

# The Impact of Process- vs. Outcome-Oriented Reviews on the Sales of Healthcare Services

How do process- and outcome-oriented online reviews differently influence consumer demand for healthcare services, and how do service complexity and popularity moderate these effects?

This study by Xue Bai and colleagues investigate how two types of online reviews, process-oriented and outcome-oriented, affect the sales of healthcare services, specifically cosmetic procedures. Process-oriented reviews describe the service steps and recovery process, while outcome-oriented reviews focus on the final results.

The authors collected extensive data from an online platform in China, analyzing over 114,000 diaries and 2 million images related to cosmetic treatments. They used artificial intelligence to classify images showing procedural recovery versus final outcomes.

The findings show that outcome-oriented reviews generally have a stronger influence on sales than process-oriented ones. However, this relationship changes depending on the complexity and popularity of the healthcare service. For more complex treatments with longer recoveries, process-oriented reviews are more helpful because consumers care about the feasibility of undergoing the procedure.

Conversely, for simpler and more popular services, outcome-oriented reviews play a bigger role by highlighting desirable results. These insights suggest that consumers use different types of information depending on the healthcare service they consider.

This study also highlights the importance of visual content in online reviews for experiential services like healthcare. The findings offer valuable guidance for healthcare platforms and providers to tailor review incentives and presentations based on service characteristics to better influence consumer decisions.

---

## MAJOR TAKEAWAYS:

- Outcome-oriented reviews generally increase healthcare service sales more than process-oriented reviews across most procedures.
- Process-oriented reviews are more impactful for complex or less popular healthcare services, aiding feasibility assessment.
- Visual content in reviews plays a crucial role in shaping consumer perceptions and purchase decisions in healthcare.

---

## WHO NEEDS TO KNOW:

- Healthcare Platform Managers
- Service Providers
- Consumer Behavior Researchers

---

## CONTACT US:

- Xue Bai, Professor, Statistics, Operations, and Data Science

[xue@temple.edu](mailto:xue@temple.edu)

- The Impact of Process- vs. Outcome-Oriented Reviews on the Sales of Healthcare Services
- Journal: *Information Systems Research*
- DOI: <https://doi.org/10.1287/isre.2019.0168>



**Fox School  
of Business**

Learn more about the Translational Research Center  
[fox.temple.edu/trc](https://fox.temple.edu/trc)