

Measure Value Across the Entire Episode of Care

CASCADE / *Treatment trajectories, downstream burden, and expected episode expenditure*

The relevant economic question is not only what the index procedure costs; it is what care trajectory the decision is expected to create or prevent.

THE ISSUE

In brief. Payment and coverage decisions often compare the immediate cost of competing treatments while leaving complications, reoperations, readmissions, post-acute care, prolonged recovery, and disability outside the frame. Patients experience a trajectory of care—not an isolated line item. A less expensive index treatment can be more costly overall when it materially changes the probability or burden of downstream events.

WHY IT MATTERS

- Index-price comparisons can reward short-term savings while shifting cost and burden downstream.
- Complication risk and recovery burden may differ meaningfully between treatment strategies.
- Transparent probability ranges expose assumptions better than a single unqualified cost estimate.

POLICY DIRECTION

- Use episode-of-care analysis when an index decision may materially affect failure, revision, readmission, post-acute care, or recovery.
- Disclose index cost, success and failure probabilities, pathway costs, time horizon, data sources, and uncertainty ranges.
- Report nonmonetized clinical and recovery burdens separately when credible valuation is unavailable.
- Require qualified human review, risk adjustment, appeal, versioning, and validation before high-stakes use.

WHAT THE ARTICLE OR FRAMEWORK CONTRIBUTES

Contribution. CASCADE—Cost Analysis of Surgical Complications and Downstream Expenditure—organizes alternative strategies as probability-weighted care pathways. The full project model can compare index cost, success and failure trajectories, additional procedures, recovery burden, and expected total episode cost. The published paper intentionally presents a simpler threshold model for conceptual clarity.

EVIDENTIARY BOUNDARY

Do not overread it. CASCADE is conceptual and requires validation against institutional or claims data. It is not a treatment mandate, payment formula, patient-specific predictor, or proof that a higher-cost procedure is better or less expensive overall. Clinical appropriateness and informed consent remain primary.

BOTTOM LINE When downstream consequences are material, require decision-makers to compare expected care trajectories—not only the visible index price.

Source foundation: *Cost-Trajectory Framework for Total Episode Expenditure in Complex Wound Reconstruction* (Cureus, 2026) | PMID 42100647 | doi:10.7759/cureus.108363