

# Safety and Compliance with an EMS Diversion Protocol to a Withdrawal Management Centre

Verdah Bismah BHSc, Jason Prpic MD CCFP (EM), Sylvie Michaud CCP(f), BScPH, Nicole Sykes RN, Jennifer Amyotte ACP



# 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 Withdrawal Management Centre.

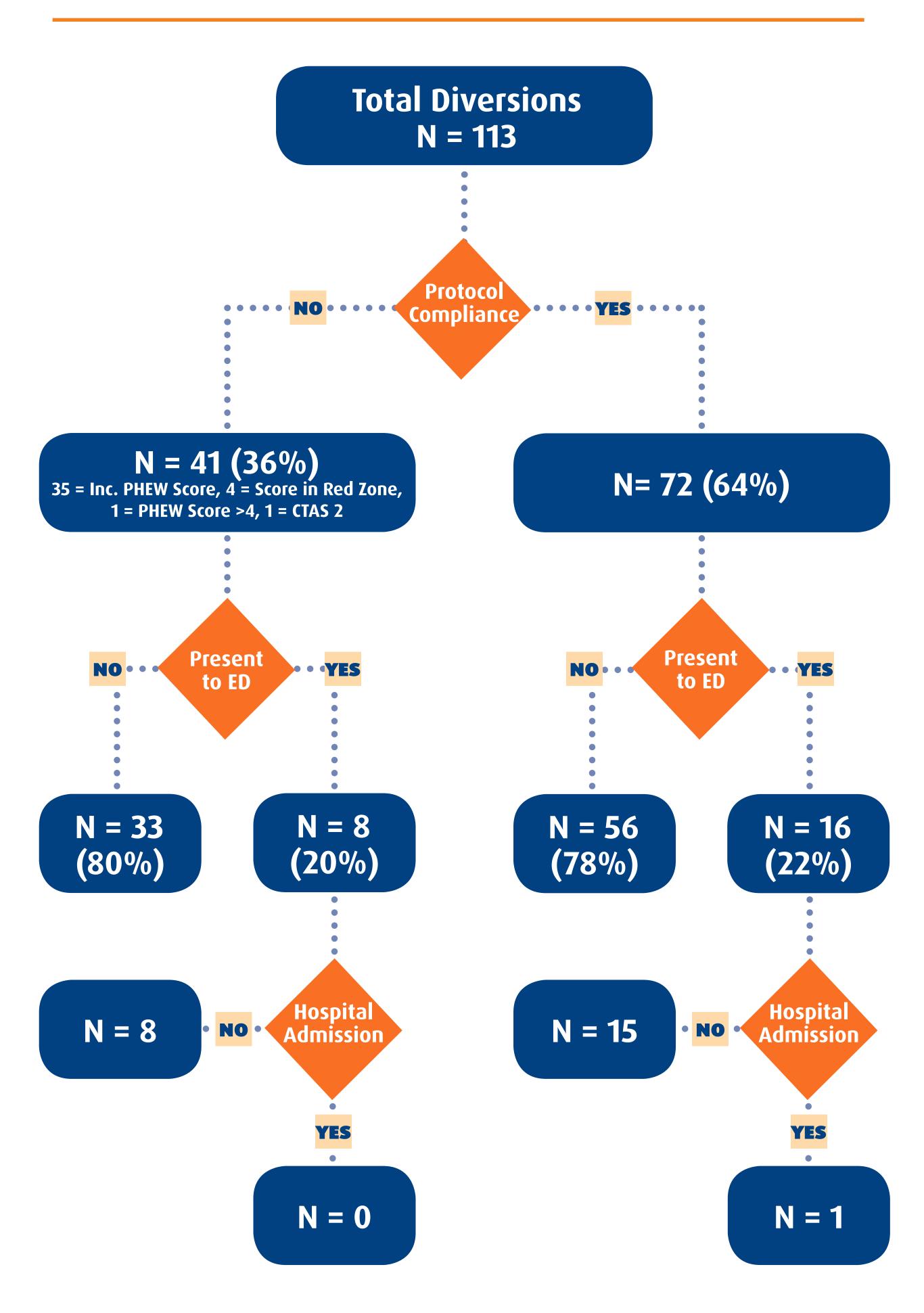
## PURPOSE

Evaluate the compliance with and safety of the Withdrawal Management Emergency Department Diversion Protocol.

## **METHOD**

Retrospective chart review of patients transported to the Withdrawal Management 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	36% (41/113)		
Protocol Failure	22% (16/72)		
Presentation to ED	21% (24/113)		
Patient Morbidity	1% (1/113)		

**Protocol non-compliance:** Patients who did not meet protocol criteria and were transported to the Withdrawal Managment Centre.

**Protocol failure:** Patients who met protocol criteria were transported to the Withdrawal Managment 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 and one hospital admission for an unrelated issue.

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 patients under the influence and improve quality of care.

### Withdrawal Management 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	Unrespo		
Tympanic Temp.		>38		35.1–37.9		<35			
Blood Glucose		>20	11-19	5.0 – 10.9	4.1 – 4.9		<4		