4. LASER SURGICAL UNIT ORGANIZATION

JOHN A. DIXON

There is something about the medical mentality that abhors the word 'organization'. All you have to do to begin laser surgery is to attend a course, buy a laser, plug it in and go to work – right? Wrong! All of the factors in our health care delivery system are arrayed against such a simplistic (and effective) approach. The laser user will soon be descending into a morass of problems relative to maintenance, transport, FDA approvals, protocols, institutional review board reviews, privileges, amortization of equipment, billing, trouble shooting and educational concerns.

The inevitable problems of introducing new technology into the clinical setting may be considerably diminished by advance planning. This chapter will suggest a format for laser unit organization, a description of the specific function of such a centralized unit and some thoughts relative to future directions in laser unit organization.

An effective unit should be designed to effectively handle most functions and problems with minimum expenditure of staff time (1). In the laser field, the staff people involved are from various departments such as medicine and surgery, a director or administrator who oversees the unit, clinical and support staff and multiple users. A typical organizational format appears in Fig. 4.1. This structure allows for departmental and institutional directions or objectives to flow through the director of the unit with the advice of a laser committee. Implementation of such objectives can be instituted by clinical support staff or technical staff to facilitate the work of laser users.

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**Fig. 4.1.** Organizational chart for Medical Laser Unit.

Conversely, problems or opportunities noted by the laser users can be channelled to the director of the unit who can then work through support staffs, the advisory committee or the institution in order to carry out the desired changes. Some specifics of operation, implementation and description of laser personnel follows.

Department or Institution – The parent organization of the laser unit can be a department such as the department of medicine or surgery or an institution such as a hospital or clinic body. In smaller institutions there will probably be a direct reporting relationship of the director of the laser unit to the hospital administrator or clinic director or other such official. In larger institutions, a clinical department may be responsible for the laser unit with input from other departments to the laser advisory committee. Institutional directions and goals are developed at this level.

Director-Laser Safety Officer – This person is the responsible administrative officer for the laser unit. In most cases the administrative and laser functions are combined. The director should have personal experience and interest in laser applications and be willing to spend the time to carry out the responsibilities necessary for the operation of the unit. Frequently, the director will be part-time in that position and have other clinical or administrative responsibilities. In larger institutions this will be a full-time job. The director is the hub of the entire operation. This person interfaces with the institution and departments through an advisory board, then directs the clinical and technical support staff to benefit laser operators. The medical specialty of the director is unimportant as long as the other criteria are met.

Laser Advisory Committee – This group is usually made up of representatives from those departments using the laser unit. Typically, surgery, medicine, obstetrics and gynecology, radiology, and ophthalmology will be involved. A representative of each of these departments meets periodically with the committee to advise the director of the unit on a myriad of considerations about privileges, equipment, research, etc.

Clinical Support Staff – These individuals report directly to the director and carry out the responsibilities to implement laser use. There is usually a head nurse who is responsible for scheduling, observation of safety factors, and directing the set-up and operation of the lasers. This person is usually charge of overall patient concerns such as electrocardiographic monitoring, monitoring of blood gases, and general items relative to clinical support.

In larger units, it is useful to have a medical technician working in the laser unit to assist in the ambulatory or general surgical operating rooms in the setting up and operation of laser, maintenance of equipment, dressing of fibers and preparation of endoscopic equipment.

Part-time technical support is also essential in the operation of the laser unit. Electricians and plumbers from the institution, such as the hospital, need to work closely with laser unit personnel for installation and maintenance of