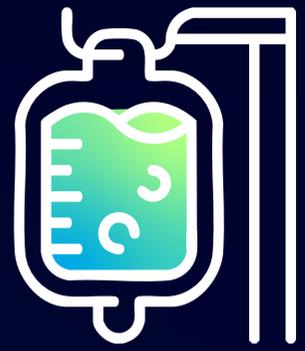


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Pharma's AI Problem

Advertising in the Age of Black Boxes

The Shifting Landscape

The healthcare marketing environment is undergoing rapid transformation. On one front, new regulatory actions are raising the bar for transparency in drug promotion. On another, AI-driven answer engines are quietly reshaping how patients and physicians discover information about therapies. Together, these forces present both risk and opportunity for pharma marketers. This POV explores what's at stake—and how the industry can respond.

1. The Backdrop: A New Regulatory Crackdown

The current administration has launched a sweeping crackdown on misleading direct-to-consumer (DTC) pharmaceutical advertising. In a September memorandum, President Trump directed HHS and the FDA to ensure that advertising delivers complete, balanced, and accurate information about prescription drugs. Secretary Robert F. Kennedy Jr. and FDA Commissioner Dr. Marty Makary reinforced this stance, unveiling reforms to close the 1997 “adequate provision” loophole that allowed broadcast ads to downplay risks. The FDA is now issuing thousands of warning letters and over a hundred cease-and-desist orders, targeting not just traditional TV spots but also social media campaigns and undisclosed influencer promotions.

Effectively, the administration contends that years of lax enforcement have undermined the doctor-patient relationship, driven demand for expensive therapies, and weakened public trust. **Rather than continuing to pursue a ban on DTC advertising in certain channels, the administration appears intent on reshaping it through stricter oversight and disclosure requirements.**

2. The Case for Oversight

Pharmaceutical advertising holds life-or-death stakes. Unlike soda or sneakers, drug ads are not mere consumer promotions; they directly influence clinical decisions and health behaviors. Research shows that while nearly all pharma social media ads highlight benefits, regulators note that fewer go into enough detail about potential risks. This spotlights an important responsibility: by continuing to pair clear benefit messaging with transparent risk communication, pharma marketers can strengthen trust with patients and healthcare providers alike. Far from limiting communication, government oversight helps ensure that promotional efforts are received as credible and evidence-based, ultimately supporting better-informed treatment decisions and reinforcing the industry's role as a vital partner in public health.



3. The Black Box Dilemma

But there's a frontier challenge far bigger than a 30-second TV ad: **the rise of AI-driven answer engines**. Large language models (LLMs) now field millions of health-related queries from patients, caregivers, and even physicians. Unlike regulated ads, these AI systems operate in an unregulated space. Their mission is not balance, it's responsiveness. In striving to answer any question, they generate sprawling threads of information that can lead consumers down rabbit holes of guidance, speculation, and sometimes outright fabrication.

This is the essence of the **black box dilemma**: nobody—not regulators, not industry, not even the AI developers—fully understands how these systems generate specific outputs. Unlike traditional ads, which are scripted, vetted by legal teams, and attributable to clinical studies, LLM responses are dynamic, probabilistic, and often unverifiable. A consumer might start with a benign query (“What are the side effects of Drug X?”) and end up with misleading, biased, or hallucinatory answers that shape their treatment expectations.

For pharma, this is existential. Vast amounts of resources are being dedicated to comply with new transparency mandates for broadcast and digital ads, while unregulated AI systems may already be the dominant channel shaping consumer perceptions of drugs.

4. What Pharma Can Do: Four Imperatives for the AI Era

Pharma marketers cannot afford to treat AI as an externality. Three imperatives emerge:

Initiate Exploratory on AIs:



Even if LLMs remain black boxes, they can be probed. Tools like Omnicom's AI Optix demonstrate how millions of prompts and responses across leading LLMs can be analyzed to surface patterns of misinformation or health risks. By auditing categories, disease states, brands, pharma companies and government regulators can at least establish a baseline understanding of the narratives these AI agents are generating. That reconnaissance is the first step toward public safety and accountability.

Proactive Engagement:



Industry leaders must anticipate the patient-AI interface by not only ensuring accurate, high-quality information about their products is available to feed into these systems, but also by shaping how models interpret and communicate that information. Guiding AI with validated data helps influence its outputs in a way that reflects evidence-based science, while starving the models of such data only increases the risk of hallucinations.

Collaborative Guardrails:



Pharma should partner with FDA regulators and AI companies to establish frameworks for medical content accuracy in generative systems, akin to the FDA's fair balance standards. This could mean certification pathways or "verified health data pipelines" for model training.

Transparency by Design:



If the administration demands radical transparency in ads, pharma must extend that ethos to digital ecosystems. That means clear disclosure of financial relationships in influencer campaigns, but also advocating for transparency in how AI generates health answers.

The administration's crackdown signals a return to rigorous oversight in drug promotion, but it also highlights a blind spot: **AI isn't bound by advertising law, yet it increasingly functions as the world's most persuasive advertiser.** Pharma's challenge, and opportunity, is to step into this vacuum before the black box defines its reputation and reshapes consumer trust on its own terms.

Want to discuss further?

Connect directly with Roshen Mathew, author of this POV, to explore what these changes mean for pharma marketers and how the industry can respond.

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