



CASE STUDY



## Streamlined Precision in Medical Equipment Data Extraction: A Case Study



**We have been so impressed by Notable's excellent customer support and just how quickly and dramatically we've been able to see results.**



**Lindsey Moon,**  
Director of Support Services, Apria

### Background

Apria is one of the nation's largest providers of home medical equipment and related services. It serves more than 2 million patients annually and operates 280 branch locations across the country. Apria works with healthcare providers, insurance companies, and patients to ensure patients receive the medical devices they need with proper financial coverage.

## The Problem

Coordinating various parties and consulting healthcare records necessitates processing a large volume of documents—almost 20 million pages per year. The issue is not only the number of documents, but also their format. Much of the data Apria needs for its processes is unstructured.

Part of the challenge lies in the healthcare field's preference for analog technologies, which aren't just more familiar but also offer security and privacy advantages. Apria receives approximately 70 percent of its order entries via fax rather than a digital format.

Along with basic identifying information about patients, these documents contain important information that must be recorded and considered in order to make determinations—such as whether a patient qualifies for insurance coverage of a medical device.

Unfortunately, the relevant data is typically surrounded by a lot of irrelevant text, and the analog format means there is no option to digitally search for the relevant data points. Manually sifting through unstructured information to perform necessary data extraction and entry presented significant issues for Apria:

### Misuse of Personnel

Before partnering with Notable, Apria's staff spent considerable time looking through documents—some of them well over 100 pages—to find and enter relevant data into their systems. This was time they could otherwise have spent getting authorization, calling patients, and performing other valuable tasks. Apria needed to overhaul its process in order to make better use of their employees.

### Slow Processing

Time-consuming manual data entry also meant slower handling times and extended revenue cycles. An important consideration for medical billing is timely filing limits, which make it essential that data is processed accurately within a given deadline. Otherwise, it can result in a revenue adjustment. Apria needed a solution that would eliminate wasted time and accelerate the revenue cycle.

### Errors

Finally, manual data entry is prone to human error. A moment of distraction or a wrong keystroke can lead to mistakes and confusion. Fixing these errors results in wasted time and money. Apria's System Support Service Director Lindsey Moon explained, "Mistakes during order entry have serious downstream effects that impact the life of the order."



**We searched for over ten years and Notable is the only company on the market that can handle non-standard pages.**



**Mark Litkovitz,**  
EVP, CIO of Apria

## The Solution

Apria first sought to solve its problem with a basic optical character recognition (OCR) solution, but this fell short. According to Moon, “It would just scrape the data and put it somewhere, but it wasn’t intuitive. It wasn’t finding the right keywords. It wasn’t really providing the efficiency that we were looking for to consume the data, understand it, and put it in the right spots.”

With Notable Systems, Apria found a true solution that streamlined the process and improved the experience for staff and patients alike.

### OCR+ and Interactive Document Review

With Notable Systems, Apria found a solution that addressed all of its pain points. The solution:

1. **Uses OCR technology to convert faxes and other documents into clean, machine-readable PDFs.**
2. **Finds and highlights relevant keywords according to Apria’s qualification guide.**
3. **Locates often hard-to-find fields necessary for order entry and qualification, such as diagnosis codes, patient demographic information, and physician information.**
4. **Generates an indexed cover sheet, making the relevant data points easily accessible on the surface of every document.**

Lindsey Moon explains, “We used eyes to scan, and now, Notable can do that for us, and it pulls the qualification keywords to the front cover page for us, so I don’t have to scan supporting pages of documents. I can see it all summarized at the top in a very usable format. So it’s been a game changer for us.”

It’s important to note that Apria’s ideal approach isn’t purely automated. As Moon points out, “I still want humans to make that final judgment call before we send it out the door.” She explains that the goal for Apria “was not reduction in staff, but really empowering our staff to get more of the hard stuff done.” Though people are still integral to the process, Notable’s solution revolutionized its approach to medical equipment data extraction.



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## The Results

Apria started noticing results right away and were immediately impressed. Through its partnership with Notable Systems, Apria has achieved some valuable benefits:

### Efficiency

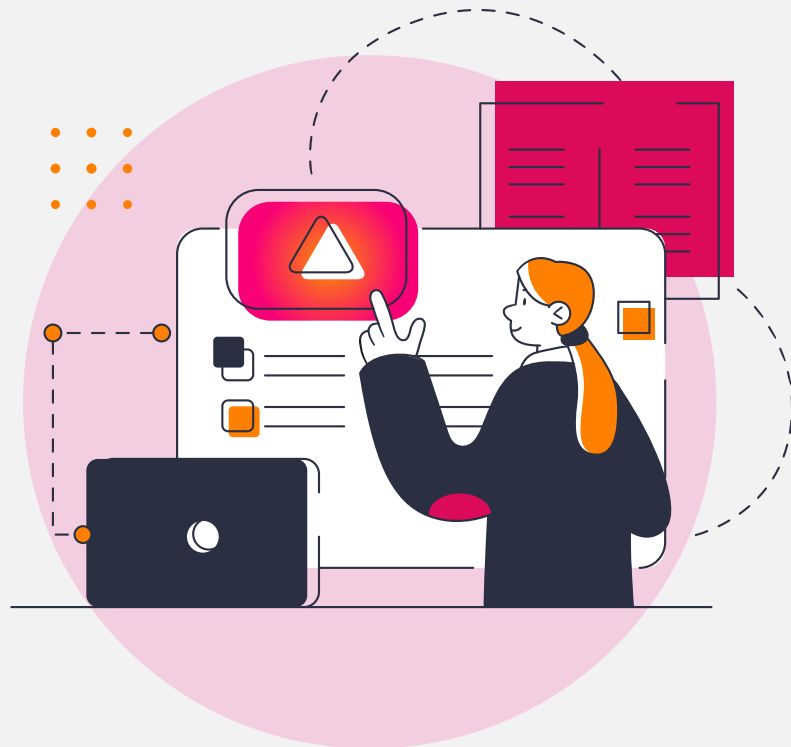
Through Notable's intelligent automation, Apria is saving over a minute per order entry and over five minutes per pre-authorization, resulting in 200,000 fewer hours per year spent on order entry and pre-authorization! Staff can now dedicate this freed-up time to valuable tasks such as providing excellent customer service and patient education.

### Speed

Greater efficiency also means a more expedient turnaround time for orders. Apria increased its sales cycle efficiency for over \$800 million worth of annual sales.

### Accuracy

By leveraging automation, Apria was also able to reduce minor mistakes and typos in data entry that could add up significantly across 2 million orders. Now, data is seamlessly extracted from documents and accurately recorded in an indexed cover page.



“

**We're going to see a lifetime value increase because we don't have downstream impacts from entering (data) wrong upfront.**

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**Lindsey Moon,**  
Director of Support Services, Apria

## The Future

Apria has high hopes for the future and the positive ripple effects of Notable's solution. Looking ahead, Moon noted, "We're going to see a lifetime value increase because we don't have downstream impacts from entering [data] wrong upfront."

Given the success of Notable's OCR+ solution and interactive document review, Apria is looking to leverage Notable Systems technology in other ways. One solution it has high hopes for is smart routing. Because Apria has branches across the country, it must distribute orders to the appropriate locations based on where patients live.

Notable's solution automatically finds the correct zip code in a document and routes it to the

appropriate destination. Moon noted that the smart routing is already about 98-99 percent accurate—more accurate than the previous manual approach. In fact, Notable's technology can identify instances where a zip code was written down incorrectly and fix the error to correctly route the order.

Overall, Apria has confidence in its partnership with Notable and how much value this partnership can deliver over time. Moon emphasized, "We have been so impressed by Notable's excellent customer support and just how quickly and dramatically we've been able to see results."

**Want to see how Notable Systems  
can help your business?**

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