WHITE PAPER

TATA CONSULTANCY SERVICES

Modernization of Healthcare Claims Processing Systems

Abstract

Traditionally, most claims adjudication systems are monolithic and designed to be self-sufficient and independent. Today, we are in the middle of a transformation in the healthcare industry with emerging ecosystems that have the primary goal of supporting wellbeing. What this means is that payers are reshaping themselves to being 'orchestrators of health' from 'claim administrators.' This, we believe, will necessitate a transformation of their operating model to become more nimble and agile.

This paper talks about how claims systems should be designed like a highway – with multiple entry and exit points to meet the needs of each product, line of business, and segment – in order to support this transformation. The components of a modern-day claims system must seamlessly integrate with ecosystem partners through APIs, support cognitive operations, and transform to a next-gen health advocacy platform. Such a system should also provide the ability to monetize business functions by offering them in an XaaS model.

Making a case for modern-day health claims systems

The existing claims systems are monolithic and created to support a specific customer segment or Line of Business (LoB), such as dental or vision. With their code base spread across multiple modules, these on-premise systems lack flexibility and elasticity, and provide no clear demarcation across the lifecycle of a claim.

Most payers either started with one or two claims systems; over the years, with continuous M&As and the launch of new medical products, additional claim engines were included into the IT landscape. This resulted in multiple sets of code base, with each system performing a large chunk of similar logic. Additionally, each of these claim engines also stored a version of membership, provider, product, plan, pricing, and other information locally in a proprietary format.

Organizations that invested in building an enterprise book of records, had to build additional processes to translate the data from the book of records to the adjudication engine's proprietary format. This resulted in claims processing based on outdated data and inconsistent/erroneous propagated across the enterprise.

For a long time now, adding more code to the existing monolithic code base and hard-coding remained the primary means to implement changes in an 'easier, quicker, and cheaper' fashion, as opposed to a rule-driven approach. As a result, payers continue to maintain ageing core applications.

Health Plans: The transformation and its requisites

As global healthcare spending continues to dramatically shift the focus from 'sick' care to 'health' care, ecosystems are emerging at a rapid pace and at multiple levels to collaborate and cooperate toward wellness. These ecosystems also emphasize on reducing the cost of care and uberization of health resources. During this transformation, claims engines have become a burden and payers should consider the following 'CORE & IMMUNE' aspects while redesigning them.

Configurable: Payers must offer personalized benefits and products, increase care coordination with providers, and enable radical changes in provider networks. The growing number of complex designs and government regulations require claim systems to be agile and intelligent with code-free configuration capabilities.

Open-API: A futuristic system should consider a highly adaptable service-oriented architecture facilitating open access and real-time integrations. It must integrate with a single source of truth and enable claim payments in real time or at the point of care, rather than follow a rigid payment cycle.

Regulatory: The system should comply with the state and local regulations along with security protocols.

Experience: Behave as one entity irrespective of the number of claim adjudication engines. Provide a unified and seamless customer experience for both internal and external stakeholders.

Intelligent operations: There must be continuous investments made to improve auto-adjudication (AA) rates for reducing the footprint of operations staff. Systems should have an integrated workflow and support AI-based intelligent operations frameworks to enable high-value, low-touch operations.

Modular: Replacing an entire system can be costly, lengthy, and resource-intensive. Piece-meal implementations and extensibility are key to the successful transformation of claim systems. Modular systems also improve developer productivity and increase development quality by reducing defects, enabling faster time-to-market, and removing dependence on SMEs.

Monetize: Payers have an opportunity to monetize their assets by providing middle-office and back-office functions as a service (for e.g. Pricing-as-a-Service, Networks-as-a-Service, or even the entire process of Claims-as-a-Service). They could offer re-branded plans and products to startups, smaller payers, and other healthcare organizations.

Users (Primary and Secondary): Most systems today only cater to primary users i.e., operations teams of payers, providers, and/or members. Systems should also support secondary users like regulators, legal departments, brokers, etc.

New business models: Health systems will have to support new business models including value-based care and alternate payment models.

Ecosystem enablement: Transforming into an orchestrator of healthcare requires payers to deploy ecosystems that prioritize integration and real-time information exchange with each other.

Unified claims engines paving the road to the future

There is no single claim engine that meets all the current and future needs. However, the need of the hour is to component-ize and modernize monolithic claims systems and enable claim applications to be part of the bigger ecosystem. A unified and modular core engine with a global design capable of onboarding all LoBs facilitates operational efficiency, which in turn helps add agility to support market and product expansion.

To that end, payers can follow the below guiderails:

- A global business process design should be set up as a base.
- LoB-specific designs for business-specific nuances and requirements should be addressed by carving out specific sub-processes that are controlled by a rules-driven framework or through a separate instance for the LoB.
- A structured hierarchy framework such as 'Group-Region' and 'Parent-Child' hierarchies will facilitate the accommodation of LoB, specific market segments, and region classifications.

This is best achieved by designing claims systems like a 'highway,' where multiple entry and exit points can be added to meet the needs of different functions.

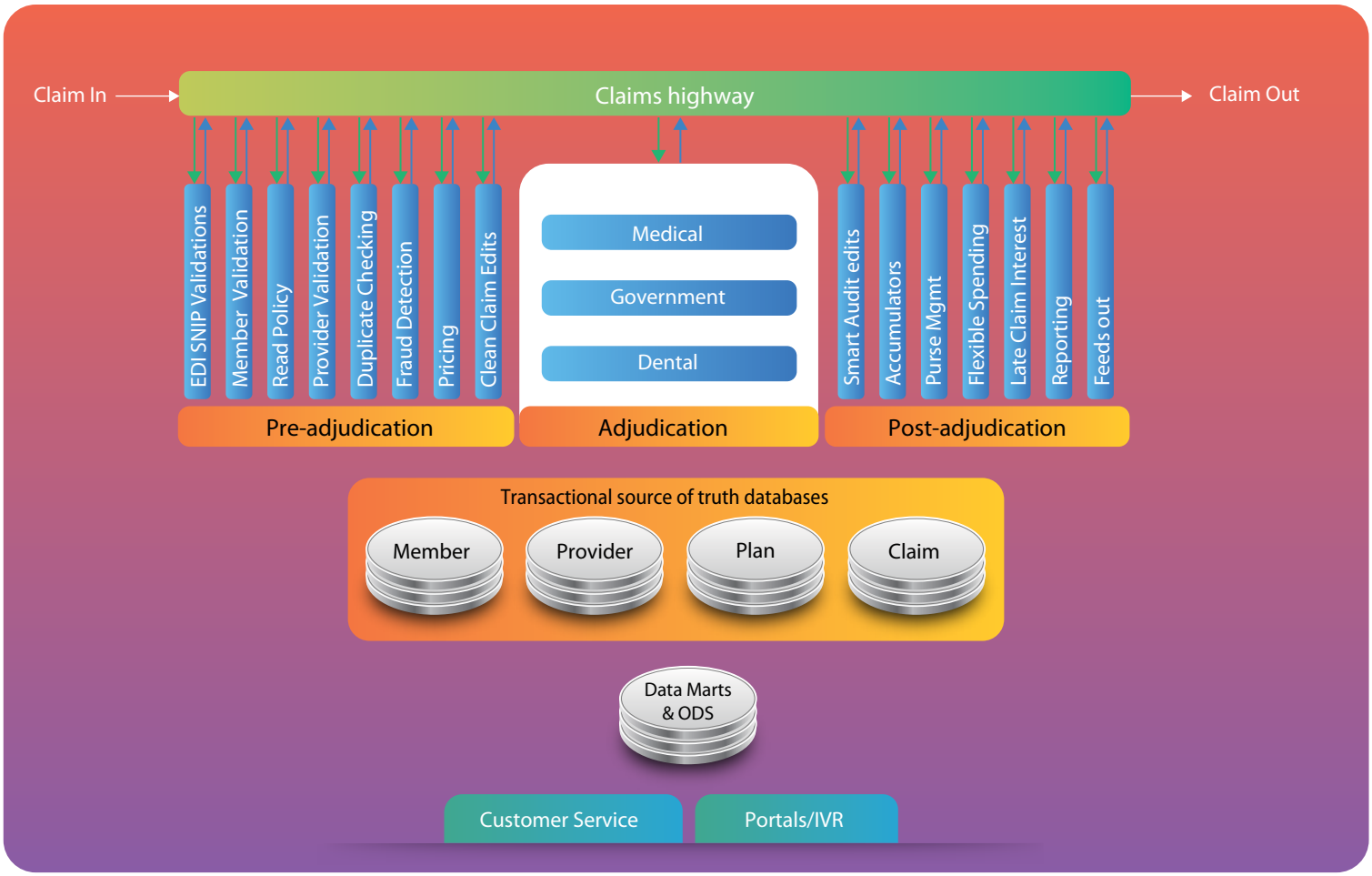

Figure 1: *A unified claims platform*

As payers rationalize and transform their application landscape of claims systems, they should look at eight 'must-do's for successful execution:

1. Achieving business outcomes through incremental value delivery
2. Simplifying business processes by understanding current processes and focusing on the opportunity to change; being flexible without compromising on system performance and throughput
3. Reviewing products and services rules during the extraction and rationalization process
4. Adapting to leverage Out-Of-The-Box capabilities of the chosen COTS product, while being prepared to change the existing ways of doing business
5. Defining clear strategies for data and basing architectural decisions after analysing all dimensions
6. Focusing on systems and business coexistence
7. Starting to test early and ensure adherence to quality and review processes along with leveraging automation
8. Enabling decision velocity through highly empowered project teams

Exceptions to the rule

Medical and dental claims can potentially be processed on the same engine, however, there are certain benefits to keeping them on separate engines. One of which is that it simplifies the process if payers decide to either divest or integrate with other dental plans.

Commercial and government LoBs can also be processed on separate engines or different instances of the same engine. This ensures flexibility in processing the claims, while addressing changes to the growth strategy, such as increasing focus, entering/exiting government LoB, and compliance with regulatory mandates by CMS.

Conclusion

With their legacy claims processing solutions, payers will not be able to compete against digital disruptors and adapt to the rapidly-changing landscape. They lack support for critical capabilities such as value-based payment and APIs for nimble collaboration. It is clear that efforts to transform their organizations' value proposition from claims administrator to health-value orchestrator must be accelerated. Ensuring the 'CORE & IMMUNE' aspects during this ecosystem modernization will help payers in accelerating time to market and scale in the future.

About The Author

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