

## ***Stop Wasting Human Resources on Claims Statusing***

### **Abstract**

This paper examines the problem inherent in both the traditional and automated methods of claims statusing in the healthcare industry, and offers a unique and modern solution to said problem.

### **The Problem at a Glance**

The current solutions for claims statusing encompass a traditional approach executed by multiple human administrators, and an automated one executed by self-configured software robots via an RPA platform.

The traditional method requiring manual user intervention is error-prone and time consuming, while current automated platforms require trained employees or third-party consultants to configure and operate software robots, which have little guarantee of working properly between disparate healthcare systems and portals.

### **Background**

As our nation and economy has grown, the healthcare industry has grown in volume and complexity. Healthcare organizations are forced to use many disparate systems that fail to share data efficiently, putting organizations at risk of falling short of the demands of modern healthcare.<sup>1</sup>

These disparate systems create a complicated workflow that requires an administrator to bounce between each system when attempting to process a claim. The tedious, manual nature of this flow is slow and inevitably yields a number of human errors, which is ultimately very costly to healthcare providers and their partners. In fact, “according to the American Medical Association, a 20% error rate among health insurers represents an intolerable level of inefficiency that causes a loss of around \$17 billion each year.”<sup>2</sup> The bottom line is that human workers are simply unsuited for these types of menial, repetitive tasks.

Finally, beyond the financial loss, there is often loss of crucial data. “In the current reimbursement system, either a single analyst or a group of analysts have to consolidate through a heap of lists and reports and make meaningful connections for filing. The lengthy processes cause crucial information to be lost, wastes employee time that can be put to better

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<sup>1</sup> Origami Risk, 3 Reasons to Integrate Healthcare Claims Management.

<https://www.origamirisk.com/post/3-reasons-to-integrate-healthcare-incident-reporting-and-healthcare-claims-management/>

<sup>2</sup> MarketWatch, Medical Claims Processing Overview 2020.

<https://www.marketwatch.com/press-release/medical-claims-processing-services-market-overview-2020--size-share-competitive-analysis-growth-insights-leading-players-upcoming-trends-and-opportunity-industry-demand-by-type-component-delivery-model-and-regional-forecast-to-2026-2020-01-17>

use, delays patient care, causes extreme confusion on the right protocols and prevents consumer satisfaction. Incorrect information puts a further burden on medical claims clearing houses.”<sup>3</sup>

## **The Curated Solution**

With recent advances in technology, automation presents the most promising solution. Instead of human administrators, build virtual administrators that can follow all the rules of the process with consistently accurate results, and superhuman speed and efficiency. This is no longer a novel solution. It is possible to sign up for a Robotic Process Automation solution today, download the software, and begin configuring your very own software robot.

And yet, it’s not that simple. Configuration entails training an employee to instantiate and configure a bot, building or buying the costly infrastructure for running the bots, and then to consistently monitor and maintain that bot. These time consuming and costly endeavors are highly reliant on the talent, time, and local resources available to scale a healthcare organization’s “bot” program when hundreds of other priorities may supersede the building of this new cost center.

However, there is another approach to robotic process automation that is gaining traction. Instead of a one-size-fits-all bot solution dependent on the training and competency of internal IT professionals, a company can now partner with experienced technology providers to build custom bots that fit their exact needs. This addresses the above stated issues in one swoop. An organization then no longer needs to worry about human errors, nor about hiring additional employees to keep up with claims processing. And it eliminates the need for trained employees to configure and operate any bots themselves. Best of all, the management of bots on payer portals or sites is maintained centrally, ensuring issues are proactively identified and resolved once and for all, rather than requiring each healthcare organization to build/rebuild bots when changes are rolled out.

## **Case Study**

Simple Fractal has successfully implemented the proposed custom solution above. One such success story follows.

One of our recent clients is a national infusion therapy provider focused on oncology with revenue in the hundreds of millions. They provide a variety of treatments to hundreds of healthcare partners who then administer those treatments at their facilities. As a result of this structure, the volume of claims and related dollar amounts are significant for the many ongoing

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<sup>3</sup> OSP, The Best Approach to Automate Healthcare Medical Claims Management Software.  
<https://www.osplabs.com/insights/the-best-approach-to-automate-healthcare-medical-claims-management-software/>

therapy sessions that need regular confirmation on claim status typically only available directly in the payer portal.

Before our partnership, our client was handling this process entirely manually. They had roughly forty employees handling claims by pulling an internal accounts receivable (AR) report, choosing from hundreds of logins from their list of partners, logging into dozens of payer portals, looking up a claim with an open balance, making sure it matched the AR report, returning to their patient management system (AdvancedMD in this case), and finally logging a status code and often a note.

From the above sentence alone, one gets a sense of the manual, tedious nature of these tasks. And that is the best case scenario. Often the process is stalled by mismatches between the portal and the AR report, site loading issues, and human errors in the claim search process, to name a few.

When Simple Fractal entered the scene, our client's claim statusing process was becoming untenable; riddled with errors, which slowed an already languid workflow. While the client considered the merits of using UiPath vs. Simple Fractal as an RPA solution, we worked closely with them to define proper business logic for the numerous payer portals and edge cases that could occur. In the end, the client decided to enlist Simple Fractal, a smaller tech provider, over a big player like UiPath due to the promise of a digital workforce that could be minutely customized, and expertly maintained.

On the first production run, our bots were able to successfully process 70,000 services across 7,300 visits and retrieve 4,000+ explanations of benefits (EOB) documents in a matter of hours. As a result, our client is now able to process claims on a weekly basis where it used to occur every few months. The reason is simple; the bot does not take breaks, call in sick, or work normal business hours. The bots can look up a status, retrieve an EOB, and drive data back to AdvancedMD in less than a minute while it takes a human somewhere around 5-7 minutes to do so. Furthermore, a bot can clone itself 100x over to divide and conquer the work in parallel for much faster results.

During the process, the automated workers also interpreted the data from the payer sites, and drove it back into AdvancedMD for detailed, customized statusing to properly alert users when a specific human intervention is needed. This is an important distinction between bespoke solutions and off-the-shelf RPA solutions on the market. While it's certainly possible to achieve success with a generic bot solution, the boost in value provided by an end-to-end solution that drives third-party payer data back into the client's system is undeniable.

Finally, the client's most recent bot run achieved 99.9% accuracy in claims status processing and 100% consistency of data being correctly extracted and posted to the appropriate places.

## Implementation

Due to the confidential and complex nature of the healthcare industry, it is important to focus on a full service solution. For the client, securing a maintained digital workforce instead of the headache of configuring and maintaining a pre-packaged suite of bots makes for a more robust solution. In this context, full service means the following:

- Discovery in order to understand the client's needs, software systems, workflow, and business case.
- Consultation for priming workflow processes for automation to ensure robustness and efficiency.
- Implementation planning and speccing.
- Integrating and building the digital workforce.
- Ongoing maintenance.

The process starts with deep discovery of the processes targeted for automation. Subsequently, both parties devise a plan for the structure and flow of the automated process together. When all specifications and scope are agreed upon, the tech partner builds out the bot systems, and executes several rounds of dry runs to ensure stability and accuracy before deploying to production. The process from deep discovery to delivery acceptance typically spans 3-6 months. Once the digital workforce is performing at peak capacity, the tech partner keeps a close eye on it through advanced systems monitoring to detect any breakages and keep the bots operational for years to come.

Perhaps the most important piece of what a specialized, full-service RPA provider can do for their clients is the reusable nature of the software combined with the ability to customize where needed.

The customization piece often occurs in the input and output segment of the bot flow. For example, bots can be triggered by an internal AR report, whose format can vary widely between organizations. Similarly, a bespoke solution can offer complete customization of the interpretation and entry of data from a bot's run into a particular practice management system and workflow.

At the same time, the reusable nature of the software means that healthcare organizations do not need to reinvent the wheel of automating similar tasks. For instance, once a robust bot suite has been built to handle navigating and extracting data from a portal like

United Healthcare or Availity, that same bot can be used for other healthcare providers with the same payers, without the concern of configuring or building out a new bot from scratch.

## **Conclusion**

It is already evident that automation is going to revolutionize the healthcare industry among many others. In fact it is estimated that specifically incorporating automation into claims management processes “can result in a 29% reduction in failed claims and eliminate around 200K hours of manual reviews, which sums up to around \$17 million of business savings per year for large providers.”<sup>4</sup>

The question is how and by whom. The bigger RPA platforms have reigned supreme for some time in the financial sector, but they have been largely unsuccessful in the healthcare industry. This is likely due to the complicated and disparate nature of healthcare systems and services.

Smaller RPA providers, on the other hand, can offer custom integration of specialized bots to tackle these issues by working closely with the client. In addition, these solutions come with a proven track record of success for a particular use case such as claims statusing, along with the upside of building a closer, strategic automation partnership between the healthcare organization and the RPA provider that spans multiple use cases.

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<sup>4</sup> Romexsoft, How to Automate Health Insurance Claim Management  
<https://www.romexsoft.com/blog/automate-health-insurance-claim-management/>