

PreP 4 PATIENT SAFETY CASES THAT UNCOVERED SYSTEM ERRORS

Abstract:

In at least eleven (11) of the nearly 100 cases processed through the four operational **PreP 4 Patient Safety** programs, the investigation of individual practitioner deficiencies (physicians or nurses) led not only to timely remedial interventions with those individuals, but also to the discovery and correction of **system flaws**.

This report briefly summarizes those 11 cases. They underscore the relationship between **PreP 4 Patient Safety** programs and **system safety improvements**. They show that a mechanism for finding and remediating physicians and nurses who have shortcomings in knowledge and/or clinical skills can be at the same time a tool for identifying and remediating system safety problems. The first four cases summarized below involve physicians; the next seven cases involve nurses.

Case #1: In this case, a radiologist's inability to correctly interpret radiographs and CAT scan results delayed a cancer diagnosis. The physician entered the PreP 4 Patient Safety program operated by the medical board in that state, was sent to Colorado to be fully evaluated by the **Center for Personalized Education for Physicians Program (CPEP)**, and complied with all of **CPEP's** recommendations for improvement. But, in addition to the identification and remediation of the physician, the investigation of the case found flaws in the hospital's system for notifying patients of negative x-ray and other diagnostic findings. The hospital is modifying and improving the notification system.

Case #2: In this case, the medical director of a hospital was found to be less competent than his case documentation implied. The remediation for this individual was a specific course in record keeping and documentation. During the investigation of the case, it was discovered that the facility's system for notifying patients of abnormal x-ray findings was flawed, leading to delays in diagnoses of cancer. Since the physician involved was the medical director, he also agreed to institute system-wide changes to improve the process of patient notification of abnormal results.

CASE #3: In this case, a physician was the subject of numerous co-worker complaints that his intimidating and retaliatory behavior put patients at risk and created a hostile work environment. The remediation plan called for a year of extended professional counseling to give the physician insight into how his behavior and communications style jeopardized patient safety and negatively impacted his co-workers. The system fix was to involve the entire staff (physicians, nurses, and other health care professionals) in counseling sessions to instill better team building skills throughout the facility.

CASE #4: In this case, the medical director of a health plan was found to be micromanaging decisions about discharging patients from hospitals, in at least one case making a patient's access to proper treatment unnecessarily difficult. The remediation plan called for the physician to successfully complete a course in Ethics and Professionalism at Case Western Reserve University, and for the next 5 years to take 40 hours per year of directed CME in approved courses on professionalism and ethics. Since the physician involved was the health plan medical director, the system fix was to review and revise the health plan's rules governing both discharge and access to care to better assure that patient safety and quality of care were the paramount consideration.

CASE #5: In this case a nurse working in a long term care facility continued to administer a medication over a period of 4 months after it had been discontinued by the resident's physician. When interviewed, the nurse said that since she was familiar with the resident's medications, she did not always check the Medication Administration Record (MAR) before dispensing. Fortunately, there was no patient harm in this case but, clearly there could have been. The remediation program involved both direct monitoring of this nurse for a period of months, and a requirement that the nurse take an approved course in record keeping and documentation.

It became apparent during the investigation of this case that the facility's pharmacy department kept sending the particular medication to the floor long after the order expired. No system was in place to catch such errors. It also became apparent that there was no record of whether other nurses had also continued to dispense the medication after the order expired. The system fix was to put in place new procedures that apply to both the pharmacy and the nurse staff so that this type of error would be unlikely to occur in the future.

CASE #6: In this case, a nurse committed a serious medication miscalculation which resulted in giving a neonate ten (10) times the ordered amount of Digoxin. The remediation involved education related to NICU medications, calculations and errors, and monitoring in the workplace for a year. During the investigation of this case, the hospital identified systems flaws in the procedures for calculating and delivering medications to patients, and put in place a number of fail safe procedures so the type of error involved in this case would be less likely to occur in the future.

CASE #7: In this case, an experienced nurse who had not worked in an acute care setting for many years returned to work in a hospital hemodialysis unit. She was referred to the PreP 4 Patient Safety program in her state, based on 2 errors: (1) incorrectly connecting dialysis equipment, and (2) administering the wrong medication to a patient. This happened when the nurse went to an adjoining unit to retrieve a specific stat medication (Digoxin) which, it turned out, was not located in the same place as on her own unit. She grabbed the wrong medicine (Epinephrine) and administered it to her patient. While there was a potential for serious patient harm, none actually occurred.

Assessment of the incident disclosed both individual practice and systems flaws. The nurse lacked current core competencies needed for acuity in the hospital setting. The hospital clinical educator met with the nurse to discuss the nurse's learning needs. It was mutually agreed that the nurse would transfer to a unit where she had prior experience, and several specific educational interventions were identified and put in place. As for the identified systems flaws, the hospital replaced the connectors for dialysis tubing with error-proof fittings so that tubes could not be connected incorrectly in the future. Also, the PYXIS machine was re-configured, so that similar medications were organized consistently in all units.

CASE #8: This case involved an experienced nurse who failed to communicate important patient information, a “panic value” potassium, to the patient's physician. Assessment consisted of practice and chart review by the nurse manager. Remediation included in-house continuing education on legal documentation, critical thinking skills, and medical surgical skills/decision making. Monitored practice was also required. During the investigation of this case, a system flaw was also discovered. The hospital identified a “gap in the procedures it had in place for review of lab values. Procedures were put in place to ensure that all lab values were reviewed by the charge nurse, with a requirement that all abnormal values in every instance be immediately discussed by the charge nurse and the primary nurse to assure that appropriate action, including immediate notification of the appropriate physician, be taken in all cases, and recorded.”

CASE #9: This case involved seven nurses (LPNs) in a long-term care facility. A physician ordered Immodium three times per day for five days for a resident. An RN received and wrote the order on the MD order sheet, and faxed the request for the medication to the pharmacy. The RN asked an LPN (one of the 7 LPNs involved in this case) to record this order on the Medication Administration Record (MAR). This was done, but the LPN did not indicate in the record the time(s) the medication was to be administered. She said in an interview that the reason she did not write down the times was that she wanted to wait until the medicine was actually delivered to her unit, so that she could calculate the times for the future doses. The medication was never received from the pharmacy. The times the medication was to be administered, therefore, were never entered on the MAR. During the next 5 days, seven different LPNs failed to administer the medicine. Some of them said they saw the notation on the MAR for the Immodium, but since no time was given they assumed it was to be PRN, so they never tried to give it, and therefore never discovered it had not been delivered. All seven LPNs were required to take educational units on proper record keeping.

The long term care facility identified two systems flaws, (1) the pharmacy failed to respond to the faxed message to deliver the medicine, and (2) the system allowed seven (and perhaps more) LPNs to incorrectly surmise that a medication was ordered PRN when in fact it was not. The system fixes included new procedures to verify and follow up on delivery of medicines from the pharmacy, and new procedures to better assure the MAR contained correct and timely notations.

CASE #10: This case involved three separate instances and three different nurses who failed to document care delivered. They also failed to document PRN controlled medications. Assessments were made through meetings and discussions with different nurse managers, as well as record review by management staff. In each of the 3 cases, the nurses were required to take in-house education courses on record keeping.

During the investigation, management concluded there was a systems flaw in that neither new nor long time staff members were exposed to a course on hospital policies and procedures regarding documentation and record keeping. To correct this, the facility put in place mandatory educational programs for all new hires, and required all existing staff to take in-house courses and periodic refresher courses on policies and procedures regarding record keeping. The facility also reviewed current policies and procedures and made changes to better assure timeliness and accuracy.

CASE #11: This case involved a nurse employed in a long term care facility. She was instructed to start an IV on a resident, but was unsuccessful because the resident became agitated and moved around constantly. This occurred toward the end of the nurse's shift, and she notified the incoming nurse that she had been unable to start the IV. The incoming nurse said she would try to do it as soon as she finished passing out medications to her other assigned residents. When the incoming nurse finally got around to entering the room of the resident who needed to have the IV started, she discovered that the first nurse had not removed the tourniquet from the resident's arm. This was five hours after the original nurse had tried but failed to begin the IV. There was swelling, but no residual or permanent damage. Remediation included in-house education, and supervision of cases involving in IV therapy for a period of months. During the investigation, the facility realized the system flaw and is considering a change in standard procedure so that whenever an IV is ordered, and a resident is difficult to manage, a second staff member will be required to assist throughout the procedure.

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