



Report To:	Program Planning Committee
From:	Robert Smith Chief of Paramedic Services
Date:	May 23, 2018
Re:	Stryker Tracked Stair Chair - Issue Report

Background

Manitoulin-Sudbury DSB Paramedic Services is responsible to regularly monitor injury rates of personnel, and to examine the evolution of equipment that could mitigate incidents of occupational injuries. The vast majority of occupational injuries experienced by Paramedics in Manitoulin-Sudbury DSB were related to utilization of the manual cot systems in deployment. An analysis of the injury events suggested that migration to a near zero lift system would help to address the injury rates. A significant reduction in these stretcher injuries was realized following the implementation of the Stryker Power Cot and Power Load system. The reduction in stretcher related injuries did allow for a second injury theme to arise, one that historically would have been overshadowed by the incidents related to manual stretchers.

Paramedics remain required to carry patients from the place of injury or illness to the Stryker Power Cot. This action often required the use of what is called a Stair Chair. This device allows for a patient to be placed in a sitting position and maneuvered. In many cases, this movement is down stairs. Transportation of patients up or down flights of stairs is a high-risk activity and has now surfaced as an occupational injury that requires mitigation.

History

Manitoulin Sudbury DSB Paramedic Service assumed responsibility for direct delivery of land ambulance services in 2004. Occupational injury has remained a significant consideration for efficacy of service delivery, and advancement in both technology and professional practice since 2004 has allowed for mitigation occupational losses.

At the October 2015 Board Meeting, approval was granted for the purchase of the Stryker Power Cot and Power Load system to replace the existing manual stretchers utilized by Paramedic Services. Part of the argument for this change included the desire to mitigate the impact of occupational injuries directly related to use of the manual cots. In the period from 2008 through 2015, the service reported 39 incidents of occupational injury related to manual stretcher use. Since 2016, following implementation of the Stryker Power Load and Power cot system, the service has recorded one occupational injury with 3 days of modified work resulting from use of the Stryker Power Cot.

Manitoulin-Sudbury DSB approved the release of a Paramedic Service's Post Traumatic Stress Disorder (PTSD) Mitigation Plan in late 2016, and since that effort, the incidents of such occupational stress injuries has been reduced.

An assessment of WSIB claims for occupational injury related to use of the manual stair chair in the period from January 2016 through April of 2018 revealed 6 claims. The Accident Cost Statement and December 2017 NEER costing for the stair chair related incidents totaled \$153,373.

A product trial of the Stryker Tracked Stair Chair and another similar device was completed from the fall of 2017 through late winter. The outcome of this trial was reported to the Joint Health and Safety Committee in March of 2018, with the recommendation for migration to the Stryker Stair-Pro tracked stair chair

Current Issues, Benefits and Risks

Any decision to adopt the Stryker Stair-Pro tracked stair chair does require consideration of emerging issues, benefits and risks. It should be noted that the device is relatively new to the market, and the decision by Paramedic Services to adopt this solution is emerging slowly. The vendor confirmed that 12 of the 54 services in Ontario have initiated deployment of the device, as have the Provinces of PEI and Nova Scotia.

The benefit of the tracked stair chair relates to the operational design and elimination of the need to lift the patient and chair down stairways, the activity that appears to be directly related to the occupational injuries being reported. The challenge with the product pertains to its 32lb weight when compared to the current 19lb Ferno model of stair chair. The current Ferno model is not tracked and must be carried both down and up stairways. The tracked product still must be carried up stairways and given its heavier design, that presents a risk to operators. The desired solution will involve continuing to deploy the current Ferno stair chair for movement of patients up stairways. Given that the stair chair life cycles seem to be, this action will likely be a zero-cost solution.

The risks associated with introduction of any new product does involve the educational uptake by staff utilizing the product. As the Stryker Stair-Pro tracked stair chair was trialed in the fall of 2017, the opportunity to familiarize all Paramedics in proper use was taken during the fall education session. Education and testing of familiarization and competent use was completed during the 2018 spring education session.

Financial Implication

Manitoulin-Sudbury DSB Paramedic Service is requesting approval for \$69,342 plus applicable taxes to be taken from the Vehicle and Equipment Replacement Reserve, while \$9,906 plus applicable taxes will be attributed to the Wikwemikong 2018/2019 budget and funded by the Province.

The balance of the Vehicle and Equipment Replacement Reserve was \$654,297 on December 31, 2017. The annual budget impact would require an additional contribution of \$5,000 to the Vehicle and Equipment Replacement Reserve to allow replacement in 2032, based upon a 14-year life cycle. This budget change will be brought forward during the 2019 budget deliberations.

Conclusion

The evolution of technology and increased internal efforts to mitigate the impact of occupational injuries on the organization is congruent with the desire by Paramedic Services to migrate to the Stryker Stair-Pro tracked stair chair.

As this purchase was not contemplated or approved during the 2018 Budget process, staff are requesting Board approval to utilize \$69,342 plus applicable taxes from the Vehicle and Equipment Replacement Reserve for this purchase. In addition, staff are requesting approval for use of \$9,906 plus applicable taxes from the Wikwemikong budget for this purchase.