Who Is Qualified to Perform Laser Surgery and in What Setting?

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ABSTRACT

Laser and light procedures are commonly delegated to nonphysician providers. The purpose of this report is (1) to summarize the factors that determine how such delegation may occur, (2) to analyze the potential pitfalls and problems associated with delegation, and (3) to propose alternative approaches that may improve the delegation process to maximize patient safety while not unreasonably restricting nonphysician provision of laser services.

KEYWORDS: Delegation, pitfalls, alternatives, patient safety, training

HISTORICAL OVERVIEW: INCREASING CONCERNS ABOUT DELEGATION

Prior to 1998, there exist few if any published reports regarding nonphysician performance of laser procedures.¹ Presumably, this dearth stemmed from the very small size of the laser business, which was the province of a few subspecialist physicians. Moreover, many commonly used lasers, such as those for hair removal and tattoo or pigment removal, had only recently been introduced, and their parameters of use were not standardized. The landscape has changed. As early as 8 to 10 years ago, reports documented the increasing tension between dermatologists and electrologists over the training required to perform laser hair removal, with dermatologists advocating that licensed physicians should supervise and be on-site; states, such as Texas, that do not require licensing for electrologists were a particular area of concern.^{1,2} Yet concurrently, data was presented to show that “properly trained” nurses had no greater risk than physicians of inducing undesirable outcomes like pigmentation change and blistering after laser hair removal with long-pulsed alexandrite laser.³ Most recently, the American Society for Dermatologic Surgery

(ASDS) reported that more than 100 million laser and light-source cosmetic procedures were performed by its members.⁴ And the increase appears to be even greater among nonphysician providers. More ominously, studies suggest that a proportionately greater amount of complications are arising from dermatologic care delivered by physician extenders. Nearly 53% of 488 dermatologists surveyed in Texas in 2004 reported seeing increased complications associated with delegation to nonphysicians, with 33% of those surveyed asserting that they knew of such complications arising in the absence of a supervising physician on-site during treatment delivery.⁵ This confirmed earlier results of a survey of 2400 members of the ASDS in 2001, which ascribed the preponderance of posttreatment patient complications to “nonphysician operators,” including cosmetic technicians, estheticians, and workers in medical/dental offices who performed procedures for which they were not trained or during the performance of which they were inadequately supervised.⁶ A growing body of evidence suggests that nonphysician provision of laser services and insufficient physician oversight of extenders may be jeopardizing patients, unnecessarily raising complication

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Lasers in Plastic Surgery; Guest Editor, Ramsey F. Markus, M.D. *Semin Plast Surg* 2007;21:193–200. Copyright © 2007 by Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001, USA. Tel: +1(212) 584-4662.

DOI 10.1055/s-2007-991187. ISSN 1535-2188.

rates, and leaving dermatologists vulnerable to public censure and legal liability.^{4,7} The American Society of Laser Surgery and Medicine (ASLMS), which has a diverse membership, including physicians from various specialties, has included policies pertaining to supervision and training in its white paper entitled "Procedural Skills for Using Lasers in General Surgery," which was approved by the board of directors of this organization on April 6, 2006. Specifically, under the section on laser utilization (general requirements and administrative controls, p. 7), the following sections are relevant:⁸

- A. Lasers are utilized only by individuals who have been credentialed for the use of specific types of lasers. The individual MAY NOT [bold in original] utilize laser technology for purposes and scenarios for which she/he does not have active privileges and appropriate training and experience.
- B. Individuals are not exposed to the useful active laser beam except for healing arts purposes and only when such exposure is authorized by a properly credentialed individual.
- C. Registered Nurses, Licensed Practical Nurses, and Technicians operate lasers only after completion of an acceptable program of certification. Personnel are certified to operate specific lasers (e.g., CO₂, KTP, Nd:YAG, etc.).

HOW DELEGATION WORKS NOW

At present, laser procedures are delivered in various venues. These include the outpatient offices of physicians trained in laser-relevant specialties and of physicians in other specialties. Various personnel may be involved in laser procedure delivery. At one extreme, all laser procedures may be delivered by the laser-trained specialist physician. Alternatively, laser services may be delegated to a less trained medical provider, but the physician of record may be involved in pretreatment consultation. At the other extreme, nonphysician personnel may provide laser services to patients without the physician ever having met or seen the patients or having acquiesced to the treatment plan. In some cases, physicians, especially those in nonrelevant specialties, may not be intimately familiar or expert with laser procedures themselves and may hire nurses or other caregivers who have been trained in laser procedures elsewhere to provide these services. Laser services would thus be a form of practice extension, or internal referral, for such physicians.

When laser services are delegated in a physician's office, the delegation may be to a licensed physician; or to a high-level nonphysician provider, like a physician's assistant, clinical nurse practitioner, or registered nurse; or to a low-level nonmedical provider, like a licensed practical nurse, surgical assistant, or medical assistant; or

to a nonmedical provider, like an aesthetician. The potential benefits of delegation to a licensed but less trained and possibly non-board eligible physician include protection of the delegating physician from malpractice claims. The benefits of delegation to a high-level nonphysician provider include the high levels of technical competence and reliability of such personnel. Lower-level nonphysician providers may, however, be a more economical choice, and they may be almost as successful in laser treatment if they have prolonged experience. A nonmedical provider, like an aesthetician, can be useful if the individual is also able to perform other non-laser procedures that may be valuable to a practice.

Laser services that occur outside of a physician's office are usually still associated with delegation, albeit more tenuous and distant delegation. Free-standing spas that provide medical services and nonmedical personal services may be staffed exclusively with nonphysician and even nonmedical personnel but may be loosely supervised by a licensed physician at another site. The primary purpose of a spa may be to function as a free-standing profit center, or it may be designed to capture patients and "up-sell" them to procedures available at the managing physician's primary office. In some cases, a spa may be part of a regional or national network of spas, operated by an overarching commercial entity and managed centrally by a medical director.

The degree of trained physician oversight at spas varies considerably. A physician may be present daily or more commonly a few times a week or month. The spa staff may be trained by and responsible to the delegating physician or they may be hired and managed by a business entity. The delegating physician, in some cases, may never come to the spa and may be only minimally available to the spa personnel by telephone or other means. Indeed, it is possible that the delegating physician may have only a legal connection to the spa as a consultant or medical director and may not even be trained in the provision of laser services he or she ostensibly supervises.

PITFALLS AND PROBLEMS ASSOCIATED WITH DELEGATION

Delegation of medical functions is a widely recognized and approved physician responsibility and privilege; however, in the context of cutaneous laser procedures, delegation can be problematic to the extent that it results in suboptimal care, insufficient caregiver oversight, and increased risk to patients of treatment-associated adverse events.

THE PURPOSES OF DELEGATION

In order to appreciate the limitations of delegation, it is useful to review the reasons why delegation occurs.

These purposes include legislatively acknowledged reasons as well as unrelated motives.

Some reasons for delegation are noncontroversial and intertwined. These include (1) increased efficiency of patient care; (2) patient convenience; (3) patient safety; and (4) cost-effectiveness. Increased efficiency may derive from a physician not performing all parts of a medical service himself or herself. Some of the functions intrinsic to patient care, like rooming patients, eliciting part of the medical history and examination findings (e.g., weight, blood pressure), and preparing surgical trays, may be well within the scope of practice of nonphysician medical personnel, who may be specifically trained to perform these. In fact, nonphysician personnel, by dint of specialized training and experience in such activities, may be faster and more accurate in performing them than the delegating physician. By delegating parts of the patient interaction that are uniform, repetitive, and less likely to require clinical judgment, the physician may also have more time to focus on other aspects of the patient interaction. Overall, delegation would thus provide the patient with a potentially quicker office visit, in which the physician would be able to direct his or her attention to the most sophisticated concerns.

Needless to say, delegation of this type would also enhance patient convenience. A briefer visit would be more convenient. Even if the visit were not briefer, the structured nature of the delegated functions would ensure that information was processed systematically and without omissions. Patient safety would be improved to the extent that delegation resulted in redundancy. That is, whereas a nonphysician provider may perform some key functions of a medical visit, the physician would retain overall responsibility and would revisit issues that were unclear or insufficiently described. This repetition, which is at the heart of the medical model in the United States, would ideally minimize errors of omission.

Finally, a model in which routine activities were delegated to nonphysicians would be cost-effective. Because physician time is usually the most expensive element of office visits, not using physician time for delegated functions would reduce overall cost. Yet because the delegated tasks would be simple and standardized, overall quality of care would not suffer. Reduced cost associated with constant effectiveness would imply improved cost-effectiveness.

Beyond these generally accepted reasons for delegation, there are other motives that may be operable in certain situations. To the extent that the physician or medical director is the managerial head of the office-based practice, he or she may be positioned to maximize the best interests of the physician. At times, these interests may be in conflict with the best interests of the patient.

The best interests of the physician may include (1) maximization of revenue through leverage; (2) max-

imization of revenue through provision of delegated low-price services; (3) ability to price out-of-pocket procedures competitively; (4) passive income; (5) incentivization of nonphysician providers; (6) reduced direct patient care; and (7) reduced overall work hours.

Revenue maximization is a goal of physicians in office-based practices as growth in revenue results in a proportionate increase in physician compensation. More specifically, revenue objectives include both higher total revenue and wider gross margin, the difference between revenue and expenses. Higher total revenue is achieved when the physician delegates revenue-generating activities to another nonphysician provider. Assuming the physician continues to serve the same number of patients as before, such delegation results in a greater total number of patients served by the physician and the additional provider together. Further, it is possible for the physician to delegate to more than one nonphysician provider. In some states, there are limits to the number of physician's assistants or nurse practitioners to whom a given physician can delegate. Such high-level nonphysician providers can be highly productive, as they can manage patients independently, and work at a rate only slightly below that of the delegating physician. Other lower-level nonphysician providers may be less productive, but they are also compensated at a lower level. To maximize the financial leverage of a practice, a delegating physician would continue to add high-level and low-level nonphysician providers until one of the following occurred: (1) licensing rules prohibited addition of more such providers; (2) the physician was not able to manage and supervise additional providers safely; (3) the marginal revenue generated by the addition of another nonphysician provider would be less than the cost, including salary and expenses, associated with the addition of such a provider.

Notably, the addition of a physician assistant or nurse practitioner can be a turn-key process, whereby the delegating physician can derive additional income without much additional supervisory function, yet low-level providers can be highly financially productive as well. Much less expensive in terms of salary, such low-level providers may require special, local training from the delegating physician but thereafter may be able to accomplish many of the same functions as a high-level provider. Moreover, rules may not restrict the number of low-level providers who may work with a given physician.

The availability of low-cost but laser-trained low-level providers may facilitate practice expansion. Thus, some laser services, such as laser hair removal and microdermabrasion, may be priced at a point too low for direct physician delivery. Were the physician to perform such services directly, he or she would forego in opportunity cost the provision of other more lucrative services. And if the physician raised the price of these

usually low-priced services to make them more worth physician time, the price may become too high for the market, and volume may fall drastically as a result. In some communities, the commodification of routine laser services like laser hair removal has become so extreme that only very-low-cost, low-level nonphysician providers can deliver such services at a competitive price. Again, though these services may not be provided by a physician, it would be in the delegating physician's financial interest to ensure that some personnel in the practice offered these at a competitive price as long as the difference between price and cost of service provision remained a positive quantity. In some cases, it may even be expedient to reduce prices below the median price in a given market in a bid to increase volume, and hence total revenue, more markedly.

The previous discussion assumes that the physician will not reduce physician time as a result of delegation and that delegation will instead increase physician revenue; however, this may not be the case, and the physician may prefer to use delegation as a means of reducing physician effort while maintaining a similar compensation level. Addition of high-level nonphysician providers can result in substantial passive income for the delegating physician because the gross revenue garnered by such personnel is slightly less than that of a free-standing physician, but the compensation of such personnel is substantially lower than physician compensation. It has been argued that in some cases, physician's assistants and nurse practitioners may merely function by appropriating patients already presenting to the practice (i.e., "cannibalizing, feeding off the physician") rather than creating new business (i.e., "rainmaking"). Were this to be true, it may still be the case that physician effort decreased as the high-level providers delivered care while physician income remained constant. It may also be the case that several years of training may be required to ensure that even high-level providers function efficiently and safely with minimal physician supervision; presumably this would postpone the point at which the physician could decrease his or her involvement in day-to-day practice operation.

One potential problem of delegating to numerous high- and low-level providers is the issue of diminishing returns, raised above. That is, a means must be found to consistently increase the size of the pie, the practice's patient base, rather than to merely reallocate ever smaller pieces of the pie to a growing number of providers. This problem is addressed via incentivization of nonphysician providers. The compensation of such providers is typically tied to their clinical productivity, with escalating payments associated with levels of financial productivity above the median for a particular provider type. Safeguards may be implemented by internalizing within the compensation model both quality of care benchmarks and good citizenship vis-à-vis other providers.

Methods, such as noncompete covenants and retention bonuses, must also be implemented to ensure long-term commitment of nonphysician providers to the practice. High-level providers, in particular, may be highly mobile because once they are laser-trained, they can function quasi-independently. Hence, such high-level providers are able to affiliate with physicians from various specialties, including physicians who may lack laser expertise themselves and who consequently may be willing to agree to a better compensation scheme. The physician initially training high-level providers may wish to avoid losing them to other physicians for at least two reasons: (1) loss of the time required to train these providers and the need for time to find and train new ones, and (2) competition with the departing providers once they are employed by another physician.

One special case of delegation occurs when a laser-trained physician in a relevant medical specialty delegates to a licensed physician without specialty certification. Such a licensed physician is at the lowest training level for a physician but obviously more qualified than a high-level nonphysician provider. As such, a licensed physician of this type may function in a manner similar to a high-level nonphysician provider: he or she may be compensated at a level lower than the laser-trained specialist and garner almost as much revenue performing slightly lower-price procedures than the specialist. The laser-trained specialist who is the marquee draw for the practice may pocket the difference. For elite laser practices that pride themselves on only having physician providers, a licensed physician may offer the benefits of delegation without the stigma of nonphysician providers. Additionally, there is no limit to how many such licensed physicians can be employed by a practice, and their malpractice coverage may be sufficient to completely protect the specialist physician who owns the practice.

All of the above reasons for delegation are also operative in a spa environment, where the leadership may not be an on-site physician proprietor but rather a distant physician proprietor or a corporate owner. In the case of a spa, the financial incentives for delegation are further enhanced by the nature of the business model, which resembles a retail store rather than a medical practice. There may be no physicians present at most times, and there may even be a dearth of medical personnel. Most spa services may be provided by aestheticians and nonmedical nonphysician providers, who are not inculcated in the need to ensure patient well-being. To a greater extent than in a physician practice, service providers may be compensated on an incentive basis.

POTENTIAL DANGERS OF DELEGATION

The problems associated with delegation of laser services are secondary to imprudence in delegation, as motivated

by the reasons outlined above. Excessive delegation can result in (1) impaired patient safety, including (a) increased frequency of avoidable adverse events and (b) failure to treat adverse events appropriately and in a timely manner; (2) provision of unnecessary or inappropriate laser services; (3) overtreatment; and (4) subordination of patient well-being to financial productivity of the practice.

These potential problems are easy to predict but difficult to avoid. As previously discussed, profit maximization suggests that delegation should continue until the marginal revenue associated with adding an incremental nonphysician provider (or licensed physician) becomes negative. It is not, however, necessary that the point of financial nonviability coincides with the safe limits of adding personnel. That is, before the profit maximization point is reached, safety may be compromised, as (a) a given physician supervises more nonphysician providers than he is able to closely monitor, and (b) the turnover rate of nonphysician providers becomes too great to ensure adequate training. Problems that have been commonly seen in delegated laser practices include the following: (1) burns associated with excessive treatment levels; (2) burns and posttreatment hyperpigmentation associated with treatment of tanned individuals; (3) scarring and hypopigmentation associated with excessive treatment, multiple passes, or cooling excess or failures; (4) delayed healing, erosions, and ulceration associated with untreated herpes simplex infection or impetigo; (5) configurate linear and round patterning of the skin associated with improper treatment resulting in tattooing with the laser hand piece; and (6) corneal and retinal injury due to inadequate use of eye protection. Some of these problems, like hyperpigmentation, will eventually resolve, but hypopigmentation, scar, and configurate scarring can be persistent and disfiguring. Rampant infection can result in functional loss, including permanent impairment of facial sensory structures.

The problem of impaired safety is exacerbated by the lack of general dermatologic training among nonphysician providers of laser services. In general, low-level and even some high-level nonphysician providers are trained mostly in the technique of laser service delivery, with lesser training in the management of adverse events, and little or no training in general cutaneous medicine. Adverse events, and especially unusual adverse events, may be recognized late by such providers, who may then treat them incorrectly. Especially when physician supervision is light, incorrect treatment may continue for some time until the problem has been worsened and permanent sequelae may be inevitable. It is a truism in cutaneous laser therapy that the firing of a laser hand piece is a trivial activity; it is everything but the actual treatment, including patient selection, parameter selection, and recognition and management of undesirable

outcomes, that requires judgment and training. In the spa environment or in a multiprovider practice, the pressure to "convert" all consultations into treatments may result in poor patient selection, which may dramatically increase the rate of adverse events.

Incentivization of nonphysician providers to maximize revenue generation can increase the risk of adverse events by (1) hurrying preoperative evaluation and laser treatment and (2) encouraging the treatment of patients who may be poor laser candidates. To the extent that nonphysician providers have a skewed financial incentive structure, wherein they are more rewarded for revenue generation than penalized for adverse events and patient dissatisfaction, the impetus to increase business may dominate. The result is increased risk for the patient and for the delegating physician, who may have medicolegal responsibility for problems accruing from delegated services.

Beyond adverse events, incentivization may lead to unnecessary treatments motivated by the desire to charge for the same. Indeed, it may be more revenue generating to systematically undertreat patients to ensure that they return for more visits. Subtherapeutic treatments may also reduce the risk of adverse events when laser treatments are delivered by minimally trained nonphysician providers. Although undertreatment is unlikely to cause irrevocable physical injury, it is a form of fraud that wastes patients' time and money.

OPTIMIZING DELEGATION OF LASER SERVICES: MAINTAINING SAFETY WHILE RUNNING A BUSINESS

A preeminent objective of medical care is safety of the patient. To this end, delegation of laser services should be performed in such a manner that patient welfare is not subordinated to the profit motive.

At the same time, safety is a relative goal, and perfect safety cannot be ensured during any medical procedure. The goal, therefore, becomes structuring of incentives so that safety is not only philosophically desirable but is also in the personal best interests of the personnel delivering medical services.

An incentive that is potentially antithetical to patient safety is the desire of the service provider to profit from delivery of laser services. Given that compensation for cosmetic laser procedures is usually fee-for-service, overall revenue can be maximized by increasing charge per procedure or minimizing staff and supply costs per patient. The prevailing charge is a function of the balance between supply and demand and cannot be modified by a single practice that does not have market (i.e., monopoly) power. On the other hand, minimization of practice costs per patient can be accomplished by (1) using less staff time per patient, (2) using less skilled staff per patient, (3) reducing staff

training and supervision, (4) using less space and supplies per patient, and (5) enlarging the practice by recruiting more patients. Of these cost-minimization strategies, reduction in staff expense is the most fruitful because staff expense tends to account for the majority of practice overhead.

Because each of the above cost-minimization strategies carries the hazard of impaired patient safety, it is necessary to implement controls to ensure a minimal standard of safety for patients. Such controls can be practice-directed or provider-specific. Practice-directed incentives, like fining instances of inappropriately low staffing levels, can incentivize practices to maintain certain safety benchmarks. Provider-specific incentives consist of such mechanisms as malpractice expense, professional licensing requirements, and maintenance of professional reputation among peers, which are jeopardized by a provider's poor safety record.

Before considering a specific arrangement of incentives to maximize safety, it is instructive to review the hierarchy of personnel who may provide laser services. Of course, there are individual differences in motivation, training, and competence, but categories can nonetheless be distinguished. In particular, laser-trained physicians in a relevant medical specialty (including those who are fellowship-trained, fellows-in-training, or pioneers in the field) are most qualified to deliver cutaneous laser services safely. They have the most didactic training, have advanced clinical training, have a base of medical training in a relevant specialty, and comprise much of the research leadership in clinical and basic investigation. After this category, there are laser-trained physicians in nonrelevant specialties. These may lack a foundation of knowledge in cutaneous medicine but may have relevant training in the operation of specific laser devices. They would be superior to laser-trained licensed physicians, who may have no more training in laser, but they lack a residency in clinical medicine. Below this category would be both non-laser trained physicians in nonrelevant specialties and basic researchers in light and optics; although these groups may have excellent clinical and research skills, respectively, they have no specific skills in the provision of cutaneous laser services to patients. Among nonphysician providers, the high-level providers would be laser-trained physician's assistants, clinical nurse practitioners, and registered nurses. Each of these have substantial and rigorous training in the care of patients; have been tested for competence in a competitive training environment; and, at least in training, have been the nonphysician provider primarily responsible for the care of very ill patients. Moreover, though such high-level nonphysician providers may not have taken the Hippocratic Oath, they share with physicians a professional commitment to the best interests of the patient. Lower-level nonphysician providers, like licensed practical nurses, medical assistants, and surgical

assistants, have also had formal training but are less highly trained. In addition, their roles in a medical interaction may be very limited, with them providing technical skills to the physician or high-level provider during the patient visit but not being responsible for the patient interaction as a whole. Finally, aestheticians are a different category altogether, as they are divorced from the medical model. Like high-level nonphysician providers, they may be primarily responsible for an entire patient interaction, but this interaction is based on a commercial rather than a medical model. For aestheticians, patient safety is not a moral professional imperative but rather important for protecting licensure and maintaining a successful practice.

The above hierarchy describes which providers are most technically qualified to provide laser services safely. However, a provider who is capable of delivering safe and effective care may be more or less motivated to do so. Beneficial outcomes are contingent on the capacity to do good, combined with the willingness to use this capacity. Although individuals can vary with regard to motivation and integrity, again we can make some generalizations regarding the alignment of incentives. In particular, physicians who have a specialty certification have the most to lose from unsafe laser practices because both their specialty certification and their state medical license may be jeopardized by negligent care. Transgressions that do not culminate in license, certification, or hospital privileges revocation can nonetheless raise malpractice rates and severely damage professional reputation. A referral practice of a subspecialist in a laser-relevant specialty is unlikely to flourish if referrers are concerned that their patients will be poorly treated and possibly harmed. Thus, a laser-trained physician in a relevant medical specialty is most incentivized to be a safe laser practitioner. A laser-trained physician in a nonrelevant medical specialty would be slightly less incentivized because their professional reputation in their specialty field, which was not laser intensive, would be less vulnerable to adverse outcomes among their laser patients. Next would be licensed physicians, who would have at risk their medical licenses but not any specialty certifications. Nonphysician providers are much less incentivized to be safe. Usually partly or completely sheltered by the malpractice coverage of their supervising physicians, such nonphysician providers are less differentiated and can more easily retrain in a different type of medical practice if they are unsuccessful at laser treatment. Although it is unlikely that a nonphysician provider would be willfully careless, their limited training and emphasis on following procedures reduces their capacity for exercising critical judgment in unusual clinical cases that may entail special safety risks. Indeed, such providers may see themselves as instruction implementers rather than fully responsible caregivers, and they may be incentivized to act in accordance with

physician-generated protocols. As such, nonphysician providers would be incentivized to provide safe laser care if closely supervised by a safety-conscious laser-trained physician but less able and willing to do so in the absence of such. To the extent that a practice has many high-level and low-level nonphysician providers per physician, each physician may be able to provide only limited oversight, which may be insufficient to ensure patient safety in cases where special considerations require special decision-making and judgments.

CONCLUSION

In summary, more highly trained physicians are most capable of being safe purveyors of clinical laser services, and they are also most incentivized to utilize this capacity. Nonphysician providers are least capable and incentivized.

The question of exactly how this should be operationalized is a legislative one. Different states have differing requirements regarding who may perform laser services, which in some states are restricted to physicians alone but in most states can be delegated to nurses. Similarly, states have differing requirements regarding how many high-level (i.e., physician's assistant and clinical nurse practitioner) nonphysician providers a given physician can supervise; this would determine the extent to which physicians could delegate laser care. There are also divergent requirements regarding whether the supervising physician needs to be on-site or not and the extent of the supervision.

Based on the above explication, the following restrictions should govern the personnel providing cutaneous laser care to patients:

- (a) Care should be delivered by laser-trained physicians, ideally those in laser-relevant specialties; such physicians should be required to document adequate didactic training and numbers of supervised cases, as required by the specialty board, during their residency or fellowship training. Those in nonrelevant specialties or those without specialty certification should be required to demonstrate substantial didactic training, hands-on experience, and competence in laser use before commencing a comprehensive practice with multiple laser and energy devices. Such training should not be brief and cursory but rather should entail at least 3 to 6 months of full-time training in laser use; if full-time training is not possible, part-time training should be spread over a longer time interval until a commensurate amount of training is completed. Until such training is completed, independent laser procedures should not be performed.
- (b) Nonphysician providers should be used to deliver laser care only under the following conditions: (1) they are

supervised by a laser-trained physician, as described above; (2) no more than two such providers are supervised at one time by a given laser-trained physician; (3) the supervising physician is on-site during at least 50% of the time that laser services are delivered by a nonphysician provider, and the remainder of the time the nonphysician provider is cross-covered by another on-site laser-trained physician or by a laser-trained physician available by phone and able to come in to see a patient problem if necessary; (4) whether high-level or low-level nonphysician providers are employed, they are mandated to undergo safety training, follow diagnosis and treatment protocols developed by the laser-trained physician, and are required to report unusual patient presentations and outcomes to the laser-trained physician for evaluation and resolution.

The independent or quasi-independent delivery of cutaneous laser treatment by nonphysicians constitutes nonphysician practice of medicine and should not be countenanced under any circumstances. The medical licensure system and specialty certification were specifically developed to ensure that patients receive medical care from experts who are highly incentivized to provide quality care. Less-qualified providers do not have the knowledge base, the clinical experience, the specialized training, and the commitment to patient safety that is necessary to protect patients. No reasonable person would accept brain surgery from an independently functioning nonphysician, and the same safeguards should be implemented for cutaneous laser surgery.

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