

Paramedic Services – Emergency Department Diversion Protocol for Mental Health and Addictions Patients

Due to Paramedics coping with a growing number of addictions and mental health-related emergency calls, two Sudbury Paramedic Services Diversion pilot projects were implemented in 2015 to reduce the strain on local hospitals. These pilot projects were developed with the simple idea that not everyone who calls 911 needs to go to the Emergency Department (ED).

Health Sciences North (HSN) operates a satellite Withdrawal Management Clinical Program at 336 Pine Street and a Mental Health and Addictions Centre at 127 Cedar Street in Sudbury. In 2015, Paramedic Services began diverting ambulance patients to these two sites through a pilot Emergency Department (ED) Diversion Strategy. Staffed by nurses, occupational therapists or social workers, these clinics treat patients who require detox or are in mental distress but who are stable and do not require the full support of the ED. These patients could be suffering from intoxication, depression, or may be thinking about suicide but do not have a plan in place.

Diversion Pilot Program Development

Through Paramedic Services Continuous Quality Improvement Program, a review of multiple caller patient profiles determined many patients were mental health and addictions patients that Paramedic Services had often brought to the ED and had either left without being seen or had been assessed and released with no real change in behaviour or call volume. Additionally, the review also determined that intoxicated patients may lead to ambulance off load delays if patient's behavior and/or level of intoxication made them unable to be placed into the waiting room.

Historically, Paramedics were never able to directly transport conscious intoxicated patients to HSN Withdrawal Management even though police had been doing so for years.

In 2012, Greater Sudbury Police Services commenced a pilot program that included training and establishing protocols to transport people to the HSN Mental Health and Addictions Centre to facilitate persons with non-acute mental illness to obtain rapid assessment and treatment by trained clinicians. This action also permitted more timely redeployment of police officers. This pilot program was successful with no adverse patient outcomes.

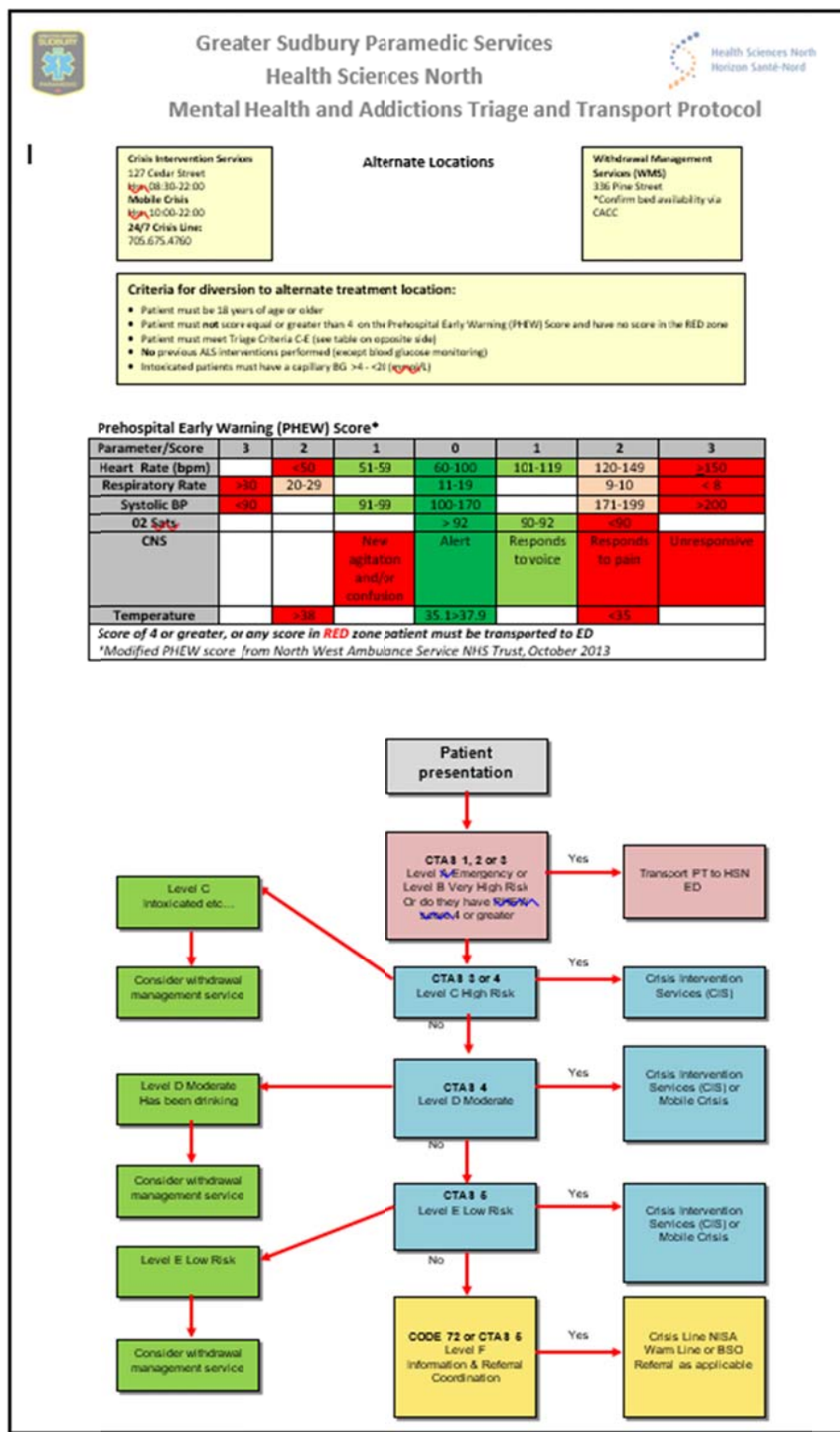
In 2013, Paramedic Services opened dialogue with HSN Mental Health and Addictions Centre to address mental health patients. Opportunities for community care were discussed and the HSN Mental Health and Addictions Triage and Transport Protocol (Fig.1) for Paramedic Services was developed and approved by Dr. Jason Prpic, Medical Director, Health Sciences North Centre for Prehospital Care.

In 2014, multiple meetings with HSN occurred to discuss options, opportunities and requirements for Ministry of Health notification and approval. Approval by the Ministry of Health was required as the Ambulance Act prohibits the transportation of ambulance patients to any other location other than a hospital.

In late 2014, the HSN Mental Health and Addictions Triage and Transport Protocol was fully approved by the Ministry of Health. Under this protocol, all patients 18 years or older, who met the medical

assessment criteria, were cooperative and agreed with the alternate location could be diverted. All acute, high-risk emergent patients would continue to be transported to the ED.

Fig. 1 Sudbury Paramedic Services Mental Health and Addictions Triage and Transport Protocol

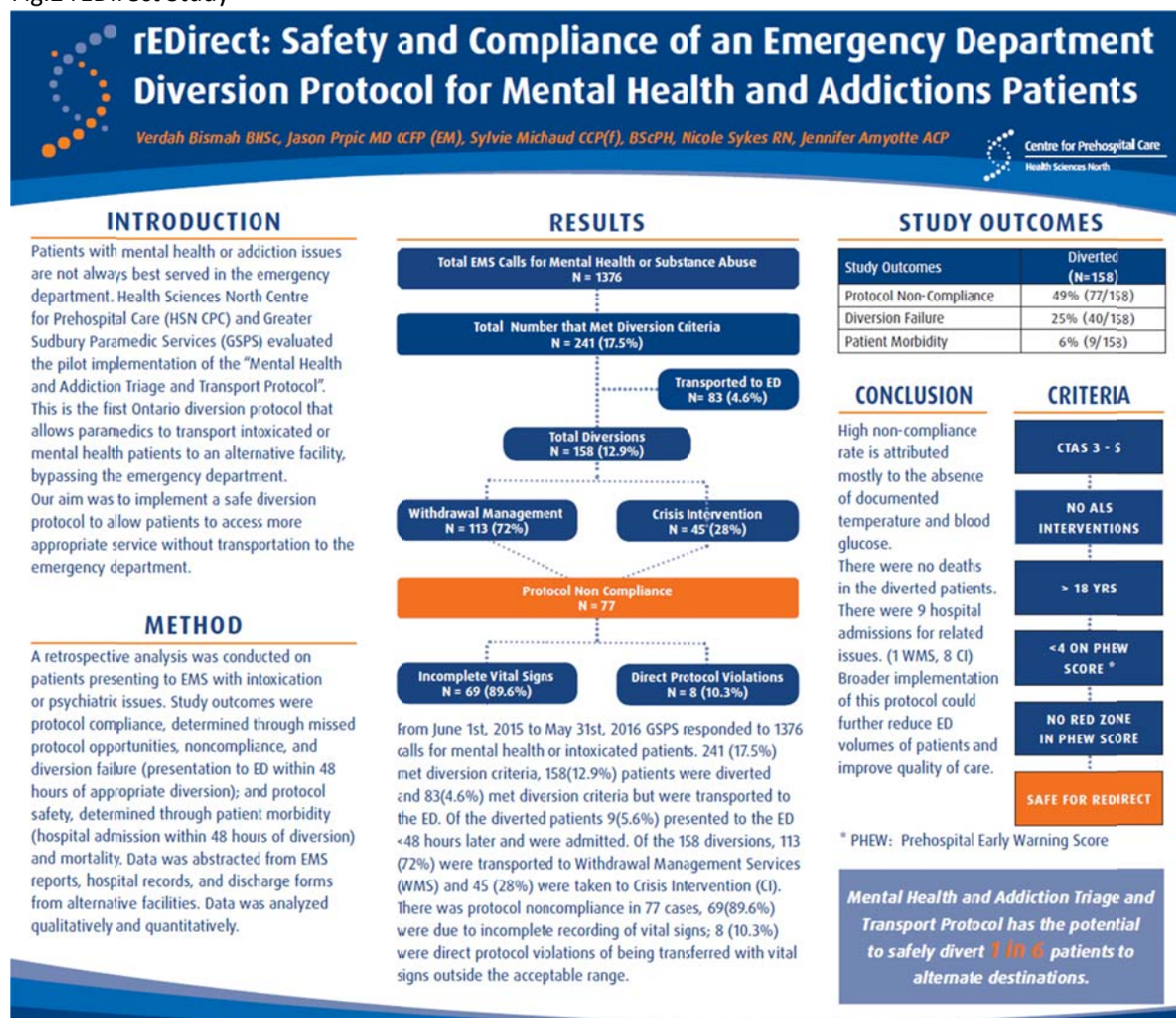


Clinicians from HSN Withdrawal Management, the Canadian Mental Health Association, Dr. James Chau, and Behavioral Supports Ontario provided Paramedics training in the safe use of the Diversion Protocol and training to enhance skills in the detection, prevention and best response of non-urgent community mental health and addictions related calls. This training was partially funded by North East Local Health Integration Network. Paramedic Services officially launched the Diversion pilots June 15, 2015.

An Evaluation of the Sudbury Paramedic Service Withdrawal Management and Crisis Intervention Diversion Pilot Programs

Sudbury had the first Ontario protocol that allowed Paramedics to transport intoxicated or mental health patients to an alternative facility bypassing the ED and in 2016, a group of researchers and healthcare professionals led by Dr. Jason Prpic completed an analysis of the programs. This research was also presented at the Canadian Association of Emergency Physicians conference in Halifax, NS in May of this year (Fig.2).

Fig.2 rEDirect Study



The rEDirect study was a retrospective analysis on patients presenting to Paramedic Services with intoxication or psychiatric issues. Study outcomes included protocol compliance and protocol safety.

From June 1, 2015 to May 31, 2016, Paramedic Services responded to 1376 calls for mental health or intoxicated patients. Of these calls, 241 patients met diversion criteria, 158 patients were diverted and 83 met diversion criteria but were transported to the ED. Of the diverted patients nine presented to the ED less than 48 hours later and were admitted. Of the 158 diversions, 133 were transported to the Withdrawal Management Clinical Program and 45 were taken to the Mental Health and Addictions Centre. There was protocol non-compliance in 77 cases, 69 were due to incomplete recording of vital signs and eight were direct protocol violations of being transported with vital signs outside the acceptable range. There have been no adverse outcomes and it has been recommended that these diversion pilots become full operational programs. Broader implementation of the protocol has the potential to reduce ED volumes and improve quality of care.

Next Steps

On average, Sudbury Paramedic Services responds to approximately 1200 low acuity mental health and addictions related calls every year and this call volume is increasing. In 2018, there were 420 calls with alcohol related problem codes identified as non-urgent and 61 patient were diverted to the Withdrawal Management Clinical Program. Subsequently, there were 764 calls with a primary problem code of non-urgent behaviour psychiatric and of those 28 patients were diverted to the Mental Health and Addictions Centre. Currently, the Withdrawal Management Clinical Program accepts patients 24/7, however; the Mental Health and Addictions Centre receives patients daily between 8:30 am - 10:00 pm only. More patients could have been successfully diverted had the Centre been open at the time of their call.

Many other diversion opportunities exist where patients needs can be better met other than in the hospital's ED. The Nurse Practitioner Clinic at 200 Larch Street will open its doors in 2020 offering many clinical services to a vulnerable patient population who are without a family physician. Discussions are underway for diversion program expansion. Additionally, Paramedic Services is also discussing the opportunity for diverting non-urgent patients of The City of Lakes Family Health Team physicians, to the City of Lakes Family Health Team Clinic. Provincial approval will again be required for further expansion of these programs.

On September 5, 2019, the Ministry of Health announced proposals to enable new models of care for select 911 patients. This proposal to amend regulations under the Ambulance Act and Health Insurance Act will provide an opportunity for select 911 patients with alternate care options for prehospital care other than transport to the emergency department. We believe these changes are an important step in the progression of health care as a whole and the modernization of emergency medical care in particular. The Paramedic profession is continually evolving to play a more comprehensive role in the healthcare system and is agile enough to adapt to fill gaps in service for the communities we serve.

Over the years, 911 has unintentionally become the safety net within the healthcare system. Diversion programs help individuals navigate the sometimes complicated health care system. Paramedics help to safely and responsibly determine if there is a more appropriate care setting for patients to receive treatment other than an ED. Our aim, with broader implementation of diversion protocols, is improved

quality of care, assisting 911 patients to receive faster treatment, and in turn, allow faster treatment for everyone waiting in line at the ED.