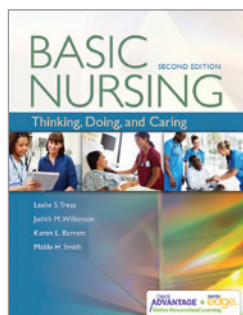


YOUR GUIDE TO DAVIS ADVANTAGE FOR BASIC NURSING

Build a successful foundation for your
NURSING EDUCATION

CLASS | CLINICAL | EXAMS | NCLEX®



LEARNING

Your text provides the foundational knowledge to teach you to think like a nurse from the very first day.



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Davis Advantage provides a personalized learning experience that helps you make the connections and apply your knowledge to master must-know concepts.



ASSESSING

Davis Edge's online quizzing evaluates your mastery of course material and builds your test-taking skills.

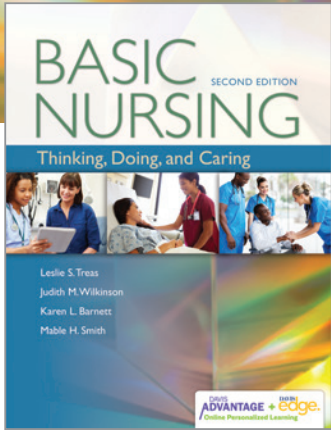


DAVIS ADVANTAGE **BASIC NURSING**

combines your text with Online Personalized Learning and Quizzing to help you master this challenging, but essential foundational content.

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**FUNDAMENTALS
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LEARNING STEP #1

Build a solid foundation and learn how to think like a nurse from the very first day.




Basic Nursing provides a comprehensive approach to care and prepares you for the real world of nursing practice.

Two types of **case studies** illustrate key points and bring concepts to life through examples of real-world nursing care.

Caring for the Nguyens

Mai Nguyen, the 76-year-old mother of Nam Nguyen, has been experiencing blurred vision and decreased visual acuity. A local ophthalmologist diagnosed bilateral cataracts and has recommended cataract removal in the left eye, with insertion of an intraocular lens. He told Mai Nguyen to schedule the surgery "at your convenience" and explained that the surgery would be performed on an outpatient basis. The ophthalmologist gave Mai Nguyen the following list of activities to prepare for the surgery:

- Schedule a date for your surgery. My receptionist will set up a time for your surgery. All surgeries are performed at Western Medical Center Same-Day Surgery Department.
- Please arrange to be seen by your primary care provider 1 to 2 weeks prior to the surgery to receive clearance for surgery.



- Make an appointment with the Preoperative Center at Western Medical Center Same-Day Surgery Department 1 to 2 days before surgery.
- Arrange to have a ride to and from the surgery.

A. What preoperative testing is Mrs. Nguyen likely to undergo? Explain your rationale.

B. The preoperative list states that the client must be seen by the primary care provider to receive clearance for surgery. Why is this an essential part of the preoperative period?

C. What theoretical knowledge do you need to perform preoperative teaching for Mai Nguyen? How could you obtain that information? Be specific about your sources.

D. What content would you include in the preoperative teaching?


E. The ophthalmologist has planned anesthesia. What factors, if any, might be important when receiving this form of anesthesia? What information do you need to answer this question?

F. Go to Davis Advantage, Resources, and Case Studies—Suggested Responses.

Meet Your Patient

Nishad Singh is a 68-year-old man who came to the emergency department (ED) with sudden onset of rectal bleeding. He tells the ED nurse, "I've been real tired and dragging for several months. This morning I felt a little worse than usual. When I went to the bathroom, there was a lot of blood. I've never had that before, and it scared me. I've had to go to the bathroom a couple times this morning, and it's all blood." The ED nurse collects the following data:

BP: 138/88 mm Hg
Pulse: 104 beats/min and regular
Respiratory rate: 20 breaths/min
Temperature: 36.7°C (98.0°F)
Oxygen saturation: 98%



The ED nurse assesses that Mr. Singh is mildly anxious. His breath sounds are clear, but his abdomen is tender in the left lower quadrant. The nurse draws blood to be sent to the lab. While they are waiting for the lab results, Mr. Singh tells the nurse, "My stomach is cramping down low, and I need to go to the bathroom." She provides him with a bedpan. He passes approximately 200 mL of bright red blood with a small amount of fecal material. He becomes sweaty and light-headed after the BM.

Think Like a Nurse questions check your understanding while developing your critical-thinking and clinical-reasoning skills.

Think Like a Nurse 40-3

Which, if any, of the preceding nursing diagnoses would be most appropriate for Mr. Singh (Meet Your Patient)? Do not use the potential complications in Table 40-2. Explain your reasoning.

Safe and Effective Nursing Care boxes illustrate how to provide safe, quality care to patients.

Applying the Full-Spectrum Nursing Model

PATIENT SITUATION

Recall Nishad Singh (Meet Your Patient). He is a 68-year-old man who came to the emergency department (ED) with sudden onset of rectal bleeding. He had been "tired and dragging for several months." The ED nurse identified nursing diagnoses of Mild Anxiety, Pain, and Risk for Bleeding. Preoperatively, his vital signs were as follows:

BP: 138/88 mm Hg
Pulse: 104 beats/min and regular; 120 beats/min; 134 beats/min
Respiratory rate: 20 breaths/min
Temperature: 36.7°C (98.0°F)
Oxygen saturation: 98%

THINKING

- Theoretical Knowledge:**
 - What is a left hemicolectomy? If you do not know the answer, consult an appropriate reference.
 - What does "metastasis to the liver" mean? If you do not know the answer, consult an appropriate reference.
- Critical Thinking (Inquiry):**
 - Why might Mr. Singh have needed a colostomy instead of having his transverse colon reconnected to the remaining lower colon or rectum? State the reference you used to answer this question.
 - Why do you think Mr. Singh has a colostomy above the level of the umbilicus and not lower down in his abdomen? State the reference you used to answer this question.

DOING

- Practical Knowledge:** Mr. Singh returned from surgery with knee-high antiembolism stockings.
 - You notice that the stockings have slid down and become wrinkled between his knees and ankles. After you straighten them and pull them up, the tops reach to about 7.6 cm (3 in.) below Mr. Singh's knees. What does this probably mean, and what should you do?
 - Which of the following instructions should you give when delegating care of Mr. Singh's antiembolism stockings to the nursing assistant? (Mr. Singh's stockings have closed toes.)
 - Remove the stockings and bathe and dry the legs every 8 to 12 hours.
 - Massage the legs after removing Mr. Singh's stockings.

CARING

- Self-Knowledge:**
 - If you were assigned to care for Mr. Singh today, what aspect of care would you feel best prepared to provide? Explain your thinking.
 - What aspect of Mr. Singh's care would you be most uncomfortable providing? Explain your thinking.
- Ethical Knowledge:** You want to provide culturally competent care. What is the first thing you will need to do to address Mr. Singh's cultural needs? Review Chapter 15 if you need to.

Clinical Reasoning: Applying the Full-Spectrum Nursing

exercises reinforce the concepts of thinking, doing, and caring to help you develop your clinical decision-making skills, while you apply what you are learning to real patients.

Over 230 step-by-step procedures with rationales teach you how to perform and master essential nursing skills.

iCare 40-1

Perioperative Care

- Perioperative nursing is a specialized area of nursing with specific, established standards of care. A caring nurse strives to integrate those standards into the nursing process and to apply standards to each patient in a caring manner.
 - Caring nurses ensure that a person is cognitively and psychologically prepared for surgery.
 - Caring nurses advocate for patients. An example is stopping the line and placing a HOLD on surgery when a person identifies an error or a risk in a process or in the surgical procedure. This exhibits **200% accountability** and embraces **high reliability** behaviors. You can do this by saying to others, "I have a concern"; "We need to stop and verify"; "I am uncomfortable proceeding"; or even stronger language: "I cannot send Ms. Brown until the surgeon comes back up and reviews her surgical procedure with her again; she clearly does not understand."
- KEY POINT:** Preventing errors and "never events" is everyone's responsibility.

iCare highlights the role of caring in nursing and demonstrates how a nurse provides safe and effective care in a particular situation.



An unconscious client is usually positioned on his side to help maintain an open airway. This decreases the likelihood of aspirating mucus or saliva by allowing it to drain out instead of back into the throat. Elevating the superior arm on a pillow allows for good chest expansion so the patient can breathe deeply and expand the lungs fully.

Safety icons alert you to important aspects of safe care to avoid potential hazardous or high-risk issues.

Surgical Team Communication

Key Concepts: Perioperative Nursing, Preoperative Care, Intraoperative Care, Postoperative Care

SENC Competency: Provide goal-directed, client-centered care

Eliciting each patient's values, preferences, and expressed needs as part of the focused nursing history will assist you in providing goal-directed, client-centered care. You can then communicate patient values, preferences, and expressed needs to other members of the healthcare team to assure patient-centered care with sensitivity and respect for the diversity of individual patients.

SENC Competency: Collaborate with the interdisciplinary healthcare team

To provide for effective collaboration within nursing and interdisciplinary teams, nurses must engage in open communication, mutual respect, and shared decision to ensure safe and effective patient care. Two-minute briefings just before surgery, led by the attending surgeon using a standardized format, have been found to improve communication and reduce delays and wrong-site surgery (Lee, 2016). Surgical briefings encourage team members to talk when there is no problem, so they are more likely to speak up when they have misgivings when problems occur (Berger, Greenberg, & Bilimoria, 2015).

Procedure 40-2 ■ Applying Antiembolism Stockings

For steps to follow in all procedures, refer to the Universal Steps for All Procedures found on the page facing the inside back cover.

Equipment

- Measuring tape
- Antiembolism stockings
- Disposable wipes or washcloth and towel (if needed to cleanse leg)
- Talcum powder (optional: check manufacturer's recommendations)

Delegation

You can delegate application of antiembolism stockings to nursing assistive personnel who have been trained in the task. Instruct the NAP as follows:

- Report the presence of any abnormalities on the lower extremities, such as lesions, sores, or redness, before applying the stockings.
- Instruct the patient to maintain a recumbent position for at least 15 minutes before applying the stockings.
- Do not massage the legs.
- Make sure there are no wrinkles in the stockings once they have been applied.

When performing the procedure, always identify your patient according to agency policy using two identifiers, and be attentive to standard precautions, hand hygiene, patient safety and privacy, body mechanics, and documentation.

Prevents venous distention and edema that occur when the patient is sitting or standing.

Pre-Procedure Assessment

- Assess the level of consciousness and cognitive ability. If the patient is unconscious or confused, you will need to call for assistance to hold and stabilize the lower extremities as you apply the stockings.
- Assess for signs and symptoms of severe peripheral arterial disease, such as weak or absent pulses, discoloration or cyanosis, or gangrene. Antiembolism stockings should not be used in patients with any of these findings because they compress the vessels and therefore further impede the already compromised arterial flow.
- Assess skin condition. Note any lesions, dermatitis, or major edema, as evidenced by shiny, taut skin. If skin is overstretching by edema, antiembolism stockings may irritate or worsen skin conditions and cause skin breakdown.
- Note the patient's position and length of time she has been in that position. Place the patient supine for at least 15 minutes before stocking application. This prevents trapping of pooled venous blood.

For High-Risk Stockings

NOTE: High-high elastic stockings have not been proved to be more effective in preventing thromboembolism than knee-high ones, and should probably be avoided because of the tendency to roll and have a tourniquet effect (Perry, Borchert, Burke, et al., 2012, revised 2014).

- Measure the circumference of the thigh at the gluteal fold.
- Measure the calf circumference at the widest section.
- Measure the distance from the gluteal fold to the base of the heel.

Knee-High Stockings

- Measure the circumference of the calf at the widest section.
- Measure the distance from the base of the heel to the middle of the knee joint.

High-Risk Stockings

NOTE: High-high elastic stockings have not been proved to be more effective in preventing thromboembolism than knee-high ones, and should probably be avoided because of the tendency to roll and have a tourniquet effect (Perry, Borchert, Burke, et al., 2012, revised 2014).

- Measure the circumference of the thigh at the gluteal fold.
- Measure the calf circumference at the widest section.
- Measure the distance from the gluteal fold to the base of the heel.

Knee-High Stockings

- Measure the circumference of the calf at the widest section.
- Measure the distance from the base of the heel to the middle of the knee joint.

Evidence is not conclusive, but increasingly supports the use of knee-high instead of thigh-high hose.

2. Assist the patient to a supine position and instruct him to maintain that position for at least 15 minutes before you apply the stockings.

Prevents trapping of pooled venous blood by the antiembolism stockings.

3. Cleanse the patient's legs and feet if necessary. Dry well.

Removing moisture, dirt, and bacteria will decrease the likelihood of infection and odor.

4. Lightly dust the legs and feet with talcum powder if desired and if recommended by the manufacturer.

KEY POINT: Do not use powder if the patient is at risk for becoming diaphoretic. Powder causes the application of the stockings, but perspiration will cause the powder to clump.

5. Holding one stocking at the top cuff in your dominant hand, slide your nondominant arm down and into the stocking until your hand reaches the heel of the stocking.

Gradually pull the remainder of the stocking up and over the leg, turning it right side out as you proceed. Be certain the stocking is straight.

6. Grasp the center of the heel with your hand inside the stocking, and then slowly turn the stocking inside out so the level of the heel with your other hand.

The elastic in the stockings is very strong. This method is the easiest way to fit it over the foot and calf.

7. Ask the patient to point his toes so you grasp the turned foot of the stocking and ease it onto his foot and heel (like putting on a sock). Center the patient's heel in the heel of the stocking.

Ensures that the pressure of the stocking is over the correct anatomical areas.

8. Gradually pull the remainder of the stocking up and over the leg, turning it right side out as you proceed. Be certain the stocking is straight.

9. Smooth out any excess material, leg stocking-free of wrinkles and bunching.

Reassure the legs regularly. To prevent complications related to swelling and weight gain.

Home Care

- Teach the client and/or caregiver to apply the stockings.
- Encourage the client to have two pairs of stockings on hand so that one pair can be used while the other is being laundered.
- Instruct the client to follow the manufacturer's directions for washing the stockings.
- Teach the client not to roll down the tops of the stockings.

Documentation

- Document leg measurements and size of the stockings used to provide a baseline.

Procedure 40-3 ■ Applying Antiembolism Stockings (continued)

Decreases the risk of skin breakdown and areas of potentially dangerous constriction.

10. When using stockings with closed toes, tug gently on the end of the stocking over the toes to create a small space between the end of the toes and the stocking.

Prevents compression of small vessels in the toes which may impede circulation.

11. Repeat the procedure on the other leg.


12. Remove the stockings and bathe and dry the legs daily.

13. Launder the stockings at least every 3 days; dry them on a flat surface.

Soiled stockings can irritate the skin; dry flat to prevent stretching.

What if . . .

- Both legs do not measure the same? Order two different sizes of stockings and use one from each package to make two pairs.



Knee-High Stockings

Pull up to 2.5 to 5 cm (1 to 2 in.) below the knee.

High-Risk Stockings

Pull up to the gluteal fold of the thigh, rotating inward so the garter is centered over the femoral artery, slightly toward the inside of the leg.

Stockings apply varying amounts of compression between ankle, calf, and thigh areas. Keeping the stocking straight ensures that the pressure occurs over the correct areas.

7. Ask the patient to point his toes so you grasp the turned foot of the stocking and ease it onto his foot and heel (like putting on a sock). Center the patient's heel in the heel of the stocking.

Ensures that the pressure of the stocking is over the correct anatomical areas.

8. Gradually pull the remainder of the stocking up and over the leg, turning it right side out as you proceed. Be certain the stocking is straight.

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Home Care

- Teach the client and/or caregiver to apply the stockings.
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- Instruct the client to follow the manufacturer's directions for washing the stockings.
- Teach the client not to roll down the tops of the stockings.

Documentation

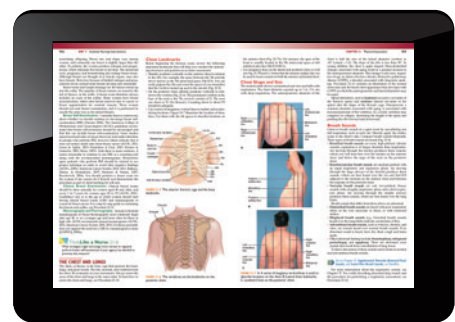
- Document leg measurements and size of the stockings used to provide a baseline.



APPLYING STEP #2

Make the connections and
apply your knowledge with
Online Personalized Learning.

Quiz yourself on how well you understand key fundamentals nursing concepts. Based on your performance, you will receive a Personalized Learning Plan with engaging videos and interactive activities. You'll know exactly where you need to focus your studies until you've mastered the concepts and are ready to apply them in class, clinical, and practice.



A **FREE ebook** version of your text, available with each new printed book, makes studying and reviewing easier, anytime, anywhere. Use the access code on the inside front cover.

Pre-Assessment for Perioperative Nursing

Question 2 of 2

The nurse is caring for a client who had a colon resection for removal of a cancerous tumor. On the surgical unit, which postoperative actions are important for complication prevention? Select all that apply.

- ☐ Ambulate routinely as ordered.
- ☐ Monitor vital signs regularly.
- ☐ Teach the patient about the type of tumor removed.
- ☐ Assess the drainage from the surgical site.
- ☐ Assist the patient to turn, breathe deeply, and cough every 2 hours.

Submit

Following your reading, take the **Pre-Assessment quiz** to evaluate your understanding of the content. Based on the results, a **Personalized Learning Plan** is mapped to your needs and guides you on a path to success.

Pre-Assessment Results

The below results show your areas of strength and weakness. Your results have been added to your Personalized Learning Plan.

Basic Nursing	
Topic	Pre-Assessment
Perioperative Nursing	<div><div></div><div>Start</div></div>

View PLP

Each **assignment** is mapped to a specific chapter in the text. Begin by reading from your printed text or from the integrated ebook.

Assignments

Fundamentals | Student Name | Start Date: 09/01/17 | End Date: 12/31/17

DISPLAY: ALL ACTIVE COMPLETED

	Perioperative Nursing	<div><div></div><div>Reading Assignment: Chapter 40</div><div>View eBook</div></div>	<div><div></div><div>Due Date: 12/31/2017</div><div>Start</div></div>
	Urinary Elimination	<div><div></div><div>Reading Assignment: Chapter 29</div><div>View eBook</div></div>	<div><div></div><div>Due Date: 12/31/2017</div><div>Start</div></div>



Perioperative Nursing

Video

Activity

Post-Assessment

Hide Transcript

Perioperative Nursing

Pre Intra Post

Perioperative Nursing

Question 1 of 8

T41-1 Coughing and Deep Breathing

from F.A. Davis

Teaching a Patient to Deep Breathe and Cough

Why is Fowler's or semi-Fowler's the appropriate position when teaching a patient to cough and deep-breathe?

Make the Connection. Drag and drop proper term that is best exemplified by each scenario.

Animated mini-lecture videos present key concepts in a way that makes the content more memorable and understandable, while **interactive learning activities** help you apply and expand your knowledge.

Post-Assessment for Perioperative Nursing

Question 1 of 1

The nurse has a new order to apply antiembolism stockings. At what point should that occur?

- ☐ During surgery
- ☒ Prior to surgery
- ☐ In the PACU
- ☐ Upon discharge

Submit

After working through the animated mini-lecture video and activity, a **Post-Assessment** quiz tests your mastery. The results feed into your Personalized Learning Plan, where your instructor is able to view them.

Post-Assessment for Perioperative Nursing

Results

You answered 5 out of 5 correctly.

Try Again View PLP



ASSESSING STEP #3

Study Smarter, Not Harder with
Online Personalized Quizzing

An interactive question-based format provides the additional practice you need to help you master course content and improve your scores on classroom exams.



Quizzing assignments are made by your instructor. Or, **create your own practice quizzes** on topics you'd like to focus on.

Quiz

Success Center | Tips for Success | Gradebook

Periop Quiz

Question 2. What factors place an older adult at greater risk during surgery than a younger person? Select all that apply.

☐ 1. Increased glomerular filtration rate

☒ 2. Decreased rigidity of arterial walls

☐ 3. Elevated basal metabolic rate

☒ 4. Lowered hepatic functioning

☐ 5. Reduced cardiac reserve

2 of 2

Immediate feedback with rationales for correct and incorrect responses enhance critical thinking and help you build your knowledge base. Many questions also include test-taking tips that show you how to analyze questions and reduce your test-taking anxieties.

Question 2. What factors place an older adult at greater risk during surgery than a younger person? Select all that apply.

☐ 1. Increased glomerular filtration rate

☒ 2. Decreased rigidity of arterial walls

☐ 3. Elevated basal metabolic rate

☒ 4. Lowered hepatic functioning

☒ 5. Reduced cardiac reserve

Rationales

Option 1: Older adults have a decreased, not increased, glomerular filtration rate.

Option 2: Older adults have an increased, not decreased, rigidity of arterial walls.

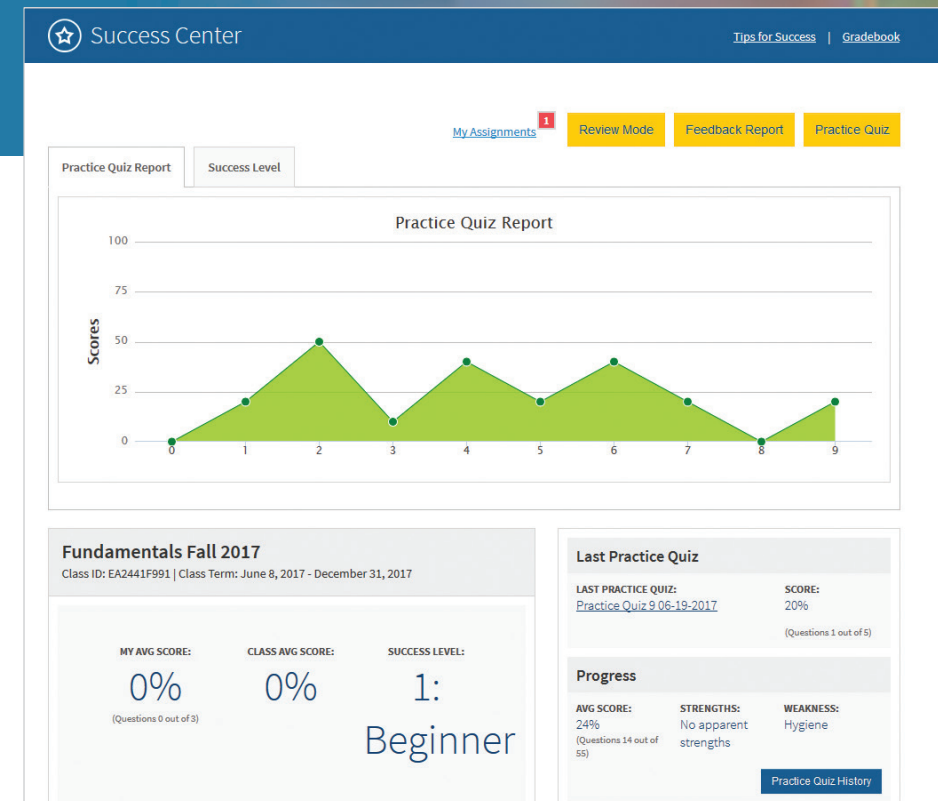
Option 3: Older adults have a lowered, not elevated, basal metabolic rate.

Option 4: The size of the liver, blood flow in the liver, and enzyme production decrease; the half-life of anesthetic agents and medications increase, which may result in toxicity.

Option 5: As one ages, cardiac output and strength of cardiac contractions decrease and the heart rate takes longer to return to the resting rate. Sudden physical or emotional stresses may result in cardiac dysrhythmias and heart failure.

Course Topic: Perioperative Nursing | Concept(s): Nursing: Perioperative | Cognitive Level: Comprehension [Understanding] |

Client Need: Physiological Integrity



Your **Success Center** offers a snapshot of your progress and identifies your strengths and weaknesses. The **Feedback Report** drills down to show your performance in individual content areas. It's easy to create new practice quizzes that focus on your areas of weakness or to select the topics or concepts you want to study.

Feedback Report

Success Center | Tips for Success | Gradebook

Feedback Report

Create Practice Quiz On Weak Areas

Course Topic

Strengths and Weaknesses will appear for a specific course topic or concept once you have answered a minimum of 10 questions in that area. Select to view by Course Topic or Concept from the drop down box above. Choose 'Create quiz on weak areas' above to begin creating a new quiz based on all weak areas.

Course Topic	Strength / Weakness	Number of Questions Answered	Success Level	Create Quiz
Fluid and Electrolyte Balance	Progressing	14	1: Beginner	Create Practice Quiz
Acid-Base Balance	Needs More Practice	10	1: Beginner	Create Practice Quiz

GET STARTED

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