Kevin Emmons and Joseph Cipriano

Adapting Health and Illness in Adult Populations for Next Generation NCLEX (NGN)

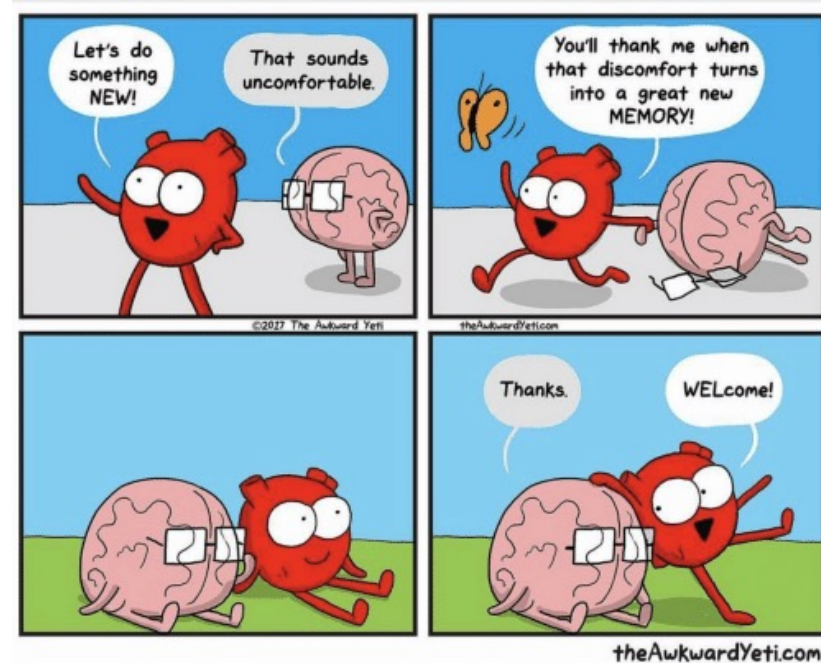# Jumping Off-Point

- Or more like being pushed…

- Previous methods
  - Pre-lecture prep with adaptive quizzing, animations, and selected videos
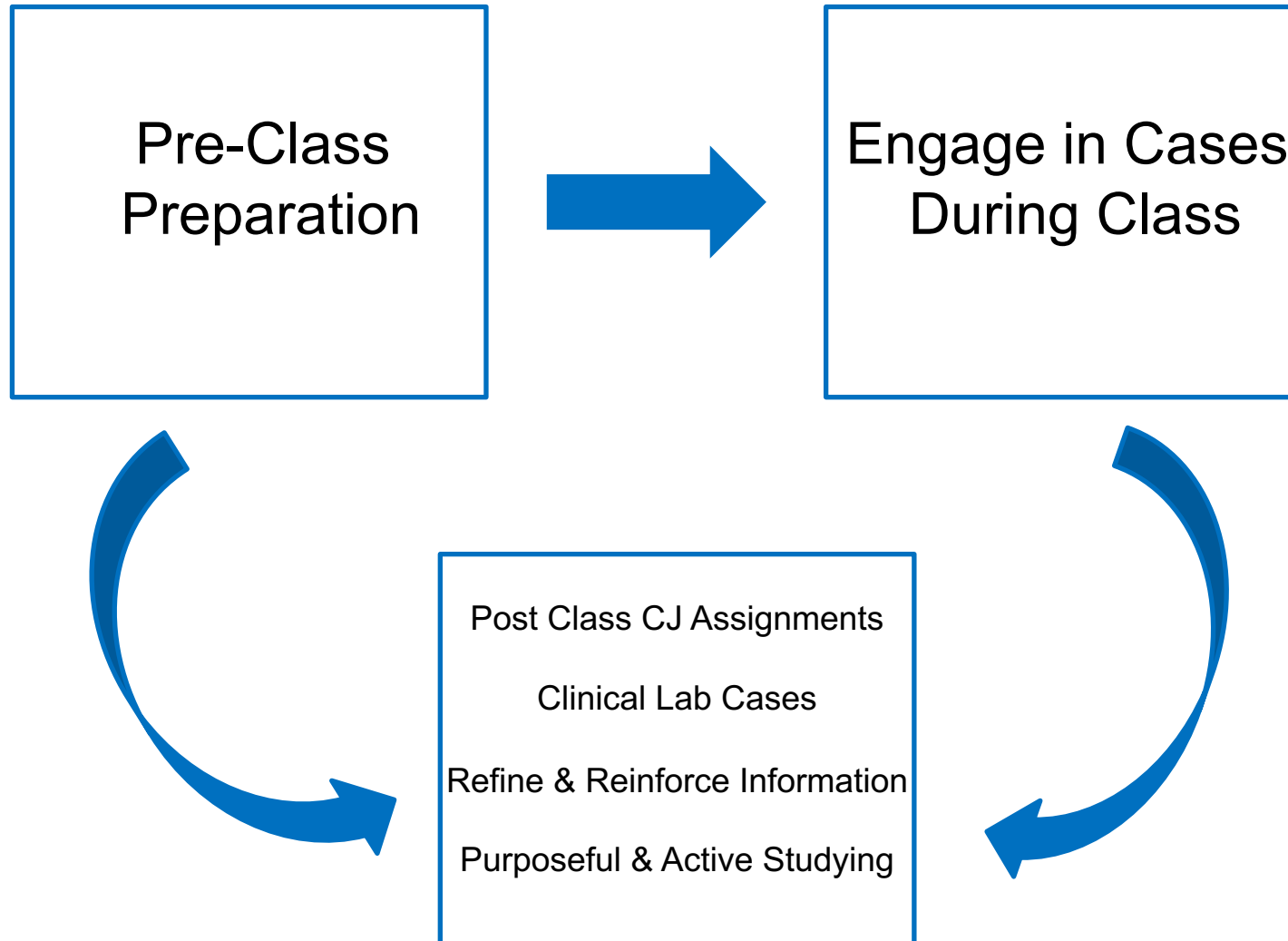 - Lecture with occasional oral cases/stories, flipped classroom exercises, etc

Moving To A New Format

- Switched to more concise book
- Limited pre-class assignments from book website
  - Short focused videos with questions
  - Some quizzing
    - Students can create more if they choose
- Recorded preclass lecture based on ppt and converted to MP4
- Lecture ppts posted for notes
- In class time spent only on guided unfolding cases
- Several post class clinical judgement assignments from book
- With reduced acute care experiences, class cases mirrored clinical CJ and CD exercises
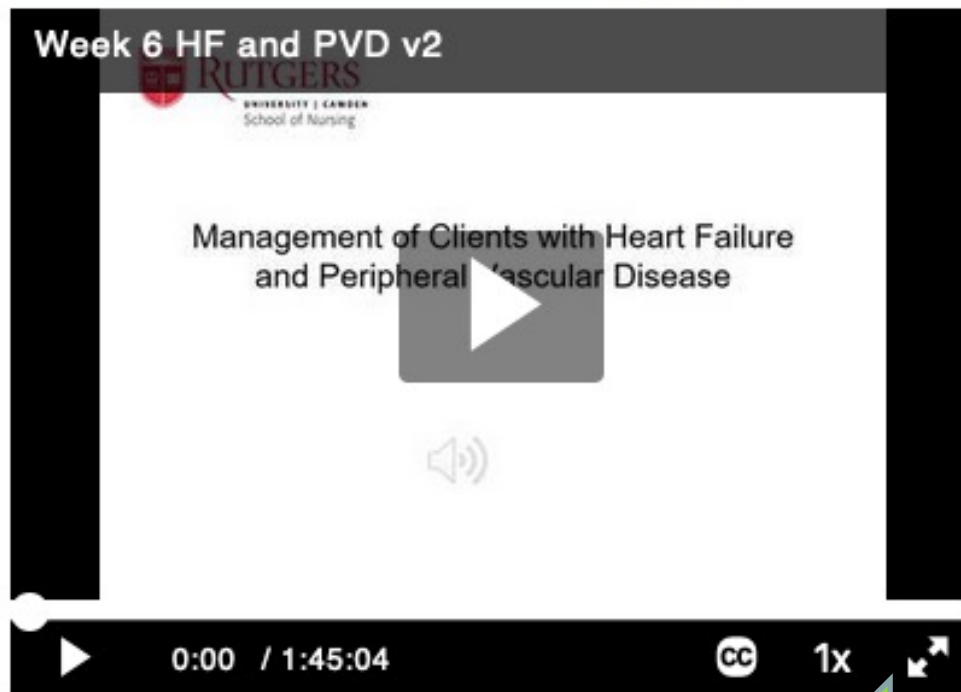

theAwkwardYeti.com

Learning Process

Pre-Class Preparation → **Engage in Cases During Class**

- Post Class CJ Assignments
- Clinical Lab Cases
- Refine & Reinforce Information
- Purposeful & Active Studying

Example of Pre-Class Prep

Pre-Class PPT

Class Presentation Downloads

Week 6 HF and PVD v2 Student Copy.pptx ⌄

Week 6 HF and PVD v2

RUTGERS
UNIVERSITY | CAMDEN
School of Nursing

Management of Clients with Heart Failure
and Peripheral Vascular Disease

▶

0:00 / 1:45:04   CC   1x   ⤢

Recorded Lecture Based on PPTs

Week 6 Case Studies Student Copy.pptx ⌄

In Class Cases and Learning Activities

Clinical Judgement Model

Examples of Cases

- Weekly objectives in Canvas
- Case specific topics and objectives given at the beginning of the class /case
- Class is designed as unfolding cases with clinical judgement & clinical decision making exercises throughout

Example Case Introductions

RUTGERS

Abraham 67-year-old African-American Male presents to the emergency department with complaints of incomplete emptying x 18 hours, nocturia with 6 to 7 episodes per night, and start and stop of stream when he voids.

He smokes a ½ pack of cigarettes per day for the past 30 years. His PMH includes Hypertension, Hyperlipidemia, Diabetes. PSH Open Cholecystectomy at age 44.

He lives at home with his wife Gail of 42 years and two dogs. He is retired from the US Postal Service.

Abraham's current Medications include Lisinopril-HCTZ 20/12.5mg QD, Rosuvastatin 10mg QD, Metformin 500mg BID, and a daily multi-vitamin.
He is up to date on his vaccines with his Pneumovax 23, Tdap, and COVID-19 (Moderna)

RUTGERS

John W. a 68-year-old male, presents to the ER with complaints of worsening b/l leg pain. John reports that he noticed it has become more difficult to walk his dog over the past 6 months. He states "I have to take frequent rests for the pain to go away. Our walk used to be 4 blocks long now I can barely make it one block without having pain." John says his pain is crampy is located from his calves down to his feet. He denies any recent injury or fall.

John has a past medical history of hypertension, type 2 diabetes mellitus, hyperlipidemia, and nicotine dependence. He said, "I've been trying to quit smoking, I've gone from 2 packs a day to a ½ pack." John denies any past surgical history. He is recently retired from his accounting firm where he worked for 46 years. John lives at home with his wife and dog. He states that he has been trying to become more physically active over the past year to reduce his weight.
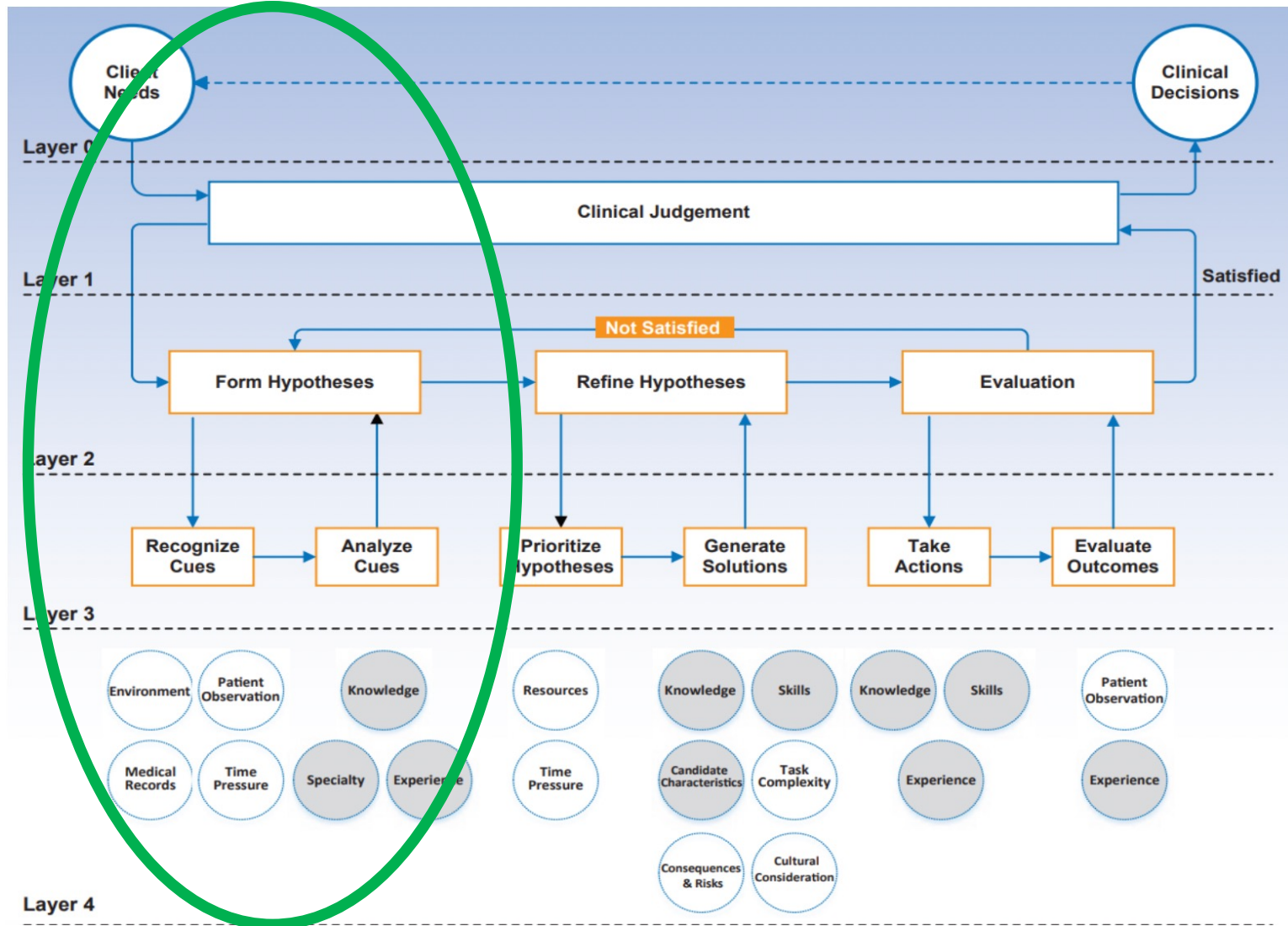
Current Medications:
- Irbesartan 300mg QD
- Atorvastatin 40mg QHS
- Metformin 1000mg BID
- Sitagliptin 50mg QD

Recognizing and Analyzing Cues

Identifying Pertinent Positives & Negatives Different Examples Below

RUTGERS

Case Information

History & Physical	Nurse's Notes	Vital Signs	Laboratory Diagnostic Results	Provider's Notes	MAR

- 67-year-old African American male
- Presents with complaints of incomplete emptying x 18 hours, nocturia with 6 to 7 episodes per night, and start and stop of stream when he voids. He denies gross hematuria, alcohol use, or erectile dysfunction.
- Smoker- ½ pack per day for 30 years
- PMH: Hypertension, Hyperlipidemia, Diabetes
- PSH: Open Cholecystectomy at age 44
- Social Hx: Lives at home with his wife of 42 years and two dogs. Retired from the US Postal Service.
- Current Medications: Lisinopril-HCTZ 20/12.5mg QD, Rosuvastatin 10mg QD, Metformin 500mg BID, Daily Multi-vitamin
- Vaccines: Pneumovax 23, Tdap, COVID-19 (Moderna)

What are the pertinent positives and negatives?

RUTGERS

Pertinent Positives:

From the statements in the H&P, what are the pertinent positives of the case?

Pertinent Negatives:

From the statements in the H&P, what are the pertinent negatives of the case?

What are the pertinent positives and pertinent negatives of case? If there are no pertinent negatives listed what would be expected

Pertinent Positives
- _____
- _____
- _____
- _____

Pertinent Negatives
- _____
- _____
- _____

Recognizing Cues: Enhanced Hot Spots

Nursing Flowsheet (Jessica M.)

Nursing Flowsheet	Provider Flowsheet	Lab Results	Imaging Results	RX	Consult Notes	Telehealth

Jessica M. 33 F DOB 10/14/19XX MRN: 11387652 Exam Room 2
Allergies: NKDA Well Exam

Time	Temp	BP	Heart Rate	Respirations	SpO2	O2 Source	Pain	Height	Weight	BMI
0905	98.1 F oral	164/92	104	16	96%	Room Air	0/10	5'7"	217lbs	34.0

Nursing Assessment

HEENT	**Head:** normocephalic **Eyes:** PERRLA **Ears:** TM intact **Nose:** Symmetrical, Mucosa moist **Throat:** Tonsils +1 no erythema
CV	S1/S2/S4, Tachycardia, +1 bilateral ankle edema, +radial, DP & PT pulses
Respiratory	Clear bilaterally
GI	Soft non-tender, non distended + bowel sounds in all 4 quadrants, no CVA tenderness
GU	Not assessed
MS	BUE 5/5 BLE 5/5, normal gait, moves all extremities, no gross deformities
Neuro	A&Ox3, pleasant and cooperative
Skin	Warm, dry, intact.

Highlight the abnormal findings

Results

Vitals	Assessment Flowsheet	Nursing Orders	Results	MAR	Notes	History

					Reference Range
Hemoglobin	14.8 g/dL				Male 14–17.3 g/dL
					Female 11.7–15.5 g/dL
Hematocrit	44.4%				Males 42–52%
					Females 36–48%
Platelets	237,000 mm3				150,000–450,000 mm3
WBCs	6,400 cell/mm3				4,500–11,00 cells/mm3
Sodium	139 mEq/L				135–145 mEq/L
Potassium	4.3 mEq/L				3.5–5.0 mEq/L
Calcium	9.0 mg/dL				8.2–10.2 mg/dL
Glucose	118 mg/dL				70 to 99 mg/dL
BUN	14 mg/dL				8 to 21 mg/dL
Creatinine	0.7 mg/dL				0.5 to 1.2 mg/dL
Total Cholesterol	275 mg/dL				200 mg/dL
LDL	207 mg/dL				Less than 100 mg/dL
HDL	29 mg/dL				Greater than 40 mg/dL
Triglycerides	212 mg/dL				Less than 150 mg/dL

Michelle J.

Michelle J. 36 F DOB 2/13/19XX MRN: 19920752 ED22A
Allergies: NKDA **Attending:** Cipriano, J **Chief Complaint:** Resp Symptoms **Full Code**

Time	Temp	BP	Heart Rate	Respirations	SpO2	O2 Source	Pain	Height	Weight	BMI
1020	100.6 F oral	110/75	108	24	90%	Room Air	0/10	5'10"	120lbs	17.2

Nursing Assessment

General Appearance	Average to slim build female with a worried facial expression and anxious. Appears pale and tired.
Neuro	Awake, Alert & oriented to person, place, time, and situation
HEENT	Oral mucosa dry but intact. Posterior pharynx erythematous. Cervical lymph nodes enlarged b/l
CV	S1/S2, Tachycardia, no edema, +3 pulses increased, equal to palpation at radial/pedal/post-tibial landmarks, brisk cap refill
Respiratory	Slight SOB with exertion and crackles heard bilaterally in lower lobes posteriorly
GI	Abdomen flat, soft/nontender, bowel sounds audible per auscultation in all four quadrants
GU	Voiding without difficulty, urine clear/yellow. Vaginal exam not perform but patient reports itching and white discharge
Skin	Warm, dry/ashen, intact

Highlight the concerning findings

Drag and Drop

Acute Kidney Injury Causes

Prerenal

Reduce renal blood flow
- Hypovolemia
- Decreased cardiac output
- Hypotension
- Vascular obstruction
- PVR/arthrosclerosis
- medications

Intrarenal

Direct damage to the kidneys
- Prolonged ischemia (ATN)
- Nephrotoxins, medication, dye, and chemicals
- Trauma
- Immunologic
- Infection

Postrenal

Mechanical obstruction of the lower urinary tract
- BPH
- Prostate ca
- Calculi
- Trauma
- Tumors
- Blot clots
- Neurogenic bladder

Recognize Cues: Most Important

Multiple Response Select

Select the findings that require immediate follow-up

Finding	
1. Temperature	
2. Blood pressure	
3. Heart rate	
4. S1/S2	
5. Lung sounds	
6. Dull percussion midway to umbilicus	
7. +2 radial pulses	

Analyzing Cues: Clinical Significance

RELEVANT Data from Presenting Problem:	Clinical Significance:
Extreme fatigue for the past several months and experiencing occasional night sweats.	
During the past week, she has developed a sore throat, dry, nonproductive cough, fever at night with increasing shortness of breath	
Vaginal yeast infection that she has tried to treat with over-the-counter medications with no success.	

Vital Signs:	Clinical Significance:
Temperature: 100.6 F oral	
Heart Rate: 108 bpm	
Respiratory Rate: 24 bpm	
Blood Pressure: 110/75	
SpO_2: 90% on Room Air	

Analyzing Cues

Matrix Multiple Choice

The nurse is concerned for skin cancer based on the physical exam findings. Put the signs and symptoms with the correct condition.

Physical Presentation	Basal Cell Carcinoma	Squamous Cell Carcinoma	Melanoma
Rough/Scaly Tumor			
Waxy nodule			
Asymmetrical			
Red/Blue color			
Flat & Shiny Appearance			

Clustering Cues that Support or Contraindicate a Particular Condition

Clustering Of Signs & Symptoms

Cluster Signs & Symptoms relevant to each disease process.

Diseases Processes:

- Left-sided Heart Failure
- Right-sided Heart Failure

Signs & Symptoms:

- Jugular vein distention
- Orthopnea
- Hepatomegaly
- Crackles
- Cool temperature in extremities
- Ascites

- Dyspnea on exertion
- Dry non-productive cough
- Low O2 stat
- Oliguria
- Dependent Edema
- Weight gain
- S3

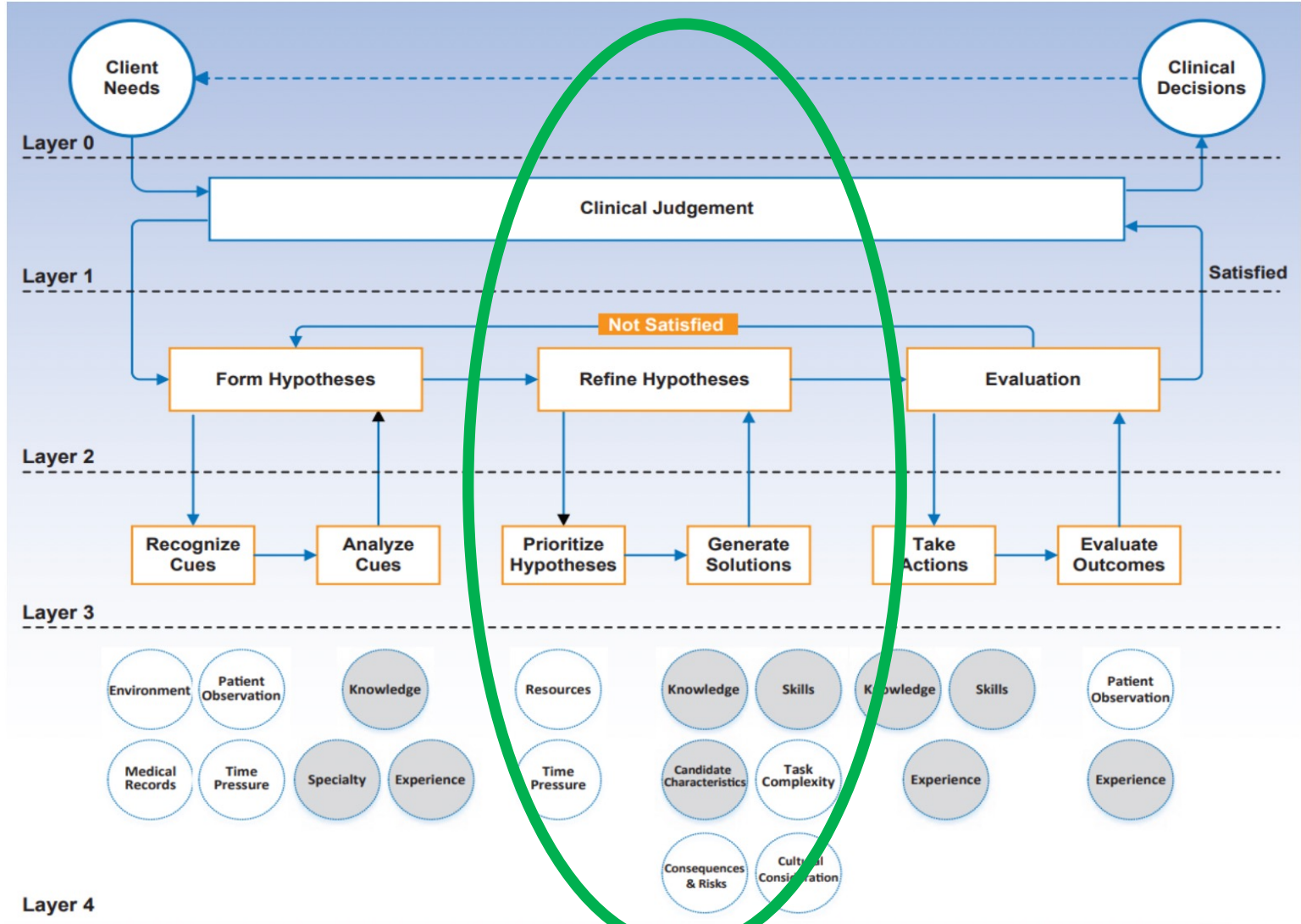**Clustering Of Signs & Symptoms**

Left-sided HF

Right-sided HF

What other information is needed?
Anticipated Diagnostic or Lab Orders

Anticipated Orders

- _____
- _____
- _____
- _____

Prioritizing Hypotheses & Generating Solutions

Prioritize Hypotheses and Generate Solutions

Create a Provider Communication SBAR Based on Your Analysis?

Prioritize Hypothesis: On NCLEX This Could Mirror a Cloze Drop Down

Risk for Complications and Rationale BPH and PC

The client is at highest risk for developing box1 is due to box2.

Word Choices box1	Word Choices box2
Acute Kidney Injury (AKI)	Nocturia
Cramping pain	Prostatectomy
Bleeding	Urinary retention
Falls	Spams

1.
2.
3.
4.

Generate Solutions

Matrix Multiple Choice

For each potential intervention, click to specify if the potential intervention is anticipated, nonessential, or contraindicated for the client.

Potential Intervention	Anticipated	Nonessential	Contraindicated
Start IV Fluids			X
Obtain EKG		✓	
Straight Catherization	✓		
Foley Catherization		✓	
Bladder Scan	✓		
Obtain a Urinalysis	✓		
Diuretic			X

Take Actions and Evaluate Outcomes
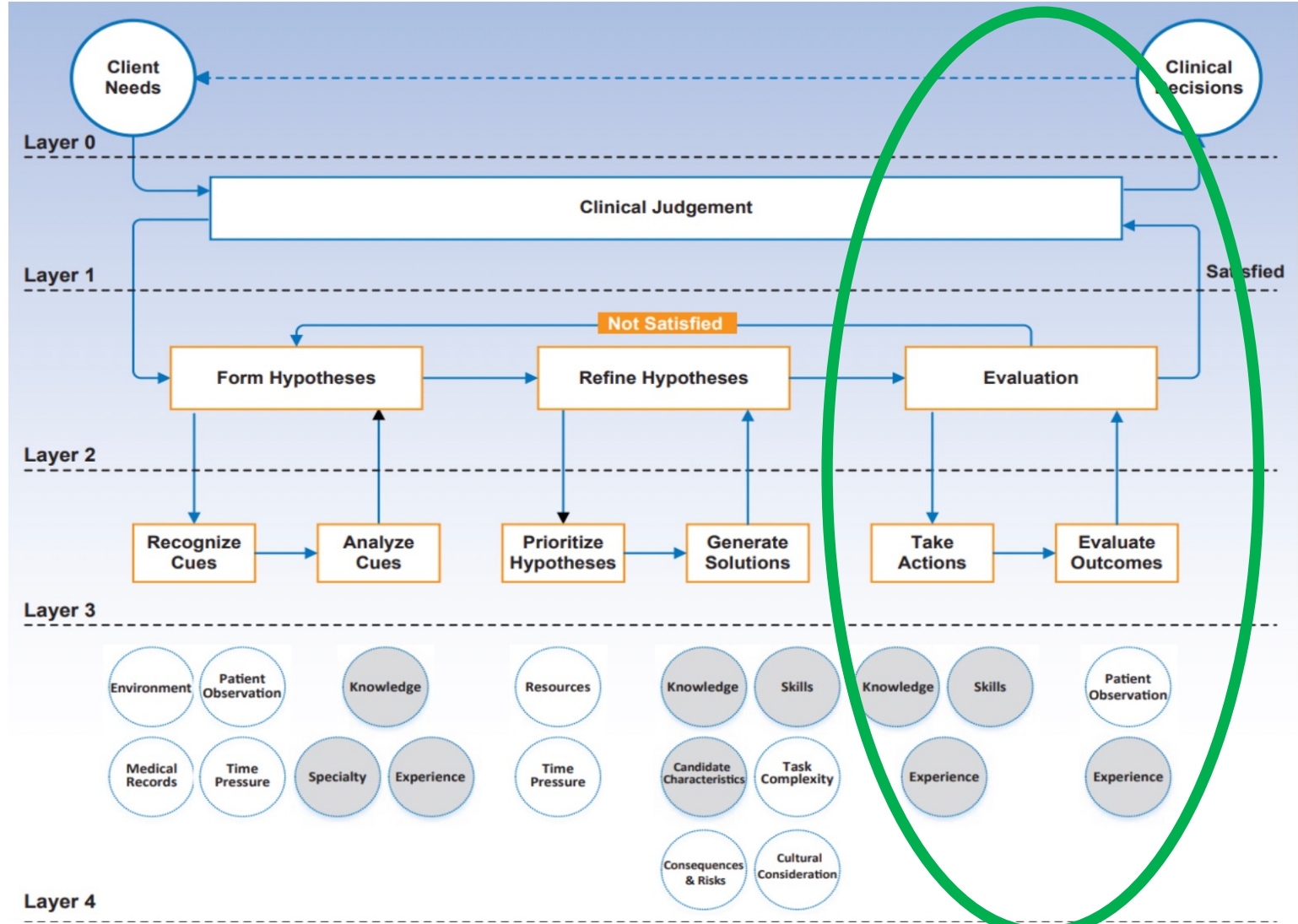
Prioritizing Actions: Drag and Drop

Knowledge Check

The provider has entered in the following orders. Rank orders by level of priority.

Orders
- Establish peripheral IV
- 0.9% Normal Saline at 100 mL/hour
- Trimethoprim/Sulfamethoxazole (Bactrim) 300mg IVPB Q8
- Obtain sputum culture
- Fluconazole 200 mg PO daily
- Titrate oxygen to keep O2 sat >95%

1st (Highest)

2nd

3rd

4th

5th

6th

Prioritizing Actions: Drag and Drop

IV Furosemide is sent up from the pharmacy, fill in the nursing chain of events with the appropriate actions from the box below. Not all choices will be used.

- Check for a reduction of BP and increase in urine output
- Check BP prior to administration
- Administer IV via slow push
- Hold medication if edema +2 or greater
- Verify orders against the medication sent from the pharmacy
- Obtain bandage and cotton ball prior to injection

#4   #1

#3   #2

# Evaluating Outcomes and Reducing Failure to Respond: Identifying Improving or Worsening Status After Interventions

		Current	Previous
Hemoglobin	1	9.8 g/dL	12.5 g/dL
Hematocrit	2	27.3%	37.9%
WBCs		4,700	8,500 cell/mm3
Platelets	3	75,000	250,000 mm3
Sodium		140 mEq/L	142 mEq/L
Potassium		3.7 mEq/L	3.8 mEq/L
Calcium		9.8	
Glucose		75	
BUN		10	
Creatinine		1.1	

	Current	Previous
Hemoglobin	10..8 g/dL	10.5 g/dL
Hematocrit	31.0%	30.9%
WBCs	3,000	8,500 cell/mm3
Platelets	208,000	350,000 mm3
Neutrophils	80%	70%
Lymphocytes	1%	4%
Sodium	149 mEq/L	142 mEq/L
Potassium	3.6 mEq/L	3.8 mEq/L
Creatinine	0.8 mg/dL	0.74 mg/dL
Rapid HIV	Positive	No record of previous

Evaluating Outcomes: Potential Complications Drag and Drop

Peritoneal Dialysis Priorities: Potential Complications
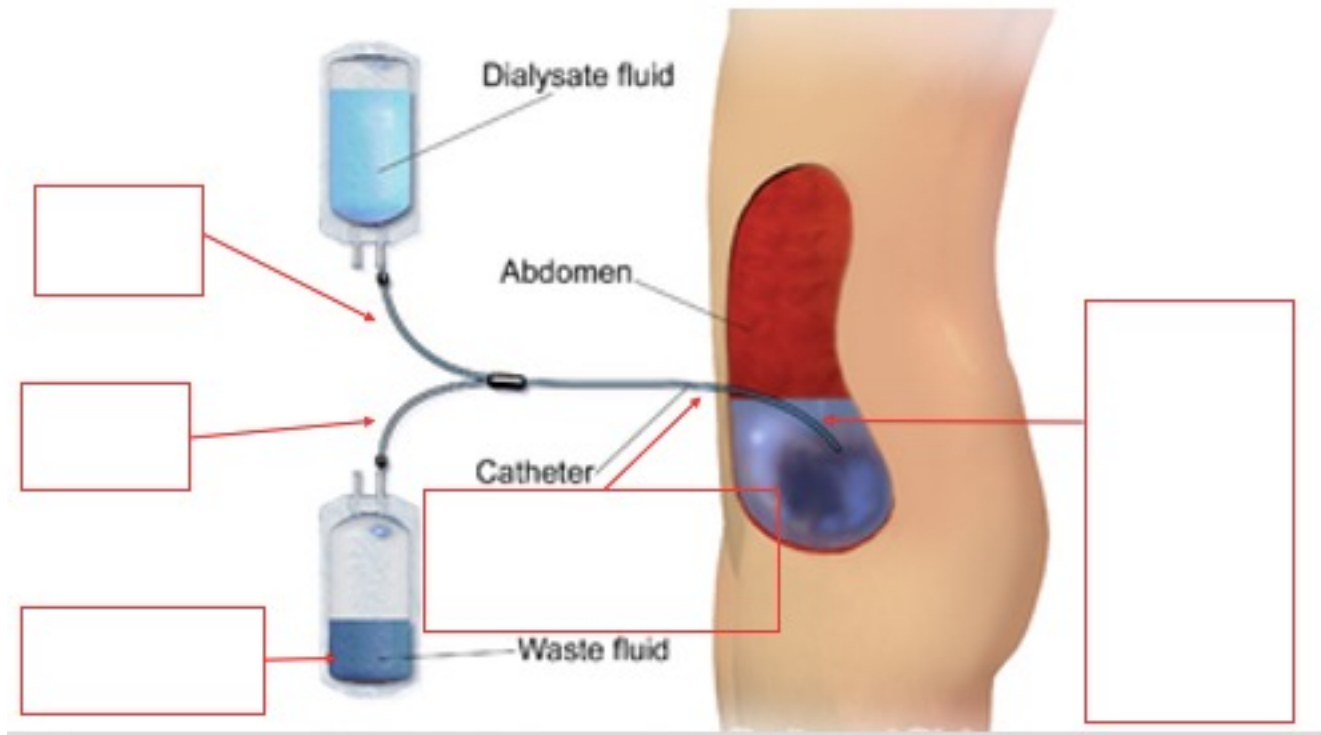
Select All That Apply

Discharge Instructions

The nurse is preparing for discharge . Which the of the following will be included?

- ☐ Assess for barriers to adherence

- ☐ Medication may be discontinued once viral load is less than 40 copies

- ☐ Check with the provider prior to taking anything OTC

- ☐ Complete follow up labs every 3 to 6 months as directed by your provider

- ☐ Seek medical attention if signs of illness develop

- ☐ Medications may be taken with or without regard to food

Evaluate Outcomes

Evaluation

☑

What aspects of the nurse's assessment indicate improving status?

Blood Pressure of 142/86

Respiration Rate of 16

Urine Output of 650mLs

Soft, non-tender abdomen

+2 edema

Lungs clear bilaterally

+DP & PT pedal pulses

Heart RRR

What do we think so far? (Lessons Learned)

- It requires effort
  - Essentially twice the work (prerecord and then develop cases)
  - Once it is done, then you can refine
  - Edit amount of information (what do we actually need cover?)
- Update cases to include more Next Generation NCLEX type questions as we learn what works and what doesn't
- Integrate polling software
  - Right now, students are responding aloud. This is good for students who are engaged but those who don't, just sit back. Attempt to call on students but having polling and numbers would be helpful.
- Take the ppt cases and create a word document patient chart to post in Canvas so students can prep for cases before class
- How do we test this way with ExamSoft?
- We added supplemental information in between cases to reinforce knowledge
  - Open Case>CJ Activity> Review Content>Unfold Case> CJ Activity> Review Content> and so forth