Violence Risk Screening at the Time of Triage in an Adult Emergency Department

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Background

Almost half of emergency physicians report being physically assaulted at work, while about 70 percent of emergency nurses report being hit and kicked while on the job.

Implementation of Violence Risk Assessments has been associated with reductions in ED workplace violence events. An example of a violence risk assessment, the Broset Violence Checklist (BVC), has demonstrated good sensitivity and excellent specificity in the Emergency Department setting.

Objectives

The purpose of this quality improvement project was to implement screening of all patients presenting to the Adult Emergency Department using the Broset Violence Checklist to assess risk for violence in the next 24 hours.

The number of patients requiring violent restraints was also tracked during this period.

Methods

Education strategies included a series of formal in-services which were held over a one-week period at times covering both day and night shifts. Information regarding the checklist was also included in daily shift huddle announcements and emailed as a PowerPoint presentation to staff. Computer "buddies" were also taped to the bottom of each computer in the department with a reminder about completion of the Broset Violence Checklist. Nurses were instructed to notify the charge nurse and security of any patients that screened as moderate or high-risk during triage. Once roomed, nurses were then instructed to hang a behavior precaution sign outside the patient's door to notify all staff for the potential risk of violence. If patients screened as moderate or high-risk on the checklist, a purple square would also populate on the tracker-board view of the electronic medical record to signal to staff the patient's risk of violence.

Retrospective chart reviews were conducted weekly during the 15-week implementation period to assess adherence to the tool. Data from monthly violent restraint audits were also collected. All collected data was accessed on site and only aggregate counts of patients and number of completed checklists were recorded. Data was then stored in RedCap, a secure web-based database.

Figures

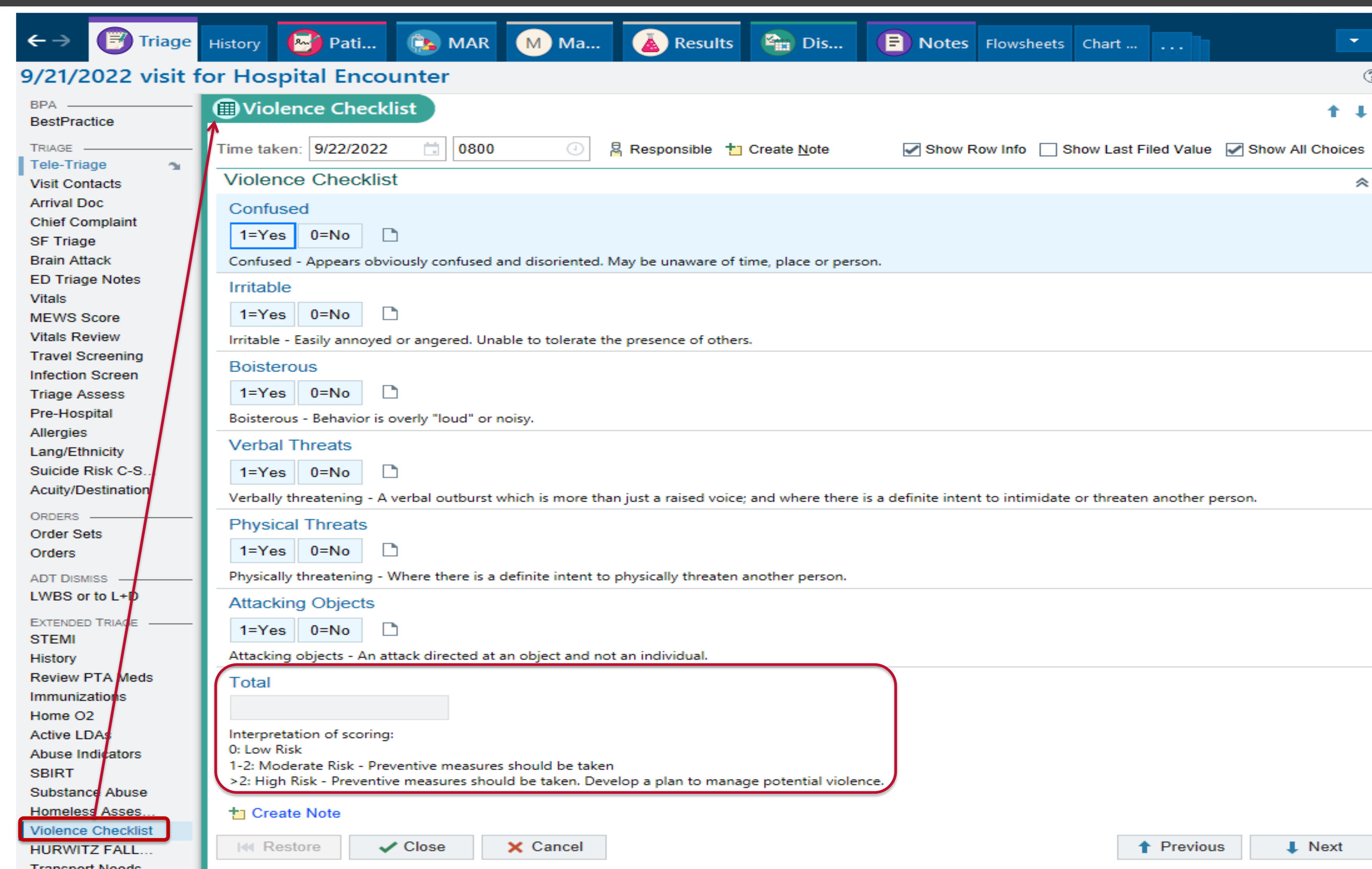

Figure 1
Example of how the BVC looks within the EMR Triage Navigator.

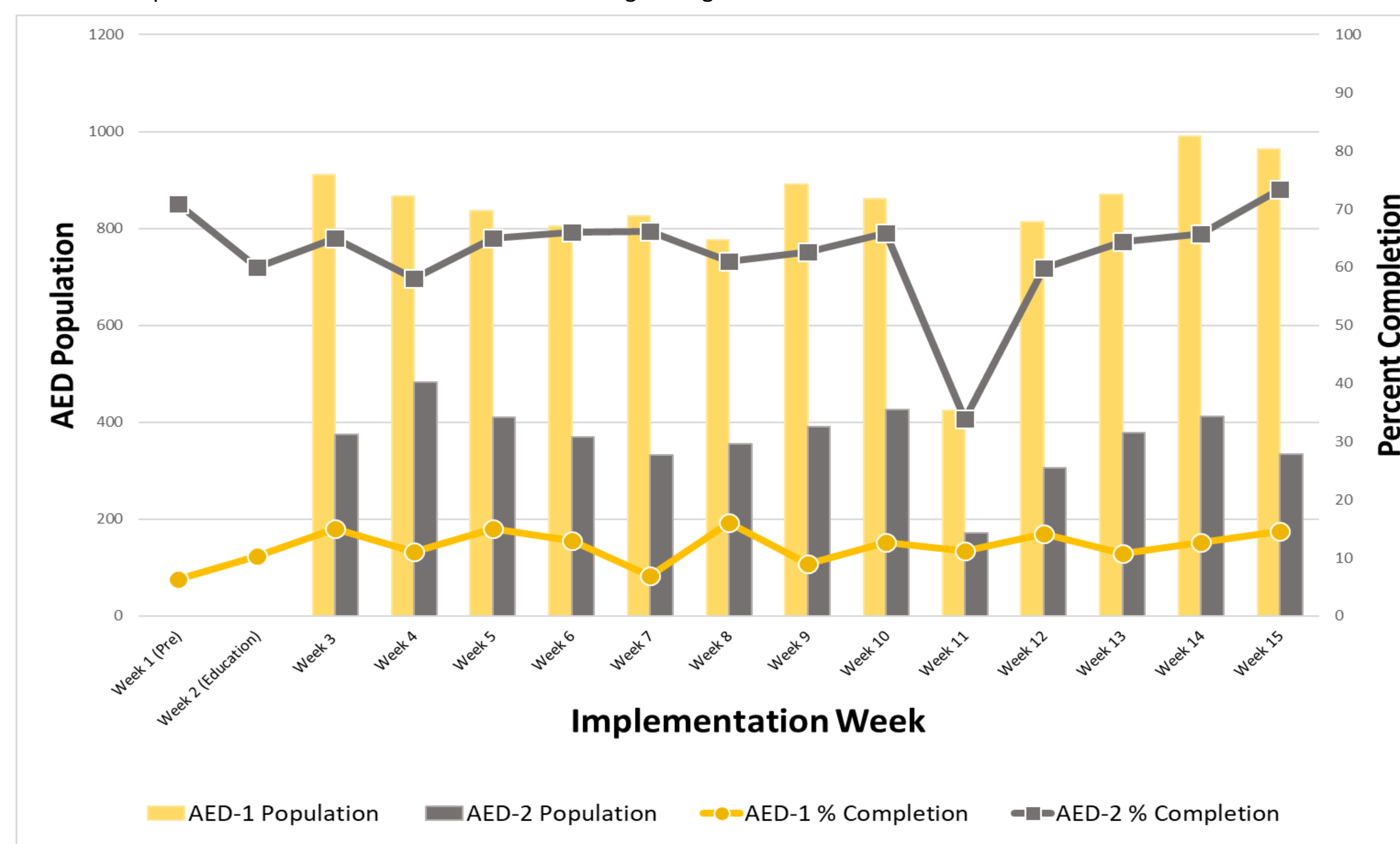

Figure 2
Run chart showing percent completion of BVC checklists on all AED patients in AED-1 and a nearby AED within the same hospital system, AED-2.

	Coefficients	Standard Error	P-value	Odd Ratio
Total Score	0.0006	0.191	0.998	1.001
Attacking Objects	2.605	2.222	0.241	13.535
Boisterous	**-2.805**	**1.260**	**0.026**	**0.060**
Confused	-0.739	0.840	0.379	0.478
Irritable	**-4.117**	**1.079**	**0.000**	**0.016**
Physical Threats	0.839	2.452	0.732	2.314
Verbal Threats	**4.223**	**1.754**	**0.016**	**68.260**

Table 1
Results of multiple logistic regression. The odds of restraints is less likely in patients who scored on the boisterous and irritable characteristics and more likely in patients who scored on the verbal threat characteristic.

Results

Adherence to completion of the BVC at AED-1 was significantly lower than that of AED-2 throughout the implementation period. The total number of patients served by AED-1 remained significantly higher than AED-2 during this same period, which may have affected overall adherence (Figure 2).

Multiple logistic regression was performed to assess the strength of association between restraint status and BVC score (Table 1). Total BVC score was found to be not statistically significant. However, components such as boisterousness, irritability, and verbal threats were found to be statistically significant. **The odds of restraints is less likely in patients who scored on the boisterous and irritable characteristics and more likely in patients who scored on the verbal threat characteristic.**

Conclusions

It is feasible to implement violence risk screening at the time of triage in a busy, urban Adult Emergency Department.

Total BVC score was found to be not statistically significant. **However, verbal threats were associated with future restraint usage.** This may be a factor of overall low rates of violent restraints during this period.

Barriers to adherence that were identified during the implementation period included: high burden of documentation for triage nurses, difficulty finding the checklist within the triage navigator section of the electronic medical record, land ack of knowledge amongst nurses regarding security's role and availability.

Bibliography

Please scan the QR code to access a full list of references.

Notes

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