# Electronic Transaction Savings Opportunities For Physician Practices

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## I. Introduction

A physician who currently relies on paper and telephone calls for insurance administration may be able to save more than \$42,000 a year through simple steps to increase electronic transactions for operations like claims submission, referral and preauthorization requests, and eligibility verification. These are savings that go right to the bottom line.

The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) require health plans to accept standard electronic transactions for basic insurance administration functions and to provide electronic responses at no extra charge or delay. The focus on HIPAA has provided a special impetus for physicians to assess potential savings from greater use of electronic transactions.

To help better understand the benefits of electronic transactions, Milliman, Inc. compared differences in the cost of manual and electronic transactions for a typical physician practice environment. The study considered six key transactions:

- Claims Submission;
- Eligibility Verification;
- Referral Certification;
- Preauthorization for Care;
- Claim Status; and
- Payment Posting.

This analysis found that implementation of electronic transactions can reduce the annual insurance administration costs by more than \$42,000 per physician. Although these savings may vary widely depending on practice specialty, employee productivity, existing use of technology, and other variables, these savings are significant enough to justify greater use of electronic transactions for many practices.

## II. Methods

Milliman developed a methodology for estimating the costs of manual and electronic transactions. For each of the six transactions considered, Milliman identified the tasks required to perform the transaction both manually and electronically.



The study found that for manual transactions, most practices follow similar processes. There is much greater variance among practices, however, in the use of technology, and the associated costs, for electronic transactions. In the most technologically advanced environment, many transactions are completely automated, effectively eliminating the need for staff involvement in processing. More commonly, however, technology improves efficiency by reducing some manual processes, but human intervention is still required.

For this study, Milliman assumed that office staff perform some administrative functions but, whenever possible, rely on electronic transactions for sending and receiving transaction communications instead of the telephone or mail. Fully automated practices may be able to achieve significantly greater savings.

In developing its estimates, Milliman:

- Identified the labor time and costs required to perform the tasks for both manual and electronic transactions
- Calculated the fully loaded time cost of labor including employee salary, benefits and payroll taxes, and general and administrative overhead
- Calculated the fully loaded cost per transaction, based on the estimated labor requirements. Electronic transaction costs included the cost of transaction fees and a 12-month amortization of set-up costs.
- Adjusted cost based on inflation factors to account for any differences in time between source data and the present

To validate its estimates, Milliman tested the results by observing administrative procedures in actual physician practices and medical groups.

For the study, Milliman made assumptions on the operating environment of the typical solo physician practice. Milliman's model practice may not represent other physician practices, specialties or operating models. Since the study results are dependent upon these assumptions, the actual savings of any given physician practice may differ from those presented in this report.

#### III. Results

Implementation of electronic transactions significantly reduces costs per insurance administration transaction. Milliman estimates per-transaction savings range from 50% to 90% depending on the complexity of the transaction. The results are shown in the chart below.





Manual vs. Electronic Per Transaction Costs

To quantify the savings achievable per physician, Milliman estimated the annual transaction volumes of a typical solo physician practice and then estimated the cost to perform these transactions manually and electronically. The annual cost for manual transactions was over \$70,000; the annual cost for electronic transactions was less than \$28,000. Subtracting the annual electronic cost from the annual manual cost resulted in savings of over \$42,000 per year from implementation electronic transactions, as indicated in the following table.

Manual Cost

Electronic Cost



	Manual Cost	Electronic Cost	Savings/ Transaction	Transactions Per Year	Estimated Annual Savings
Claims	\$6.63	\$2.90	\$3.73	6,200	\$23,124.21
Eligibility Verification	\$3.70	\$0.74	\$2.95	5 1,250	\$3,693.04
Referrals	\$8.30	\$2.07	\$6.22	2 1,000	\$6,223.17
Preauthorization	\$10.78	\$2.07	\$8.71	100	\$870.62
Payment Posting	\$2.96	\$1.48	\$1.49	4,340	\$6,456.59
Claim Status	\$3.70	\$0.37	\$3.33	620	\$2,065.59
TOTAL					\$42,433.23

#### Estimated Annual Savings from Electronic Transactions For Typical Physician Office Practice

The greatest savings occur for those transactions where technology eliminates telephone time such as eligibility verification and claim status checks for which electronic transactions result in 80% to 90% cost reductions. The study considered a fairly common practice environment, for which these are relatively low volume transactions with verification of insurance eligibility on only a subset of patients; and check claim status on only those claims unpaid after a certain number of days.

Higher volume transactions, such as payment posting and claims submission result in lower per-transaction savings, but contribute more significantly to aggregate savings. Electronic claims transactions alone account for over 50% of savings.

In addition to the per-transaction financial savings, Milliman identified other, harder to quantify, benefits accrued through greater use of technology. Examples include:

- Electronic claim submission reduces claim rejections and the need to resubmit claims multiple times.
- Electronic claim submission improves cash flow and reduces accounts receivable days because claims are paid more quickly.
- Electronic eligibility verification allows physicians to easily validate every patient's insurance eligibility on every visit reducing the collection and billing costs for patients without coverage, and reducing bad debt.
- Electronic transactions reduce the office staff telephone time.



• Electronic payment posting significantly reduces accounts receivable errors, and improves customer satisfaction.

## **IV.Conclusion**

Physician practices have significant administrative savings opportunities in replacing traditional paper processing with electronic transactions. HIPAA requires all healthcare payers to establish electronic transaction capabilities, providing a further impetus for physician practices to take advantage of electronic transaction savings. Milliman analyzed both manual and electronic transaction costs for a typical physician office without a fully automated practice management system. Even in this situation, per physician savings were more than \$42,000 annually.

### V. About Milliman

Milliman, Inc (formerly Milliman and Robertson, Inc) is a leading international consulting and actuarial firm serving healthcare payers, service providers and consumer organizations for over half a century. The firm is especially well known and trusted for its quantitative analyses. It has established substantial practice expertise in healthcare technology applications and in evaluating the benefits of those applications. As a result of its expertise, *Emdeon* Corporation asked Milliman to provide its assessment of potential savings to physician practices in moving from paper to electronic transactions.

For more information about the study, or about Milliman, please contact the study authors, John Phelan at <u>john.phelan@milliman.com</u> or Andrew Naugle at <u>andrew.naugle@milliman.com</u>.