

Characterizing the Role of the “Triage”: Reasons for Triage Discordance and Impact on Disposition



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INTRODUCTION

Inpatient general medicine physicians are increasingly called upon to serve in a “triage” role assessing and managing requests for admission to the acute care medical service.^{1, 2} To our knowledge, no study has catalogued these activities in a comprehensive way, especially with respect to decision-making functions. Thus, our objectives were to (1) characterize the demands on the triage role by measuring the frequency and origin of admission calls to the acute care medical service, (2) better understand the triage decision-making process by delineating sources of triage decision concordance/discordance, and (3) identify the impact of the triage with respect to ultimate disposition in the setting of triage discordance.

METHODS

At our institution, each triage logs all admission calls received at the end of each shift into a centralized Triage Database that captures basic information such as date, time, location of referral, and ultimate disposition as well as the triage’s assessment of admission appropriateness to the acute care medical service. For this study, “triage concordance” was

coded when the triage indicated the referral was “definitely appropriate” for the acute care medical ward and “triage discordance” was coded for all other responses.

All complete entries logged in the Triage Database between May 1, 2018, and April 30, 2019, were considered for inclusion in this study. Outside hospital transfers, psychiatry transfers, and direct/planned admissions were excluded. Data were downloaded into Excel and analysed for frequencies and descriptive statistics. This project was approved by the University of Washington Institutional Review Board.

RESULTS

Our sample included 3499 Triage Database entries over the 1-year study period. The majority of requests originated from the Emergency Department ($n = 2362$; 67.5%) and the medical Intensive Care Unit ($n = 774$; 22.1%). Few requests originated from non-Medicine acute care services ($n = 157$; 4.5%), outpatient clinics ($n = 95$; 2.7%), surgical Intensive Care/surgical Intensive Care Unit ($n = 87$; 2.5%), or neurosciences Intensive Care Unit ($n = 24$; 0.7%).

Overall, there was concordance in assessment between triage and referring physician in 2391 (68.3%) and discordance in 1108 (31.7%) of all admission calls. The triage most commonly shared concordance with calls coming from the medical ICU (78.9% concordance), followed by the outpatient clinics (70.5% concordance), ED (67.3% concordance), and neurosciences ICU (62.5% concordance). Sites with less common triage concordance included other non-Medicine acute care services (46.5% concordance) and trauma/surgical ICU (40.2% concordance). The primary reason for discordance varied by site of admission referral. These results are depicted in Figure 1.

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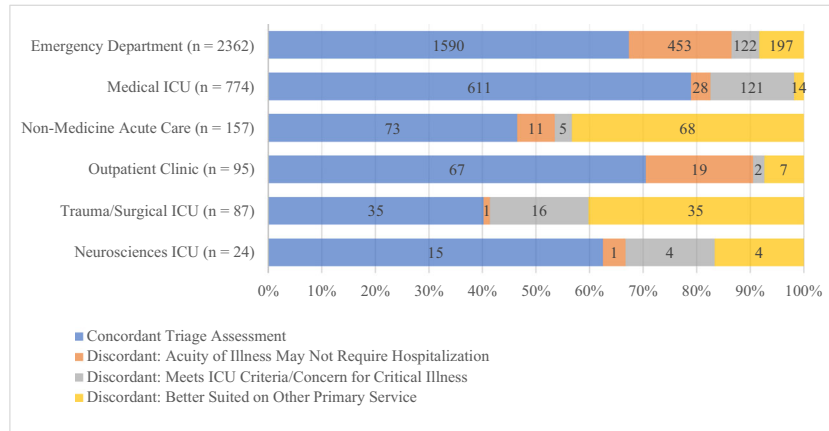


Figure 1 Triage calls by referring site and concordance/discordance

Among all patients with triage discordance, disposition was consistent with triagist assessment in 40.6% (450/1108) of cases. Disposition outcomes varied by reason for triage discordance and site of referral. Among the patients felt not to require inpatient admission, only 22.4% (115/513) were ultimately discharged while 77.6% (398/513) were admitted to the hospital. For patients the triagist felt would be better served on an alternate service, 50.2% (163/325) were admitted to a non-Medicine service while 49.8% (162/325) were admitted to an acute care Medicine service. Of the patients the triagist assessed as requiring intensive care, 63.7% (172/270) were admitted to (or remained in) an ICU whereas 36.3% (98/270) were either admitted to an acute care service or discharged.

Of discordant calls, ultimate disposition was consistent with triagist assessment in 77.8% (7/9) of calls from the neurosciences ICU; 59.5% (50/84) of calls from non-medicine acute care services; 55.8% (29/52) of calls from the trauma/surgical ICU; 54.0% (88/163) of calls from the medical ICU; 34.7% (268/772) of calls from the ED; and 28.6% (8/28) of calls from the outpatient clinic. Patient disposition information is summarized in Table 1.

DISCUSSION

Admitting or transferring a patient reflects shared clinical decision-making between the referring physician and the

Table 1 Disposition Outcomes for Calls with Discordance Between Triagist and Referring Physician Assessment

	Of discordant calls, disposition consistent with triagist assessment	By reason for discordance		
		Acuity of illness may not require hospitalization	Meets ICU criteria/concern for critical illness	Thought better suited on other primary service
Emergency Department	268/772 (34.7%)	96/453 (21.2%)	84/122 (68.9%)	88/197 (44.7%)
Medical ICU	88/163 (54.0%)	14/28 (50.0%)	70/121 (57.9%)	4/14 (28.6%)
Non-Medicine Acute Care	50/84 (59.5%)	1/11 (9.1%)	1/5 (20.0%)	48/68 (70.6%)
Outpatient Clinic	8/28 (28.6%)	4/19 (21.1%)	0/2 (0%)	4/7 (57.1%)
Trauma/Surgical ICU	29/52 (55.8%)	0/1 (0%)	13/16 (81.3%)	16/35 (45.7%)
Neurosciences ICU	7/9 (77.8%)	0/1 (0%)	4/4 (100.0%)	3/4 (75.0%)
All Sites	450/1108 (40.6%)	115/513 (22.4%)	172/270 (63.7%)	163/325 (50.2%)

accepting physician.^{3, 4} We have identified that triage discordance is prevalent and that ultimate disposition is often not in alignment with triagist assessment. To our knowledge, this is the first study to report the specific activities of physicians serving in this emerging triagist capacity. Our results suggest the triagist may have less definitive impact than assumed and that additional exploration into physician communication, decision-making and patient outcomes is warranted.

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Compliance with Ethical Standards:

This project was approved by the University of Washington Institutional Review Board.

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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