DEDER GENERAL HOSPITAL

PREOPERATIVE AND POSTOPERATIVE HOSPITAL STAY PROTOCOL

BY: HSQU

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SMT APPROVAL SHEET

TITLE	**Title**: Preoperative and Postoperative Hospital Stay Protocol 2017E.C **Version**: 1.0			
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REVIEW	**Reviewed and updated** **Review date: July 2018E.C**			

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1. INTRODUCTION

Safe surgical care requires a holistic approach that spans the **pre-operative, intra-operative, and post-operative phases** of a patient's journey. While intraoperative safety receives significant attention, delays and complications are often rooted in inadequate **pre-operative preparation** or **post-operative monitoring**.

This protocol provides standardized guidance on:

- **Pre-operative** hospital admission timing and preparation**.**
- **Post-operative** monitoring, discharge criteria, and follow-up.
- **Procedure-specific benchmarks** for length of stay (LOS).
- **Monitoring M** to ensure efficiency and quality.

2. PURPOSE

This protocol aims to:

- **Standardize pre- and post-operative hospital** stay across surgical services.
- **Reduce unnecessary admissions** and **prolonged postoperative** hospital stays.
- **Improve patient outcomes** through structured preparation and recovery care.
- Provide **benchmarks for LOS** for common surgical procedures.
- Ensure cost-effective use of hospital resources.

3. OBJECTIVES

3.1. General Objective

- To **establish a standardized system** for **preoperative** and **postoperative** hospital stay management.

3.2. Specific Objectives

- Ensure all surgical patients undergo **comprehensive preoperative assessment and preparation.**
- Provide **evidence-based postoperative monitoring** to detect complications early.
- Define **expected hospital stay durations** for **prioritized surgical procedures.**
- Introduce **monitoring mechanisms** to evaluate adherence to the protocol.
- Improve patient satisfaction and optimize resource utilization.

4. SCOPE

- **The protocol applies to**:
  - **All** patients undergoing **elective or urgent surgical** procedures requiring hospital admission.
  - Both General Surgery and Gynecology/Obstetrics dapartments
- It covers elective and emergency surgical cases, from preoperative preparation through postoperative care until discharge.

Responsible Parties:

- Surgeons,
- Anesthetists,
- OR nurses,
- ward nurses, and
- Hospital quality officers.

5. PRE-OPERATIVE PHASE OF HOSPITAL STAY

5.1. Preoperative Assessment

A. Medical History & Physical Examination

- **Comprehensive review of comorbidities**:
  - Cardiovascular,
  - Pulmonary,
  - Renal,
  - Diabetes,
  - Neurological, and
  - Prior anesthesia complications.
- **Physical exam** focusing on
  - Airway,
  - Cardiopulmonary, and
  - functional status.

B. Diagnostic Testing (As Indicated)

- **Routine**:
  - CBC,
  - BMP,
  - Coagulation panel

- **Cardiac**:
  - ECG (age >50 or cardiac history),
  - Echocardiogram (if symptomatic)
- **Pulmonary**:
  - Chest X-ray (age >60 or symptoms),
  - PFTs (if COPD)
- **Other**:
  - HbA1c (diabetics),
  - Urine pregnancy test (if applicable)

C. Anesthesia Evaluation

- Conducted by Anesthetists
- ASA physical status classification.
- Airway assessment (Mallampati, neck mobility, dentition).
- Discussion of anesthesia type (general, regional, monitored sedation).

D. Medication Management

Medication	Management
Antihypertensives	Continue day of surgery (with sip of water)
Beta-blockers	Continue; initiate only if high cardiac risk
Anticoagulants	Hold per protocol (warfarin 5 days, DOACs 1–3 days)
Metformin	Hold day of surgery
NSAIDs	Stop 5–7 days pre-op
Insulin	Adjust dose; sliding scale may be used

E. Patient Education & Consent

- **Informed consent** obtained after discussion of risks, benefits, and alternatives.
- **Pre-op instructions provided**:
  - **NPO:** No solid food after midnight; clear liquids allowed up to 2 hours before surgery.
  - **Skin prep**: Chlorhexidine wash night before and morning of surgery.
  - **Smoking cessation**: Strongly encouraged (ideally 4–8 weeks prior).
  - **Bowel prep**: Required for colorectal procedures.

F. Optimization of Comorbidities

- HbA1c <8% (if possible)
- BP <160/100 mmHg
- Pulmonary rehab for COPD patients
- Cardiac clearance if indicated

5.2. Day of Surgery (Preoperative Holding Area)

1. **Verification & Safety Checks**

- **Confirm:**
  - Patient identity,
  - Procedures,
  - Site, and
  - Side (Time-Out protocol).
- **Signed consent.**
- **Allergies**, **implants**, **code** status.
- **Final vital signs**, **physical assessment**, and **NPO** status verification.

2. Preoperative Medications

- **Prophylactic antibiotics**:
  - Administered **within 60 min before incision** (120 min for vancomycin/fluoroquinolones).
- **DVT prophylaxis**: Mechanical (SCDs) or pharmacological (if no bleeding risk).
- **Anxiolytics**: Midazolam (if needed).

3. Patient Preparation

- Remove jewelry, dentures, contact lenses.
- Apply sequential compression devices (SCDs).
- Insert urinary catheter (if indicated).
- Transport to OR with full handoff report.

5.3. Intraoperative Phase

- Conducted per surgical and anesthesia standards.
- **Maintain**:
  - Normothermia (forced-air warming)
  - Normoglycemia (glucose 140–180 mg/dL)
  - Fluid balance and urine output (>0.5 mL/kg/hr)
- Surgical site marking and time-out performed.
- Specimen labeling and handling per policy.

5.4. Postoperative Phase

A. Immediate Postoperative Care (PACU)

1. Monitoring

- Continuous: ECG, SpO_2, NIBP, respiratory rate.
- Pain, nausea, and sedation assessed every 15–30 min.
- Neurological status (especially after regional/general anesthesia).

2. Criteria for PACU Discharge

- Aldrete Score ≥9
- Stable vitals,
- Adequate oxygenation,
- Controlled pain/nausea,
- Minimal bleeding

B. Inpatient Ward Care (Postoperative Days 0–5+)

1. Daily Clinical Assessments

- **Vital signs**: Every 6 hours (more frequent if unstable)
- **Pain**: Assessed every 4 hrs using 0–10 scale
- **Wound**: Inspected daily for erythema, drainage, dehiscence
- **Drains**: Output and character documented per shift
- **Bowel/bladder function**: First flatus, stool, and void recorded
- **Ambulation**: Out of bed on POD #0 or #1, as tolerated

2. Standard Interventions

- **DVT Prophylaxis**: LMWH, heparin, or SCDs (unless contraindicated)

- **Antibiotics:** Typically discontinued within 24 hrs (longer if infection/implant)
- **Nutrition:** Clear liquids → full diet as tolerated;
- **Pulmonary Care:** Incentive spirometry every 1–2 hrs while awake
- **Glycemic Control:** Target 140–180 mg/dL; insulin sliding scale if needed

6. Hospital Stay Monitoring Mechanism

A. Structured Monitoring Framework

Phase	Frequency	Parameters	Team
PACU	Continuous	Vital signs, SpO_2, pain, sedation, urine output	PACU Nurses
POD 0–1 (High Risk)	Every 1–2 hrs (first 4 hrs), then every 4 hrs	Vitals, pain, wound, drains, mental status	Bedside Nurses, Surgical Team
POD 2–Discharge	Every 6 hrs	Vitals, diet, mobility, wound healing	Bedside Nurses
High-Risk Patients	Individualized	Lactate, glucose, fluid balance, cognition	ICU/Step-Down or RRT

B. Standardized Monitoring Tools

1. Daily Patient Progress Chart

- Completed during **interdisciplinary rounding**. Includes:
  - vitals,
  - wound status,
  - pain control,
  - mobility, and nutrition.
  - Discharge planning status

2. **Admission-Discharge Register:**
    - Record admission, surgery, and discharge dates.
3. Length of Stay (LOS) Tracker:
    - Compare actual stay with expected stay.
4. **Complication Logbook:**
    - Record SSI, bleeding, reoperation, readmissions
5. **Surgical Audit:**
    - Monthly review of LOS, complications, and discharge delays

7. DISCHARGE PLANNING & CRITERIA

Initiated on POD #0.

Discharge Readiness Criteria:

- Tolerating oral intake
- Pain controlled with oral medications
- Afebrile × 24 hours
- Ambulating independently or with assistive device
- Wound healing without infection
- No active drains or IV medications
- Understanding of home care
- Discharge Instructions Include:
- Wound care
- Activity restrictions
- Medication reconciliation
- Follow-up appointment (7–14 days)
- Emergency signs: fever, bleeding, severe pain, SOB

8. Post-Discharge Follow-Up

- **POD #3–5**: Phone By liaison officer nurses
- **POD #7–14**: In-person visit for suture/staple removal and evaluation
- **30-Day Readmission Tracking**: Reviewed monthly for quality improvement

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Appendix 1: Prioritized Surgical Cases and Expected Hospital Stay

S/N	Surgical Case	Preoperative Stay (day)	Postoperative Stay (day)	Remark
1.	Elective Caesarean Section	1	2	
2.	BPH	1	4	
3.	BPH	1	5	
4.	Goiter	1	2	
5.	Intra-Abdominal Mass	1	2	
6.	Amputation	1	2	
7.	Hernia	1	2	
8.	Trans-Abdominal Hystrectomy	1	3	
9.	TV hysterectomy	1	3	
10.	Cholysystectomy	1	2	
11.	Contracture release and skin graft	1	5	
12.	Wound Debridment under GA	1	2	
13.	Heamorrhoidictomosis	1	2	
14.	Drainage of perianal abscesses	1	2	

Appendix 2: Prioritized Emergency Cases Hospital Stay

S/N	**CASE**	**Post-operative**	**Remark**
1.	Acute appendicitis	2	
2.	SBO 2^0 to volvulus (derotation)	2	
3.	Resection and anastomosis	5	
4.	Sigmoid volvulus with colostomy	2	
5.	Perforated PUD	5	
6.	Emergency C/S	3	
7.	Chest tube	3	

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Table 1:**ELECTIVE SURGERY PRE/POST OPERATION HOSPITAL STAY MONITORING DATA COLLECTION TOOL**

Date of Data collection		**Service Month & Year**		**Data Collector Name**		**Signature**

Pre Operation Profile					**Post Operative Profile**			
MRN	Date of Admission	Date of surgery	Pre Operation LOS	Cumulative pre Operation LOS	Date of Discharge	Post Operation LOS	Cumulative post operative LOS	Diagnosis
Total pre Operative LOS					**Total post Operative LOS**			
pre Operative ALOS					**Post Operative ALOS**			

Table 2:EMERGENCY SURGERY PRE/POST OPERATION HOSPITAL STAY MONITORING DATA COLLECTION TOOL					
DIAGNOSIS	STANDARD	PRE OPERATIVE		POST OPERATIVE	
		TARGET	ACHIEVED	TARGET	ACHIEVED
	TLOS				
	ALOS				
	TLOS				
	ALOS				
	TLOS				
	ALOS				
	ALOS				

Table 3: SUMMARY OF ANALYSIS RESULT OF ELECTIVE and Emergency SURGICAL CASES PRE/POST OPERATIVE HOSPITAL STAY (TOTAL CASES)

STANDARD		TARGET	ACHIEVED	REMARK
Emergency	TLOS			
	ALOS			
Elective	TLOS			
	ALOS			
TOTAL SURGERY CONDUCTED	Elective			
	Emergency			