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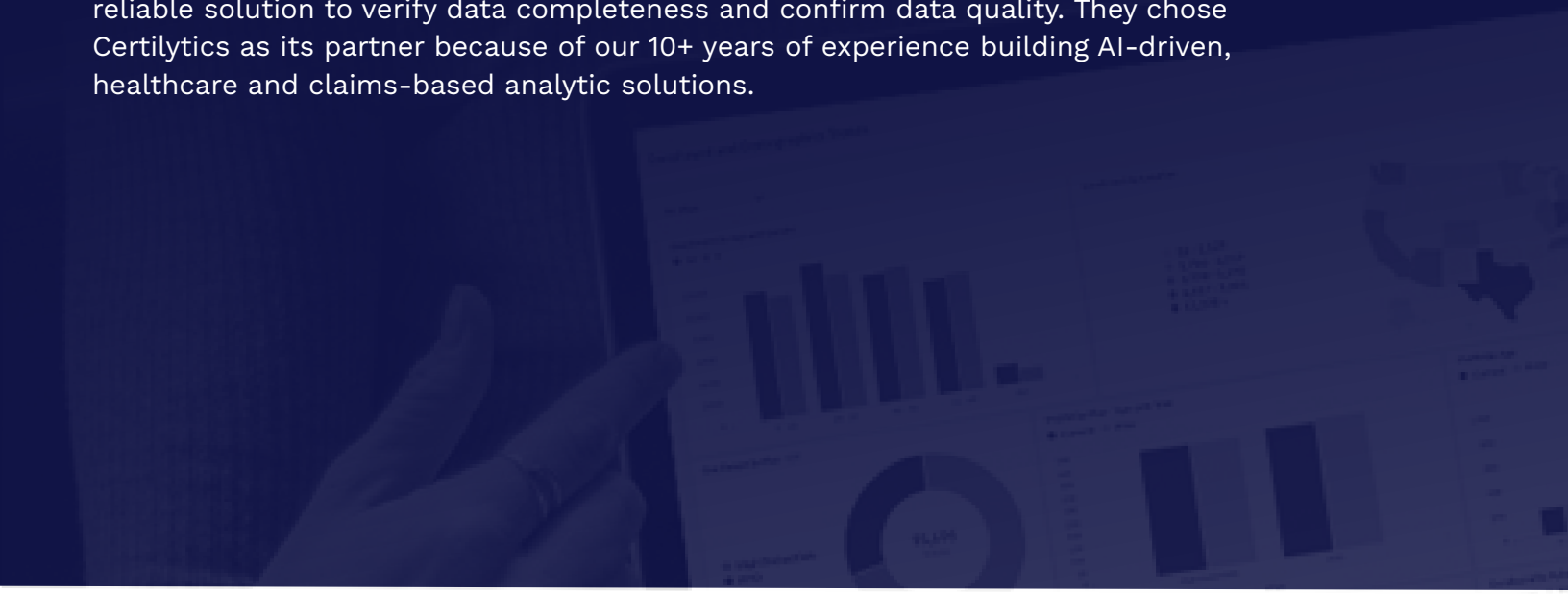
AI Impact Brief

Identifying Missing Claims to Improve Data Quality and Health Plan Operations

One of the nation's largest health insurers was looking to optimize its operations and as a part of its efforts wanted to ensure the completeness and accuracy of their data.

Specifically, they wanted to focus on identifying claims with missing claim lines – a data issue that could negatively impact the accuracy and reliability of the health plan's operations from financial management to clinical quality, compliance, operations, and member services.

With the large number of claims received, the insurer was looking for an efficient and reliable solution to verify data completeness and confirm data quality. They chose Certilytics as its partner because of our 10+ years of experience building AI-driven, healthcare and claims-based analytic solutions.



Customer Overview

Large National Insurer

28 million+
Members

775,000+
Providers in Network

AI-Powered Data Management and Insights *by Certilytics*

Prediction of Missing Claims

The purpose of this model was to measure the risk that a medical claim is missing one or more service line items. Leveraging modern and powerful AI techniques, the model learned the contents of a “complete” claim across multiple claim types especially among the more complex claims like inpatient and outpatient facility claims.

One issue the model revealed was higher levels of missingness in outpatient colonoscopy claims for women. A deeper analysis by Certilytics and the insurer found that some providers and other insurers do not always capture lab services like pregnancy testing – a common practice prior to the procedure. Often, such services may be bundled or procedure codes unsubmitted for various reasons such as adjustments and denials.

Identification of Denied Claims Not Being Submitted

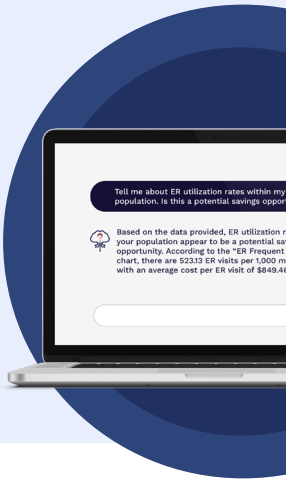
As suggested above, the model also found that missingness may be tied to denied service lines more broadly speaking. This was also confirmed with our insurer partner. Denials are often financially-based, but denied lines can still retain clinically relevant information – and in risk modeling, missing such information can negatively impact analyses.

Certilytics AI/ML Solution Used

ClaimsGPT

A missing claim line prediction model built using Certilytics’ claims representation modeling framework. It leverages the latest generative algorithms to understand complex contextual relationships inherent within a claim.

The model trained on over 205 million claims accurately detects claims with missing lines, achieving an AUC of 0.80 — a strong result, especially given its unique design and lack of direct market comparisons.



RESULTS

This model allows insurers to quickly identify those who might have submitted claims with missing records as well as identify shortcomings in their own operational databases. Addressing this issue not only improves data quality across the health plan, but also instills greater confidence in their financial management processes, clinical quality, compliance, operations, and member services.

Interested in learning more about how Certilytics’ AI-driven claims prediction solution can help you better manage your data and your business?

Schedule a meeting with the Certilytics team.

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