Codify by AAPC

Long-Term Care Survey Alert

RISK MANAGEMENT: Implement Systems To Prevent Deadly Tubing Misconnection Errors

If you think it can't happen, your residents are at higher risk for mix-ups.

Picture this: A temp nursing staff person connects the resident's enteric feeding to his peritoneal dialysis catheter--or mistakenly administers an IV med into a patient's epidural line.

If those scenarios sound like remote possibilities, take heed of a recent **Joint Commission on the Accreditation of Healthcare Organizations'** sentinel alert reporting on those particular errors and others. And in the survey world, such alerts mean surveyors come forearmed with published information saying your facility should have been aware of such accidents.

Not only that, but skilled nursing facilities today care for higher acuity patients who often do have IVs, peritoneal dialysis catheters, gastrostomy tubes, suprapubic urinary catheters--or even epidural catheters for pain management.

"The basic lesson from the reported cases of tubing and catheter misconnection error is that if it can happen, it will happen," comments **Dennis S. O'Leary, MD**, president of the Joint Commission, in the recent sentinel alert on tubing misconnection errors. O'Leary notes that the errors pose "a real threat to patient" safety and can be overcome through a systematic approach to avoid misconceptions.

Risk management experts suggest implementing these error-proofing strategies for nursing home settings:

• Label tubing to identify what it's for. That's what intensive care units do to prevent tubing misconnections, observes **Treva Boydelatour RN, LNC,** a risk management nurse with **Royal Manor Management** in Middleburg Heights, OH. "And that's probably the safest way to alert nursing staff to the type of tubing they have hold of," she tells **Eli.** For example, peritoneal dialysis tubes can be a problem if unlabeled because someone could hook it up to an IV or enteral feeding, she notes.

Label both ends of the tubing--the distal end near the IV solution or enteral feeding and the one near the patient, suggests **Michael Cohen,** president and founder of the **Institute for Safe Medication Practices** (ISMP).

• Take steps to prevent staff from mistakenly administering IV medications through epidural lines intended for pain management. Cohen says the ISMP has had reports of such accidents. "And some patients may come to the nursing facility with pain therapy administered via an epidural line," says Cohen.

Safety tip: "The epidural tubing should have no Y sites," he adds. That way you can't plug in anything or administering medication meant for the IV route, Cohen notes.

• Use infusion pumps that look different for tube feedings and IVs. That way staff won't be as likely to get confused and hook up an enteral feeding to an IV line. Also keep the pumps on opposite sides of the bed, advises Cohen.

In addition, "staff should trace the line from the IV or enteral feeding to the access site to make sure it's in the right location."

• Discontinue IV lines as quickly as possible to prevent accidental administration of enteral feedings, etc., via the lines. "The facility can use a heparin lock for administering IV antibiotics or medications on an intermittent basis," says Cohen.

CPT® 2023 American Medical Association. All rights reserved.

Codify by AAPC

• Flag residents with cognitive impairment who have IVs or other tubing for closer monitoring by nursing staff, suggests **Sue Masoorli**, **RN,** CEO of **Perivascular Nursing Associates** in Philadelphia.

• Train staff to never force tubing to fit together. Masoorli tells **Eli** about one case on the East coast where a licensed nurse hooked up oxygen tubing to an IV and killed the patient. "The oxygen tubing doesn't fit the IV tubing so the nurse taped it to keep it in place," she says.

Implement These JCAHO-Recommended Safety Steps

To reduce the risk of errors related to tubing misconnections, the Sentinel Event Alert recommends these specific steps:

• Don't purchase non-intravenous equipment with tubing connectors that permit connection with intravenous (IV) connectors.

• Test and assess risks of new tubing and catheter purchases to identify the potential for misconnections. Implement appropriate preventive measures before using.

• Route tubes and catheters having different purposes in different, standardized directions, e.g., route IV lines toward the head; route enteric lines toward the feet.

• Re-check connections and trace all patient tubes and catheters to their sources as a standard of care when a patient arrives in a new care setting.

• Emphasize the risk of tubing misconnections in clinician orientation and training programs.

• Inform patients/families of the importance of getting help from nurses or doctors whenever they have a real or perceived need to connect/disconnect devices or infusions.

• Don't use tubes or catheters for unintended purposes, such as using IV extension tubing for epidurals, irrigation, drains, and central lines, or to extend enteric feeding tubes.

• Teach staff to turn on the light in a darkened patient room before trying to connect or reconnect tubes or devices.

CPT® 2023 American Medical Association. All rights reserved.