Case Study:

Platform Modernization: Clearinghouses Reducing Costs While Executing Strategy

OrboAccess
Healthcare Payments

OrboGraph
Intelligent Payment Automation
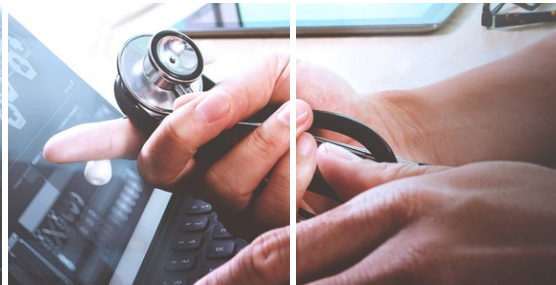
Executive Summary

Three initiatives involving platform modernization for payment and remittance electronification are summarized in this document. Healthcare claims clearinghouses continue to search for new service offerings and deployment opportunities of artificial intelligence (AI) as a means to reduce costs and drive strategic value to their clients. Additionally, with the COVID-19 pandemic affecting business across the globe, these clearinghouses benefited from solutions that are pandemic and natural disaster resistant.

OrboGraph was selected by three major clearinghouses for their automation strategy involving PDF and paper-originated EOB conversion as well as correspondence letter processing, hosted on OrboGraph's Healthcare Payment Automation Center (HPAC).

The concept of partnering with a hosted AI platform using a SaaS pricing model for these clearinghouses has great appeal, as it minimizes initial investment, delivers immediate benefit, and reduces manual processing costs dramatically.

One of the largest pitfalls of the electronic clearinghouse function is its inability to process paper EOBs, thus missing out on a large portion of the claim data flow. OrboGraph supports the electronification of paper remits for clearinghouse clients, enabling a complete electronic remit clearinghouse solution.

Supporting Industry Data: OrboGraph Projects Growth of PDF and Paper Volumes for RCM
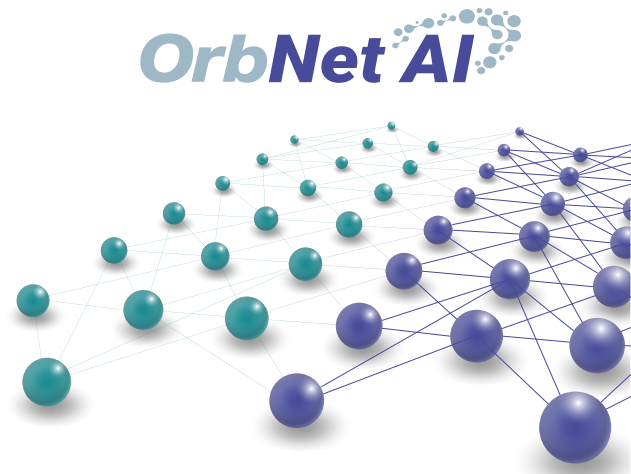
Client profiles are summarized below:

- Industry-Leading Clearinghouse -- a Subsidiary of a U.S.-Based Fortune 500 BPO Service Provider

- Healthcare Solutions Provider with Clinical Data Clearinghouse

- A Traditional RCM Clearinghouse

Client Profile #1: Industry-Leading Clearinghouse -- a Subsidiary of a US-Based Fortune 500 BPO Service Provider

An RCM company that bills itself as "more than just a clearinghouse," this OrboGraph partner supports its clients in blending claims processing with revenue management and analytics software, designed to accelerate claim payment rates and improve AR accuracy levels. This company sells their solutions as a bundled EOB conversion with contract analysis for customers and their analytics services rely on high levels of accuracy and efficient remittance processing.

1 ### Challenge:

This clearinghouse began their OrboGraph partnership because of their struggles with paper remit rates that reached 30%+. With their contract compliance solution relying on ERAs (835 EDI files), a prevalent gap was apparent as they were missing 30% of providers' remitted claims. To address this challenge and improve analytics, they needed to increase electronic remittance coverage.

2 ### Customization:

By collaborating with OrboGraph, this clearinghouse developed a solution to close the claim gap by converting paper EOBs to ERA and integrating the results holistically into their contract analysis product -- with the end goal of direct lift on recovered revenue and improved downstream BI. This clearinghouse leveraged OrboGraph's OrboAccess technology to deliver high-quality EOB conversion, patient payments conversion, and correspondence indexing (extracting key fields from non-ANSI correspondence letters that are indexed and categorized by type of letter), and hosts the data on their rebranded OrboGraph Healthcare Payment Automation Center (HPAC) Portal.

3 ### Results:

The results were improved downstream business and denial intelligence from the automated payment posting functionality. Their providers receive 100% of their contract analysis and audit processes, along with a direct lift on both identified and recovered revenue from more electronic remits being fed into the audit process. This has led to a shortened audit process, as they now possess a more complete claim population represented in the system, yielding a holistic view into their underpayment landscape. Furthermore, by reducing the chances of underpayment, they provide direct benefit to providers through increased accuracy in patient billing and communications.

From the marketing & sales perspective, their partnership with OrboGraph has allowed them to mature from a production-oriented approach -- focused on direct mail and email to drive activity through the pre-sale -- to an OrboGraph-supported demonstration process. They now take an increasingly strategic approach through individual partnerships with other PMS companies and RCM companies while leveraging bundled products, which are the engine behind the bulk of the business driven through their partner program.

Client Profile #2: Healthcare Solutions Provider with Clinical Data Clearinghouse

As a US-based company that provides full BPO outsourcing for over 300 health systems, this company helps their clients optimize scale, achieve efficiency, and reduce performance risk while thriving in an increasingly complex and challenging healthcare environment.

1

Challenge:

Like many other businesses in the world, this clearinghouse -- specifically their RCM processes and functions -- was greatly affected by the COVID-19 pandemic. With the shutdown of offices not just in the US but across the world, the clearinghouse experienced issues and delays with its current vendor -- which was unable to perform tasks from a work-from-home environment due to HIPAA. To ensure business continuity, HIPAA compliance, and build processes that are pandemic-resistant, this clearinghouse embarked on the initiative to transition from its current offshore business process operation (BPO) vendor to a technology vendor. The clearinghouse understood that in order to ensure business continuity with minimum delays, it must leverage AI technologies.

2

Response:

OrboGraph's AI technology minimizes the need for manual intervention in the processing and electronification of paper-based remittances and EOBs/EOPs, allowing the clearinghouse to continue processing with minimum interruptions or delays -- even during the COVID-19 pandemic. In addition to its technology, OrboGraph deploys a globally-distributed network of vendors for quality assurance to ensure quality, enabling the clearinghouse to reach 99+% accuracy levels for their data.

Additionally, the clearinghouse is leveraging the advanced correspondence indexing solution, including self-service categorization, to increase its offerings and value to its clients. The data is also being utilized by downstream BI solutions.

3

Results:

By transitioning to AI technology, the clearinghouse has the capability to ensure that its processing of paper-remits and EOBs/EOPs is resistant to pandemics like COVID-19 and other natural disasters. They are also benefiting from the increase in data quality from both remits and correspondence letters to grow the value of its business intelligence and analytics.

Additionally, the AI technology has reduced the amount of time for onboarding and has the ability to scale with the business as the clearinghouse looks to increase its market share.

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Client Profile #3: A Traditional RCM Clearinghouse

This traditional clearinghouse was focused on taking advantage of immediate opportunities in their market. This meant starting from scratch and working with a partner to build a long-term solution that would allow them to move past paper conversion and provide full clearinghouse ERA functionality to their hospital and health system customer base.

This tech-reseller examined their competition and saw that the ability to convert paper EOBs was a standard functionality offered. They understood the need to offer a full clearinghouse solution and, in response, chose OrboGraph because of the clear concept of ERA conversion and revenue-focused value. Providing these functions was critical in both acquiring new customers and retaining their existing customer base.

1 Challenge:

Most of their hospitals are working with a bank lockbox, which involves processing and posting large volumes of scanned copies of checks/EOBs. For multi-faceted hospitals and systems dealing with large volumes, decentralized business processes, multiple tax IDs, and multiple facilities, this created an incredibly complex process.

2 Customization:

Leveraging OrboGraph's neural network technology, their clients have the ability to work with any bank and offer decentralized health systems a path to uniform processes, enabling them to adapt to a changing reimbursement environment and eliminating manual efforts around EOB scanning and image transmission. Now, their data flow works seamlessly for the hospital customer.

3 Integration Insights:

OrboGraph effectively functions as a payer in their network. Data flow works seamlessly for the end hospital customer thanks to the use of a Large Central Aggregator (LCA). In the LCA configuration, a provider (or bank partner) scans paper EOBs and electronically transmits through a lockbox adapter, replacing the work of manual processing or outsourcing. This approach is flexible enough to adapt to any medical lockbox servicing a hospital or system while still providing the benefits of removing manual effort associated with EOB scanning and image transmission.

4 Results:

OrboGraph's solution facilitates a centralized approach to EOB conversion, functioning as a "traffic manager," replacing disparate relationships with each client. The organization works with a central pipeline to control streaming of all client work while receiving results -- enabling dissemination and routing of results to each respective client. Additionally, correspondence letters are now automatically indexed and categorized, create the ability for clients to assign letters to users, add free-text comments, update the status of working letters, and even assign a customizable "last action" for tracking purposes.

Their new approach has resulted in both a revenue opportunity and a chance to expand and complete their product offerings.

A Competitive Advantage

These companies, and their clients, gain a competitive advantage by leveraging the following capabilities:

- **OrbNet AI**: Based on highly targeted Artificial Neural Networks (ANN) and deep learning models, OrbNet AI incorporates specially trained Convolutional Neural Networks (CNN) and Recurrent Neural Networks (RNN), along with field detection and text classification to deliver improved posting accuracy. The automation rates of this technology enable scalable growth without increasing staffing levels.

- **Self-Learning**: Ability to learn layouts of EOBs both via AI and programmatically, including self correction based on production sampling. This capability minimizes exception items that require manual intervention.

- **Crosswalk Conversion**: Translating proprietary codes and complex verbiage on unregulated EOB/EOPs from paper payers to standard electronic codes that map to electronic payers. This function can be used as is or packaged by RCM companies as part of a denial management service in conjunction with billing and collections, holistic reporting, and any function that relies on the ERA. This crosswalking functionality replaces hard-to-maintain human expertise with smart automation.

- **Provider Override**: Our signature method of interpreting payer adjustments, we reach beyond proprietary codes, reading paper verbiage using AI technology and standardize all translation into ANSI. Once implemented, this capability provides a distinct advantage in the ability to override default translation with custom codes, erasing the need for manual interpretation and enabling fluent translation of payer communications to meet all practice management varying workflows.

- **HPAC Portal**: Scalable and resilient cloud-based data center which hosts the OrboAccess suite of healthcare payment automation solutions including Access EOB Conversion, Access Correspondence Letters and Access Denial Intelligence. Leverages enterprise-grade infrastructure to provide a virtual and transparent "manufacturing facility" that allows large RCM companies visibility into our processes, obtaining the status of every item, identifying processing stage, flagging outliers, and more. Functions on Amazon Web Services (AWS) for cloud deployment to take advantage of security, accessibility, maintainability, reliability and scalability.
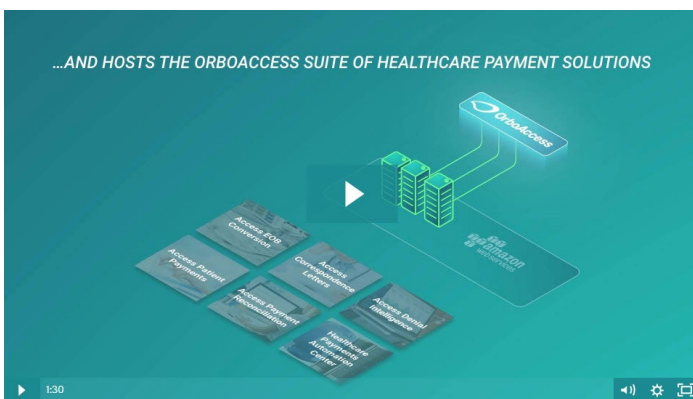
Watch Healthcare Payments Automation Center (HPAC) Video

Watch Access EOB Conversion Video

Additional Resources from [Modernizing RCM with AI:](#)

- Blog: [Solving Revenue Cycle Accuracy Problems](#)
- Blog: [Prescribing a Treatment to the Pain of EOBs](#)

Moving Forward with OrboGraph

To learn more about the specific solutions that were applied in these three cases, we invite you to explore our flagship healthcare offerings.

Access EOB Conversion

Providing the power to extract data from scanned images or PDF documents created from paper-based EOBs and EOPs, Access EOB delivers EDI 835 ERA files that are ready for cash posting in practice management (PM) and hospital information systems (HIS). Access EOB is used for:

- Daily conversion and electronification of EOBs and EOPs from insurance companies
- Daily conversion for downstream applications, i.e. denial management and BI
- Bulk processing of high volume EOB/EOP paper documents as an on-demand service
- EOB indexing for environments needing access to EOB images via searchable field criteria

Modern Dashboard technology allows system administrators and aggregators to analyze trends while our Virtual EOB facilitates easy viewing at the transaction level, greatly simplifying RCM research.

Get to Know Access EOB Conversion

Access Correspondence Letters

Solve denial problems by extracting index data from images of paper-based correspondence. Access Correspondence Letters eliminates the need for manual input into billing and denial systems by pulling information from each letter and creating a text file (or "zero dollar" EDI 835) that easily automates the importing into content management systems.

Improve processing time through enhanced workflow management that tracks approvals and empowers managers.

Get to Know Access Correspondence Letters

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