



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item number: 5.a

Title:

Presentation of Northwestern Medicine Mobile Stroke Unit – Information only

Presenter:

Fire Chief Joseph Schelstreet

Meeting: Government Services Committee

Date: April 23, 2018

Proposed Cost: \$

Budgeted Amount: \$

Not Budgeted:

Executive Summary *(if not budgeted please explain):*

The Fire Department, in conjunction with Tri City Ambulance and Northwestern Medicine Central DuPage Hospital (CDH) will be implementing a joint response protocol for possible stroke patients. This will be accomplished utilizing the response of our current Advanced Life Support Ambulances and the new Mobile Stroke Unit (MSU) in place at CDH. The MSU is equipped with CT Scanner and can dramatically improve the time for diagnostics and administration of needed medications. These early interventions have been shown to dramatically reduce rehabilitation time and improve overall patient outcomes. The intent is to begin joint response in April. Additional information is provided in the memorandum contained within the packet. This is a presentation only and no action is called for.

Attachments *(please list):*

* Memorandum

Recommendation/Suggested Action *(briefly explain):*

Information only



Memo

Date: April 3, 2018
To: Mayor Rogina
Members of the City Council
From: Chief Joseph Schelstreet
Re: Mobile Stroke Unit

The medical ailment commonly referred to as a stroke is more specifically a disease that affects the arteries leading to and contained within the brain. According to the American Stroke Association, it is the number 5 cause of death and a leading cause of disability in the United States. In 2017, 37 responses were made to 911 calls from St. Charles residents for stroke related emergencies. Current research indicates that early intervention has the potential to positively impact patient outcomes.

In our area, best practices have previously indicated direct transport to Northwestern Medicine Central DuPage Hospital (CDH) as it is one of the few hospitals in Illinois to be awarded the Advanced Comprehensive Stroke Center designation. Now, CDH in partnership with local Emergency Medical Service agencies such as the St. Charles Fire Department and Tri-City Ambulance, have implemented a dual response protocol that includes a state-of-the-art Mobile Stroke Unit (MSU) to bring stroke care directly to the field for stroke patients. This MSU is the first of its kind in Illinois, and one of the few in the nation. It will begin servicing St. Charles and eastern Kane County in conjunction with local EMS within the month of April.

The Mobile Stroke Unit is equipped with a CT Scanner that will enable advanced diagnostics, and a direct telemedicine connection to Northwestern neurologists. The telemedicine equipment allows the MSU team to directly communicate with the neurologist, who can direct care while the team is transporting the patient to the hospital. If the neurologist determines that the patient is experiencing a blocked blood vessel in the brain, the physician may direct that a clot-breaking medication is administered. In the case of a blood vessel rupture in the brain, a clotting agent may be recommended. This early intervention can lead to better outcomes.

When it's not being dispatched to a call, the Mobile Stroke Unit will reside at the Central DuPage Hospital. The MSU will operate 365 days a year, 7 days a week from 8 am to 8 pm.

How the Mobile Stroke Unit Will Work:

- A patient or bystander calls 9-1-1 and reports stroke-like symptoms
- A St. Charles ambulance and the Mobile Stroke Unit will be alerted for a possible stroke patient
- A St. Charles ambulance and the Mobile Stroke Unit will both go to the scene
- Our paramedics will complete a Stroke Assessment, and if a stroke seems likely, turn care of the patient over to the Mobile Stroke Team
- The Mobile Stroke Team will complete a CT scan on the patient from inside the MSU
- The Mobile Stroke Team will contact the on-call neurologist using real-time audio and video to read the CT scan and begin patient care in the Mobile Stroke Unit

For any further information, please do not hesitate to contact me.