Dakota Clevenger

**Quality Improvement Activity: Fault in Stroke Protocol**

In May of 2020 at around 7 at night, a middle-aged woman came to the emergency room with complaints of a headache and a sudden onset of blurry vision. She came up to the window in triage and was asked if she needed to see a doctor and she stated that she did. The nurses proceeded to check her in and took her back to get her vital signs and do an assessment on her. Her vitals were normal for her besides her blood pressure was high, but she stated having a history of hypertension. So, it wasn't a big red flag for her blood pressure to be elevated. The nurses finished her assessment and told her that we will get her back as soon as possible and sent her back to the waiting room. Since it was shift change things were hectic and things could easily slip through the cracks and things did. The triage nurses forgot to put in orders for a head CT to check on the neurological status of the patient. The ER at this time was full because of COVID patients and traumas that had come in, so the waiting room was full, and the wait time was about 10 hours. This patient's family comes up to the triage window about 2 hours later and asks if they are going to do anything for his mom because they haven't taken her back for any tests or back to a room yet. He states that his mother says that the headache has intensify and now she cannot feel her left side of her body. The nurses state back to the family member that they must wait their turn and that they are busy and don't have any rooms available right now. A few hours later the patient who is still in the waiting room loses consciousness, so the nurses run out and check on her and rush her back into triage and get her vitals again and notice her blood pressure is now 210/95. So, they now notice this patient is probably having a stroke and rush her back to CT and call a code stroke. The CT showed that she had a massive clot in her brain. So, the physician immediately called for this patient to have a thrombectomy because she is no longer a candidate for tPA since it must be given within 3 hours from the onset of symptoms. After surgery, she was taken to the ICU to recover and get physical therapy for the deficits that she has.

**Describe the scenario. In what way did the patient care or environment lack? Is this a common occurrence?**

In this scenario a woman who was having very vague symptoms of a stroke came into the ER. She then was triaged and put back in the waiting room to wait for a room to become available to see a doctor. After the initial assessment there was a lack of urgency and follow through for this patient. The patient was left in the waiting room for hours while she was having symptoms of a stroke which is a time sensitive thing to treat. When the family member questions what was taking so long, they were given a very rude response and left to wait even more. If the nurses would have followed the stroke protocol and knew the common and vague symptoms of a stroke this patient could have been treated faster and been given tPA. There are the common symptoms of a stroke that everyone knows which is left or right sided paralysis or a facial droop but there are many other vague symptoms that could happen such as the headache, hypertension, and blurry vision. The nurse should know the protocol and the symptoms so when they might even have the slightest symptoms of a stroke, they get immediate treatment. The sad thing is this is a common occurrence in emergency rooms because like any other place in healthcare so many people come in and cry wolf or exaggerate and so it makes it harder to know what is real or not, but no matter if the nurse thought this patient was exaggerating, they should treat them like a true

emergency. Because an emergency is defined by the person experiencing it not the nurse triaging them. It is our job to listen to our patients and treat them no matter what.

**What circumstances led to the occurrence?**

The circumstances that led to this occurrence was that the ER was super busy, and the nurses are burned out from seeing so many COVID patients that they neglected to follow proper protocol when it came to ordering a head CT on a patient who had vague symptoms of a stroke. They also did not follow protocol during the initial assessment when they failed to recognize symptoms of a stroke that are outlined on the stroke protocol.

**In what way could you measure the frequency of the occurrence? (Interviewing nurses, examining charts, patient surveys, observations, etc.)**

You could measure the frequency of not recognizing symptoms of a stroke and not acting according to protocol by examining charts, reviewing the amount of time from onset of symptoms to treatment and by interviewing nurses that had stroke patients. Protocol states that from the time of onset of symptoms you have a 3-hour window to give tPA before the deficits are permeant. So, the longer you wait for treatment the more complications the patient may have.

**What ideas do you have for implementing interventions to address the problem?**

- Create extensive education on how to identify a stroke that the staff in the emergency room and especially the triage area must take quarterly.
- Implement a part of the charting system that if they have any symptoms of a stroke, regardless of what they came in for, it will have a questionnaire about stroke symptoms, so the nurse must further assess if the patient is having a stroke and then proceed with proper protocol.
- Create a checklist to check off the things needed to be done off the protocol when a stroke is suspected.
- Have a mock code stroke and test the staff on their preparedness.

**How will you measure the efficacy of the interventions?**

You can measure the efficacy of the new implementations by auditing the staff and charts for when they implemented the protocol and called a code stroke to the time that tPA was initiated. And see how well the new addition of the stroke charting is helping in identifying a stroke patient.