

EMERGENCY COMMUNICATION NURSES’ ABILITY TO CORRECTLY SELECT ABDOMINAL PAIN AS THE APPROPRIATE PROTOCOL IN TELEPHONIC NURSE TRIAGE SYSTEM

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OBJECTIVES

The primary objective of this study was to determine the ability of an Emergency Communication Nurse (ECN) to appropriately identify the Abdominal Pain Chief Complaint Protocol to use to triage patients in low-acuity cases. The secondary objectives were to establish the most frequently used primary triage code (Medical Priority Dispatch System™ (MPDS®) Determinant Codes), triggering the use of the Abdominal Pain Chief Complaint Protocol in the Emergency Communication Nurse System™ (ECNS™), as well as the percentage of these calls resulting in a Recommended Care Level (RCL) of “emergency ambulance response” and “ED as soon as possible.”

METHODS

The retrospective and non-controlled descriptive study analyzed audio recordings of 100 randomly selected ECNS cases (50 from each of the two centers) where the Abdominal Pain Chief Complaint Protocol was the selected protocol to triage the patient’s symptoms. The specific data elements extracted from the ECNS database were: call types (entry via 911 or 7-digit nurse triage line), if abdominal pain was the correct protocol choice, the choice of protocol by the case reviewers performing quality assurance, the final disposition (RCL) reached by the ECN and the reviewer, date and time of call, and if the call came via 911, the MPDS Determinant Code that was reached.

ABDOMINAL PAIN COMPLAINT AMONG NURSE CLINICIANS DURING TELEPHONE TRIAGE

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CONCLUSION

Abdominal pain was selected as the correct Chief Complaint Protocol less than 75% of the time, with reviewers agreeing with the Emergency Communication Nurses (ECNs) on the Recommended Care Level only 22% of the time, which is lower than was expected with a significant over-triage by ECNs on this Protocol. The findings showed the mitigating potential a secondary triage system might have on the burden of growing demand emergency medical dispatchers are experiencing. It also highlighted several areas for potential improvement for the ECNs in their triage skills.

TABLES

Measure		Cases (N=100) n (%)
Gender (Female)		69 (69.0)
		10 (10.0)
Age (years)*	<=20	24 (24.0)
	20-30	17 (17.0)
	30-40	20 (20.0)
	40-50	14 (14.0)
	50-60	15 (15.0)
	>60	
Abdominal Pain Protocol	Correctly selected by ECNs	72 (72.0)
	Correctly selected by ECNs	22 (22.0)
	All RCLs assigned by the ECNs	
	Seek Emergency Care as soon as possible	51 (51.0)
	Emergency Response	30 (30.0)
	Seek Face to Face Care within 1-4 Hours	11 (11.0)
	See doctor in the next 12 hours	3 (3.0)
	See doctor in the next 1-3 days	3 (3.0)
	Contact OB/GYN	2 (2.0)
Recommended Care Levels (RCLs)	All RCLs recommended by the Reviewer	
	Seek Face to Face Care within 1-4 Hours	37 (37.0)
	Seek Emergency Care as soon as possible	28 (28.0)
	Emergency Response	17 (17.0)
	See doctor in the next 12 hours	8 (8.0)
	See doctor in the next 1-3 days	6 (6.0)
	Contact OB/GYN	2 (2.0)
	Routine appointment with doctor	2 (2.0)

ECNs, Emergency Communication Nurses
*Overall age (mean±Standard Deviation): 41.6±17.5 years (Female: 40.9±18.8; Male: 43.1±14.2, p= 0.8603)

Table 1. Data summaries

Protocol Recommended by Reviewers	Cases (N=100) n (%)
Abdominal pain	72 (72.0)
Vomiting	12 (12.0)
Rectal bleeding	2 (2.0)
Constipation	2 (2.0)
Diarrhea	2 (2.0)
Dizziness	2 (2.0)
Dysuria	2 (2.0)
Abdominal injury	1 (1.0)
Chest pain	1 (1.0)
Flank pain	1 (1.0)
Flatulence	1 (1.0)
Pregnancy bleeding	1 (1.0)
Miscellaneous	1 (1.0)

MPDS, Medical Priority Dispatch System
Table 2. MPDS Protocols recommended by the reviewers