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The effect of mandatory triage questions on triage processes: A qualitative exploratory study

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Contribution to Emergency Nursing

- The current state of scientific knowledge on emergency nursing process around triage indicates that there are multiple individual and environmental challenges to rapid and accurate identification of the patient at risk for decompensation.
- The main findings of this research are that emergency nurses report challenges to rapid and accurate triage related to regulatory-related questions mandated at the initial triage encounter.
- Key implications for emergency nursing practice from this research are that 1) narrowing the focus of the triage assessment to the identification of patients with physiologic or psychologic instability may increase both the identification of patients at risk and of decompensation 2) moving regulatory-related questions elsewhere in the ED care trajectory may improve both nursing compliance and patient outcomes.

Abstract
Objective: The study purpose was to obtain an understanding of both the types of questions mandated for the triage encounter in emergency departments across the US, and how emergency nurses (EN) perceive the relevance of these questions to the triage process.
Methods: a qualitative descriptive exploratory study using focus group data was used. Data were collected at an in-person emergency nursing conference held in September 2022. Data were analyzed using Mayring's 8-step process.
Results: Participants (n=35) voiced concerns about a lack of expertise at all points in the triage process. The overarching problem is reported as data required by regulatory agencies are conflated with triage assessment information. Participants in this study reported that the conflation of the triage assessment with regulatory compliance is causing significant issues in the ability of ENs to appropriately evaluate patient presentations. Main thematic categories were identified as *Assessment or Compliance, Who's Assessing the Patients,* and Establishing Safety*(subthemes: Important Questions, Situationally Important Questions, Important Questions Prior to Discharge),* and *The Lack of EN Input.*
Conclusions: The conflation of regulatory data collection with patient assessment at the initial triage encounter challenges the ability of the EN to rapidly and accurately identify patients at risk for deterioration. We recommend that initial triage processes encompass questions that focus on establishing the stability of the patient, the safety of the waiting room, and include inquiry relevant to the patient presentation.

*Keywords***:** emergency nursing; triage; workplace environment; clinical decision-making; regulatory

Introduction

The purpose of the triage process in the emergency department (ED) is to establish acuity in an effort to connect the patient with the appropriate type of resources needed to address the presenting complaint[1]. This acuity designation aids in determining which area of the ED will best serve the patient and whether the patient can safely wait for treatment. However, given the prevalence of long waiting times prior to the initial provider encounter, the rapid identification of patients needing immediate treatment is critical for patient outcomes, and so the accurate triage assessment of the patient is necessarily a focus of emergency care.

Background and Significance

The Emergency Severity Index (ESI) is the most commonly used triage algorithm in the United States[2]. It is a 5-level system that uses patient data and predicted resources to assign an acuity level ranging from *emergent, requiring lifesaving intervention* (1) to *stable, needs no resources* (5). Levels 1 and 2 comprise patients who are unstable and require immediate intervention, while levels 3, 4, and 5 comprise patients who are not unstable and who will require some number of resources to reach a disposition decision. In the ESI algorithm,[1] the critical questions for establishing *physiological and psychological stability* are 1) *is this patient in need of life-saving intervention?* and 2) *is this patient at risk for decompensation?* Once these questions are answered in the negative, the focus shifts to resource allocation in the stable patient. Depending on the nature of the complaint, this may require a focused assessment and questioning about the patient's medical, surgical, psychiatric, social, and/or medication history to determine if increased risk for deterioration is present.

Triage nurses must have a broad experience in emergency care and a substantial knowledge base, which includes patient health disruptions, history, and presentation, to make decisions about patients' stability and risk of decompensation. Decisions made by triage nurses at the initial patient encounter are critical

to provide ED patients with a safe and appropriate care trajectory; failure to correctly identify a patient's acuity level may lead to negative patient outcomes, up to and including death of the patient.[3,4] Current challenges to this process include increased patient volume and acuity, inadequate or insufficient nurse staffing,[5] and constant distractions from waiting room activity.[6]

The Joint Commission and other regulatory entities require that patients be assessed during an ED visit for a variety of high-risk situations (e.g., suicidal ideation, physical/sexual abuse, intimate partner violence (IPV)). Regulatory entities do not dictate when during the visit these assessments must occur, only that they must occur. To meet these regulatory assessment requirements, the temptation is to add them to the triage process, precisely because every patient is triaged, though these questions may not add to the assignation of an accurate acuity level.[7,8] Similarly, emergency department leaders may place other screenings at triage, especially to screen for communicable diseases,[9]time-sensitive presentations such as sepsis[10] and safety concerns including risk for violence.[11]

Risk assessment for social determinants of health and associated co-morbidities such as mental health status, self-harm behaviors, and various types of abuse are often conducted during triage, yet the evidence is absent regarding whether querying patients during the triage process is the most effective approach to identify at-risk patients. Required screenings and assessments may overburden the triage encounter, lengthening the process and delaying rapid assessment of patients in the triage queue.

Johnson et al.[12] reported nurses' understanding of triage assessments to include (a) must ask, (b) actions of triage, (c) relevant but not urgent for triage, and (d) not perceived as relevant. Importantly, participants in Johnson's study[12] reported that the "must ask" questions included those required by hospital protocol. The nurses did not consider these questions relevant to the patient's presentation and treatment, and so questions regarding HIV status, physical/sexual abuse, substance abuse, and suicidality, were all viewed as "checkbox questions" (those that needed to be answered because of

regulatory requirements). Johnson's study[12] reported these questions as delaying the questions that assessed stability and determined the level of resources required. Answers to checkbox questions had little meaning for the nurses—and thus, also might not reveal critical information related to patient stability. There is inconclusive evidence to determine whether additional screening during triage may be of some value in other areas, such as pregnancy status[13] and firearms injury risk.[14]

Other researchers[16,17]have written about the necessity of maintaining situational awareness and adaptability to meet the demands of the constantly shifting ED environment. The triage nurse is often given responsibility for oversight of the waiting room[17,18] and is frequently called upon to adapt their workflow based on patient volume or concerning patient presentations. Triage nurses must visually assess patients coming in, listen to the greeter or registrar for initial high-risk statements, and manage interruptions even as they are triaging someone else.

There is a need to identify components of the triage assessment process that can be optimized to improve decision-making and clinical outcomes.[2,18,19] It is possible that this problem is not "triage" *per se*, but rather the distractions from the triage process related to the required screenings. Interruptions in triage regardless of the reason is a leading cause of triage inconsistencies and mistriage.[6] Additionally, these screenings are consolidated into an already time pressured process that by design should rapidly identify the high-risk patient of physical or psychological deterioration. Because ED triage standards rely heavily on the individual's subjective assessment and are subject to the limitations of insufficient evidence and clinician skills in risk stratification, researchers have proposed possible solutions to improve competency and accuracy[2,4,18] and suggest opportunities to improve the efficiency and effectiveness of screening and assessment processes during different phases of the ED visit. These suggestions focus on the engagement of administration, the input of ENs performing triage, and a continuous process of education and competency evaluation. [2,3,18]

The purpose of this study was to obtain an understanding of both the types of questions mandated for the triage encounter in EDs across the US, and how emergency nurses (EN) perceived the relevance of these questions to the triage process.

Methods

This study used a descriptive qualitative exploratory approach[20-22] collecting data from focus groups. Institutional Review Board approval was obtained (Advarra, Columbia, MD) prior to the recruitment of participants. Focus groups were audio-recorded. Individual identifiers were redacted from the final transcript before the data were analyzed. Once the findings were verified by the participants, the audio recordings were deleted. The COREQ guideline was used in the reporting of this study.

Sample

A purposive representative sample of nurses who have provided patient care in an ED triage area and would be attending the ENA Emergency Nursing 2022 Conference in Denver, CO (Sept. 30 – Oct.3, 2022) was recruited via email. Inclusion criteria included nurses who: were aged 18+ years, functioned as an ED triage nurse in the US, and had 6+ months experience in the triage nurse role. There was no assumed relationship between study participants and the research team. Seventy-eight nurses responded to the call for participants.

Data Collection

Thirty-five participants met in one of two focus group sessions. While the ideal size of a focus group is 8-10 subjects, the size of group also can depend upon the experience and comfort of the facilitator with conducting discussions. It is recommended that researchers over-recruit and manage larger groups than under-recruit and have to cancel sessions[23]. Our research team has been conducting focus group data

collection for more than 10 years and has experience in managing larger groups of participants such that everyone has a chance to contribute. The raw data reflects participation of 100% of individuals.

As part of the recruitment process, participants completed an online survey using Qualtrics software[24] that included their demographic information (e.g., age, gender, education, nursing experience) and the practice settings in which they worked (e.g., type of emergency department, number of annual patient visits). Each of the two focus group sessions were facilitated by the principal investigator (PI) while other members of the research team took field notes and audiotaped the proceedings. In addition, the research team used a common data collection form for note-taking and for guiding focus group discussions. Evidence of data saturation was assessed at the close of each focus group session. The focus group discussions were transcribed in their entirety, and the transcripts along with the field notes provided the data for thematic analysis. The questions that guided the semi-structured focus group discussion were as follows:

- *What is the triage process at your ED?*
- *What kinds of questions are asked at triage?*
    - *Are those questions mandatory?*
    - *Is there a hard stop in the electronic health record (EHR) until those questions are answered?*
- *How do you understand the purpose of triage?*
    - *What kinds of information do you collect at triage that support that purpose?*
    - *What kinds of information could be collected at another time in the care trajectory?*
        - *What are those pieces of information, and where should they be asked?*
        - *Does it depend on the patient/patient presentation?*
        - *How do you decide?*
        - *Ideally, how could the flow of information line up with the needs of the patient and the workflow of care?*

Data Analysis

Demographic data were exported to an IBM SPSS Statistics 22, and descriptive statistics were performed. Data saturation was reached at the conclusion of the second focus group. Members of the

research team used a modified version of Mayring's 8-step approach to inductive category development[25], allowing themes to emerge from the data. These steps include revisiting the research question, determining category definitions, formulating inductive categories, revising categories as analysis progresses, final working through of texts, and interpretation of results, with formative and summative checks throughout the process. Focus group transcriptions and field notes were analyzed by the PI and members of the research team individually using open coding, simultaneous coding, and sub-coding techniques as described by Saldana;[26] the transcriptions were then reexamined as a team to determine the final categories and themes by consensus.[26] Final findings were sent to participants for member-checking; 13 of the 35 participants responded and all confirmed the accuracy and appropriateness of data interpretation. This method of analysis and thematic comparison, in addition to member checking and peer debriefings, was undertaken to maintain rigor, determine saturation, and enhance the credibility and dependability of the study's findings.

Findings

A total of 35 ENs participated in one of two, 1-hour focus group sessions. [see Table 1 for the demographics of this sample]. The data yielded four main themes of: *Assessment or Compliance, Who's Assessing the Patients*, *Establishing Safety (subthemes: Important Questions, Situationally Important Questions, Important Questions Prior to Discharge*), and *Lack of EN Input (*see Figure 1*).* They discussed several critical elements of this problem, including a lack of primary assessment for stability, expertise at all points in the triage process (specifically a lack of expertise in triage nursing), and an understanding of the purpose of triage by administration. Participants reported that data required by regulatory agencies are conflated with triage assessment information required to assess stability and required resources, and that this causes significant issues in the ability of ENs to appropriately evaluate patient presentations.

Assessment or Compliance?

Participants described an initial process in which regulatory data collection is so front-loaded that the patient's chief concern was only uncovered during the last part of the encounter. These ENs reported they felt as though the required information took precedence over critical patient information.

[We need] to rule out things like COVID, have you been out of the country? … any symptoms of COVID? … we go through the litany, uh, headache, nausea, vomiting, loss of taste or smell, whatever. .Do you have any drugs or alcohol or weapons on you? We do that screening. Are you coughing up blood, which is a TB screening, or do you have paroxysmal cough, meaning pertussis screening for isolation purposes. … last menstrual cycle… are you feeling safe at home? Are you feeling suicidal? … do you want to hurt anyone else? Any suicide risk factors? then we have the, well, we would have the complaint [ie why the patient came to the ED] *in there, and then a narrative about the complaint*. [SN21F]

We make all of ours [questions] required. You cannot go any further and shut out the note until you complete the Columbia [Suicide Severity Rating Scale] *score, until you complete the sepsis score, until you complete whatever other scores that we have in there. There's multiple, multiple [items], and we do a lot of the isolation things too, so we know where and how to place them and, you know, we'll stop our assessment right away at their complaint and do the rest of it in the back if there's something they need to go immediately back for.* [SN31F]

Who's Assessing the Patients?

This category focused on the lack of a primary assessment of patient stability. Participants noted that a variety of processes are followed in the triage area. Personnel that initially encounter the patient include ENs, and, in some cases, other staff members, such as respiratory therapists, or patient account representatives. Patients sometimes are "greeted" and not assessed by a nurse but are screened with a

variety of questions and/or are taken directly back to an empty emergency treatment room. The concern centered around the training and expertise of the persons determining stability and resource-allotment.

The registrar is the first person to see the patient. They've received some minimal education about trigger words, chest pain, stroke symptoms, et cetera, and alert the triage nurse. However, the triage nurse is not in the waiting room and they will call [information about]the patient back [SN10F]

They [patients] walk in through the door. That person over there is called a greeter or a volunteer gives them a clipboard with a paper to fill out. They go into the waiting room, they come back, give it to registration, who registers 'em and gives it to me.[SN6]

The free-standing place that I'm working at currently pretty much has anybody up front. The person that oriented me to their triage process was an RT [respiratory therapist] Yeah, and they ask all of the questions, including the suicide, domestic violence. They take vital signs, but it's not until they get back to a room that a nurse assigns a triage level… the whole purpose of this entity is to get people in and out, and they want to get them triaged faster so that they can say that they've been seen by somebody in healthcare, unfortunately, it's not even like a, a medic that has that field experience. … It does not feel safe at all. [SN12F]

Establishing Safety

Participants discussed some general data collection "buckets", which included questions centering on the *safety of the waiting room:* infection control (e.g., travel, symptoms, vaccination status, homicidality [as a patient presentation])*, individual safety concerns* (e.g., identification of the correct patient, abuse, IPV, suicidality, alcohol and drug use/abuse, medication allergies), and finally, *the chief concern on presentation* (symptoms and initial assessment of acuity based on how the EN perceives the "look" or appearance of the patient).

Specifically, nurses reported focusing on discrete data that they identified as important to the safety of the individual patient as well as to those patients and others in the waiting room. Those data fell into one of three subthemes: *important questions*, *situationally important questions,* and *important questions prior to discharge*.

Important Questions

Questions perceived as "important" allow nurses to screen for catastrophic health disruptions (individual safety), communicable diseases (waiting room safety), time-sensitive metrics compliance, and finally, patient acuity. If all patients could be brought immediately to a treatment area, nurses felt triage as a process would not be difficult. Given unpredictable waiting time, participants reported that *what* needs to be asked and *when* it is asked is primarily related to how long the triage nurse thinks those patients are going to be waiting.

So the important questions are with your assessment, if you need to, if it's, do you have chest pain? If you have chest pain, when did it start? Shortness of breath? Any other criteria that you would you alert to respiratory issues versus cardiac? Those quick things, if you have any immediate, like, I just had a stent, something important like that. [SN5F]

In the discussion of important questions to establish stability or safety, there was very little conversation about actual acuity assignation; participants reported the binary of "sick or not sick" as the driver of triage processes versus an appropriate use of the ESI to assign an acuity score. Additionally, and surprisingly, vital signs were not always considered as a discriminator of acuity.

I'm gonna do my part at triage, sort, sick, not sick, get through that and I'll do my vital signs after I've determined they're not ESI one or two; vital signs aren't absolutely essential, but I need to find out, do I send 'em right back first? I don't care what their vital signs are at that point, I can tell that they're sick. [SN10F]

A lot of times we have the SAT [oxygen saturation], the PLETH [waveform] and we'll do heart rate respiratory rate SAT because that will guide you if you need the blood pressure. A lot of us more senior nurses still love that blood pressure, but we go off those high-risk vital signs, because that also will kind of guide you to sick, not sick. [SN3F]

This deficit was recognized as a problem, given variability in compensatory ability. Some participants identified vital signs as a critical part of the triage assessment process.

Each [patient] group has different vitals that will affect [acuity]. I had a kid that came in whose parents gave them skull fractures. Kid was compensating, compensating, compensating, compensating, and then dumped. But no vitals had been done until I walk in and have my nurses do vitals on. [SN16F]

I want to know your vital signs, why you're here. Like what happened leading up to why you're here in significant past medical history. That's it. What then I can tell by your past medical history correlating with your vital signs and how you physically look, whether you need to get back sooner than later [SN8F]

Participants expressed concern that nurses with little emergency nursing experience or recently graduated nurses with little nursing experience did not have an understanding of how to safely decide which triage questions were relevant to patient presentation or risk profile.

Ours [questions] are not hard stops, and that's what I find to be problematic with the newer people doing triage, they're not asking these questions that could make a huge impact on the infection control issues of our department. [SN21F]

There's really a conundrum here between all the questions that we want to ask to make sure we're not missing something for all these people that are sitting out in the waiting room for eight hours. Versus these are the only questions I need to know if they're sick… nobody is perfect and we all make mistakes, but, in the last few years when we have more and more inexperienced nurses working with us, it got more and more difficult. And this is why so much, so many things get missed because we do not have the time to educate them. I mean, it's just we have inexperienced staff nurses, we have inexperienced travelers, and it goes on and on and on and on. And this is when a lot of things have changed not to the better…If you have experience, you think different, you ask different questions once you see, okay, this was the answer. And you get this with experience. [SN19F]

Another challenge to the understanding of "importance" of these initial questions discussed by these nurse participants was the variations in individual and institutional understanding of the purpose of triage as establishing acuity based on decompensation risk. They reported that the triage nurse is the first position lost and often replaced with a greeter or other non-healthcare staff. The replacement of the triage EN with a non-healthcare trained employee who initially greets the patient in the triage area challenged the understanding of the most important function of the triage process which is to establish safety and stability.

. . . the first position that goes away when we're short, is nurse first or nurse greeter…So there's not even a dedicated person standing there to manage all of those questions and, and what your hard stops are. [SN28F]

Situationally Important Questions

Situationally important questions are driven by *patient presentation and history*. Participants reported that questions that do not situationally apply to the patient are meaningless. Nurse participants expressed frustration at what they perceived to be acontextual, regulatory-driven questions. They reported that when asking patients questions that were not relevant to the patient's presentation, they felt the questions were asked out of context and yielded meaningless answers.

I think the key is, is that many of these questions are really pertinent to the chief complaint. So, you know, if I have a person that has fallen and hit their head, then blood thinner is pertinent, right? If I have a chief complaint of, um, mental health, then suicide screening is pertinent. So they're not high priority on every patient, but they are priority based on chief complaint. It depends on their story. Why are they here? What's, I mean, am I just depressed, and I just want some resources or I'm really down and, and what are their body language cues telling you to, Are they totally disconnected? Do they have a flat affect? I worry about those more versus the tearful, I've just had a horrible stress, whatever [SN11F]

I find the one question that patients often give me a very perplexed look is when I'm starting to ask about their, um, advanced directives. And they're like, "But I'm here [because] *my foot hurts." Um, and I have to say, "Well, I have to ask these questions." Um, but, um, questions of that nature definitely would fit better when that primary nurse has built a rapport and can ask those questions without it being so impersonal.* [SN27M]

Important Questions Prior to Discharge

Participants reported that many of the regulatory-related questions could be moved to a post-treatment, pre-discharge phase of care, allowing for patients to be connected with resources or interventions that were not critical to safety or stability on presentation, but might prevent future issues if addressed during the ED visit.

I want you to add, uh, vaccination history. Like not, you know, I'm talking about adult, you know, like a lot of times pediatrics, you know, I see how that's in their triage about immunizations and, COVID. [SN9F] *influenza, tetanus* [added by group]

Um, the only thing that is really important then all those screening questions for our doctors is what pharmacy do you prefer to use? Because they call, or they electronically put all the pharmacies through [SN6F]

Tetanus is important if they've got an injury or an open cut but is not for everybody, but that's important before they leave. [ED2M]

In contrast to questions considered important and relevant, participants expressed that regulatory- or reimbursement-related questions were considered less important. Participants identified barriers to both appropriate acuity assessments and data collection to meet regulatory requirements in the triage process as including EHR design, staffing, lack of privacy for patients, and interruptions by other patients.

It's kind of funny though, how they're sometimes in the electronic health record, they're organized. Like I'm asking someone their suicidality screen and the next question is when was your last menstrual period, just the way they ordered it, it's like kind of like, Wow, I could have ordered that better. I could have found a different way to do that. [SN30F]

It's a very strange flow. We've asked to make it more creative, more in line with how you actually triage people. And our IT department says that's not possible. [SN28F]

So for me personally, when I'm at the window, if they're not coming in with a suicidal complaint, I don't think it's effective to ask out front. Um, not just culturally, but if you have someone tearful coming up asking for mental health resources, and you have a whole lobby of people checking in behind them, or a medic standing next to you waiting to check in someone else, I don't think it's appropriate or that I'm gonna get an effective answer if I'm saying, do you feel like harming yourself? [SN7]

I think what everyone's saying is really like this cognitive load and burden and the bias that can happen, which is where I think we've tried to maybe be purposeful and add questions that help us improve our cognition, but then at the same time burden us. Which to your point, the interruption is so, is so key because you're in a workflow and you're like, Wait, oh, I definitely answered that question for this patient. But that was actually like three patients ago when they're all the same [SN29F]

Lack of EN Input

An additional participant consideration in the placement of questions or data collection into the triage process include a lack of input from staff nurses, charge nurses, and triage nurses; participants reported that administrators who are not providing direct nursing care, regulatory agencies, or state agencies are driving the decision-making process placing new questions into the triage encounter.

CMS has guidelines of what questions have to be answered, Joint commission, all of those surveying agencies have questions to answer. And then each hospital then sets some local rules too about what you may have to answer. I think what's always, um, after [specific named number] *years of this is, I remember we had triage with seven questions. It's now at our institution 37 questions that are asked. And you know, always challenge people that ask 37 questions if you can do four a minute, your triage time is really taking 15, 15 minutes a patient* [SN24M]

…when there's an incident that occurs, um, again within our system, um, we're all pretty close knit. So generally, we will kind of disseminate that information to everybody, and then if it's something that our risk managers or regulatory people feel that now something that's part of the action plan to add something into triage [SN17F]

I just wanna add, just as a director, we get often, um, things from the state that says as of January 1st, you will ask this question and there's no ifs ands or buts, so, It's really hard to determine where, where you're gonna ask it. Sometimes triage [nurses] actually just, just ask it out in triage. But yeah, just keeps adding, adding, adding minutes. [DR1F]

Discussion

The purpose of this study was to obtain an understanding of both the types of questions mandated for the triage encounter in EDs across the US, and their perceived relevance to the triage process.

Our participants were concerned about *who's assessing the patients*, and the experience levels of nurses put out in triage. Previous examinations of triage processes[18] suggest that inexperienced nurses are challenged to accurately identify high risk patients. The focus of the discussion centered around *safety*.

To *establish safety*, participants discussed *important questions, situationally important questions*, and *important questions asked prior to discharge*. An additional category of questions that was deemed "unimportant" consisted of questions the participants viewed as completely irrelevant to the ED trajectory of care. This study aligns with the work of Johnson et al[12] who reported a similar breakdown of triage categories; this difference in the perceived usefulness or relevance of questions asked in the triage encounter may lend itself to a more effective placement of questions such that they are meaningful at that point.

Hinson et al.[4] described the common elements of triage systems currently in use, and, most importantly, that all are designed to identify and prioritize patients with critical, time-sensitive care needs. These elements universally rely on some level of subjective, data-informed judgment made by trained triage providers. The primary encounter, then, should establish physical and/or psychological stability, and thus questions that are not related to that objective might be moved to another part of the care trajectory.

Having mandatory, regulatory-related questions or assessments required in the initial triage encounter becomes problematic when nurses do not consider the questions relevant and either do not ask the question or consider the answer as not providing an accurate picture of patient risk status. However, making these checkbox questions a "hard stop" in the electronic triage process, which prevents the nurse from reaching the next set of triage questions unless the current question is answered, can lead to fidelity problems, meaning nurses may be recording an answer to a question, but did not actually ask the question. There is not much literature that touches on this problem, although Boudreaux et al.[26] saw this as enough of a concern to explicitly ask whether nurses in their study of emergency department behavioral health care followed the screening protocol procedure. Wolf et al.[13] also found that in 86% of cases, pregnancy-capable patients with specific complaints were not asked about pregnancy status, as the nurses often decided the question was not relevant even when patient symptoms were indicators for high-risk complications of pregnancy.

The current literature supports placing questions unrelated to stability elsewhere in the patient encounter. Specifically, Betz et al.[27] investigated challenges to identifying ED patients at risk of suicide and recommended inserting secondary screening later in the ED visit or implanting risk stratification tools earlier within the visit. Johnson et al. study[12] also reported a category of assessments based on information relevant to the patient, but not relevant to the triage decision. The participants in the current study confirmed this understanding and emphasized that although the questions they were required to ask in triage were important, they were not urgently related to establishing stability and resource-allocation and could wait for a later time during the ED visit.

Research findings suggest benefits to placing assessment questions in more relevant phases of the care trajectory include a better focus on immediate identification of at-risk patients and fewer interruptions that can impede care.[6,28] Participants in our study suggested that the lack of EN input in this process led to asking regulatory questions unrelated to the patient's chief complaint that would be more effective

and useful if asked in a phase of the emergency care trajectory in which the EN was able to establish a relationship with the patient. Similarly, participants reported that questions about substance use, safety (e.g., IPV, elder abuse), and access to care required both privacy and a therapeutic relationship to allow for meaningful responses.

Implications for Emergency Nursing

Triage is a function performed almost exclusively by emergency nurses, whose contribution to the form and function of this process is critical to maintaining patient safety. The function of triage is to rapidly identify high-risk patients who need immediate care; using this function to address regulatory-driven data collection impedes the safety and accuracy of the triage process. Findings from this study can inform the separation of the patient assessment process from the collection of other data that is not necessary to establishing patient risk at the initial encounter.

Limitations

The study sample was drawn from a demographically diverse group of emergency nurses. The participants in this study were interested in the topic and able to travel to a national conference; nurses who chose not to participate may have had a different understanding of the phenomenon, which may limit the transferability of our findings. The large size of the focus groups may have precluded some viewpoints from being heard; however, member checking at both the end of each focus group and also after findings had been sent to participants did not yield any new data.

Conclusions

The conflation of regulatory data collection with patient assessment at the initial triage encounter challenges the ability of the EN to rapidly and accurately identify patients at risk for deterioration. Inexperienced triage nurses are further challenged with differentiating between questions that establish

stability and questions that meet a regulatory requirement. Participants in this study described challenges to triage that include interruptions, acontextual regulatory questions and a lack of privacy in the triage area. We recommend that triage processes encompass questions that establish the stability of the patient, the safety of the waiting room, and include inquiry relevant to the patient presentation. We also recommend that nurses performing triage have appropriate training and experience in that role to better assist in delineating "important" questions from those less so, and moving the less important, regulatory-related questions to later in the patient care trajectory. Future research should focus on strategies for effective placement of regulatory-related questions such that all mandated regulatory data are collected without compromising assessment of patient safety or flow of the patients during the trajectory of their emergency care and treatment.

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Table 1. Demographic Characteristics of Focus Group Participants and Emergency Care Settings Where They Work (n = 35)

Nurse Demographics		**ED Demographics**	
Gender	**%**	**Patient Population**	**%**
Female	88.6	*General ED*	*77.1*
Male	8.6	*Adult Only ED*	*17.1*
Missing	2.9	*Pediatric Only ED*	*2.9*
		Missing	*2.9*
Age	**Mean ± SD, (Min, Max)**	**Facility Type**	**%**
		Non-government, not-for-profit	74.3
		Investor-owned, for-profit	11.4
Participant age	48.1 ± 10.9, (29,69)	*State or local government*	8.6
		Federal government/military/VA	2.9
		Missing	2.9
Education	**%**	**Practice Setting***	**%**
Bachelor's	40.0	*Community hospital in/near metro area*	62.9
Master's	40.0	*Affiliate with women's hospital/childbirth center*	54.3
Doctorate	8.6	*Academic medical center*	22.9
Diploma	5.7	*Freestanding ED*	14.3
Associate	2.9	*Critical access hospital*	11.4
Missing	2.9		
Years of Experience	**Mean ± SD, (Min,Max)**	**Geographic Location**	**%**
RN in all settings, including ED	*22.3* ± 11.7, (5.0,49.0)	*Urban*	31.4
ED nurse only	*18.6* ± 9.9, (5.0,46.0)	*Suburban*	31.4
RN in current ED	*10.6* ± 9.5, (0.5,29.0)	*Mid/small city*	28.6
ED role (non-RN)	*7.9* ± 12.9, (0.0,46.0)	*Rural*	5.7
		Missing	2.9
Role in Primary Practice Setting	**%**	**Annual ED Patient Visits**	**%**
Staff nurse	*37.1*	*1-5,000*	*0.0*
Clinical/nurse educator	*17.1*	*5,001-10,000*	*5.7*
Director	*11.4*	*10,001-20,000*	*5.7*
Manager	*8.6*	*20,001-30,000*	*14.3*
Other	*8.6*	*30,001-40,000*	*14.3*
Charge nurse	*5.7*	*40,001-50,000*	*2.9*
CNS	*5.7*	*50,001-75,000*	*17.1*
VP nursing	*5.7*	*75,001-100,000*	*17.1*
Clinical coordinator	*2.9*	*>100,000*	*14.3*
Missing	*2.9*	*Missing*	*8.6*

**Percentages do not equal 100 as more than one response was possible*

Figure 1. Main and Subthemes Identified from Data