Conseil des Services du District de
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District Services Board

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Report To:	Program Planning Committee
From:	Robert Smith Chief of Paramedic Services
Date:	June 27, 2018
Re:	Paramedic Intravenous Therapy - Issue Report

Background

Manitoulin-Sudbury DSB Paramedic Services is responsible for the direct delivery of paramedic services throughout the member communities. Such service delivery is not static, rather one that evolves with advancements in medicine. Primary Care Paramedic (PCP) autonomous IV initiation is one such advancement that took hold in Ontario some years ago. The protocols have been adopted across the Province, including all but three services in Northern Ontario Paramedic Services. The Kenora, Rainy River, Cochrane, Temiskaming, and Nipissing DSSAB's all have an autonomous PCP IV program in place. In addition the City of Thunder Bay, Town of Parry Sound and the City of Greater Sudbury all have an autonomous PCP IV program in place.

Manitoulin-Sudbury would be a late adopter of such a program. An environmental scan of the entire Province has shown that most services have autonomous PCP IVs activities.

History

Manitoulin Sudbury DSB Paramedic Service assumed responsibility for direct delivery of land ambulance services in 2004. As a Primary Care Paramedic Service, patient care was delivered within the established scope of practice. Since that time, the PCP scope of practice has evolved to include the introduction of more medications, the activities associated with greater diagnostics, and the introduction of auxiliary skills such as intravenous therapy. Manitoulin-Sudbury DSB has not been an early adopter of these additions to the scope of practice. That said, the service has ultimately introduced each additional skill over time.

The addition of autonomous IV therapy to Ontario PCP scope of practice was introduced in the mid-1990s but became widespread approximately 10 years ago. A detailed environmental scan has revealed that the PCP IV skill is in use across Northern Ontario in all but 3 services; Algoma DSSAB, James Bay (WAHA) and Manitoulin-Sudbury DSB. Provincially, it appears approximately 90% of services have certified intravenous therapy as part of the PCP scope of practice. The introduction for this skill into Paramedic Services would not be something that would be considered cutting edge.

Current Issues, Benefits and Risks

Autonomous IV therapy is a standard of care across the Province, specifically within 8 of the 11 Paramedic Services in Northern Ontario. A decision to endorse the introduction of autonomous IV therapy into the PCP scope of practice in Manitoulin-Sudbury DSB would allow for some specific benefits to the patient population given the rural and remote nature of the response area, in addition to significant transport times to hospital. An analysis of 2017 call types suggests that intravenous cannulation and fluid therapy would benefit approximately 800 Paramedic Services patients.

The capacity to introduce better patient care and diagnostics in the prehospital environment has advanced greatly in the last number of years. IV therapy will allow Paramedics to directly correct incidents of low blood sugar, where today administration of glucagon works indirectly and less effectively. The ability for Paramedics to undertake lab testing in the patient's home as part of the Community Paramedicine program, will allow for early disease detection, and will reduce Emergency Department visits and hospital admissions.

Over the last 6 months, staff have shared the concept for introduction of Paramedic IV therapy in Manitoulin-Sudbury DSB. Information was also shared with each employee during education sessions in the fall of 2017, and spring of 2018. Feedback has been positive.

It must be noted that approximately 30% of Manitoulin-Sudbury DSB Paramedics are currently certified to perform intravenous cannulation, medication administration and fluid resuscitation, having a positive impact on the financial implication of program adoption.

Financial Implication

Manitoulin-Sudbury DSB Paramedic Service is requesting approval introduction of autonomous intravenous therapy to the PCP scope of practice during fall 2018 education sessions. The initial education cost for this program has been estimated at one day per employee. Given that 25% of staff are already certified and as such would be exempt from this program, the direct savings from their exemption would offset the capital costs

associated with introduction of this scope. In short, the cost of education and capital outlay for training devices to facilitate autonomous PCP intravenous therapy would have no impact on the 2018 budget.

The ongoing operational costs have been explored and based upon an assumed initiation rate of 500-600 events each year, the operational budget would see an impact of approximately $7,500 annualy. Operational costs will be absorbed in 2018 budget and would be brought forward as operational costs in future years.

Conclusion

Health care generally, and Paramedic systems specifically have evolved patient care delivery over time. Examples include the introduction of 12 lead ECG completion to facilitate early diagnosis of heart attacks, addition of Continuous Positive Airway Pressure (CPAP) devices to improve the outcome of patients with severe respiratory distress, the addition of medications to assist in early treatment of life endangering events, and intravenous initiation and fluid therapy to improve outcomes for our patients.

The implementation of this program will be managed through existing budgets, and the operational costs for year one will be absorbed from within the existing budget. Any future costs will be brought forward as part of the annual budget process.

The Board give approval to implement an approved program for education and certification related to autonomous intravenous therapy for Primary Care Paramedics in the Paramedic Service.