WORKFLOW MAPPING OF A PATIENT JOURNEY FROM ER TO DISCHARGE IN A MULTISPECIALTY HOSPITAL
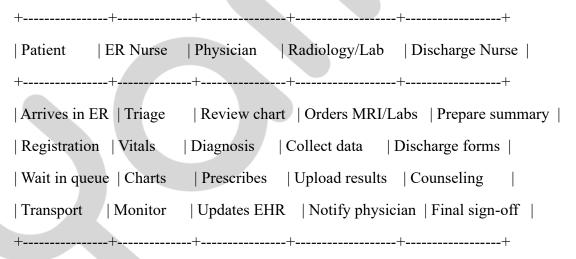
1. Abstract

This case study simulates a complete patient journey from emergency room (ER) arrival to discharge, emphasizing healthcare system structure, clinical terminology, interdepartmental communication, and role-specific documentation. It guides students through standard processes using diagrams, role-based vocabulary, and real-world terminology used in charting and electronic health records (EHR).

2. Learning Objectives

- Understand patient flow across departments in a hospital setting

- Learn terminology specific to each stage of hospital care

- Analyze role-specific responsibilities using a swimlane diagram

- Apply clinical terms to real-world transitions (triage, diagnosis, care, discharge)

3. Swimlane Diagram: Hospital Workflow

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| Patient       | ER Nurse    | Physician     | Radiology/Lab   | Discharge Nurse |
+---------------+-------------+---------------+-----------------+-----------------+
| Arrives in ER | Triage      | Review chart  | Orders MRI/Labs | Prepare summary |
| Registration  | Vitals      | Diagnosis     | Collect data    | Discharge forms |
| Wait in queue | Charts      | Prescribes    | Upload results  | Counseling      |
| Transport     | Monitor     | Updates EHR   | Notify physician| Final sign-off  |
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4. Key Terminology by Role

Department/Role Terms Commonly Used

ER Nurse	Triage, Vitals, GCS, NPO, SBAR format
Physician	Diagnosis, Differential Dx, ICD-10, SOAP, Disposition
Radiology/Lab	PACS, CBC, CMP, Imaging Protocol, STAT
Ward Nurse	PRN, IV line, Bedside notes, Chart update
Discharge Unit	MAR, Follow-up, Home care instructions, Readmission risk

5. Case Example: Fractured Arm

Step-by-Step Flow

1. **ER Arrival**
   - Term: Triage Level 2
   - Nurse records vitals (BP, HR), pain scale = 8/10

2. **Assessment**
   - Physician enters preliminary diagnosis: Possible radius fracture
   - Orders X-ray STAT

3. **Radiology**
   - Result: Distal radial fracture, non-displaced
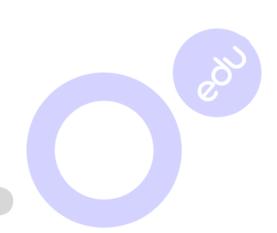   - Physician updates EHR and plans for casting

4. **Treatment**
   - Nurse administers analgesics PRN
   - Arm is immobilized and patient is observed overnight

5. **Discharge**
   - Summary includes injury, procedure, medication, follow-up date
   - MAR updated, discharge note sent via EHR

6. Visualization: Timeline

Time	Action
12:15 PM	Patient arrives at ER
12:45 PM	Seen by triage nurse, initial notes made
1:30 PM	X-ray ordered
2:15 PM	Physician explains diagnosis
3:00 PM	Casting complete
4:00 PM	Observation in ward
10:00 AM (next day)	Discharged with full instructions

7. Assignment Tasks

1. Create your own swimlane diagram for a different condition (e.g., chest pain, head injury).

2. Write a short paragraph explaining how terms like "SOAP", "PRN", and "Disposition" are used.

3. Match hospital roles with their standard terminology.

4. Design a simplified discharge summary using standard format.

8. Learning Outcome Matrix

Outcome	Activity
System understanding	Workflow mapping
Vocabulary usage	Role-based terminology table
Practical clinical thinking	Case walk-through and assignments
Written healthcare communication	Discharge summary design

9. Conclusion

Understanding hospital workflows and their embedded terminology equips students with a realistic view of how healthcare is organized. By simulating this flow, learners become better prepared to operate within interprofessional teams and interpret documentation with accuracy.

10. References

- Joint Commission Documentation Guidelines

- WHO: Hospital Workflow Process Framework

- EHR User Guide – Epic Systems

- Healthcare Terminology Reference Guide (ANA, HIMSS)