

When Celebrities Prescribe — Regulating Drug Promotion on the Internet

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Since the 1980s, direct-to-consumer advertising of prescription drugs has been prevalent in the United States — one of only two high-income countries to permit such ads. In the past two decades, patient-targeted promotion has expanded beyond traditional print and television advertising to the Internet, with social-media narratives shared by public figures becoming increasingly common. Endorsements of prescription drugs on social media can be rapidly disseminated across platforms, complicating regulatory oversight. This challenge is compounded by the growing role of third-party intermediaries, such as telehealth companies, in drug promotion.

Today, this shift is most visible in the promotion of glucagon-like peptide-1 (GLP-1) receptor agonists used for diabetes, obesity, and overweight with coexisting conditions. With the prevalence of overweight or obesity being about 70% among U.S. adults, these medicines have become a top-selling drug class — and one of the most advertised classes. Amid such prominent promotion, the U.S. regulatory-oversight system is showing its seams. New forms of marketing have evaded regulatory scrutiny, leaving patients exposed to potentially misleading information. An important question is how to adequately regulate this type of drug promotion.

Under federal law, a prescrip-

tion drug is considered to be misbranded if labeling or advertising for the product is false or misleading, which can include omission of material information. According to implementing regulations from the Food and Drug Administration (FDA), fair balance is required in the communication of benefits and risks. In practice, this policy has been enforced for promotional activities attributed to manufacturers. But when social-media influencers and online pharmacies are the source of drug-related communication, their financial or other relationships to manufacturers or compounding pharmacies can be unclear.

Two recent high-profile cases illustrate the shifting landscape of drug promotion and the limitations of current oversight. In March 2024, Oprah Winfrey hosted a nationally televised program about weight-loss medications. During the show, Oprah highlighted benefits of the GLP-1 agents semaglutide and tirzepatide. The program included paid consultants to manufacturers of the brand-name drugs, Novo Nordisk and Eli Lilly. In another case, in August 2025, the telehealth company Ro launched a social-media campaign featuring Serena Williams, who shared her experience using GLP-1 receptor agonists obtained on Ro's platform. In the video, Williams, one of the world's most accomplished athletes, said her

body “needed” these medicines after giving birth, although she didn't name a specific GLP-1 drug.

In September 2025, the FDA issued a series of warning letters targeting problematic direct-to-consumer advertising.¹ In letters to Novo Nordisk and Eli Lilly, the agency concluded that the Oprah program had conveyed a misleading impression of safety by minimizing risks associated with GLP-1 agents and cited the presence of company representatives on the show.² It is unclear whether Oprah was paid by the manufacturers for her involvement in the program. Although the Ro campaign similarly emphasized therapeutic benefits and gave little attention to risks, it hasn't prompted FDA enforcement action.

Telehealth platforms have reported greater demand for weight-loss appointments after celebrity endorsements, suggesting that campaigns can be associated with increased care-seeking behavior.³ Celebrity involvement in drug promotion spans a continuum, from informal endorsement of personal use to engagement in commercial partnerships. Elon Musk, for example, has openly championed the use of GLP-1 agents for obesity on social media. Tom Brady is an investor in and serves as the chief wellness officer of a telehealth company that offers GLP-1 products. These cases show that, although the FDA regulates medical products and their promotion

by manufacturers, there are other forms of communication that can shape patient demand.

Patient-facing content that now circulates pervasively on social-media platforms can blur the distinction between health-related information about prescription drugs and misleading advertising. In a recent analysis of more than 84,000 social-media posts discussing GLP-1 drugs, stimulants for attention deficit-hyperactivity disorder, or biologics for autoimmune conditions, 740 high-engagement posts containing promotional claims or other content relevant to FDA or Federal Trade Commission (FTC) oversight generated more than 57 million views, with posts from celebrities and influencers accounting for 43% of such content.⁴ More than 80% of high-engagement posts contained promotional elements without clear sponsorship information, and only one third mentioned risks associated with the products.⁴

Decades of research have revealed that drug promotion can translate into prescribing requests. A recent study found that 7 in 10 prescribers have been approached by patients about medications they saw on social media, with nearly half of all respondents prescribing a product they had been approached about.⁵ Some heavily marketed medications, such as weight-loss drugs, psychiatric medications, testosterone formulations, and hair-loss treatments, can have potentially serious adverse effects. Versions of many of these products may also be sold by compounding pharmacies, which aren't subject to the same oversight as FDA-regulated manufacturing facilities for prescription drugs. Moreover, misleading pro-

motion on social media could disproportionately affect young people using these platforms, potentially resulting in imbalanced impressions of benefits and risks and trivialization of prescription-drug use.

We believe stronger guardrails are needed to protect the public and to keep pace with the ways in which patients now encounter drug promotion. Social-media platforms could more clearly label paid health content and more prominently feature disclosures about risks. Such platforms have had limited success in moderating various kinds of misinformation,

nitions of prescription-drug advertising could be expanded to include promotion of an entire class of drugs, and such promotion could trigger disclosure requirements, which currently apply only to advertisements for named products. Finally, with adequate funding, the FDA could expand its existing initiatives, including the Bad Ad program, and deploy technology-assisted surveillance systems to detect misleading prescription-drug advertising on the Internet.

Policymakers have proposed bills that would either restrict direct-to-consumer advertising by

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however, which makes it difficult to rely on their policies as a substitute for enforceable standards.

Using their existing authority, the FDA and the FTC could update guidance to align oversight with the current promotional environment. For example, the FDA could modernize fair-balance requirements for digital platforms by mandating that information about risks be presented directly alongside claims about benefits (e.g., provided in the same social-media communication, using spoken or visually prominent content), rather than being relegated to fine print or a separate website. Defi-

manufacturers or extend liability for misleading messages to third-party entities involved in promotion. The End Prescription Drug Ads Now Act (S. 2068) would prohibit manufacturers from engaging in advertising on any media platform, although such a ban would probably face strong industry opposition as well as legal scrutiny, given the U.S. Supreme Court's approach to evaluating corporate speech under the First Amendment in recent cases.

By contrast, the Protecting Patients from Deceptive Drug Ads Act (S. 652) attempts to modernize oversight by requiring influ-

encers to disclose compensation they receive for prescription-drug promotion to the Open Payments database. It would also authorize civil penalties for entities engaging in paid social-media communication that they know is misleading or that is recklessly false and extend FDA advertising requirements, including fair-balance obligations, to telehealth companies. Under such a regime, regulators could prioritize enforcement actions against high-reach celebrity-endorsement campaigns, since a small number of people have outsized influence and enforcement activities could deter similar behavior.

International experience could inform U.S. efforts. In 2025, a Higher Regional Court in Germany held that paid influencers qualify as agents of pharmaceutical companies and social-media communication must comply with traditional disclosure requirements under German law. It also treated

“known persons,” including celebrities and influencers who have sizable social-media followings, as subject to stricter advertising restrictions than those applying to the general public.

Direct-to-consumer advertising for prescription drugs that resembles medical guidance and evades oversight increasingly shapes people’s expectations and behaviors. In this context, the principle of fair representation of benefits and risks should not become a dead letter. Targeted guardrails could provide the necessary friction to discourage brazen violations of regulations governing drug promotion and protect patients from misleading medical narratives.

Disclosure forms provided by the authors are available at NEJM.org.

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This article was published on July 18, 2026, at NEJM.org.

1. Makary MA. The FDA’s overdue crackdown on misleading pharmaceutical advertisements. *JAMA* 2025;334:1701-12.
2. Food and Drug Administration. Warning letters. April 21, 2026 (<https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/compliance-actions-and-activities/warning-letters>).
3. Leventhal R. Celebrity GLP-1 use triggers surge in weight loss drug appointments, per Zocdoc data. Emarketer. October 2, 2025 (<https://www.emarketer.com/content/celebrity-glp-1-use-triggers-surge-weight-loss-drug-appointments--per-zocdoc-data>).
4. Kresovich A, Tran H, Shi H, et al. High-engagement social media posts related to prescription drug promotion for 3 major drug classes. *JAMA* 2026;335:181-3.
5. Munevar D. From scrolling to script: the growing influence of prescription drug ads on social media. NORC at the University of Chicago. July 2025 (<https://www.norc.uchicago.edu/research/library/from-scrolling-to-script-the-growing-influence-of-prescription-drug-ads-on-social-media.html>).

DOI: 10.1056/NEJMp2602486

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Love and Death

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It’s December during my final year of residency, and I am ready to be done with intensive care units (ICUs). I am tired of the blood gases. I am tired of performing procedures I am not good at. I am tired of the sunless days that melt into weeks. But mostly I am tired of the death. I have recently completed a month each in the cardiac ICU and the pediatric ICU, and now am wrapping up a month in the medical ICU.

I first became accustomed to

death, in all its permanency, when I stalked these halls as an intern. At that time, in the spring of 2020, I cared for endless rows of intubated patients. I built bonds with families over days and weeks, but once a patient died, I learned I would barely see or hear anything more about them. The paperwork was signed, the body was whisked downstairs, and the good intern moved on to the next patient. Any relationship with the patient, any special compassion,

was tossed like a disposable stethoscope. Somewhere in the recesses of my mind, a void would open. But voids, like empty beds and open lists, have a habit of being filled by the humdrum torrent of residency.

This time through the ICU, the causes of illness are more diverse, but the death seems just as prevalent. I watched the slow failure of a young father’s bone marrow transplant. The nurse printed out the telemetry strip so his child