

# Patient Safety Alert

Veterans Health Administration Warning System  
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<b>Item:</b>	<b>Decimal point display issue with Abbott APM II pump</b>
<b>General Information:</b>	The APM II Pump manufactured by Abbott Laboratories Hospital Products Division will not display a decimal point on the screen when entering values in the tenths of micrograms per milliliter (mcg/mL). However, the decimal point is displayed when the value entered is in the milligrams/milliliter (mg/mL) range.
<b>Specific Incident:</b>	A physician ordered Fentanyl for a patient and a concentration of "12.5 mcg/mL Fentanyl" was sent by the Pharmacy to the floor for administration. A nurse programmed the Abbott APM II pump by entering a 1, a 2, a decimal point and a 5. The pump provided audio feedback at each keystroke, but the display showed "125 UG/ML". This entry was double checked by another nurse who concurred that the correct information had been entered into the pump despite the display reading "125UG/ML". The design of this pump display could result in an adverse drug event with the patient receiving ten times more concentration than the ordered amount.
<b>Action:</b>	<ol style="list-style-type: none"><li>1. Check to see if you have these pumps at your facility. If these pumps are not used no further action is required.</li><li>2. If you have these pumps review the analgesic formulary to determine if your facility uses Fentanyl or other analgesics that are administered via a PCA pump in the microgram per milliliter concentration range. If these medications are not used no further action is required.</li><li>3. If the pumps are present and used to administer Fentanyl or other analgesics ensure that there is a facility guideline for use of these drugs with PCA pumps.<ol style="list-style-type: none"><li>a. Guidelines must cover all aspects of medication ordering, dispensing, administration and monitoring.</li><li>b. Make sure that a standard dose in whole numbers is ordered. Use only whole numbers without a decimal.</li><li>c. Make sure that a standard solution is dispensed to the patient at a concentration that is compatible with PCA pumps. Only use whole numbers without decimals.</li><li>d. Have Pharmacy review all PCA medication orders for accuracy, to make sure medication orders and dispensing meets your facility's guidelines and are in whole number before sending to the patient care unit for administration.</li></ol></li></ol>
<b>Addl. Information:</b>	NCPS was able to duplicate this screen display vulnerability and the manufacturer has been notified. We will also be working with Office of Information to modify the appropriate VistA and CPRS software packages to block the digit after the decimal, if Fentanyl or other analgesics are ordered in the micrograms concentration range.
<b>Source:</b>	VISN 20
<b>Contact:</b>	Mary Burkhardt or Bryanne Patal at the National Center for Patient Safety at: 734-930-5890.