

HPSN 2009

Digitizing Diabetes

Uncommon Teaching Methods for Common Diseases

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Objectives

- Discuss need for increased integration of DM scenarios in nursing curriculum
- Discuss nonconventional approaches to programming ECS for DM scenarios
- Demonstrate how ECS is used to teach physiologic responses to blood sugar changes and nursing interventions
- Discuss methods for improving diabetes education in nursing curriculum



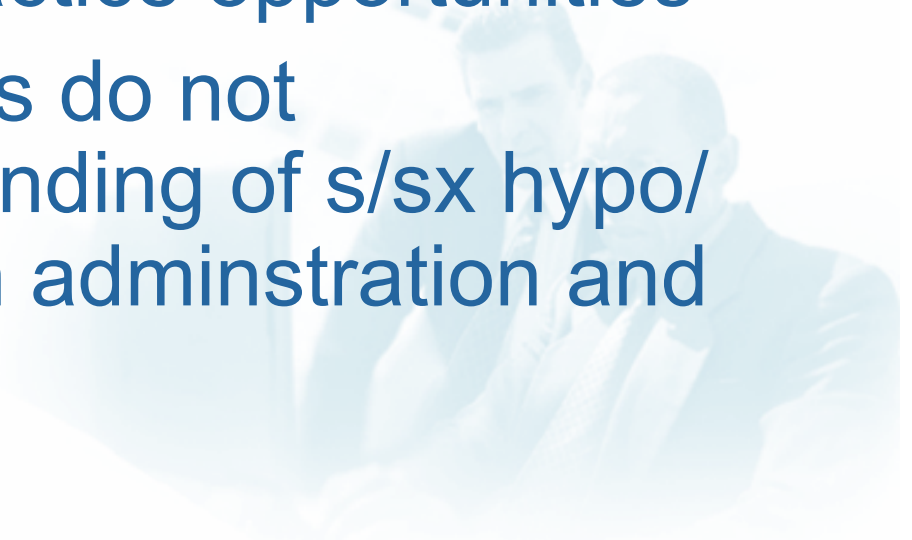
Why Diabetes in Simulation?

- DM becoming pervasive in U.S. with an est. 23.6 million in 2007.
- Diagnosed-17.9 million
 - Undiagnosed – 5.7 million
 - ~23% 60+ yrs of age
 - More likely to need hospitalization due to DM +/- comorbidities





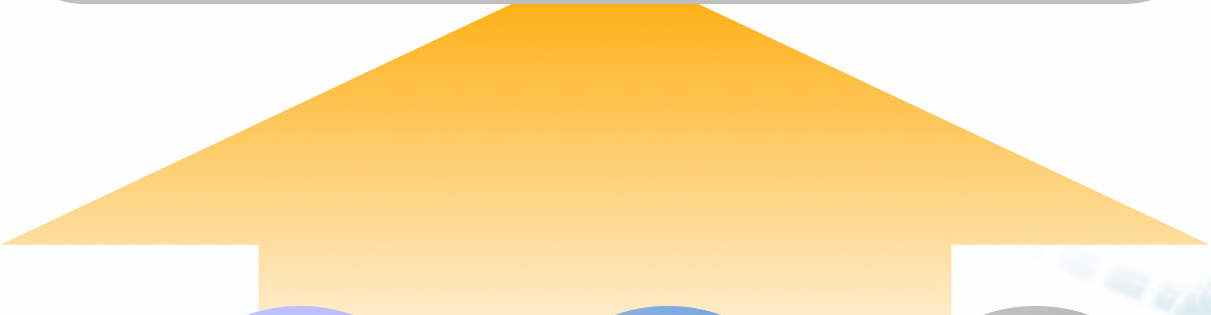
- Students sporadically exposed to pts with DM in clinical experience, usually in conjunction with secondary DX
- Current DM simulations focus on acute life threatening situations
- Decreased clinical practice opportunities
- Faculty report students do not demonstrate understanding of s/sx hypo/hyperglycemia, insulin administration and insulin actions



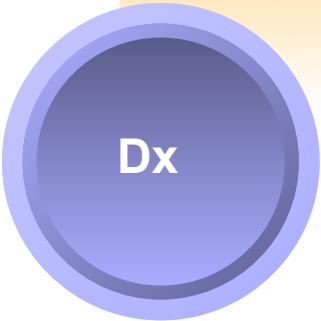


Plan of Action

Content needing enhancement



Assmt



Dx



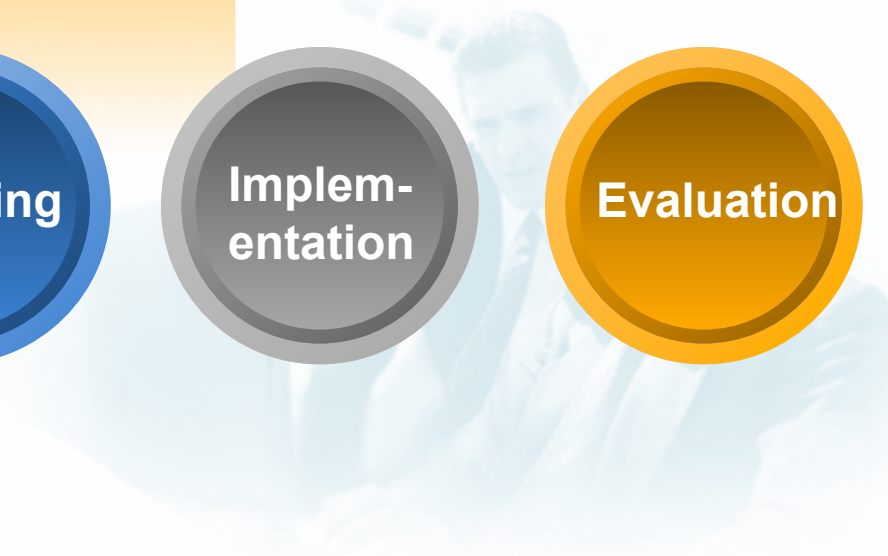
Planning



**Imple-
mentation**



Evaluation



Programming ECS

- Develop methods for programming physiological reactions to blood sugar changes and nursing interventions





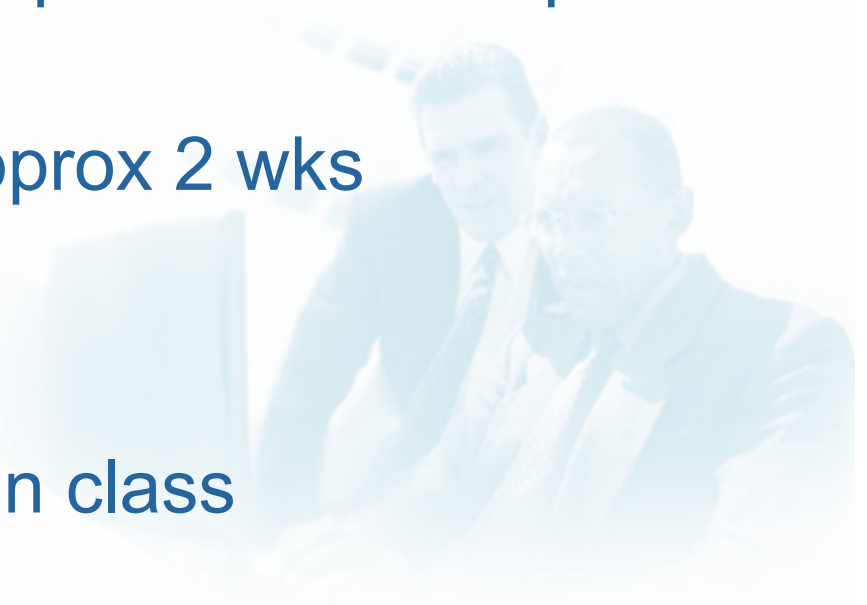
Pilot with students





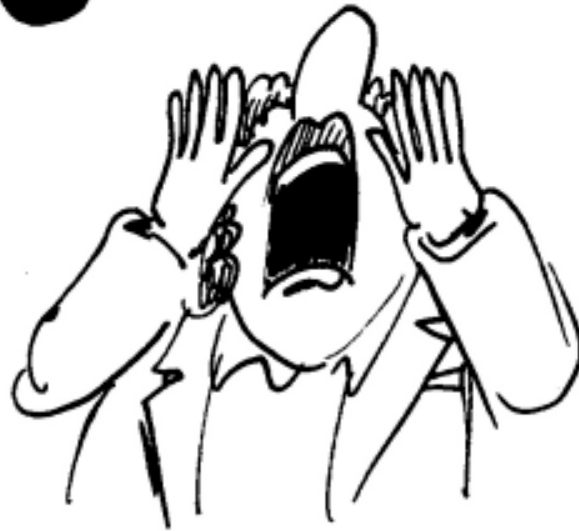
Scenario

- 20 y/o male college athlete came to urgent care. Stated he felt faint at baseball practice and passed out. Admits to:
 - Frequent thirst which he quenches with sports & energy drinks
 - Frequent urination for approx 2 wks
 - Fatigue, lack of energy
 - Frequent headaches
 - Difficulty staying awake in class





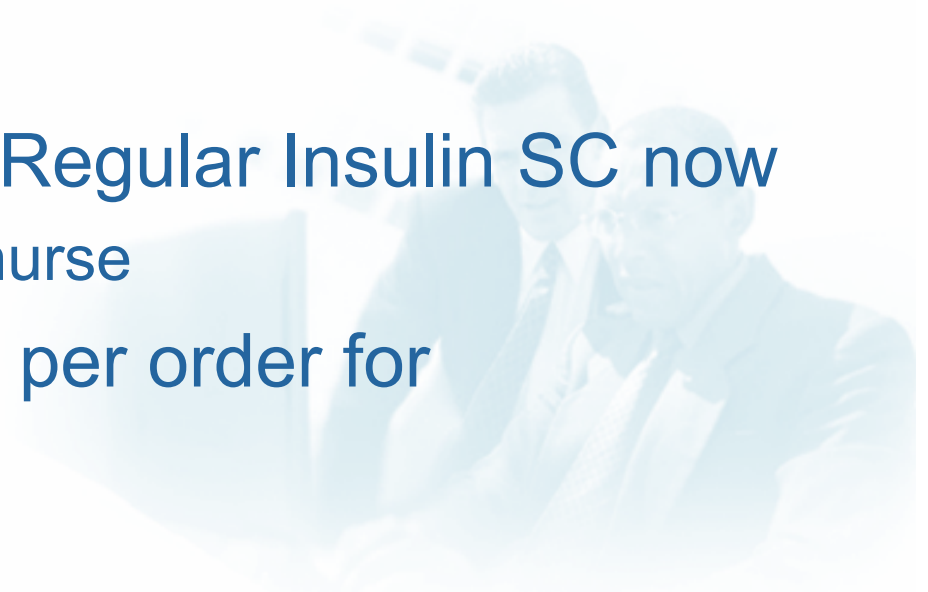
Volunteers!





Scenario (cont)

- Assmt by nurse in clinic:
 - T38.4 – P120 – RR 28, breathing deeply
 - BP 85/50, SpO2 90% on RA
 - BS via accucheck – 468
 - Appears flushed
 - Order received for 3 u Regular Insulin SC now
 - Administered by clinic nurse
 - Transferred to hospital per order for admission





In the Hospital

- Admitting nurse reviews notes and orders from urgent care MD
 - Reads notation of BS of 468 and order for insulin per sliding scale
 - Gives 3 U Reg insulin for BS of 468 per sliding scale.....





- Questions?



- Ideas?

