# When Safety Event Reporting Is Seen as Punitive

## *"I've Been PSN-ed!"*

V. Ramana Feeser, MD; Anne K. Jackson, RN, MS; Nastassia M. Savage, PhD; Timothy A. Layng, DO; Regina K. Senn, RN; Harinder S. Dhindsa, MD, MPH; Sally A. Santen, MD, PhD; Robin R. Hemphill, MD, MPH*

**Address for correspondence. E-mail: robin.hemphill@vcuhealth.org, Twitter: @VASafetyDoc.*

**Study objective:** Reporting systems are designed to identify patient care issues so changes can be made to improve safety. However, a culture of blame discourages event reporting, and reporting seen as punitive can inhibit individual and system performance in patient safety. This study aimed to determine the frequency and factors related to punitive patient safety event report submissions, referred to as Patient Safety Net reports, or PSNs.

**Methods:** Three subject matter experts reviewed 513 PSNs submitted between January and June 2019. If the PSN was perceived as blaming an individual, it was coded as punitive. The experts had high agreement ($\kappa$=0.84 to 0.92), and identified relationships between PSN characteristics and punitive reporting were described.

**Results:** A total of 25% of PSNs were punitive, 7% were unclear, and 68% were designated nonpunitive. Punitive (vs nonpunitive) PSNs more likely focused on communication (41% vs 13%), employee behavior (38% vs 2%), and patient assessment issues (17% vs 4%). Nonpunitive (vs punitive) PSNs were more likely for equipment (19% vs 4%) and patient or family behavior issues (8% vs 2%). Punitive (vs nonpunitive) PSNs were more common with adverse reactions or complications (21% vs 10%), communication failures (25% vs 16%), and noncategorized events (19% vs 8%), and nonpunitive (vs punitive) PSNs were more frequent in falls (5% vs 0%) and radiology or laboratory events (17% vs 7%).

**Conclusion:** Punitive reports have important implications for reporting systems because they may reflect a culture of blame and a failure to recognize system influences on behaviors. Nonpunitive wording better identifies factors contributing to safety concerns. Reporting systems should focus on patient outcomes and learning from systems issues, not blaming individuals. [Ann Emerg Med. 2021;77:449-458.]

Please see page 450 for the Editor's Capsule Summary of this article.

Readers: click on the link to go directly to a survey in which you can provide **feedback** to *Annals* on this particular article.
A **podcast** for this article is available at www.annemergmed.com.

0196-0644/$-see front matter

https://doi.org/10.1016/j.annemergmed.2020.06.048

**SEE EDITORIAL, P. 459**

## INTRODUCTION

### Background

Medical errors may be potentially catastrophic for patients, and up to one half of all clinicians are involved in a serious adverse event at least once during their career.[1] In a survey of more than 3,000 physicians in the United States and Canada, 92% reported previous involvement in adverse events, and 81% reported resultant job stress.[2] Furthermore, all team members are susceptible to error and vulnerable to the fallout, and they may bear silent witness to mistakes while agonizing over conflicting loyalties to patients, institutions, and teams.[3] The purpose of reporting systems is to identify safety issues to make changes and improvements in the health system.[4–9] However, a culture of blame discourages event reporting, and receiving punitive reports inhibits the development of a just culture,[10] thus reducing individual and system improvement in patient safety. This fear of being blamed is a recognized barrier to safety event reporting and results in losing sight of the real goal: identifying the cause or causes of safety events.

### Importance

When patient safety event reports, referred to as Patient Safety Net reports (PSNs) carry undertones of blame or accusation, vital information within the report may be overlooked. A punitive report is one in which the language describing a safety event would be perceived by the recipient as intending to inflict harm or invoke punishment. Ideally, PSNs would focus on system-based concerns, not the specific individuals' roles in the event. However, one study found that one half of the reports at a

**Editor's Capsule Summary**

*What is already known on this topic*

Patient safety reporting seeks to improve care through discovering systems problems amenable to broad solutions. People may use reporting systems to voice individual concerns or resolve interpersonal conflict.

*What question this study addressed*

How often do submitted patient safety reports seek to blame or punish coworkers or colleagues?

*What this study adds to our knowledge*

One fourth of submitted safety event reports at this single institution were identified as punitive.

*How this is relevant to clinical practice*

Individuals may submit patient safety event reports for any number of reasons. Clinically meaningful response to reports requires encouraging submission of systems concerns and looking beyond punitive intent to underlying systemic problems.

family practice attributed blame to specific individuals.[11] Unfortunately, criticizing individuals undermines the ability to identify safety concerns and improve safety from the lessons learned.

The Agency for Healthcare Research and Quality (AHRQ) defines the omission of punitive rhetoric as a key feature for high reliability organizations.[12] Where other high reliability organizations (eg, aviation) have successfully established strong safety cultures around continuous improvement, this approach has been slow to gain traction in medicine. Overall, the AHRQ Hospital Survey on Patient Safety Culture demonstrated improvements in safety perceptions,[5] but nonpunitive responses to error remained an area in need of improvement and had the largest variability across hospitals surveyed.[13] Our own data on nonpunitive reactions to reporting showed room for improvement within our system. However, few studies have explored why reporting systems are used punitively, and even fewer have described strategies to mitigate such attitudes in patient safety event reporting.

### Goals of This Investigation

This study's objective was to determine the incidence of punitive PSNs and the factors related to punitive submissions. In this study, we audited PSNs from a single emergency department to identify the reports that could be perceived as punitive by the recipient; meaning the goal of submission could be interpreted as trying to get the primary parties involved in trouble or criticize their actions. Reading PSNs from the perspective of the recipient allows further understanding and categorization of the punitive nature of the report. Through this effort, we hoped to redirect the focus of event reporting back on systems factors contributing to safety events versus blaming individuals. The integrity of patient safety reporting hinges on emphasizing systems issues in case reporting and omitting punitive attitudes.

## MATERIALS AND METHODS

### Study Design and Setting

This was an Institutional Review Board–exempt, retrospective, quality improvement study at Virginia Commonwealth University Health System in Richmond, Virginia. The data were collected from a 100,000-visit inner-city emergency department.

### Selection of Safety Event Reporting Systems

PSNs are submitted through an online system to which all employees have access through the health system's intranet and are encouraged to use. Employees are introduced to the reporting system during onboarding, with repeated reminders of how to access the reporting system and how the information will be used (ie, reviewed for actionability). The ED shares monthly reports of de-identified PSNs and incorporated best practices. Furthermore, the health system provides training on becoming a high reliability organization, including the importance of a just culture, speaking up, and reporting to improve the system of care rather than blame individuals.

Reporting is not mandated, only encouraged, and reports can be submitted either with self-reported identifying information or anonymously. The contents of the PSNs are then reviewed by the ED Quality Leadership team, which consists of an attending physician, the nursing director, and a registered nurse with 10 to 23 years of ED experience and 1 to 5 years of quality improvement experience. The Quality Leadership team then determines whether the report requires action and, if so, what type of action.

### Methods of Measurement

To categorize PSNs, the team compiled categories from the reporting system (ie, harm score, event type) and additional categories through a review of the literature,[14–16] as well as from our research question: How frequently are event reports being submitted punitively, and what factors are related to a punitive submission? Table 1 includes all coded categories.

This study capitalized on the experience of the ED Quality Leadership team to perform as the 3

**Table 1.** Patient safety report categories.

| Category | Labels | Frequency (N=513 PSNs), n (%) |
|---|---|---|
| Punitive* | Yes | 130 (25) |
| | Unknown | 34 (7) |
| | No | 349 (68) |
| Harm score† | Unsafe condition | 65 (13) |
| | Near miss | 97 (19) |
| | No harm evident, physical or otherwise | 126 (25) |
| | Emotional distress or inconvenience | 110 (21) |
| | Additional treatment | 92 (18) |
| | Temporary harm | 17 (3) |
| | Permanent harm | 4 (1) |
| | Severe permanent harm | 0 (0) |
| | Death | 2 (<1) |
| Actionable* | Critical action | 10 (2) |
| | Actionable | 400 (78) |
| | Not actionable | 103 (20) |
| Addressed in the moment* | Yes | 405 (79) |
| | No | 91 (18) |
| | Unknown | 17 (3) |
| Focus of safety report*,‡ | Communication | 62 (14) |
| | Employee behavior | 21 (5) |
| | Environment | 28 (6) |
| | Equipment | 65 (15) |
| | Issue related to patient assessment | 19 (4) |
| | Issues related to resident and staff training | 114 (26) |
| | Lack or misinterpretation of info | 32 (7%) |
| | Nursing documentation | 8 (2) |
| | Patient or family behavior | 24 (5) |
| | Policies and procedures | 49 (11) |
| | Safety and security | 11 (2) |
| | Supplies | 8 (2) |
| Event type† | Adverse reaction or complication | 71 (14) |
| | Communication | 99 (19) |
| | Environmental or infrastructure | 57 (11) |
| | Equipment or supplies | 12 (2) |
| | Fall or injury | 18 (4) |
| | Medication or transfusion | 112 (22) |
| | Other | 56 (11) |
| | Radiology or laboratory results | 71 (14) |
| | Security or behavioral events | 17 (3) |
| Patient hold* | Yes | 70 (14) |
| | No | 443 (86) |

*Categories determined by research team on the basis of review of the literature.
†Categories pulled from the PSN submission portal.
‡The focus of safety reports frequencies included only the PSNs with a single focus (n=441).

interprofessional subject matter experts because of their expertise in the ED and in quality improvement. Initially, the research team, including nurses, residents, researchers, and senior and junior faculty, met weekly with the subject matter experts to review de-identified PSNs to develop and refine the coding schema, also serving as a bias check. After each meeting, the subject matter experts would code another 10 PSNs with the updated categories and reconvene with the team to discuss discrepancies, concerns, or gaps. Once the coding schema was developed, the subject matter experts then coded 100 safety reports individually to determine their interrater reliability. Fleiss κ was calculated, assessing the extent that the raters code content the same way (ie, have high agreement). The results indicated high levels of agreement (0.92), and because the 100 reports constituted 19.5% of the resulting total reports, the team determined that the remaining reports could reliably be coded individually. Discrepancies in codes were reviewed, by discussing the rationale behind choices, and consensus on the most accurate code was

**Table 2.** Frequency results.

| Category | Frequency Results, n (%) | |
|---|---|---|
| | Punitive (n=130) | Nonpunitive (n=349) |
| Harm score* | 3 (2) | 19 (5) |
| Was event related to patient hold or transfer? | 33 (25) | 28 (8) |
| Was the issue addressed in the moment? | 87 (67) | 293 (84) |
| Was the report actionable? | 32 (25) | 64 (18) |
| What type of event was reported? | | |
| Adverse reaction or complication | 27 (21) | 36 (10) |
| Communication | 33 (25) | 56 (16) |
| Environmental or infrastructure | 11 (8) | 45 (13) |
| Equipment or supplies | 3 (2) | 9 (3) |
| Fall or injury | 0 (0) | 18 (5) |
| Medication or transfusion | 19 (15) | 83 (24) |
| Other | 25 (19) | 29 (8) |
| Radiology or laboratory results | 9 (7) | 61 (17) |
| Security or behavioral events | 3 (2) | 12 (3) |
| What was the focus of safety report?† | | |
| Communication issue | 38 (41) | 43 (13) |
| Employee behavior issue | 35 (38) | 5 (2) |
| Environment issue | 7 (8) | 26 (8) |
| Equipment issue | 4 (4) | 62 (19) |
| Incomplete or inaccurate information issue | 7 (8) | 33 (10) |
| Nursing documentation issue | 7 (8) | 6 (2) |
| Patient assessment issue | 16 (17) | 13 (4) |
| Patient or family behavior issue | 2 (2) | 24 (8) |
| Policy or procedure issue | 27 (29) | 41 (13) |
| Safety or security issue | 5 (5) | 15 (5) |
| Staff training or competency issue | 24 (26) | 100 (31) |
| Supply issue | 0 (0) | 9 (3) |

*Harm score comparison grouped PSN scores from temporary harm to death as patient "harmed" and unsafe condition to additional treatment as "unharmed."
†The focus of safety report comparisons included only PSNs with a single focus (n=441), of which 319 were not punitive, 29 were unknown, and 93 were punitive.

reached. The time span of 6 months with more than 500 reports was determined to be sufficient to span the breadth of incidents typically submitted.

## Analysis

The coders reviewed and categorized each PSN, including whether receiving the PSN *would be perceived as intending to get the recipient in trouble*, thus indicating that it was punitive. The coders indicated PSNs as punitive, nonpunitive, or unclear. For example, if the submitter included names or targeted language such as "I contacted John Doe 3 times and he did not provide the service," it would have been marked as punitive. Fleiss κ was then calculated on the 29 PSNs that were coded for whether they were punitive and indicated sufficient interrater agreement (κ=.84).

Additional breakdowns for each of the coded categories and their frequencies are included in Table 1. The frequency and percentages of punitive versus nonpunitive PSNs were described across the categories. The categories provided by the PSN submission system and that did not require coding were harm score (eg, extent that the concern affected or harmed a patient, from an unsafe condition to death of the patient) and type of event (eg, what the negative or potentially negative outcome was). The team coded the categories of the focus of the submission (eg, primary contributing factor to the situation, such as patient or family behavior) and whether the event report was actionable (ie, does the event require a response?) on the basis of the

**Table 3.** Punitive patient safety report examples.

| | Sample PSNs (edited slightly for length and confidentiality) | Core Issue or Concern | Reframed With Systems Focus |
|---|---|---|---|
| 1 | EEG technician was notified of emergency EEG to be done at 2217 for child in possible subclinical status epilepticus. The EEG tech did not do the EEG and left the hospital at 2300. EEG was not done until following day at 1100 by a different technician. The tech performing the study the second day did not notify staff of the EEG, and the patient was in status epilepticus when EEG was started. EEG supervisor notified of this Sunday by email with no response.<br>***Why this was considered punitive:*** *Punitive to EEG tech by blaming them and telling on them to their supervisor. This may also be punitive to the EEG supervisor.* | There are not enough EEG techs to provide 24/7 service, and order priority level (eg, whether it needed to be done that night or could wait) should have been communicated. Could have escalated by pager or phone to EEG supervisor the night before so that diagnosis was not delayed. | EEG technician was notified of emergency EEG order at 2217 for child in possible subclinical status epilepticus. EEG not performed until the next day at 11 AM by a different technician, and provider was not notified that EEG was running. Patient was in status epilepticus. EEG supervisor notified by email. There may be problems in communicating urgency of some EEGs. |
| 2 | Went to Trauma Bay for morning general surgery signout, and an ED nurse called for a patient who needed a surgical airway where we hadn't been consulted or involved. I was told that multiple attempts had been made by the ED at intubation, and they had been unable to pass the ETT fully beyond the cords using multiple modalities and thought there was an obstructing lesion just distal to the cords preventing passage. I asked if anesthesia had been called for assistance, and I was told that it was not necessary despite the fact that this was clearly a very difficult airway. The patient was then taken up to the OR for an emergency tracheostomy. Per report, there was no time before my arrival that they were not able to adequately oxygenate and ventilate the patient. This is not an uncommon occurrence for surgery to arrive at a difficult or compromised airway in the ED to find that anesthesia has not yet been contacted.<br>***Why this was considered punitive:*** *Punitive to ED by making generalized unsubstantiated statement about the ED that was not directly related to the reported event.* | Airway alert was not activated, which would have mobilized both anesthesia and surgery teams to respond to the ED. | Multiple intubation attempts had been made by the ED, and patient had an obstructing lesion distal to the vocal cords preventing intubation. The ED was able to oxygenate and ventilate the patient. Anesthesia had not yet been called for a difficult airway in the ED. Surgery arrived to the ED and contacted anesthesia, and the patient went to the OR for emergency tracheostomy. Involvement of surgery earlier may be valuable. |

**Table 3.** Continued.

| | Example PSNs (edited slightly for length and confidentiality) | Core Issue or Concern | Reframed With Systems Focus |
|---|---|---|---|
| 3 | Patient had CT ordered at 1821. CT not completed until 2318. CT had to be notified at 2200 by TL (*team lead RN)* that CT had still not been completed. TL informed by CT tech that "patient is next to be done." On entering CT, no one was currently in either CT room, and 1 tech was on her phone on social media. ***Why this was considered punitive**: Punitive to CT tech and intending to get the CT tech in trouble.* | Identify barriers to getting a CT scan completed within the accepted turnaround time (eg, adequate staffing for CT techs to allow continuous scanning and scheduled breaks). | CT ordered 1821. TL notified CT at 2200 that study had not yet been performed. On entering CT, no patients were being scanned in either CT room and only 1 tech was in CT, on break. CT not completed until 2318. |
| 4 | Patient had a large scalp avulsion that needed repair. ENT resident proceeded to clean and repair wound. His mask was not properly secured, and he was constantly coughing and sniffling while repairing wound. Repair continued until after midnight, when patient had to go to the OR on an emergency basis because of hypotension. At one point, I noticed the patient was sitting up while MD repaired wound. I asked who had sat the patient up, and the patient reported the ENT doctor did. I notified the MD that the patient was on logroll precautions, to which he stated: "I can't suture her wound while laying down." This patient had known C4 and C7 fractures. I notified trauma attending of the situation at bedside. Once ENT MD was notified that we needed to take patient to OR on an emergency basis, MD proceeded to staple the rest of the wound. The ENT MD left the patient with an array of sutures, trash, and drapes on her chest, as well as a pair of sharp, bloody scissors on the floor next to the patient. Patient then taken to OR. The wound repair took over 4 hours, delaying the patient from obtaining a repeat CT scan and also from going to ICU when the bed was assigned hours before going to OR. ***Why this was considered punitive**: Punitive to ENT resident with a long report and unneeded details, some of which seem trying to aim at getting the resident in trouble.* | ENT resident should have another option for sick call or another provider who could have done the repair. Communication was inadequate among the team members to indicate the ICU bed was ready so patient could have moved to allow adequate monitoring while performing the repair. Determine whether there was an alternative position to allow spine precautions and laceration repair. A procedure table and sharps container should have been at patient's bedside. | Sick ENT resident was coughing and sniffling while repairing a large scalp avulsion. The laceration repair took over 4 hours, and delayed patient from getting a repeat CT and delayed patient from going to the ready ICU bed. Logroll precautions were not followed, and patient was upright during the repair. Laceration repair instruments including sharps were placed on the patient instead of in a safer area. |

literature.[14] Finally, the research team was interested in determining whether the PSN was actionable (ie, how immediately the submitted situation required action, if at all), addressed in the moment (eg, was corrective action taken during the event?), and affected the patient's length of stay (eg, did the situation directly or indirectly delay the patient's transfer or release?) and whether it was related to the PSN being punitive.

**Table 3.** Continued.

| | Example PSNs (edited slightly for length and confidentiality) | Core Issue or Concern | Reframed With Systems Focus |
|---|---|---|---|
| 5 | RN stated pt admitted for AMS and hadn't had PO intake for 4 days. I asked RN whether she had recent vital signs because the last ones charted were at 0600. She stated "No" and did not give a reason why. I asked what his most recent bladder scan was because I saw he had q6h bladder scan ordered. She stated she hadn't been doing it but pt urinates. I asked when the last time he urinated was and she stated when he got straight cathed, I saw in the chart that was at 0200. She informed me the pt wasn't receiving his ordered IVFs because she "did not want to make him upset" and that he did not have MITTs on because he was no longer pulling out lines. I had to tell her to bladder scan him and take a set of vital signs. She documented 198/144 BP, and I called ED to ask about intervention or what MD said. ***Why this was considered punitive:*** *Punitive to ED RN for something that could have been addressed in the moment with supportive questioning and request to get the few missing things done.* | This patient was an admit hold with long length of stay in the ED and raises concerns about whether ED RN staffing and resources were adequate for inpatient care. Need to identify barriers in the ED to following inpatient orders and ensure adequate communication about orders, hypertension, and IV issues with inpatient providers. | Bladder scan was not performed as ordered. Patient arrived hypertensive with no ED intervention. |
| 6 | This patient was in a chair in a semiprivate room in the ED and waiting for OBGYN to arrive. OB arrived and completed an assessment in the patient room (with the tele-language interpreter on); at this time we heard the provider tell the patient "frog legs." Upon looking in the room, OB resident was performing a pelvic examination (with the tele-language interpreter on) and while the patient was in the semiprivate room only separated by a curtain. ***Why this was considered punitive:*** *Punitive to OB resident intending to get them in trouble instead of calling attention to the contributing system factors that were involved.* | It is not ideal to do a pelvic examination in a nonprivate room. Are there not enough procedure rooms, and were other areas full? OB resident had multiple consults but should have communicated they were coming to the ED so we could have moved the patient to a private room. | OB resident performed pelvic examination on a patient in a shared room separated by a curtain. OB resident had multiple consults and there may not have been alternative rooms to conduct this examination. |

*AMS,* Altered mental status; *cathed,* catheterized; *CT,* computed tomography; *EEG,* electroencephalogram; *ENT,* ear, nose, and throat; *ETT,* endotracheal tube; *ICU,* intensive care unit; *IV,* intravenous; *IVFs,* intravenous fluids; *MITTs,* soft mittens used for patient safety; *OB,* obstetrics; *OBGYN,* obstetrics and gynecology; *OR,* operating room; *PO,* oral(ly); *pt,* patient; *tech,* technician.

## RESULTS

### Characteristics of Study Reports

Between January and June of 2019, 513 ED PSNs were reviewed. Of these, 130 (25%) were identified as punitive, 34 (7%) were unclear, and 349 (68%) were nonpunitive. The full list of results (eg, frequency and percentage of each comparison) are included in Table 2, and examples of punitive PSNs are provided in Table 3. More nonpunitive PSNs were related to patient harm (temporary or permanent harm or patient

death) than not (ie, 5% vs 2%). Additionally, more nonpunitive PSNs were addressed in the moment compared with punitive PSNs, and more punitive PSNs were related to longer stays compared with nonpunitive PSNs.

Given that each safety concern can have multiple causes, each PSN could have multiple problem foci identified. Specifically, there were 2 PSNs submitted with 4 foci, 11 with 3, 59 with 2, and 441 with only 1. For instance, example 5 in Table 3 had 4 foci identified (ie, employee behaviors, patient assessment issue, policy or procedure issue, nursing documentation issue). However, a review of the data indicated that PSNs with a higher number of foci also had a higher percentage of being punitive. As such, comparisons related to PSN foci were limited to those with only 1 focus (n=441).

### Main Results

For the foci of PSNs, there was a higher proportion of punitive PSNs that contained communication issues, employee behavior issues, and patient assessment issues compared with nonpunitive PSNs, whereas there was a higher proportion of nonpunitive PSNs that had equipment issues and patient or family behavior issues than punitive PSNs. Finally, when considering the types of reported events, there was a higher proportion of nonpunitive PSNs related to falls and radiology or laboratory results than punitive PSNs. Additionally, the types of events that were more likely to be punitive than nonpunitive PSNs were adverse reactions, communication failures, and events that fall into some other event category.

## LIMITATIONS

Although informative, the results of this study were limited in several ways. First, the PSNs included in these analyses were from a 6-month period in a single ED at a single institution. The single-institution design limited the generalizability to other EDs. Different departments or institutions may have different types and frequencies of events and diverse cultural norms related to reporting (eg, report just in case vs only report serious events) and the reasons for reporting (eg, punitive vs system improvement).

Because making a punitive determination is inherently subjective, we attempted to mitigate subject matter expert biases by using the broader interprofessional research team to develop the codes. Further, this study included 513 reports over 6 months; a larger sample size over a longer period of time and throughout the year could provide stronger and more generalizable information related to the relationships in this study. However, this study assessed a substantial number of reports submitted in that time that represented typical reports in the ED. The study also provides valuable insight into the types and qualities of PSNs and meaningful directions for improvement in the utility of PSN submissions and for future research to explore this understudied area of quality improvement tools.

## DISCUSSION

Voluntary reporting of safety events is an important mechanism that can be used to improve the safety of health care systems. Within this institution, 25% of PSNs were judged as punitive, thus indicating that recipients could believe that the goal of submission was to criticize them, rather than identifying systems issues. This view reflects a commonly heard colloquialism in our system: "I've been PSNed!", essentially saying they believed that someone was trying to get them in trouble by submitting a report.

We also noted that punitive PSNs were more likely to have multiple foci (eg, employee behaviors, patient assessment, a policy or procedure, and nursing documentation; see example 5 in Table 3) than nonpunitive reports. This may be a result of a buildup from the multiple issues encountered while trying to provide high-quality patient care, which may make the submitter frustrated and focus on the individuals rather than systems issues. The PSN submissions that affected a patient's length of stay were also more likely to be punitive and may have been tied to the event affecting the quality of care provided.

Our results indicate that PSNs related to patients who were harmed (ranging from those temporarily harmed to those who died) were less likely to be punitive. This finding suggests that the more serious impacts on patients were tied to more clinical and objective PSNs than those reports of events that had less serious impacts. Additionally, those reports that focused on interpersonal issues (ie, employee behavior, communication, patient assessment) tended more frequently to be punitive reports, and reports focused on issues over which employees have little control (ie, equipment, patient or family behavior) tended to be nonpunitive more frequently. Those reports more focused on systems issues (eg, environment, policy or procedures, safety or security) did not lean more toward punitive or nonpunitive, potentially because of the lack of control the involved parties had in the event. Examples 1 and 2 from Table 3 are punitive reports involving communication issues, which were submitted with language conveying frustration rather than using the language focusing on the systems issue. Table 3 provides examples of less punitive wording for some of the reviewed PSNs.

A high frequency of punitive reports may reflect a culture of blame and retribution,[15] rather than a just culture focused

on learning and improvement.[16] To combat this issue, the institution where this study took place provides training on appropriately using the safety event reporting system with a renewed focus on high reliability organizations and a just culture within the last 2 years. Another possibility to minimize using safety event reporting systems to report people instead of systems issues is to ensure alternative resources or tools that employees can use to disclose problematic behavior of colleagues. This would allow people to report individual issues (eg, Dr. X yells at staff for situations outside their control) without using the safety event reporting system.

Other potential issues with using reporting systems punitively are the failure to recognize the system factors and the propensity to oversimplify the report as "just trying to get someone in trouble." To combat these issues, it is integral that health systems understand the error reporting process in organizations[17] and to provide training and education to all employees, including salient reminders to employees virtually (eg, by email) and physically (eg, in notes or signage in the environment), about how and why to submit PSNs. This training could include feedback on submitted reports, with ways to improve them. This approach would provide employees with the best practices for submitting PSNs.

Finally, encouraging employees to deal with the situations in the moment, either by finding a solution or by using the chain of command, may reduce the probability that submitted error reports will be seen as punitive. However, there may be fewer reports if the situations are resolved; therefore, it is important also to provide incentives for submitting reports of solved situations, which may be useful for other departments or the system more broadly. This could involve an award system or recognition for innovative solutions that help the health system to reinforce the focus on systems issues and problem solving.

Reinforcing the intent of a PSN as a mechanism to identify systems issues that affect the safety of patients and employees may encourage submitters to focus on the "why" of the event, rather than the "who," thus leading to a more just safety culture. The examples of punitive PSNs in Table 3 with the more systems-focused language illustrate the powerful impact that word choice may have when investigating an event. These examples can be used to encourage submissions that include the systems-focused language because nonpunitive wording can help better identify causes or contributing factors when determining action plans. Additionally, departments providing consistent feedback on the intent of PSN systems and the most effective ways to discuss the events will help support the utility of PSNs in the identification of root causes and limit the perception of "tattling" in the reports.

Furthermore, by identifying the characteristics of PSNs that are more likely to be punitive, departments can direct their focus on providing direction specific to those situations. For instance, encouraging employees to discuss unsafe events in the moment with a strong safety climate allows for discussions that will reduce punitive events submissions because waiting to address an issue may foster frustration. Additionally, creating scenarios or pulling from existing reports to practice submitting PSNs that use more objective and less punitive language (eg, Table 3) would be beneficial, particularly when the issue is related to another employee's behavior or communication issues. Recognizing the characteristics of punitive PSNs may also help the individuals reviewing PSNs for systems improvement so that they are less likely to disregard a report as "tattling" and may help them look beyond the negative language for the systems issues that contributed to the situation.

The use of PSN systems is key to successful quality improvement in health systems. It allows all members of the system to identify and submit situations and events that are threats to safety or that harmed patients or team members. However, it can result in punitive situations in which the report is more about "who" did it than understanding "why" the event or situation happened, thus limiting its utility. This study sought to identify the factors related to whether a report was punitive within an ED, to provide direction for improving the way reporting systems are used and thereby improving the safety of the health system. Reports that were focused on issues of communication, employee behavior, patient assessment, and policies and procedures tended to be more punitive, as were events related to adverse reactions or complications, communication, and radiology or laboratory results. By educating providers on the purpose of PSN systems and on how to submit reports with a greater focus on systems improvement, we are providing an organization's most valuable resource, its people, with the tools to be effective and vigilant stewards of safety in their own environments.

*Supervising editor:* Stephen Schenkel, MD, MPP. Specific detailed information about possible conflict of interest for individual editors is available at https://www.annemergmed.com/editors.

*Author affiliations:* From the Department of Emergency Medicine, Virginia Commonwealth University Health System, Richmond, VA (Dhindsa, Feeser, Hemphill, Jackson, Layng, Santen, Senn); Office of Assessment, Evaluation, and Scholarship, Virginia Commonwealth University School of Medicine, Richmond, VA (Savage, Santen); and the Department of Emergency Medicine, University of Virginia, Charlottesville, VA (Layng).

*Author contributions:* HSD, SAS, and RRH conceived the study, and all authors participated in the study design. VRF, AKJ, and RKS

reviewed and coded the patient safety event reports. NMS advised on coding procedures and analyzed the data. VRF, TAL, and NMS drafted the manuscript, and all authors contributed substantially to its revisions. VRF takes responsibility for the paper as a whole.

All authors attest to meeting the 4 ICMJE.org authorship criteria: (1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND (2) Drafting the work or revising it critically for important intellectual content; AND (3) Final approval of the version to be published; AND (4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

*Funding and support:* By *Annals* policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article as per ICMJE conflict of interest guidelines (see www.icmje.org). The authors have stated that no such relationships exist.

*Publication dates:* Received for publication March 2, 2020. Revision received May 29, 2020. Accepted for publication June 25, 2020. Published online August 15, 2020.

Presented at the 2020 Mid-Atlantic Society for Academic Emergency Medicine regional conference, Washington, DC, March 4, 2020.

## REFERENCES

1. Scott SD, Hirschinger LE, Cox KR, et al. The natural history of recovery for the healthcare provider "second victim" after adverse patient events. *Qual Saf Health Care*. 2009;18:325-330.
2. Waterman AD, Garbutt J, Hazel E, et al. The emotional impact of medical errors on practicing physicians in the United States and Canada. *Jt Comm J Qual Patient Saf*. 2007;33:467-476.
3. Wu A. Medical error: the second victim. The doctor who makes the mistake needs help too. *BMJ*. 2000;320:726-727.
4. Fordyce J, Blank FS, Pekow P, et al. Errors in a busy emergency department. *Ann Emerg Med*. 2003;42:324-333.
5. Stang AS, Wingert AS, Harling L, et al. Adverse events related to emergency department care: a systematic review. *PLoS One*. 2013;8:e74214.
6. Calder LA, Forster A, Nelson M, et al. Adverse events among patients registered in high-acuity areas of the emergency department: a prospective cohort study. *CJEM*. 2010;12:421-430.
7. Hafner JW, Belknap SM, Squillante MD, et al. Adverse drug events in emergency department patients. *Ann Emerg Med*. 2002;39:258-267.
8. Liu SW, Thomas SH, Gordon JA, et al. A pilot study examining undesirable events among emergency department-boarded patients awaiting inpatient beds. *Ann Emerg Med*. 2009;54:381-385.
9. Camargo CA, Tsai CL, Sullivan AF, et al. Safety climate and medical errors in 62 US emergency departments. *Ann Emerg Med*. 2012;60:555-563.e20.
10. Battard J. Nonpunitive response to errors fosters a just culture. *Nurs Manage*. 2017;48:53-55.
11. Cooper J, Edwards A, Williams H, et al. Nature of blame in patient safety incident reports: mixed methods analysis of a national database. *Ann Fam Med*. 2017;15:455-461.
12. Pronovost PJ, Berenholtz SM, Goeschel CA, et al. Creating high reliability in health care organizations. *Health Serv Res*. 2006;41:1599-1617.
13. Famolaro T, Yount N, Hare R, et al. *Hospital Survey on Patient Safety Culture: 2018 User Database Report*. Rockville, MD: Agency for Healthcare Research and Quality; 2018.
14. Harris CB, Krauss MJ, Coopersmith CM, et al. Patient safety event reporting in critical care: a study of three intensive care units. *Crit Care Med*. 2007;35:1068-1076.
15. Cooper WO, Spain DA, Guillamondegui O, et al. Association of coworker reports about unprofessional behavior by surgeons with surgical complications in their patients. *JAMA Surg*. 2019;154:828-834.
16. Boysen PG. Just culture: a foundation for balanced accountability and patient safety. *Ochsner J*. 2013;13:400-406.
17. Zhao B, Olivera F. Error reporting in organizations. *Acad Manage Rev*. 2006;31:1012-1030.