IMPLEMENTATION OF A SELF REPORT PROGRAM IN AN EMS SYSTEM

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BACKGROUND

According to the Institute of Medicine's sentinel paper *To Err is Human: Building a Safer Health System*, at least 44,000 people, and perhaps as many as 98,000 people, die in hospitals each year as a result of medical errors that could have been prevented (The Institute of Medicine, 2000). Medical errors can be defined as the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim. Emergency Medical Services (EMS) paramedics often care for patients in challenging, unpredictable and potentially dangerous settings, exposing the patients to an environment with potential patient safety hazards.

In Northeastern Ontario, the function of monitoring the appropriateness and quality of advanced patient care has been assigned to Health Sciences North Centre for Prehospital Care (HSN CPC) via a Performance Agreement with the Ministry of Health and Long Term Care. Historically, most patient safety events were detected through a retrospective audit process of the Ambulance Call Reports (ACR). There are identified gaps in the current auditing process linked to ACR sampling and turnaround times from call date to review date. The sampling of ACRs is based on a sampling error of +/- either 2.5% or 5% (CI95%), depending on call type, resulting in the potential for missed errors or variances. The review time is a system issue whereby ACRs are not always available to the program for review in a timely fashion, occasionally for extended periods of time.

AIM

We developed a program designed to encourage front line paramedics to report patient safety events in a timely manner, to allow us to respond quickly to patient safety events and to implement more timely risk reduction strategies.

The 'Self-Report Program' was introduced to paramedics through in class education sessions to provide them with the expectations in the use of the tool. The program was also introduced to the EMS employers during regional meetings.

MEASURES

PRE SELF-REPORTS

In the one-year period prior to the implementation of the Self-Report Program (April 1, 2013 to March 31, 2014), 415 ACRs had an identified variance from standard of care. The average time from the date of patient care to the audit date was approximately 23 days (min 0 - max 256, 90th percentile – 57.6 days)

POST IMPLEMENTATION OF THE SELF-REPORT PROGRAM

In the one-year period following the implementation of the Self-Report Program (April 1, 2014 to March 31, 2015), 81 self-reports were submitted by paramedics. The average time from the call date to self-report date was approximately 3 days (min 0 - max 34, 90th percentile – 11 days)

RESULTS

After implementation of the self-report program, patient encounters reported by paramedics were reviewed the same day almost half of the time (49%). This compares to the pre implementation era where only 1 case was reviewed the same day it occurred (~0%). Also, 84% of the time, calls reported by paramedics are being reviewed in < 1 week as compared to 38% in the pre implementation phase. Applying the t test to the pre and post implementation data yields a p-value of ~0 which shows that these differences are strongly significant.

LESSONS LEARNED

The implementation of a self-reporting process for paramedics to report deviations from standard of care has reduced the time it takes to identify patient safety issues from an average of 23 days to 3 days. This reflects a strong, statistically significant reduction.

This data is limited by the voluntary nature of the program. It is hoped that, over time, an increased comfort with the processes following self-reporting of patient safety issues will foster a culture of increased reporting enabling rapid implementation of system improvements.