

# Who Is Holding the Syringe? A Survey of Truth in Advertising Among Medical Spas

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**BACKGROUND** The degree of supervision and level of expertise required for performing cosmetic procedures differs significantly from state to state. Medical spas providing cosmetic procedures have seen exponential growth since 2020.

**OBJECTIVE** To provide a representative sample of the medical spa industry in the United States regarding the expertise among providers performing cosmetic procedures and the degree of oversight at medical spas offering these procedures.

**MATERIALS AND METHOD** Descriptive study based on a standardized telephone interview performed by a secret shopper in Chicago and surrounding suburbs. Data were then extracted and analyzed.

**RESULTS** Of 127 medical spas reviewed, a supervising physician was not on-site at 81.1% of the facilities. Patients were informed of this at 64.6% of the surveyed medical spas.

**CONCLUSION** There is considerable variation in the oversight and in the training among those performing cosmetic procedures at surveyed medical spas. As cosmetic procedures become increasingly popular among the public, further regulation of medical spas is warranted to protect patient safety.

Medical spas, or medi-spas, integrate aesthetic medical services with traditional spa services under the supervision of a licensed physician. In the United States, medical spas are a \$15 billion industry, employing more than 70,000 personnel.<sup>1</sup> The current growth of medical spas in this country is exponential. In 2021, the American Medical Spa Association (AmSPA) reports 7,430 spas in the United States, which increased to 8,841 spas in 2022. This corresponds with growth in average revenue of \$1,722,551 per spa in 2021 to \$1,982,896 per spa in 2022.<sup>1</sup> The increase in number of facilities and revenue reflects data showing that since 2015, consumer interest (e.g. Google search inquiries) in medical spas and cosmetic procedures has grown.<sup>2</sup> Medical spas are also likely more accessible to consumers given decreased wait times compared with physician offices.<sup>3</sup> Growing interest, greater accessibility, and rising profitability, therefore, suggest that many cosmetic patients are not having their procedures performed in physician offices, but rather medical spas.

According to AmSPA, 63% of member medical spas have non-Doctor of Medicine (MD) ownership.<sup>1</sup> Among those medical spas owned by physicians, 80% are of noncore aesthetic specialties, meaning a medical specialty other than dermatology, plastic surgery, otorhinolaryngology, or ophthalmology. Of member medical spa directors, 69% are of a noncore specialty.<sup>1</sup> Recent studies highlight a trend of increased delegation of cosmetic procedures by both dermatologists and nondermatologists to nonphysician providers.<sup>4–6</sup> Nonphysician providers (e.g., physician assistants, nurse practitioners, and registered nurses) lack equivalent or standardized procedural training compared with physicians.

The delegation of cosmetic procedures can place patients at increased risk for adverse events. This is specifically documented for laser surgery, for which state-to-state regulations vary considerably and for which an increased risk of medical professional liability claims is observed among nonphysician providers.<sup>7,8</sup> At medical spas, this relative higher incidence of complications for cosmetic procedures is likely due to improper training, improper technique, and/or improper cosmetic device settings.<sup>9</sup>

Patients may not be aware of the credentials or the oversight of the provider performing their cosmetic procedure or the potential risks to their health. The aim of this study was to elucidate who performs cosmetic procedures, provides medical supervision, and follows safety protocols at medical spas, and the extent to which medical spa staff are transparent regarding this information to cosmetic patients.

Chicago and its surrounding areas were selected as the study site. In a 2020 study, Chicago was identified as the US city with the third greatest number of aesthetic physicians (122 or 0.45 per 10,000 persons) and the fifth highest

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number of medical spas (166 or 0.61 medical spas per 10,000 persons).<sup>10</sup> Chicago has a high ratio of medical spas to aesthetic physicians (1.36), suggesting that a considerable number of cosmetic procedures are being performed by nonphysician providers.<sup>10</sup>

## Methods

In April 2022, the authors queried Google, Facebook, and Yelp websites with the search terms “medical spa,” “medi-spa,” “medspa,” and “Chicago.” The queries yielded 138 medical spas in the Chicagoland area. Websites were reviewed, and contact information, available services, and medical director information, if available, were recorded. A script regarding inquiry for new patient services was developed by the authors. Secret shoppers then contacted the 138 medical spas through telephone and recorded responses from staff. Information was collected, extracted into a usable data set, and analyzed using R (R Core Team, 2013). This study did not involve experimentation on human subjects and is exempt from Institutional Review Board review. The authors were responsible for the database queries, review, and analysis.

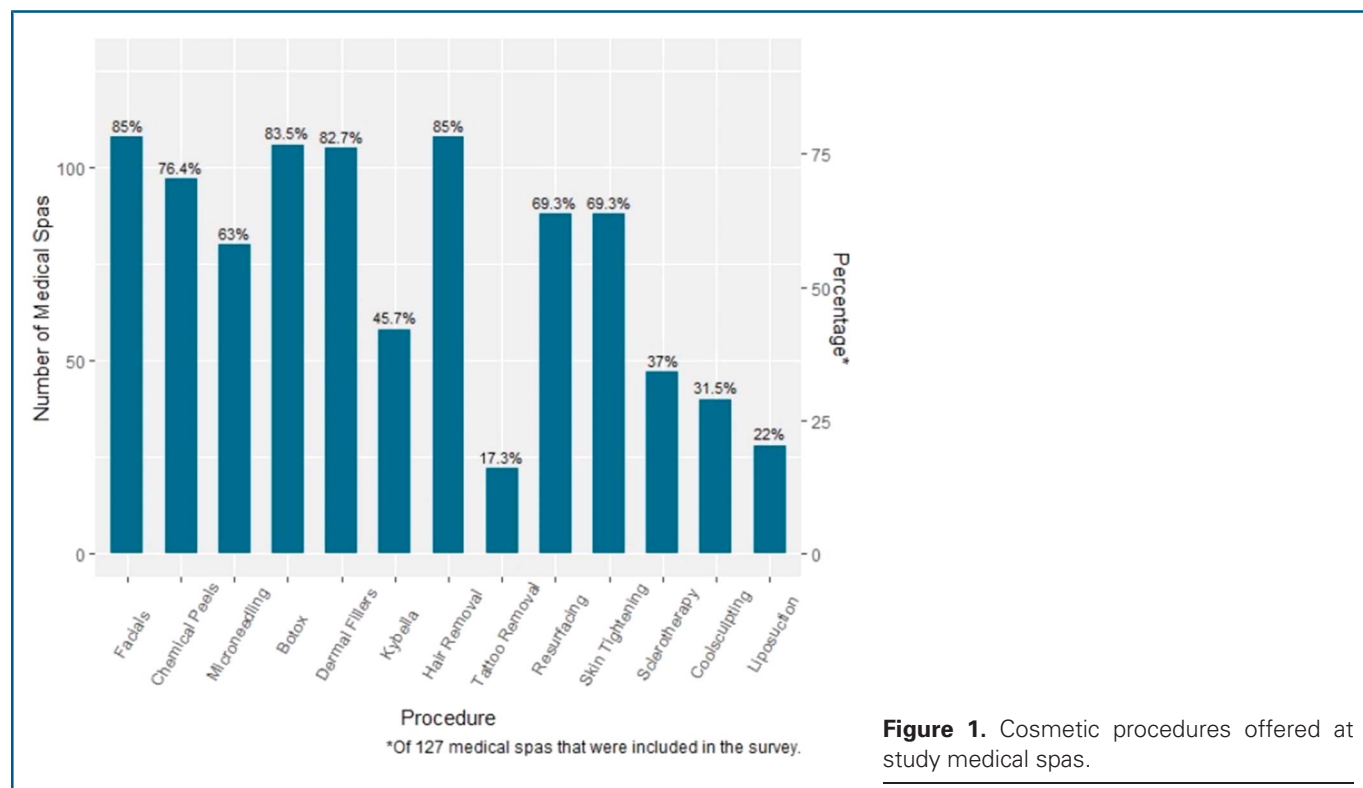
## Results

Of the 138 identified medical spas, 11 spas could not be reached or, when contacted, were not a medical spa (e.g.,

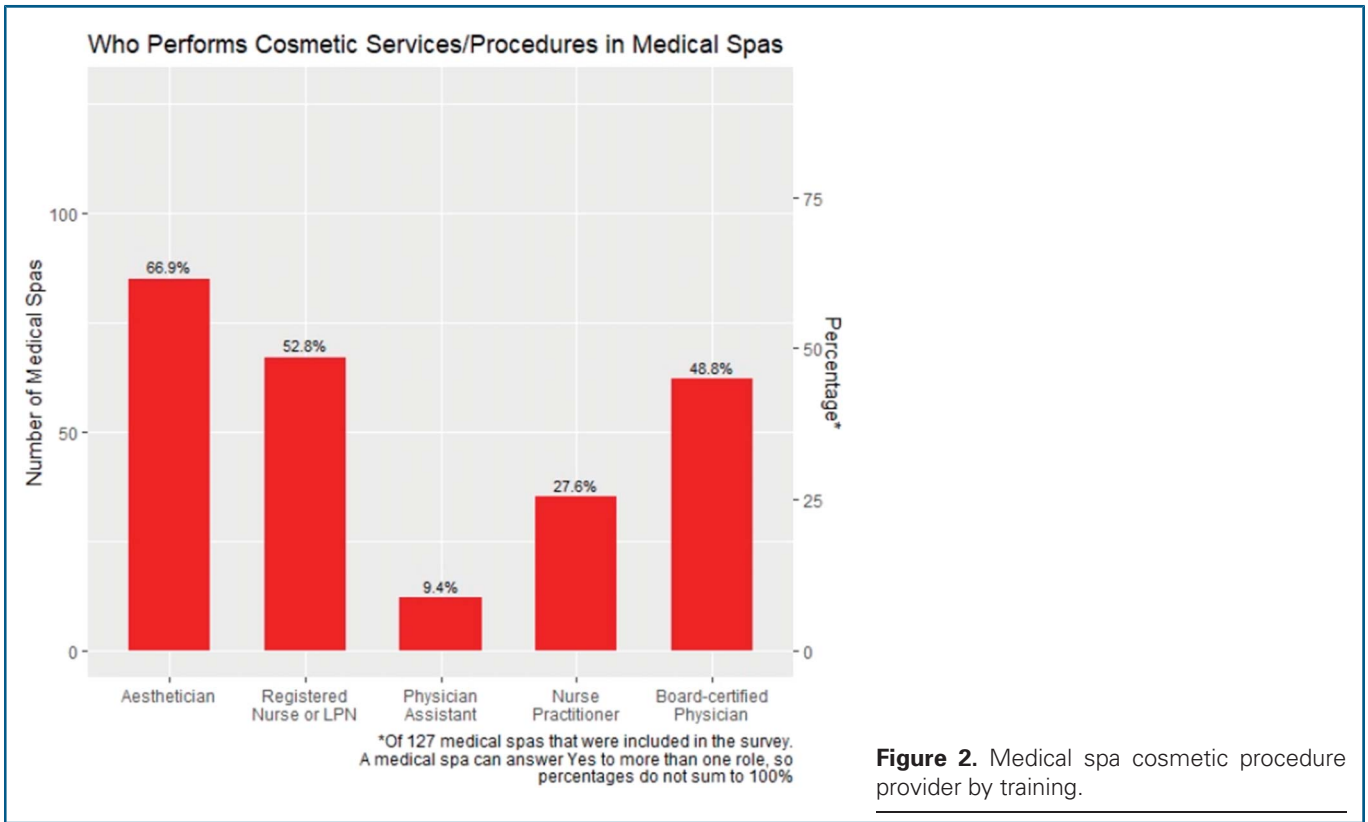
solo aesthetician practice), bringing the total to 127. The most common cosmetic procedures provided at queried medical spas were facials and laser hair removal (both 85%), followed by neuromodulator injections (83.5%) and soft-tissue dermal filler injections (82.7%) (Figure 1).

Aestheticians and registered nurses/licensed practical nurses perform cosmetic consultations at most of the medical spas in this study (64.6% and 51.2%, respectively). A supervising physician is available to conduct an in-person cosmetic consultation at 41.7% of surveyed medical spas. A patient’s medical history is reviewed by a supervising physician at 40.9% of those medical spas, although it is not clear how consistently this is performed. At most of the surveyed medical spas, cosmetic procedures are performed by aestheticians and nurses, 66.9% and 52.8%, respectively (Figure 2). A physician supervises or personally performs cosmetic procedures on-site at approximately half (53.5%) of the medical spas in this study (Figure 3).

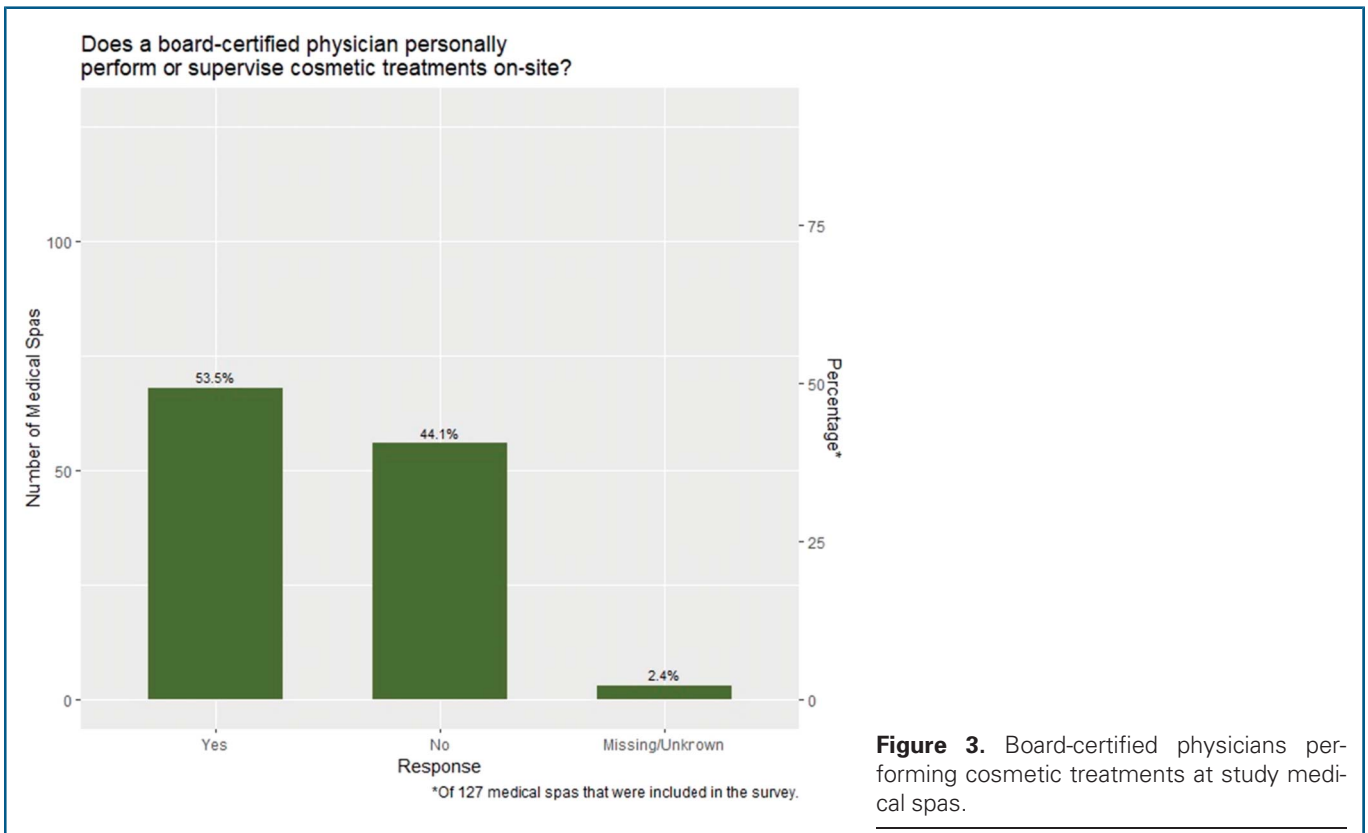
Eighty-four percent of medical spas in this study endorsed having a medical director or supervising Doctor of Medicine (MD)/Doctor of Osteopathic Medicine (DO) physician. Among these medical directors and supervising MDs/DOs, only 69.3% are reported to be board-certified in a medical specialty. The top reported medical specialties of medical spa directors are Plastic and Reconstructive Surgery (19). (Table 1).



**Figure 1.** Cosmetic procedures offered at study medical spas.



**Figure 2.** Medical spa cosmetic procedure provider by training.



**Figure 3.** Board-certified physicians performing cosmetic treatments at study medical spas.

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**TABLE 1. Study Medical Spa Directors or Supervising Physicians by Medical Specialty**

Reported Medical Specialty	Count
Aesthetic medicine	1
Anesthesiology	3
Cosmetic surgery	9
Dermatology	5
Emergency medicine	3
Family medicine	8
Gastroenterology	1
Hair restoration surgery	1
Internal medicine	12
Internal medicine and dermatology	1
Obstetrics and gynecology	5
Ophthalmology	1
Optometry	1
Oral and maxillofacial surgery	1
Pediatrics	3
Pediatric surgery	1
Plastic and reconstructive surgery	19
Plastic surgery nursing certification	1
Psychiatry	1
Radiology	1
Unknown	6
Vascular medicine	1

A medical director or supervising MD/DO is always on-site at 16.5% of reporting medical spas. If not located on-site, the medical director or supervising MD/DO is located at their primary practice (e.g., office or hospital) for 62.1% of reporting medical spas and in the same city as 23.3% of surveyed medical spas (Figure 4). Sixty-five percent of queried medical spas state that they inform patients that the medical director or supervising MD/DO is not on-site.

In the event of a complication or unwanted side effect from a cosmetic procedure, 70.1% of surveyed medical spas notify a medical director/supervising MD or DO. When asked about protocols for the management of cosmetic complications, responses vary. The most common answer was that patients are given an after-hours number at the time of their cosmetic procedure and that a nurse staff member monitors this phone line and performs triage.

## Discussion

This study contributes to a growing amount of evidence demonstrating that most cosmetic procedures offered at medical spas are performed by nonphysician providers. Oversight at medical spas differs greatly and is inconsistent across the United States. State medical boards determine guidelines regarding what constitutes a medical procedure, the delegation of such procedures, on-site versus off-site physician supervision, and the staffing ratio of supervising physicians to nonphysicians. For example, a supervising physician in California is not required to be present during procedures at a medical spa but must be “immediately reachable” by phone or e-mail at all times. While in Florida, a medical spa should be within 25 miles of a supervising physician’s primary place of practice, and the distance between any of the physician’s offices may not exceed 75 miles.

The combination of nonphysician administration of cosmetic procedures and inconsistency in medical supervision places patients of medical spas at risk for procedural complications. In one study evaluating the litigation of cosmetic procedures, 64% of litigated cases were performed outside of a traditional medical setting, such as medical spa.<sup>8</sup> A significant number of the litigated cases involved allegations of lack of supervision or proper training of nonphysician providers.<sup>8</sup>

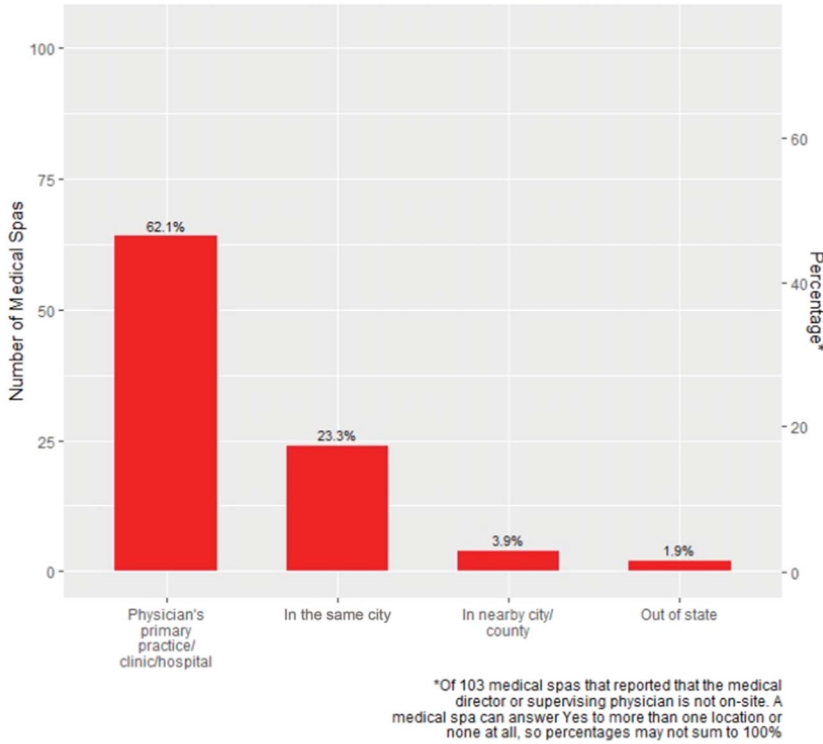
Among those medical spas the authors surveyed, a supervising physician was not on-site at 81.1% of the facilities. Staff informed patients of this information at 64.6% of the medical spas. This means that many patients are not aware that medical spa staff are performing cosmetic procedures without the direct supervision of a medical director or supervising physician. Patients are also likely unaware that, should a cosmetic procedural complication occur, a medical director or supervising physician would not readily be available for medical evaluation and management.

One limitation of this study is that the authors did not determine which cosmetic procedures are performed by which medical spa service provider (e.g., laser resurfacing performed by a nurses vs a physician). Another limitation is that with the geography of the study being limited to Chicago and surrounding areas, nationwide conclusions are difficult to determine. Further studies are needed to better understand the true extent of this phenomenon.

## Conclusion

There is significant variation in the supervision and level of training among those performing cosmetic procedures at medical spas. The cosmetic patient is often unaware of the vast differences in education and supervision among medical spa providers. Improved regulation of cosmetic procedures performed at medical spas, and guidelines regarding on-site versus off-site supervision and the staffing ratio of supervising physicians to nonphysicians, is needed to protect patient safety.

If not on-site, where is the medical director or supervising physician?



**Figure 4.** Physical location of study medical spa directors or supervising physicians.

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**References**

- American Med Spa Association. *Medical Spa State of the Industry: Executive Summary*. Chicago, IL: AmSPA; 2022. Available from: <https://americanmedspa.org/resources/med-spa-statistics>. Accessed February 15, 2023.
- Wang JV, Albornoz CA, Zachary CB, Saedi N. Evolution of search trends for medical spas and cosmetic dermatologists: a 2009 to 2019 national comparison. *Dermatol Surg* 2021;47:872–4.
- Wang JV, Shah S, Albornoz CA, Rohrer T, et al. Medical spa or physician practice: the national impact of patient wait times in aesthetics. *Dermatol Surg* 2021;47:887–9.
- Austin MB, Srivastava D, Bernstein IH, Dover JS. A survey comparing delegation of cosmetic procedures between dermatologists and non-dermatologists. *Dermatol Surg* 2015;41:827–32.
- Brody HJ, Geronemus RG, Farris PK. Beauty versus medicine: the nonphysician practice of dermatologic surgery. *Dermatol Surg* 2003;29: 319–24.
- Gibson JF, Srivastava D, Nijhawan RI. Medical oversight and scope of practice of medical spas (med-spas). *Dermatol Surg* 2019;45: 581–7.
- DiGiorgio CM, Avram MM. Laws, and regulations of laser operation in the United States. *Lasers Surg Med* 2018;50:272–9.
- Jalian HR, Jalian CA, Avram M. Increased risk of litigation associated with laser surgery by nonphysician operators. *Jama Dermatol* 2014; 150:407–11.
- Wang JV, Albornoz CA, Goldbach H, Mesinkovska N, et al. Experiences with medical spas and associated complications: a survey of aesthetic practitioners. *Dermatol Surg* 2020;46:1543–8.
- Wang JV, Albornoz CA, Noell C, Friedman PM, et al. Skewed distribution of medical spas and aesthetic physician practices: a cross-sectional market analysis. *Dermatol Surg* 2021; 47:397–9.

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