47.1%) had a priority score of 1 and 19.8% scored 2, such that 66.9% were in the top priority category for resource allocation. 9.4% had comorbidities indicating likely 5-year mortality, while 14.8% had conditions thought to predict death within 1 year. Reviewers were uncertain about these determinations, with an average confidence of only 48.2-68.0% depending upon the comorbidity. In the fixed effects model, Hispanics had an average priority score 0.81 points lower than whites (95% CI -1.20,-0.45); no difference was found between Black patients (0.3, 95%CI -0.20,0.80) and white patients.

**Conclusion:** In this diverse, region-wide cohort of critically ill patients, few meaningful racial differences were identified in the prioritization of patients under existing crisis standards of care. Hispanic patients may score slightly better than whites, though this may have little real-world significance. Importantly, physicians who would make CSC-based resource allocation decisions had poor confidence in predicting near-term mortality. This raises concern both for clinician moral injury and the fairness of considering comorbid conditions in CSC.