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What doctors can do to prevent medical errors during transfer of care

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How can clinicians keep patients safe during critical transition of care? As patients' conditions change, they move to different hospital floors, care teams and, eventually, leave the hospital. During those moments, patients are at high risk of fragmented care, adverse drug events and medication errors.

Medical errors can be costly for both patient and hospital. A 2012 Joint Commission report focussing on transitions of care estimated that 80% of medical errors involve miscommunication between caregivers during the handoff between medical providers. In a 2016 presentation Helen Haskell, president of Mothers Against Medical Error and Consumers Advancing Patient Safety, showed that medication errors are the leading cause of medical harm and extended stays in hospital patients. Patients are estimated to be exposed to one medication error each day, and one in four hospital errors occur during prescription or administration.

In order to keep patients safe, clinicians should focus on three key points along the patient's continuum of care:

1. Upon admission

Patient admission is a critical time for risk assessment. Clinicians should employ screening tools to identify high-risk patients before procedures. For patients potentially receiving opioids, this can include the Risk Index for Serious Prescription Opioid-Induced Respiratory Depression or Overdose (RIOSORD), an analytical model designed to define elevated risk of overdose or life-threatening respiratory depression.

It is crucial that the results of these tests be quickly communicated to all clinician teams responsible for the patient through their stay. This includes special attention to the patient's current medication and any existing conditions.

2. Patient recovery

As patients recover from procedures, it is common for patient-controlled analgesia (PCA) pumps to be employed to manage pain. For the opioid-naive, incorrect dosages can lead to opioid-related respiratory depression.

Research published in Anesthesia & Analgesia suggests that an electronic checklist may help, especially during intraoperative transfers of care. The PPAHS PCA Safety Checklist is a free downloadable resource developed by a panel of experts to reduce the risk of opioid-related adverse events.

Continuous electronic monitoring should also be employed for all patients receiving opioids. This includes the use of pulse oximetry and capnography monitors. Intermittent spot checks are not sufficient to detect the signs of opioid-related respiratory depression. A key study by Dr. Melissa Langhan, assistant professor of pediatrics and emergency medicine at the Yale University school of medicine, quantified this as an average of 3.7 minutes quicker than pulse oximetry monitoring.

3. Patient discharge

Clinicians should take steps to actively engage patients and their families as partners in their health. Most importantly, before discharge patient should ensure they have the information they need to use their medications safely.

Patients are encouraged to ask the following five questions about their medications:

1. Have any medications been added, stopped or changed, and why?
2. What medications do I need to keep taking, and why?
3. How do I take my medication, and for how long?
4. How will I know if my medication is working, and what side-effects do I watch for?
5. Do I need any tests and when do I book my next visit?

We encourage clinicians to download a PDF version of these five questions and share with their patients here.

For more resources dedicated to patient safety, please visit the CPSI and PPAHS websites.

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