



What is the
"TRUE COST"
of getting paid?

Optimizing AR in healthcare



June 2019

What is the "TRUE COST" of getting paid?

Optimizing AR in healthcare

Table of Contents

Increasing healthcare costs will put price pressure on suppliers.....	3
Accounts receivable cost as an improvement area	3
Estimating AR costs in the healthcare supplier market.....	4
The added cost of exception handling.....	6
The opportunity cost of days sales outstanding and quantifying the time value of money.....	7
Calculating the WACC and how WACC varies by company size	9
Additional benefits to getting cash in the door earlier	9
The key benefit of electronic payment solutions	10
How big is the opportunity for the healthcare supply market? Calculating electronic payment efficiencies.....	12
Conclusion.....	12

Increasing healthcare costs will put price pressure on suppliers

Rising healthcare costs in the U.S. have been a chronic problem for decades across the healthcare supply chain. The Center for Medicaid and Medicare Services (CMS) projects that healthcare spending will rise by about 5.5 percent annually from 2017 to 2026, **and will be almost 20 percent of the U.S. economy by 2026, at around \$5.7 trillion.**¹

The increased levels of spending are primarily attributed to jumps in Medicare enrollment from the retiring baby-boomer population, increased prices of medical goods and services, and an overall greater disposable

income in the U.S.

Moreover, the cost growth for providers is expected to outweigh revenue growth by a wide margin. Healthcare

Healthcare providers are experiencing declining reimbursements and growing costs, and expect margin management to be an ongoing concern.

providers are experiencing declining reimbursements and growing costs, and expect margin management to be an ongoing concern. It's logical to assume that the squeeze on margins for providers will make its way across the value chain to healthcare suppliers.

One area of opportunity for healthcare supplier efficiency is the supply chain. McKinsey and Company suggests that medical wholesalers can potentially gain 7-10 percent increases in profit, and medical supply companies 10-20 percent, from creating efficiencies across the supply chain, through both revenue and cost improvements.² While healthcare providers will ramp up exploring new revenue opportunities, perhaps the quickest and easiest opportunities for margin management will be to manage costs better.

As healthcare providers look to better manage their costs, suppliers should expect pressure on their prices. Suppliers should be aggressively trying to protect their margins and proactively driving unnecessary expenses out of the supply chain.

Accounts receivable cost as an improvement area

One internal cost area that could present substantial value to a supplier is minimizing transaction costs, particularly in Accounts Receivable (AR) management.

In the healthcare space, some industry players have already recognized a growing need to reduce both the transaction and the time costs associated with collecting money.

However, the extent of potential savings from AR improvement is not always obvious for a

¹ Abutaleb, Yasmeeen (2018, February 14). "U.S. healthcare spending to climb 5.3 percent in 2018: agency." Retrieved from <https://www.reuters.com/article/us-usa-healthcare-spending/us-healthcare-spending-to-climb-53-percent-in-2018-agency-idUSKCN1FY2ZD>.

² Ebel, Thomas; Larsen, Erik; Shah, Ketan. (2013, September) "Strengthening health care's supply chain: A five-step plan." Retrieved from <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/strengthening-health-cares-supply-chain-a-five-step-plan>.

supplier. The stigma of a transaction fee, or the concept of “paying to get paid,” trumps the idea of potential savings from earlier payment. Many suppliers feel they do not need AR acceleration because they appear to have enough cash on

hand. However, they could be underestimating the cost of capital.

Existing approaches to accelerating

receivables such as early payment discounts are usually quite ineffective. Sometimes the providers (the buyers) take the discount but do not pay early, leaving the supplier to bear the shortfall. Ultimately, these dynamics lead to material reductions in available cash— inhibiting the flexibility and options that could be available by having more accessible cash earlier in the conversion cycle. This could lead to a substantial amount of money being left on the table by healthcare suppliers.

Currently, there is one solution on the market that can help both reduce these costs immediately and provide an exponential decrease in costs over time. This industry-specific electronic payment solution automates payments, provides rich transaction detail for auditing and accounting purposes, and allows suppliers to receive payments in as few as 15 days. Because suppliers typically average

40 days for receivables,³ having cash in hand up to 25 days earlier can easily offset the charges associated with this leading e-payment solution and provide improvements to working capital.

Estimating AR costs in the healthcare supplier market

Spending on healthcare in the U.S. is sizable: approximately \$3.6 trillion in 2018 and growing by approximately 5 percent.⁴ Of this, nearly 32 percent, or \$1.1 trillion, is in hospitals, with almost 50 percent,⁵ or \$500 billion, associated with spending on purchased supplies, versus other expenses such as staff costs, doctor salaries, etc. Purchased supplies include consumables such as medical devices and surgical equipment. The size of this spending alone implies that healthcare supplies are a prime area for improvement on AR costs.

Exhibit 1 shows the weighted average cost of the most widely used payment channels for healthcare supplies. There are several types of payment channels available to suppliers to collect receivables, and all have varying costs. The most common form of payment is check, followed by ACH, then wire transfer, and finally credit card.

The costs differ by payment channel, and each channel imposes an internal and external cost. Exhibit 1 breaks down the difference in internal and external transaction cost by

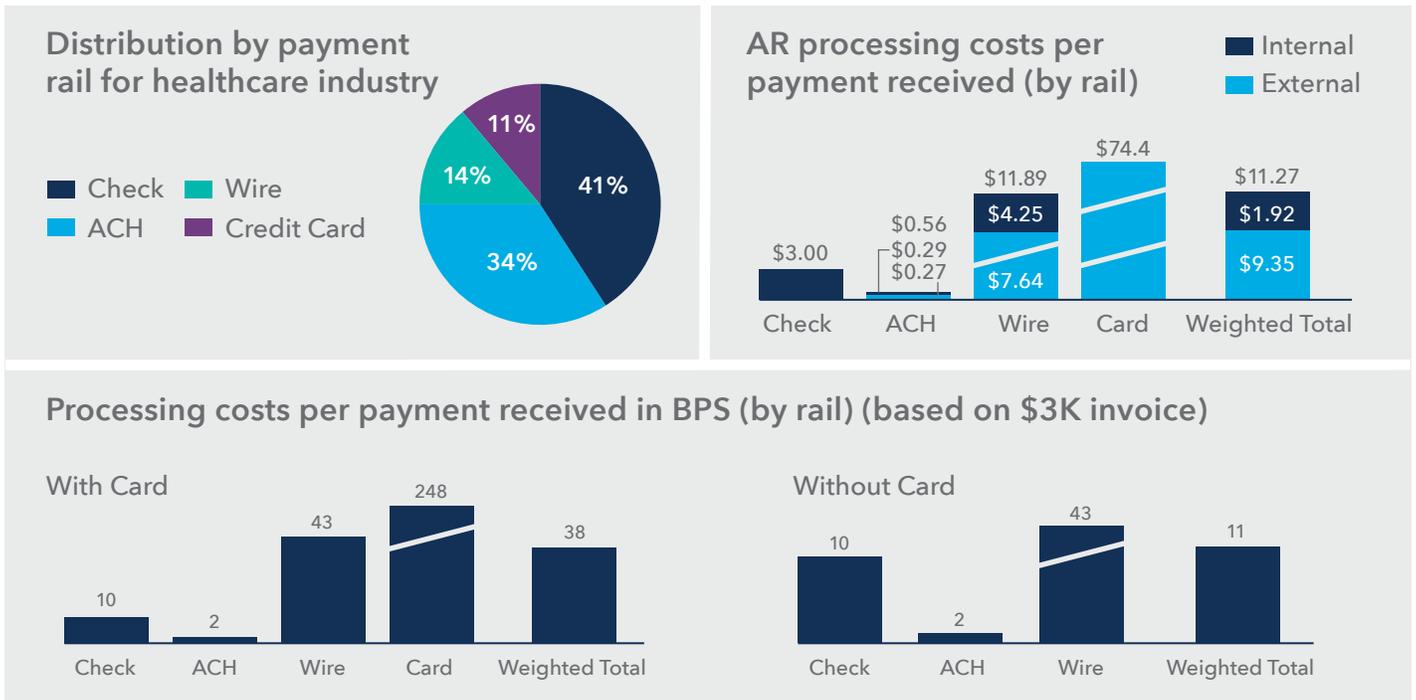
³Harte Hanks Consulting Healthcare Supply Survey, 2018

⁴(2016) “National Health Expenditures 2016 Highlights.” Retrieved from www.cms.gov.

⁵Dittman, J. Paul. (2016 April) “Managing Cost in the Healthcare Supply Chain.” Retrieved from https://www.mpo-mag.com/issues/2016-04-01/view_features/managing-cost-in-the-healthcare-supply-chain.



EXHIBIT 1: Transactions processing costs overview by payment channel⁶



payment channel. External costs are the transaction fee or out-of-pocket expenses charged to the supplier, and internal costs are the estimated administrative costs incurred to process the transaction.

For example, the cost of receiving payment by check is approximately 10 basis points, or 0.10 percent of a transaction. Why is this, when checks have a \$0 transaction fee? It is the amount of time it takes for an accounts receivable or administrative employee to process that check. From the time the check arrives at the office, to the time the money is reflected in the bank account, the process requires manual labor—receiving the check, validating that the account and invoice

number tie to the statement in the system, endorsing the check, and then depositing the check. An average transaction payment for a supplier is around \$3,000, so the cost to receive that money via check is approximately 0.10 percent of \$3,000, or \$3.00.⁷ Now, you may be thinking these fees do not apply to your business because you have a lockbox. However, even with a lockbox, you are looking at around \$1.00 per check⁷ on top of the manual effort required for exceptions or incomplete information.

Credit card payments are by far the most expensive payment channel. Exhibit 1 outlines the processing costs per payment received in basis points for each of the most widely used

⁶ JP Morgan, (2016) "2016 AFP Electronic Payments Survey: Report of Survey Results." Retrieved from <https://www.afponline.org/publications-data-tools/reports/survey-research-economic-data/2016-afp-electronic-payments-survey>.

⁷ Harte Hanks Consulting Healthcare Supply Survey, 2018

payment channels. Most credit card companies charge vendors a processing fee of 2-3 percent (around 250 basis points), which is much higher than other payment methods. Wire transfer is the next most expensive payment channel, with transaction costs of approximately 50 basis

points. Most banks charge fees for sending and receiving wires and for international wire

Credit card payments are by far the most expensive payment channel.

transfers, for which the fees are higher due to the banks' exchange-rate fees. The charge for Automated Clearing House (ACH) payments vary by bank. Some banks do not charge anything at all, while others charge a small handling fee. However, often overlooked as a cost for ACH is the initial setup and ongoing maintenance of customer account information. For suppliers with hundreds or thousands of customers, this can be a significant effort, adding hidden costs to the underlying transaction cost of ACH.

Exhibit 1 shows that it costs \$11.27 on average, or 38 basis points, for an average healthcare supplier to receive payment of \$3,000. These costs add up quickly. If your company receives 10,000 payments monthly, the cost of processing the payment and bank fees could exceed \$100K a month, which clearly demonstrates how optimizing more cost-effective channels over others could be an easy step toward better margins.

The added cost of exception handling

These costs are exacerbated when transactions go into exception handling. For payments to be handled smoothly, you need to rely on an error-free transaction, and that is not always the case. It's estimated that approximately 10 percent of transactions go into exception handling,⁸ which adds a considerable amount of time to process the payment. For example, when a check is received with no invoice or account number attached, the AR administrator must execute a number of additional manual tasks—locate and contact the vendor and determine the associated invoice and account number—before beginning to properly process the check. The same delays can apply to ACH, check and wire transfer payments. Wire transfers generally apply to larger transactions and international payments, are not reversible and are even more cumbersome to fix. Exception handling can add an additional increase in transaction costs that are not reflected in the transactions costs in Exhibit 1 above.

As a healthcare supplier, you are profoundly conscious of the various transaction fees your company is absorbing, but do you understand the true hidden costs or trade-offs between certain solutions? There is a much more substantial cost associated with getting paid, which is often overlooked or forgotten: the time value of money.

⁸Harte Hanks Consulting Healthcare Supply Survey, 2018



The time value of money is linked to days sales outstanding (DSO) for receivables. DSO is the number of days that occur between a sale and when the cash is received for that sale. This measures how much time, on average, a supplier waits to receive cash due to them. The average DSO in the healthcare supplier segment is around 40 days.⁹

The most significant transaction cost is not the actual transaction fees, but the time it takes to receive the cash due to your organization.

The opportunity cost of days sales outstanding and quantifying the time value of money

The industry average DSO is 40 days across non-electronic payment solutions. Why is this important? Each day your company doesn't receive the cash it is owed is a cost to the company, and not having your cash for 40 days is a substantial stretch.

The logical next step is to quantify the loss in receiving payment 40 days after the invoice is due. To understand that, we must think of the opportunity cost of investing that money and receiving a return on that investment. Companies refer to this opportunity cost as the weighted cost of capital.

The weighted average cost of capital (WACC) defines the rate at which money changes in

value over time for a company—it is a blended average cost of money obtained through both debt- and equity-sourced funds. The WACC is calculated based on the capital structure of a company, which is the balance of debt

The weighted average cost of capital ("WACC") defines the rate at which money changes in value over time for a company.

and equity that a company has for providing the funds needed to operate the business. The WACC is different from short-

term borrowing rates that companies use to borrow for shorter intervals. In the long-term, companies decide their capital structure based on tax rates, the relative cost of debt and equity and lender risk appetites. Once an individual company determines this, any incremental financing is factored in at the WACC, or the optimal capital structure. For most companies in the healthcare industry, capital structure is composed of 20 percent debt and 80 percent equity.

Let's take an example. Outlined below in Exhibit 2 is the public company General Electric's (GE) cost of capital in millions of dollars.¹⁰ The equity and preferred stock make up total equity, and borrowings are total debt. Each capital source has a required rate of return, which is varied. The average interest rate on borrowings, or GE's debt, is 2.2 percent. Regular equity and preferred

⁹ Harte Hanks Consulting Healthcare Supply Survey, 2018

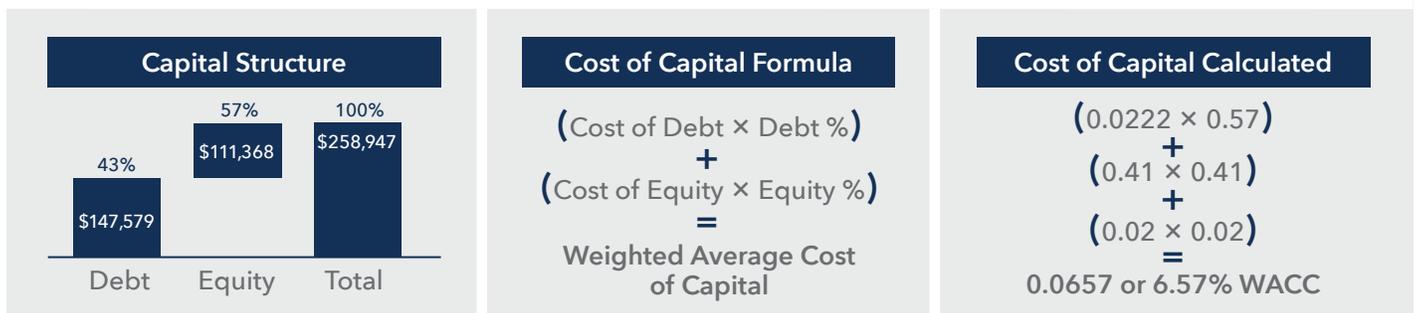
¹⁰ GE Balance sheet information retrieved from <https://www.stock-analysis-on.net/NYSE/Company/General-Electric-Co/DCF/Present-Value-of-FCFF#WACC>. Numbers represent GE's balance sheet at a certain point in time in 2018.

EXHIBIT 2: GE's cost of capital

General Electric's cost of capital as of 10/23/2018

REAL WORLD EXAMPLE

Capital Source	Value (\$M)	Weight	Required Rate of Return	Weighted
Equity (fair value)	105,944	0.41	12.70%	5.21%
Preferred stock (fair value)	5,424	0.02	5.00%	0.10%
Borrowings, include interest rate and currency derivatives designated as hedges of borrowings (fair value)	147,579	0.57	2.22%	1.27%
Weighted Average Cost of Capital				6.57%



stock investors expect a return of 12.7 percent and 5 percent, respectively. WACC is calculated by multiplying the cost of debt by the percentage of the capital source that is debt, then adding the cost of equity multiplied by the percentage of the capital source, that is equity. Applying this formula to GE produces a WACC of 6.57 percent. This effectively means that GE's funds cost 6.57 percent per year, and if they are not using those funds, they are losing that 6-7 percent return on those funds.

Every day that money is not in GE's hands, it costs GE 6.57%/365, or 0.018 percent per day (or 1.8 basis points). So, for every month delay in receivables it costs GE 54 basis points.

Using the example of the cost impact of an average DSO of 40 days for a supplier and knowing the average WACC in the healthcare supplier industry is about 6.67 percent, according to NYU Stern¹¹—the opportunity cost of a 40-day DSO would be: $(40/365) \times 6.67\% = 73 \text{ bps}$

$73 \text{ bps} \times 3,000 \text{ (average payment size)} = \21.93

It therefore could cost the supplier about \$21.93 for the 40-day delay.

The fully loaded estimated costs—the cost of 40 days of DSO (\$21.93) plus the average transaction cost (\$11.20) come to \$33.13. This is around 1.1 percent of the \$3,000 payment.

¹¹ NYU Stern WACC Report, 2018

From this, it is understandable why you might not realize that it may take over 100 basis points per transaction to get paid, which is substantially higher than the 38 basis points in just transaction costs. The hidden cost of DSO is too significant to be overlooked. This estimated 112 basis-point cost is considerable and represents the actual cost of getting paid, whether visible or not.

Calculating the WACC and how WACC varies by company size

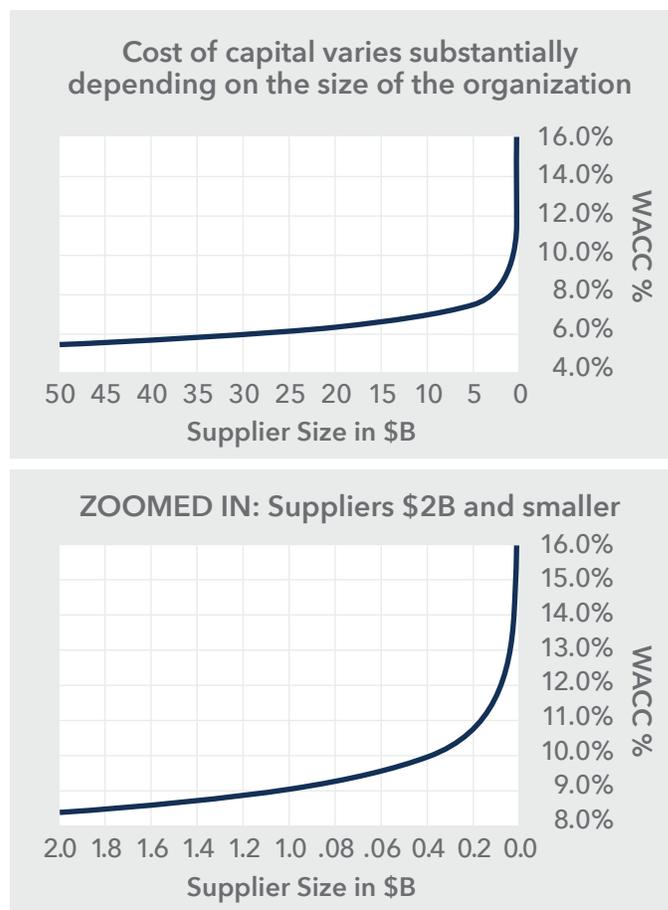
Calculating the cost of capital is not always a straightforward exercise. While WACC estimates are easily accessible for public companies, they are not as easy to obtain for private companies. Additionally, WACC varies substantially based on the revenues of a supplier company. For example, smaller companies generally have a much higher WACC. Exhibit 3 outlines these differences. This implies that it is especially critical for smaller suppliers to utilize electronic payment solutions, because their underlying WACC

tends to be exponentially higher than that of their larger peers. For example,

WACC varies substantially based on the revenues of a supplier company.

the WACC for a healthcare supplier with \$10 billion in revenue is about 7 percent, but for a supplier with \$1 billion in revenue, WACC may be 9 percent, and for a supplier with \$100 million in revenue, WACC may be over 11 percent. The smaller the size of the healthcare supplier, the larger the WACC may be.

EXHIBIT 3: WACC (weighted cost of capital) by size of company in healthcare supply, Harte Hanks Consulting



Additional benefits to getting cash in the door earlier

Many companies, particularly those with steady cash flow and working capital, may inadvertently downplay the need for or underestimate the benefits of further accelerating cash flows. Leaders of these companies sometimes forget that maximizing shareholder value means that all capital, even the capital sitting in the pockets of customers, must be actively deployed in a way that meets required rates of return beyond their cost of capital.



The strength of the balance sheet is affected by receivables not being paid, which, given the scrutiny of their financials by the public and shareholders for public companies, is even more critical. Having more cash on hand consistently is a reasonable way to shore up cash flow and working capital, and is a distinct competitive advantage for companies.

Extra cash on hand can be beneficial for a variety of reasons, such as using the increased liquidity for strategic investments and paying down debt.

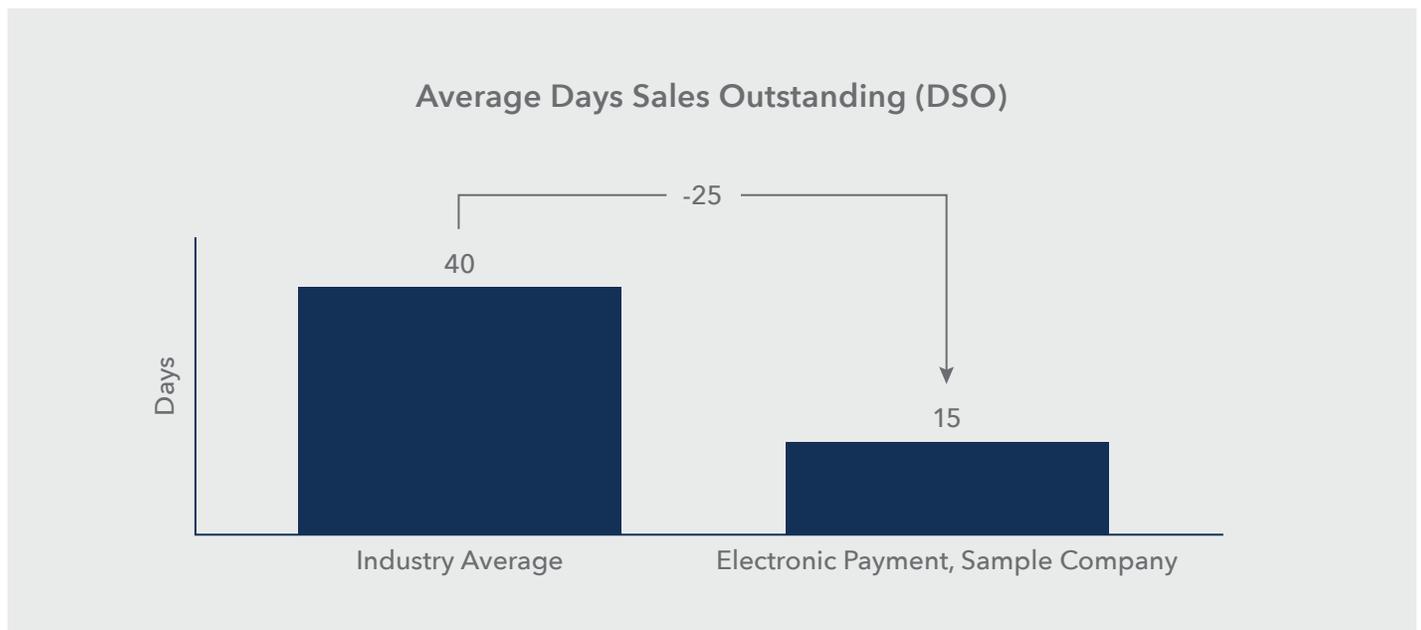
This is especially important for suppliers who continue to face margin compression and will need additional cash to make investments and create new revenue streams.

The key benefit of electronic payment solutions

There are opportunities to reduce costs by utilizing an electronic payments solution, which can allow supplier companies to receive payments in as few as 15 days¹² for a minimal transaction fee.

Exhibit 4 shows DSO for non-electronic and electronic payments. The industry average DSO is 40 days across non-electronic payment solutions. The average for electronic payments, using our example electronic payment company, is 15 days, or 25 days shorter than other types of payments. Why is this important? Having this cash in hand earlier presents a substantial opportunity regarding cost savings.

EXHIBIT 4: DSO industry estimates derived from the Harte Hanks Consulting healthcare supply survey 2018

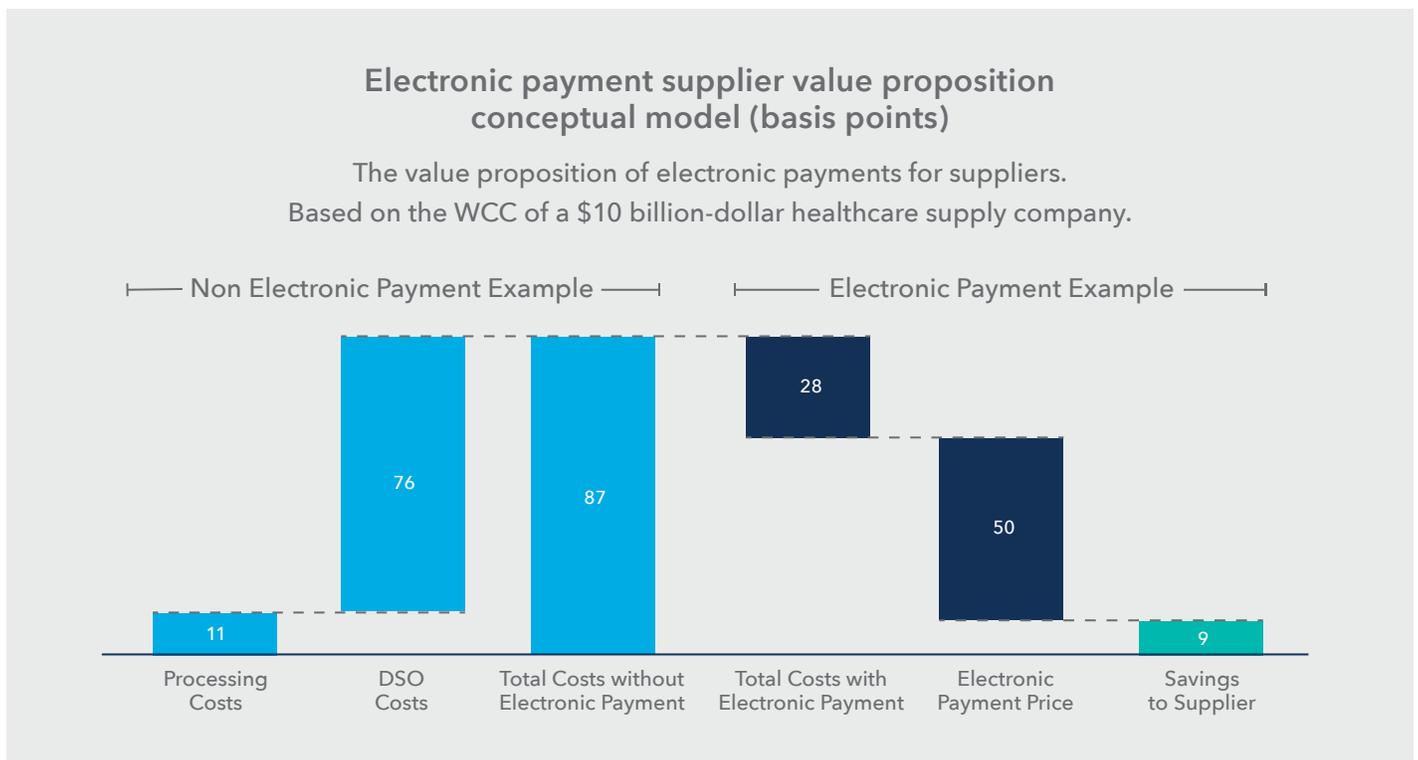


¹²Based on the average DSO for suppliers using GHX ePay to receive payment.

As you can see in Exhibit 5, the average cost of an electronic payment is substantially lower than the weighted average cost across other payments (credit card excluded). There is about 0.09 percent, or 9 basis points, in average savings from utilizing an electronic payment method. This savings occurs because the money from electronic payments arrives an average of 25 days sooner, which reduces DSO costs by 42 percent, thereby offsetting the electronic payment transaction fee. With credit cards, the

potential savings for electronic payment solutions are even higher. Credit cards cost you 248 basis points, on average in processing fees. Many healthcare suppliers might shy away from accepting credit card payment as a result. However, even when excluding credit cards and other expensive payment options, the overall savings from electronic payment solutions compared to other payment methods is worth more in-depth consideration.

EXHIBIT 5: Supplier savings in basis points for non-electronic and electronic payments, derived from the Harte Hanks Consulting Healthcare supply survey, 2018



How big is the opportunity for the healthcare supply market? Calculating electronic payment efficiencies

Earlier we mentioned that approximately \$500 billion is spent on healthcare supplies in the U.S. annually. Let's assume that all of these transactions occur through electronic payments versus a mix of other types of payment channels. The potential average savings for the DSO component alone would be approximately \$2.3 billion annually across all suppliers, assuming an average healthcare supply industry WACC of 6.67 percent and average days saved of 25. The savings from processing costs could be another ~\$550 million, making an estimated potential total savings of nearly \$2.85 billion annually.

Conclusion

There is a tremendous opportunity to take a fresh perspective on the value that best-in-class electronic payment solutions can deliver

around DSO, carrying costs, exceptions rates, fully loaded processing costs and cash accessibility. When considered in the context of overall costs, efficiencies and comparative benefits delivered by solutions that align cost to value as discussed in this study, the financial value proposition of electronic payment solutions becomes much more apparent. Even after modest transaction fees, these solutions provide a quick and easy way to reap cost savings.

If you are a multi-billion-dollar supplier, you can save a significant amount of money and enable better business relationships with your providers where electronic payments are the preferred transactional channel. If you are a smaller supplier, the potential savings are even more substantial, as the estimated costs of DSO are higher for smaller suppliers and the need for cash flow is often greater. It doesn't matter what size healthcare supplier you are, the savings are there. Are you ready to take action?

Sponsor's Statement

GHX has built the largest community of healthcare supply chain trading partners by connecting supply chain, finance and clinical professionals with their suppliers and partners. Its pioneering, cloud-based technology and services offer the healthcare industry an open and neutral electronic trading exchange that delivers procurement, contract management, order lifecycle management, vendor credentialing and compliance, business intelligence, invoice and payment automation, and other supply-chain-related tools and services. Since 2010, GHX has helped its customers realize more than \$10 billion in savings.

GHX ePay is an automated payment solution designed to improve the way business is transacted between providers (hospitals and health systems) and suppliers. Unlike other e-payable solutions on the market, GHX ePay leverages an established and growing network of healthcare providers and suppliers.

And, by automating the labor-intensive processes in payments and enabling timely, secured payment, ePay maximizes operational efficiency and provides a balance in the financial relationship for payor and payee.

GHX commissioned Harte Hanks to conduct research into healthcare supplier payables practices. The data reflects survey responses from healthcare manufacturers (supplies, devices and equipment) and executives (manager/director or above in finance, treasury, credit and collections, accounts receivable) with over \$1 billion U.S. dollars in revenue annually.

Forward-thinking finance professionals are embracing new, automated invoice and payment options that remove manual processes, paper invoices and checks and unpredictable credit card fees. GHX is proud to sponsor this study as part of its continuing effort to serve its healthcare customers, and help them achieve their financial goals.

For more information, visit [GHX.com](https://www.ghx.com)

