Clinical Outcome Rewards

Outcome-Based Reward Design

Reward models can be trained not just on preferences, but on actual clinical outcomes to align AI with real-world treatment success.

Outcome Metrics

- Survival Rates: Long-term patient outcomes
- Readmission Rates: 30-day hospital readmissions
- Symptom Improvement: Patient-reported outcomes
- Complication Rates: Post-treatment adverse events
- Quality of Life: QALY, functional status measures

Implementation Challenges

- Long Feedback Loops: Outcomes take time to materialize
- Confounding Factors: Many variables affect outcomes
- Sample Size: Need large datasets for statistical power
- Ethical Considerations: Can't experiment with patient health