

Medical Charts Review App

Web-based workflow app for efficient and automated medical charts review for the detection of duplication and fraud.

Challenge

The main objective of this project was to create a Health Care Reform (HCR) compliant solution that would enable review of a larger volume of claims.

The technical issues that the payer was experiencing were large numbers of records that needed to be processed and highly complex logic for automated compassion and discrepancy detection. The client's original estimate was that 10,000 records would be handled in a given

day. Revised estimates later put that figure at upwards of 1,000,000 records per day. In order to accommodate this spike, we recommended a different approach to record retrieval by leveraging web services.

The biggest risk that Vicert faced was the CMS mandated requirements and a constantly changing interpretation of those requirements by the client. Significant changes to the end requirements meant that managing the delivery of the app components to allow maximum flexibility for those necessary changes was critical.

The three main problems that the client was trying to solve are as follows:

- [Centers for Medicare and Medicaid Services \(CMS\) Mandate](#)

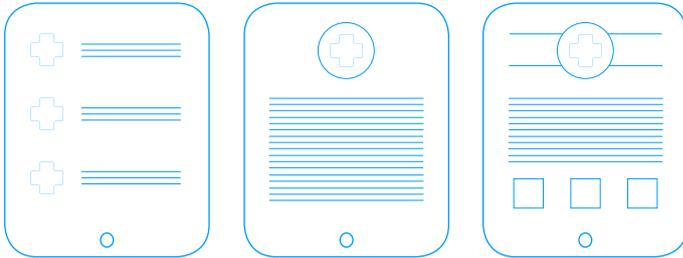
This mandate required the review of claims submissions for payers requesting reimbursements for balanced payments through the Health Care Reform legislation.

- [Health Care Reform \(HCR\) Requirements](#)

Existing solutions didn't meet the HCR requirements, so the risk team made the decision to implement a new solution that would satisfy them.

- [Manual Claims Processing](#)

The amount of claims that could be processed using the legacy process (manual spreadsheets) was small. That is why an automated solution was needed to filter the majority of suspected fraudulent claims for manual human review.



Solution

Vicert created a centralized medical chart repository for storing electronic versions of the medical charts of identified members with risk adjustment. The workflow app we developed required that we build a complex set of logic based on CMS requirements to identify potentially fraudulent cases and then integrate the cases to two external solutions for chart and claims data. This allowed staff to manually review those specific cases. Any updates made by staff had to then be stored and transmitted

to CMS using their standard format. From a technical standpoint, the key elements of the solution were a Java web-based app with Spring and Hibernate frameworks. The web-based solution is flexible, secure and scalable. The solution includes a configurable workflow, enabling automated indexing and processing of medical charts. Vicert implemented integration with third-party vendors, Epi Source and Record Flow. These vendors were used to automate chart retrieval and processing.

Benefits

The health payer gained the ability to process and review all claims charts instead of the previous manual process which included only 5% of the total number of claims. The solution enabled automated processing and evaluation of these claims charts, with only a small subset of records for manual review. In the long run, the decision to develop this solution has significantly impacted their workflow and increased ROI.

Tech: Oracle, Spring, Hibernate

Duration: 9 months

Value: \$1.3M