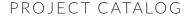# AI-Driven healthcare cost reduction

🔵 BRIEF

A large healthcare provider aimed to optimize their operations and reduce costs by leveraging natural language processing (NLP) technology. Their goal was to extract valuable information from caregivers' notes, enabling the creation of comprehensive and structured patient health histories. They also sought to identify and analyze social determinants of health (SDH) factors that significantly impact patients' well-being. They turned to artificial intelligence and machine learning for a solution.

🔵 APPROACH

The healthcare provider partnered with Lozard to develop an efficient text mining engine. The engine would extract specific words and relevant details from caregivers' notes and uncover context and meaningful insights. An algorithm was implemented to achieve this, analyzing a vast dataset of 500,000 records from approximately 10.000 patients.

LOZARD

AI-Driven healthcare cost reduction

→ ACTIONS TAKEN

Developed NLP models that were rigorously validated by the healthcare provider's subject matter experts.

Anonymized records of caregiver notes from various encounters, including clinical visits, pre-and post-operative care, and discharge notes, were included in the analysis.

This proactive approach led to a reduction in acute medical issues, resulting in fewer emergency room visits. Ultimately, the implementation of AI-driven data analytics enhanced the quality of care while lowering overall healthcare costs.

→ OUTCOMES

500,000 patient records analyzed for critical insights.

AI models consistently produced results, offering the organization a comprehensive 360-degree view of each patient, enriched with precise and extensive SDH details.

Improved quality of care and health outcomes.

Reduced cost of care.