

# Next-Gen Learning On the Fly: Clinical Judgment for all Nursing Students

PRESENTED BY:

Tim Bristol, PhD, RN, CNE, ANEF

NurseTim® from NurseThink.com



# Our Speaker



**Tim Bristol, PhD, RN, CNE, ANEF**

Owner NurseThink® NCLEX® Review

Faculty Walden University

Faculty FSIL Nursing - Haiti

His motto...

“Today we will learn  
how to learn.”

# Clinical Judgment

- The outcome of critical thinking a clinical decision making.
- CJ is the DOING outcome of learning and practicing
- NCSBN sees a need for more of this because
  - Increasing gap between practice / academia
  - Errors by novice nurses indicate lack in CJ
  - Continuing growth in complexity



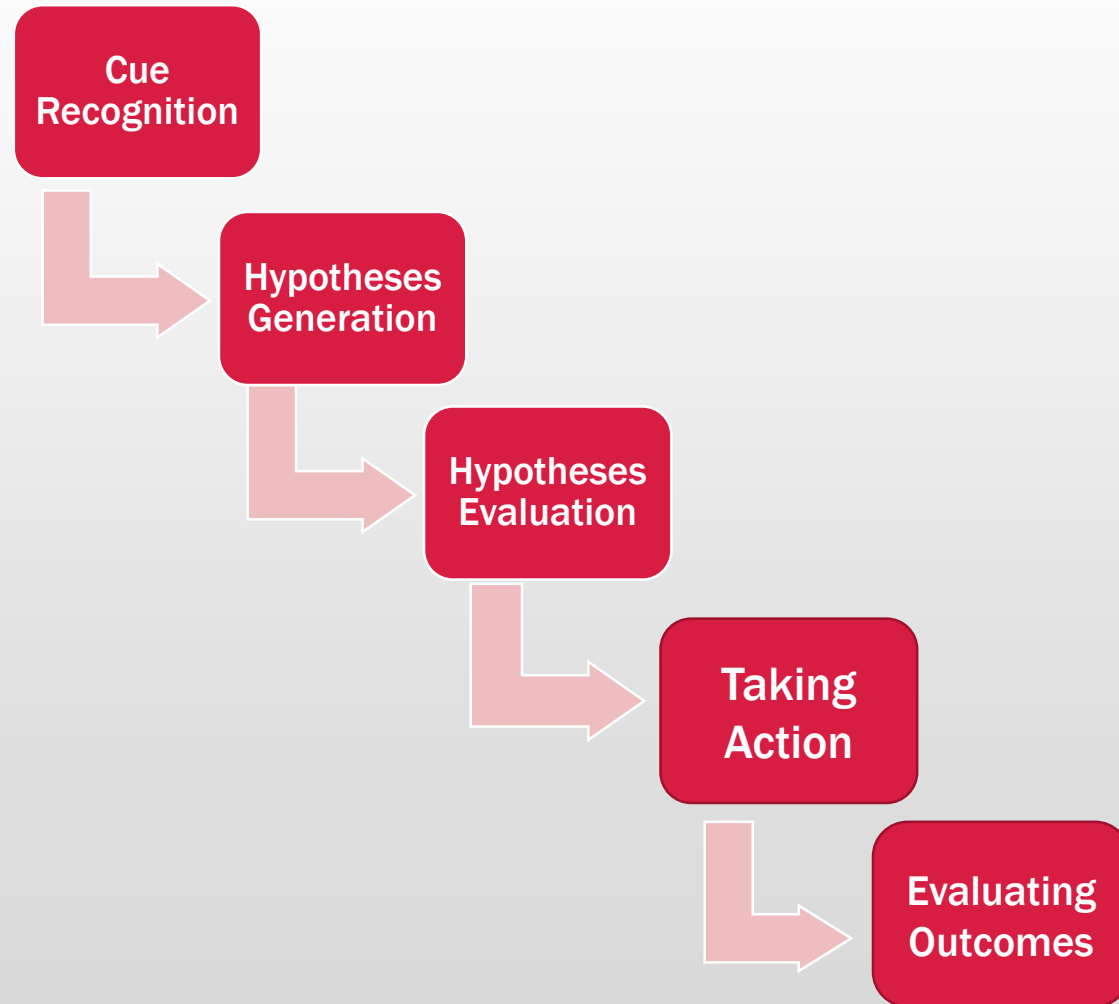
# The Future - NCLEX

- Near – increase in difficulty
- Not to far off – change the type of testing / questions for more valid assessment of CJ



What's Next?

# 5 Steps to Clinical Judgment

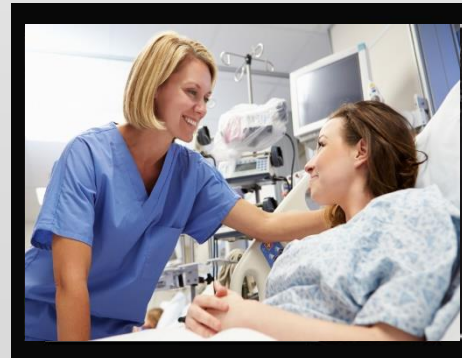
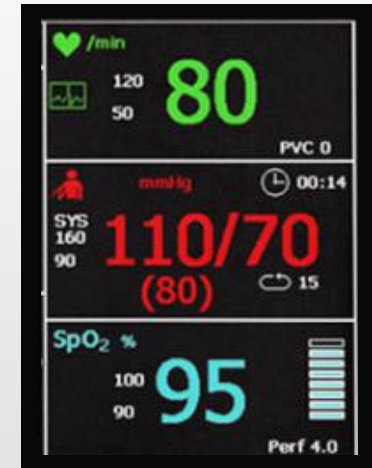


1. Cue recognition
2. Hypotheses generation
3. Hypotheses evaluation
4. Taking actions
5. Evaluating outcomes

<https://www.ncsbn.org/11435.htm>

# #1 Cue Recognition

- Example of a cue – digital clubbing, vitals, statement by the client
- Is this information a priority?
- Is this information an indication of improvement / worsening?
- Extended multiple response where the test taker labels multiple items as “unrelated” “sign of improvement” or “sign of worsening”



# Cue Recognition Learning

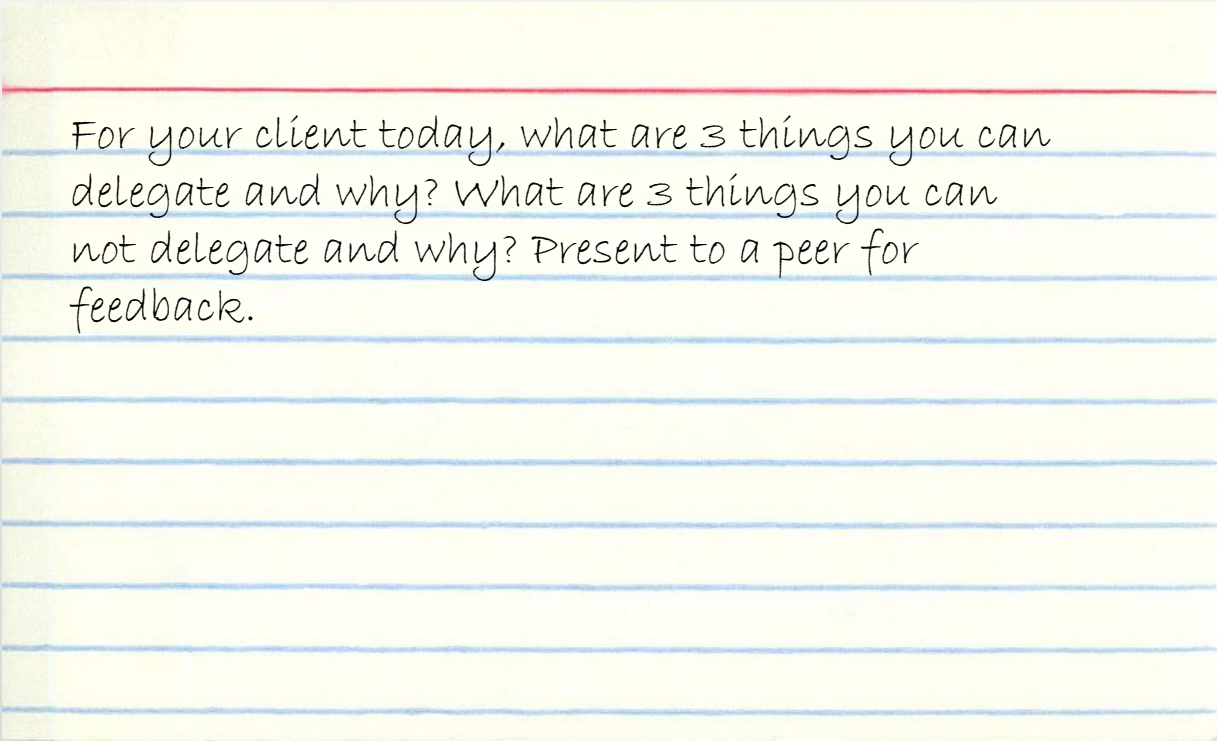
- Practice often and early
  - Start in fundamentals
- During class – here are 3 patients with Crohn's disease, what is most concerning in each case scenario?
  - Don't tell them every time the 'correct' answer
- Integrated in a lab / sim / clinical
  - Be overt





# CREATE Cue Recognition Habits

- Students write this on a 3x5 card...
  - Based on REDUCTION of RISK POTENTIAL from the test plan


A 3x5 index card with a yellow background and blue horizontal lines. The card is placed on a light gray surface. The text is handwritten in black ink.

For your client today, what are 3 things you can delegate and why? What are 3 things you can not delegate and why? Present to a peer for feedback.



# CREATE Cue Recognition Habits

- Now students, using the case study
  - Open your lab book
  - Try to create three lab values.

 Prenatal Period

**Priority concepts**

Development, Reproduction

**Critical thinking**

**What Should You Do?**


The pregnant client at 8 weeks of gestation tells the nurse that she is experiencing morning sickness upon awakening. By lunchtime, she no longer has issues with nausea and vomiting. What should the nurse instruct the client to do to assist in relief of this common morning discomfort?

Answer located on [link](#)

A. Time from **fertilization** of the ovum until the estimated date of **delivery**

B. About 280 days

C. **Nägele's rule** for estimating the date of delivery, also known as date of birth ([Box 25-1](#))

1. Use of Nägele's rule requires that the woman have a regular 28-day menstrual cycle.
2.  Subtract 3 months and add 7 days to the first day of the last menstrual period; then add 1 year if appropriate. Alternatively, add 7 days to the last menstrual period and count forward 9 months.

B. Gravidity and Parity

A. Gravidity

1. **Gravida** refers to a pregnant woman.
2. *Gravidity* refers to the number of pregnancies.
3. A nulligravida is a woman who has never been pregnant.
4. A primigravida is a woman who is pregnant for the first time.
5. A multigravida is a woman in at least her second pregnancy.

B. Parity

1. **Parity** is the number of births (not the number of fetuses, e.g., twins) carried past 20 weeks of gestation, whether or not the fetus was born alive.
2. A nullipara is a woman who has not had a birth at more than 20 weeks of gestation.

# CREATE Cue Recognition Habits

- Review what you find in the Lab Guide

Back Main Index Index Potassium, Blood (K)

potassium

Posttransfusion purpura

Potassium (K)-anion gap and

Potassium (K)-blood

Potassium (K)-urine

Potassium (K)-with calcium and magnesium

Potassium iodide, thyroid-stimulating hormone and

PPD (purified protein derivative) test

PPG (postprandial glucose)

PRA (plasma renin activity)

PRA (progesterone receptor assay)

PRC (plasma renin concentration)

Prealbumin (PAB)

Preeclampsia

Pregnancy....

Pregnancy-associated plasma protein-A (PAPP-A)

**Normal Findings**

- Adult/elderly: 3.5-5.0 mEq/L or 3.5-5.0 mmol/L (SI units)
- Child: 3.4-4.7 mEq/L
- Infant: 4.1-5.3 mEq/L
- Newborn: 3.9-5.9 mEq/L

**Critical Values**

**Possible Critical Values**

- Adult: <2.5 or >6.5 mEq/L
- Newborn: <2.5 or >8 mEq/L

**Test Explanation and Related Physiology**

Potassium (K) is the major cation within the cell. Normal serum K concentration is approximately 4 mEq/L. Because the serum concentration of K is so small, minor changes in concentration have significant consequences. K is excreted by the kidneys, and there is no resorption of K from the kidneys. Therefore if K is not adequately supplied in the diet (or by IV administration in patients who are unable to eat), serum K levels can drop rapidly.

Serum K concentration depends on many factors, including the following:

- Aldosterone.** This hormone tends to increase renal losses of K.
- Sodium resorption.** As sodium is resorbed, K is lost.
- Acid-base balance.** Alkalotic states tend to lower serum K levels by causing a shift of K into the cell. Acidotic states tend to raise serum K levels by reversing that shift.

An electrocardiogram may demonstrate peaked T waves, a widened QRS complex, and depressed ST segment in hyperkalemia.

Hypokalemia is associated with increased cardiac sensitivity to

Back Main Index Index Sodium (Na), Blood

sodium

Society for Maternal-Fetal Medicine (SMFM)

Sodium (Na)-blood

Sodium (Na)-fractional excretion of

Sodium (Na)-potassium level and

Sodium (Na)-urine

Sodium (Na)-values, of children

Sodium resorption

Soft tissue swelling, in bone x-ray

Soluble fms-like tyrosine kinase-1 (sFlt-1)

Somatomedin C

Somatomedins

Somatotrophic-evoked responses (SERs)

Somatotrophic-evoked responses (SERs)-abnormal latency for

Somatotropin hormone (SH). See Growth hormone (GH)

Sonogram. See Ultrasound

**Normal Findings**

- Adult/elderly: 136-145 mEq/L or 136-145 mmol/L (SI units)
- Child: 136-145 mEq/L
- Infant: 134-150 mEq/L
- Newborn: 134-144 mEq/L

**Critical Values**

**Possible Critical Values**

<120 or >160 mEq/L

**Test Explanation and Related Physiology**

Sodium is the major cation in the extracellular space, in which serum levels of approximately 140 mEq/L exist. Therefore sodium salts are the major determinants of extracellular osmolality. The sodium content of the blood is a result of a balance between dietary sodium intake and renal excretion.

Many factors regulate homeostatic sodium balance. Aldosterone causes conservation of sodium by decreasing renal losses. Natriuretic hormone, or third factor, increases renal losses of sodium. Antidiuretic hormone (ADH), which controls the resorption of water at the distal tubules of the kidney, also affects serum sodium levels.

Physiologically, water and sodium are very closely interrelated. As free body water is increased, serum sodium is diluted, and the concentration may decrease. The kidney compensates by conserving sodium and excreting water. If free body water were to decrease, the serum sodium concentration would rise; the kidney would then respond by conserving free water.

**Clinical Concerns**

## #2 Hypothesis Generation

- A lot of talk about PRIORITIZE
- A lot of talk about what needs to be done to get the best outcomes for the client
- Extended drag and drop, no longer a list of tasks performed in the correct order...

Care of one client

OR

Care of multiple clients

OR

Plans for teams

# #3 Hypothesis Evaluation

- Compare with the evidence base
- Compare with the priority client needs
- Compare with ideas from peers



# Hypothesis Generation/Evaluation Learning

- Of these 3 patients, who is most at risk for cervical cancer? (drag the client scenario into the correct location)
- Of these 3 clients, who is most at risk for lung cancer? (drag the client scenario into the correct location)
- Of these 3 clients, who is most at risk for ovarian cancer? (drag the client scenario into the correct location)
- Allow the students the opportunity to CREATE some of this on their own. Then compare with a peer.

# Hypothesis Generation/Evaluation Learning

- How did you do with planning for this client?

< Back Main Index Index

Rheumatoid Arthritis

Search: rheuma

(RLS)

- RF (Rheumatic fever)...
- Rheumatic fever (RF)...
- Rheumatic heart disease
- Rheumatoid arthritis (RA)...**
- Rhynchi
- RIFLE classification
- Right-sided failure
- RLS (Restless legs syndrome)
- Rolling hiatal hernia
- Roux-en-Y gastric bypass (RYGB)
- Rule of Nines chart
- RYGB (Roux-en-Y gastric bypass)

S

- Salmonella
- Salpingitis
- Salpingo-oophorectomy

**Goals**

The patient with RA will have satisfactory pain relief and minimal loss of functional ability of the affected joints, participate in planning and carrying out the therapeutic regimen, maintain a positive self-image, and perform self-care to the maximum amount possible.

**Nursing Diagnoses**

- Chronic pain
- Impaired physical mobility
- Disturbed body image

**Nursing Interventions**

Prevention of RA is not possible at this time. However, community education programs should include information on symptom recognition to promote early diagnosis and treatment. The primary goals in the management of RA are reduction of inflammation, management of pain, maintenance of joint function, and prevention or correction of joint deformity.

Interventions begin with a careful physical assessment (joint pain, swelling, range of motion, general health status), psychosocial assessment (family support, sexual satisfaction, emotional stress, financial constraints, vocation and career limitations), and environmental concerns (transportation, home, and work modifications).

- Suppression of inflammation may be effectively achieved through the administration of NSAIDs, DMARDs, and biologic/targeted therapies. Discuss the action and side effects of each drug and the importance of necessary laboratory monitoring. Make the drug regimen as understandable as possible.
- Nondrug management may include the use of therapeutic heat and cold, rest, relaxation techniques, joint protection, biofeedback, transcutaneous electrical nerve stimulation (TENS), and hypnosis.
- Lightweight splints may be prescribed to rest an inflamed joint.

# DO NurseThink<sup>®</sup>



NurseThink		
<b>Priority Assessments</b> 1 2 3	<b>Priority Labs &amp; Diagnostics</b> 1 2 3	<b>Priority Nursing Interventions</b> 1 2 3
<b>Priority Medications</b> 1 2 3	<b>Priority Potential &amp; Actual Complications</b> 1 2 3	<b>Priority Collaborative Goals</b> 1 2 3

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Learn Right the First Time

13



# #4 Taking Actions

- Remember CJ is the DOING part of Critical Thinking and Clinical Decision making
- The candidate SORTS the hypotheses and addresses the highest PRIORITY



# Taking Actions - Learning

- Question type, where the test taker analyzes the nurse's actions at multiple points throughout the shift
  - When did the nurse intervene incorrectly? What did the nurse do? What should the nurse have done instead?
- Need to DO this often in class!
  - Less emphasis on facts
  - More emphasis on concepts and actions




# Taking Actions - Learning


- In class – Up out of your seats AND PAIR UP, take your phones and take a look at your MED SURG CLINICAL COMPANION in Skyscape! Then review the NurseThink® Notes – PRIORITY NURSING INTERVENTIONS
- After reviewing your clinical companions DO at least 2 assessments and 2 interventions (clinical imagination) based on the concept we have been studying

# Skills Hub Learn


← Medication and Blood Administration 🔍




Ear: Irrigations & Medication




Eye: Irrigations & Medication




Inhaled: Aerosol Therapy (SVN) & Metered-dose Inhalers




Intradermal Injection



Intramuscular Injection




Intravenous: Blood Administration



Intravenous: Continuous Infusion: Priming IV Tubing




Intravenous: Dilution and Reconstitution



← Medication and Bl... 📋 ▶

**INTRADERMAL INJECTION**




**CRITICAL ELEMENTS**

- Prepare medication for one patient at a time
- Calculate accurately, the dosage, confirming safe dose range
- Verbalize potential adverse effects and any monitoring requirements
- Perform 3 checks for safe medication administration
- Utilize 2 patient identifiers
- Evaluate patient allergies

**PROCEDURE**

**Prior to Treatment: (Critical Thinking)**

- Assess patients need for treatment
- Confirm order





← Intradermal Injection




How To Do an Intradermal Inje... ➔





# Skills Hub Log

← Medication and Bl...  

## INTRADERMAL INJECTION




### CRITICAL ELEMENTS

- Prepare medication for one patient at a time
- Calculate accurately, the dosage, confirming safe dose range
- Verbalize potential adverse effects and any monitoring requirements
- Perform 3 checks for safe medication administration
- Utilize... 
- Evaluate... 

### PROCEDURE

Prior to Treatment: (Critical Thinking)

- Assess patient... 
- Confirm order

Tap on the desired menu item

SKILL LOG ✕

LEARN PRACTICE QUIZ

## Intradermal Injection

COMFORTABLE WITH YOUR KNOWLEDGE?

Not yet

Instructor Sign Off

skyscape

SKILL LOG ✕

LEARN PRACTICE QUIZ

## Intradermal Injection

HAVE YOU PRACTICED THIS SKILL?

YES! Not yet

Lab Clinic

Instructor Sign Off

skyscape

SKILL LOG ✕

LEARN PRACTICE QUIZ

## Intradermal Injection

HOW WELL DO YOU KNOW?

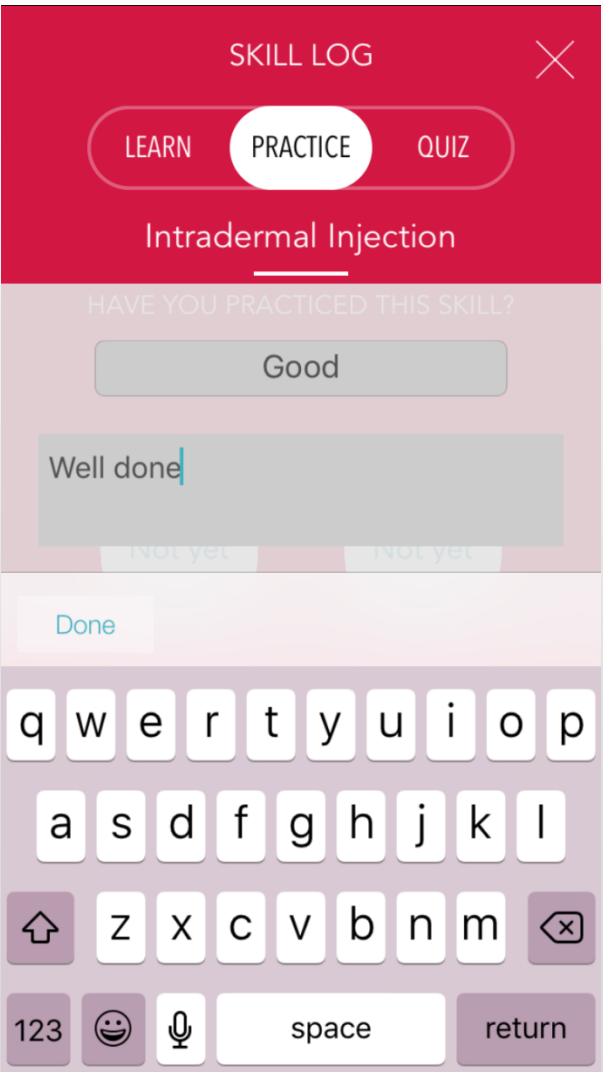
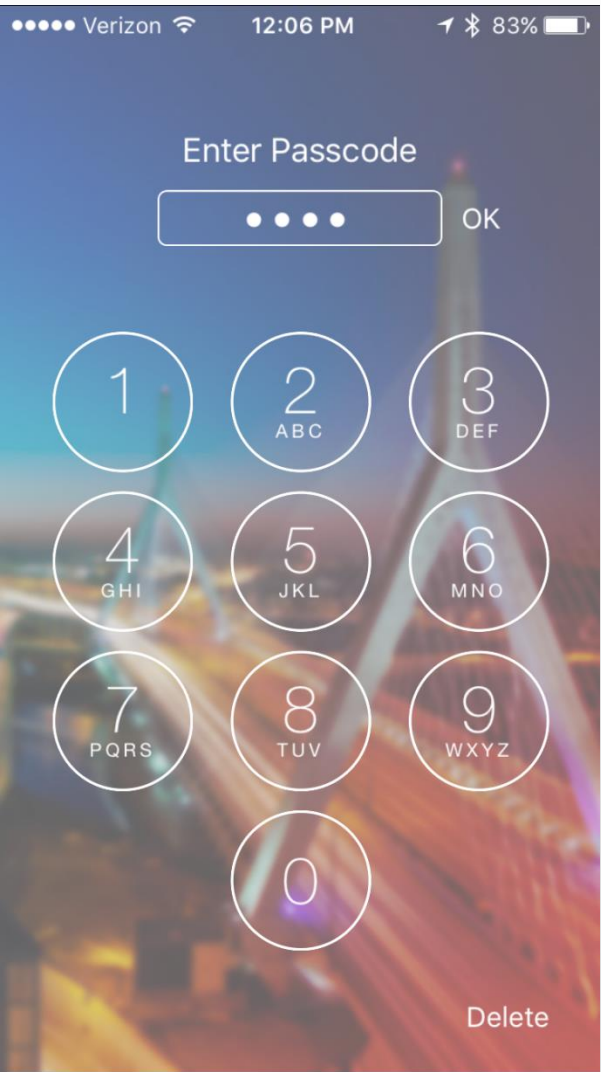
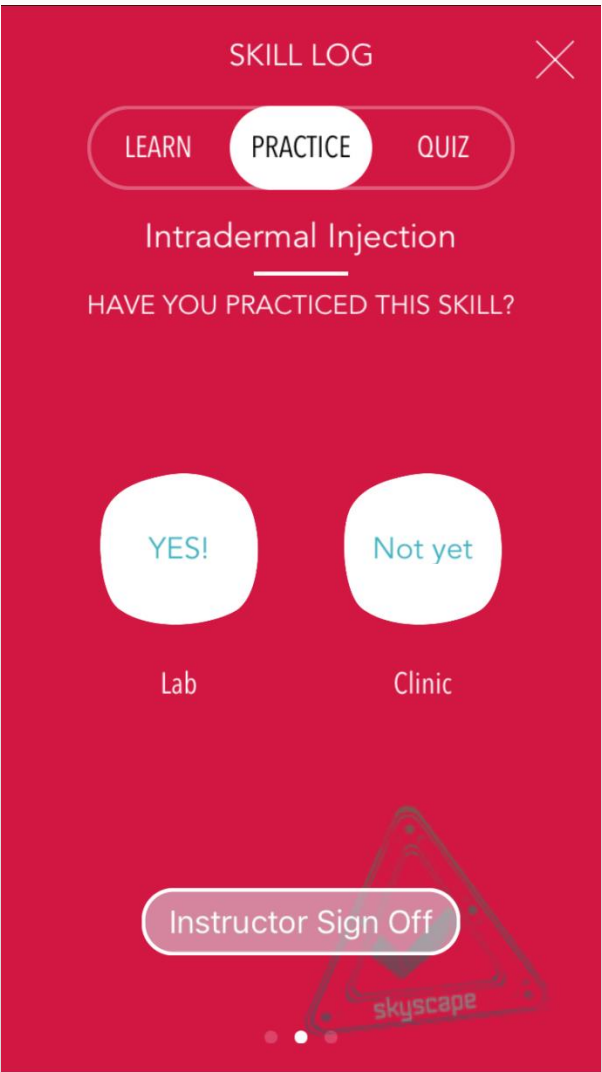
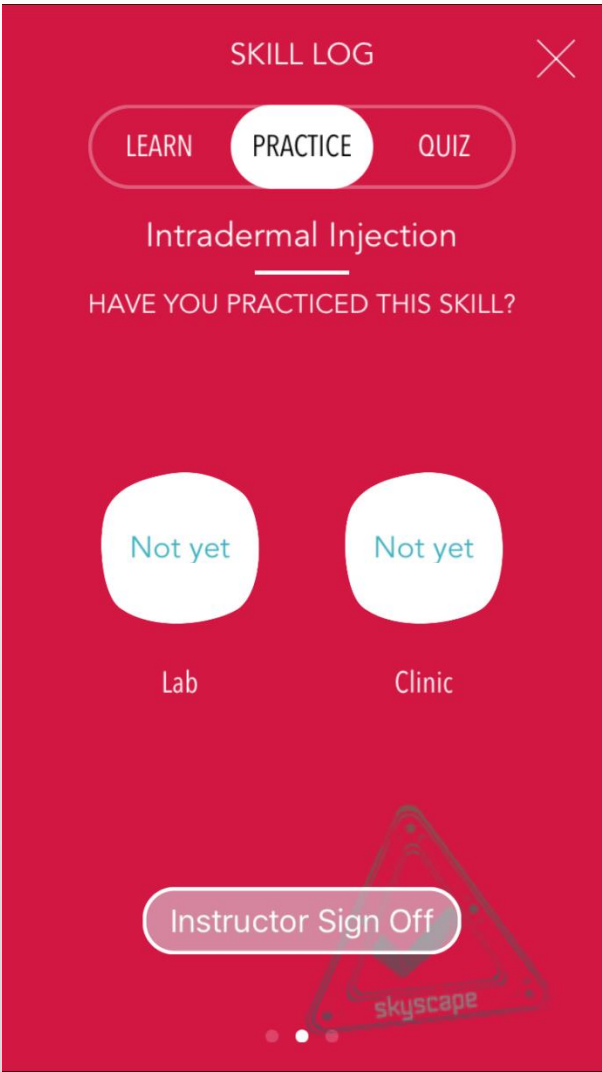
1 2 3 4 5

RESET

Instructor Sign Off

skyscape

# Skills Hub Practice



# Skills Hub Quiz

SKILL LOG

×

LEARN PRACTICE QUIZ

Intradermal Injection

HOW WELL DO YOU KNOW?

1 2 3 4 5

RESET

Instructor Sign Off

← Intradermal Injection

Which infection control standard causes the most injuries to nurses in the delivery of intradermal injections?

A Needle sticks from improper disposal of sharps

B Blood splash from bleeding injection sites

C Blood contamination from not using gloves

D Needle sticks from placing the syringe in the bed

Check

SKILL LOG

×

LEARN PRACTICE QUIZ

Intradermal Injection

HOW WELL DO YOU KNOW?

1 2 3 4 5

RESET

Instructor Sign Off



# Skills Hub: Student Summary Report

skyscape

Go

APPS

PRODUCTS

SCHOOLS/GROUPS

BLOG

MY ACCOUNT

ABOUT US

CART (0)

STUDENT SUMMARY

Student Name	LEARN	PRACTICE		QUIZ			
		Lab	Clinic	Attempted	Correct	Wrong	Unattempted
Fundamentals							
Maxwell Edison	11	7	4	14	9	5	0
Clara Bella	12	11	9	32	18	14	2
Dennis ODell	11	10	9	38	21	17	0
Molly Jones	11	10	8	25	15	10	2
Loretta Martin	12	11	10	38	27	11	0
Billy Shears	12	11	10	47	32	15	0
Practice							
Maxwell Edison	11	9	8	33	24	9	1
Clara Bella	9	7	7	25	19	6	0
Dennis ODell	7	5	4	16	9	7	1

# Skills Hub: Detail Report of Student

## DETAIL REPORT OF STUDENT

Student Name : Maxwell Edison

Student Email : skillsgrouptest@skyscape.com

Date : 4/7/2016 3:16:42 PM

	LEARN	PRACTICE		QUIZ					FEEDBACK	
		LAB	CLINIC	Q1	Q2	Q3	Q4	Q5		
Airway and Oxygen										
Chest Physiotherapy	●	●	●	✓	✓	✓	✗	✓	Excellent	💬
Incentive Spirometer	●	●	●	✓	✓	✓	✓		Excellent	💬
Oxygen Delivery: Mas...	●	●	●	✓	✓	✓			Good	💬
Suctioning: Oral & N...	●	●	●	✓	✓				Poor	💬
Suctioning: Endotrach...	●	●	●						Good	💬

# #5 Evaluate Outcome

- What cues does the nurse look for?
- Compare outcome against what was expected
- Expanded drag and drop, Extended multiple response, Scenario questions



# Evaluate Outcome - Learning

- Scenario question
  - Multiple response – what are the priority cues
- Scenario action
  - Multiple response – what are the actions to take
- Scenario evaluate outcome
  - Multiple response – what outcomes are most concerning

# WRAP-UP

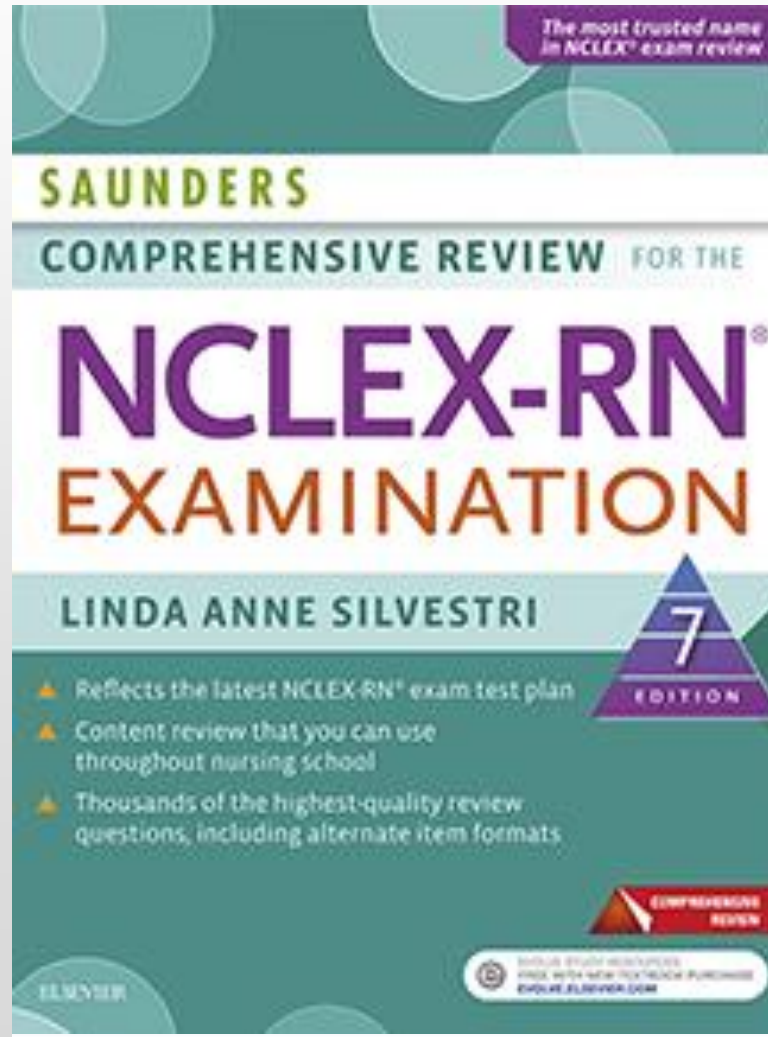
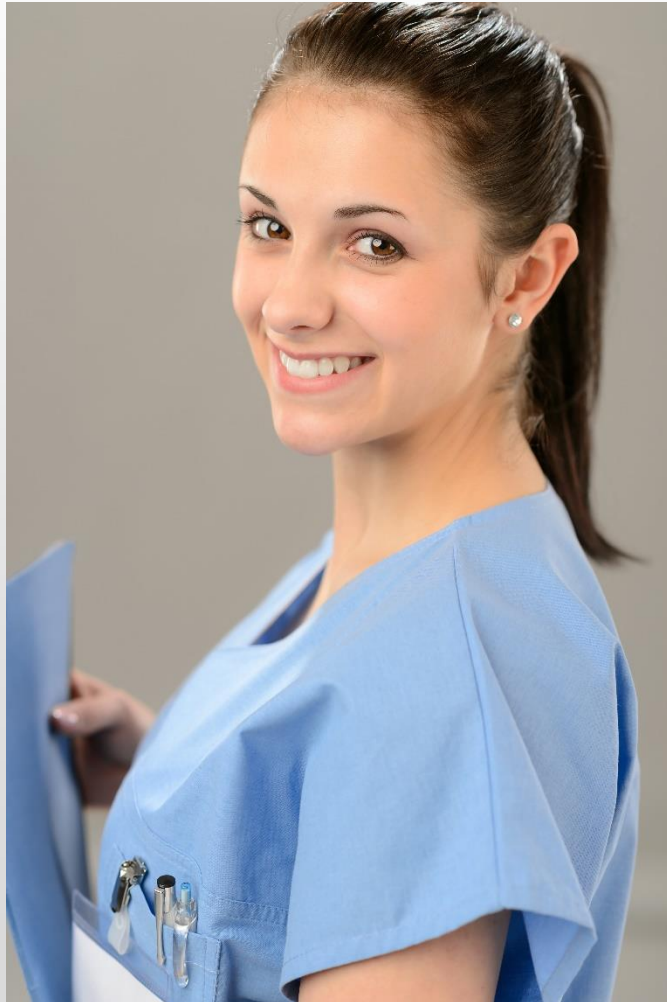
*NEXT GEN LEARNING FOR NURSING EDUCATION*

# Learning – Are they ready?

- Help students take ownership of their classroom prep and classroom follow-up by showing them what to do!!!
- Students take out your phones and let's spend 10 minutes in NCLEX Practice

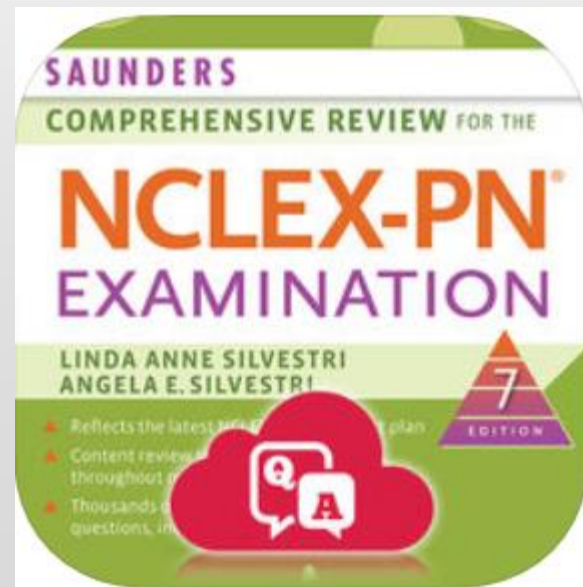
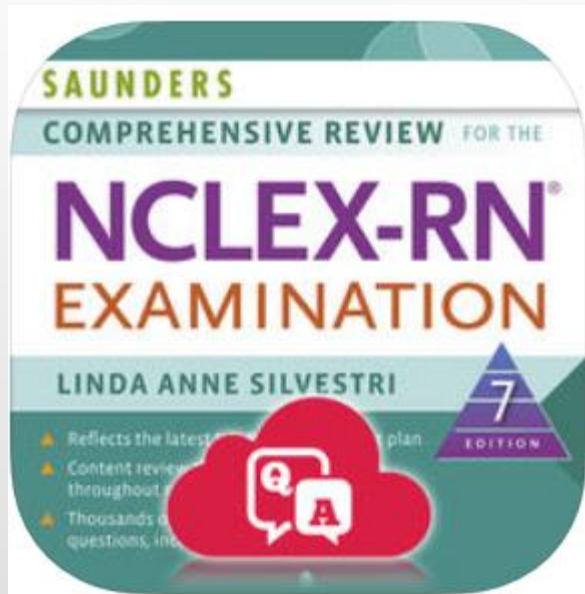


# Save Time Studying





# Know what you Don't Know



CREATE QUIZ

TITLE (Tap to Rename)

May 18, 2018 09:39:36

SECTION

9 Acid-Base Balance

NUMBER OF QUESTIONS

Tap to choose...

STUDY MODE

EXAM MODE

Cancel

Done

6 Ethical and Legal Issues

7 Prioritizing Client Care

8 Fluids and Electrolytes

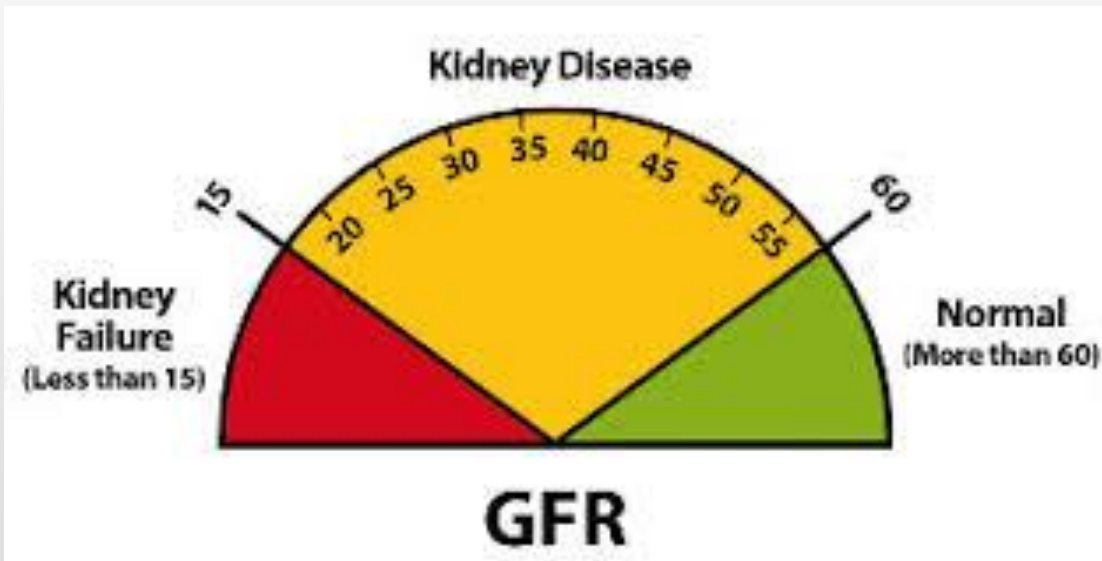
9 Acid-Base Balance

10 Vital Signs and Laboratory Reference Intervals

11 Nutrition

12 Parenteral Nutrition

# Know what you Don't Know



60" 93% 9:41 AM

← Question 4686

The nurse is reviewing the laboratory results of estimated glomerular filtration rate (eGFR). What are some conditions that can cause a decreased eGFR? **Select all that apply.**

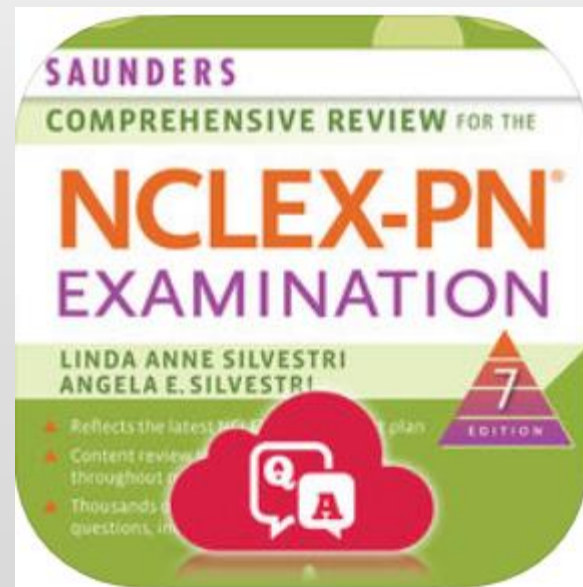
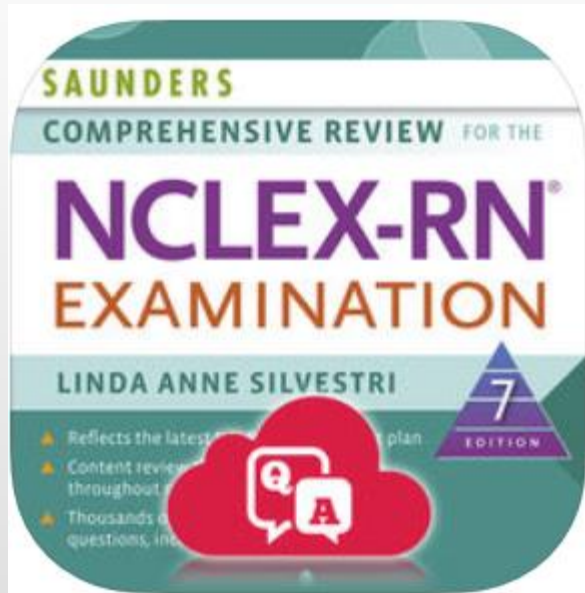
- 1 ☐ Shock
- 2 ☐ Cystitis
- 3 ☐ Dehydration
- 4 ☐ Fluid overload
- 5 ☐ Heart failure (HF)
- 6 ☐ Cirrhosis with ascites

< SUBMIT >

Tap here to fill entire screen

≡ □ ←

# TRACK what you Don't Know



[←](#) Saunders CR for NCL... [RESET](#)

### Focus on your weak areas

All	All
Question Type	
Content need Categ.	
What Cognitive Ab.	

### Question Stats

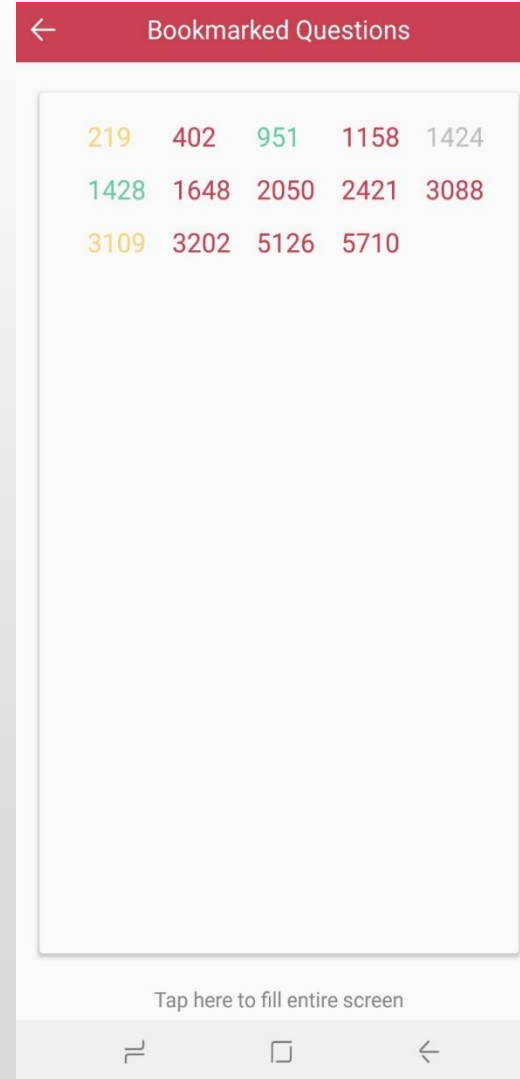
Tap to Review/Attempt

Correct	16 of 6138
Correct Multiple Attempts	2 of 6138
Incorrect	24 of 6138
Skipped	0 of 6138
Unattempted	6096 of 6138

Tap here to fill entire screen

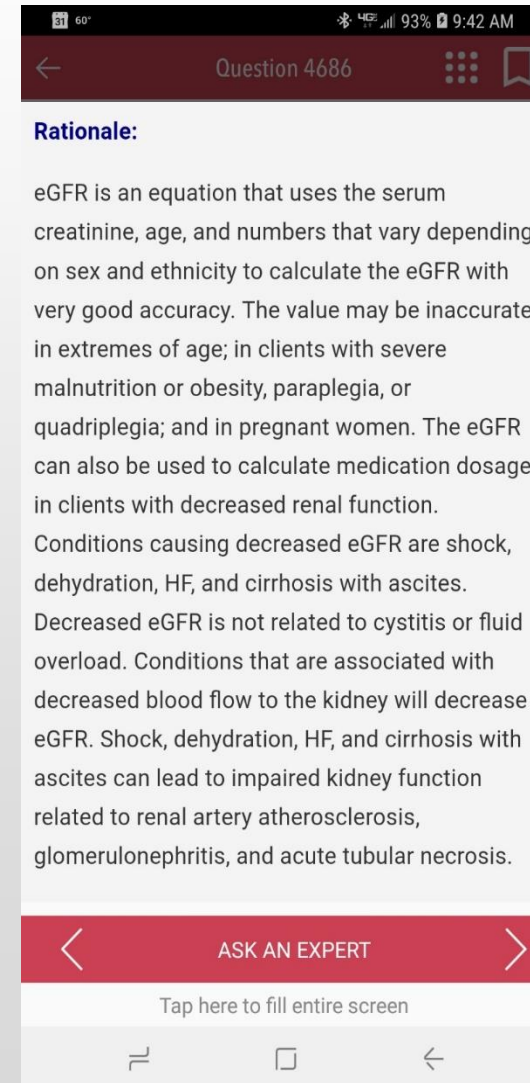
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# TRACK what you Don't Know

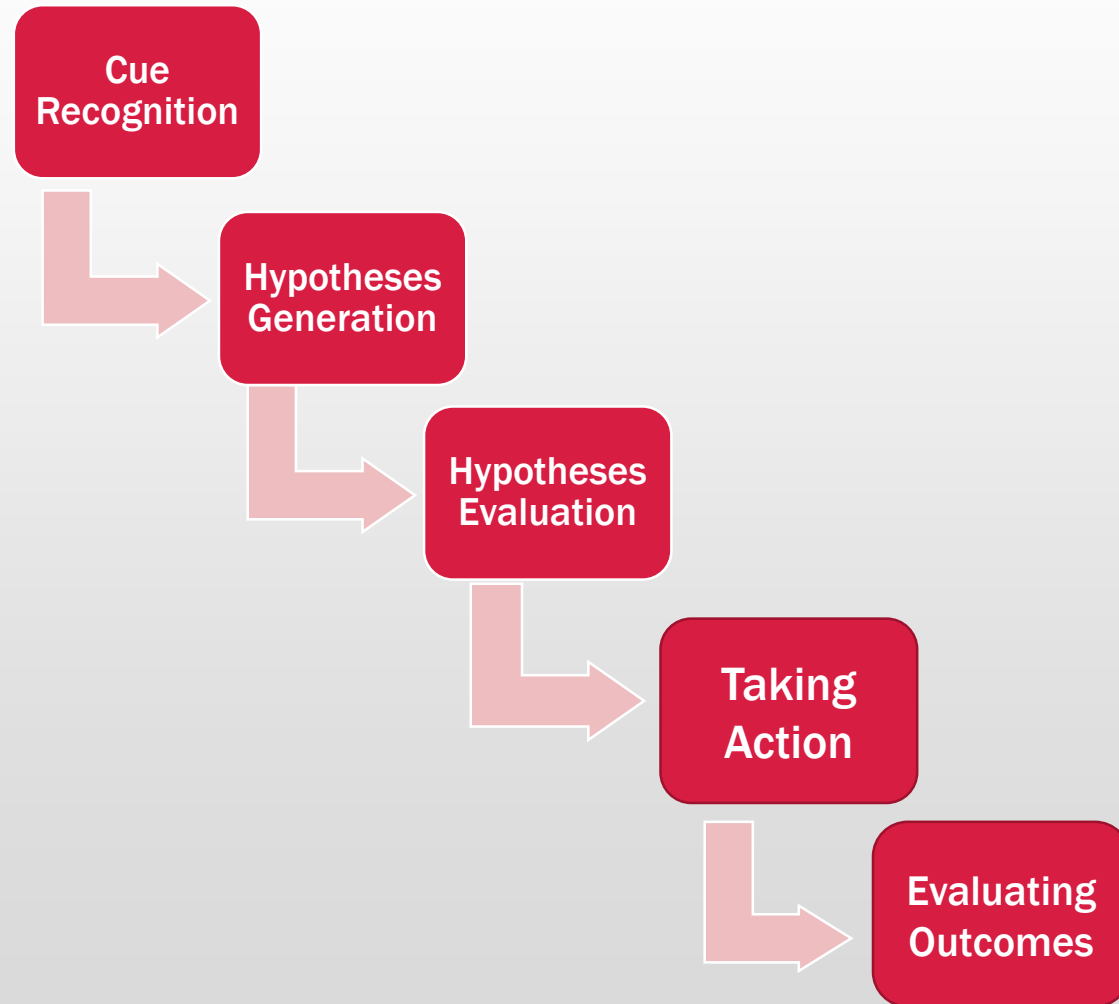


# Know what you Don't Know

- Each question has rationale
- Features ASK AN EXPERT service where nurse educators are on standby to provide clarification if a student needs help or clarification of an answer or rationale.



# Learning / Be Overt - 5 Steps to Clinical Judgment

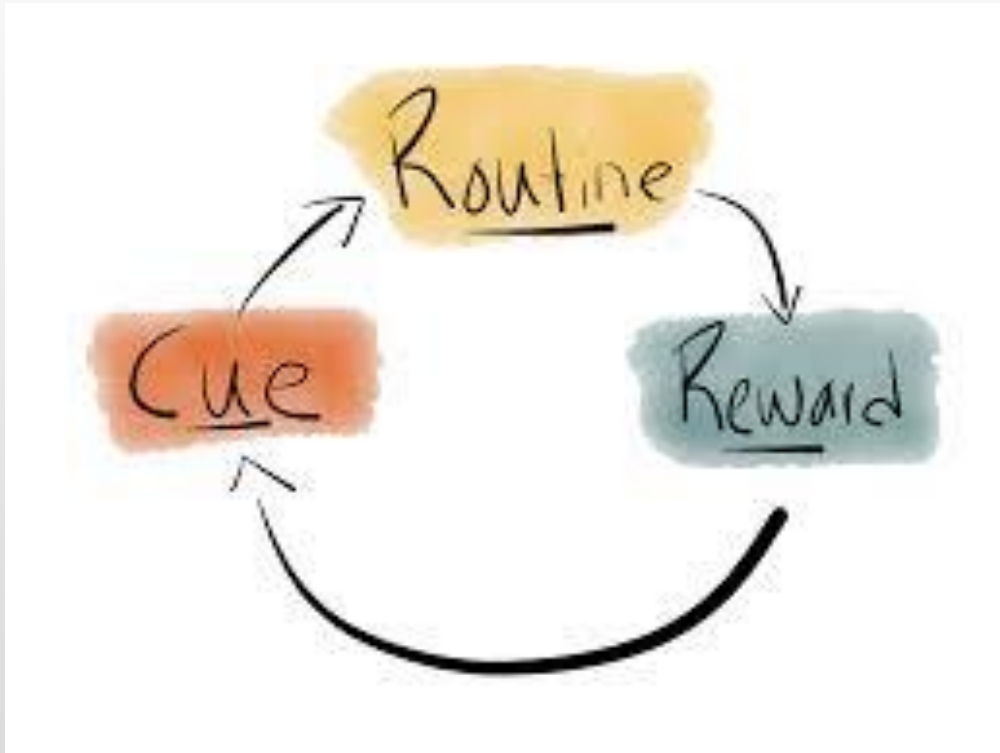


Use this language...it's ok

1. Cue recognition
2. Hypotheses generation
3. Hypotheses evaluation
4. Taking actions
5. Evaluating outcomes

<https://www.ncsbn.org/11435.htm>

# Clinical Judgment Requires Formation of Habits



- What can be done in class, lab/sim, and clinical?
- What can be done in all semesters?
- What can be done with any lesson plan?



# Q & A

*NEXT GEN LEARNING FOR NURSING EDUCATION*

# Ask a question



Please post your question in the chat window.

# Thank You

- Contact us for more information on Skyscape Solutions
  - Email [sales@skyscape.com](mailto:sales@skyscape.com)
- **RESOURCES referenced in Webinar**
  - **Skills Hub App** – find in App and Google Play stores
  - **Saunders Comprehensive Review for NCLEX Examination | NurseThink™ bundle**
    - *Skyscape.com | Search NurseThink*
  - More tips for using **NurseThink® Notes Notebook** 2<sup>nd</sup> Edition - [NurseThink.com](http://NurseThink.com)
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  - Email [webinar@skyscape.com](mailto:webinar@skyscape.com)