



The most award winning healthcare information source. TRUSTED FOR FOUR DECADES.

www.ahcmedia.com/articles/138503-addicted-patients-inject-infect-their-own-iv-lines

# Addicted Patients Inject, Infect Their Own IV Lines

At risk of bloodstream infections, overdose

August 15, 2016

By **Gary Evans**, Senior Staff Writer

The national opioid epidemic is causing daily overdoses in the community, diversion drug thefts by healthcare workers, and now a dangerous new aspect at the bedside: Hospitalized patients are injecting illicit drugs and hoarded medications directly into their placed IV lines.

In the process, they may give themselves bloodstream infections — a serious complication in its own right — but in this scenario the risk is compounded by possible overdose. There are some reports of patients overdosing in hospitals, joining the estimated 29,000 people who OD annually on opioids in the U.S.

“I have definitely seen this,” says **Kimberly New**, RN, JD, founder of Diversion Specialists in Knoxville, TN. “In fact, I am aware of more than one case in which a patient did this and overdosed and died while in a hospital or other healthcare facility.”

Infection preventionists were already involved in the issue because drug-diverting healthcare workers have caused a tragic succession of hepatitis outbreaks among patients in recent years. Infections caused by traveling surgical techs have happened so frequently that Colorado recently enacted a tough new law requiring registration, fingerprints, and a background check for these workers. (See related story in this issue.)

This latest disturbing nuance to the problem is addicted patients infecting themselves by tampering with their IV lines while hospitalized for some other condition. In manipulating and accessing their lines, patients may contaminate the insertion site and seed their own bloodstream infections. They may also develop BSIs caused by whatever illicit drugs and solutions they managed to surreptitiously inject in their system while hospitalized. An unexpected outbreak of this variety happened at Baptist Medical Center in Jacksonville, FL, last year, and given the nature of addiction and the scale of the opioid epidemic, hospitals all over the country could be facing similar cases.

Two colleagues at the hospital shared their experience with this complex problem recently in Charlotte at the annual conference of the Association for Professionals in Infection Control and Epidemiology (APIC).

“From October 2014 to September 2015, we reported 16 bloodstream infections — a combination of CLABSIs and non-CLABSIs in one particular service,” says **Robyn Kay**, MPH, CIC, clinical epidemiologist at Baptist Medical. “When we dove down into each of these infections, [we realized] we had a problem. Our clinicians were writing in the patient record that they were concerned about line manipulation and accession, so we needed to take action pretty quickly.”

The hospital has a full regalia of infection prevention protocols and bundles in place, but it was something of a shock to find that eight of the 16 BSIs were due to patient line manipulation and access to inject drugs.

“We didn’t plan for patients who self-inject and manipulate their lines,” says **Blanca McKean**, MSN, RN, NE-BC, nursing director of the Adult Tower at Baptist Medical. “You don’t know you have an issue until it’s an issue. We didn’t find any literature specifically on how to manage this patient population that self-injects while in hospitals, but we did find that it is not an isolated issue.”

Indeed, infection preventionists should be aware of this new risk as various aspects of the opioid epidemic continue to roil through the healthcare system, says **Susan Dolan**, RN, MS, CIC, president of APIC.

“IPs need to have this on their radar, and really [be aware] whenever they see unusual organisms at unusual sites or notice an unusual event,” she says. “Another important piece as part of this whole drug diversion situation is to connect with their pharmacy folks, be sure that they are aware of what the policies are, and know what mechanisms are in place to prevent diversion.”

On top of the problem of patients and healthcare workers stealing and injecting drugs, there are continuing infections caused by poorly trained providers blatantly reusing needles, syringes, or single-dose vials on more than one patient.

“These startling and continuing outbreaks are probably somewhat the tip of the iceberg,” Dolan says. “We certainly don’t know about all of them because detection requires putting the pieces of the puzzle together. It takes the right people at the right place and right time. It takes someone who has an inquisitive mind, who says, ‘Something isn’t right. Why would a patient like this with no risk factors have hepatitis?’”

## **Red Flags**

Showing a slide of various plastic syringes, straws, and other drug paraphernalia taken from patients, McKean says the experience with addicted patients underscores how serious the opioid epidemic has become.

“We have a problem nationwide with opioid overuse,” she says. “Since 2000, we have had an increase of 137% in opioid-related deaths. Let that sink in for a second: a 137% increase.”

Deconstructing events from the identified cases, Kay and McKean did a retrospective chart review for some of the patients with bloodstream infections.

“Some of the patients we noted had behavioral changes, increased anxiety, depression, and aggression, as well as an increase in pain medication requests,” McKean says.

The patients required frequent placement and adjustment of their peripheral lines, and “with some of these patients we changed lines up to four times in one day,” she adds. “These patients also complained of difficulty swallowing unrelated to any medical issues — which required the need for IV pain medication administration.”

Other red flags included patients appearing over-sedated beyond what would be expected for the medication they were taking. Patients would often insist on closed doors and privacy and took frequent and prolonged bathroom visits.

“They wanted privacy, especially after [pain] meds were administered,” McKean says. “They were also very protective of their belongings. They didn’t want to allow a change of linens or have any help with hygiene. They demanded to do it themselves. We found when taking care of these patients that the reason was that they were hiding all of their paraphernalia in their beds.”

## **The Intervention**

A multidisciplinary team was formed to address the issue, with representation from physicians, nurses, infection control, pharmacy, risk management, and behavioral health. A series of interventions was devised based on incremental steps that begin with the admission process.

"The best time to try and identify these patients is during admission," McKean says. "We have an opportunity to identify them through the physician [workup] or the nursing admission assessment. We try to identify if there is any history of drug abuse."

If so, the patients are told that because of their drug history, behavioral health will be consulted to minimize any potential withdrawal effects or relapses during the hospitalization. Pharmacy is brought in to validate their current medications and recommend any necessary changes.

"This is just fostering open, honest communication, and again, it is aimed at preventing withdrawal," McKean says. "We collaborate with our patient relations and risk management. We want to avoid line placement if possible. And if we do need to place a line, we don't want to place it in an area that is too accessible to the patient."

For example, a line placed in the neck area can be easily accessed with both hands and thus should be avoided,

"We also want to [place the line] in their dominant arm because then it will be harder for them to access it," McKean says. "We don't want to leave any nursing supplies in the room. We found a couple of times in delivering nursing care and bringing in our supplies to either flush a line or medicate a patient — you turn around to do something in the chart and your supplies have disappeared. You think you are losing your mind, but it is actually the patient taking them."

## **Some Elude Detection**

Addicted patients not identified during the initial admission may be subsequently identified, warranting placement in a room that allows video monitoring.

"We have had this occur several times where we find these patients in the bathroom injecting in their lines," she says. "They are in a bathroom a prolonged time and you go in there and they are injecting some foreign substance."

At this point, the patient is transferred to a "care view" room if possible, which has a video monitor that allows oversight without actually recording the patient.

"Hopefully that will help deter them from injecting because they know we are watching them," McKean says. "We remove the sharps container and the trash can from the room."

Medication is either administered intramuscularly or in a solution.

“A lot of times when you give these patients their pain meds they ‘cheek’ them and then take them out later, crush them, and inject them into their lines,” she says.

The nursing team tries to ensure patient room doors and bathroom doors remain open and either ban visitors or require them to check in first with security.

“We have found that a lot of times visitors will bring in these substances for the patient,” she says. “If [warranted], coordinate with security to conduct a room search. We have had to do that a couple of times and it is not pleasant. We don’t want to make the patients feel awkward or incriminated, but we want to make sure they’re safe. The last thing we want to do is find a patient overdosed in the bathroom.”

The program is a work in progress, with the next phase to include a scripted educational video to model drug addiction conversations with patients.

“We realize that this approach may not be feasible for every hospital system, but the process has been helpful to identify at-risk patients and prevent healthcare-associated infections,” Kay says. “Some of the challenges are that a patient may decide to leave against medical advice, and of course we worry about that. Another [challenge] is identifying these patients [early]. Sometimes we do miss them. We want to minimize the inpatient admissions and hopefully screen them out if they don’t need [hospitalized] medical care while they are in the emergency department.”

## **Welcome to AHC Media**

Get to know the award winning AHC Media by enjoying 3 free articles on us! Call us at 800-688-2421 with questions, comments and/or to request product trials and alternative billing options.

[Register \(/user/new\)](#) [Subscribe \(/products/273-hospital-infection-control-prevention-print-online-1-year-subscription\)](#) [Sign In \(/user/login\)](#)