

The Endoscopy Unit and Staff

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Most endoscopists, and especially beginners, focus on the individual procedures and have little appreciation of the extensive infrastructure that is now necessary for efficient and safe activity. Endoscopy has become a sophisticated industry. Many of us work in large units with multiple procedure rooms full of complex electronic equipment, with additional space dedicated to preparation, recovery, and reporting, in collaboration with teams of specially trained nurses and support staff. More and more units resemble operating room suites, but with a human touch. Endoscopists are also learning (often painfully) some of the imperatives of surgical practice, such as efficient scheduling, disinfection, and safe sedation/anesthesia.

Endoscopy is a team activity, requiring the collaborative talents of many people with different backgrounds and training. It is difficult to overstate the importance of appropriate facilities and adequate professional support staff, in order to maintain patient comfort and safety, and to optimize clinical outcomes.

Staff

Specially trained endoscopy nurses have many important functions:

- They prepare patients for their procedures, physically and mentally.
- They set up all of the necessary equipment.
- They assist endoscopists during procedures.
- They monitor patients' safety, sedation and recovery.
- They clean, disinfect, and process equipment.
- They maintain quality control.

Technicians and nursing aides may contribute to these functions. Large units need a variety of other staff, to handle reception, transport, reporting, and equipment management.

Facilities

The modern endoscopy unit has areas designed for many different functions. Like a hotel or an airport (or a Victorian household), the endoscopy unit should have a smart public face ("upstairs"), and a more functional back hall ("downstairs"). From the patient's perspective, the endoscopy suite consists of areas devoted

to reception, preparation, procedure, recovery, and discharge. Supporting these activities are other functions, which include scheduling, cleaning, preparation, maintenance and storage of equipment, reporting and archiving, and staff management.

Procedure rooms

The rooms used for endoscopy procedures have certain key requirements:

- They should not be cluttered or intimidating. Most patients are not sedated when they enter, so it is better for the room to resemble a modern kitchen rather than an operating room.
- They should be large enough to allow a patient stretcher trolley to be rotated on its axis, and to accommodate all of the equipment and staff (and any emergency team), but also compact enough for efficient function.
- They should be laid out with the specific functions in mind, keeping nursing and doctor spheres of activity separate (Fig. 1.1), and minimizing exposed trailing electrical cables and pipes.

Each room should have:

- piped oxygen and suction (two lines);
- lighting that is focused for nursing activities, but not dazzling to the patient or endoscopist;
- video monitors (for the endoscopy image and monitoring outputs) placed conveniently for the endoscopist and assistants, and allowing the patient to view, if wished;
- adequate counter space for accessories, and a large sink for dirty equipment;

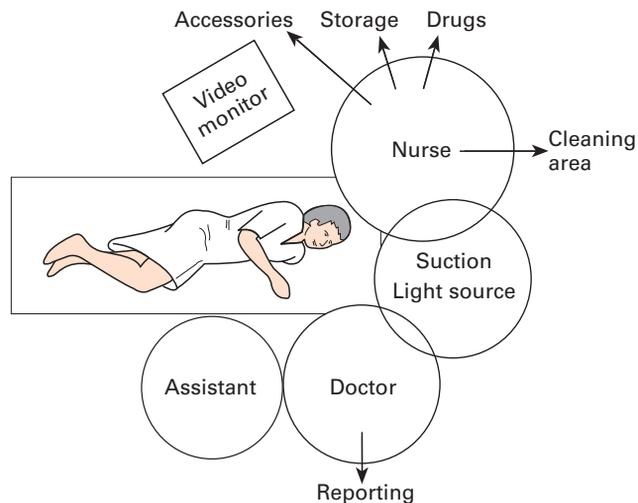


Fig. 1.1 Functional planning—spheres of activity.

- storage space for the equipment required on a daily basis;
- systems of communication with the charge nurse desk, and emergency call;
- disposal systems for hazardous materials.

Peri-procedure areas

The peri-procedure areas that patients encounter include:

- reception and waiting rooms for patients and accompanying persons;
- preparation areas (for safety checking, consent, undressing, intravenous (IV) access);
- recovery bays or rooms. These should be separate from the preparation area, so that patients coming in are not mixed with those going out (for obvious reasons), but adjacent for efficient nursing management;
- postprocedure interview and discharge rooms. A private room must be available for sensitive consultations.

Staff areas

The endoscopy unit also has many support areas that patients do not see, including:

- a central focus workstation—this is needed in any unit that has three or more endoscopy rooms. Like the bridge of a ship, it is where the nurse captain of the day controls and steers the whole operation;
- endoscope storage, cleaning, and disinfection areas;
- areas for storage of all other equipment, including an emergency cart;
- medication storage;
- reporting room;
- management office;
- storage for staff valuables; and
- staff refreshment area.

Management and behavior

Complex organizations require efficient management and leadership. This works best as a collaborative exercise between the medical director of endoscopy and the chief nurse or endoscopy nurse manager. The biggest units will also have a separate administrator. These individuals must be skilled in handling people (doctors, staff, and patients), complex equipment, and significant financial resources. They must develop and maintain good working relationships with many departments within the hospital (such as radiology, pathology, sterile processing, an-

esthesia, bioengineering), as well as numerous manufacturers and vendors. They also need to be fully cognizant of all of the many local and national regulations which now impact on endoscopy practice.

The wise endoscopist will embrace the team approach, and realize that maintaining an atmosphere of collegiality and mutual respect is essential for efficiency, job satisfaction, and staff retention, and for optimal patient outcomes.

It is also essential to ensure that the push for efficiency does not drive out humanity. Patients should not be packaged as mere commodities during the endoscopy process. Treating our customers (and those who accompany them) with respect and courtesy is fundamental. Always assume that patients are listening, even if apparently sedated, so never chatter about irrelevances in their presence. Never eat or drink in patient areas. Background music is appreciated by many patients and staff.

Documentation

Information for patients (such as explanatory brochures and maps) is discussed in Chapter 3 (see “Patient education and consent”).

The agreed policies of the unit (including regulations dictated by the hospital and national organizations) are enshrined in an Endoscopy Unit Procedure Manual (Fig. 1.2). This must be easily available, constantly updated, and frequently consulted.

Day-to-day documentation includes details of staff and room usage, disinfection processes, instrument and accessory use and problems, as well as the procedure reports.

Procedure reports

Usually, two reports are generated for each procedure—one by the nurses and one by the endoscopist.

Nurse's report

The nurse's report usually takes the form of a preprinted “flow sheet,” with places to record all of the preprocedure safety checks, vital signs, use of sedation/analgesia and other medications, monitoring of vital signs and patient responses, equipment and accessory usage, and image documentation. It concludes with a copy of the discharge instructions given to the patient.

Endoscopist's report

The endoscopist's report includes the patient's demograph-



Fig. 1.2 Endoscopy unit practices are collected in a procedure manual.

ics, reasons for the procedure (indications), specific medical risks and precautions, sedation/analgesia, findings, diagnostic specimens, treatments, conclusions, follow-up plans, and any unplanned events (complications). Endoscopists use many reporting methods—handwritten notes, preprinted forms, free dictation, and computer databases.

The paperless endoscopy unit

Eventually all of the documentation (nursing, administrative, and endoscopic) will be incorporated into a comprehensive electronic management system. Such a system will substantially reduce the paperwork burden, and increase both efficiency and quality control.

Educational resources

Endoscopy units should offer educational resources for all of its users, including patients, staff, and doctors. Clinical staff need a selection of relevant books, atlases, key reprints, and journals, and publications of professional societies. Increasingly, many of these materials are available on-line, so that easy internet access should be available. Many organizations produce useful educational videotapes, CD-ROMs, and DVDs. In the future, some of these resources will be linked directly with endoscopy reporting systems.

Teaching units will need to embrace computer simulators, which are becoming valuable tools for training (and credentialing). Patients are also increasingly interested and well served with educational materials. Details are given in Chapter 8.

Further reading

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