Chargemaster Automation: A Strategic Asset for Achieving Revenue Integrity
Introduction

Today’s hospital and health systems face unprecedented challenges as they work to provide quality care and improve financial performance. Uncertainty about new payment models, coupled with declining reimbursement and increasing compliance risk, is causing added margin pressure. Most healthcare organizations are challenged to find additional cost-cutting methods and are looking internally to improve operations.

As the central point of the revenue cycle, the chargemaster is a vital tool for ensuring optimal reimbursement, operational efficiency and compliance. Vast amounts of reimbursement are lost daily due to inaccurate pricing, charging and coding. A complete and accurate chargemaster holds the greatest potential for making sure providers charge appropriately for all services and receive proper reimbursement. However, a poorly managed chargemaster inevitably results in revenue leakage – the gap between the amount of revenue provider organizations are entitled to and the amount of reimbursement eventually received.

According to a Truven Health Analytics analysis of uncollectible hospital revenues, if bad debt expense is added to contractual allowances, charity care, and self-pay discounts, hospitals ultimately collect only about 40 percent of the amount billed.\(^1\) Additional revenue leakage occurs when the chargemaster is not aligned with data in other departments’ systems, resulting in over- and under-charges as well as denied and delayed reimbursement.

Failure to accurately and effectively maintain the chargemaster places a facility – regardless of size – at serious risk for compliance violations as well as lost reimbursement. While the focus of chargemaster maintenance may have been the charge value in the past, emphasis is now on accuracy of the entire line item. Complete, continual analysis is required to make certain the proper combination of revenue, CPT/HCPCS and modifier codes is associated with each charge.\(^2\)

In recent years, chargemaster maintenance has become increasingly more important due to mounting payor scrutiny, the complexity of payor contracts, and transparent pricing mandates. At the same time, chargemaster maintenance has become much more manageable and efficient due to the availability of automated tools.\(^3\) Flexible and robust revenue cycle technology will become a requirement for successful healthcare organizations that want to provide quality care and stay profitable.\(^4\)

With healthcare reform, healthcare organizations must find ways to operate more efficiently and deliver value. This pressure presents opportunity for healthcare leaders to identify means that position their organizations to achieve high quality care at lower cost. Improved revenue cycle management is a vital part of the business performance solution. For this reason many leading financial management teams are taking a more holistic approach to doing business— one that is focused on healthcare revenue integrity – the achievement of operational efficiency, compliance and optimal reimbursement.

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Market Drivers – Making the Case for Automation

Market forces are rapidly changing the landscape of the healthcare industry. In addition to increased regulation and enforcement, hospitals are generally experiencing a rise in bad debt due in large part to the slow-growth economy. Payor mix is shifting from commercial insurers toward Medicare, Medicaid and self-pay. Charitable donations and investment income are down. Finding new sources of capital will place demands on organizations to demonstrate improved efficiencies and business processes. Many organizations are choosing automated chargemaster maintenance solutions to improve the accuracy and efficiency of business processes. Manual chargemaster processes are no longer adequate to stay current with the pace of change.

According to Paul Pitcher, research director for KLAS, “There’s a lot to be achieved with automated solutions, yet I would say about half of the hospitals are using chargemaster tools now. In the past, a lot of organizations would use consulting services, but as soon as those consultants went out the door, the chargemaster data grew old.” Automation is a function of cost, he notes, and there’s value for providers in a tool that updates charge data regularly, achieving what a consultant could achieve once every few months.

Which areas represent the best opportunities to improve your organization’s financial performance?

- Optimizing pricing to ensure competitive pricing in your market and for accurate reimbursement
- Improving charge capture and coding
- Improving denials prevention and management
- Improving underpayment detection and management
- Improving audit prevention and appeals management
- Improving operational efficiencies across departments


According to Craneware Annual Executive Industry Survey. November 2011
An HFMA member poll indicated that more than 40 percent of member hospitals in April 2009 still used manual processes or consultants to manage their chargemasters. Further, one-third of respondents reported that more than 30 percent of their denials were directly caused by chargemaster issues. And, because the chargemaster is central to ensuring revenue integrity, improvements at other points will have minimal impact until issues related to the chargemaster are resolved. Charge data needs to be verified and managed in order to minimize ongoing compliance risks and for appropriate reimbursement.

HealthEast Care System, the largest, locally-owned healthcare provider in the Minneapolis/St. Paul area is among the foremost leaders in the use of automated chargemaster management tools. David Pries, director of revenue integrity for the organization, affirms that market forces are driving change like never before.

“The bottom line is this: We’re trying to get paid in full for what we do,” he says. “Insurance companies and auditors are looking for every reason to deny payment. We have to document and charge properly in order to foster the organization’s long-term health and keep up with the competition in the marketplace.”

Challenges of Manual Chargemaster Management

The chargemaster is one of the most complex files in a health information system. Proper maintenance is critical to ensure proper charging for services and codable supplies within financial and regulatory parameters.

When chargemasters are maintained using manual processes, there is often no effective way to identify and address errors until a claim is denied by the payer. Manual processes do not provide the visibility required to identify and address the root causes of errors at their source, which leads to delayed, reduced or denied reimbursement. Even a single erroneous code in the chargemaster can lead to potentially millions in lost revenue.

For Steward Health Care System, New England’s largest community-based hospital network, visibility into the departments at multiple sites was a major challenge. Developing and maintaining a chargemaster standard across six hospitals was their number one priority.

“If we made a correction at only one facility, our other facilities were at risk of continuing to get rejections,” says Angela Confoey, corporate director, CDM. “Using a manual approach to chargemaster management for all facilities presented many obstacles, including inconsistent charging, finding and fixing errors on the back end, and managing CMS year-end requirements. So much was hidden, that the potential for error was huge.”

For many years the healthcare industry has been described as slow to adopt information technology, holding to the notion that money is better spent on clinical advancement than on operational and financial improvement. Some organizations believe that manual processes and/or consultants are working well to keep their chargemaster up to date. They are not aware of the procedural breakdowns that prevent them from capturing the reimbursement to which they are entitled.

A manual approach to chargemaster management involves accessing data that resides in disparate systems. To perform chargemaster maintenance and analysis, staff must download and consolidate the data, then use spreadsheets to perform the analyses and generate reports. In addition, to ensure the accuracy of charges, staff must also read and understand numerous reference sources on coding, billing and revenue compliance and constantly review updates to the Federal Register to determine whether each coding change applies to the organization. If the change is applicable, staff must find each place in the chargemaster where those changes apply. Then, every line item in the chargemaster affected by a change must be properly updated without clerical error. Finally, the changes must be communicated immediately to affected clinical departments. Clearly, this is not a realistic or efficient process for ensuring...

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"Revenue Cycle Management: A Life Cycle Approach".
It is a time-consuming project requiring hours of dedicated resources on a daily basis – time and effort that could be better spent on other initiatives and mission-critical business activities.

HealthEast had a 25-year-old manual system, and could not see the “big picture” of their revenue cycle. “There was no way to be sure that changes were being properly implemented and that people were being educated. The process was unreliable and inefficient,” says Pries. “We had no ongoing maintenance of the chargemaster and no idea how much revenue we were missing. At the time, it seemed easier to have an annual audit done by a consultant.”

With thousands of line items in a typical hospital chargemaster, relying on manual processes and periodic reviews inevitably exposes the organization to errors, which can be costly in terms of lost revenue, rework, training, fines and penalties. For HealthEast, there was too much risk to continue relying on manual processes. “With a 1 percent margin in a volatile healthcare market, we knew we had to increase revenue. Finding a way to determine the extent of the leakage was essential. We needed to look beyond reducing costs, services and staff toward achieving better financial performance through revenue integrity.”

“Cutting costs is not enough. Most hospitals have already cut as much as they can,” adds Confoey. “With the current state of the economy, we have to change the way we do business in order to survive. This means moving away from the idea that we can’t afford the cost of automation toward the idea that automation will pay for itself in revenue.”

Achieving Optimal Reimbursement, Efficiency and Compliance

As a strategic asset to achieving revenue integrity, a complete and accurate chargemaster holds great potential for ensuring optimal reimbursement, efficiency and compliance. For financially challenged hospitals, as well as those committed to continual process improvement, automating chargemaster management processes represents a significant opportunity for improving revenue and operational efficiency.

There is discussion in some corners of the healthcare industry about the concept of a “virtual CDM.” In that theoretical model, some data components needed for billing could reside in systems other than the chargemaster. For example, HCPCS codes and charges could go directly from the pharmacy system to the claim, without involving the chargemaster or the financial staff. Wherever fluid data is stored, the charge data still needs to be verified and managed in order to minimize compliance risks and for appropriate reimbursement. The compliance risks are too great to omit those steps before the data is used to create bills. Automating the verification and change-management process is the safest and most efficient way to manage data that drives bills.

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Financial Challenges Addressed with Chargemaster Automation

- **Incorrect charging and coding** – A primary source of revenue leakage is improperly captured or incorrectly billed charges for procedures and codable supplies. Software can continually monitor and analyze charges to help ensure accuracy. Solutions can also identify potentially missing charges, helping optimize revenue and reduce compliance risk.

- **Monitoring compliance issues** – Analyzing compliance issues in the chargemaster is an increasingly critical, albeit time-consuming, aspect of chargemaster management. Software can simplify the process by continually monitoring compliance issues and delivering automatic updates that reflect the latest regulatory, coding and compliance edits directly to the chargemaster.

- **Keeping up with CMS changes** – Automated processes offer a higher level of accuracy and efficiency than can be achieved when hospital chargemaster staff is tasked with manually tracking and applying regulatory changes. Software provides immediate access to the most current AMA and CMS information as well as the Active Code Book, and can apply coding changes and updates to the chargemaster file when the application is opened. Staff with ready access to this authoritative information can become valued resources on how CMS changes affect the hospital’s charges.

- **Obtaining departmental input** – Maintaining control over who is authorized to make changes in the chargemaster file can be difficult when using manual processes. Automation software permits clinical and other departmental staff to review chargemaster information and submit change requests. However, chargemaster staff maintains control over who enters changes directly into the file.

- **Managing and tracking chargemaster changes** – Managing the chargemaster change-control process involves numerous steps and requires efficient interactions among various departmental staff. While email and other means of communication are available, they may not be integrated with chargemaster management tools. Further, the inability to efficiently track each change and its associated rationale for auditing purposes elevates the level of risk. Technology offers customizable workflow capabilities that capture and track changes made directly to the chargemaster file by authorized staff, as well as approved change requests submitted by other departments. The result is an accurate audit trail that is readily available for management and auditing requirements.

- **Communication with clinical departments** – Involving clinical departments in charge decision-making is critical to establishing accurate, compliant charges. Automation technology supports workflow, communication and education about regulatory changes. It permits clinical and financial staff to access current relevant information, and to collaborate on charge decision-making. With greater understanding of their role, in terms of both revenue integrity and patient care, clinicians are better positioned to recognize risks and see how their role affects the financial health of the organization.

- **Managing multiple chargemasters** – Using a manual approach to chargemaster management for multiple facilities can lead to variations in revenue management processes, which exposes an organization to revenue loss as well as compliance issues. Automation technology provides the ability to effectively establish and sustain standardization of multiple chargemasters. This allows the visibility needed to ensure charge code accuracy, improve operational efficiency, and establish best-business practices across the healthcare system.
Purchasing Considerations for Chargemaster Management Technology

When purchasing automated chargemaster management software, it is essential to look for features and services that ensure the best return on investment. Consider the following capabilities:

- Continual monitoring and analysis of charge data to provide immediate alerts to updates
- Browser-based access to the most current coding and regulatory information to ensure compliance with payer guidelines
- Tracking of interdepartmental routing, approvals and communication, such as change request processes, with embedded audit trails and memos
- Proprietary logic to identify potentially missed charges
- Flexibility for client-defined levels of standardization
- Automatic distribution of charge updates across the system
- Ability to align the chargemaster with pharmacy and supply purchasing history
- Fee schedule analysis with option to customize to your market
- Competitive pricing that analyzes your data according to industry benchmarks relevant to your market
- Audit trails that track all chargemaster management activities
- Direct reporting capabilities
- Adaptability to meet increasing chargemaster management demands resulting from business growth
- Visibility required for accurate pricing, charging and coding
- System integration with patient accounting system
- Security features to allow read-only or controlled access
- Physician billing management
- Best-practice processes for achieving optimal software performance and sustainable revenue integrity
- Ongoing, exceptional customer support
- Establishment and continual management of a corporate standard chargemaster file for integrated delivery networks and healthcare systems

- **Chargemaster double entry** – One of the most inefficient aspects of manual chargemaster management involves the manual entry of charges into the patient billing system. It’s an error-prone task that can lead to the double entry of charges as well as other inaccuracies. With technology, charge updates can be directly transferred from the chargemaster management solution into the patient billing system, eliminating the risk of errors and improving efficiency.

- **Pricing analysis** – Achieving greater pricing transparency and defensible pricing are growing priorities in an environment driven by unprecedented economic and regulatory pressures. To remain competitive in today’s market, hospitals must have access to the data required for ensuring appropriate pricing. Chargemaster management software offers a single point of access to pricing data via a fee schedule module, comparative pricing and reporting.

- **Access to multiple reference materials** – Each department within a hospital has its own set of reference materials contained in separate manuals or databases, which makes consolidated access to clinical, coding, financial and regulatory resources extremely difficult to achieve. Technology can provide consolidated access to these resources and eliminate the tedious process of searching various code books and databases, helping improve efficiency and accuracy.
Benefits

From critical access hospitals and independent community hospitals to integrated delivery networks, a growing number of healthcare organizations are choosing automated chargemaster management tools as the best-practice approach to full realization of reimbursement, compliance and efficiency. Based on their outcomes, a promising body of research indicates significant return and benefit for those who have adopted technology to automate chargemaster management processes. Industry experts agree that organizations considering the benefits should focus on the value offered by software-based solutions for achieving revenue integrity.

Further, installing new software is only part of achieving revenue integrity – optimal benefits are realized by establishing a related process to manage new technology. Education is essential for the organization.

Which steps has your organization taken in the past three years to improve financial performance? 11

- Established a revenue integrity department
- Established a director-level or above revenue integrity title
- Invested in a chargemaster management/automation tools
- Invested in tools for improved charge capture
- Invested in denials management tools
- Invested in audit management tools
- Invested in audit appeal services
- Invested in patient estimate software
- Added staff to address revenue cycle challenges/improve revenue integrity

% of Hospitals surveyed

as a whole to develop and sustain the chargemaster process using the right combination of tools and knowledge. Professional services and support help providers make a successful transition to business process improvement and best practices.

For Steward Health Care System, investing in an automated chargemaster management solution to achieve standardization of the more than 1,500-bed integrated network substantially improved financial performance, resulting in a $1.6 million annualized incremental revenue gain.

One of the most convincing scenarios occurred during preparation to meet the January 1, 2010 deadline for completing CMS code changes. Using a report generated for all six hospitals, Confoey and her staff successfully identified and addressed all coding issues at the corporate level. In addition, they looked at all volume and codes added during 2009 and gauged the gross revenue impact for 2010 CPT code changes. “The results were shocking,” she says. “Without automated tools to help replace the CPT codes, we would have had numerous rejects, incurring a potential loss of millions in gross revenue.”

HealthEast CFO Robert Gill affirms the importance of using automated tools for practicing financial responsibility. “With 7,300 employees, 1,200 volunteers and 1,400 physicians on staff, ensuring a strong foundation of revenue integrity supports our mission of delivering quality, compassionate, cost-effective care to our communities.”

HealthEast is committed to achieving best practices in terms of both clinical and financial performance. “With the new software we were able to achieve greater internal control and increase operational efficiency within a very short time,” says Pries. “One of the best benefits is having immediate access to resources in one place — information that was once buried in manuals. And, we had virtually no documentation — no audit trail. Now we have access to every change, who did it, why and how it was done.”

The software also helps to ensure defensible pricing, notes Pries. “The system allows us to make sure prices are aligned with costs and expected reimbursement, which keeps us competitive in the market. The discoveries have been incredible,” he says. “Our patients care that we’re charging the right price for the right services and supplies related to their care.”

**Conclusion**

The issues inherent in today’s healthcare environment call for new financial strategies as hospital leaders struggle with shrinking margins, a slowly recovering economy, and the uncertainty of healthcare reform. This paper has explored the challenges and risks associated with manual chargemaster processes and the rationale for adopting an automated approach to chargemaster management. Organizations cannot afford to ignore the benefits of financial best practices if they expect to remain competitive and deliver quality care to the communities they serve. Automated revenue integrity solutions can dramatically improve an organization’s financial performance in a short period of time. Over the longer term, implementing these tools will continue to generate benefits in return for a relatively low investment, empowering healthcare organizations to compete in an increasingly demanding market.
About Craneware

Craneware is the leader in automated revenue integrity solutions that improve financial performance for healthcare organizations. One quarter of registered U.S. hospitals use Craneware Revenue Integrity Solutions™. In 1999, Craneware introduced the industry’s first effective chargemaster management solution. Today, Craneware’s flagship product, Chargemaster Toolkit®, has achieved HFMA Peer Review status for eight consecutive years and for the last six years, Chargemaster Toolkit has ranked number one in the KLAS Revenue Cycle – Chargemaster Management market category in the “2011 Best in KLAS Awards: Software & Services” report.

Craneware is dedicated to helping healthcare organizations achieve revenue integrity. We believe in the success of the healthcare industry. Visit stoptheleakage.com for other educational resources and to “Join the Movement” to prevent revenue leakage. For additional information on Craneware Revenue Integrity Solutions that optimize reimbursement, increase operational efficiency and minimize compliance risk, we invite you to contact us by calling 877-624-2792 or sending an email to info@craneware.com.
Case Study: HealthEast Care System

Organization
A not-for-profit healthcare system including three acute care hospitals, one long-term acute care hospital, 14 primary care clinics and 23 specialty clinics serving the Minneapolis/St. Paul area

Challenge
Manual chargemaster processes made ensuring accurate charge capture, billing, reimbursement, and compliance difficult and time-consuming

Solutions
Craneware’s Chargemaster Toolkit® and Bill Analyzer

Results
Annualized potential revenue gain of $213,000 attributed to a drug-to-administration charge capture issue identified by Bill Analyzer

Automated solutions replace inefficient manual processes to improve charge capture and financial performance.

Faced with healthcare reform, organizations like HealthEast Care System are subject to more scrutiny than ever before. According to David Pries, director of revenue integrity, HealthEast had relied on manual chargemaster processes for 25 years, placing the organization at financial risk. There were too many opportunities for human error that could lead to lost revenue. “With a 1 percent margin in a volatile healthcare market, we knew we had to increase revenue,” says Pries. “Finding a way to determine the extent of the leakage was essential.”

HealthEast needed the visibility into their processes to ensure they were receiving all earned reimbursement through proper pricing, charging and coding. To remedy the problem, Pries and his team began the search for automated solutions to help ensure optimal reimbursement, operational efficiency and compliance. Because improving charge capture offered the most potential for improving financial performance, HealthEast saw the value of using Craneware’s Chargemaster Toolkit in conjunction with Bill Analyzer to maintain a current chargemaster and more efficiently produce clean, compliant claims.

“We suspected we were missing reimbursement and needed a way to determine root causes of revenue leakage,” adds Sue Lanigan, director of patient accounting. “With 50,000 claims going out each month, our goals were to get every charge right the first time, ensure compliance through internal audits, and recover as much appropriate revenue as possible.”

In a review of high volume issues, the software identified a costly pattern of error in that various departments were charging for drugs but missing administration charges. The greatest opportunity for recovering revenue — an estimated annualized potential of $213,000 — was discovered in key departments including radiology, cancer care, laboratory and nursing.

Furthermore, Craneware Professional Services worked closely with HealthEast staff to establish best-practice processes designed to achieve an immediate return on investment and ensure sustainable benefits using the software. The right combination of technology, training and support quickly resulted in a more streamlined collaborative workflow, significant operational improvement and financial gains. “By partnering with Craneware, we’re confident in our ability to identify and address the root causes of revenue leakage,” concludes Pries.
**Case Study: Glens Falls Hospital**

**Organization**
A not-for-profit healthcare system including a 400-bed acute care hospital and 28 regional healthcare facilities serving New York’s Southern Adirondack Region

**Challenge**
Inefficient manual chargemaster processes prohibited the visibility required to ensure proper charging, reimbursement and compliance

**Solutions**
Craneware’s Chargemaster Toolkit® to automate chargemaster management and Online Reference Toolkit® to provide instant access to regulatory resources

**Results**
Achieved optimal compliance, operational efficiency and a net revenue gain of $300,000 in the first year of implementing new technology, training and best-practice business processes

In the era of healthcare reform, it is critical that hospitals collect all revenue earned, meet compliance and remain competitive in today’s market. With a service area that spans six rural counties, Glens Falls Hospital incurs millions of dollars in costs that are not reimbursed by Medicare, Medicaid and private health insurance plans. With further reductions in reimbursement expected from all payors, hospitals must make sure they price, charge and code effectively and defensibly to achieve financial improvement.

Faced with these challenges, Glens Falls Hospital made the decision to invest in technology and process improvement to ensure optimal reimbursement, efficiency and compliance. After extensive research, Glens Falls chose Craneware’s Chargemaster Toolkit to automate their chargemaster. For both financial and clinical staff, the new software helped open the lines of communication aimed at achieving the most efficient use of the software to meet regulatory requirements, manage audits and avoid financial penalties. “The software streamlines workflow and provides an excellent audit trail. We can easily see changes to the chargemaster – who did what, when it was done, and why,” says Sandy Baker, chargemaster manager.

Before using the software, Glens Falls relied entirely on a paper process with no means to pinpoint root causes of revenue leakage. As a result, compliance was a critical concern. “We’re now confident in our ability to identify, correct and prevent compliance issues,” says Doug Barry, vice president of revenue cycle. “And, the software supports defensible, competitive pricing through immediate access to current data for reporting and analysis.”

With new technology and best practices in place, Glens Falls quickly realized improvements in both financial and operational performance. “In the first few months, we achieved significant efficiency gains through standardizing our charge and pricing processes,” concludes Barry. “We now have the tools to achieve financial success through revenue integrity, making it possible to expand services and charity care for our community.”
About Craneware

Craneware (AIM: CRW.L) is the leader in automated revenue integrity solutions that improve financial performance for healthcare organizations. Craneware’s market-driven, SaaS solutions help hospitals and other healthcare providers more effectively price, charge, code and retain earned revenue for patient care services and supplies. This optimizes reimbursement, increases operational efficiency and minimizes compliance risk. By partnering with Craneware, clients achieve the visibility required to identify, address and prevent revenue leakage. To learn more, visit craneware.com and stoptheleakage.com.