

Health Care Payment Reform: A Proven Model for Addressing Escalating Health Care Costs

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Executive Summary

Whether you pick up a newspaper or turn on a news program, the hot topic of the day is health care reform. It is a priority for many individual states as well as the federal government—and for good reason. In 2009, U.S. health care spending represented 17.6 percent of the country's gross domestic product (GDP). By 2017, the share of GDP devoted to health care is expected to reach 19.5 percent. Between 2007 and 2017, government economists expect U.S. health care spending to nearly double, from about \$2.2 trillion to \$4.3 trillion. What's more, health care spending now accounts for approximately 30 percent of total state budgets.

These numbers reflect a looming financial crisis unless positive steps are taken now to control and even reduce health care costs. Indeed, in a June 2009 speech to the American Medical Association, President Obama said, "Health care reform is the single most important thing we can do for America's long-term fiscal health."

The umbrella of "health care reform" is a large (and controversial) one. There are many aspects of reform, ranging from how health care providers are compensated for overall treatment plans rather than individual services (sometimes referred to as "quality of care"), to who is covered by what kind of insurance/payment plan. Experts suggest that the problem is so large that it must be addressed as inter-related pieces in order to invoke sustainable reform.

This paper focuses on one aspect of reform—that of processing the payments made by patients and other payers (private insurers, Medicaid/Medicare) to health care providers. Fifteen percent to 20 percent of the cost of health care in the United States is devoted to the administrative aspects of the payment system. Health care is still a highly paper-based sector with a lack of automation across many administrative processes; 60

"Health care reform is the single most important thing we can do for America's long-term fiscal health."

President Barack Obama

percent of transactions are still manually processed. Expenditures on the processing of bills, claims and payments; bad debt; and other transactions total more than \$300 billion a year. It is these costs that can be significantly reduced through the use of proven payment technologies and automated processes successfully deployed in other industries.

At least one successful pilot program has validated the technical feasibility of verifying eligibility and adjudicating claims in real time. This automated solution shrinks the payment cycle by weeks and extracts much of the time-consuming manual labor from today's process. On the heels of the pilot's technical validation, the state of Vermont—a pioneer in health care reform—is researching how it can best implement real-time eligibility verification and claims adjudication.

Payment processing reform lacks the extreme controversy of other aspects of health care reform. (Think “universal coverage” or “the public option.”) With up-front federal funding and the appropriate federal or state participation mandates, it’s possible to implement real payment processing reform now while experts continue to hammer out the details of other aspects of health care reform. What’s more, the savings from payment processing reform could be used to fund other initiatives.

It likely will take many years to design and implement health care reform overall. However, it’s possible to address payment processing reform now, building on the significant work that has already been researched and tested. Stakeholders in the process believe that health care payments processing reform has the potential to have a positive outcome by 2012. The needed reform could be a reality faster than one thinks.

Key Takeaways

For the purpose of clarity, let’s define what is meant by “health care payment processing reform.” By this we mean the redesign and automation of the process for assessing a patient’s eligibility for a health service under his insurance or government payment plan; estimating the cost of the services rendered; adjudicating the payment for the services; determining a patient’s responsibility for payment; and electronically processing the patient’s payment at the time service is rendered.

End to end, this process currently takes weeks and, occasionally, months. We believe it can be redesigned such that, with the application of the appropriate health information technology, as well as full participation of providers and payers, the process can take place in real time while the patient is in the provider’s facility. The end result is that the patient can know the total cost of the service rendered before he walks out the door, and the provider can be compensated—at least partially if not wholly—within 24 to 48 hours.

We hope that readers of this paper will take away and consider several key points in the context of their own legislative agendas or business operations:

- Reform of the current health care payment processing system is a necessary component of overall health care reform. The current methods used to verify a patient’s eligibility for service and to adjudicate claims submitted to payers are highly inefficient. When a patient receives care from a provider and is ready to walk out the door, neither the patient nor the doctor knows how or even if that service will be paid for. The patient has no idea what the cost of the services rendered are. Answering those questions typically takes weeks or months. Health care payment processing reform can bring the answers into real time and significantly reduce unnecessary administrative costs.
- Health care payment processing reform is feasible using proven technologies and payment processes. Borrowing models from industries such as retail, it’s possible to build a real-time transaction hub that can verify eligibility and adjudicate a claim while the patient is still in the provider’s office. This would allow both the patient and the doctor to know the cost of the care and who is responsible for what portion of the payment. Payments from insurers could be received by the provider’s office within 24 to 48 hours instead of weeks, as is common today.
- Lessons learned from a previous pilot program and other initiatives help in formulating what to do and how to do it. A pilot conducted from 2005 to 2007 validated the technology and the streamlined business processes. Even the “failed” aspects of the pilot hold valuable lessons to help ensure successful reform today. Stakeholders in the health care industry believe that work done to date to understand the area of health care payments will enable reform that will lead to a positive outcome by 2012.

- The state of Vermont is one of several states developing a blueprint for health care payment processing reform and preparing to move forward with implementation once funding can be worked out. Vermont sees payment processing reform as a critical component of a broad and comprehensive health care reform initiative for the state. And, as chairman of the National Governors Association, Vermont Governor Jim Douglas says health care reform—and especially cost reduction—is essential for every state in the nation.
- Successful reform requires full participation from numerous parties, especially the health care providers and the insurers/payers. State or federal mandates may be necessary to ensure participation. Without full participation in the new automated processes, too many manual “exception” processes will derail the benefits of true reform.

The Need for Health Care Payment Processing Reform

What if payments processing for retailers were managed the way health care payment processing is managed?

Imagine the scenario of a corporate executive with an expense account taking a client out for dinner. The two businessmen go to a local seafood restaurant. The waiter presents them with menus that have food choices listed but no prices. Before they order, the executive pays \$25 toward the total cost of the evening’s bill. He knows that his expense account will cover most but probably not all of the cost of the dining experience. The businessmen order and eat their meals.

At the end of the dinner, the waiter tells the executive that the restaurant will submit the final bill directly to his company in order to process the payment through the expense account. The businessman has no idea what the total cost of the dinner is. Weeks later he will learn that his company will pay 80 percent of the cost of his shrimp dinner, but only 50 percent of the cost of his guest’s lobster dinner. The cost of the bottle of wine will not be covered at all. The executive will have to pay out of his own wallet the costs of the items not covered by the expense account.

Meanwhile, the restaurant must wait weeks to receive partial payment for the meal from the executive’s company. Then the restaurant must send an invoice to the executive and hope he will send payment for the rest of the tab. In about half of the cases of serving customers, the restaurant never receives payment due from the actual diners. To make up that lost revenue, the restaurant simply raises prices for customers who are likely to pay their bills.

This scenario seems absolutely ludicrous, doesn’t it? Yet if one thinks about it, this is precisely what happens when an insured patient goes to a health care facility for treatment. The patient pays a co-pay fee and receives a service—the costs of which are unknown to the patient at the time of receipt. The provider submits a detailed invoice to the insurance company, which pays its portion of the bill several days or weeks later. The health care provider then sends a bill to the patient for the remaining costs of the service rendered weeks ago. The patient might be totally surprised by his share of the expenses he must now pay out of pocket. The needs of neither the patient nor the provider are met.

A \$300 billion annual expense that provides little value

As illustrated previously, the ways in which payments are made today to doctors, clinics and hospitals are highly inefficient. Providers often wait weeks and sometimes months to be paid for their services—if they are paid at all. Patients are poorly informed about the true costs of the services they receive. When a patient is in a doctor's office, he often has no idea what his own payment obligation will ultimately be. If the patient has insurance coverage, he rarely knows the status of whether or not he has met his deductible requirements.

Under this very real scenario, physicians and hospitals typically collect only about 50 percent of the balance due from insured patients, and only 10 percent to 20 percent of the balance from self-pay patients. Across the health care sector, this dismal payment response results in almost \$60 billion in bad debt each year. These are costs that are passed along to other consumers in the form of higher rates for health insurance and higher costs for services; for example, \$10 for a single aspirin dispensed at a hospital. The problem will get worse as more of the burden of payments shifts to patients who have accepted only high-deductible insurance plans in order to manage the rising cost of health care insurance premiums.

In 2008, the health care industry processed more than \$2.2 trillion in payments. According to McKinsey & Company, 15 percent or more of the cost of health care in the United States is devoted to the administrative aspects of the payment system. Expenditures on the processing of bills, claims and payments; bad debt; and other transactions total more than \$300 billion a year.

The expenses are so high, in part, because 60 percent of the transactions are still manually processed. Moreover, an estimated 80 percent of payments to providers in 2008 were paper-based. The cost to process a manual claim and issue a paper check is almost \$9 per claim. By comparison, the cost of generating a payment using an automated process averages about \$.80 per claim.

Health care providers accrue almost \$60 billion in bad debts each year because patients don't pay their bills.

McKinsey & Company

Overall, the lack of automation, manual claims processing and heavy reliance on paper check payments are the norm of the industry, which is driving up costs and inefficiencies, according to Aite Group. These costs can be significantly reduced through the use of proven payment technologies and automated processes tested in the health care industry and already fully deployed in other industries.

The timing is right for payment processing reform

The timing is right for states and the federal government to address health care payment processing reform now. The American Reinvestment and Recovery Act of 2009 (also known as ARRA or "the stimulus bill") allocates about \$20 billion in funding for "health information technology" (health IT, or HIT). While the vast majority of the funds are earmarked for electronic health records (EHRs), a portion of the funds can be used to develop electronic eligibility and claims transactions. As we'll discuss later, Vermont is one state eyeing such funds to implement real reforms in the area of health care payment processing.

Small pilot programs have already shown that it's possible to reduce health care administrative costs and increase payments to providers through payment processing system reform. Implemented on a wider scale, a new process could free up resources to address the broader need of ensuring that more people have access to affordable health care.

Key stakeholders in the health care payments industry have a positive outlook toward payment processing reform. In June 2009, Aite Group surveyed senior executives at stakeholder organizations such as providers, health plans, health care vendors, financial institutions and clearinghouses. In rating the key issues faced by the health care industry today, these stakeholders ranked the state of Medicare and health care payments as one of the top three challenges. However, they also believe that payment processing reform has the potential to have a positive outcome by 2012 due to the amount of work that has been attributed by the stakeholders in understanding the health care payments area.

Getting from 'Here' to 'There': Designing a Multi-party Solution for Real-time Eligibility Assessment and Claims Adjudication

There are many parties with an interest at stake in payment processing reform. Health care is not a matter of a simple transaction between a patient and a doctor; rather, it's an elaborate system that includes multiple providers of services and numerous people and agencies that pay for the services.

Any solution for health care payment processing reform has to consider the needs of multiple parties, including the following:

- **The service provider** – The provider is the doctor, clinic or hospital that delivers care to the patient and is entitled to be paid for services rendered. In most cases, the provider is the party that initiates a claim for payment, thus starting the whole payment process in motion.
- **The insurer** – The insurer determines if services provided to a patient are eligible for payment under the policy, and at what compensation rate. The insurer issues payment to the provider, and sends an Explanation of Benefits (EOB) statement to the patient.
- **Government programs** – Government-sponsored programs such as Medicaid, Medicare and various state programs are another form of insurer.
- **The patient or person of responsibility** – The patient or his or her designated "person of responsibility" (such as a parent or guardian) is responsible for paying all other expenses for care, such as the insurance co-pay, the plan's deductible amount, and the remainder of what isn't covered by insurers and government programs.

Determining eligibility and payment responsibility can get complicated. There are countless permutations and variations on each patient's eligibility and payment requirements, resulting in sophisticated business rules that must be applied when a patient requests a health care service. These rules determine if, and how much, an insurer or government program will pay to the provider for the patient's care. Each insurance company has its own method of determining eligibility. We believe—and it has been proven—that such rules can be automated and processed in a centralized "transaction hub" for real-time assessment.

The current state of the payment process—in a word, it’s sick

Today, there is no all-inclusive automated process for eligibility determination, claims adjudication and payment processing. For the most part, providers as well as insurers have developed their own disjointed processes, some aspects of which are conducted manually. This is not to fault these parties; they simply don’t have the resources, leverage and incentive to join together and bring about change. Later in this document, we’ll talk about how this can be done.

Figure 1 illustrates the typical payment process today when a patient visits his health care provider, followed by a brief description of each step.

Typical Health Care Payment Process Today

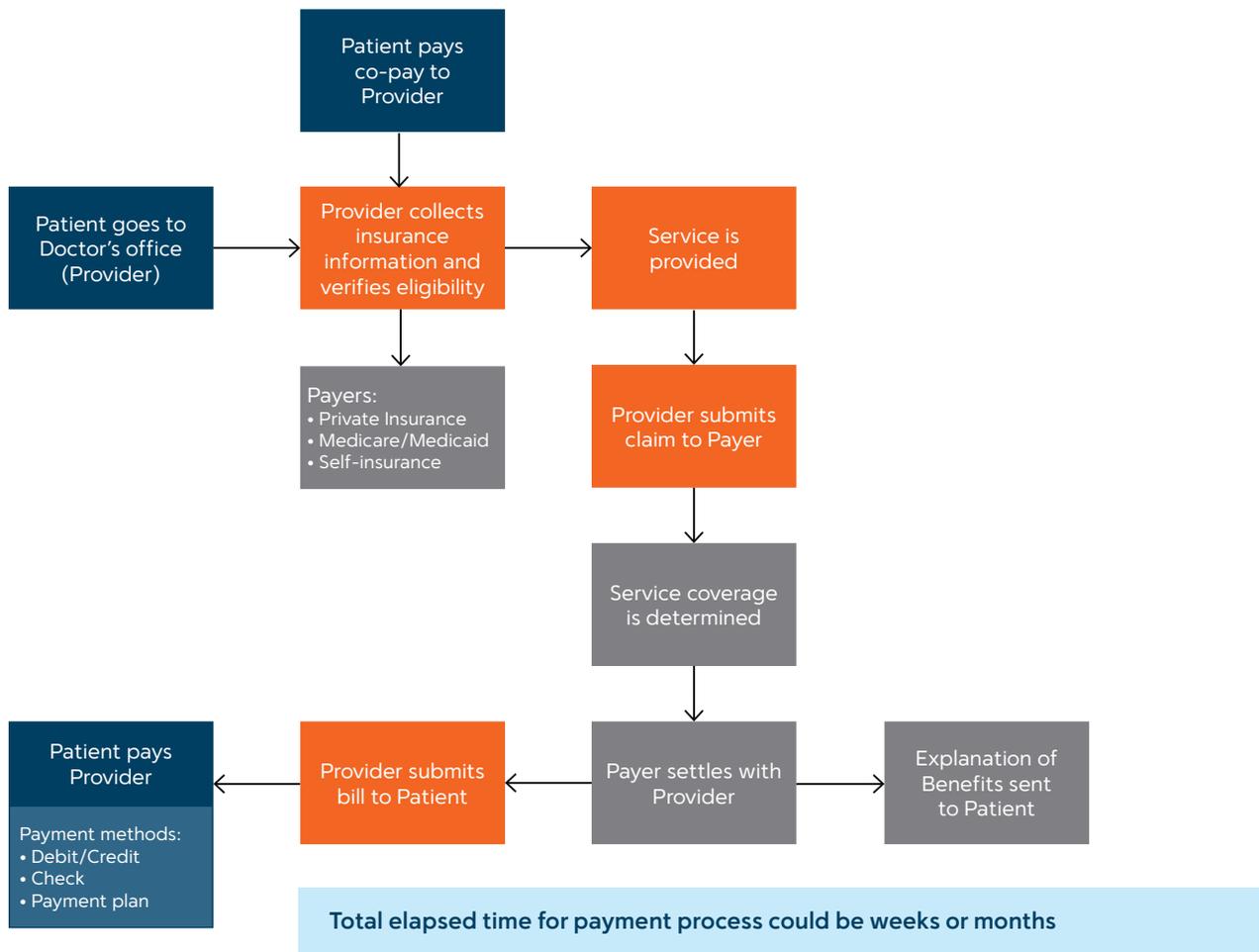


Figure 1: Sample current health care payment process

Doctor's office collects insurance information. The office staff collects current insurance information from the patient and verifies eligibility. This step may be handled when the patient makes the appointment or at the time of service. Many providers today do not have the capability to check eligibility electronically. Those practices without access to an eligibility verification system check a patient's eligibility for insurance either by calling the carriers (and speaking to a person or confirming through an integrated voice response or IVR process) or by checking a Web site. Depending on the number of patients seen each day, this function takes office staff approximately two to four hours every day. Carriers have independent systems for verifying eligibility.

Patient pays co-pay. This is the portion of payment the patient is responsible for at the time of treatment—typically a small percentage of the total cost of the service.

Doctor provides service. The doctor assesses the patient and determines the treatment.

Doctor's office submits claim to payer. After the doctor sees the patient, it is clear what services were rendered and can be claimed for payment by the insurer. The doctor's staff submits the claim to the appropriate payer(s). This is often done electronically, although manual submission processes still exist. (According to McKinsey, providers collectively spend \$100 billion or more each year managing the submission of claims.)

Service coverage determined. The insurer determines the full extent of payment to be made to the provider under the patient's coverage plan. If multiple payers are involved, the secondary payer determines its level of responsibility after the primary payer is done. If incomplete information is provided, or errors are introduced, the claim may be denied and then resubmitted or appealed.

Payer settles with doctor's office. The insurer(s) sends payment to the provider, either electronically or, more commonly, by mailing a check. (Due to the manual nature of the usual health care payments cycle, the average time to settle payments for physicians ranges from 40 to 45 days, and anywhere from 55 to 60 days for hospital networks.)

EOB sent to patient. The insurer sends an Explanation of Benefits (EOB) statement to the patient. This may be the first time the patient sees his care costs, and how much of the total cost is his responsibility.

Doctor's office submits bill to patient. The provider's office sends an invoice to the patient, requesting payment for services that weren't fully covered by the co-pay and the insurance payments. This step may not apply to Medicaid or Medicare patients.

Patient pays remaining balance to doctor's office (or not). The patient pays for services rendered, by check/Automated Clearing House (ACH), credit/debit or payment plan. Providers typically collect 50 percent or less of their patients' obligations.

The total timeframe for this process—from initial patient visit to final payment for service—is often weeks or months. The process is hampered by lack of automation, multiple individual systems for eligibility verification and errors in information. As a result, many billions of dollars are wasted each year as providers process and attempt to collect on claims. Moreover, bad debt grows as many patients fail to fulfill their financial obligation to pay for services rendered.

A prescription for process reform

Borrowing a page from other industries that process payments (retail, for example), it's possible to apply coordinated technology to verify eligibility and adjudicate claims in real time—in other words, when the patient is still in the provider's office. Additionally, using the financial products and systems that exist today, it's possible to accelerate the payment process to ensure that providers receive payment for their services within 24 to 48 hours of providing those services.

The vision for a reformed health care payment processing system includes a consolidated "hub" for transactions such as verification of eligibility and adjudication of claims. This hub would be used by all providers and all payers in a collective system, such as within a state or even at the national level. Such a hub doesn't exist today but is a crucial element of real payment processing reform.

Taking the process in Figure 1 described earlier, there are multiple points of opportunity where technology can vastly transform the process into one that is far more efficient and less costly. The enhanced process looks something like that shown in Figure 2, followed by a brief description of the steps.

Restructured Health Care Payment Process

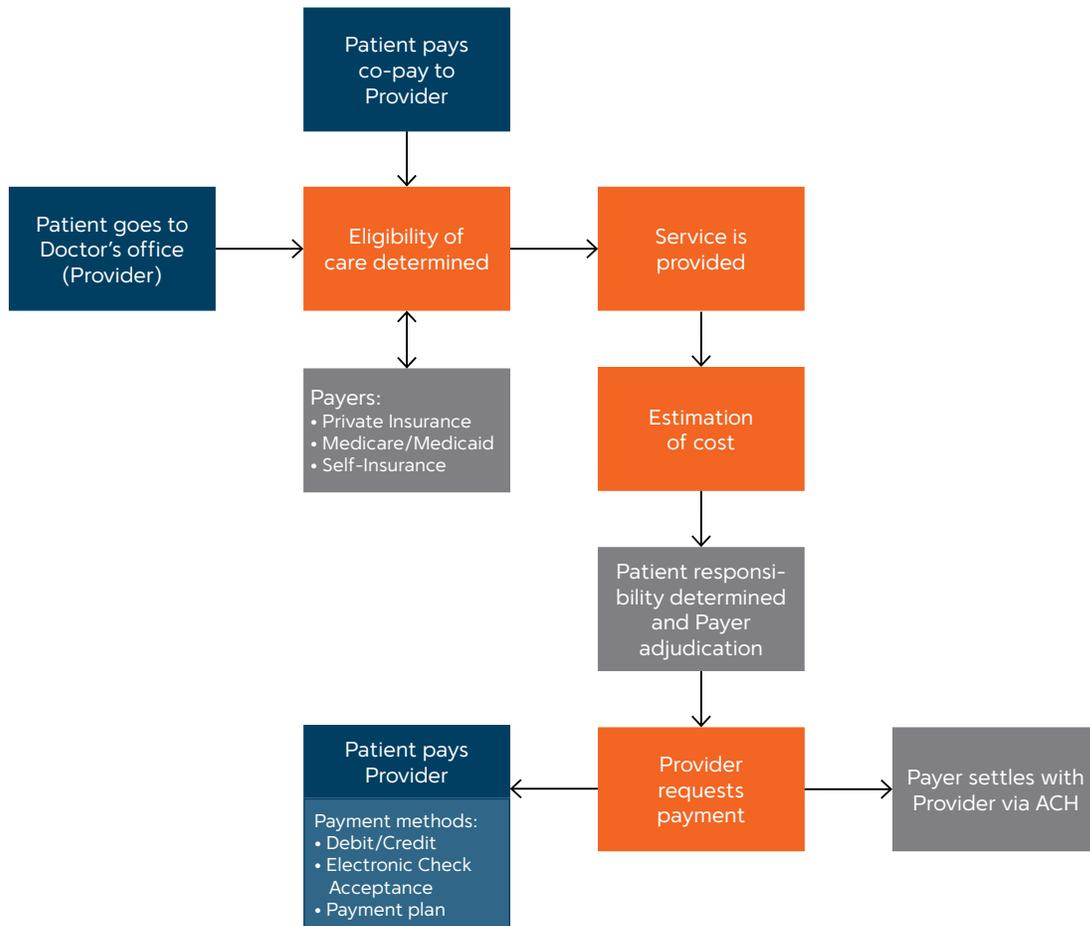


Figure 2: Sample restructured health care payment process

Eligibility of care determined. When the patient arrives at the provider's office, he uses a personal card or "token" of some sort to check in and initiate the process of verifying eligibility through the central health transaction hub. At minimum, the token contains the patient's insurance and payment responsibility information. Within minutes, his eligibility status is ascertained with the data moving back and forth over the Internet via a secure encrypted connection. Because the verification process is centralized, automated and consistent for all payers, the office staff spends much less time on this activity.

Patient responsibility determined and payer adjudication. Once the doctor has seen the patient, and before the patient leaves the office, the procedure codes can be entered into the transaction hub and submitted to the payer. The claim is adjudicated and responsibility for payment is determined within minutes.

Patient pays doctor's office. Before leaving the provider's office, the patient provides the office staff with his payment method, which can include full payment via check, credit card or debit/credit card, or via a payment plan.

Payer settles with doctor's office via ACH. The insurer settles its payment responsibility via the financial Automated Clearing House (ACH), usually within 24 to 48 hours of claim submission.

Using other industries as a payment processing model

The health care industry can take a lesson from the retail industry on the use of real-time connections between systems to enable decision-making based on accurate information. A very simplified version of this approach is used when someone makes a purchase with his or her credit or debit card. The merchant's point-of-sale system makes a real-time inquiry into the available account balance or credit line. Based on the results of that inquiry, the purchase is authorized and funds are moved.

Other industries are seeing a trend toward interoperability of systems. The need for sharing of information across systems and organizations is providing the impetus for this transformation. This is especially true in government, where multiple agencies and programs provide services and benefits to the same constituents. This is typically accomplished through the use of open systems and architectures that facilitate interfaces with a wide range of systems and technologies.

The benefits of a reformed health care payment process

There are tremendous benefits to be gained by redesigning the health care payment process. For example:

Patients enjoy the convenience and clarity of being able to identify their coverage status and have their eligibility verified within minutes. They know what their deductible and co-payment amounts are, as well as their total payment responsibility at the time of service. In some cases, they can use cost of care as a factor in deciding on treatment.

Health care providers can significantly reduce staff time currently spent on the claims process. They can receive their due compensation from payers within 24 to 48 hours, and reduce the amount of uncollected debt held by patients who simply don't pay. They can tie the eligibility and payment process into their practice management systems and generally run a more efficient business.

Payers reduce the time spent on verifying eligibility and adjudicating claims and reduce the likelihood of fraud stemming from multiple claims for the same service. They reduce costs by trimming the need for invoices and payer statements, and by using low-cost ACH payments instead of printed checks.

The state or federal government improves the sharing of information among members of the transaction hub and helps to reduce overall administrative funds. Such savings can be used to provide additional services, provide services to more people or reduce overall operating costs.

The Concept Is Proven: Results of a Real-time Eligibility Verification and Payment Pilot

The transaction hub and automated process described previously is a proven concept. In 2005, First Data launched pilot activities to automate provider and payer processes. First Data conducted the pilot through 2007 with Cerner, a health insurance carrier, and UMB, a bank that issued the Health Savings Account (HSA) card to be used for payment.

The pilot was conducted in a Cerner health care clinic. The goal of the pilot was to demonstrate the feasibility of a real-time eligibility verification and claims adjudication process. This included Web-based applications to enable member eligibility verification and real-time medical claim submission and adjudication, with next-day payment and reconciliation services. In the pilot program, providers were able to interface with the hub to check patient eligibility and then have real-time connections to payers in order to submit a claim while the patient was still in the provider's facility.

Key elements of the solution tested in the Cerner pilot

The pilot involved the innovative use of new and existing technology that was integrated to provide an end-to-end health care payment processing solution. Among the elements were:

A card issued to each patient – This three-track magnetic-stripe card contained financial data on tracks 1 and 2 and health care data on track 3. The payment features included:

- Manage health care fund balances such as the patient's Flexible Spending Account (FSA), Health Reimbursement Account (HRA) or Health Savings Account (HSA)
- Provide an integrated line of credit, either health care specific or general purpose
- Support other fund balances, such as transit, parking, dependent care, other post-tax funding sources

The health care features included:

- Medical plan ID number
- Health care transaction generation, such as eligibility and claims
- Access to medical records

A Point-of-Care (POC) device – This card reader, located at the provider's facility, supported both financial and health care transaction processing.

Web-based application – Accessed via encrypted Internet connections, this application supported both financial and health care transaction processing. This included an integrated Web-based application for the provider to securely send and receive eligibility transactions to multiple payers.

ACH and supporting reconciliation and settlement tools – These tools facilitated and automated payments from the payer to the provider.

Credit/debit payment capabilities integrated into the health care application – This integration facilitated the payments from the patient to the provider.

Multi-payer solution – This solution was available for any payer able to support real-time Healthcare Eligibility Transaction System (HETS) 270/271 eligibility transactions. The application translated transactions into Health Insurance Portability and Accountability Act (HIPAA)-compliant eligibility and claims transactions for routing to multiple payer locations. This included handling the necessary transaction edits.

The results of the pilot and lessons learned

The Cerner pilot ended in early 2007 after attaining limited success. On the positive side, the goal of demonstrating the feasibility of the technology and payment process was achieved. It proved that eligibility could be verified in real time and claims could be adjudicated and paid at the point of service. It successfully showed that technology is not a constraint in reforming the health care payment process.

However, reserved participation on the part of providers and payers limited the success of the pilot. It was a “chicken-and-egg” scenario; although providers were willing to make the changes in order to receive quicker payment, they were hesitant to sign up for the pilot unless they knew their payers would be involved. Likewise, payers would not jump in unless a significant number of providers participated. In the end, total participation was not high enough to significantly reform the payment process for the broader population of payers and providers.

Many useful lessons were learned that can now be applied toward a broader program with significant backing from a state government or the federal government, including the following:

- **The transaction hub worked as expected.** The pilot proved it is technologically feasible to adjudicate a claim in real time and deliver the response to the provider’s office in less than 10 seconds (on average). However, insurers need to reform their processes to allow for real-time eligibility verification and real-time payment adjudication through a centralized hub. The incentive for doing so is knowing that the new process can be used to work with a majority of providers; cost savings will abound through automating time-consuming manual processes; and data transmission throughout the electronic process is secure.
- **Participation in the program must be mandated or otherwise encouraged** because a critical mass of participants—both providers and payers—is needed. This reduces the need to handle “one off” situations where a provider or payer uses a different process from the group.
- **There must be minimal changes to the providers’ current business processes.** Providers do not want to work with multiple systems in their offices, especially if it means any duplication of effort. Integrating the providers’ practice management systems with the transaction hub solution helps to minimize process change and encourage adoption of the new process.
- **ACH payment to the provider can be delivered the day following actual claims adjudication**, thus reducing the time it takes to put payment in the hands of the providers. This can be an incentive for providers to join a future program.
- **It’s important to overcome the cultural roadblock of “we’ve always done it this way.”** This should not be a problem once providers and payers see that the new streamlined processes can free-up people to perform value-added tasks.

Vermont's Vision for Health Care Payment Processing Reform

Recognized nationally as a leader in health care reform, the state of Vermont is in the midst of designing statewide reform measures. Payment processing reform is among the key measures the state is undertaking. Through the power of House Bill 441 Sec. E.102.1, the Vermont 2009-2010 General Assembly charged the state's commissioner of information and innovation with the responsibility to convene a workgroup to "explore ways to use and fund health information technology to achieve health care payment reform in this state." The bill required the workgroup to consider the use of smart card technology and other mechanisms that could potentially enable real-time eligibility determinations and claims adjudication within a health care professional's office or hospital.

The Health Information Technology (HIT) Payment Reform Workgroup, which included personnel from multiple state agencies along with representatives from First Data, IBM, the provider community and the payer industry, conducted its study in July and August 2009. On Aug. 31, 2009, the workgroup delivered its final report, which includes a description of the "as is" environments for eligibility processing and claims processing; the "to be" vision of how the state would like the processes to work; federal action pertaining to the issue; and next steps in the state's reform process.

As directed by the legislation, First Data was invited to be a non-paid technical consultant to the work group, owing to our previous experience with the real-time eligibility verification and payment pilot and our deep expertise with payment processing systems in other industries. First Data advised the group on what is technically feasible in terms of settling electronic payments quickly and securely. Our seat at the table with the Vermont HIT Payment Reform Workgroup gave us a unique vantage point. We believe the vision outlined below is based on sound principles, procedures and technologies that are viable not only for Vermont, but also for the broader U.S. health care industry.

Vermont's "as is" environment for eligibility verification

The starting point for the HIT Payment Reform Workgroup was to study the current environment for eligibility verification. Although the "key facts" below pertain specifically to the state of Vermont, the situation is consistent with the "as is" eligibility verification process of other states.

- Many practices do not have the capability today to check eligibility electronically. Those practices without access to an eligibility verification system check a patient's eligibility for insurance either by calling the payer (also known as the carrier or insurer) or by checking a static Web site.
- Eligibility verification checks can happen at various times, including when a patient calls for an appointment; one to two days prior to an appointment; at the time a patient presents for an appointment; or retrospectively through submission of a claim.
- When offices check for eligibility prior to a patient's arriving for an appointment, the office can alert the patient before the appointment if there is an eligibility problem. This gives the patient time to try to fix any error before the appointment or to decide whether he will pay for the visit out of pocket.
- Payers (also known as carriers or insurers) have individualized systems for verifying eligibility. The process is not consistent across payers.
- A small number of practices are beginning to contract with services that check eligibility for patients.
- A small number of practices use a provider portal that allows patients to fill out forms online prior to their arrival at the physician's office. Other offices may mail patients forms to complete and return prior to the appointment (though many patients just bring the form to the appointment).
- Medicare is requiring proof of identification at the time of an appointment in order to limit/prevent cardholder fraud.

Vermont's "as is" environment for claims adjudication

In Vermont today, as in the vast majority of the country, claims are processed by insurers on a batch basis. That is, they are submitted at a point in time by providers and are processed en masse by the health insurance plan or other payer. This process works differently for each insurer. It has resulted in an industry that batches and submits claims for small providers and in significant administrative capacity being built within larger providers to accomplish the submission, adjudication and payment process. Since each payer has its own series of requirements, the claims must be batched from individual providers to individual insurers. This is time-consuming and labor-intensive. The best automated systems available today nonetheless require manual intervention on a significant minority of claims.

The typical process of claims adjudication today often takes multiple weeks to result in a payment. Again, this scenario is specific to the state of Vermont but is typical elsewhere around the country.

Vermont's "to be" environment—a vision for the future

Vermont's vision of the future is "the implementation of a statewide initiative that will reduce administrative costs through the provision of a comprehensive point-of-service eligibility and electronic adjudication of health care claims using a token-based system and starting in physician offices/ambulatory care centers." This vision has a basic premise: Make the system more transparent, work in real time and become standards-based, and it will become more efficient.

Key principles of the state's vision for the future of health care payments include the following:

- Patient eligibility verification before services are provided
- Real-time claim submission and adjudication immediately after services are provided
- Ability to tell a patient what he owes while he is still at the office
- Collection of patient co-pay in the office
- Collection of payer portion within 24 to 48 hours

This vision for payment reform is consistent with the trends seen within leaders in the health care industry. Significant attention is being placed on improving the efficiency of the health care payment process by making it more like the payment processes in other industries, such as retail. This requires better communication and information sharing between the parties involved in order to eliminate the uncertainty and long delays associated with payments.

Another industry trend that plays a major part in the state's vision is the emphasis on patient payments, in addition to the payments from health insurance plans and other payers. As more of the payment responsibility has been shifting to patients due to increasing deductibles and co-pays, this payment component has become more important. The state recognizes that any significant process improvement must address both of these payment types.

All of the principles involved in this vision are currently in place and operational with groups of providers or specific payers. However, the concepts have not been implemented on a statewide scale, as envisioned by Vermont. Previous efforts to make improvements such as these have been constrained by the lack of coordination across the various entities involved and commitment to make the needed changes. The state's vision for this effort is to help facilitate the changes across the state by providing a standardized solution and approach, along with some of the needed infrastructure. As a result, the state intends to take advantage of these proven business practices and technologies to significantly improve health care payments in Vermont.

The high-level process shown above can be categorized into three major subprocesses, briefly described below:

1. Eligibility verification
2. Claim submission and adjudication
3. Payment processing

Eligibility verification

In the state’s vision for the future of health care payments, real-time eligibility verification plays an important part of the solution. Because insurance eligibility is often unknown by providers at the time of service in the current environment, care is often provided without a clear understanding of where payment will come from. Although there is an expectation of payment, the actual amount to be paid and the source of the payment is not certain, and oftentimes full payment is not collected. As a result, uncompensated care has become a major issue for many health care providers across the country. In fact, hospitals saw a 57 percent increase in uncompensated care between 2000 and 2007. This is primarily due to two factors:

1. Growth in the uninsured population
2. Rapid growth in consumer-driven health plans

The Vermont health care payment reform solution can address this issue by providing real-time links to eligibility information in the systems of the major payers in the state. This solution could include connections to insurers and other payers such as Medicaid, Medicare, CIGNA, Blue Cross Blue Shield (BCBS) and MVP Health Care. As a result, providers would have immediate access to information about the patient’s insurance coverage before any services are provided.

In order to facilitate efficiency in operations, ideally the solution would be integrated with provider practice management systems. This method would enable information to be moved between systems without entering it multiple times. The solution could facilitate this integration by providing interfacing tools, such as an application programming interface (API) that provider information technology staff can use to link the systems.

Although details regarding the Vermont approach are yet to be developed, First Data is working with partners IBM and Preferred Health Technology to define a solution that can meet the state’s vision. This solution involves the use of software that facilitates integration between the transaction hub and providers’ practice management systems. Figure 3 illustrates the steps involved in First Data’s vision of the anticipated eligibility verification process, followed by a brief description of each step.

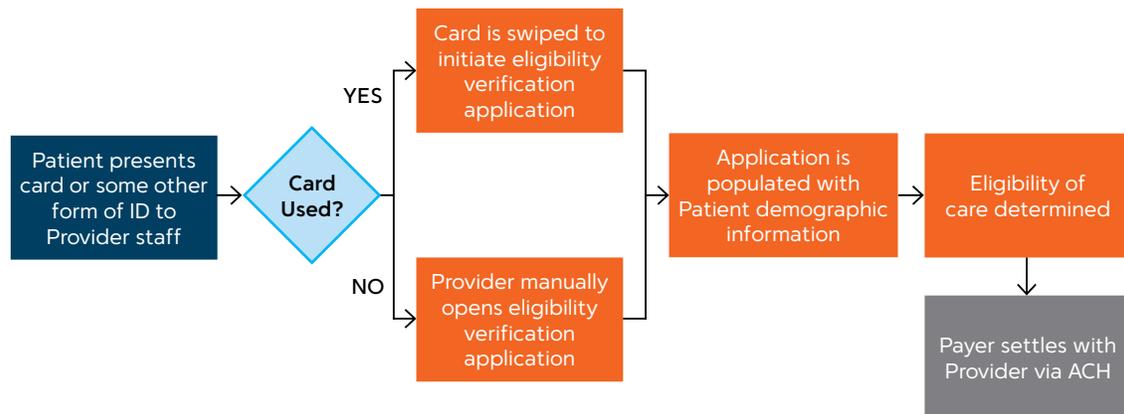


Figure 3: Eligibility verification subprocess

Patient presents card or some other form of ID to provider's staff. This step occurs when the patient arrives in the provider's office. The eligibility verification application can be initiated using a predefined card, such as a smart card or basic insurance card, or it can be initiated manually if the patient provides suitable identification.

Card is swiped to initiate eligibility verification application. If a card is used for eligibility verification, it is swiped in a card reader that captures the patient's demographic information and health plan information. The information is then prepopulated into a secure, Web-based software application for submittal.

Staff manually initiates eligibility verification application. If a card is not used, the office staff can initiate the Web-based eligibility application and manually enter the patient information.

Application is populated with patient demographic information. Depending on the method used to initiate the application, the patient data can be populated in the application via the card reader or by manual data entry. Preferred Health Technology provided the screen shot shown in Figure 4 from a sample patient eligibility verification application.

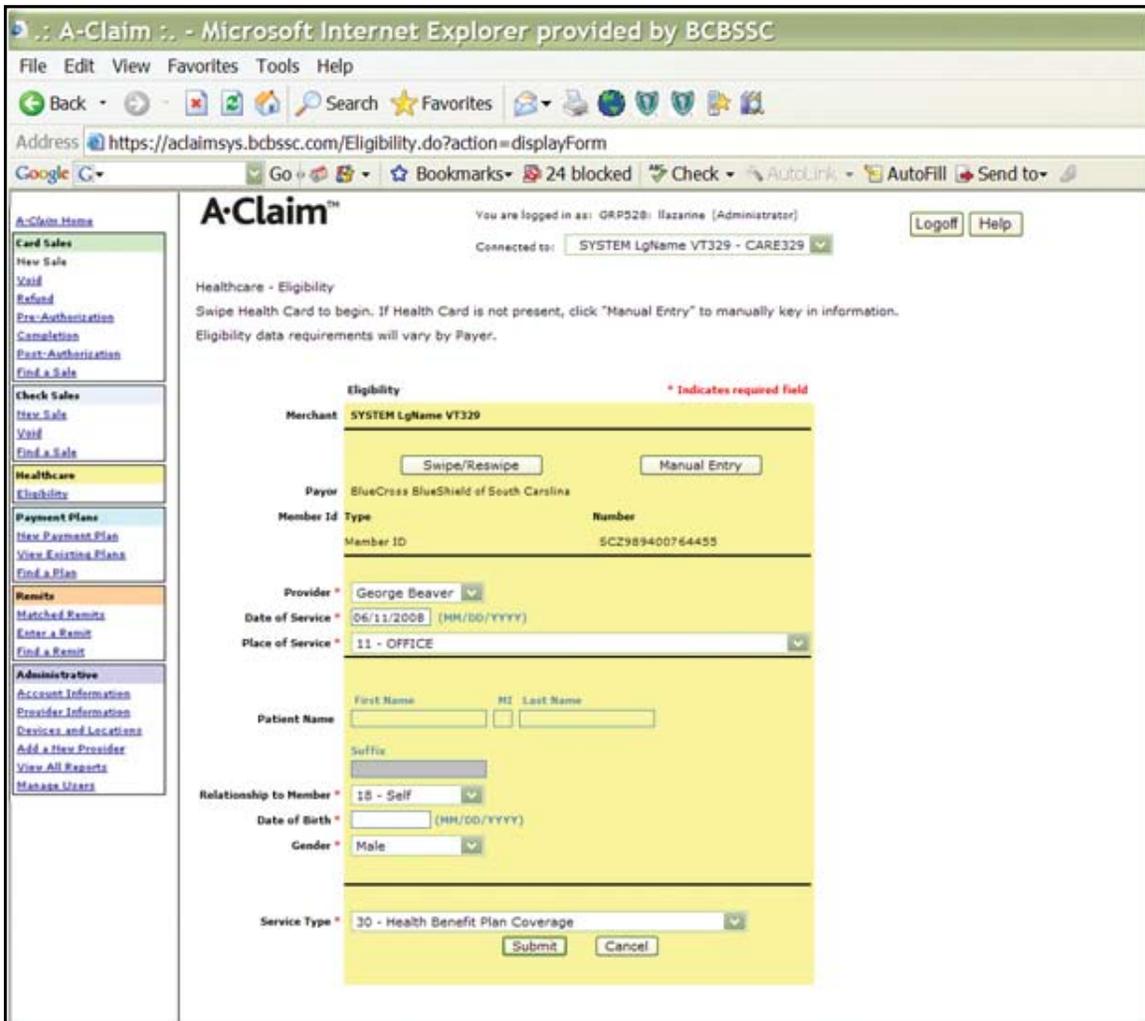


Figure 4: Data entry screen for patient data in a sample eligibility verification application

Application connects to payer system. Once the patient data is entered into the eligibility verification screen, the office staff member submits the eligibility request. The system uses predefined interfaces via an encrypted Internet connection to request specific eligibility data for the patient. It is expected that the Vermont system would interface with the following insurers/payers: Medicaid, Medicare, CIGNA, Blue Cross Blue Shield (BCBS) and MVP Health Care.

Payer system provides patient eligibility information. In this step, the application obtains the eligibility information from the payer system and presents it on a printable screen on the provider’s computer. It would include information on topics such as plan dates, coverage, deductibles and co-pays.

It is envisioned that the eligibility verification processes described earlier would be performed via a secure, encrypted Internet connection. It would include passing standard HIPAA Eligibility Transaction System (HETS) X12N 270/271 transactions. Figure 5 (below) illustrates the high-level information flow in this process.

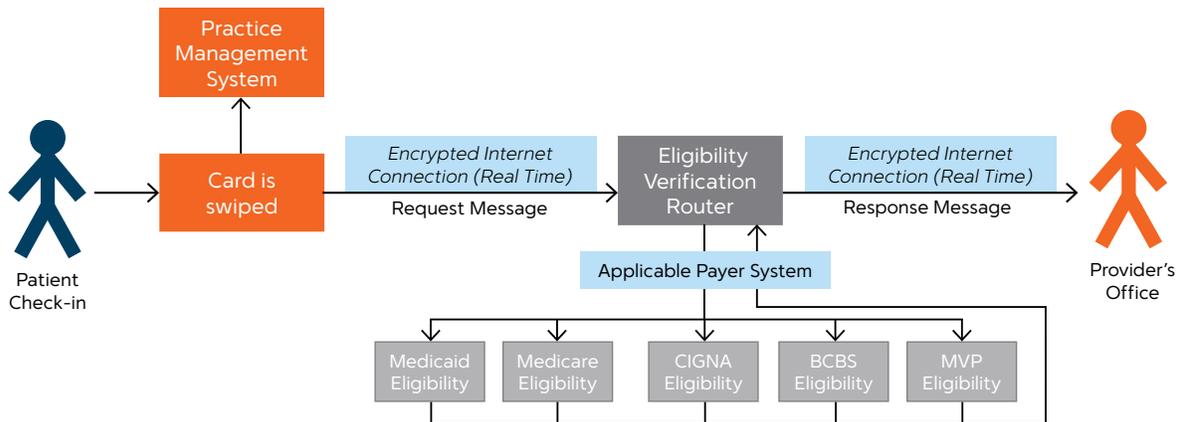


Figure 5: Information flow for eligibility verification

Claim submission and adjudication

Once the services are provided to the patient, the process focuses on submitting the claim to the payer and ensuring all parties understand their payment responsibilities before the patient leaves the office. As described previously, it is envisioned that this would be accomplished through real-time links to all of the major payers in the state. The system would facilitate real-time claim submission and adjudication so that providers and patients know the amount to be paid by the payer and the amount owed by the patient after factoring in all co-pays and deductibles. In cases where adjudication cannot be completed in real time, the system would enable costs to be estimated based on eligibility information available at the time of service.

Figure 6 illustrates the steps involved in First Data’s anticipated claims adjudication part of the process, followed by a brief description of each step.



Figure 6: Claim submission and adjudication subprocess

Staff enter services provided into Web-based claim form. In this step, the provider’s office staff would populate the Web-based claim form while the patient is still in the office. The patient demographic information would be transferred electronically from the eligibility screen to the claim form in order to avoid duplicate data entry.

Claim is submitted to appropriate payer. Once the claim form is complete, the provider staff would submit the claim to the appropriate payer, through a secure encrypted Internet connection, based on eligibility information obtained during the patient check-in process.

Claim is adjudicated in real time. As the claim is submitted, the payer system would adjudicate the claim to validate that the services performed were within the parameters of the patient’s health plan and to determine the amounts to be paid by the patient and the payer.

Adjudication results are presented to provider. After the claim is adjudicated, a screen from the Web-based application would show the results to the provider. It would define the specific amount to be paid by the payer as well as the patient responsibility for payment.

Adjudication results are provided to the patient. The provider’s staff receives the results of the adjudicated claim and then presents the information to the patient. It would show the patient’s monetary responsibility and break down the amount into co-pay and deductibles, as appropriate. In cases where adjudication cannot be completed in real time, the system would enable costs to be estimated based on eligibility information available at the time of service.

Supporters of the implementation of this vision for claim submission and adjudication anticipate that it would result in lower health care costs. It would significantly reduce the administrative effort associated with claim submittal and approval, providing a benefit to both providers and payers.

As described earlier, these transactions would be performed via a secure, encrypted Internet connection. The platform would allow multiple real-time payers to deliver this functionality through a uniform interface. Procedure codes would be entered into the interface and a real-time transaction would be sent to the payer.

Additionally, the solution would be integrated with provider practice management systems using interfacing tools such as APIs. This method would enable information to be moved between systems without entering it multiple times. Figure 7 illustrates the high-level information flow in this process.

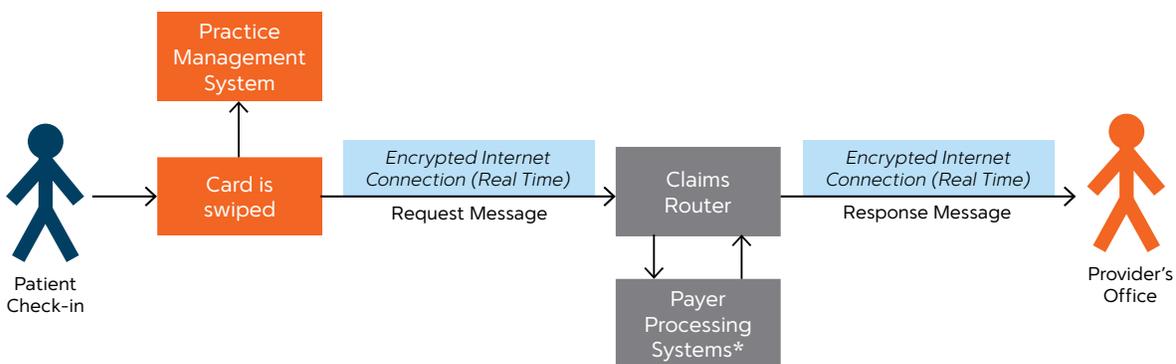


Figure 7: Information flow for claims submission and adjudication

*Claims, benefits, membership, provider systems

Payment processing

The last step is the processing of the payments to the provider from the payer and the patient. This is a critical part of the solution, because it addresses two important problem areas identified in the current environment:

1. The long time period between the provision of services and the receipt of payment from payers. This time period can be reduced from weeks to days when real-time claim adjudication is implemented, as described earlier.
2. The low rate of collections from patients. This issue can be addressed by giving providers the ability to tell patients what they owe while they are still at the office and collecting their payment at that time.

The state recognizes that not all claims can be adjudicated in real time. Some claims could have factors that make them poor candidates for real-time processing, and some payers may choose not to participate in the real-time adjudication process. Therefore, First Data’s vision includes improvements to the payment process in those cases as well by providing tools that enable providers to estimate costs and authorize patient payment prior to final adjudication, all incorporating First Data’s security technologies .

Figure 8 illustrates the steps involved in First Data’s anticipated payment processing part of the overall process, followed by a brief description of each step.

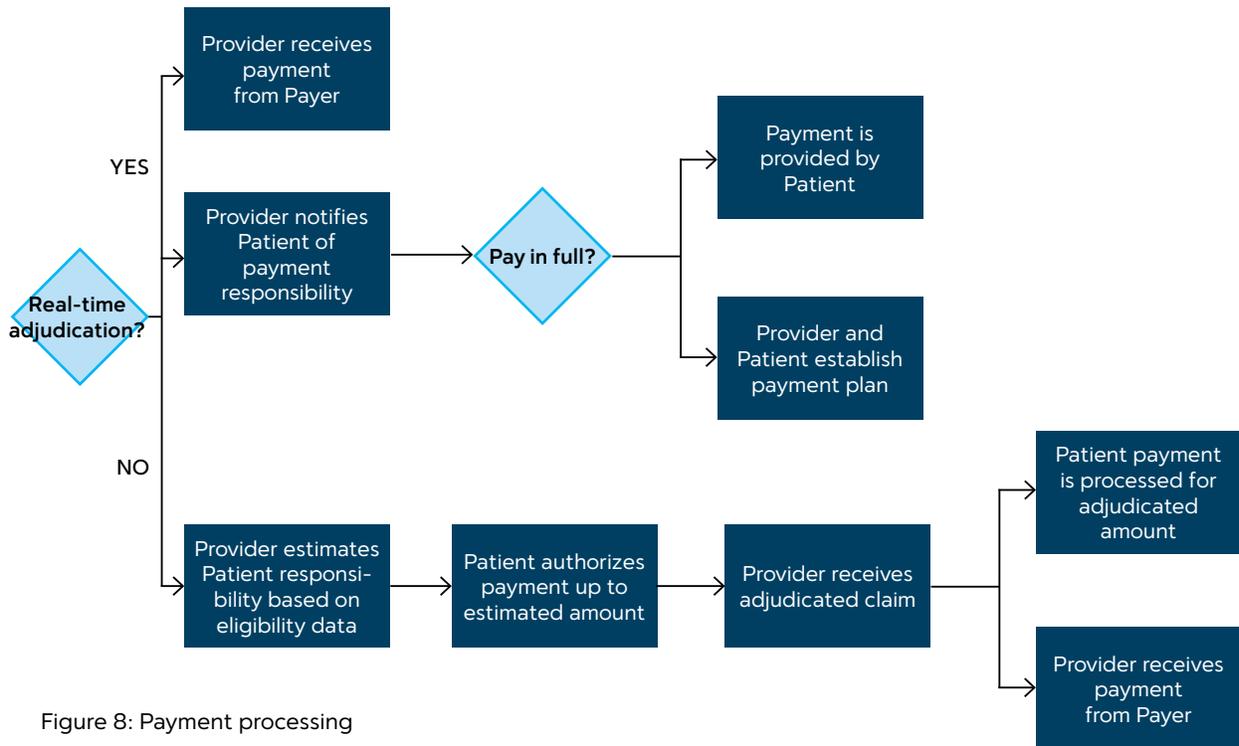


Figure 8: Payment processing

Receive payment from payer. If the claim was adjudicated in real time with the payer, then it is anticipated that electronic ACH payment can be provided within 24 to 48 hours.

Staff notify patient of payment responsibility. If the claim was adjudicated in real time with the payer, then the office staff would immediately notify the patient of his or her payment responsibility. It is envisioned that this step would take place as part of the checkout process while the patient is still in the office.

Payment is provided by patient. The patient would be given options for making payment to the provider. Payment methods could include credit card, debit card and check.

Establish payment plan. Another option for the patient may be to establish a payment plan with the provider. This would involve establishing advanced authorizations for monthly charges (or some other prearranged schedule) to a credit card until the full payment obligation is met.

Staff estimate patient responsibility based on eligibility data. If the claim was not adjudicated in real time, then the patient responsibility would need to be estimated. The system would assist with the estimate based on eligibility information collected during check-in. The purpose of this step is to have the patient commit to a payment before leaving the office, even though the amount is yet to be finalized.

Patient authorizes payment up to estimated amount. In this step, the patient authorizes the provider to charge a credit card or withdraw funds from an account up to the estimated payment amount. The actual payment would not take place at this time, however, if the claim was not adjudicated in real time.

Receive adjudicated claim. This step is the trigger for collection of payment from the patient. If the claim was not adjudicated in real time, this step would occur after the patient has left the office.

Patient payment is processed for adjudicated amount. Once the adjudicated claim is received by the provider, the office staff would process the patient payment for the final adjudicated amount. If the amount is less than the previously authorized amount, no additional authorization is required. If the amount is more than the previously authorized amount, the patient would be contacted to provide authorization for the additional payment amount.

A vision for success for Vermont—and beyond

The concepts, processes and technologies that Vermont envisions for its health care payment processing reform are very similar to those that were explored in the 2005 Cerner pilot program described previously. Observing the lessons learned from the pilot, the Vermont system plans to incorporate the changes that should make the reform a success.

First of all, the state expects high participation from health care providers as well as the insurers. Participation could be mandated via legislation, but this is yet to be determined. A key to getting these parties to willfully adopt use of the transaction hub is to ensure it can be integrated with existing back-office systems. For health care providers, this would be the practice management systems. For insurers, this would be their existing eligibility verification and claims adjudication applications. The state's planners are already giving consideration to what is needed for successful integration of these applications. Moreover, all systems would ensure compliance with HIPAA electronic submission standards.

Vermont needs federal funding in order to move forward with its plan. In fact, legislation enacted in June 2008 by the General Assembly of the State of Vermont aims to position the state as first in line for federal funds. Therefore, the planners are looking at payment processing reform as one component of overall health

care reform, and they are aligning the state's reform efforts with ARRA requests. Planners hope to be able to use federal funds earmarked for health information technology to develop the eligibility verification and claims adjudication transaction hub.

To keep up on Vermont's quest toward health care payment processing reform, go to <http://hcr.vermont.gov/>.

The governor of Vermont believes that other states can benefit from his state's research and initiatives. At the September 2009 National Governors Association meeting, Vermont Governor Jim Douglas spoke on the importance of states to actively participate in health care reform measures. At the conclusion of his talk, he unveiled the "Rx for Health Reform" Web site, which can be found at <http://www.subnet.nga.org/ci/0910/>. The site serves as a clearinghouse for all initiative news, activities and published materials.

What's Happening at the Federal Government Level

It's no exaggeration to say that health care reform is the talk of the country. The Obama administration is calling for passage of some measure of reform legislation by the end of 2009. At this writing, federal legislation is in the formative stage; there are many proposals but no definite course of action yet.

In mid-September 2009, the chairman of the Senate Finance Committee released a framework for comprehensive health care reform. This framework outlines several significant new proposals to improve quality, reduce costs and finance expanded coverage. Among the proposals are a new CMS Innovation Center and a Pilot Project on Payment Bundling. One provision would fund the establishment of a \$10 billion Innovation Center at the Centers for Medicare and Medicaid Services (CMS), which would have authority to test new provider payment models and expand successful programs into the Medicare program. A second provision directs the Health and Human Services (HHS) secretary to develop a voluntary pilot program encouraging hospitals, doctors and post-acute-care providers to achieve savings for the Medicare program through increased collaboration and improved coordination of patient care by allowing participating providers to share in the savings. These provisions are a step in the right direction toward reducing health care costs by addressing payment reform.

Funding of the proposed health care reform measures is a major issue, and here's where payment processing reform can provide widespread benefits. Even conservative estimates show that payment processing reform can save billions of dollars annually in administrative costs. Such savings could be reinvested to support other areas of health care reform that are in hot debate, such as how to provide insurance coverage for the 46 million people without coverage today.

"Stimulus" and other federal funds already have been designated for "health care IT"—upward of \$40 billion, the bulk of which is going toward electronic health records. No money is currently designated specifically for health care payment processing reform; however, it's possible that a small portion of the health IT funds could be used to develop systems such as the transaction hub that Vermont and other states envision.

Within the broad spectrum of health care reform, there is an overall goal for administrative simplification that would include payment processing reform. The 2005 Cerner pilot program showed that reform is technically feasible, but federal mandates for participation, along with federal funding, are critical components of wide-scale adoption. Some of the groundwork being done in Vermont today is expressly geared toward enabling the state to solicit federal funding. Without such funding, Vermont's project may not get off the ground.

Conclusion: Making Payment Processing Reform a Reality Could Be Faster Than You Think

As health care accounts for an increasing share of the country's GDP, there's no doubt that system-wide reform is needed. Certainly payment processing reform is a component of the overall initiative, as payment administrative costs total more than \$300 billion a year. Such costs can be lowered dramatically by fully automating time-consuming and labor-intensive processes like eligibility verification, claims adjudication and payment transaction processing.

Borrowing a transaction processing model from the retail industry, the 2005 Cerner pilot program validated the feasibility of an automated transaction hub for the health care industry. We can learn from the failures as well as the successes of the pilot study; for example, future success would require mandating participation by providers and payers, and the integration of new applications with existing ones. With the appropriate legislation and funding, these are not insurmountable challenges.

Even as the federal government debates how to implement nationwide reform, states are taking the initiative to plan their own reforms. At least 17 states have proposed or are moving toward comprehensive health care reform. As illustrated within this document, Vermont is already on the path of reforming payment processing. And while Vermont may have a head start in the reform process, it's not the only state pursuing change.

Even though individual states are mapping out their own health care reform measures, the states need funding from the federal level. For example, Vermont is aligning its health care payment processing reform goals with that of the federal government with the intent to secure federal funding for its program. Once funding is secured, Vermont could have a viable solution in place within a year or two.

Health care reform has multiple components—and while payment processing reform isn't the part that's getting the most press, it offers a proven solution to address the 15 percent to 20 percent of health care expense now attributed to administrative processes. What's more, key stakeholders believe that positive results in payment processing reform can be achieved by 2012. With consideration for putting together the technology, the streamlined processes, the legislation and the funding, significant health care payment processing reform can be a reality within just a few years.

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- ¹³ American Hospital Directory; Medical Group Management Association; McKinsey & Company analysis (data presented in *The McKinsey Quarterly*, "Overhauling the US health care payment system," June 2007).
- ¹⁴ The Healthcare Eligibility Transaction System (HETS) system is intended to allow release of eligibility data to Medicare providers or their authorized billing agents for the purpose of preparing an accurate Medicare claim, determining beneficiary liability or determining eligibility for specific services. Such information may not be disclosed to anyone other than the provider, supplier or beneficiary for whom a claim is filed. The system provides access to Medicare beneficiary eligibility data in a real-time environment. In this environment, the submitter transmits a 270 eligibility request file (either directly or through a switch, i.e., a clearinghouse) and remains connected while Medicare processes the transaction. Medicare then returns a response (typically, a 271 eligibility response) file via the same network connection. HETS 270/271 is an extranet-based eligibility system for high volume providers who frequently check Medicare eligibility. The HETS 270/271 system allows providers or clearinghouses to submit HIPAA compliant 270 eligibility request files over a secure connection.
- ¹⁵ Office of Vermont Health. Division of Health Care Reform, Health Information Technology Payment Reform Workgroup Final Report. Senator Bill Carris and Representative Anne O'Brien. 31 August 2009.
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About the Author

John Grubmuller, vice president, oversees sales and business development activities for First Data's Government Health and Human Services team. This includes managing business development efforts as well as partnering with clients to identify strategic solutions that fit their particular needs. Having been in the government contracting industry for more than 17 years, Grubmuller has in-depth knowledge of consulting services and government human services systems and programs, and he is actively involved in industry organizations.

During his eight-plus years at First Data, Grubmuller contributed his expertise to the Vermont Health Information Technology Payment Reform Work Group and has been involved in government health care technology projects in several other states.

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