Supplemental Digital Content B: Evolution Vasopressin Alert Signs and Product Labeling

Intervention		Initial	Final Version	
Matching colors between syringe and pump for each concentrations/doses and pre-printed orders		Rx# 706 04/0et/2016 MRN 000000321 4N Shadow dark, samurai Pharmacy Test Vasopressin IV syringe 1 unit/mL PFS 50 in 0.9% NaCl (50 mL) Expiry 1700h Date **High Alert** Room Temp QTY: 0.02	Unchanged	
Simulation	Participant Quote		1	
1	•	Noticed the red after. DI or Shock does not help because haven't used it [vasopressin] enough"		
2,3,6,7	Did not see sign			
4,5,8	Saw red, but didn't read past it			
Intervention		Initial	Final Verson	
Alert signs on infusion pumps for high-alert medications		Indication: DIABETES INSIPIDUS (DI) Dosage range: 0.0005 – 0.01 units/kg/HOUR	HIGH ALERT MEDICATION VASOPRESSIN: check the PUMPS DIABETES INSIPIDUS (DI): Dosage range: 0.0005 – 0.01 units/kg/HOUR SHOCK: Dosage range: 0.0003 – 0.002 units/kg/MINUTE	
Simulation	Participant Quote			
1	"No. I looked at that (signage) and I don't know. I just didn't connect the two. But I think those signs are great. I think when we are doing vasopressin, that would be a really good thing to have in there" "If sign said: per hour NOT per minute" STOP			
2	"The idea of the sign is great. But we didn't look at that." "Vasopressin - check your rate" is what needs to be highlighted to get attention"			
3	"I didn't see that [signs] at all." "for me, it's when I make the sign that I recognize it."			
4	"I use it [vasopressin] so rarely that I didn't even know that one was per hour and one was per minute" Change the color to identify high alert med "Would put it on colored paper, not white. Color draws the eye." RN and MD reflected that they did not know difference between shock and DI were the units.			
5	"I saw it [sign], but in the moment, the HR or MIN were just words. They weren't triggering me, the words Shock and DI in bold was not enough" Preferred other version (the one on white paper)- but on colored paper			
6	"I was so focused on the patient in front of me that I didn't look on the environment. I was so focused on him. I totally missed those signs."			
8	"It [sign] was very helpful and obvious. 1st I read it and thought it was the right dose, then I was like, wait a minute."			