Triage in the Emergency Department: Role challenges, Satisfaction, and Perceptions of Staff

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Triage in the Emergency Department: Role challenges, Satisfaction, and Perceptions of Staff

Jaclyn Gardner

Senior Honors Project

Submitted in partial fulfillment of the graduation requirements of the Westover Honors Program

Westover Honors Program

April, 2011

Ellen Deluca Committee Chair
Kim Ayscue
Nancy Cowden
Abstract
The goal of this study is to describe staff satisfaction and role challenges among Registered Nurses (RN’s) and Emergency Department technicians in a 43 bed Emergency Department (ED) at a community hospital. This is an exploratory study to determine the factors that create an efficient ED, from staff’s perspective, to facilitate improvement for other Emergency Departments. Four RN’s were interviewed, including at least one manager, and ED staff completed a survey to determine role challenges involved in the triage process, perceptions of qualifications needed for triage, and overall satisfaction with the comprehensive triage method used in this setting. Surveys were analyzed for themes using Chi Square and Crosstabs analysis using SPSS software. Coding method and statistical evaluation of survey data were done with the assistance of a statistical expert. Several significant findings were noted. Technicians felt less autonomous than nurses in triage, but wished they could triage more often. Nurses felt that technicians could not triage. All agreed that experience is the most important factor, and this was supported by interviews. Overall, role challenges are certainly present, and all staff would like opportunities for experience to improve their performance.
Triage in the Emergency Department: Role Challenges, Satisfaction, and Perceptions of Staff

Introduction
The Emergency Department (ED) is the door to the rest of the hospital; the filter through which patients are sorted. It is here that it will be decided whether or not a patient is admitted and here that those not being admitted will be treated. In recent years the Emergency Department has also become the primary care physician for many who cannot afford a visit to a doctor's office. Since the ED is required by law to treat all patients regardless of ability to pay, it is not surprising that it is often overcrowded. Statistics have surfaced recently (Horwitz 2006) that indicate ED wait times are growing longer as a result, and many patients are not being seen within the recommended time. In fact, Horwitz (2006) found that the percentage of ED patients that were seen by a physician within the recommended time after their arrival declined by nearly 5% from 1997 to 2006 (Horwitz 2006). These wait times could be unsafe for up to 59% of patients (Bradley 2010). This can, of course, result in serious medical complications, including loss of life. The nurse cannot control how many patients enter the ED, but he or she can control how efficiently and accurately patients are triaged. “Triage” originates from the French word “to sort” or “to choose”. In the medical field it refers to the process of deciding which patients need to be seen by the doctor first and which patients can afford to wait. Contrary to popular belief, Emergency Departments are not first come, first served.

Triage methods vary according to criteria with which patients are sorted, as well as the individuals performing the triage. In most Emergency Departments a five-level triage method is used, sorting patients into five different acuity levels: Level 1 or emergent 1 (must be treated immediately), Level 2 or emergent 2 (must be treated within 20 minutes), Level 3 or urgent (can wait up to 2 hours), Level 4 or non-urgent (must be treated but can wait longer than 2 hours), and Level 5 or Non-urgent ambulatory (can be discharged). The person performing triage uses specific criteria to sort patients. Levels 1 and 2 can often be identified visually. For example, if the patient is unresponsive, they would be categorized as a 1. If they are responsive, but short of breath or crying out in extreme pain,
they would usually be categorized as a 2. If both of these situations are ruled out, the patient’s vital
signs must be taken. If they are not stable, this classifies a patient as a level 2. If they have stable vital
signs, they are classified according to how many resources they will use. A resource may refer to
getting an X-ray or having blood drawn for labs, but usually does not include drugs. If they will likely
use two resources, this classifies a patient as a 3, if they will use one, they are a 4, and if they will use
none, they are classified as a 5. There are some other factors to be taken into consideration, such as
the age of the patient. Children, for example, have some specific criteria. For the most part, however,
this method is very standardized.

Although some institutions only use three acuity levels, the Emergency Nurses Association
(ENA) recommended the five-level system after questions were raised about the accuracy of only
three levels. The five-level system has been found to be valid and reliable and is supported by
evidence (Howard and Steinmann, 2010). The system certainly does promote more uniformity in
triage by creating specific criteria. However, as will be discussed later, nurses (and other medical
professionals who may be performing triage) do have some freedom to go with their instincts.

One question that is often raised regarding triage is who should be performing triage, and how
many people? This is one of the key differences between traffic-director triage, spot-check triage, and
comprehensive triage. In traffic-director triage an individual is stationed at the door to sort patients
based on general appearance. This person may or may not have extensive medical knowledge. In
spot-check triage a Registered Nurse (RN) is summoned when a patient presents, but that nurse is not
staffed specifically for triage. In most EDs today a more advanced method called comprehensive
triage is necessary. In this system a medically qualified person, often an RN, is trained and stationed
specifically for triage and classifies patients according to one of the five acuity levels. Comprehensive
triage can also be two-tiered, meaning that the patient is seen by two health care professionals, often
RNs (Howard and Steinmann, 2010). The first nurse assesses patients at the door and determines if
they are acuity Level 1. All other patients are directed to the second RN, who triages them.
Comprehensive triage in various forms has been found to be more effective than simple triage. In one hospital in the Netherlands, the ED implemented a form of advanced triage that involved an RN performing the initial triage, with a physician checking behind. This hospital managed to decrease its overall patient length of stay (LOS) by an average of 14 minutes. Patients who required additional assessments had their LOS reduced by 27 minutes. (Rosmulder et al., 2010). This validates the importance of medically proficient individuals performing triage and the value of the two-tiered system. After all, one study found that placing a physician in the waiting room significantly decreased the number of patients that left without being seen (Han et al., 2010). However, effectiveness of triage was not evaluated in this study, and it was found that the physicians did not make a significant difference in wait times. In addition the physicians in the Dutch study indicated that the nurses correctly triaged the patients 93% of the time without the aid of a physician (Rosmulder et al., 2010). The aim of that study was to show that when a two-tiered system was implemented, LOS was reduced without sacrificing accuracy.

Two-tiered systems may include a physician or may include two RNs. In one study a two-tiered system was implemented at a Level 1 Trauma Center, in which two RNs assessed patients. After the implementation of this system, only 2 cases of mis-triage occurred out of 20,332 patients. (Kouzminova et al., 2009). Both RNs and physicians can be effective and efficient at triage. In one case with low-acuity level patients with pharyngitis, nurse-only triage was actually more effective than physician triage (Undeland et al., 2010). The fact that a comprehensive method was used seems to make more of a difference than whether the individual was an RN or physician. Overall, it seems a two-tiered system is generally more effective than standard, comprehensive triage, but some hospitals may not have the resources to implement this system. In either case, comprehensive triage involving experienced medical professionals is key.

Both efficiency and accuracy are necessary to produce the best patient outcomes. Long wait times can be life-threatening to high-acuity patients, but rushing the triage process and sacrificing accuracy can also have disastrous consequences. Lewis (2010) found that an Emergency Department managed
to decrease their wait times from 4 hours to 9 minutes after implementing a new triage model called the Rapid Evaluation Unit Model (REUM). The patients were greeted by a clerk who sorted them into one of the two sides of the ED; one designated for walk-in patients and one designated for higher-acuity patients. Further triage was performed at the bedside by an RN (Lewis, 2010). However, no indication was given of the accuracy of the triage. The researcher does not make clear how many patients were mis-triaged using this method. This information is critical to assure that patients are receiving appropriate care in a reasonable amount of time. Of course, there is no way to be sure, but much of this responsibility falls on the triage nurse.

The triage nurse must be able to rapidly and correctly distinguish high-acuity patients. The nurse can influence the method of triage that is used in the ED by becoming involved in the decision-making process with his or her supervisors. Regardless of the specific triage method that is used, an RN can greatly increase patient outcomes by combining experience and critical thinking with protocols and guidelines. Certain simple techniques, such as scanning the room frequently for obvious changes in patients, can also help identify high acuity patients. These obvious changes may include change in consciousness, pain level, or speech. Also, it is important to tell patients to inform the nurse if they feel their condition is worsening (Bradley, 2010). Delegation of triage to another health care professional must be done with care, since extensive medical knowledge and triage experience is necessary to perform triage well. At the community hospital being assessed in this study, a comprehensive five-level triage system is used by a Registered Nurse, sometimes two. Technicians may assist the nurse in gathering data, but ultimately the Registered Nurse always makes final triage decisions.

Understandably, the task of triage can often be daunting and challenging for the nurse and other staff. Even competent and experienced nurses can face certain challenges associated with triage. Nurses must work with other staff during the triage process. In fact, Baumann and Strout (2006) found that using a physician, technician, and nurse in the triage process reduced length of stay. What, then, is unique about the role of the nurse? The traits that make an effective triage nurse are complex.
According to Andersson et al. (2006), both internal and external factors play into a nurse's triage decision. Internal factors include skills such as knowledge, experience, intuition; and personal traits such as courage, uncertainty, confidence, and rationality. External factors can include the work environment (such as number of patients) and the nurse's assessment findings. Clearly, no one factor defines triage. Nurses must deal with their own values and emotional challenges, as well as staying up to date on knowledge and gaining valuable experience.

Research Question

The purpose of this study was to explore the experience of triage through the eyes of the staff that perform it. Role challenges were identified for both nurses and non-nurses and staff satisfaction was be measured. Other perceptions of triage were explored, including views on different triage methods, who should perform triage, and what qualities make a good triage nurse. Role challenges and some issues with satisfaction are expected, since this is such a demanding task. Approval was granted by the Institutional Review Board at Lynchburg College and Centra Health, with guarantee of protection of human subjects.

Methods

Semi-structured interviews were conducted with four Lynchburg General Hospital staff, including three registered nurses and one nurse manager. The researcher questioned subjects on the average patient census and waiting times of the ED, as well as method of triage used, changes that have been made to the method, reasons for change, and staff reactions, with a goal to explore the role of the nurse in the ED environment (See Appendix A for interview questions). Interviews were audiotaped using a digital tape recorder and transcribed by the researcher. Themes will be developed based on interview data collected from staff.

The researcher also spent one four hour shift at the triage desk observing a nurse triage patients. These observations are included in the discussion.
In addition to the interviews and observation, Emergency Room Staff completed a survey designed by the researcher and reviewed by two content experts to determine staff satisfaction with the triage method and challenges faced by nurses and technicians in the setting. The content of the survey included demographic data with a Likert scale focused on the views of the triage process. Areas for qualitative data were also provided. (See Appendix B for a copy of the survey.) The surveys were handed out in person in the Emergency Department, with the permission of the ED Manager and the charge nurses on schedule for those shifts. The researcher distributed surveys during three different shifts, with a brief description of the purpose of the project and the assurance that the surveys were anonymous and confidential.

Twenty-six subjects participated in the survey. Fifteen were Registered Nurses, six were technicians, one was a paramedic, and four marked “other”. For the purposes of this study, the subjects were divided in Nurse and Non-Nurse Categories. Out of the 26 participants, 22 (84.6%) were female and 4 (15.4%) were male. The participants ranged in age from the 18-30 age group to the 51-60 age group. Table 1 includes Age distribution information. The educational level of participants ranged from High School to Bachelor’s Degree. Refer to Table 2 for Education distribution. One participant did not circle a choice, but wrote in “diploma with several college credits”. This participant is not included in the table. The participants also varied in terms of how long they had worked at this particular Emergency Department. Please see Table 3 for distribution of experience.
Table 1: Age in Years of Participants

<table>
<thead>
<tr>
<th>Years in age</th>
<th>18-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participants</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Percentage of total participants</td>
<td>38.5%</td>
<td>30.8%</td>
<td>19.2%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

Table 2: Highest Education Completed by Participants

<table>
<thead>
<tr>
<th>Highest Education Completed</th>
<th>High School</th>
<th>Technical School</th>
<th>Associate's Degree</th>
<th>Bachelor's Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Participants</td>
<td>3</td>
<td>1</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Percentage of Total participants</td>
<td>11.5%</td>
<td>23.1%</td>
<td>42.3%</td>
<td>38.5%</td>
</tr>
</tbody>
</table>

Table 3: Years Experience of Participants at Current ED

<table>
<thead>
<tr>
<th>Table 3</th>
<th>&lt;1 year</th>
<th>1-5 years</th>
<th>6-10 years</th>
<th>11-20 years</th>
<th>21-30 years</th>
<th>&gt;31 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participants</td>
<td>1</td>
<td>13</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Percentage of total participants</td>
<td>3.8%</td>
<td>50%</td>
<td>11.5%</td>
<td>23.1%</td>
<td>7.7%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Statistical analysis was completed with the assistance of Dr. Bianca Sumutka, Lynchburg College Psychology Department. The surveys were analyzed on SPSS software, using both a Chi Square analysis and a Crosstabs analysis. The Chi Square test laid out frequency tables for each question, compared them to predicted values, and determined the statistical
significance of the answers. The Crosstabs compared the responses of the nurses and non-nurses.

Results

The interviews were semi-structured and mainly served the purpose of gaining background information on the hospital, the Emergency Department, and the triage methods used. It was made clear that a different "closed triage" system was used for a short time, in which patients were not getting a full assessment until reaching the back. The nursing staff were dissatisfied with this, because they felt they were not getting a "full picture" of the patient soon enough. Hence, management decided to switch back to the open, comprehensive, five level triage system that they use now. Currently staff satisfaction seems to be very high; all the nurses interviewed had difficulty coming up with ways in which they would improve their triage system now. Although one nurse stated that they might need some more beds, all the nurses agreed that they were adequately staffed and use an efficient system. (See Appendix A for interview questions).

In the survey, the participants were asked whether or not they had participated in triage. Twenty-three (88.5%) answered yes, while three participants said no. Out of those who said they do not triage, 100% said they had directed patients to the back and/or entered patients into the system. Of the 23 who answered yes, 39.1% triaged 1-2 times a week, and 39.1% have been triaging for 1-5 years. These two groups represented the most common levels of triage experience and frequency. Out of the remaining 13 participants, six triage every shift, four triage 1-2 times a month, and three triage less than once a month. Seven have been
triaging for 11-20 years, three for less than one year, one for 6-10 years, one for 21-30 years, and one for more than 31 years.

The participants who stated that they do triage were asked if they had received some type of triage training. The distribution between yes and no was relatively even, but the slight majority (52.2%) answered yes. Those participants were asked to state what sort of training they had received. The non-nurses had several different answers. One stated that it was part of her Emergency Medical Technician (EMT) training; one stated that he had watched two triage videos, and another stated that she had completed a preceptorship. All of the nurses who responded to this question stated that they had taken some kind of class on the job.

An agree/disagree section was added to the survey, which included 25 statements. The participants were asked to rate how strongly they agreed with the statements. (See Appendix B for survey.) Out of those 25 questions, 13 were deemed statistically insignificant, and 12 were deemed statistically significant ($p<0.05$) using a Chi Square analysis. These 12 statements are shown in Table 4, including the most common answer and the statistical significance.
Table 4: Significant Variables from Agree/Disagree Section (without Cross-tabulation)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Most common answer</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I think my education is important to my triage ability”</td>
<td>Agree (46.2%)</td>
<td><em>p</em>=0.009</td>
</tr>
<tr>
<td>“I think my triage training is important to my triage ability”</td>
<td>Agree, Neutral and Strongly Agree (all 30.8%)</td>
<td><em>p</em>=0.023</td>
</tr>
<tr>
<td>“I think my experience is important to my triage ability”</td>
<td>Strongly agree (65.4%)</td>
<td><em>p</em>=0.002</td>
</tr>
<tr>
<td>“I think my intuition is important to my triage ability”</td>
<td>Strongly agree (61.5%)</td>
<td><em>p</em>=0.000</td>
</tr>
<tr>
<td>“I think and RN (non-BSN) can make triage decisions”</td>
<td>Strongly agree (57.7%)</td>
<td><em>p</em>=0.000</td>
</tr>
<tr>
<td>“I think an RN (BSN) can make triage decisions”</td>
<td>Strongly agree (50%)</td>
<td><em>p</em>=0.000</td>
</tr>
<tr>
<td>“I would feel more prepared for triage with higher education”</td>
<td>Strongly disagree (34.6%)</td>
<td><em>p</em>=0.021</td>
</tr>
<tr>
<td>“I would feel more prepared for triage with more experience”</td>
<td>Strongly agree (38.5%)</td>
<td><em>p</em>=0.007</td>
</tr>
<tr>
<td>“I feel confident in my triage decisions”</td>
<td>Agree (44%)</td>
<td><em>p</em>=0.004</td>
</tr>
<tr>
<td>“I sometimes feel guilt when triaging one patient over another”</td>
<td>Strongly disagree (40%)</td>
<td><em>p</em>=0.010</td>
</tr>
<tr>
<td>I feel like I can make a difference in people’s lives when I triage</td>
<td>Agree (44%)</td>
<td><em>p</em>=0.003</td>
</tr>
<tr>
<td>“I wish I could triage more often”</td>
<td>Neutral (36%)</td>
<td><em>p</em>=0.017</td>
</tr>
</tbody>
</table>

See Appendix D for individual frequency tables of each of these questions. See Appendix C for summary of survey results.
An area of high statistical significance was the group of questions regarding which qualities are most important to triage ability. There was a higher distribution towards “strongly agree” for the statements including experience and intuition. The difference between staff perceptions of important factors in triage are laid out in Graphs 1-4. Note that for the purpose of the graphs, “agree” and “strongly agree” values were combined, as well as “disagree” and “strongly disagree” values.

**Figure 1:** Percentage of Responses to “*My formal education is important to my triage ability*”.
Figure 2: Percentage of Responses to “My triage training is important to my triage ability”

Figure 3: Percentage of Responses to “My experience is important to my triage ability”.
Figure 4: Percentage of Responses to “My intuition is important to my triage ability”.

Another area of significance was the participants’ views on what they believe would improve their triage performance. These graphs also combine the values of “agree” and “strongly agree”, as well as “disagree” and “strongly disagree”. This distribution is demonstrated in Graphs 5 and 6.
Figure 5: Percentage of Responses to “I would feel more prepared for triage with higher education”

Figure 6: Percentage of Responses to “I would feel more prepared for triage with more experience”
One other area of significance that allows for comparison is the participants’ views on which professions ought to be able to perform triage: Technicians, RN (non BSN), and RN (BSN). Note that the statement regarding technicians was not statistically significant, but is represented here as a means for comparison in Graphs 7-9.

**Figure 7:** Percentage of Responses to “A technician can make final triage decisions”

This graph, along with graphs 9-11, also combine the “agree” and “strongly agree” values into one variable, and the “disagree” and “strongly disagree” values.
Figure 8: Percentage of Responses to "An RN (non-BSN) can make triage decisions".

Figure 10: Percentage of Responses to "An RN (BSN) can make triage decisions".

See Appendix C for full summary of survey responses.
The cross-tabulation analysis analyzed the difference in the answers of the nurses and the non-nurses. See Tables 5-10 for frequency differences in answers to selected statements. The “agree” and “strongly agree” values have been combined for simplicity.

**Table 5**: Response Frequency Comparison of Nurses and Non-Nurses to “I find triage to be mentally challenging”.

<table>
<thead>
<tr>
<th></th>
<th>Nurse</th>
<th>Non-nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree (percentage)</td>
<td>73.3%</td>
<td>0</td>
</tr>
<tr>
<td>Disagree</td>
<td>13.4%</td>
<td>45.5%</td>
</tr>
<tr>
<td>Neutral</td>
<td>13.2%</td>
<td>27.3%</td>
</tr>
<tr>
<td>N/A</td>
<td>0</td>
<td>27.3%</td>
</tr>
</tbody>
</table>

**Table 6**: Response Frequency Comparison of Nurses and Non-Nurses to “I find triage to be emotionally challenging”.

<table>
<thead>
<tr>
<th></th>
<th>Nurse</th>
<th>Non-nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree (percentage)</td>
<td>53.3%</td>
<td>0</td>
</tr>
<tr>
<td>Disagree</td>
<td>20%</td>
<td>63.7%</td>
</tr>
<tr>
<td>Neutral</td>
<td>26.7%</td>
<td>9.1%</td>
</tr>
<tr>
<td>N/A</td>
<td>0</td>
<td>27.3%</td>
</tr>
</tbody>
</table>
Table 7: Response Frequency Comparison of Nurses and Non-Nurses to “I think a technician can make triage decisions”.

<table>
<thead>
<tr>
<th></th>
<th>Nurse</th>
<th>Non-nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>6.7%</td>
<td>63.7%</td>
</tr>
<tr>
<td>Disagree</td>
<td>73.4%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Neutral</td>
<td>20%</td>
<td>9.1%</td>
</tr>
<tr>
<td>N/A</td>
<td>0</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

Table 8: Response Frequency Comparison of Nurses and Non-Nurses to “I feel like I have autonomy when I triage”.

<table>
<thead>
<tr>
<th></th>
<th>Nurse</th>
<th>Non-nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Disagree</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Neutral</td>
<td>0</td>
<td>40%</td>
</tr>
<tr>
<td>N/A</td>
<td>0</td>
<td>30%</td>
</tr>
</tbody>
</table>

The statement in Table 20 had a sample size of ten non-nurses instead of 11, because one non-nurse did not answer the question.
Table 9: Response Frequency Comparison of Nurses and Non-Nurses to “I wish I could triage more often”.

<table>
<thead>
<tr>
<th></th>
<th>Nurse</th>
<th>Non-nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>13.2%</td>
<td>40%</td>
</tr>
<tr>
<td>Disagree</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Neutral</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>N/A</td>
<td>6.6%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 10: Response Frequency Comparison of Nurses and Non-Nurses to “I think that triage is well staffed”.

<table>
<thead>
<tr>
<th></th>
<th>Nurse</th>
<th>Non-nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>39.9%</td>
<td>54.6%</td>
</tr>
<tr>
<td>Disagree</td>
<td>39.9%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Neutral</td>
<td>20%</td>
<td>9.1%</td>
</tr>
<tr>
<td>N/A</td>
<td>0</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

See Appendix C for Summary of frequency of survey responses.
Following the agree/disagree section, participants were asked to answer the question “What do you think is the biggest challenge to overcome in triage?” A variety of answers were obtained. Out of the 17 participants that answered this question, four made reference to experience:

“"The right knowledge, experience, and asking the right questions! History is very important". (nurse)

“"You need experience!" (nurse)

“"When the train pulls in and you have 10 people to triage, it can get overwhelming. No amount of formal education can prepare you- you have to experience it, get your rhythm down, and pull from your experience." (nurse)

“"Knowing whether someone is legitimately ill or trying to get attention. We get a lot of people who cry wolf and it takes experience to know the difference". (non-nurse)

Three nurses indicated experience as being a major challenge, compared to only one non-nurse. This may suggest that experience is considered to be more important to nurses than to non-nurses.

Seven made reference to other qualities of the nurse, including knowing one’s own abilities, consistency, and efficiency:

“"Knowing when you are and are not ready for that responsibility" (nurse)

“"All nurses triaging consistently". (nurse)
"Appropriate helpful staff that have initiative makes a huge difference!" (nurse)

"Difficult to look at a patient for three minutes and know everything about that patient". (nurse)

"Some nurses are efficient and fast, then some nurses are very slow and don’t care about time. It seems that some nurses can keep the flow constant, then some can slow everything down and put us 200 behind". (non-nurse)

"Attitude!" (non-nurse)

"Adequately staffed, as long as the right individuals are out there. Some are too slow (has nothing to do with training)" (non-nurse)

Four of these answers are from nurses and three from non-nurses, indicating that both professions see other internal factors as being important.

Six made reference to outer factors (factors not within the nurse) such as qualities or quantities of patients:

"Census- some nurses become very overwhelmed with the amount of patients that need to be triaged". (nurse)

"Triaging pediatric patients" (nurse)

"Patients understanding why they have to wait, that it is not first come first served". (nurse)
"Attitudes of patients" (non-nurse)

"Public education about the triage process" (non-nurse)

"1. Getting enough information from patients... 2. Managing privacy and disgruntled patients when the ER is full". (non-nurse)

Note that three responses are from nurses and three from non-nurses, suggesting that external factors are seen as equally important to both professions.

Discussion

Perceptions of the triage process

As evidenced in the results above, there was significant agreement among all participants in several areas. These areas included factors that are important to one’s triage ability, what would improve one’s triage ability, who is qualified to perform triage, confidence in triage decisions, and feelings of guilt in the triage process. Experience is clearly a major factor in one’s ability to triage since all participants who answered felt that it was important to their triage ability, and 69% said they would feel more prepared for triage with more experience; furthermore, several participants cited experience as the biggest issue to be overcome in triage. The participants felt that education and triage training were important, with 69% and 61% agreeing on these statements (respectively). However, intuition and experience were seen as being more important.
Despite the fact that education was seen as an important factor in triage, the majority (65%) disagreed that they would feel more prepared for triage with higher education, and only 12% agreed. It seems that although education is important, one can only be taught so much, whereas one can never have enough experience. There was also a significant difference in who the participants felt was qualified for triage. Most of the participants agreed that a Registered Nurse (RN) could perform triage, but views were more conflicted on the question of a technician performing triage. Fifty percent disagreed that a technician could perform triage, but only 4% disagreed that an RN could perform triage (whether a BSN or not). The question of whether the RN had a BSN seemed relatively insignificant to the participants. It ought to be noted, however, that the majority of non-nurses felt that a technician was qualified to triage (63.7%) compared to only 6.7% of nurses. Even though experience is the most important factor, nurses feel that their higher level of medical education is required to perform triage safely. Nurses did cite education as more important than non-nurses did. In response to the statement “I think my formal education is important to my triage ability”, 86.6% of nurses agreed, versus only 45.5% of non-nurses.

In my own observations, I did note that experience and intuition played a big part. As a senior who has almost completed my formal nursing education and who has trained herself on the triage process for the purposes of this project, I felt inadequate at triage. Although I have had four years of nursing school and have knowledge of the triage process, I lack experience and the intuition that accompanies it. The nurse I shadowed could look on the computer screen and see “13 year old girl—not herself” and chose to triage her first, even though there were some others with what seemed at first to be more serious, or obvious, problems. My first impression was to triage her later, since this did not seem dangerous. The nurse explained to me, however,
that because of her age group, this could indicate that she took pills and that she needs to be evaluated promptly. Experience and intuition played a part in this decision.

The majority of participants stated that they do feel confident in their triage decisions, with 80% agreement. On this issue there appears to be little difference between nurses and non-nurses. Although 86.7% of nurses agreed to feeling confident versus 70% of non-nurses, it should be noted that 20% of non-nurses felt this question did not apply to them and selected "N/A". By contrast, all the nurses who participated selected agree, disagree, or neutral. Hence, it is possible that these percentages would have been more even if all non-nurses had answered, or if those who did not answer were worked out of the equation so as to raise the percentage. The majority of participants agreed that they do not feel guilt in the triage process. In fact, 64% disagreed, with only 24% agreeing. These numbers were relatively even between nurses and non-nurses. However, to the statement "I find triage to be emotionally challenging", there was quite a lot of disagreement between nurses and non-nurses. The majority of nurses find it to be emotionally challenging, whereas the majority of non-nurses state that they do not. This may be due to several factors. One is that in nursing programs, holistic care, including emotional care, is stressed more than in EMT training programs. Note that all technicians may not be EMTs, but many are. The EMT philosophy is more focused on the medical aspect of the patient. This is not to suggest that EMTs are cold-hearted, but this emphasis may aid them in not feeling the patients' problems personally. Although nurses are taught to remove themselves emotionally when necessary so they can give quality care, they are also taught to assess a patient’s emotional dimension of functioning, and may be doing this automatically when they perform triage assessments. To know the reason for this difference for sure, further research is needed.
There was another surprising difference between nurses and non-nurses. The majority of nurses agreed that triage is mentally challenging, whereas the majority of non-nurses disagreed. This difference is more difficult to explain than the question of emotional challenges. From my own observations at the triage desk, I noticed that technicians were not making triage decisions, but rather simply taking vitals and entering patients into the system. After this, the triage nurse looked at the chief complaint on the computer, decided which ones needed to be seen first, and then called them in individually to triage them. Essentially, the nurse has to make two decisions and sort through the patients twice. However, many non-nurses did state that they have triaged, even though the interviews conducted among the managers revealed that they do not make triage decisions in the ED (only the nurse can). There is a possibility that when stating that they do triage, many non-nurses were referring to Simple Triage and Rapid Treatment (START) triage.

This is very different method of triage from comprehensive hospital triage, and is taught to EMTs. This method involves visually assessing patients, ideally for less than a minute, and tagging them as black (dead or expected to die) red (needs immediate attention) yellow (injured but can wait) and green (ambulatory, minor injuries). Since this involves a very quick decision being made for large numbers of patients (this is often used in a disaster with many casualties, or at least more than that particular crew of first responders can handle), there is not much information to sort through. Vitals and history are not obtained. The assessment done is limited to respirations (are they there, are they fast?) level of consciousness, and mental status (simply, do they know who they are/where they are?). The first responder can perform many of these tasks simultaneously and move on quickly. In some cases they can visualize which category the patient is in and not have to do any assessment. For example, any patient that is walking is
automatically green and must be moved out of the way. Any patient that has no pulse or loses their pulse is a black.

A nurse in hospital triage does not dismiss ambulatory patients, but rather must try to “solve the mystery” to some extent. If a patient has abdominal pain but does not appear distressed, they could be a level 3 (see Introduction). But if their vitals signs are abnormal, perhaps a low blood pressure, this changes the outlook. Then perhaps this person has a history of a GI bleed and mentions off-hand that they take ibuprofen every day for back pain. This changes the outlook again; there is a good possibility this person may be having another ulcer that may be bleeding again (ibuprofen can cause stomach bleeding when taken regularly). If the nurse had not thought to ask about history and did not pick up on the ibuprofen comment, she may have mistakenly put this person as a three and compromised their care. A nurse can visually assess some triage decisions, but also must be able to make decisions based on what he or she cannot see. Undoubtedly, START triage requires experience, resolve, confidence, and some knowledge. However, hospital triage is a more challenging task than START triage, due to its complexity.

This confusion between triage methods may or may not have been the reason that non-nurses found triage to be less challenging than nurses did. There is also the possibility that if an experienced EMT is very accustomed to working under pressure, they may feel more calm and collected behind a triage desk. To discover the answer to this question, more research is needed, with clarification on the survey of what types of triage participants have performed.

Overall, the participants felt that multiple factors are necessary for one to be able to triage effectively, including patient characteristics and characteristics of the ED staff. This is consistent with the study by Andersson (2006), which identified multiple factors, both inner and outer that are needed for effective triage. Experience appears to be the most important factor, and
one can never get enough experience. The majority do feel confident in their triage decisions, and most also seem to be able to remove themselves enough to not feel guilt over their decisions.

Staff Satisfaction

There is ambivalence regarding staff satisfaction (feelings of fulfillment, support from co-workers, etc). Factors of staff satisfaction were measured by statements 16-19 and 23-25 in the agree/disagree section. (See Appendix B for survey). The questions on fulfillment, enjoyment of triage, autonomy, staffing, assistance, and feeling overwhelmed did not demonstrate statistical significance. However, it was significant that 44% agreed that they feel they can make a difference when they triage. Combined with the 20% that strongly agreed, this makes a total 64% agreement, compared to 12% disagreement. Although the question of fulfillment was statistically insignificant, it should be noted that 33.8% did agree that it is fulfilling, and the high level of agreement on making a difference in patient’s lives does demonstrate some level of fulfillment. Fifty-six percent total agreed that they feel they have autonomy (only 16% total disagreed), and 57.7% agreed that they receive assistance when needed (only 15.4% total disagreed). From my own observations, I saw that the triage nurses did indeed have some autonomy despite the strict triage protocol. One patient should have been a 4 according to the guidelines, because she had extremity pain. The triage nurse, however, knew that this could be a blood clot and contacted the physician to have her evaluated more quickly. The nurse did have opportunity to use her expertise. Although not all of these numbers were statistically significant, they are worth noting. Triage method used also seems to have an effect on staff satisfaction. In interviews, it was made clear that staff satisfaction declined when a “closed triage” system was implemented, that is;
patients skipping the triage area and going straight to the back to be triaged in the room. Nurses felt it was more difficult to get a complete picture of the patient in this method and pushed for a change back to the way it is now. This shows that a large part of satisfaction is simply feeling like one can do an adequate job and take care of patients well. Staff satisfaction at this ED seems relatively good overall. One staff member in an interview summed it up well—"I really like the way it is now. It’s not a perfect system, but I don’t know how to make it perfect...it’s chaotic, but it’s controlled chaos".

Role Challenges

The question of role challenges was addressed by presenting the statement "I feel like I can live out the philosophy of nursing when I triage", by comparing the answers of nurses and non-nurses, and by questioning participants on who they think can triage. On the philosophy question, the answers picked most often were "neutral" and "NA". There seems to be ambivalence on this topic, perhaps just because the question of nursing philosophy is a rather complex one. However, it could also represent possible role challenges for nurses, since this question was designed to assess how much triage nurses "felt like a nurse" when triaging. The fast pace that is required for triage does not exactly allow for holistic care, which is a large part of nursing philosophy. Another aspect of nursing philosophy is that nurses should perform multiple different roles for their patients, including caregiver, educator, communicator, advocate, and manager. The triage nurse cannot provide much care during the triage process, and also has limited opportunity to act as an advocate or an educator. In my observations, I did note that the nurse acted as an advocate by asking about abuse, and by calling the doctor if she felt that this particular patient really needed to be cared for quickly. Some education was possible, such as
explaining quickly what the patient could have. However, it is very difficult to carry out these roles in such a short time, and therefore may be difficult to live out the philosophy of nursing. Still, some nurses do feel validated as a nurse by performing triage. One nurse interviewed stated- "...there are some things that only a nursing judgment is called for, and triage is one of those things".

There seemed to be some role challenges for technicians as well, since the majority stated they think that a technician should be able to triage, and many said they wish they could triage more often. The technicians and other non-nurses feel that they are not living up to their full ability by not triaging as much as the nurses. The non-nurses also felt like they have less autonomy than the nurses do. Although they are involved in the triage process, from my observations they do not make those final decisions. This could feel limiting to technicians and other non-nurses, and present a potential role challenge. Despite reporting high levels of autonomy, fewer nurses then non-nurses wish they could triage more, and more nurses do not find the triage area to be well staffed. This could be due to role challenges, or may simply be due to the fact that since nurses already triage more than technicians; they do not feel a need to triage more. As stated above, nurses did find triage to be more challenging than the non-nurses, which could actually represent more role satisfaction. If nurses feel challenged and feel autonomous, they may be more satisfied with having that role. Non-nurses, however, felt less challenged. This could indicate less role satisfaction.

Clinical Significance

This tool would be useful for managers who want to improve overall staff morale and satisfaction. It could also be useful for ED managers when selecting which types of training to
use for triage nurses. Many noted experience as a major factor in triage ability. Therefore, the manager could implement a preceptorship program for those learning to triage in addition to the triage class that nurses in this study referenced. This way, triage nurses can gain experience before they attempt triage on their own. In some cases, these same values could be used to decide which staff are ready for triage. Perhaps one nurse never took a class but has assisted with the triage process for years, and another has had plenty of training but no experience. If the staff rate experience as being more important, the manager may decide that it would be better to choose the former (depending on the circumstances). If staff rated their confidence in triage decisions to be low, managers could help implement more training and/or preceptorship for the staff. If guilt and emotionally challenging agreements were high, the manager could implement de-briefing.

This has an impact on patient care because confident staff that feel prepared in their decisions are more likely to be efficient, and staff that are satisfied with their roles are more likely to be good communicators for their patients and work well with their co-workers.

**Improvements Needed**

This assessment tool was developed by the researcher and conducted as a pilot study. Throughout this study, opportunities for improvement were observed. The type of triage being referenced should be clarified in the future, so as to avoid confusion between hospital triage and START triage, and obtain more accurate data. The question “I think an APN can make triage decisions” should be changed to say “Advanced Practice Nurse” or “Nurse Practitioner”. There seems to have been some confusion on this question, as one participant skipped the question, and there were a higher number of “N/A” responses to this than to questions on the same topic. The two questions that ask about an RN’s ability to triage differentiate between a BSN (nurse with a
Bachelor’s) and non-BSN (nurse with an Associate’s). There was a higher level of agreement that a non-BSN can triage than a BSN. It is unclear if the participants felt a nurse without a Bachelor’s degree was more qualified that a nurse with one, or if they simply did not think BSN makes a difference and put “neutral”. To clarify this, the statements should be changed to read “I think a BSN nurse is more qualified than a non-BSN nurse”, “I think a non-BSN nurse is more qualified that a BSN nurse” and “I do not think it matters if the nurse is a BSN”. Another area for improvement would be to include a question that simply says “I am satisfied with my work in triage”, since this will more directly address the issue of staff satisfaction. In order to be deemed valid and reliable, this tool will have to be distributed multiple times with similar but larger samples. Some other barriers were hit due to time constraints. In the future, approval for research ought to be gained further in advance to prepare for inevitable delays in the research process; this way, more analysis can be done with the surveys.

Conclusion

Further research, with improvements to the tool, is needed to definitively assess role challenges and staff satisfaction. Overall, staff satisfaction seems relatively high but is difficult to gauge with the current tool since there are so many different factors that may or may not indicate satisfaction. There are some role challenges involved with the triage process due to its fast pace and the different roles that are performed by different professions. Overall, nurses do feel autonomous and feel like they can make a difference in patient’s lives during the triage process, despite other ambiguous findings. The fact that a nurse can triage finds agreement with a very large majority, indicating that nurses are viewed as competent in triage. Many factors are
important to one’s ability to triage, including education, training, experience, and intuition. Out of all of these factors, none are viewed to be as important as experience. External factors, such as numbers and attitudes of patients, are also viewed as important, as evidenced by qualitative data. Triage is viewed to be a complex process requiring many virtues of the one performing it. Due to its complexity and difficulty, some role challenges do occur and should be managed to promote better satisfaction overall.
Literature Cited


Appendix A: Interview Questions

How long have you worked at the Lynchburg General Hospital Emergency Department?

What position have you held there?

I understand the LGH ED changed its triage method in recent years. Is that correct?

Please describe the current triage method?

What works well?

Please describe your role?

What do you see as the challenges of your role and the triage process?

How would you describe the atmosphere of the waiting room?

If you could propose any changes to the triage method used, what would they be
Appendix B: Survey

I. Demographic Data

1. What is your profession (circle one)?
   - Physician
   - Advanced Practice Nurse
   - Registered Nurse
   - Paramedic
   - Technician
   - Other (specify) ____________________

1. How long have you worked at this Emergency Department?
   - <1 year
   - 1-5 years
   - 6-10 years
   - 11-20 years
   - 21-30 years
   - >31 years

2. What is your age?
   - 18-30 years
   - 31-40 years
   - 41-50 years
   - 51-60 years
   - 60+

3. What is your sex?
   - Male
   - Female

4. What is your highest level of education?
   - High School
   - Technical School
   - Associates Degree
   - Bachelor’s Degree
   - Master’s Degree
   - Doctorate
   - Medical School

II. Triage Experience

1. Have you ever participated in triaging patients? If no, go to question 7.
   - Yes
   - No

2. If yes, where?
   - Triage area/triage desk
   - Patient’s room
   - Nurse’s station
   - Triage clinic
   - Other (specify) ____________________

3. If yes, how often do you triage?
   - Every shift
   - 1-2 times a week
   - 1-2 times a month
   - <1 time a month
4. How long have you been triaging patients?

- <1 year
- 1-5 years
- 6-10 years
- 11-20 years
- 21-30 years
- >30 years

5. Have you ever taken a triage training course or preceptorship?

- Yes
- No

6. If yes, please state what type of training.

7. Have you ever participated in directing patients to the back or entering chief complaints (but not triaging)?

- Yes
- No

III. Agree/Disagree

Please answer any questions that apply to you. Circle a number for agree (A), disagree (D), strongly agree (SA), strongly disagree (SD), neutral (N), or not applicable (N/A). Feel free to comment.

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1. I enjoy triaging patients

6

2. It is mentally challenging to make triage decisions

6

3. It is emotionally challenging to make triage decisions

6

4. I think my formal education is important for my ability to make triage decisions.

6

5. I think my triage training is important for my ability to make triage decisions.

6

6. I think my experience is important for my ability to make triage decisions.

6

7. I think my intuition is important for my ability to make triage decisions.

6
8. I think it is important for a technician to make final triage decisions. 1 2 3 4 5
6
9. I think it is important for a RN (non BSN) to make final triage decisions. 1 2 3 4 5
6
10. I think it is important for a RN (BSN) to make final triage decisions. 1 2 3 4 5
6
11. I think it is important for an APN to make final triage decisions. 1 2 3 4 5
6
12. I would feel more prepared for triage with higher education. 1 2 3 4 5
6
13. I would feel more prepared for triage with more experience. 1 2 3 4 5
6
14. I feel confident in my triage decisions. 1 2 3 4 5
6
15. I sometimes feel guilt when triaging one patient over another. 1 2 3 4 5
6
16. I find triage to be fulfilling. 1 2 3 4
5 6
17. I feel like I have autonomy when triaging. 1 2 3 4
5 6
18. I think I can make a difference in patients' lives when triaging. 1 2 3 4 5
6
19. I feel that I can live out the philosophy of nursing when I triage. 1 2 3 4 5
6
20. I prefer the comprehensive, level 5 triage system to the 3 level 1 2 3 4 5
6 system.
21. I prefer the three level system of triage over the five level 1 2 3 4 5
6 system.
22. I wish I could triage more often. 1 2 3 4
5 6
23. I sometimes feel overwhelmed at triage  
   6

24. I receive assistance when needed at triage  
   6

25. I think triage is adequately staffed.  
   5  6

26. What do you feel is the biggest challenge to be overcome in triage?

_________________________________________________________________________

_________________________________________________________________________
Appendix C

I. Demographics
Total surveys filled out: 26
Occupation: 15 Registered Nurses (57.6%) *
   6 technicians (23.1%)
   1 paramedic (3.8%)
   4 other (1 registration, 1 respiratory, 1 HUC, 1 unit support assistant) (15.4%)
Age: 18-30: 10 (38.5%) *
   31-40: 8 (30.8%)
   41-50: 5 (19.2%)
   51-60: 3 (11.5%)
   60+: 0
Years at this ED: <1 year: 1 (3.8%)
   1-5: 13 (50%) *
   6-10: 3 (11.5%)
   11-20: 6 (23.1%)
   21-30: 2 (7.7%)
   >31: 1 (3.8%)
Highest Formal Education:
   High School: 3 (11.5%)
   Technical School: 1 (3.8%)
   Associative Degree: 11 (42.3%) *
   Bachelor's Degree: 10 (38.5%)
   Master's: 0
   Doctorate: 0
   Medical School: 0
   Other: “Diploma with several college credits” (RN)
Sex: Male: 4 (15.4%)
   Female: 22 (84.6%)*

II. Triage Experience
Participated in triage: Yes: 23 (88.5%)*
   No: 3 (11.5%)
Of the people who haven't triaged:
   Have entered patients into the system: All 3 (100%)
Of the people who have triaged: (sample now 23 until next section)
   How often triage?: Every shift: 6 (26.1%)
      1-2 times a week: 9 (39.1%) *
      1-2 times a month: 4 (17.4%)
      <1 time a month: 3 (13%)
      * One person wrote “NA” although checking yes to triaging:
         Unit support assistant.

How long have you been triaging patients?
   <1 year: 3 (13%)
   1-5 years: 9 (39.1%)*
   6-10 years: 1 (4.3%)
11-20 years: 7 (30.4%)
21-30 years: 1 (4.3%)
>31 years: 1 (4.3%)

*one person, unit support assistant, replies with NA

Have you ever taken a triage training course or preceptorship?
Yes: 12 (52.2%)*
No: 11 (47.8%)

Please state what type of training:
- “Preceptorship” (unit support assistant)
- “It was part of my EMT training” (tech)
- “2 week class and set up triage in 1980” (nurse)
- “Class and training (on the job)” (nurse)
- “With the new computer class” (nurse)
- “Triage class” (nurse)
- “Class for ED” (nurse)
- “Triage class at hospital” (nurse)

III. Agree/Disagree

1. I enjoy triaging patients:
   38.5% agree.
   19.2% strongly agree.
   15.4% are neutral.
   11.5% said NA.
   11.5% strongly disagree.
   3.8% disagree.

2. Triage is mentally challenging:
   30.8% strongly agree.
   19.2% are neutral,
   19.2% disagree.
   11.5% agree,
   11.5% said NA.
   7.7% strongly disagree.

3. Triage is emotionally challenging:
   34.6% disagree.
   19.2% neutral.
   15.4% agree,
   15.4% strongly agree.
   11.5% said NA.
   3.8% strongly disagree.

4. I think my formal education is important to my triage ability:
   46.2% agree.
   23.1% strongly agree.
   15.4% said NA.
   11.5% are neutral.
   3.8% strongly disagree.
No one disagrees.

5. I think my triage training is important to my triage ability.
   - 30.8% said NA,
   - 30.8% agree,
   - 30.8% strongly agree.
   - 3.8% disagree,
   - 3.8% neutral.
   No one strongly disagrees.

6. I think my experience is important to my triage ability:
   - 65.4% strongly agree.
   - 23.1% agree.
   - 11.5% said NA.
   No one disagrees or strongly disagrees or is neutral.

7. I think my intuition is important for my triage ability:
   - 61.5% strongly agree.
   - 15.9% agree.
   - 11.5% said NA.
   - 7.7% neutral.
   - 3.8% disagree.

8. I think a technician can make triage decisions:
   - 30.7% strongly disagree.
   - 23.1% agree.
   - 19.2% disagree.
   - 15.4% are neutral.
   - 7.7% strongly agree.
   - 3.8% said NA.

9. I think a RN (non BSN) can make triage decisions:
   - 57.7% strongly agree.
   - 26.9% agree.
   - 7.7% are neutral.
   - 3.8% said NA.
   - 3.8% strongly disagree.
   No one disagrees.

10. I think an RN (BSN) can make triage decisions:
    - 50% strongly agree.
    - 30.8% agree.
    - 11.5% neutral.
    - 3.8% said NA,
    - 3.8% strongly disagree,
    no one disagrees.

11. I think an APN can make triage decisions:
    - 33.3% agree.
    - 25% strongly agree.
    - 12.5% disagree,
    - 12.5% neutral.
    - 8.3% said NA,
8.3% strongly disagree.

12. I would feel more prepared for triage with higher education:
   34.6% strongly disagree.
   30.8% disagree.
   15.4% neutral.
   7.7% agree,
   3.8% strongly agree,
   7.7% said NA.

13. I would feel more prepared for triage with more experience:
   38.5% strongly agree.
   30.8% agree.
   11.5% neutral.
   7.7% strongly disagree,
   7.7% disagree.
   3.8% said NA.

14. I feel confident in my triage decisions:
   44% agree.
   36% strongly agree.
   12% neutral.
   8% said NA.
   No one disagrees.

15. I feel guilt when triaging one patient over another:
   40% strongly disagree.
   24% disagree.
   24% agree.
   8% said NA.
   4% neutral.

16. I find triage to be fulfilling:
   30.8% agree.
   26.9% neutral.
   15.4% strongly disagree.
   11.5% disagree.
   11.5% said NA.
   3.8% strongly agree.

17. I feel like I have autonomy when I triage:
   32% agree.
   24% strongly agree.
   16% neutral. 8% disagree.
   8% strongly disagree.
   12% said NA.

18. I feel like I can make a difference when I triage:
   44% agree.
   20% strongly agree.
   12% said NA.
   12% neutral.
   8% strongly disagree.
4% disagree.

19. I feel like I can live out the nursing philosophy when I triage:
   24% neutral.
   24% NA.
   16% strongly agree,
   16% agree.
   12% strongly disagree.
   8% disagree.

20. I prefer the five level system to the three level system:
   36% strongly agree.
   24% neutral.
   20% NA.
   6% agree.
   4% disagree.
   No one strongly disagrees.

21. I prefer the three level system:
   28% strongly disagree,
   28% disagree.
   24% NA.
   16% neutral.
   4% agree.
   No one strongly agrees.

22. I wish I could triage more often:
   36% neutral.
   28% strongly disagree.
   12% agree,
   12% NA.
   8% strongly agree,
   4% disagree.

23. I sometimes feel overwhelmed at triage:
   30.8% agree.
   23.1% neutral.
   15.4% strongly agree.
   11.5% NA.
   11.5% strongly disagree.
   7.7% disagree.

24. I receive assistance at triage when needed:
   34.6% agree.
   23.1% strongly agree.
   19.2% neutral.
   7.7% disagree,
   7.7% strongly disagree,
   7.7% NA.

25. I think triage is adequately staffed:
   26.9% agree.
   23.1% disagree.
   19.2% strongly agree.
   11.5% strongly disagree.
   15.3% neutral.
IV. Qualitative:
What do you feel is the biggest challenge to be overcome in triage?
A. Answers of Registered Nurses:
1. “Census- some nurses become very overwhelmed with the amount of patients that need to be triaged”
2. “Knowing when you are and are not ready for that responsibility. Going with what you’ve learned, know, and been taught”.
3. “Triaging pediatric patients”.
4. “Appropriate helpful staff that have initiative makes a huge difference! Ncise (?) level is a problem”.
5. “All nurses triaging consistently”.
6. “When the train pulls in and you have 10 people to triage, it can get overwhelming. No amount of formal education can prepare you-you have to experience it, get your rhythm down, and pull from your experience”.
7. “Difficult to look at a patient for three minutes and know everything about that patient”.
8. “Patients understanding why they have to wait, that it is not first come first served.”
9. “You need experience”.
10. “The right knowledge, experience, and asking the right questions! History is very important”.
B. Answers of non-nurses
1. “Timing, some nurses are efficient and fast, then some nurses are very slow and don’t care about time. It seems that some nurses can keep the flow constant, then some can slow everything down and put us 200 behind”.
2. “Attitudes of patients”.
3. “Adequately staffed, as long as the right individuals are working out there. Some are too slow (has nothing to do with training). *Let’s try to remember we are in health care, not running a hotel, restaurant”.
4. “Attitude!”
5. “Public Education about triage process”
6. “1. Getting enough information from patients to better access. Three level system doesn’t do that. 2. Managing privacy and disgruntled patients when ER is full”.
7. “Knowing whether someone is legitimately ill or trying to get attention. We get a lot of people who cry wolf and it takes experience to know the difference”

Comments written next to the agree/disagree section:
A. Comments by nurses
1. Next to “I sometimes feel overwhelmed at triage” Subject marked neutral and wrote “with no extra triage nurses and 15 patients to be triaged”.
2. Next to “Intuition is important to triage”, subject marked strongly agree and wrote “Nursing sense like spiderman”.
3. Next to “technician can make triage decisions” subject marked agree and wrote “a good one”.
4. Next to “APN can make triage decisions” subject marked agree and wrote “legal reasons”.
5. Next to “I prefer five level triage” subject marked neutral and wrote “with either one it depends on the volume”.
B. Comments written by non-nurses
1. Next to all questions asking about qualifications needed to triage (tech, RN, etc) subject marked neutral and wrote “it all depends on who it is”.
Appendix D

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"I feel like I can make a difference in people's lives when I triage"

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