Request for Decision

Ambulance Offloading Delay (AOD) – Update

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Signed By

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Recommendation

Whereas Ambulance Offload Delays are currently the most significant operating pressure faced by Greater Sudbury EMS; and,

Whereas Ambulance Offload Delays continue to increase, with 45% of patients brought to the Health Sciences North Emergency Department in 2012 resulting in an offload delay, 18% are thirty minutes or more; and,

Whereas these delays resulted in over 4,000 lost vehicle hours in 2011 with a financial value of $353,805 and contribute to increased emergency response times; and

Whereas the principal cause of Ambulance Offload Delays are a high number of Alternate Level of Care patients in acute care beds resulting in a lack of in-patient bed capacity, leading to high numbers of in-patients in the Emergency Department resulting in overcrowding; and,

Whereas the North East Local Health Integration Network funded the Functional Assessment and Outcome Unit at the Memorial Site which was a sixty-bed unit for Alternative Level of Care patients awaiting placement which eased the acute care bed shortage by providing surge capacity at times of critical in-patient levels; and,

Whereas the North East Local Health Integration Network is discontinuing the funding of the Memorial Site with thirty beds permanently closed and the final thirty beds closing by March 31, 2013; and,

Whereas the loss of the Alternate Level of Care beds and surge capacity afforded by the Memorial Site will in all likelihood place additional pressures on the Laurentian Site resulting in further Emergency Department overcrowding leading to ambulance offload delays;

Therefore, be it resolved that Council request the CEO of North East Local Health Integration Network and the CEO of Health Sciences North attend a future meeting of Council to provide a presentation on action plans being undertaken by the North East Local Health Integration Network and Health Sciences North to address Emergency Department overcrowding, patient flow, and eliminate Ambulance Offload Delays.

Background

The City's Emergency Medical Services Division has been dealing with Ambulance Offload Delays (AOD) since 2005. AODs are the most significant operating pressure faced by Emergency Medical Services (EMS) today. The AOD situation was first reported by the Chief of Emergency Services during the Priorities Committee Meeting of November 21, 2007. Then again on June 4, 2008, when a joint update was provided to the Priorities Committee by Vicki Kaminski CEO HRSRH, Richard Jolly, CAO Community Care Access Centre (CCAC), and the Chief of Emergency Services. That update covered the hospital's Alternate Level Care (ALC) crisis, the role CCAC was playing, and the ongoing impact AODs were having.

Since our last update, the AOD problem has escalated. Locally, EMS has been experiencing a surge in AODs at Health Sciences North (HSN) during the first quarter of 2012. This recent surge continues to place significant pressure on our EMS resources during day-to-day operations.

AODs are a delay in the normal Transfer of Care (TOC) process between Paramedics and Emergency Department nursing staff. The principal cause of AODs are a lack of in-patient bed capacity, leading to high numbers of in-patients remaining in the Emergency Department resulting in prolonged Emergency Department length of stay and Emergency Department overcrowding. While the Emergency Department at HSN has 37 beds, it averages 20 in-patients awaiting beds in the hospital at the start of each day. It is not uncommon to see this number go much higher.

This chronic overcrowding in the Emergency Department results in the inability for Paramedics to transfer care to a treatment bed in the Emergency Department. EMS considers any delay of **10 minutes** or more from the time Paramedics arrive in the Emergency Department to transferring the patient to hospital nursing staff to be an AOD.

The most common factor resulting in Emergency Department overcrowding is the high number of in-patients in the Emergency Department who require admission to HSN beds but for whom an in-patient bed is not available. The lack of available in-patient acute care beds at HSN is, in most part, caused by Alternate Level Care (ALC) patients blocking acute care hospital beds. ALC patients no longer require acute care; but, are awaiting specialized care or placement in other facilities such as long-term care facilities. These specialized beds or services are not available resulting in these ALC patients remaining in acute care beds for extended periods of time.

HSN single-site hospital was designed to operate with "zero" ALC patients. Despite this, currently, there are 86* ALC patients in the hospital blocking acute care beds and contributing to hospital overcrowding. (*HSN ALC Website June 1, 2012)

The Functional Assessment and Outcome Unit at the Memorial Site was a sixty-bed unit for ALC patients waiting placement. The Memorial Site, when operating, eased the acute care bed shortage, providing surge capacity at times for critical in-patient levels. The funding is ending for the Memorial Site with 30 beds already closed and the final 30 beds slated to close by March 31, 2013. The loss of the ALC beds and surge capacity afforded by the Memorial ALC Site will in all likelihood place additional pressures on the Laurentian Site resulting in further Emergency Department overcrowding.

With only one Emergency Department in the City, during periods of high ambulance call volumes or significant AODs, Paramedics have no alternate Emergency Department that allows diversion of ambulance patients away from the primary Emergency Department. A second Emergency Department would allow time to decant Emergency Department patients and reduce Emergency Department overcrowding and

AODs.

AOD Impacts

The MOHLTC Dispatch center data for 2011 indicates that City ambulances collectively spend some 4,070 hours at the hospital on AOD. This is equal to parking one of our ambulances at HSN and leaving it there for the entire shift, about 11 hours every single day of the year. The direct value associated with this loss of deployment is $353,805.

EMS must up-staff additional ambulances to directly offset the loss of available ambulances during periods of high AOD volume or to perform out-of-town transfers. This is done to ensure that the combination of AOD and out-of-town transfers does not severely impact our ability to meet the community's emergency medical needs.

AODs leave fewer ambulances available to service calls, resulting in difficulties in providing balanced emergency coverage across the City and result in longer response times. The remaining available ambulances are much busier, resulting in less downtime for Paramedics. This reduction in downtime results in less time to complete patient charting and increased ovetime as Paramedics complete charting at the end of the shift. In addition, with fewer vehicles to service calls result in late or missed meals as well it increases overtime from crews on Offload Delay in the Emergency Department at shift change.

It is important to know the chronic nature of Emergency Department overcrowding and AOD places significant stress and frustration on Paramedics, nurses, and physicians in meeting the needs of patients in less than ideal circumstances which negatively impacts job satisfaction.

During periods of high AOD, there are increased incidents of ambulances from other services being assigned emergency calls in our City while they are here dropping off or picking up patients at HSN. It is important to note that CGS must financially reimburse other services for these cross-border calls.

Our Platoon Superintendents spend significant periods of time in the Emergency Department. It is not uncommon for the supervisor to spend the majority of their duty shift in the Emergency Department during periods of high AOD volumes. This strategy is important but results in significant challenges for the supervisors when trying to address a number of other important operational issues.

Current AOD Status

The attached charts demonstrate that AODs continue to increase in frequency and duration. Attachment 1 - Patient Volume, depicts the number of AOD incidents, 30 minutes or more, occurring each month. We see in the first quarter of 2012 the number of AODs increase significantly. This increase appears to coincide with the closing of the first 30 beds at the Memorial Site.

***see attachment 1 - Patient Volume**

Attachment 2 - Delay Distribution for all Call Types indicates the number of patients brought to the Emergency Department and the length of time to transfer care. During the period of Jan – May, 2012, 45% of patients brought to the Emergency Department resulted in an AOD of ten minutes or more, compared to 29% for the same period in 2011. This represents a 64% increase in the number of delays in 2012.

***see attachment 2 - Delay Distribution for all Call Types**

AOD Mitigation Strategies

Since 2005, Greater Sudbury EMS has been working with community and provincial stakeholders on strategies and initiatives to mitigate the impact of AODs on the delivery of land ambulance services in our community.

Some of these more recent initiatives include:

The City of Greater Sudbury has designed, developed, and just recently implemented an electronic Ambulance Offload Delay Tracking System (AODTS) in the Emergency Department. The system provided real-time situational status and reporting on AOD. We are now working at evaluating stage one implementation of the AODTS which includes staff compliance. Further updates to the system are in the planning phase.

- A draft “Deployment Depletion Protocol” is now complete and is undergoing a trial by EMS Platoon Superintendents. This escalation protocol ensures a standardized and consistent approach by EMS, MOHLTC Dispatch, and HSN in dealing with AODs.
- EMS Platoon Superintendent, HSN Emergency Department Charge Nurse and the MOHLTC Dispatch Supervisor teleconference at the beginning of each shift in order to discuss the current status of the Emergency Department and Emergency Department in-patient capacity. This provides an opportunity for operational managers to discuss the expected challenges for the shift and take proactive steps to address anticipated delays.
- Senior staff from EMS and HSN meet regularly to review issues specific to patient flow and explore opportunities to improve and reduce AODs.
- The single best strategy to address AOD is to have an EMS Platoon Superintendent present in the Emergency Department when AODs are occurring. When in the Emergency Department, the Platoon Superintendent works closely with the Charge Nurse, patient flow personnel, and Emergency Department managers to mitigate the effects of AOD during the duty shift.

The Platoon Superintendents' responsibility is to provide system oversight with particular attention to AOD and ambulance deployment. The Platoon Superintendents have full authority to manage balanced emergency coverage and deployment requirements through up-staffing during their duty shift.

Ambulance Offload Nurse Program

Greater Sudbury, along with thirteen other EMS across Ontario are being provided funding to reimburse hospitals for the cost of providing an Ambulance Offload Nurse, dedicated solely to assuming care of EMS patients from Paramedics who otherwise would be on AOD. The “Offload Nurse” receives a patient report from Paramedics and assumes care of those patients who meet a predetermined category so the Paramedics may leave the hospital quickly and return to their primary role of providing care in the community.

Greater Sudbury EMS received $160,252 for the fiscal year 2011-2012, with indications from the MOHLTC that the funding will continue for fiscal 2012/2013. The AOD Nurse is staffed Monday to Friday from 10 a.m. to 10 p.m. and has proven to be a benefit and is the first intervention that has had a measurable positive impact on offload delay since the problem emerged in late 2005. During the first quarter of 2012, the AOD Nurse managed 11% of the ambulance patients. It is important to note that although the number of AODs continues to climb, the impact would be much worse if we did not have an AOD Nurse.

Conclusion

Ambulance Offload Delays are a symptom of a heath care system that is working beyond capacity. Experience tells us that high Emergency Department in-patient numbers coupled with high ambulance call volumes will result in AODs.

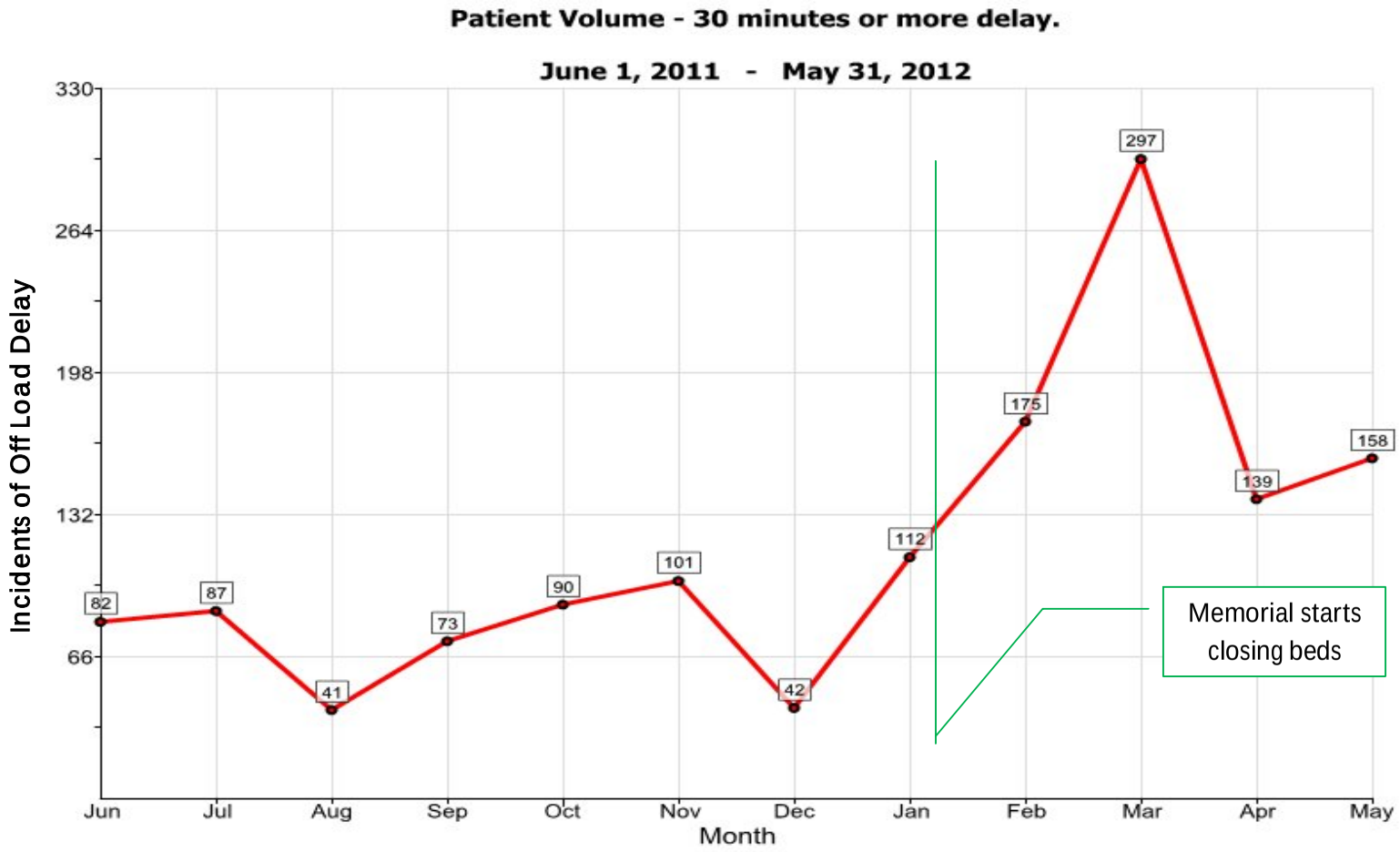
The decision to close the Memorial Site by March 31, 2013 is a significant concern. The loss of these 60 ALC beds and the surge capacity provided by the Memorial Site will undoubtedly create additional pressures in managing ALC patients within our community.

This leaves many unanswered questions as to the ultimate impact the closure of the Memorial ALC Site will have on hospital overcrowding beyond March 31, 2013. The ALC numbers continue to grow, currently sitting at 86 at HSN, with 30 more at the Memorial. When the final 30 ALC beds close, HSN will have no surge capacity. This has the potential to place the system in crisis due to a lack of acute care beds.

The focus by the NELHIN and HSN has now turned to improving community care outside the hospital setting. The Emergency Services Department supports these types of strategies, but remain concerned that they may not be as successful as anticipated. Community demographics show that our aging population will continue to increase placing increased demand on all health care services, the increasing demand coupled with the loss of these ALC beds will continue to result in poor patient flow and increased Emergency Department overcrowding.

It is Emergency Services belief that until the NELHIN and HSN have implemented proven solutions that effectively address hospital overcrowding are implemented, the Memorial Site should remain open.

In the meantime, EMS will continue to monitor AOD and the impacts of the AOD Nurse program and other initiatives intended to alleviate Emergency Department overcrowding, managing these issues with an aim to improve Service delivery through the return of lost ambulance hours back to community.


Patient Volume - 30 minutes or more delay.
June 1, 2011 - May 31, 2012
Incidents of Off Load Delay
330
264
198
132
66
82
87
41
73
90
101
42
112
175
297
139
158
Jun
Jul
Aug
Sep
Oct
Nov
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Jan
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Mar
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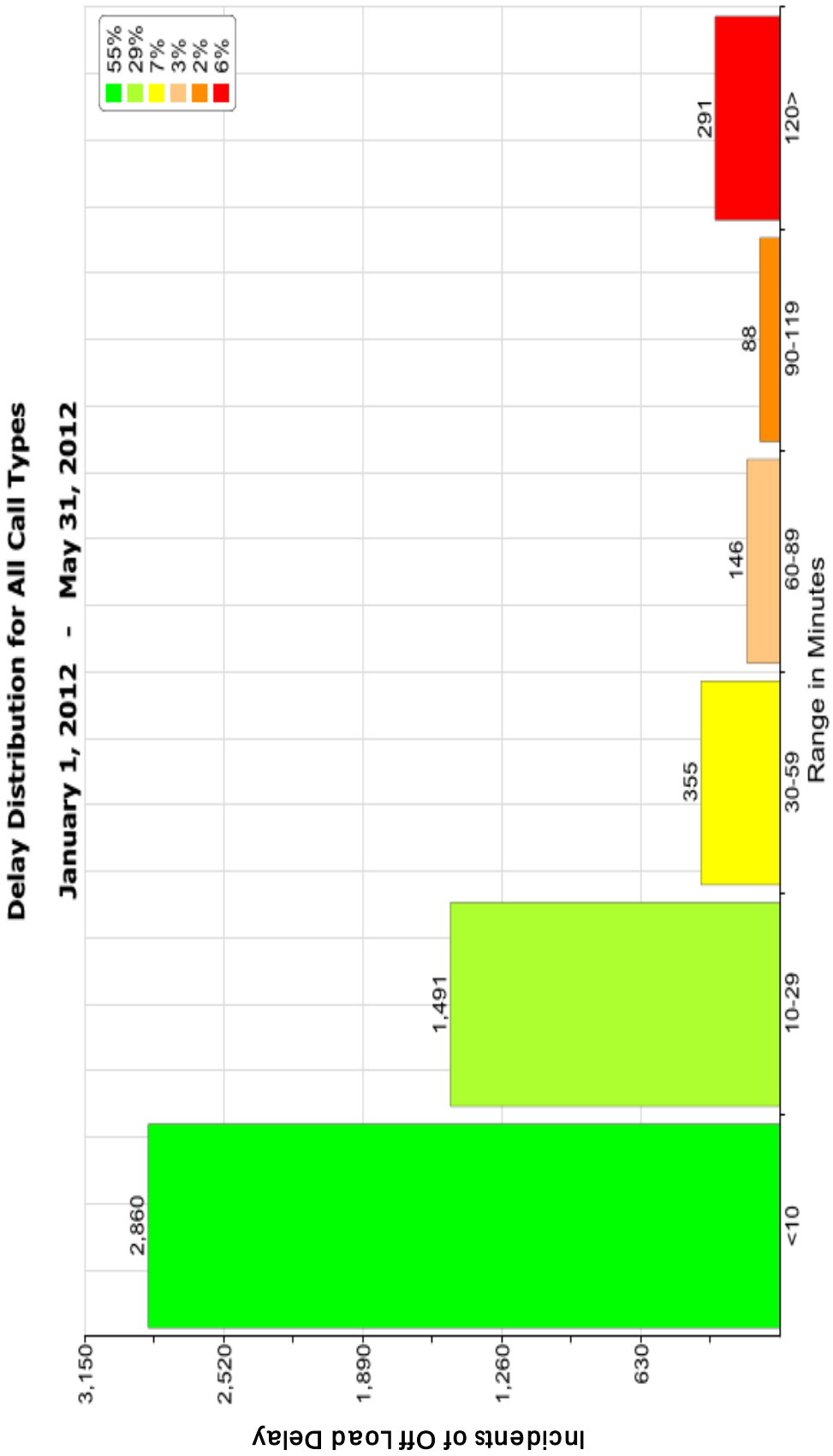
Month
Memorial starts closing beds



Attachment 2 - Delay Distribution for All Call Types 1/1