**Touchstone™ Suite: Inpatient Module**

Uses artificial intelligence (AI) to proactively identify where your organization is performing, and then recommends and prioritizes opportunities for improvement.

**Type:** Software Application  
**ID:** 2621  
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The Touchstone Suite: Inpatient Module aggregates data from across healthcare organizations. The Touchstone benchmarking service uses risk-adjusted benchmarks and predictive models to intelligently direct users as they prioritize improvement opportunities and explore the root causes of under- (and over-) performance in key areas.

**Intended users**
- Clinical/Quality Data Analyst
- Population Health / ACO Data Analyst
- Program Director
- Chief Population Health Officer

**Potential data sources**
- Aggregated data from client EDWs (clinical/EMR, claims)
- External data sources and benchmarks (government, other third party sources)

**Note:** Clients must be contributing and sharing their data for benchmarking purposes. Clients who decline to contribute will only have access to public data sources.

**Key measures**
Organizational performance to risk-adjusted benchmarks to the following metrics:
- Mortality
- Length of Stay (LOS)
- Readmissions
- Variable direct cost (supplies, labor, drugs, etc.)

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The problem

Benchmarks play a vital role in helping identify improvement opportunities. Benchmarking is typically separate from other analytics, thus analysts have to manually review thousands of benchmarks to determine the most promising opportunities, with little ability to understand the drivers of performance.

Touchstone uses machine learning to help organizations identify and prioritize opportunities and gain insight into the drivers of their outcomes.

**Our approach**

The Touchstone analytics application is the next generation in benchmarking, opportunity analysis, and prioritization. Unlike antiquated benchmarking technologies with a narrow focus on the inpatient setting, Touchstone focuses on the full continuum of care—and surfaces machine learning-powered recommendations in an intelligent user interface.
Benefits and features

Leverage the power of AI

- **AI-powered opportunity analysis** - Machine learning algorithms reveal improvement opportunities hidden in EMR, clinical, cost accounting, and claims data.

- **Seamless data extraction** - Data extraction software pulls directly from the data warehouse, eliminating the manual file creation burden that’s common with other antiquated benchmarking technologies.

- **Democratized benchmarking** - Intuitive user interface makes benchmarking available to as many people in the health system who want to use it.

Continuous Improvement and Insight

- **Proactively recommends opportunities for improvement** - Uses AI to proactively recommend, quantify, and prioritize improvement opportunities. Users no longer have to sift through hundreds of benchmarks to find opportunities. Like Netflix, recommendations improve over time based on user interest (e.g., surgical services, labor and delivery, etc.).

- **Offers intelligent direction** - Intelligent, intuitive user interface makes it quick and easy for users to explore the factors behind each improvement opportunity.

- **Focuses on the full continuum of care** - Includes risk-adjusted benchmarks for the full continuum of care using the most granular and detailed data possible.

Use cases

A Program Manager in the surgical department of Promontory Hospital turns to Touchstone to look for opportunities to improve on cost and outcomes. Touchstone recommends that there may be an opportunity to improve their mortality rate for Touchstone procedures, which is 90% higher than the risk-adjusted benchmark would expect. After drilling into the data, she identifies that three physicians’ cases are driving the majority of the higher than expected mortality rates. She also notes that the highest variable direct cost of supplies is correlated with these higher than expected mortality rates. She deploys a clinical analyst to investigate the specific drivers of the cost differential, positing that if there are discrepancies in the way these three providers deliver care they could be rectified to reduce overall mortality and cost.