

Physicians' Responses to Other Physicians' Online Drug Reviews: Evidence from a Randomized Experiment *

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April 27, 2026

Abstract

We study how physicians update professional evaluations when exposed to peer reference information, using a field experiment embedded in a large physician-only online community. Physicians rate drugs on a scalar score and provide free-text comments; in the treatment group, they are shown reference evaluations, while the control group is not. We develop a gap-based framework that distinguishes proportional informational learning from reference targeting. In ratings, reference exposure induces strong convergence toward the benchmark: absolute deviations compress substantially more than directional adjustment, rejecting a sharp restriction implied by linear Bayesian updating. Micro evidence shows pronounced bunching and exact matching at the reference point with limited overshooting. Convergence in ratings is only weakly moderated by prescribing experience (a proxy for private-signal precision) and by randomized source labels, indicating limited precision-based reweighting and limited sensitivity to source credibility. In contrast, for text, a higher-dimensional response with higher adjustment costs, we find modest but systematic semantic convergence using clinical-language embeddings, especially for initially distant and less experienced physicians. This convergence does not replicate under token-overlap (Jaccard) measures, suggesting it is not driven by mechanical copying. The results imply that the mechanism and welfare properties of social learning depend on channel design: low-cost, salient ratings amplify conformity incentives, whereas higher-cost text encourages more selective learning.

Key Words: online reviews; social learning; reference points; conformity; reputational herding; field experiment; healthcare decision-making; text embeddings.

JEL codes: C93, I10, I11, L86.

*We thank seminar participants at the Kansai Labor Economics Workshop and the Empirical Moral Science Workshop for helpful comments.

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