How Medical Banking Can Boost Transactional Efficiencies and Reduce Costs at the Point of Service

Background

A significant part of the healthcare claims cycle pertains to the financial transaction once the responsibility of the payer is determined during the adjudication process. Financial institutions have traditionally played a significant role in this area. They have offered services such as lockboxes, ERAs and EFTs which improve the efficiency of healthcare financing transactions.

ERAs and EFTs enable automation of billing and accounts receivable systems. For situations where the payment/remittance cycle still depends on a paper-based manual process, financial institutions offer lockboxes, which allows them to clear checks the very day they are received, thus reducing the number of days the funds are in receivables.

Many of the more customer-centric financial institutions are delivering added value to providers by creating what are called Digital Image Lockboxes. In such cases, these institutions collect remittance advice along with the EFT or check, and then capture images of the remittance advice using imaging solutions. These images are then shared with providers.

With the advent of consumerism and need for associated consumer enabling tools, banks and financial institutions have started to play a significantly broader role in the new paradigm of consumer-centric healthcare. This has resulted in evolution of what the industry calls Medical Banking.

What is Medical Banking?

Over the past many years, industry leaders have begun leveraging the banking industry's business processes, systems and assets to better manage the challenges of rising healthcare costs. Significant traction for these efforts is beginning to emerge.

Medical Banking refers to the above mentioned convergence of functions. The term itself, is a trademark of the Medical Banking Project™, whose founder John Casillas defines it as "the latent integration of banking technology, infrastructure and credit with healthcare administrative operations."

There is a growing tendency to move towards closer and coordinated functioning between payers, financial institutions and providers. Moreover, newer areas of cooperation are being sought on an ongoing basis, and assessed for suitability. The continued proliferation of this model and the exact shape it takes would be determined by the emerging needs and

priorities of healthcare industry. However, in the foreseeable future, healthcare consumerism, the structures associated with it, and the need to rein in administrative costs and increase efficiencies will drive the model. Financial institutions that seize the initiative will quickly move up the learning curve and emerge as leaders in the long run.

This paper looks at the trends that are driving demand for Medical Banking services and how financial institutions are responding with their offerings. We also look at some of the more operational aspects of Medical Banking, including IT and operational challenges.

Why Medical Banking -- Trends Influencing Medical Banking

Healthcare Cost

A 2005 University of California study[1] reported that administrative costs accounted for 25% of healthcare spending in the United States -- or approximately $230 billion annually. A more recent study, commissioned by the PNC Financial Services Group and conducted in February 2007 by the independent research firm Chadwick Martin Bailey, indicated that the proportion of administrative costs has increased to more than 30% -- an extremely inflated figure compared with the customer's expectation of around 10% as reported by the same study.

Incidentally, the same study reported that roughly 70% of customers will be highly upset to learn that administrative overhead was as much as 30%. The implications are clear: Industry players need to be more efficient to survive. Improved efficiency, in fact, will drive customer retention. Inefficiencies in healthcare delivery and financing systems, moreover, are contributing factors for chronic high administrative costs.

According to the healthcare actuarial firm of Milliman and Robertson (M&R), the average cost to providers to process and collect on a claim is $11, ranging from a low of $8.50 to a high of $18. Also, on the payer side, the typical Medical Loss Ratio can range from 70% to 88%, signifying 12-15% administrative costs. Financial institutions on the other hand have highly efficient transaction processing systems. For example, transactions executed via ATM, phone or Internet average a few cents a piece. The reason: Financial institutions have built a very stable secure and wide-spread payment network to process various types of payments (from credit and debit cards through non-card transactions). The healthcare industry should leverage the financial industry's infrastructure and competencies to improve the efficiency of healthcare financing and services delivery.

Consumerism

Consumerism is a key emerging trend in the healthcare industry. For banks and financial institutions, the most direct consequence is the movement towards consumer-directed health plans (CDHP), through the creation of dedicated healthcare accounts such as HRA, FSA and HSA. CDHP put greater responsibility on the consumer to understand his/her unique healthcare needs and use their healthcare dollars accordingly. CDHP accounts, funded by employers and/or members, are typically accompanied by a more traditional health plan with relatively high deductible from payers. The member's healthcare dollars typically come from CDHP accounts before the traditional plan kicks in.

Consumerism has spawned multiple structural requirements across the payer industry. Since members are more responsible for the healthcare dollars accumulating in CDHP accounts, they need tools to inform wise healthcare decisions. From the provider side, claims now may get reimbursed from multiple fund sources, some of which are owned by members. So providers want to ensure that all of those sources have sufficient funds to reimburse a claim. From the payer and CDHP account processor side, a single claim must now go through adjudication logic in multiple steps. Employers want to ensure that consumerism helps to control the rising cost of healthcare, while meeting the needs of employees. These separate but equal outcomes require greater integration and interaction among different entities involved in healthcare financing and delivery.

Moreover, the industry now requires real-time claims adjudication and real-time member

responsibility determination. One way for providers to ensure the availability of funds to reimburse a claim is to deconstruct how a claim would be reimbursed at the point of service. This enables providers to make sure that funds are available across all sources. Through real-time member liability determination or real-time claims adjudication, providers can get a clear idea of which entity will pay what percentage of the claim reimbursement.

PHR

PHR refers to the health information of the member. PHRs are owned by the member and maintained jointly by member and payers or other PHR vendors. PHRs form a key constituent of ensuring the quality of treatment at the point of service. PHRs normally have all elements of member's health-related information, which enables providers to make more accurate decisions. Importantly, the PHR needs to be portable, moving with members as they shift from one plan to another. Also, the PHR needs to be available widely through a variety of channels to allow members to easily view and update their records and enable providers to access these records from various care settings such as PCP office, hospital bedside, etc. Finally the PHR should be completely secure; any access/update to PHRs should be completely auditable by members. Since PHR data and transactions have little or no financial content, it remains to be seen how the banking industry can assist in improving processing efficiency in this area.

The following information graphic (Fig. 1) highlights business trends that are driving demand for Medical Banking services.

End-to-End TPA Services for Consumerism

Many payers responding to the consequences of increased consumerism find that they needed to move quickly to take a leadership position with new product offerings. Because these new products require new functionalities and business processes, they are looking for independent entities that can build, manage and maintain end-to-end consumer-oriented products for them.

Medical Banking's Emergence

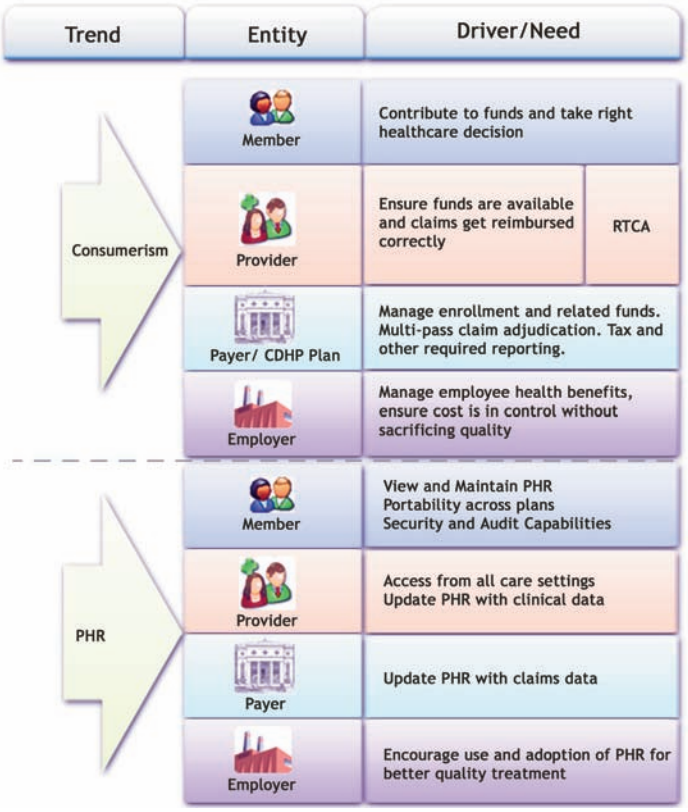

Fig. 1

Where Healthcare & Financial Services Intersect

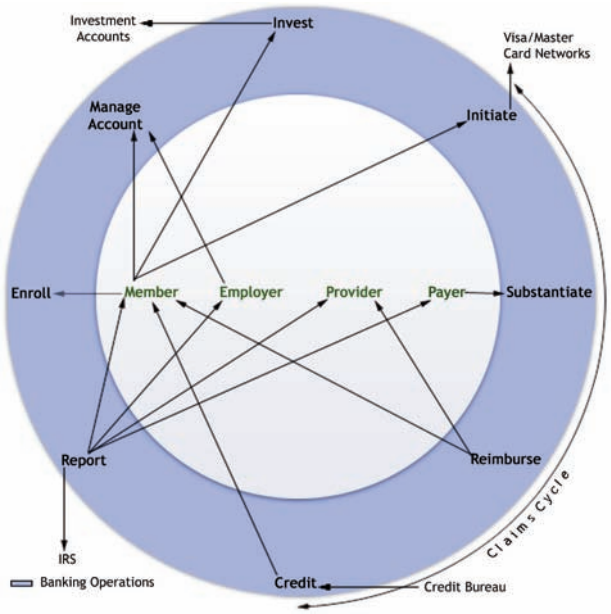

Fig. 2

Banks and financial institutions, meanwhile, are seen as natural custodians of funds for CDHP accounts. As an extension to this process, banks and financial institutions have been offering complete TPA services in the consumer space. The following are the services banks and financial institutions offer as a TPA to handle complete consumerism-related business processes (see Fig. 2).

Enrollment and Account Management

Financial institutions have been offering services to maintain the CDHP enrollment along with the tools to manage the accounts and funding mechanisms used by members. They maintain the CDHP enrollment along with the related processes to initiate funds transfer from employer and member and the core accounting processes to manage the debits and credits from/to the accounts. They also provide tools to members to view their fund status along with the statuses of the claims that have been submitted against their CDHP accounts. Banks and financial institutions also maintain the portability of the HSA funds as members go from one employer to another.

Funds Investment

Some of the CDHP funds, such as HSA, are a long-term savings vehicle for members where the member can pay for his/her healthcare expenses not only when he/she is employed but in post-retirement in a tax-advantaged manner. In short, the funds invested and grown in CDHP accounts work like a Healthcare 401(k). So it is crucial for banks and other financial intuitions to offer the best investment vehicles to attract members across different demographics. Banks and financial institutions are offering different types of funds such as large cap, small cap, balanced, international, index, fixed income and money market accounts as investment vehicles for HSA funds. Some CDHP processors are also forging partnerships with brokerage firms to help members actively self-manage their investments.

Depending on the arrangement between financial institutions and payers, these services are offered on a fee basis paid either by the plan or the member. In the first scenario, the plan reimburses the financial institution for its services. However, some entities also offer standalone HSA products directly to the consumer. In this case, the consumer is charged for various services such as account setup and

maintenance, HSA checks, supporting debit card transactions and account overdraft, etc.

Real-time Transactions via Integrated Healthcare and Financing Cards

Many plans have been moving away from paper identity cards towards magnetic stripe cards for their members. These cards are used at the provider's offices to access member eligibility. Financial institutions have also rolled out debit cards attached to CDHP accounts funds such as HSA. The magnetic stripes of the debit cards can be encoded to include the member's identifying information for authorizing payment from his/her CDHP account. The card minimizes the need for manual data entry for eligibility inquiry. Since the member has to carry a single card into the provider's office, the user experience is vastly improved. From the providers' point of view, the card can provide real-time information of eligibility of the patient, co-payments and the ability to pay from an eligible healthcare account -- all at the point of service. This results in reduction in coordination and communication efforts.

Auto Substantiation

These cards are supported by logic which splits the payments among different accounts accounting for allowed goods and services and other IRS guidelines. The IRS provides guidelines covering allowable expenses for each CDHP fund as well as how deposit, compliant withdrawals and non-compliant withdrawals should be treated for tax reporting purposes.

While the out-of-pocket part of an adjudicated claim is matched for contribution from various CDHP accounts, IRS rules need to be applied to ensure expense eligibility for compliance substantiation. The IRS requires that CDHP account transactions be substantiated either automatically or manually. By providing auto-substantiation services, banks and financial institutions significantly reduce the burden of manual substantiation on the members.

Currently auto-substantiation functionality is offered most widely in the case of FSA-tied pharmacy claims. It is proliferating to other CDHP claims, as well.

For complex CDHP accounts arrangements with different priorities and overlapping benefit structures, the tax reporting and justification process is a fairly complicated task. Financial institutions also provide value-added services to members and payers by providing 1099 forms for each of these accounts.

Multi-Purse Reimbursement

Different CDHP account types, such as Flexible Spending Account, Health Reimbursement Account, Health Savings Account and Medical Savings Account, have their own attributes, allowed services and benefits and hence need to be managed differently.

Payers face processing challenges when a customer who is enrolled into HMO/PPO/ traditional coverage also has multiple CDHP funds accounts. Any single healthcare claim may get reimbursed by the payer and/or one or more of the CDHP accounts. The number of and type of funds that reimburse the provider would depend upon the type and content of the claim. Reimbursement from CDHP accounts may start after member pays a portion out-of-pocket. First dollar coverage for certain preventive services can also originate from specific funds. These complex benefit tiring rules need to be applied by the CDHP account processor in order to disburse funds accurately. Banks and financial institutions are playing a very effective role in this process based on pre-configured rules, some of them by the members themselves. These entities can reimburse a claim from different accounts while factoring in the account priority as well.

These transactions can be completed by a single "Multi-purse card" which supports multiple CDHP accounts and also acts as a healthcare identity card.

Financing Healthcare with Credit

Healthcare accounts are financed by employers and employees incrementally over the course of the year. This puts the member in a quandary if he comes across the need to pay for healthcare in the beginning of the funding period and also if the member needs more healthcare dollars than what is in his CDHP fund and payer coverage. Healthcare financing structures have

evolved to cover such cases. Traditional banking institutions provide revolving credit for healthcare purchases based on income level and credit history. These loans can be paid off by the customer in monthly payments. Other institutions underwrite loans to a broad employer-based group through payroll deductions. By attaching these credit lines to specific healthcare accounts banks can make CDHPs more attractive to employees.

Importantly, when the consumerism trend initially emerged, providers and consumers were concerned about the high burden on consumers. Now, providers are starting to question if consumers with credit risk or bad debt experience should be placed in high deductible plans. Here again, financial institutions may have a role to play by providing more information about the consumer's credit worthiness to the provider or by offering products to cover credit risk of the consumer.

Provider Revenue Cycle Management Related Rervices

Medical Banking also has a significant role to play in the provider setting. Banks and financial institutions can automate claims posting and reconciliation from the provider side for a significant number of claims. Provider offices and institutions can then focus only on complex claims.

Financial institutions can play a crucial role in the treatment of the uninsured. When an uninsured individual comes to the hospital for treatment, banks and financial institutions can provide income and credit history information at the point of service. So if the person cannot pay at that juncture, the hospital -- through its charity program -- or the bank can offer credit programs (if the person is not enrolled or eligible for the Medicaid program). For uninsured patients, hospitals want to know whether the patient can pay, is willing to pay, or both. Medical Banking services can quickly provide the right information to the hospitals.

In certain cases, financial institutions have integrated their processes completely with the provider's revenue cycle from pre-admission to eligibility, claims submission, denial management and collection. Since revenue cycle management and conversion of receivables to cash is the main source of cash flow for hospitals, they are careful in completely outsourcing their revenue cycle operations to banks and financial institutions.

PHR Services

PHR are gradually becoming an essential component to ensure that providers receive all relevant information at the point of service in any care delivery setting. PHR information by nature has to be owned by the member, portable, accessible from a wide variety of settings and secure. Financial institutions can play a role in the PHR scenario in different ways, as envisioned by different researchers.

Shabo[2] presents a scenario where PHRs would be maintained in an Independent Health Records Bank, instead of the provider maintaining the patient's records in its own offices. These records would be accessed using standard communication protocols. Yasnoff[3] has proposed that fees will be paid by the consumer to encourage the physician to use the patient data from the central repository. Gold proposes that a Health Record Bank would store all the PHR information in a virtual account similar to an account aggregation services used by financial institutions. The Health Record Bank would be able to collate data from various different sources like a financial institution or a bank collects all data from a checking account, savings account, investment account and loans/mortgages into one consolidated statement. Consumers would be able to maintain the control over who would be able to contribute which data and who can access different data segments.

A few of the desired qualities of the central heath record repository revolve around the ability to collate data from multiple heterogeneous sources; a mechanism to securely disseminate data over wide range of channels; and the ability to track and audit any usage of data. Financial institutions have most of these desired technological assets that can be applied to create a central health record repository. Moreover by virtue of having 55 million-plus online banking users, PHR adoption will receive a major boost if banking channels are used for PHR access. For the actual

The Medical Banking Continuum

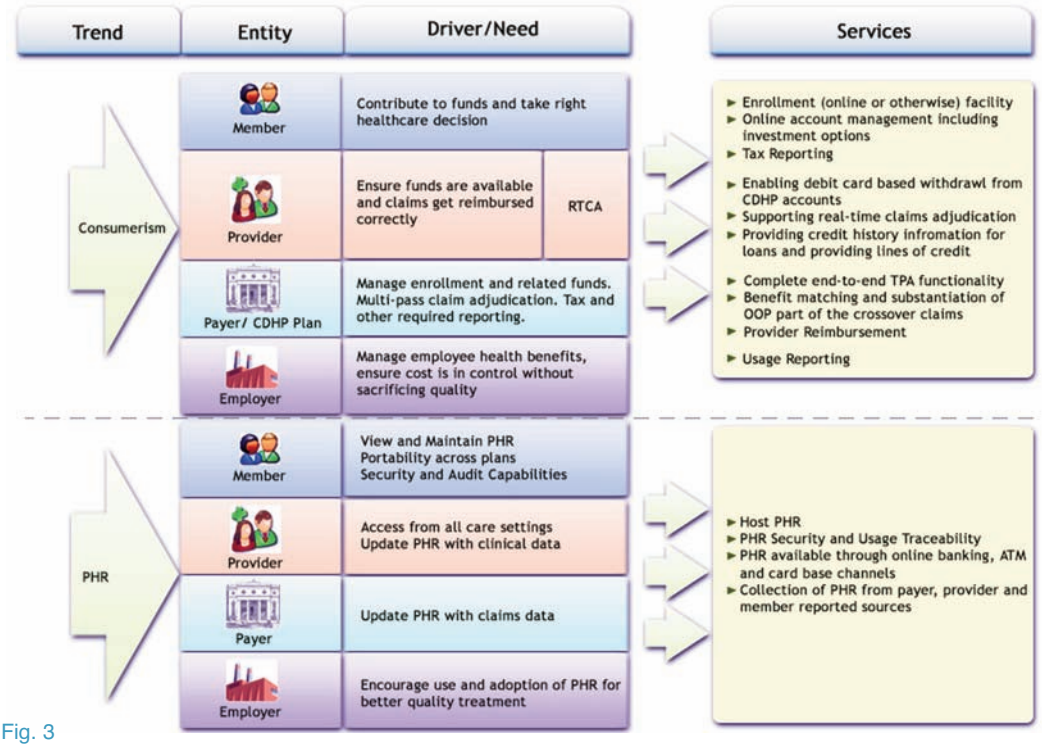

Fig. 3

dissemination to the provider point of service, existing debit cards can be used along with PIN and other security mechanisms to retrieve PHR information from the bank's central repository. However since PHR involves non-financial transactions and large part of the PHR data resides in payer and provider's systems, banks and financial institutions may face significant challenge in mobilizing their infrastructure to handle PHR requirements.

Fig. 3 (above) shows how financial institutions are offering various services to address the demand for Medical Banking services.

Challenges

Medical Banking remains an evolving phenomenon. Before Medical Banking can truly be offered in its entirety, business cases need to be justified; the pros and cons of several approaches need to be evaluated carefully; new regulatory mandates need to evolve; and technical standards must be agreed upon.

There are a number of challenges that must be resolved before Medical Banking-related functionalities can be implemented. Some of these challenges are discussed below.

Evolution of CDHP

Since CDHP are evolving products, consumers are discovering new requirements for various types of enabler tools. Financial institutions need to play an effective role in mitigating consumer needs by playing more of an infomediary role. Moreover, healthcare consumerism is poised for a significant leap. Consumerism is not without its risks. CDHP products give preferential treatment to healthy people, forcing those with higher healthcare requirements into traditional products. Given this scenario it is important for banks and financial institutions to determine how they will deliver value-added services to the healthcare industry.

Business Model and Competition

Financial institutions also need to determine the type of business model (factoring in all

economic, legal and political ramifications) that would best support Medical Banking services. The industry is currently going through a transition with a variety of business arrangements in play. United HealthGroup has acquired Exante bank to offer Medical Banking-related services; other major payers are tying up with banks/financial institutions. Meanwhile, a significant number of initial independent Medical Banking and CDHP providers have been acquired by different plans. Banks and financial institutions periodically have created separate business entities to handle Medical Banking transactions. These entities use the parent bank's resources to offer services, while providing investment options from their holding company's as well as from third-party trading platforms.

Also BlueCross and BlueShield Association (BCBSA) have launched a bank to handle Medical Banking transactions for some members. The Blue Healthcare Bank is likely to be a strong competitor to traditional banks and financial institutions, given its backing of BCBSA, which many Blues nationwide may find appealing in support of their Medical Banking initiatives.

Outsourcing of Provider Operations to Banks and Financial Institutions

Provider operations need to be aligned closely with their core services and ancillary activities like revenue cycle management can be outsourced to the bank to achieve maximum leverage. Since revenue cycle is the lifeline of most provider operations, it may take providers a while to warm up to the idea of outsourcing one of their key activities. Also banks and financial institutions need to ensure that their own processes are streamlined enough to make a difference and provide significant savings.

Without the complete outsourcing of the revenue cycle, providers can still utilize various common Medical Banking services such as EFT and ERA. To take advantage of these offerings, many providers would need to significantly ramp-up investment in their operations by re-engineering their business processes, retraining their people and enhancing their IT systems. So provider adoption may take a while. Financial institutions, meanwhile, need to ensure that by outsourcing revenue cycle operations providers would derive significant benefits such as reduced operational risk, as well as access to better IT and business processes. At the same time the financial institutions need to be aware of the provider's community links and help them handle this in a sensitive manner. The fact is that payment/remittance process is currently mostly manual, with 15-55% adoption of ERA/EFT originating from Medicare carriers. ERA/EFT adoption for the Blues and commercial plans stands at 8-40%[4]. Hence banks and financial institutions in the foreseeable future can continue to add significant value merely by automating payment- and remittance-related activities.

Bank's Information Systems

Financial institutions have traditionally processed transactions that are fundamentally different from most handled by the healthcare industry. Hence banks and financial institutions venturing into Medical Banking, need to invest in new systems and platforms, which is likely be biased toward their own operating characteristics and needs. These entities, therefore, need to ensure that they can actually support the full complement of Medical Banking transactions with their systems. They also need to ensure that the right business processes and management oversight is in place to fit the operating parameters of health plans and providers. Currently there are no industry-wide agreements that cover Medical Banking's reporting requirements. As a result there is no means to compare and benchmark competitive bank operations. However as Medical Banking gains traction in the market, banks and financial institutions can expect these types of industry demands either explicitly (through regulation) or implicitly (through best practices).

Regulatory Compliance

One of the key aspects of the payer industry is that it is fraught with heavy regulation. Newer regulations such as updates to HIPAA, completely new HIPAA transactions such as claims attachment, PHR exchange, and novel ways to codify diseases and services are emerging. Some of these changes may be extremely disruptive to the industry's operational processes. For example, ICD-10

codes are scheduled to be implemented for disease and procedure/service codes by 2010-2012. This is expected to have major implication across the entire healthcare industry. Financial institutions need to ensure that they guarantee the compliance on time, even ahead of the time needed to test transactional integrity with various business partners.

Another important aspect relates to how these entities handle Protected Health Information (PHI) in the form of claims, enrollment, etc., after which are subject to the HIPAA regulations. Compliance with HIPAA laws would be a new competency to most banking entities. Hence they need to ensure that they comply with HIPAA security, privacy and transaction standards in both words and spirit. Any violation of HIPAA laws, especially security and privacy provisions, could tarnish not only the image of Medical Banking but the core operation of the bank.

PHR

The PHR and health record bank scenario is not yet clear. Multiple entities, employers, payers and banks/financial institutions, are jostling to carve out a position in this space. Each has its own strengths. Who would survive is not yet clear. Also, financial institutions need to work out funding arrangements and a viable business model, such as which entities would operate centralized PHR repositories. Payers can easily justify the investment into a PHR system since they have most of the data required and would need relatively small capability modification to act as a central PHR repository. Employers can also justify this investment as a mechanism to attract better quality talent. Financial institutions may justify their involvement through increased revenue generated via fees paid by members. However if the access to PHR by providers become mandatory and/or customary, then some of these fees may be unsustainable and financial institutions, acting as a PHR aggregation agency/repository, may be only be able to charge a nominal fee. For example, if a patient has been going to a provider's office for some period of time and has a record history maintained by that provider, then it may be difficult for the provider to justify the sudden introduction of fees to cover access the patient's record from a central repository. Also such access to PHR information may be required at multiple points across the entire care settings over a period of time. The fees for this access may add up quickly to form a significant cost to the patient. Hence it is crucial for financial institutions to forge partnerships with payers and providers to establish cost-sharing arrangements so these services can be provided without a direct cost to the patient. Since most payers and some large providers themselves are vying to offer similar services to consumers, it remains to be seen if such arrangements can be established.

Conclusion

Medical Banking appears to be on the verge of proliferating throughout core healthcare processes and operations. However, there is still considerable uncertainty in terms of how different forces, such as cost pressure, demand for more consumer information and regulations, will play out. Also payer incumbents in this sector are trying to carve out a role in Medical Banking by participating in some of the key initiatives. While movement toward an integrated Medical Banking process is expected to continue incrementally, the healthcare industry needs to fully leverage banking industry processes and infrastructure to transform this dream into a reality. As such, Medical Banking will remain a work in progress for the foreseeable future.

List of Abbreviations

ERA	Electronic Remittance Advice
EFT	Electronic Fund Transfer
CDHP	Consumer Directed Health Plan
HRA	Health Reimbursement Account
HSA	Health Savings Account
FSA	Flexible Spending Account
PHR	Personal Health Record
TPA	Third Party Administrator
IRS	Internal Revenue Service
HMO	Health Maintenance Organization
PPO	Preferred Provider Organization
HIPAA	Health Insurance Portability and Accountability Act
ICD -10	International Classification of Diseases, Version 10
PHI	Protected Health Information

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Third-Party Trademarks

"Medical banking is a trademark of the Medical Banking Project (a.k.a. MBProject)."

Footnotes

[1]http://pub.ucsf.edu/newsservices/releases/200511101/

[2]Shabo A., "A Global Economic-Medico-Legal Model for the Sustainability of Longitudinal Electronic Helath Records", 2005

[3]Yasnoff WA, "A Path to Achieving Health Information Infrastructure, eHealthTrust™, September 27, 2005

[4]Medical Banking- Fad or Wave of the Future?, Healthcare Financing Conference, June 24-27, 2007

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