**Fact Sheet: Insulin Pen Safety in Hospitals**

The use of insulin pens instead of traditional vials and syringes is preferred by many health care providers and patients in the hospital setting because pens provide

• Improved dosing accuracy

• Time savings due to faster dose preparation and administration

• Lower risk for hypoglycemia in the ambulatory setting

• Lower health care use rates and costs

Insulin pens are intended for the administration of multiple doses to the same patient using a new needle for each dose. Sharing of insulin pens among multiple patients may expose patients to blood-borne pathogens (e.g., HIV, hepatitis B virus, and hepatitis C virus), even if the needle is changed because

* Reverse flow of blood and other biological material from patients into insulin pen reservoirs or cartridges has been documented.
* Although insulin pen reservoirs and cartridges contain antimicrobial agents, these agents are ineffective against viruses.

Errors involving sharing of insulin pens have occurred despite warnings about the danger of the practice from the CDC, Food and Drug Administration, and other authoritative groups. Therefore, additional efforts are needed to prevent the sharing of insulin pens and ensure their safe use in hospitals. Possible strategies include

* Labeling pens for specific patients and prohibiting pen use for patients other than the individual on the label
* Storing pens in patient-specific locations
* Developing barcode functionality that ensures that insulin administered in a pen device is both the correct type of insulin and is the specific insulin pen intended for the patient

An interprofessional effort by everyone involved in insulin use at the institution can improve patient safety and outcomes. Because of the seriousness of infection with HIV and hepatitis viruses, the Centers for Disease Control and Prevention (CDC) recommends the following prompt actions for all patients injected using a pen that was previously used for another patient, regardless of whether the needle was changed between patients:

* Notification about the risk of infection
* Testing for blood-borne pathogens

If an insulin pen error is detected during a survey of a Medicare- or Medicaid-certified provider by an accrediting organization, the surveyor must report the breach of infection control to the state public health authority.

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