

Quality Improvement Activity: Medication Administration Errors

A patient came in the Emergency Department via EMS upon arrival the EMT gave report to the assigned nurse of the patient about their current condition. EMT explained to the nurse the patient reported that they were experiencing nausea and vomiting along with weakness and confusion after eating a few chocolate bars an hour before the patient called 911, and the patient has a history of Diabetes Mellitus, Hypertension and is obese. After report the doctor assessed the patient, they determined the patient was in a hyperglycemic state after the nurse took their blood glucose level and the result was 325 mg/dL. The doctor then ordered 8 units of Humalog a fast-acting insulin to give to the patient to help lower their blood sugar level. The nurse immediately drew up the insulin inside the medication room not realizing how many units they had drawn up in the syringe. The TPCN asked another nurse to verify the amount in the syringe and without the TPCN explaining to the verifying nurse the number of units the patient was supposed to get, the verifying nurse went ahead and co-signed the insulin without asking the TPCN since the department was busy that day. After verification the nurse administered the insulin to the patient and after 15-20 minutes the patient calls the nurse and begins to complain of heart palpitation, shakiness, paleness and increased in sweat. The nurse then suspects the patient blood glucose levels were low because the patients' signs and symptoms are consistent of hypoglycemia the nurse immediately checks their blood glucose level the result was 140. The nurse then calls the doctor for their assessment and to determine what to give the patient to bring their sugar up, the doctor also suspects the patient might have received more insulin because of the rapid drop in blood sugar level. The nurse then asked the verifying nurse how many units they checked on the syringe and told the TPCN they witnessed 12 units of insulin. After stabilizing the patient and their blood sugar levels are within normal limits the TPCN realized they had made a medication administration error and endangered the patient.

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

In the scenario above the patient came in by EMS because they were complaining of nausea, vomiting, weakness, and confusion after consuming several chocolate bars. After the doctor determined that the patients sign and symptoms are consistent with hyperglycemia and the glucose level were 350 mg/dL the doctor orders 8 units of Humalog to be given to the patient to lower the patients' blood glucose levels. Because of the amount of work load the nurses were experiencing in the department the nurse neglects in verifying how much insulin they drew up in the syringe and the second nurse verifier neglected in double checking the amount that is needed for the patient. This has then led for the patient to become hypoglycemic after the administration of insulin. The patient care was lacking due to the wrong amount of insulin jeopardizing the patients' health. If the TPCN and the second nurse took the time to verify the amount of insulin that was on the syringe and followed the 7 right of medication administration the medication error would have been prevented. Medication administration error is common for nurses to make especially when they become very busy or distracted. But as nurses we must

Ian Canono

always follow the 7 rights of medication administration for the patient safety especially if its insulin to prevent harm to the patient.

What circumstances led to the occurrence?

The circumstances that led to the occurrence is the nurse did not double check the correct number of units of insulin that was drawn, and the second nurse verifier failed to properly verify with the TPCN the amount that will be given to the patient and the amount that was in the syringe. The nurse did not properly follow the 7 rights of medication administration which jeopardized the patient's safety and health.

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

The frequency of occurrence of medication administration error are measurable by self-report of nurses who make the errors or witness the error, reviewing incident report specifically for medication errors, clinical surveillance, and interviewing nurses. They are more than 100,000 medication related errors that get reported to the FDA yearly in the US.

What evidence-based ideas do you have for implementing interventions to address the problem?

Implementing interventions by addressing to reduce the occurrence of medication errors made by nurses for the safety and health of the patient are as follows:

- Requiring nurses to have a check off list document of the 7 rights of medication administration protocol for high-risk medication such as insulin
- Designing effective warning signs implemented in computers reminding verifying nurse to double check the medication amount with TPCN
- Involving the patient in medication checks before administration

How will you measure the efficacy of the intervention?

To measure the efficacy of the intervention implemented to reduce medication administration errors is to look at the number of nurses who report medication administration errors and reviewing the incidence report documents after protocol have been implemented.