



## Healthcare's "New" Strategic Assets: Explanation of Benefit Forms (EOBs/EOPs) and Correspondence Letters



**For providers, RCM  
Companies, BPO's,  
bank lockboxes,  
billers and  
clearinghouses**

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## 1. Introduction

The insurance payment ecosystem has hit a “ceiling” for native electronic adoption...

Healthcare payment electronification efforts have failed in its goals to achieve 100% utilization of ACH and EDI 835 files. To cope, providers are outsourcing images of paper and PDF-originated explanation of benefit forms (EOBs/EOPs) and correspondence letters in record volumes to BPOs, clearinghouses, banks, billers and revenue cycle companies.

**The realization: Paper and PDF payments and remittances are here to stay. The marketplace should shift from a mindset of paper as a burden, to one of efficiency and treat these documents as an organizational asset.**

Later in this document, you will see that paper and PDF-originated remits will most likely see *increases* over the next two to four years! It is now critical to address electronification as a strategy to achieve true automation and keep unit costs from rising; controlling costs with a focus on attaining straight-through processing (STP) levels of efficiency in payment posting of payer reimbursements.

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**“A fresh look at process improvement that leverages AI technologies can revamp legacy, manual processes into a modernized hybrid, straight-through processing model.”**

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A fresh look at process improvements that leverage Artificial Intelligence (AI) technologies can revamp legacy, manual processes into a modernized straight-through processing model. This approach can now deliver a unit cost reduction for processing remittances at a level which approaches native EDI electronification - **an amazing breakthrough for any company serving the RCM space!**



## 2. The Paper Paradox - Diminishing Returns

Much of the revenue cycle is electronic, but expensive, paper and PDF-based payments and remittances are still heavily used by payers to reimburse healthcare providers. **Why, in this age of electrification are we still addressing this problem? Two words: diminishing returns.**

Providers must allocate resources to test and validate EDI 835 file generation from every payer. It's time consuming and costly but very beneficial when critical mass payers adjudicate and pay thousands of claims. When smaller payers or select payers are encountered, the overhead to "certify their native EDI 835 files" becomes too onerous for the provider to complete the entire circuit at a low cost.

Imagine repeating a certification cycle with multiple iterations for 100+ small payers. It's actually cheaper to **keep** the paper!

*However, there is a major drawback to paper and PDF EOBs/EOPs and correspondence letters. These documents limit a provider or RCM company, because data cannot be ingested into downstream business intelligence (BI) systems.* That means missing data elements for reporting and "leakage", making it very difficult to maximize receivable collections.

## 3. Paper Across the RCM Enterprise

Wasted spending in healthcare has cracked \$1 trillion annually – an amount that's over 2X the funding of the Medicaid program. Of that waste, between 20% and 25% is attributed to administration alone, and the numbers appear to be rising – in no small part due to the high cost of paper and PDF-related inefficiencies.

According to the 2018 CAQH Index, only 63% of claim payments are completed electronically while 48% of remittance advices are now generated as electronic remittance advices (ERA) vs. EOB/EOPs – a number that dropped from 56% in 2017. **Healthcare still relies on paper and PDF documents, and according to CAQH, there is a potential of \$9.8 billion in annual savings from greater adoption of electronic transactions.**

To compound the challenge, OrboGraph modeled out paper volume projections for the next 2-4 years. Our prediction: a 3% increase based on natural claim volume growth combined with minimal gains in native EDI 835 files, along with 100% reliance on paper-based correspondence letters. It is time to get serious about handling paper and PDF remits as a strategic asset.

## 4. 10 Costly Steps of Human Data Entry

Posting remittance advice manually is no simple task. The process requires healthcare coding knowledge and is costly. **The costs of manually posting a single claim from an EOB/EOP can approach \$3.00 per claim** due to complications of the following steps:

1. Searching for the responsible party
2. Entering the patient ID
3. Finding the date of service
4. Selecting the correct service line
5. Entering payment amounts
6. Entering transaction information
7. Entering adjusted amount
8. Entering amount for balance billing
9. Repeating steps 4-8 as needed
10. Proceeding to the next manual task

Correspondence letters are also time consuming and costly for providers. Many providers defer these letters to a denials and adjudication department which cannot always keep up with the workload. Ignoring or loosely archiving correspondence letters facilitates denied claim losses! Additionally, these documents are many times not integrated with a strong archival system and managed as paper.

**But there are solutions to these issues...**



## 5. RCM Automation with Artificial Intelligence

To put it bluntly, many providers, clearinghouses, BPO's, banks, billers and revenue cycle companies have not updated their paper-based processing for years. This results in unnecessary lag times, posting errors, missing information, inefficient management practices and manual workarounds.

These are issues that should be driving strategic process improvements within organizations which electronify the data from the paper and PDF-originated documents.

Progressive revenue cycle companies, service bureaus, bank lockboxes billers and clearinghouses are **getting ahead of the game by responding with AI-powered solutions, specifically deep learning**, to cut back and even eliminate paper in those final, cost-draining corners of the revenue cycle. Although this is considered a hybrid method to achieve electronification, the costs can be very similar to native EDI file processing.

Those who are not modernizing their platforms, will not stay competitive.

## 6. The Business Case for Hybrid Electronification

According to the 2018 CAQH index, the cost to process a paper or PDF-originated EOB/EOP manually is \$2.99 per transaction. A native EDI file is estimated at \$1.15. The unit cost reduction for this function is estimated at \$1.84 per transaction.

Note that the cost of an AI-based solution which can extract data automatically from paper and PDF documents and create EDI 835 file output is generally around \$0.50. The savings rate of \$1.34 per transaction is easily achievable for hybrid electronification. Couple this with new scanning technologies on checks, and you can see a savings over \$1.50 per transaction.

High volume RCM companies and other outsourcing organizations can see tremendous value. These companies can see thousands of transactions per day. For just 1,000 transactions, the estimated savings can approach \$375,000 per year. Additionally, the overhead from managing data entry staffing can be reduced significantly.

Even smaller entities and providers with modest levels of paper and PDF-originated items can see potential savings as high as 50% for these functions, resulting in reallocation of resources to higher impact areas.

## 7. Eliminate the "Information Bottleneck"

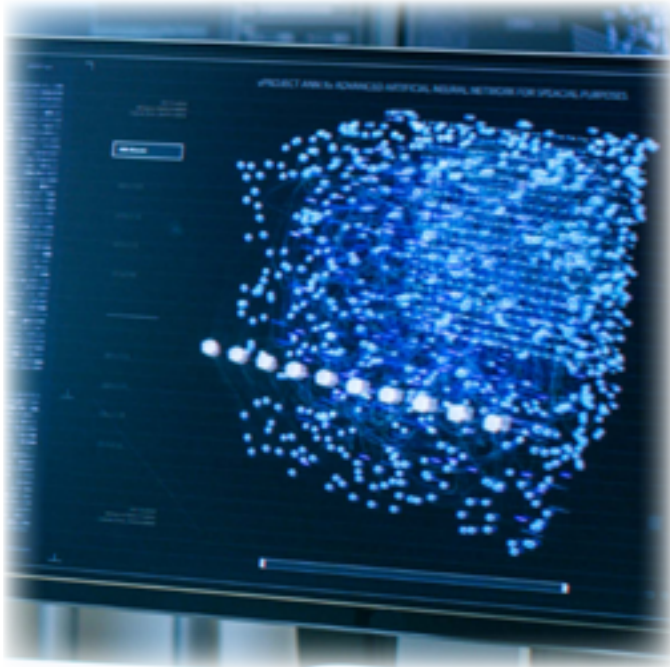
Paper and PDF-generated remits and letters can also cause an "information bottleneck", because manual posting of remittance data directly into hospital information systems (HIS), patient accounting systems (PAS), or practice management systems (PMS), many times cannot be shared across other departments or applications in the revenue cycle.

By not sharing this data, denial management systems, 3rd party reporting systems, and BI solutions cannot be fully leveraged. These ancillary systems provide stellar reporting accuracy and even predictive analytics.

## 8. The Provider and Bank Perspective Toward Hybrid Electronification

Providers (as receivers of checks and remits) and/or their medical lockbox vendors cannot eliminate mail extraction or check deposit processing when they receive 10-50% of their remits in paper or PDF. Because of this, improving processes by an incremental amount, i.e. 10%, 20% or 30%, only provides marginal value. Additionally, the overhead of manual processes remain, driving up unit costs for the limited paper and PDF-originated documents. To compound the issue, keyers are often less productive on the last 20%, because economies of scale cannot be achieved with selective volumes.

Providers and bank lockbox processors, both in-house and outsourced, benefit greatly when 100% automation is achieved and data is shared within their BI systems.



## 9. RCM Companies and BPO Perspectives

Straight-through, electronic processing holds benefits for revenue cycle servicers. Typically, these organizations have large data entry centers in the US or overseas. Like any in-house processor, **AI automation can improve efficiencies and cut costs associated with unnecessary paper-based processes**, but that is only the beginning.

Hybrid electronification allows a BPO to be more profitable and process higher volume fluctuations. These organizations have a hard time addressing high-volume days, while managing slow, mid-week periods. Meanwhile, signing a large client requires the need to hire, train and manage a new labor pool on paper-related processes - not exactly a “state-of-the-art” concept.

## 10. And Then There is the Payer

Note that payers do absorb a lot of cost when printing checks and EOBs. This is because the printing, bursting, preparation and mailing costs are part of the accounts payable function.

Payers get little empathy from providers, however. Providers just want the posting data and to get paid.

**Payers could also benefit from a hybrid electronification environment by sending only PDF versions of EOBs/EOPs** instead of shipping boxes of paper to lockboxes around the country. AI-enabled electronification can create EDI-835 files friendly to HIS and PMS systems. This takes the printing burden off the payer, and overall, the revenue cycle becomes more efficient.

As a side benefit, this will only improve the contract management process.

## 11. Hybrid Electronification Realized

Converting paper and PDF-originated remits and correspondence letters is why the **Healthcare Payment Automation Center (HPAC)** from OrboGraph and **OrboAccess** was created. AI-based Opti-Lift technology extracts service lines and transaction data from paper or PDF-originated EOBs/EOPs, correspondence letters, and checks. The technology creates a customizable, fully populated, EOB-friendly, EDI 835 payment file for automatic posting into hospital information, patient accounting or practice management systems which automatically updates medical account receivables.

The underlying technology for hybrid electronification:

- **AI & Deep Learning:** highly targeted models to automate the extraction of field data on EOBs and correspondence letters to levels approaching 99+%
- **Artificial Neural Networks (ANN), Convolutional Neural Networks (CNN) & Robotic Neural Networks (RNN):** neural networks designed to analyze visual imagery along with networks commonly used in speech recognition and natural language processing (NLP)
- **Layout Learning:** system capability to learn layouts of thousands of EOBs and know where to look for field data
- **Crosswalking:** automated field mapping of proprietary codes to ANSI code taken from EOB data



## 12. Moving Forward Into Electronification

As an RCM organization, **AI-enabled electronification should be on your short list.** These technologies transform the traditional operational workflow for healthcare payment processing and propel any organization managing these workflows into the next generation of revenue cycle electronification. It is easily linked with broader organizational strategies that prioritize electronic and digital interaction, yields identifiable and quantifiable hard results, and due to the data-oriented nature of revenue cycle, is an ideal fit for this branch of healthcare.

## 13. Take the REI Challenge

How do you think your organization scores relative to others in the payment processing space? Take the [Remittance Efficiency Index \(REI\) Challenge](#) to find out! Once you have your number, you can build a strategic plan to improve it! For a walk-through or review of your REI information, feel free to reach out to OrboGraph at [info@orbograph.com](mailto:info@orbograph.com).



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