



**To:** San Mateo County Emergency Care Providers

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**Subject:** Updates and Training Coming to the System

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There are a number of updates that we are releasing on November 1<sup>st</sup>. The actual training is forthcoming and once completed will be active in the EMS system. Many of these items need to be vetted through you over the next 6 months, so please know this will be a little rocky as we change the look of the protocols and the ePCR, but realize we are trying to minimize changes as best we can. This will be a collaborative effort and any mistakes, bugs, or just a better way to do something exists, let your supervisor know and we can adjust based on your experiences in the field.

**MEDS 4.0** – This is a minor update to the MEDS software. The update limits the number of primary impressions to about 65; however, you will now be able to more easily search for an impression rather than searching drop-down menus. Standard definitions for these impressions will be on the MEDS computers in a separate file to help with choosing the appropriate impression. This will go live when the update comes to the tablets, but the list is included with this memo with definitions.

**New Protocol Format** – The first set of protocols are being released. Their wordier counterparts will be retired but should be similar to what you have already been doing. Changes to the system will be explained in this memo and training will begin in November. Ask a supervisor if you find other changes not mentioned.

**Epinephrine in Cardiac Arrest** – One change is decreasing the amount of epinephrine we use in cardiac arrest to 3 mg. Epinephrine has never been shown to improve outcomes in cardiac arrest and large doses, over 3 mg, has shown to be detrimental to patients. Please limit to 3 rounds of epinephrine.

**ECMO** – Training for ECMO, which is essentially cardiopulmonary bypass, is scheduled during the next couple of months. Included in the first set of protocols is the ECMO and application of the LUCAS device during cardiac arrest. Those in persistent ventricular fibrillation or pulseless ventricular tachycardia within Mills-Peninsula catchment will be able to receive this potentially revolutionary treatment. The phone number to reach the ECMO doctor is active, but training is just starting, and expected date of training completion is not until January 14<sup>th</sup>, 2019.

**Thrombectomy capable Stroke Center (TSC)** – Mills-Peninsula has met the requirements for becoming a TSC which means that they can receive patients in the extended stroke window. The biggest difference between a TSC and CSC is the lack of a neurosurgeon. The majority of LVO (Large Vessel Occlusion) stroke patients do not require a neurosurgeon. They have been providing this service for many months already, but formally get recognized and go live on November 1<sup>st</sup>, 2018.



**Change in Stroke Protocol** – The stroke protocol has been updated with the new time frames for stroke patients and the last known well window has been expanded. Patients with stroke symptoms should go to a Primary Stroke Center. When the last known well is between 3.5 and 9 hours, the patient should go to a TSC or a CSC. All other stroke patients should be brought to a Primary Stroke Center.

**Mobile Stroke Unit (MSU)** – The policy for the MSU has been approved by the county and the protocol is in this first release of protocols. Training for and coordinating with the MSU will be starting with the ECMO training and the expected date to go live is December 17<sup>th</sup>, 2018.

**Base Station** – Yes, the rumor is true, a centralized base station is in the works. This will consist of the physicians at Stanford who are trained in Emergency Medical Services and you may see in the field when responding to calls in MD-1. Until the number for the base station is released, continue to use the destination hospital as your base station.

**Shocking Unstable Cardiac Dysrhythmias** – The only other big change from the current protocols, but in line with AHA/ARC training for ACLS is the use of electricity for unstable dysrhythmias. This again should be reserved for very unstable patients as cardioversion hurts and it is rare that cardiac dysrhythmias are unstable.

Attached are the first batch of new protocols, the primary impression list and their definitions which you will start training on in November. While the “Go Live” is today for some of these, full compliance is expected by January 15<sup>th</sup>, 2019.