Paparella: Volume IV: Plastic and Reconstructive Surgery and Interrelated Disciplines

Section 1: Plastic and Reconstructive Surgery

Chapter 20: Office Surgery - The Office Surgical Suite

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Outpatient surgery has now become commonplace. It is difficult to conceive of how unusual it was for surgeons to operate in their own offices 10 years ago. In view of the rapid changes in the applications of office surgery, it must be recognized that any review of this topic will be dated almost as soon as it is written. The author has had over 10 years of experience in designing and operating two office-based outpatient surgical facilities. The first was designed as an integral functioning part of a medical office; the second consists of a licensed outpatient surgical center that, although physically located within an office complex, exists as an independent entity.

There are several advantages to outpatient surgery in general, and to office surgery in particular. First, outpatient surgery offers convenience to both patient and surgeon. Second, it tends to reduce apprehension about the operation since the patient is not quite so uprooted from the home environment. Finally, there are financial advantages that can be quite significant. This chapter focuses on the customized office surgical unit, but the principles apply to any outpatient surgical setup.

Although it can be much more efficient to operate in one's own office surgical suite, it still becomes a fairly expensive endeavor. Several years ago, an office operating suite could be quite simple. There were few requirements beyond a simple operating chair, lighting, and basic surgical instruments. One equipped the suite according to one's own needs and wishes. For those planning only relatively minor procedures under local anesthesia, there seemed to be no need to obtain sophisticated monitoring devices or even more than basic resuscitative equipment.

It seems to have been simple in retrospect, but there were distinct problems in those early days of office surgery. There was virtually no peer support from the rest of the medical community. Those few of use who dared to carry out surgery in our "offices" were looked upon as mavericks regardless of how sophisticated our suites were and how careful we were to observe hospital-like techniques and precautions.

In spite of offering a major cost saving, we faced major obstacles in gaining reimbursement from the insurance companies. In the late 1970s our typical operating room charges for major otolaryngologic procedures such as a face lift or thyroidectomy were between \$250 and \$400. This was far less than one-half of what the hospitals were charging, yet few insurance companies would honor the charge. The only way we could collect was to issue the charge as part of the physician's service, thus hoping to collect on the patient's major medical insurance.

This has all changed now that the government and third-party payers are emphasizing the cost savings obtainable through outpatient surgery. The pressure is on surgeons, patients, and providers to carry out as much of their work as possible on an outpatient basis. In fact, whereas there were once problems in collecting for outpatient surgery, now the same difficulty may lie in collecting for hospitalization related to a specific operation. All this has come at a price, however, for it does not follow that just because a procedure is covered on an outpatient basis, it will be covered in any surgeon's ambulatory facility. Requirements for licensure and accreditation have made it much more difficult for individuals to design and operate their own office surgical unit.

Cost accounting becomes important, creating an additional chore that is always burdensome, but even more so when a surgeon is first starting up. As the movement toward outpatient surgery progresses, however, the practitioner who plans to build an operating room in the office must be fully aware of these important trends.

Third-party reimbursement is essential in this day of cost consciousness. Although insurance companies are becoming more attuned to covering outpatient surgery, there is no assurance that this trend will continue to cover private operating rooms within the surgeon's office, unless they are licensed. Even if it does, payment now tends to be based on an assigned value for a procedure rather than the actual cost of a facility. A private operating suite that is used at the convenience of one or a few surgeons may not be able to function as economically as a multispecialty general ambulatory surgical center. Assigned reimbursement schedules may fall short of the actual operating costs of the individual surgical suite.

Surgeons who plan their own surgical suite must therefore recognize that from a purely economic standpoint they may not be able to recognize a profit from the facility. It still may be true that the savings in time and the convenience offered to both surgeon and patients may make the project worthwhile.

It is also important to be attuned to local, state, and federal legislation related to the construction and operation of freestanding ambulatory surgical facilities. Obtaining a certificate of need, and building to comply with state health department and Medicare requirements, may add considerably to the cost of the project, but can make the difference between operating in the red or in the black. The American Medical Association has prepared a monograph that gives some guidance in these areas.

Unfortunately, at the time of this writing, changes are too rapid to enable accurate guidelines to be offered. Furthermore, it is important to realize that federal legislation (particularly in regard to Medicare) can be administered differently by different states.

Finally, it is important to recognize that hospitals are keenly aware of the competition coming from private outpatient surgical facilities. We are likely to see much more competitive pricing of outpatient surgery by hospitals, and so the cost advantage in favor of the private practitioner is not nearly as great as it was only a short time ago.

In response to these trends, we are beginning to see the development of a middle-ground approach to the ambulatory surgery center. Developers have designed facilities for small groups of surgeons who each maintain their own practices but share the use of the

facility. The surgical unit itself may be owned by the surgeons or jointly with the developer, who hopefully has the expertise to design and operate the unit in a cost-effective way.

Designing the Facility

At this point, it is appropriate to emphasize the value of visiting existing facilities before embarking on your own building venture. Textbooks like this are of help, but there is no substitution for actually spending time at functioning office outpatient surgical facilities. These visits provide opportunities to evaluate the weaknesses and strengths of various designs. Physicians who have invested the time and effort to build their own facilities are proud of what they have accomplished and generally welcome visitors for a day or so. During your visit, talk to the staff as well as the surgeon. Inquire as to the adequacy of space and equipment, traffic flow, and convenience. Do not hesitate to ask about problems that were discovered and about what would be done differently if the facility were built again.

Of course, it is needful to take into consideration the type of practice for which the particular building was designed. A facility designed for general otolaryngology would be far different than one designed primarily for cosmetic surgery.

The following discussion is largely based on the design of the Facial Plastic and Cosmetic Surgical Center in Abilene, Texas. This is a state-licensed, fully accredited, Medicare-approved ambulatory surgical center designed and built for the solo practitioner. The design would be suitable for a small group, and most of the principles discussed would be applicable to a larger group.

It is emphasized that the recommendation made here should be reviewed with appropriate state and local authorities if you are contemplating licensure or Medicare approval, since the requirements vary from state to state.

General Considerations

Construction requirements are largely based on the Federal Fire Safety Codes, which are different for new construction and previously constructed buildings. If licensure and Medicare approval are desired, the requirements of the National Fire Protection Association (NFPA) have to be met in most states, although on occasion a waiver may be obtained. These requirements are in addition to any local fire and building codes that must be observed. These may be confusing to most physicians, but should pose no insurmountable problems, other than added expense, to most architects.

The size of the entire facility depends on the individual needs of the medical staff. One thousand square feet may be enough for an adequate surgical center for a single surgeon, but two to three times that space would probably be more appropriate for most facilities.

In most cases the surgical center is part of the rest of the office facility and may well share some of the common support areas such as medical records, central supply, lab areas, and so forth. In planning for any type of certification, these shared areas can be a source of problems. You must decide how much of your facility you plan to have included in the certification process. Certifying agencies generally take the stand that any common areas must

be inspected along with the surgical facility, and these areas are therefore held to the same standards of construction and operation.

Operating Room Size

An operating room size of 14 x 16 feet has proved to be quite adequate. In a previous facility, we elected to place our scrub sink in the operating room: a great convenience, but contrary to state code for licensure. For some strange reasons, known only to health department bureaucrats, running water in an operating room was deemed to be "insanitary". Barring legal requirements, it is helpful to have a sink in the operating room, although the large scrub sink did impinge on space that would have been otherwise useful.

In considering OR size, remember to subtract the area taken up by cabinets; it is free OR space that counts. It is important not to be crowded. Even if you could get by in a small space during a routine procedure, that space may be woefully inadequate during an emergency situation when additional personnel and equipment are needed.

Operating Room Equipment

Operating Table. In the past, there was a very limited selection of OR tables for office use, but this is no longer the case. Each surgeon should be able to find a table that is suitable for his own specialty. We originally performed our surgery on a standard examination table with a back that elevated up to about 45 degrees. It was somewhat tedious, but it worked! This illustrates that some of the more major items of equipment do not have to be purchased right away.

We now use an electric contour chair model, which has proved very adequate and reliable. With the advent of liposuction surgery, performed by many otolaryngologists, the contour chairs are inadequate for this type of work. If an electric table is contemplated, it is helpful to plan a floor plug adjacent to the site of the table.

Sterilization Equipment. Although we now have a full-sized hospital-type autoclave, we managed very nicely for years with a small tabletop steam autoclave supplemented by a gas autoclave. This latter unit utilized ampules of ethylene oxide and proved indispensable for sterilizing many items that would not tolerate steam. Through the use of heavy plastic bags, these units control the escape of the ethylene oxide and are safe and effective. Although these units comply with present Occupational Safety and Health Administration (OSHA) regulations, there is an indication that the allowable levels of ethylene oxide may be severely limited. A venting system for the unit is available, although there is no certainty that this will be acceptable. One source of this type of equipment is H. W. Anderson Products, Inc, 11616 Industriplex Blvd, Baton Rouge, LA 70809.

General Supplies and Instruments. Most surgeons who plan an office operating room already have some experience operating in the hospital, and thus have a pretty good idea of the instruments they use in their practice. They probably are not aware of the cost of these instruments. Some discretion must be used in purchasing instruments, but a carpenter is only as good as his tools. Although the initial cost may be significant, subsequent expenses should be modest, since instruments last much longer in a private operating room if they are

given the care that they deserve. It is very unusual for us to replace an instrument because of breakage or wear.

With experience, you will find that you can prepare for cases with far fewer instruments than were set up for you in the hospital, since the setup will be specifically designed for you. Trays should consist of only those instruments that are likely to be used. Items needed on occasion can be kept sterile and opened if needed.

Of course, when purchasing your own equipment, there will be additional bookkeeping responsibilities, many more bills to be paid, and charges for usable items must be determined. Some centers prefer to establish a set fee for each procedure; while others prefer to charge for each item used in addition to the fee for the time in the operating room.

It is astounding how many sources of supplies can be accumulated, especially when searching for the best buy on each item. Sometimes it may be wiser to select a few general sources to avoid some of the bookkeeping problems that result from multiple accounts. The monthly deluge of bills can be truly overwhelming. However, direct purchasing can, at times, result in significant savings. This is another advantage of having adequate storage space: it can make it possible to shop in quantity for bargains.

Emergency Equipment. A major consideration in an office operating room should be the management of emergencies. The fact that emergencies so rarely occur makes it all the more difficult to prepare for them. Adequate equipment must be immediately available. Our operating room contains, in addition to cardiac and blood pressure monitors, a defibrillator and a readily available Ambu bag. There are outlets for oxygen from the central manifold (which in turn has automatic switching from two banks of cylinders). We use a Banyon emergency kit that contains a laryngoscope, endotracheal tubes, a blood pressure cuff, IV fluid, an emergency cut-down tray, and all the usual necessary emergency medications. This kit, with slight modifications to suit our own particular needs, is kept available for emergency use. Medications or supplies are never removed for routine needs, and it is restocked whenever used. Periodically, the dated supplies are exchanged for fresh drugs.

Personnel must know how to use the equipment. Staff should be instructed in their individual responsibilities in case of an emergency situation. Everyone should have some designated responsibility, even if it is just to stand by for further instructions. Periodic drills must be used to emphasize each person's role.

Recovery

Space dedicated to the recovery area can be conservative. Our first facility utilized two small recovery rooms each measuring about 8 x 8 feet. This provided enough room for a patient recliner, a chair for an attendant, a small table, and a rolling cart for monitoring equipment. Two of these recovery rooms proved adequate, although a third sometimes would have been desirable. We occasionally used conference rooms for patients' recovery. We now have a three-bed recovery room with curtains separating each area. It has proved more convenient to have all the postoperative patients in one area. A small preoperative room can be used as a private recovery room if desired.

In this way, one nurse is adequate for all recovering patients. Since most of our surgery uses general anesthesia, we like to have a nurse present. If local anesthesia with sedation is utilized, it is perfectly appropriate to have non-nursing personnel watch the patients during recovery.

A nurse call system is installed so that the patient can be left in the temporary care of a family member who can summon staff if needed. We also have video monitoring in the recovery room, which allows us to keep an eye on the patients.

A bathroom should be located close by the operating room and recovery area. It is helpful to have a wide door with an uncluttered area around the commode, since patients frequently need help after surgery. Support railings should be installed on the walls adjacent to the commode, and there should be an alarm switch within easy reach.

Doors, Walls, and Ceilings

The doorways should be made wide enough for easy passage, giving consideration to the possible use of stretchers or wheelchairs.

Walls and floors should be durable. We found a high grade of vinyl wall covering to work quite well. In considering floor covering, economics play a great role since there is a great range in price and quality. If possible, a high-grade solid floor covering, preferably with some cushioning, is recommended. Scuff resistance is important because this is a no-wax finish.

A standard suspended ceiling with acoustic tile was initially used (again not adequate for a licensed facility) and served quite well, although I would seriously consider nonporous ceiling tiles, which are easier to clean and probably somewhat more sanitary, of the type normally found in food handling establishments. In our new facility we have a solid ceiling, which is preferable from the standpoint of aesthetics but somewhat more expensive.

You may wish to design outlets from the ceiling for medical gases, fiberoptic lighting, and electricity. In some facilities a ceiling-mounted operating microscope may be desirable. All of these matters must be considered in the initial stages of construction.

Lights

If ceiling-mounted OR lights are to be installed, adequate structural support must be provided. This is variable, depending on the lights chosen. In our first facility, we used Burton dual floodlights suspended from the ceiling. These could easily be incorporated into a standard suspension ceiling with only a little added support. This was adequate, although the newer multiquartz or multihalogen lighting systems made by Burton and other manufacturers may be preferable if the surgeon depends heavily on the conventional type of OR lighting. Heavier lights, of course, require additional structural support.

Many surgeons today depend primarily on a head light, and so the type of ceiling light may be relatively unimportant. I would advise caution in considering the single-source halogen lights, even when used in pairs; these cause heavy shadows that can prove quite objectionable. Even if the surgeon who designs the facility believes that standard OR lights are unnecessary, others who later use the surgical center may not feel the same way; it may be difficult to add the lights at a later time, if adequate provisions for structural support are not included in the original design. Lighting, of course, is one of the most important things in an OR.

Storage

It has often been stated that there is never enough storage space, and this is certainly true in most office surgical facilities. A storage area equal to the size of the OR is desirable, although probably few design for this much space. Cabinets are helpful, but some of the space should be free space, or at least large closets for the storage of bulky items. A good system for labeling drawers and closets can be invaluable. When seeking certification, it may be necessary to have separate sterile and nonsterile storage areas.

Medical Gases and Suction

Oxygen, nitrous oxide, nitrogen, and compressed air are the usual gases needed for an ambulatory surgical suite. Suction, although not a gas, should be considered with the gases, since the construction goes hand in hand. It is not absolutely necessary to have a central source for any of these, but it is often highly advantageous.

Arguments for central gases include economy in the purchase of the gases, since larger tanks will be used; a neater working environment; and less frequent servicing needs. Disadvantages include the cost of construction and servicing as well as the difficulties that can result from hidden leaks in the plumbing. In the case of oxygen, the advantages certainly outweigh the disadvantages, since it is used so widely. In the case of the other gases, it depends on the individual situation. In a practice in which air-driven instruments are commonly used, it may be a great convenience to have central nitrogen. In the case of nitrous oxide, the small machine-mounted tanks are adequate for several cases, and we have elected not to install a central source.

An adequate central source of suction is far preferable to individual suction units. It is much quieter and far more convenient. If a portable unit is to be used, one of high capacity should be chosen. The small portable suction units such as the standard Gomco (so familiar in hospital wards) are usually inadequate. With the advent of liposuction surgery, much more powerful units are now on the market that would serve nicely.

If central suction is installed in the OR, two outlets are desirable: one for the surgeon and one for the anesthetist. Similarly, it is frequently desirable to have one suction source for suction drainage, leaving another for general use.

There is relatively little need for compressed air. It can be handy for cleaning instruments, and with proper filtration can be used to power ventilators on anesthesia machines. When used in this capacity, the compressed air is simply a power source; it is not the actual gas being administered to the patient. In spite of this and the fact that little actual gas volume is used in this way, it is generally easier to use oxygen as the power source.

Environmental Control

Special consideration is needed for the heating and cooling requirements in the OR. The temperatures desirable there are different from those appropriate for the rest of the clinic in that generally more cooling and less heating is required during surgery. Furthermore, it is often desirable to change temperatures fairly rapidly, for example, warming the room when the patient first arrives, cooling it during surgery, and then warming it again as the patient is waking up. A zone system with the OR constituting a discrete zone should work well. In our first operating facility, we compensated by installing a standard ceiling fan in the OR, but this is less satisfactory than an initially well designed system.

Medicare instructions are specific on approved cooling and air circulation requirements for operating and recovery rooms, often demanding high levels of air movement and filtration.

Electrical Power

Adequate electrical power should be installed on several different circuits so that a failed breaker does not interrupt all the electricity in the operating room. Grounded plugs, of course, are essential. An alternative source of power is highly desirable. A relatively small generator should suffice, with automatic activation of key circuits in case of power failure. A simple relay system uses normal power to hold the generator circuits in a closed position. If the power fails, the relay allows these circuits to come on line, as well as activate the starter for the generator, which is battery powered.

Our system provides current to the operating lights, a few of the hall lights, and to selected floor and wall plugs in the recovery area as well as the operating room and the minor surgery suite. Since most modern office surgery tables are electric, it is wise to put a floor plug where it is planned to install the table.

Medicare also requires auxiliary power for the alarm systems, as well as the ventilation in the surgical and recovery suites, although power for the compressors for the air conditioning is not required.

Previously, many facilities were required to install isolated electrical panels to help eliminate the risk of fire. Today when explosive gases are not used, there is no rational explanation for this requirement and it serves no useful purpose. Most local authorities have eliminated this requirement.

Patient Access

Aisles should be wide enough to allow wheelchair transportation between the OR, RR, bathroom, and exit. Patient access and egress is an important consideration. Medicare requires corridors 8 feet wide connecting the OR, RR, and the nearest exit for certification. Our original facility required patients to negotiate three steps at the back door; obviously a ramp would have been preferable. Remember that patients usually require assistance when leaving and it is helpful to be able to negotiate the way easily with a wheelchair.

Traffic flow is another important consideration. We designed our surgical area so that there is a bathroom in the center of the preoperative, surgical, and recovery areas. When patients are brought from the preoperative area to surgery, they use the bathroom as a last stop. This bathroom is also convenient to the recovery room for after surgery. This bathroom was designed to be large enough and is equipped with substantial handicap railings.

Communication

Unlike the hospital, the outpatient OR usually functions as a part of a total clinic. Most likely, personnel will be shared in that they will also have responsibility for other functions in the nonsurgical areas of the clinic. Communication between the OR and the rest of the clinic is important. We have a telephone extension in the operating room with an intercom to the rest of the phones in the facility. The OR phone has a speaker-phone attachment to allow hands-off conversation; this is especially useful for obtaining lab reports. In addition, we have a telecommunications outlet for an electrocardiographic machine that is linked to a computer analysis system, allowing ECG reports to be obtained in case of emergency.

Paging is available over a loudspeaker system so that needed personnel can be summoned if needed, even when their exact location is uncertain. This also allows us to have music throughout the building.

A nurse call system is installed in the recovery room so that patients can summon assistance. Since we often allow families to stay with patients in the recovery room after they have awakened, it is important that they know how to summon help if needed. An emergency nurse call alarm is installed in the patient bathroom. Both of these nurse call buzzers sound throughout the building, but can be turned off in any desired location.

Finally, a "panic alarm" can be triggered from the OR to alert the entire office staff to a potential emergency.

Careful attention to planning communications in the office can result in the surgical unit functioning in a much more orderly manner.

Selection of Cases For Outpatient Surgery

The types of surgical procedures carried out in an ambulatory facility must be individualized, and depend on the facilities developed and the staff and equipment available. A large percentage of otolaryngologic and head and neck surgery procedures can be performed in an office outpatient surgical facility. However, many facilities have physical limitations that preclude some of the more major operations.

Ideally it is best to determine beforehand the scope of surgical practice that is anticipated for the facility so that proper planning can be made. There often are preexisting physical limitations that force the practitioner to suit the practice to the facility, rather than gear the facility toward the desired practice.

It is wise to overplan and overbuild. There is little question that the trend toward greater emphasis on ambulatory surgery will continue. It is rare that an individual builds a facility that he later feels is too big; unfortunately, the opposite is often the case.

For the past 15 years, this author has carried out a wide range of surgical procedures on an out patient basis that were traditionally considered hospital procedures. As early as 1975, I was routinely doing thyroidectomies and parotidectomies in my office operating facility. Although my practice has been limited to cosmetic surgery since 1984, I formerly carried out a wide range of otolaryngologic procedures such as tonsillectomy, endoscopy, sinus surgery, and tympanomastoid surgery. Most of the procedures use general anesthesia.

This chapter is primarily concerned with the physical aspects of the design of the office operating suite. It must be stressed, however, that the ultimate success or failure of an office surgery program depends on the skill, experience, and training of the entire staff. An office OR must not be used as an excuse to allow surgeons to carry out procedures that they are not trained and qualified to do. Surgeons must realize that in the office OR they are indeed "the captain of the ship", responsible for many things that are taken care of by others in the hospital.

Adequate equipment and supplies for the planned procedure must be available. Surgeons must have instrumentation equal in quality and assortment to those that they would require in the hospital. Sutures, dressings, and medications must be available as needed. Patients should never be expected to accept second best because they are undergoing office surgery.

Most important, surgeons must be equipped to handle unforeseen situations. They must be able to carry out advanced life support without outside assistance. Plans must be made ahead to time to allow for the transfer of patients to a hospital, if required. Transfer agreements with the hospital must be established in advance. There should be a roster of consultants who are available for specific problems outside the range of the surgeon's expertise.

A thorough preoperative evaluation should be carried out to ensure that the patient is fit to undergo the planned operation. This may be done by the operating surgeon or by another designated physician. Selected laboratory tests should be individualized. The shotgun approach that was common in hospitals years ago proved to be expensive and nonproductive. Tests should be ordered on the basis of need rather than routine.

Procedures and Anesthesia

Patients undergoing surgery in the office receive extensive preoperative counseling both verbally and through written instructions.

We individualize the preoperative workup on the basis of the patient's age, medical history, and physical examination. When it is deemed advisable, we recommend a medical workup by the patient's family doctor or internist. Chest x-rays, ECGs, hematocrit tests, and urinalysis can all be done in the clinic. Other tests are run by outside laboratories of the patient's choice.

One of our anesthetists contacts the patient at home before surgery for an initial consultation. This is amplified by further discussion and examination just before surgery.

At the conclusion of the preoperative conference the patient is given a cope of our standard operative permit. This is broadly based on a standard form that was briefly endorsed by the Texas legislature in an effort to wrestle with the burgeoning malpractice problem. The form reviews risks in general, and brief sections outline the specific risks related to particular operations. Patients are instructed to take the form home and read it carefully. They are advised that they will be given an opportunity to ask questions before signing the form on the morning of surgery. A note is made in the chart indicating that the form was given to the patient. It is important to give the permit to the patient well in advance of the surgery, since it refutes the possible argument that patients were asked to sign a form that they did not have the opportunity to study, or that they were already committed to proceeding with the operation when the form was presented. The form is written in plain language, and just above the signature carries the admonition: "Do not sign this form unless you have read it and feel that you understand it. Ask any questions you might have before signing".

Patients are premedicated before entering the operating room with 200 mg of dimenhydrinate (Dramamine) and 100 mg of secobarbital (Seconal), given with a small sip of water. This provides adequate relaxation and has almost entirely eliminated the problem of postoperative nausea in our patients. Patients are then escorted to the preoperative room where the IV is started.

We have had extensive experience with the use of low-dose ketamine hydrochloride (Ketalar) and diazepam (Valium) as an adjunct to local anesthesia, and this is our preferred regimen when surgery is carried out using local anesthesia. In these patients, the anesthesia may be administered and supervised by the surgeon.

At the present time, nearly all of our procedures employ general anesthesia, administered by certified nurse anesthetists under the direct supervision of the operating surgeon. Some surgeons question the liability incurred with the use of nurse anesthetists as opposed to MD anesthesiologists. Our insurance carrier makes no distinction in rates whether anesthesia is administered by a nurse or by a physician. Ultimately, the choice, like so many others, must be individualized depending on the surgeon's preference and local custom.

Otolaryngologists and head and neck surgeons are in the enviable position of having extensive training in the management of airway problems. Since a large percentage of the calamities involving general anesthesia are directly related to problems with the airway, these specialists are well suited to office surgery. It behooves all of us who operate in our own facilities to maintain our airway management skills regardless of what aspect of the specialty we practice. These skills, combined with up-to-date knowledge and experience in advanced CPR, should be adequate to initiate treatment for any emergency that may arise.

The equipment in the office OR must be completely adequate for the type of anesthesia chosen. If general anesthesia is used, a second backup unit should be available in case of equipment failures. Drugs and gases in suitable amounts and varieties should be on hand for routine procedures and emergencies. Dated drugs must be watched and replaced as needed.

After surgery, patients are brought to the recovery room by stretcher. We use ICU beds for recovery stretchers because of their slightly larger size and the softer mattresses, much more comfortable than standard stretchers. These are brought into the OR after surgery. Patients stay on these beds until ready to leave the recovery room. In most cases, the patients are awake enough after surgery to slide over by themselves; if not, we use a short roller to move them.

A recovery room nurse stays with the patient until discharge. The anesthetist remains immediately available until he and the surgeon agree that the patient is beyond the stage of likely need for further anesthetic care.

Sometimes patients are awake enough when they reach the recovery room to allow their family to sit with them. Video monitoring and a call system allow the staff to remain in close supervision without actually remaining with patients. When patients are fully recovered, as determined by the operation surgeon, they are assisted to their car or to one of our private guest suites.

The inclusion of private living suites within the clinic adds a new dimension to an outpatient surgical center. Much greater flexibility can be added to the services offered. Many of our patients come from great distances, and in the past were required to stay in nearby motels. Now they can stay in the clinic itself. The suites each contain a hospital-type bed and an additional day bed. Each room contains a small kitchenette with refrigerator and microwave oven. A telephone and television with video recorder are furnished. In the bathroom is a combination shower-steam bath with handicap railings for security. Each suite has an entrance into the clinic and a private entrance to an outside courtyard. At night the clinic entrance is locked, but the outside access remains open so that patients or families may come or go.

The suites are not intended to serve as hospital rooms. Patients are not discharged to the suites if it is felt that hospitalization is indicated. Nevertheless, it is obviously much more convenient and comfortable for patients to stay in their own suite. It is also much more convenient for the surgeon, since patients can easily be checked on the evening of surgery and the following morning. It also offers patients a strong sense of security.

Accreditation

Concepts in ambulatory surgery continue to change at a rapid rate. Certainly, every surgeon desires a facility that is completely adequate for the mission planned. It is difficult for individuals to think of every need and eventuality. Currently, it is still possible to build an OR within an office without complying with any regulatory criteria. However, it is likely that in the near future regulations may be imposed to dictate a certain standard for office ORs.

There is an avenue open to all surgeons who operate in their own facilities that will help them to provide the safest and most efficient service, without burdening them with undue regulation. That avenue is the Accreditation Association for Ambulator Health Care. Incorporated in 1979 as an offshoot of the Joint Commission on Accreditation of Hospitals, the purpose of the AAAHC is "to organize and operate a peer-based assessment, education, and accreditation program for ambulatory health care organizations as a means of assisting

them to provide the highest achievable level of care for recipients in the most efficient and economically sound manner".

Organizations sponsoring the AAAHC include The American Academy of Facial Plastic and Reconstructive Surgery, The Freestanding Ambulatory Surgical Association, The Society for Office Based Surgery, and The Outpatient Ophthalmic Surgery Society. This broad-based sponsorship ensures that the AAAHC remains responsive to the needs of those involved in outpatient surgery.

Organizations seeking accreditation begin by writing to the AAAHC requesting their handbook, which describes the standards to be met. If the facility considers that it can meet the standards, an accreditation survey is scheduled. Surveyors are physicians, dentists, nurses, and administrators chosen and trained by the AAAHC. These are all volunteers actively involved with ambulatory care, thus ensuring that they are in touch with the problems faced by the facility. Each survey is tailored to the type of facility being visited. The results of the survey are reviewed with the organization and then forwarded to the AAAHC, after which a decision is made as to accreditation. The organization can receive approval for 1 or 3 years, or approval can be deferred or denied on the basis of deficiencies discovered during the evaluation. If an organization is unsure whether it can comply with AAAHC requirements, it can request a consultative evaluation. This type of survey allows the organization to seek assistance in preparing for accreditation. Problems are identified and recommendations made for improvement, but no decision is made as to accreditation.

For those who see office surgery as a means of avoiding red tape and regulations, some reconsideration is unfortunately in order. As surgeons increase their efforts to obtain third-party payment for surgery performed in their office, and especially as they seek payment for the facility as well as their own services, government agencies and insurance companies are taking a new look at these facilities and beginning to impose criteria that must be met if the facility is to qualify for coverage.

At the present time, accreditation often makes it much easier to obtain reimbursement from insurance companies. In the case of Champus, for example, AAAHC accreditation ensures coverage if the organization is otherwise in compliance with Champus regulations. It appears likely that in the future accreditation will be important both for licensure and for Medicare reimbursement. Of equal importance is the fact that by achieving accreditation, the organization or facility assures itself and its patients that it is committed to the highest possible standards of care. Office operating rooms being outside the usual bounds of peer review, this takes on increasing importance.