

Volume without Value: The Empty Metrics of Pain Medicine Social Media Influence

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Across social media platforms such as Instagram, X, and LinkedIn, a familiar post now permeates the interventional pain landscape. “Congratulations, Dr. Smith, for implanting 300 patients with the XXX system”. However, there is no mention of patient-related outcomes, complications, or long-term follow-up. Instead, there is a myopic focus on case counts that fails to acknowledge the impact on patient lives or functionality. The accompanying photo is usually the same: a smiling doctor standing shoulder to shoulder with a device representative, surrounded by stacks of opened device boxes used as free advertising. It looks like a celebration but feels more like a product launch. The focus is on marketing, not medicine.

These congratulatory posts have become a form of social currency, increasing professional visibility within the interventional pain community. Companies share them because they are easy to distribute, simple to measure, free, and quick to praise with comments, likes, and virtual engagement. Device representatives, managers, and executives all give themselves a proverbial pat on the back for another successful case, another sale. What is not mentioned is that these posts distort reality and shift attention away from meaningful clinical value toward throughput. When achievement is judged by quantity rather than quality, pain medicine risks losing sight of accepted clinical aims as well as its ethical foundation.

At the same time, we should acknowledge that higher procedural volumes have been associated with improved outcomes and lower complication rates across several procedural disciplines. For example, procedural proficiency has been demonstrated in the spine surgery literature and reflects the value of experience and repetition.^{1,2} Volume itself is not inherently harmful and can even correlate with enhanced safety and quality. The concern raised in this editorial is not the act of performing advanced procedures or even performing them frequently. Rather, it is the public celebration of volume as the leading indicator of quality in the absence of patient-centered metrics. Also, of concern is who is pushing the narrative. With the rise of social media and its popularity among clinicians, visuals and messaging carry more weight than ever, particularly in a rapidly changing field. The cult of personality in a digital and social media age is now unavoidable.

Volume-driven virtual validation parallels another trend: the rise of industry-sponsored centers of excellence (COEs). These COE designations originally described multidisciplinary programs anchored in evidence-based care.³ Many current iterations, however, rely on vague or volume-focused criteria, such as procedure counts, participation in company training, and product use, rather than on medical outcomes, complication rates, or independent oversight.⁴ When entities that develop and promote therapies also define the standards of excellence, the result is a feedback loop that risks promoting scale over quality.

Despite this challenging landscape, we also recognize that social media content has the potential to play a constructive role. Increased public awareness of interventional pain therapies supports patient access, increases understanding, and contributes to competitive innovation.⁵ The potential positive impact of visibility does not diminish the need for accuracy or context, but it does highlight that not all public communication is inherently problematic.

Our field faces this challenge amid heightened scrutiny. The Centers for Medicare and Medicaid Services (CMS) recently proposed broad coverage cuts for several interventional pain therapies, including peripheral nerve blocks.⁶ Demonstrating value is always essential, more so in this period in which insurers are engaging in efforts to further limit treatments that can have substantial benefits for our vulnerable patients. In this environment, professional societies must reclaim leadership by establishing transparent, evidence-based standards of excellence. Industry partners should prioritize data integrity over superficial appearances and support efforts to demonstrate meaningful outcomes rather than volume milestones. Clinicians should resist the lure of vanity metrics and remain focused on sustainable, equitable, patient-centered care.

These concerns also extend to social media, where much of this activity occurs. Future work should include systematic research that categorizes the types of posts common on social platforms and evaluates their influence on clinical behavior, patient understanding, and professional norms. Coupling these patterns to outcomes and public perception will help strengthen the evidence base for this conversation.

Perhaps the relevance and salience of the concerns expressed in this editorial can be clarified and strengthened by applying principle-based bioethics as articulated by Beauchamp and Childress.⁷ This framework maintains that the 4 broad primary principles of Autonomy, Beneficence, Nonmaleficence and Justice represent a common morality of values on which sound medical practice is based. Regarding industry's volume-based rather than outcomes-based promotional marketing of its devices through social media, the first 3 of these principles are certainly applicable.

"Autonomy" pertains to the importance of respect for patients' decisions regarding which treatments they choose to receive or not receive. When social media misrepresents excellence as being determined by volume rather than evidence of clinical efficacy, patients' abilities to make treatment decisions that are in their best interest are compromised. "Beneficence" refers to healthcare providers' duties to do all that can be done to promote patient well-being. When physicians are complicit in social media-driven attempts to promote procedures and devices that may be misrepresentative, beneficence becomes questionable. As the corollary of Beneficence, "Nonmaleficence" refers to our primary duty to "first and foremost, do no harm" (from the Latin, "primum non nocere"). Again, promotion of the "XXX system" may be beneficial to many well-selected patients. However, social media has been determined to be particularly persuasive for our most vulnerable patients,⁸ and accordingly, even higher levels of transparency in marketing should be sought.

Despite our concern that the currently utilized practice of using COE designation of treatment facilities in a volume-based manner is fraught with ethical hazards, it is important to recognize that all of us work with and certainly support the interventional and neuromodulation industries. As discussed recently,⁹ without the contributions of industry, the practice, research and education of pain medicine would suffer dramatically, with patients becoming the ultimate victims. Unfortunately or not, medical ethics and business ethics have little to do with each other, as while medical ethics always emphasizes patient well-being, business ethics "is commonly defined as the study of right and wrong, or good and bad, in professional activities and decisions" – which puts a heavy emphasis on cost-containment and profitability.¹⁰ Expecting industry to adopt medical ethics in lieu of its own ethical code is unrealistic, and perhaps inappropriate. However, physicians complicit in supporting industry's questionable conduct regarding its social media marketing practices may want to consider whether such involvement is consistent with contemporary medical ethics.

Our patients deserve more than empty congratulations. They deserve care that is effective, compassionate, and evidence based. The next time a post proudly announces a volume milestone, we should pause and ask what changed for those patients. Further, we should consider whether we, as healthcare providers, are encouraging industry to drive the treatment narrative rather than thoughtfully choosing whether the messages being provided through these volume-based social media practices are genuinely in our patients' best interests. Until we can rectify this dilemma and demonstrate our commitment to the most ethical patient care, we are not practicing excellence. We are only performing it.

Disclosure

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