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Metal Detectors Improve Patients' Sense of Safety in the Emergency Department

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Authors

Fiorino, Devon

Easter, Joshua

Kehr, William

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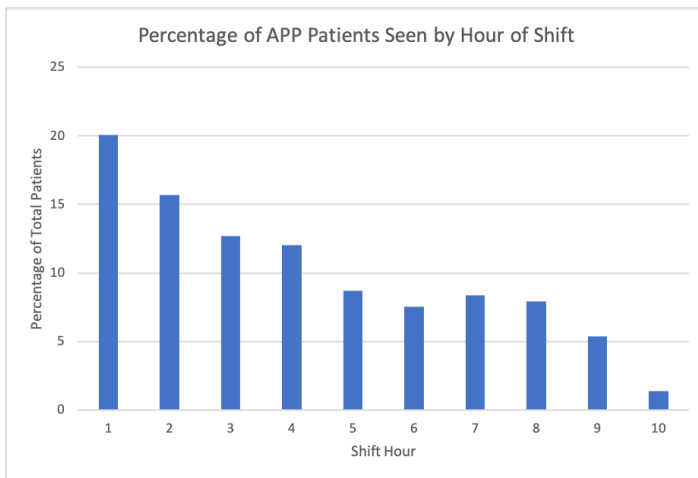


Figure 1. Percentage of APP patients seen by hour of shift

18 Impact of a Best Practice Alert on the Implementation of Expedited Partner Therapy

Andrew Gutting; Emily Ager; Fahmida Ahmed; Keith E. Kocher; *Rachel Solnick*; Roland C. Merchant; Zoe Curry

Objectives: The objective of this study was to determine if an ED-based electronic health record (EHR) Best Practice Alert (BPA) increased the ordering of expedited partner therapy (EPT) for sexually transmitted infections (STI) in adult patients.

Background: US EDs have reported increases in STI visits and positivity rates, mirroring record level increases in STI incidence in the general population. EPT is an evidence-based practice recommended by public health experts for treating sexual partners of STI patients. EDs typically evaluate patients for STIs without their sexual partner present, thereby providing opportunities for EPT. However, EPT is infrequently used in US EDs.

Methods: This pilot study was part of a quality improvement initiative conducted between August and October 2021 in an academic tertiary care ED located in the Midwest. An EPT BPA was randomly displayed in the EHR to clinicians when they empirically treated adult ED patients for STIs with antibiotics. Differences in proportions of EPT ordering were calculated for STI visits between BPA exposed vs. unexposed, ED clinician type, and testing-confirmed vs. not confirmed STI status.

Results: Of the 52 adult ED patients empirically treated for STIs during the study period, their mean age was 30 years old, 56% were female, 48% White and 40% Black, and 31% had Medicaid. Testing-confirmed STI prevalence was 27%. EPT was ordered less often during BPA unexposed (8%;

95% CI 1-25) than BPA exposed (42%; 95% CI 23-63) STI visits, for a mean difference of 35% (95% CI 13-56). EPT was ordered during 41% of STI visits involving residents, as compared to 7% of physician assistant visits ($p=0.07$). EPT was not ordered more often for testing-confirmed vs. not confirmed STI visits (21% vs. 26%; $p=0.7$).

Conclusion: Displaying an EHR BPA greatly increased EPT ordering for patients empirically treated for STIs, although not consistently across all clinician types. Because suspected cases of STIs may be less common in some EDs depending on the populations they serve, BPAs may be a useful tool to bolster the implementation of EPT practices.

19 Metal Detectors Improve Patients' Sense of Safety in the Emergency Department

Devon Fiorino; *Joshua Easter*; William Peter Kehr

Objectives: We aimed to assess the impact of metal detectors on patients' feelings of safety in the ED.

Background: National guidelines recommend hospitals attempt to prevent weapons from entering EDs. Metal detectors have been shown to reduce the number of weapons coming into EDs. However, there are concerns that they are unwelcoming to patients and might discourage them from seeking care. Less than one third of hospitals in the United States utilize metal detectors. The most recent ED based studies of patients' attitudes towards metal detectors were over 25 years ago, and patients' perceptions of safety likely have evolved during this time.

Methods: We surveyed a convenience sample of patients and their companions >18 years of age, who had undergone metal detection at the entrance of our suburban, academic ED from 2019-2021. Using tailored design, we developed survey questions with a consensus panel of physicians, nurses, and patients. We pilot tested the survey with cohorts of medical students and patients. Respondents anonymously reported their answers to questions on a 5 point Likert scale online in Qualtrics. Descriptive statistics were calculated, and chi square tests were utilized to compare groups.

Results: The survey response rate was 78%, with 303 patients completing the survey. Most (71%) non-respondents were due to clinical care needs preventing participation. Approximately two thirds of participants were patients (67%) and female (61%) with nearly all respondents in the ED for non-traumatic concerns (83%). Nearly one third of respondents (31%) had a colleague or family member that had been the victim of physical assault, 16% had previously witnessed physical violence in the ED, and 29% had a weapon in their home. An abundance (91%; 95% CI: 87 – 94%) of respondents reported that metal detectors improved their sense of safety in the ED. Slightly over half of respondents (52%; 95% CI: 46 – 58%) indicated the presence of metal detectors

made them more likely to visit an ED in the future. A small proportion (5%; 95% CI: 3 – 8%) indicated people should be allowed to bring weapons into the ED. Nearly one fifth of respondents reported metal detectors were somewhat or very inconvenient (19%; 95% CI: 15 – 24%) or somewhat or very much limited their privacy (21%; 95% CI: 16 – 26%). For respondents that reported a concern about privacy or inconvenience, over two thirds still favored having metal detectors (71%; 95% CI: 55 – 84%). There were no significant differences between respondents about metal detectors based on age, education, gender, race, prior exposure to violence, or personal ownership of weapons.

Conclusion: In this single center study, patients and their companions reported feeling safer with metal detectors in the ED, despite modest concerns about their impact on convenience and privacy. These results are similar to much smaller studies from 25 years ago.

20 The Role of Call-Back Systems in Older Patients Discharged from the Emergency Department

Cassandra Saucedo; Darius Martins; Jennifer Roh

Objectives: UC Irvine in partnership with CipherHealth has incorporated an automated call-back system utilizing a Geriatric Emergency Nurse Initiative Expert (GENIE) to follow-up with older patients. This study aimed to discover the most significant concerns older patients have after discharged from the ED, impact of a call-back system, impact of a dedicated GENIE in the follow-up process, and to highlight areas for further research.

Background: Emergency departments (ED) can be challenging to navigate for elderly patients. Geriatric visits to the ED are common and costly for both patients and health systems. Additionally, older patients are more likely to have a longer length of stay, increased complications and worse health outcomes. Over the past decade, there has been increasing efforts to incorporate geriatric specific care in emergency departments. The goal of these programs was to better communicate with older patients regarding their health and reduce recidivism.

Methods: CipherHealth data regarding call-back rates and intervention details for UC Irvine Medical Center and UC Irvine Health were collected from June to November of 2021. Additionally, call-back data from the geriatric specialist nurse was collected during this time period and compared to

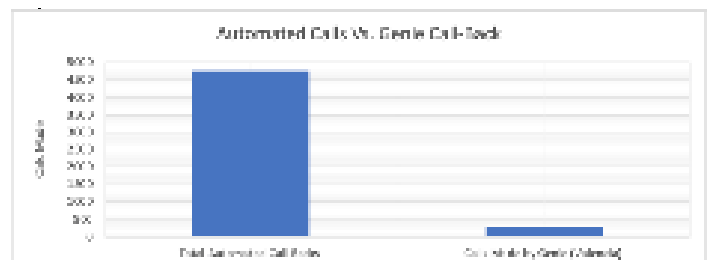
the call-back rates of the automated CipherHealth system. Using the GENIE call-back data, we grouped call-backs into categories based on specific patient concerns. Finally, recidivism rates were obtained prior to the implementation of CipherHealth and geriatric nurse specialists and compared with those seen after.

Results: There were a total of 4,748 initial calls made with the Cipher Health system and 292 individual follow-up calls made by the GENIE. Of the calls made by the GENIE the most common issue was with follow-up appointments (99 recorded issues). The next most common issue was with discharge instructions (82 recorded issues), followed by general status issues (80 recorded issues), issues obtaining prescriptions (18 recorded issues), and medication questions (13 recorded issues). Additionally, the rate of recidivism for patients over the age of 65 prior to the implementation of the call-back system was 20.9 percent compared with 15.6 percent in the months following implementation of these systems.

Conclusion: Our data suggests that there are specific areas of intervention that many older patients have issues with post-discharge. These concerns centered around follow-up appointments and discharge paperwork, suggesting an avenue for future quality improvement. Additionally, the decrease in recidivism after implementation of the call-back systems are a promising sign. A future study would be needed to prove true causation however there are reasons for optimism.

Intervention	Call Rate
Total Number of Calls Plus Follow-ups From the ED	4748
Follow-up calls made by the GENIE for patients represented in the Automated Calls	292

Table 1.



Graph 1. Automated calls vs. Genie call-back.