

Topic: ULTRASONOGRAPHY/DOPPLER STUDIES

Logistic Puzzle

Case Scenario

In a busy clinic, schedule TAS for 10 patients, TVS for 5, TRUS for 3, neck USG for 4, and extremities Doppler for 6. Logistics: TAS needs 30-min slots with full bladder prep (1-hour wait); TVS/TRUS require private rooms with lithotomy setups; neck/extremities need linear probes and quick positioning. Factor in maintenance (15-min disinfection post-invasive) and peak hours (9 AM-12 PM). Optimize flow for reproducible quality without delays.

Objectives

- Logistically plan preparations, room assignments, and positioning logistics.
- Allocate time for patient instructions and care (e.g., consent for invasive).
- Integrate clinical apps (e.g., vascular for extremities) and trends (portable units).
- Ensure quality through sequenced assurance protocols.

Instructions

Map a half-day schedule. Assign rooms, times, and logistics steps. Use the image to visualize multi-room flow.

Questions

1. Logistically, how to sequence TAS before TVS for same patient to minimize wait?
2. What room logistics for TRUS (e.g., enema station) and positioning aids?
3. For extremities Doppler, why supine/prone logistics differ from neck, and time impact?
4. How to logistically assure quality: Insert maintenance breaks without disrupting reproducibility?

Clues

- Clue 1: Hydration prep for TAS; overlap with non-invasive neck.
- Clue 2: Private for endocavitary; knee-chest aids for TRUS.
- Clue 3: Elevate legs for venous; 20-min slots vs. 45 for abdominal.
- Clue 4: Disinfect post-shift; checklists for probe calibration.



(Image illustrates lower extremity positioning steps; logistically adapt for clinic flow.)

Rubrics	Marks Alloted (out of 10 marks)
Accuracy of Preparations & Instructions	3
Positioning & Patient Care	3
Clinical Applications & Techniques	2
Quality Assurance & Reproducibility	2
TOTAL MARKS	10 marks

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