Data-Driven Healthcare Decisioning: Unleashing the Power of External Data Sets and Predictive Analytics
U.S. hospitals and physician practices are struggling with the rise of self-pay patients, which comprise both the uninsured and underinsured. An October 2009 study by research firm McKinsey & Company stated that healthcare providers can expect to retrieve only half of a patient’s balance after discharge. According to the Hospital Accounts Receivable Analysis Report on First Quarter 2011, patients were the third largest debtors behind managed care and Medicare, comprising 19.27 percent of outstanding accounts receivables (A/R) owed to the central business office (CBO). However, self-pay represents only 6.42 percent of CBOs’ gross revenue. All indicators point to self-pay continuing its upward trajectory, with no signs of slowing down. McKinsey & Company note that if current trends persist, increased patient liabilities and poor collection rates could reduce a hospital’s net revenue yield by 4 to 5 percent within five years. In this constrained environment, healthcare providers are scrambling for strategies and robust solutions that drive efficiencies and as a result increase self-pay collections.

Beyond front-end improvements in patient payment estimation and administrative streamlining, many hospitals are successfully increasing their self-pay collections at the point of service through the implementation of predictive analytics and external data sets. This white paper discusses how the implementation of these solutions can help reduce uncompensated care by:
(a) creating patient financial risk profiles to segment accounts into the appropriate workflows for optimal resource allocation, in particular, eligibility for charity care or financial assistance programs; (b) combatting fraud and improving registration accuracy by verifying patient demographic information at the point of service, and (c) creating more effective back-end collection strategies based on patients’ likelihood of payment. In addition, the paper debunks some of the myths about the risks associated with using credit report data in healthcare revenue cycle management.

First Step: Driving Front-End Efficiencies
Focusing on the front end makes sense: According to a U.S. Department of Commerce study of depreciation of accounts held in house, accounts at 90 days reach a critical depreciation period of 0.5 percent per day. At 120 days, the ability to collect drops significantly, and by 180 days, the ability to collect plummets to less than 30 percent. In its Practice Perspectives on Patient Payments research that the Medical Group Management Association (MGMA) conducted with Visa Inc. in the fall of 2009, MGMA found that when a physician practice turned over a patient’s bad debt to a collections agency, only $15.77 was recovered from every $100 owed to the practice. “There’s real money to be lost in terms of actual cost,” said James Bohnsack, vice president of product development for TransUnion Healthcare, which leverages its multiple data assets, consumer information insight, advanced analytic capabilities and diverse expertise to develop solutions for its global customers across industries.

Faced with diminishing returns once the patient leaves the facility, hospitals and physician practices are re-examining their front-end processes, including those at the point of scheduling (POS), to determine how those processes can be streamlined. “Anything – technology, tools, training – that streamlines the process is going to enable better collections and identification of financial resources (for the patient),” said Suzanne Lestina, director of Revenue Cycle MAP for the Healthcare Financial Management Association. Payment estimation tools help healthcare providers calculate at the POS how much patients will pay out of pocket based on insurance eligibility and benefits, the payer’s contractual obligations and historical cost of the service to be rendered. This transparent process
also decreases patients’ anxiety over not knowing what their financial liability is going to be for the procedure.

By creating a more efficient workflow for self-pay collections, hospitals and physician offices can decrease costs associated with staff making numerous telephone calls and mailing multiple letters. Healthcare providers can maintain their patient-physician relationship by eliminating the constant billing communications, which deteriorate the patient experience. Especially in an era of consumerism, healthcare providers must enhance patient satisfaction across all areas of interaction. Indeed, patient satisfaction, consumerism in the form of pricing transparency and quality are impacting revenue cycle processes and workflow, and RCM solutions, according to the Health Information and Management Systems Society’s 2008 white paper, Re-engineering the Revenue Cycle for the Emerging Medical Consumer: A Work Product of the HIMSS Financial Systems Revenue Cycle Task Force.

**Deploying Best Practices from the Financial Services Industry**

While front-end revenue cycle management tools have increased POS collections, forward-thinking healthcare providers are beginning to implement predictive analytics solutions that rely on multiple external or third-party data sets at pre-registration to create a comprehensive view of the patient’s financial situation. By having high-quality financial information about the patient on the front end, healthcare providers can more efficiently segment them to mitigate their financial risk and – just as importantly – find the best financial assistance program for their situation, all the while appropriately and efficiently allocating resources. For example, if at pre-registration third-party data indicate that the patient has undergone a significant financial hardship and is unable to pay, staff can route the patient directly to financial counseling to begin the qualification process for an entitlement or charity care program.

Risk identification and management are core competencies of the financial services industry. By relying on external data sets, such as consumer credit reports, financial services companies are able to segment customers and determine the best, most cost-effective programs based on their financial risk profiles. “The use of credit reports in healthcare revenue cycle management is emerging, although the practice is ripe with myths surrounding the impact on a patient’s credit that need to be exposed”, Bohnsack said. Educating the industry on the value of credit data will help all stakeholders realize the benefits of applying these and other external data sets on the front end.

One of the fears of pulling a credit report is the potential negative impact on the patient’s credit score. When healthcare providers pull credit reports on their patients, however, credit reporting agencies deem the request a “soft inquiry,” which is only viewable by the consumer and does not impact the consumer’s credit score. Healthcare providers often assume that patients are required to give consent every time a credit report is pulled. The Fair Credit Reporting Act, however, allows healthcare providers “permissible purpose” to access credit reports if the reason for checking is for extending credit to patients for services they will be receiving.

Many nonprofit and community-based hospitals believe that using consumer credit data to financially screen patients is diametrically opposed to their mission to serve the community, which includes never turning away patients due to their inability to pay. Instead, the practice enables a more comprehensive, front-end financial screening process that helps identify patients who are capable of paying and increases the organization’s bottom line, which is critical given that most hospitals are major economic contributors in their communities. Just as important, the application and incorporation of analytics and robust data help identify patients who seemingly are not eligible for financial assistance but in fact can qualify for an entitlement or charity care program.

Riverside Health System (RHS) automated its upfront processes, which included deploying TransUnion’s credit data and analytics to determine patients’ credit worthiness and financial ability to pay and/or eligibility for its charity care program. In 2010, RHS recorded $8 million per month in uncompensated care. As a result of the automation of its upfront processes, the five-hospital system in southeastern Virginia increased its POS collection by 54 percent in 2011.
**Applying Predictive Analytics and External Data Sets on the Front End**

In the white paper Re-engineering the Revenue Cycle for the Emerging Medical Consumer, the HIMSS Financial Systems Revenue Cycle Task Force identified front-office operational best practices in RCM, including patient/guarantor ID validation, quality assurance processes, preauthorization screening and assessing guarantor’s probability to pay, which are enabled by the utilization of third-party data sources.

At the point of scheduling, staff must accurately capture demographic information such as date of birth. Downstream problems can occur that lead to cost implications if healthcare providers cannot verify upfront that the patient’s demographic information is correct. For example, hospitals still struggle with return mail as a result of patients registering with inaccurate or incomplete information. Insurance eligibility and benefit levels must also be verified. If the service being scheduled requires pre-certification or pre-authorization, the request to the payer must be submitted before the procedure can be scheduled.

Healthcare providers can be even more efficient and strategic at the point of scheduling or registration with predictive analytics and external data sets. Fraud alerts can be triggered when, for example, a death certificate is linked to a social security number presented by the patient. In this case, the alert will prompt staff to request additional information. When used in combination, diagnosis and procedure codes will trigger an alert when a managed care patient schedules a service that is not covered. Staff would then contact the physician to determine if the order was correct but the wrong diagnosis code entered. If both codes are indeed correct, however, the patient would be informed and given the choice of paying out of pocket or seeking other forms of payment. Educating the patient up front eliminates miscommunication when the bill is received.

**Identifying Patients for Entitlement, Charity Care Programs**

U.S. hospitals provided $39.3 billion, or 5.8 percent of total expenses, in uncompensated care, comprising bad debt and charity care, in 2010—an increase of $200 million since 2009, according to the most recent Annual Survey of Hospital Data by the American Hospital Association of nearly 5,000 hospitals.

With uncompensated care steadily rising, healthcare providers are advised to identify as early in the revenue cycle process as possible a patient’s need for financial assistance. Initiating a transparent discussion about payment options at the point of scheduling enhances the patient experience. For example, schedulers can help prepare patients by identifying supporting financial documentation they must bring on the day of the service. This high-touch approach contributes to better customer service and building trust, and reduces the amount of bad debt write-off for uncollectable dollars by moving eligible accounts to charity care programs.

Several hospitals and health systems have successfully bolstered their financial assistance programs. In partnership with TransUnion Healthcare, BayCare Health System, a community-based health system serving the Tampa Bay area, developed a comprehensive medical assistance program to support its uninsured residents. TransUnion Healthcare's solution helped drive BayCare’s financial assistance application process, which has brought in millions of reimbursement dollars from the state of Florida.

**Driving Efficiencies in Back-End Processes**

Applying data-driven healthcare decisioning at the point of service gets cash in faster; additional value can be derived throughout the organization when information is applied in the CBO’s back-end processes, which squarely addresses CFOs’ concerns regarding the rising tide of self-pay dollars. Automated claims work queue management was identified by the HIMSS Financial Systems Revenue Cycle Task Force as an operational best practice in the back office. By automating claims status inquiries once claims are submitted, collectors can quickly determine which claims were accepted, denied or are in process. This automated process reduces manual intervention and cost to collect, and resolves situations in a timely manner. In addition, patient financial services managers can drive quality assurance in scheduling and registration processes, thereby increasing the quality of registration data, by addressing persistent reasons for claims denials.

Early adopters in the healthcare industry are successfully using the financial services’ collection segmentation strategies for their self-pay balances. Credit report characteristics help determine
the risk associated with the patient’s likelihood to pay or propensity to default on the balance owed. Credit risk scores, which are based on historical payment behavior, determine the likelihood of a patient defaulting within a specified period of time. Using credit risk scores along with account balances, healthcare providers can create segmentation schemes for follow-up strategies on past due accounts. For instance, high scorers are the best payers, so they do not require follow-up for 60 days. The next best scorers drop on a worklist at day 45, and so on. Accounts for patients whose profiles indicate that they won’t pay at all are outsourced to collection agencies on a contingency basis. By developing a collections segmentation strategy, providers can optimize their collection workflow and enable their collectors to focus on the most collectible accounts.

Once every attempt to collect has been made and accounts reach the point at which they will be written off as bad debt, TransUnion Healthcare’s data assets and charity determination algorithm can do a final check. If, for example, updated information reveals that a patient’s financial situation has changed in the last six months that now qualifies him or her for charity care, the balance can be credited to charity care. This bad debt charity classification is another back-office best practice identified by the HIMSS Financial Systems Revenue Cycle Task Force.

Re-classifying bad debt to charity care enables nonprofit hospitals to maintain their organizations’ tax-exempt status for providing care as a “community benefit.” From a Federal standpoint, revenue cycle executives must be able to track it and have a standardized approach that they can defend and apply consistently every time. In partnership with TransUnion Healthcare, North Shore-LIJ Health System, one of the largest health systems in the country, developed a comprehensive charity care identification program using data and analytics to determine eligibility for charity care rather than having accounts being classified incorrectly as bad debt. Bob LeWinter, vice president of Regional Claims Recovery, which is an extended business office of North Shore-LIJ, said, “What we were trying to do was solve the disconnect problem when patients weren’t stepping forward. Based on cost of living in our geographic area and our intuitive feel for the patient population, it was impossible to believe that out of 31,000 self-pay patient bill drops, only 300 were eligible for charity care.” When the patient hasn’t completed a charity care application, contacted the hospital or taken any action, North Shore-LIJ screens the accounts against consumer credit data and analytics and, if applicable, designates the account as charity care. As a result of North Shore-LIJ’s charity care identification program, they have been able to reduce reliance on paper documentation by almost 75% and designate more accounts as charity care.

The Pressing Need for Data-Driven Healthcare Decisioning
Leading hospitals are successfully implementing predictive analytics and external data sets to better manage their self-pay in both the front and back ends of the revenue cycle, thereby increasing revenue and patient satisfaction while decreasing cost to collect. As CFOs and managers anticipate healthcare reform’s impact on their organizations, predictive analytics will continue to be a strategic tool to combat the persistent rise of self-pay. As Dan Richards, director of regional sales for TransUnion Healthcare, points out, “While data assets have always been necessary in some form or another, current trends in the healthcare industry indicate that they will only become increasingly more integral to hospitals.”