

Safety and Compliance with an EMS Diversion Protocol to a Crisis Intervention Centre

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INTRODUCTION

Overcrowding continues to be a problem in Canadian Emergency Departments (ED). In Ontario, paramedics must transport patients to the closest and most appropriate facility. In an effort to improve patient flow, Health Sciences North Centre for Prehospital Care (HSN CPC) and Greater Sudbury Paramedic Services introduced a diversion protocol which allows paramedics to transport patients directly to the Crisis Intervention Centre between the hours of 0830 and 2300.

PURPOSE

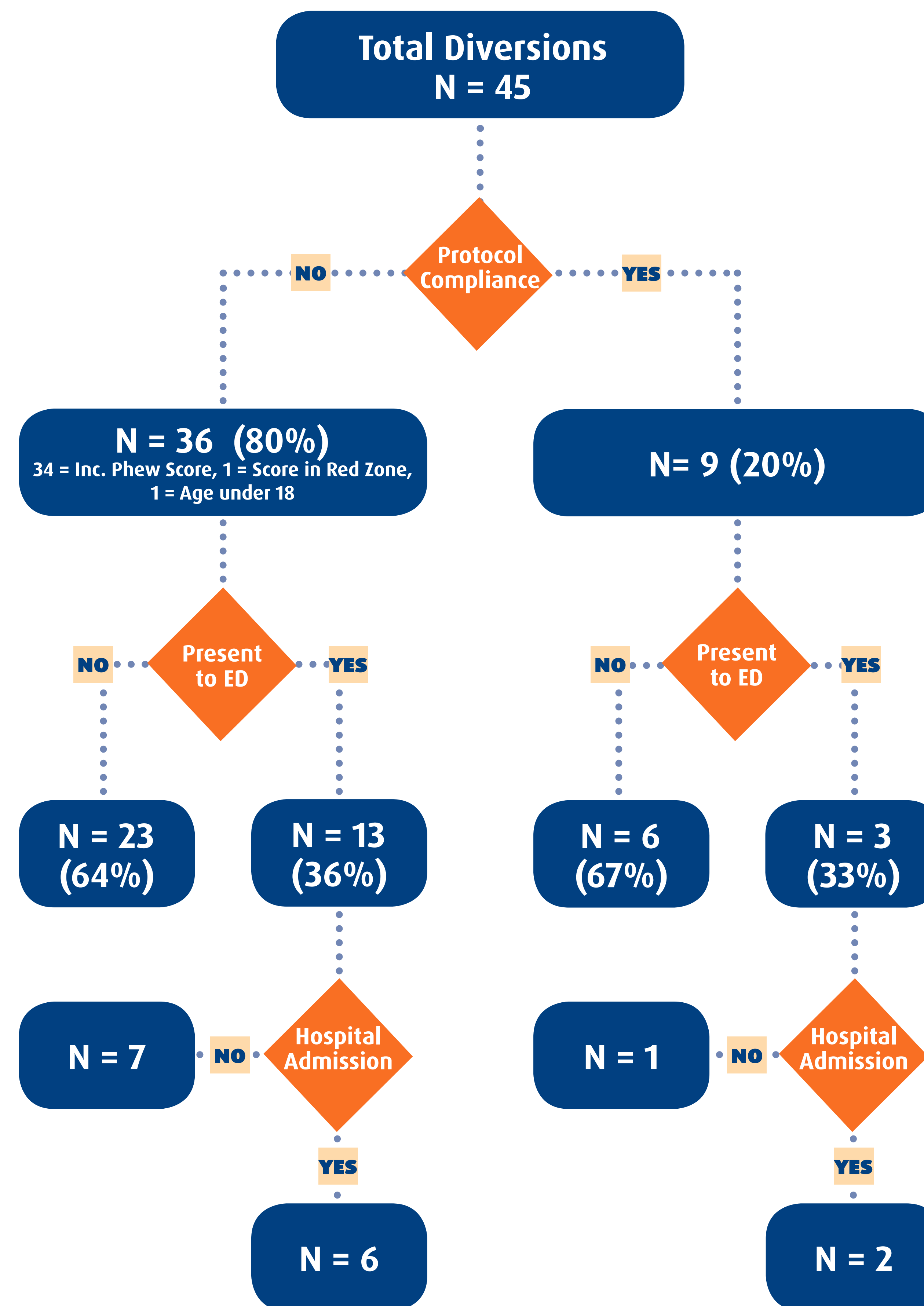
Evaluate the compliance with and safety of the Crisis Intervention Emergency Department Diversion Protocol.

METHOD

Retrospective chart review of patients transported to the Crisis Intervention Centre based on the diversion protocol.

Study period : June 1, 2015 to May 31, 2016

RESULTS



STUDY OUTCOMES

Study Outcomes	Diverted to CI (N=45)
Protocol Non-Compliance	80% (36/45)
Protocol Failure	33% (3/9)
Presentation to ED	36% (16/45)
Patient Morbidity	18% (8/45)

Protocol non compliance: Patients who did not meet protocol criteria and were transported to the Crisis Intervention Centre.

Protocol failure: Patients who met protocol criteria were transported to the Crisis Intervention Centre and required secondary transport to the ED for further medical evaluation within 24 hours.

Patient morbidity: Any adverse patient outcomes including subsequent admission within 48 hours.

IMPLICATIONS AND CONCLUSION

High non-compliance rate is attributed mostly to the absence of documented temperature and blood glucose.

There were no deaths in the diverted patients however two were admitted with an overdose. Diversion allowed for timely evaluation and referral to appropriate services in the majority of cases.

Broader implementation of this protocol could further reduce ED volumes of mental health patients and improve quality of care.

Crisis Intervention Emergency Department Diversion Protocol Criteria

- Triage criteria of CTAS 3 - 5
- No ALS interventions performed (except blood glucose monitoring)
- 18 years of age or older
- Patient must not score 4 or more on the Prehospital Early Warning (PHEW) score
- PHEW score must not have any score in the red zone

	Pre-Hospital Early Warning (PHEW) Score						
	3	2	1	0	1	2	3
Heart Rate		<50	51-59	60-100	101-119	120-149	≥150
Resp. Rate	>30	20-29		11-19		9-10	<8
Systolic BP	<90		91-99	100-170		171-199	>200
O2 Sat.				>92	90-92	<90	
CNS status			New Agitation/Confusion	Alert	Responds to Voice	Responds to Pain	Unresponsive
Tympanic Temp.		>38		35.1-37.9		<35	
Blood Glucose		>20	11-19	5.0-10.9	4.1-4.9		<4