

Infermedica's AI triage outperforms traditional methods in the emergency department

In a study of 18,000 ED patients, researchers evaluated an AI-supported triage system and compared it with the Emergency Severity Index (ESI) and the Manchester Triage System (MTS). The AI-supported approach demonstrated improved clinical outcomes, higher patient satisfaction, and more balanced resource utilization—highlighting the potential of AI triage to enhance both care quality and operational efficiency in emergency departments.

— Key findings

61% lower odds of mortality

AI-supported triage was associated with 61% lower odds of in-ED mortality vs. MTS (OR 0.39, P < .001)

More balanced resource utilization

Improved distribution of ED resources compared to traditional triage systems

Higher patient satisfaction

9.0 vs 7.0 satisfaction score

Fewer complications

4.42% vs 10.25% complication rate vs. MTS

IMPACT & OPPORTUNITIES

Four ways AI triage strengthens the ED

Go to the nearest emergency department

Your symptoms are worrisome and you may require emergency care.

Be sure to report:

- Vomiting
- Pressing chest pain



- ↗ **Improves clinical outcomes:** Associated with lower mortality and complication rates.
- ↗ **Optimizes ED performance:** Enables more balanced resource utilization
- ↗ **Enhances patient experience:** Drives higher patient satisfaction
- ↗ **Modernizes triage systems:** Strengthens traditional approaches like ESI and MTS

— Conclusion

AI triage demonstrated measurable improvements in both clinical outcomes and ED operations compared to traditional methods.

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