CHAPTER 12

PATIENT INTAKE AND AMENITIES

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Checklist

1. Are there adequate waiting areas for patients and families?
2. Are there adequate facilities in the preoperative holding area?
3. Where will invasive monitoring lines and regional blocks be placed, and what facilities and equipment will be needed for these?

Patient-intake areas of the operating room (OR) suite receive incoming surgical patients and their companions. Patients discharged after surgery may also utilize these areas. These areas include the preoperative waiting room, usually staffed by a clerk, and the preanesthetic holding area staffed by nurses and other personnel. A separate toilet facility should be available for each of these two areas, as the patients in the latter area are usually in hospital gowns. An anesthesia preoperative clinic and pain clinic may be adjoining and may use these areas as well as require examination rooms. Procedure rooms for nerve blocks, placement of invasive monitors, and other procedures may also be parts of these areas. The same rooms may serve as examination rooms as well as procedure rooms. In the absence of separate rooms, procedures may be performed in the preanesthetic holding area. Inpatients may not be brought to this area but instead briefly wait in the corridors during their trip to the OR from their bed in the ward. Some hospitals, especially the older ones, may not have patient-intake areas near the OR. In those hospitals, even the outpatients may briefly wait in the corridors during their trip to the OR from the intake area.

After their discharge from the postanesthesia care unit (PACU) or directly from the OR, day surgery patients may be brought back to the preanesthetic holding area, which now serves as the phase II recovery area, from where the patients are discharged home. Alternatively, the phase II recovery area may be separate from the preanesthetic holding area.

Time in the OR is substantially more expensive than in the preanesthetic holding area, which is substantially more expensive than in the preoperative waiting room. The patients are brought to the preanesthetic holding area so there is sufficient time to complete preparation for anesthesia and surgery before they are transferred to the OR.

Surgical patients are generally grouped into three categories: 1) inpatients, who are in the hospital the day prior to surgery; 2) day surgery outpatients, who come to the hospital and return home in less than 24 hours; and 3) morning-admit patients, who come to the hospital on the morning of surgery and stay at least 24 hours.

The facilities required for each group vary. For example, inpatients arrive in the OR suite in hospital gowns. Outpatients and postoperative admission patients arrive in street clothes and need dressing rooms and storage facilities for their clothing and belongings. Currently, a majority of patients in most health care facilities are day surgery outpatients.

The preanesthetic holding area is utilized by nurses and physicians to perform preparatory activities for anesthesia and surgery. Examples include intravenous (IV) catheter placement, medication administration (e.g., antibiotics, sedatives, etc.), charting (e.g., verifying patient identification, permits, vital signs, nursing assessments, etc.), and monitoring. The preanesthetic holding area usually contains beds or stretchers screened by curtains on suspended tracks. This is preferable to isolated rooms, which increase nursing staff needs, decrease nurse supervision of patients, and require a nurse-call communication system. Individual "bays" offer increased privacy without compromising nursing supervision, especially if the nursing station is located to optimize patient observation. Facilities suggested for each bed space (station or bay) include lights, electrical outlets, emergency call button, privacy curtains, and a bedside chair. Each station usually has monitoring comparable to that in the OR. Piped-in oxygen and suction are also provided. The preanesthetic holding area also requires a clean utility room for supplies, such as drugs, syringes, needles, IV catheters, sets, and fluids. A soiled utility room is needed for items such as soiled linen and urine samples, and clean storage for linen and nonmedical supplies is also needed. Appropriate resuscitation equipment (e.g., crash cart) must be readily available.

Invasive procedures, including placement of radial artery, central venous, and pulmonary artery catheters, may be performed in the preanesthetic holding area or an adjoining procedure room. Induction of regional anesthesia (e.g., epidural and upper extremity blocks) may take place in this area, as may induction of general anesthesia in pediatric and developmentally delayed adults. This may involve the administration of intramuscular, intranasal, oral, or rectal anesthetics. Specific patient populations may require special facilities in the preanesthetic holding area. For example, the hospital environment often causes apprehension in children. A colorfully decorated designated pediatric area with toys and the availability of television or video games may alleviate some of the fears and anxieties. Parents are often allowed to remain with their children in the preanesthetic holding area, as it usually decreases anxiety, but will increase the number of persons that must be accommodated in the area. Patients with contagious infections may need to be isolated from other patients, and an isolation room should be a part of this area. Prisoners and their guards may also be segregated from other patients.

According to Bolognesi, when building or renovating a health care facility, the use of appropriate consultants is recommended. These include: 1) a health care facility consultant (i.e., a strategic planner who understands and assesses the political atmosphere, addresses Certificate of Need issues, and organizes the building/renovation project); 2) a financial consultant; 3) an architect/engineering team; and 4) a construction contractor.

Planning for the patient-intake areas begins with a description of the functional activities required. Because of the potential for dual use of the facilities and personnel, the patient-intake area is often planned with the preanesthesia evaluation clinic and the PACU. A pain clinic may also be a part of this area. Close physical proximity of these facilities is required to achieve dual use.

The design of ambulatory surgery centers in England is reviewed by Burns. In these facilities, the preanesthetic holding areas and phase II postoperative recovery area are both situated in the "ward."

The following paragraphs describe the facilities at the various University of Florida Medical Center–associated locations. When the University Hospital renovated its preanesthetic holding area and PACU in 1995, health care consultants closely worked with health care providers and personnel from hospital facilities and planning. The five-step process included: 1) description of functional activities (i.e., what the facility would provide); 2) workload and staffing requirements; 3) work environments within the facility and the methodology for determining the space necessary for each; 4) proposed space allocation; and 5) criteria for translating space allocations into floor plans. The functional activities of the preoperative/postoperative facility are: 1) providing for preoperative screening of surgical outpatients and postoperative admission patients, including pediatric patients; 2) providing a preoperative holding area for inpatients; and 3) delivering postoperative care to postanesthesia patients, except those recovered in critical care areas. The workload and staffing requirements measured the surgical workload in terms of surgical hours and the number of ORs. The same was done for nursing, clerical, and technical personnel. The activity of the preoperative/postoperative facility was directly coupled to the number of ORs. For example, the number of beds needed in the preoperative holding area was set equal to the number of ORs. The surgical case load was categorized by patient type (e.g., inpatient, day surgery, and outpatient admission) to better define the needs of the facility. Outpatients require clothes-changing facilities and clothing lockers or other storage, as well as phase II recovery facilities. Based on these calculations, the preoperative holding area was felt to require a nurses' station (150 square feet), two charting workstations (30 square feet each), 24 adult holding beds (60 net square feet each), a patient toilet with handicapped access (40 square feet), and a storage area (100 net square feet), for a total of 1,790 net square feet. Finally, in the design criteria/affinities section, it was noted that the preoperative holding areas should be proximate to the OR and phase I recovery, phase I recovery should be adjacent to the OR suite, and phase II recovery should be proximate to the phase I recovery.

The Veterans Affairs Medical Center at the University of Florida, built in 1968, had 347 inpatient beds and eight ORs. All surgical patients used to be inpatients. Preanesthetic holding activities took place in the corridor just outside of the OR. Patient stretchers were positioned along the corridor walls in view of the main OR desk.

In these corridors, IV lines and, occasionally, radial artery catheters were placed, and IV fluid bags were hung from wall hooks above each stretcher position. This implementation cluttered the OR corridor, obstructed traffic flow, and reduced patient privacy. To accommodate outpatients, additional facilities (e.g., dressing rooms, toilets, and phase II recovery) would be needed. In many other hospitals, the inpatients stop in the corridor on the way to the OR rather than in the preanesthetic holding area.

Shands Hospital at the University of Florida is a 534-bed tertiary care medical center. There are 23 ORs in the main suite and two remote cystoscopy rooms. The preanesthesia holding area includes 12 preoperative bays (i.e., large open room with divider curtains) and eight bays that serve both preoperative and postoperative (phase II) patients. A separate nursing station is positioned at the end of each of these two areas. For first-start cases, pediatric patients are gathered in the PACU (which is empty at this time), where toys and videotapes are available. Parents are allowed to remain with their children. For subsequent cases, a section of the preanesthetic holding area is designated for pediatric patients, and the toys and videos are moved to this area. Each bay in the preoperative and combined preoperative/postoperative patient areas is equipped with piped gases (i.e., oxygen, air, and vacuum), electrical outlets, and a shelf for noninvasive monitors. The piped-gas supply system, specifically the vacuum line, is positioned lower than normal so that a connected suction canister would not be at the patient's eye level.

The 423-bed county general hospital at the University of Florida has eight ORs and one cystoscopy room in the main surgical suite. There are four beds in the preoperative holding area just inside the OR suite. Additional patients are placed along the OR corridors. This facility uses a "day room" approach for outpatients and postoperative admissions, similar to the outpatient "ward" described by Burns. Outpatients are admitted to a room on the ambulatory surgery ward. This ward provides clothes changing facilities, storage, toilet, television, and a comfortable and private environment for patients and their families to wait for surgery. Before surgery, the patient is moved from the ambulatory surgery ward to the preanesthetic holding area. Postoperatively, the patient returns to the ambulatory surgery ward for phase II recovery. Patients seem highly satisfied with this system because they have their "own" room.

A freestanding surgery center that has seven bays in the preanesthetic holding area and four ORs performs approximately 250 anesthetics per month. The bays are situated in a semicircle around the nursing station. This arrangement facilitates close observation of the patients by the nursing staff. One drawback, however, is that it is difficult for nurses and physicians to privately discuss an individual patient's condition or management plan because other patients can hear the conversation. The patient bays do not include piped compressed gas supplies, so oxygen cylinders, portable suction units, and appropriate resuscitation equipment must be brought into the area.

At a private community hospital with 298 inpatient beds, there are eight ORs in the major surgery suite. The preanesthetic holding area consists of seven dressing rooms and two restrooms. When “called” to the OR area, the patient waits in one of two bays to the side of the OR corridor, with space for additional patients along the OR corridors. An attached surgery center has four ORs and seven bays in its preanesthetic holding area. Each patient bay contains a television set. Patients complete their preanesthetic holding activities as well as phase II of postanesthesia recovery in this area. Diagnostic and therapeutic pain blocks may be conducted here. Thus, the basic components of the patient-intake areas of the OR suite are similar in most of the hospitals.

Resources

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