

A decorative graphic of wavy, overlapping lines in shades of blue and grey flows across the middle of the page, starting from the left edge and curving towards the right. The lines vary in opacity and thickness, creating a sense of motion and depth.

## WHITE PAPER

# Payment Technology and Health Care Industry Revenue Cycle Management

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## Executive Summary

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Health care providers, squeezed by lower insurance reimbursement rates, shrinking margins, and challenged to collect more patient payments at the point-of-care, are actively looking for solutions to help manage revenue cycles and compliance with government and industry mandates.

A seven-fold increase in self-payments over the last decade has greatly increased the role and importance of POS (point-of-sale) payments. Yet the health care industry as a whole lags far behind other segments in modernizing an inefficient and wasteful payment system. According to McKinsey & Co.<sup>i</sup>, payment processing costs are 15%-20% of every dollar in health care, compared to just 2% in retail.

Over the next 4 years, patient self-pay expenses will double<sup>ii</sup>; this may seem counterintuitive in light of health care reform, but the expected increase of 30 million people into insurance plans will drive the volume of co-pays and deductibles. This puts additional pressure on providers to manage their cash flow in a timely way.

Facing growing and often seemingly conflicting demands for more services, better cost controls, faster adoption of electronic records and greater utilization of Health care Information Technology (HIT), the health care industry has no choice but to adapt.

Under intense pressure to run health care services with the efficiencies and productivity of a business enterprise, health care providers, payers and vendors in the HIT industry can replicate and leverage payment technologies adopted in other vertical industry segments. Payment acceptance technologies incorporate strong security and PCI compliance, which are vital to maintaining patient confidentiality and reducing cost, waste and abuse.

The American Recovery and Reinvestment Act of 2009 and the Patient Protection and Affordable Health care Act of 2010 provide incentives and potential sanctions that further drive health care providers to upgrade IT infrastructure. This white paper explores how payment technologies can impact key HIT areas that are crucial to improving efficiency, productivity, profitability and patient satisfaction.

## Government Incentives Driving Health Payments Modernization

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Much attention has been devoted to the movement toward Electronic Health Record (EHR) technology, for which the Health Information Technology for Economic and Clinical Health Act (HITECH) Act provides \$20.8 billion in incentives to providers who adopt “meaningful” use of this technology. It’s estimated that such adoption could result in payments of \$44,000-\$64,000 per practice beginning in 2011. On the flip side, those organizations who fail to make progress in this area face the penalty of 1%-3% reductions in Medicare reimbursements beginning in 2015.

But HITECH legislation included electronic eligibility verification under the EHR umbrella, which provides powerful incentive for payers and providers to move ahead with this very important component of patient management. Electronic eligibility verification promises to reduce bad debt, spur collection of patient self-pay requirements at the time of service, and improve the patient sign-in process.

Many organizations are moving to adopt machine readable ID cards for electronic eligibility verification and industry groups are hard at work developing interoperable standards. These cards, which have been adopted by many providers of health savings accounts (HAS) and flexible spending accounts (FSA), for the most part rely on the same type of magnetic stripe or smart card technology on which retail card payments are transacted quickly and efficiently.

## Payment Security & Privacy of Patient Information

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Government driven mandates for privacy and confidentiality of patient information in some respects parallel card payment industry efforts to establish and enforce comprehensive requirements aimed at ensuring the security of electronic payment transactions and protecting a consumer identity and financial information.

At the core, payment security and protection of patient information are largely dependent on the adoption and consistent application of best practices in the handling of data. The payment card industry, initially driven by large credit card companies, has adopted and is evolving a common industry standard—the PCI Data Security Standard, or PCI DSS—that includes requirements for security management, policies, procedures, network architecture, software design and other critical protective measures.

Under the auspices of PCI DSS, the payments industry has adopted related standards for PCI PIN Transaction Security (PTS) covering terminals and hardware security modules, and the Payment

Application Data Security Standard (PA-DSS) to govern the development of secure payment applications that do not store sensitive data such as PIN data and other card information.

Any organization accepting card payments, whether credit or debit, is covered in some manner by these PCI standards—including health care organizations. For many, it is a sound investment to leverage existing payment technology to meet the challenges of other business areas such as eligibility verification, payment automation, and lowering costs.

Although US card payments today are primarily based on magnetic stripe technology, most payment systems vendors have expertise and equipment to deal with smartcards that utilize embedded computer chips to store a variety of information. These cards can be integrated into current health care processes and systems to deliver a variety of benefits:

*[S]mart cards can facilitate rapid identification of a patient arriving at an emergency room and rapid retrieval of lifesaving information about medical history, recent tests, treatments, and medications. This critical information can be stored on the smart card chip or the smart card can provide secure access to data stored elsewhere. Smart cards can also provide fast access to demographic and insurance information, critical to an accurate registration/admissions process and to downstream billing and payment processes. The instant availability of recent lab test results can eliminate redundant testing and delays. Adding payment capabilities will give patients the ability to manage their health care investment accounts and services using a single integrated form factor.*

*-- The Smart Card Alliance Health Care Counciliii*

PCI compliance is not easy, nor is it inexpensive. For health care providers, developing the skills and expertise to successfully navigate the requirements of PCI poses a costly and frustrating chore. Rather than reinventing the wheel, providers of health care equipment and patient management services are more likely to opt to integrate existing payment technology into their systems.

## The Intersection of Payment and Electronic Eligibility Verification

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Payment cards are ubiquitous in modern society. According to a report by the Federal Reserve Bank of Boston, payment cards have been adopted by 93.4% of all US consumers. That survey also found that consumers judge credit and debit cards as easy to use as cash, and easier than using checks.

In a recent article in *Issues in Science & Technology*, Arnold Milstein, medical director of the Pacific Business Group on Health in San Francisco and Chief Physician at Mercer Health & Benefits, and Helen Darling, president of the National Business Group on Health, noted that electronic eligibility verification based on magnetic stripe cards is already widely available but sporadically implemented:

*[P]ayers have produced millions of magnetic stripe ID cards to enable electronic eligibility determination and provide accurate co-payment information at the point of care. However, adoption is lagging badly in physician offices where photocopying of magnetic strip ID cards remains a common practice.<sup>iv</sup>*

The Medical Group Management Association's (MGMA) Project, [SwipeIT \[SH1\]](#) has signed up more than a 1,000 organizations to its campaign for industry wide adoption of standardized, machine-readable patient ID cards. MGMA estimates "that machine-readable patient ID cards could save physician offices and hospitals as much as \$1 billion a year by eliminating unnecessary administrative efforts and denied claims."

As various states and more payer organizations mandate ID cards to automate eligibility verification, health care organizations have an opportunity to leverage the required infrastructure to ease their payment challenges. As noted in the McKinsey article, "Providers have only a limited ability to estimate their patients' liabilities at the point of service. Even when they do, few can present bills at the time of treatment and process credit or debit card payments.<sup>v</sup>" This type of inefficiency, say the authors of that report, results in physicians and hospitals typically collecting just 50% of the post-insurance balance owed and producing almost \$60 billion in bad debt annually.

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First Data, one of the world's largest payment processors, says that reforming this situation is possible using proven technologies and 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.<sup>vi</sup>*

First Data has been working on an initiative in Vermont to implement a statewide, comprehensive system for point of service eligibility determination and electronic adjudication of claims. First Data is working with partners including Preferred Health Technology, Inc., developer of the A-Claim system that has been deployed in multiple organizations to automate eligibility verification, claims, and payment processing. According to First Data, as it envisions the Vermont system:

*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 pre-populated into a secure, Web-based software application for submittal....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.<sup>vii</sup>*

A key challenge to HIT modernization is the interoperability of data among providers, payers and financial organizations. With payments, McKinsey notes, clearinghouses process outbound information transactions but banks process inbound financial transactions but that divide is likely to close:

*In the longer term, a single processor will probably handle outgoing claims and incoming payment flows. Several players are experimenting with not only integrating them but also helping providers to undertake reconciliation, denial management, and the rebilling of disputed claims.<sup>viii</sup>*

Consolidating health and data transactions into a unified stream is likely to depend on extending and modifying payment gateways, which are not extensively used to bridge ecommerce payment with traditional bank legacy payment systems. Rather than requiring each participant to throw out all existing systems and invest in a "one size fits all" scheme, these gateways serve as middleware that accommodates different systems utilized by different participants in the transaction chain. Typically, these host-based gateway services can be accessed by web browsers or integrate with existing software applications, and provide a pathway to multiple payment processors.

## How Payment Technology Can Impact HIT Today

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The health care industry is woefully reliant on manual interaction and paper processing. According to Diamond Management & Technology Consultants:

*Providers and payers can eliminate nearly \$25-\$30 of the cost of processing a claim by submitting them electronically. With nearly 75% of claims submitted electronically today, achieving an increase of another 5-10% could generate approximately \$6 billion in annual savings.<sup>ix</sup>*

Areas in which card payment technologies can impact health care today include:

### Debit/Credit Payments/PCI Compliance

PCI compliance is a daunting issue that falls far outside the expertise of most health care organizations as well as health care equipment and service providers. Payment terminals and applications that are already PCI certified and validated can be immediately implemented to capture patient payments at the point of care, reducing the need for a great deal of paperwork and debt collection. Wireless payment devices - using Wi-Fi or cellular technology - make it possible to implement card acceptance in any health care environment, including home health care, mobile clinics, health care workshops, and so forth.

### Comprehensive Eligibility

Card acceptance devices can read ID cards and almost instantly verify eligibility, authorize services and determine patient financial liability.

### Signature Capture & Multimedia

Card payment systems with user-friendly touch screens enable electronic signature capture and forms processing, which helps to reduce paperwork and file storage associated with signed documents, supports HIPAA and insurance, and provides electronic archives for subsequent analysis. Some of these screens utilize multimedia technology to enable customer-centric messaging, such as well-care information, promotions, and other value-added services.

### Real Time Claims Adjudication

Acquiring patient insurance data through machine-readable technology allows organizations to ensure that claims are adjudicated more quickly, error rates are reduced, manual intervention and labor costs

are reduced, and the A/R impact is minimized. In addition, co-payments can be collected on the spot by integrating claims and payments with machine readable financial cards.

### FSA/HSA Substantiation Requirements

Combining flexible spending account and health spending account processing with payment devices enables near-instant validation of patient eligibility, co-pays and deductibles and simultaneous processing of patient self-pay requirements.

## A Time for Advancement

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The retail segment processes customer transactions at a fraction of the cost of health care patient transactions, in large part due to the implementation of payment devices that implement industry-wide security standards, accept and integrate with a wide variety of applications, and interface with multiple processors. Health care organizations can realize many of the same benefits and leverage their investment by integrating payment automation with eligibility verification and authorization.

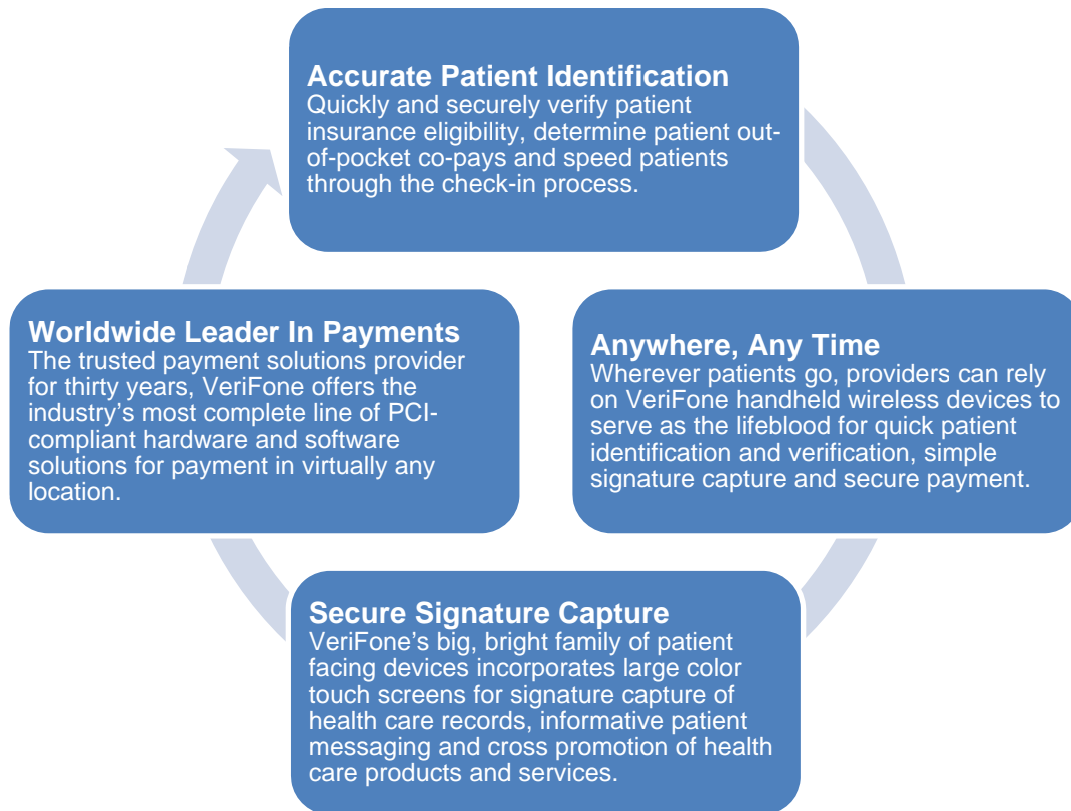
Payment technology offers numerous benefits to health care organizations seeking to keep up with federal mandates and implement improved productivity and efficiency. Implementing card payment technologies at the point of care offers providers the opportunity to integrate eligibility verification, authorization, claims submission and patient payment.

By incorporating secure payments into day to day operations, health care providers can realize improved Revenue Cycle Management and PCI compliant acceptance. At the same time, they can offer patients an improved experience that streamlines the check-in process, simplifies claims management and reduces confusion over coverage and payment liability.

Today secure PCI payment solutions are available in a wide variety of form factors to fit any environment to support hospitals, doctor's offices, clinics, pharmacies, home health care, ambulatory and rescue services, specialty medical, and dental. Devices are available in a variety of models including, patient-facing, all-in-one countertop devices, portable wireless, and iPhone peripherals.

For a complete list of health care solutions from VeriFone including patient facing and countertop devices, smart card and contactless solutions, wireless and mobile solutions, transaction processing solutions, end to end encryption, and services and support visit <http://www.verifone.com/healthcare>

## Solutions Tailored To Health Care, from Hospital to Home Health



<sup>iii</sup> Smart Card Alliance Health care Council, "A Health care CFO's Guide to Smart Card Technology and Applications." The Smart Card Alliance, February 2009.

<sup>iv</sup> Arnold Milstein and Helen Darling, "Better U.S. Health care at Lower Cost." Issues in Science and Technology, Winter 2010.

<sup>v</sup> Nick A. LeCuyer and Shubham Singhal, "Overhauling the US health care payment system." The McKinsey Quarterly, June 2007.

<sup>vi</sup> John Grubmuller, "Health care Payment Reform: A Proven Model for Addressing Escalating Health care Costs." First Data Corp., November 2009.

<sup>vii</sup> Ibid.

<sup>viii</sup> Nick A. LeCuyer and Shubham Singhal, "Overhauling the US health care payment system." The McKinsey Quarterly, June 2007.

<sup>ix</sup> Sri Velamoor and Tom Weakland, "New Opportunities to Cut Costs and Create Value in Health care Payments." Diamond Management & Technology Consultants, March 2010.