Infusing the Revenue Cycle with Clinical Intelligence to Drive Success

The challenges that have emerged from the current maelstrom of market and regulatory changes are forcing healthcare providers to think about the delivery of care in new ways. One of the most significant imperatives to emerge has been the need to eliminate the silos around the clinical delivery of care and the financial processes that are interwoven with it, in order to drive “clinical intelligence.” Clinical intelligence refers to infusing all aspects of the financial portion of a patient encounter (the revenue cycle) with dynamic, clinically underpinned technology and expertise to ensure the compliance and effective execution of the encounter.

According to Healthcare Business Insights (HBI) research, better performing healthcare organizations are using the principal of clinical intelligence to enhance the accuracy and efficiency of key parts of the revenue cycle. While clinical intelligence can be important for almost any portion of the revenue cycle, there are key activities that occur in the beginning, middle, and end of the revenue cycle that benefit most from the integration of clinical intelligence: medical necessity determination, clinical documentation, and claim submission. Success at these three pivotal points in the revenue cycle cannot be achieved with traditional business solutions alone. Instead, innovative strategies that leverage a combination of best practice technology and clinical insight are proving to be critical for hospitals and health systems that want to emerge as leaders during a tumultuous time.

Deploying Clinical Intelligence and Process Improvement to Achieve Best Practices in Medical Necessity Determination

While there are many important activities that occur in the beginning part of the revenue cycle, medical necessity determination is one that research shows has deeper financial implications than many healthcare organizations realize. According to a June 2013 survey conducted by the American Hospital Association, 96% of hospitals surveyed indicated that medical necessity denials are many healthcare organizations realize. According to a June 2013 survey conducted by the American Hospital Association, 96% of hospitals surveyed indicated that medical necessity denials are complex and difficult to manage. Staff members who were insufficiently trained would compound the difficulty by inaccurately extracting codes from physician orders during scheduling and registration, resulting in an ineffective medical necessity check and leading to lost reimbursement.

The best practices that have emerged in recent years, though, have made it possible for healthcare organizations to eliminate these barriers for both outpatient and inpatient care delivery, by utilizing technology and clinical expertise. For scheduled outpatient services, medical necessity verification is moved upstream to the physician practice via computerized physician order entry (CPOE), streamlining the process and enhancing communication between the physician practice and the hospital. At the hospital, staff members in Patient Access are trained in coding to extract diagnosis codes from physician orders, enabling medical necessity checks to be performed. Trained coders are moved into a centralized scheduling role, overseeing all orders coming into the facility and assisting with authorizations and ABNs prior to service.

Software is used to automatically scrub accounts and notify staff members of discrepancies based on continuously updated payer rules. Staff members in turn notify patients in advance if certain procedures will not be covered by insurance, allowing sufficient time for patients to decide whether to move forward with services. Technology also allows registration departments to be connected through electronic communications, yielding a seamless, more streamlined process for verifying the medical necessity of unexpected services.

### Key Clinical Intelligence Points in the Revenue Cycle

<table>
<thead>
<tr>
<th>Revenue Cycle</th>
<th>Financial Clearance</th>
<th>Pre-Certification &amp; Medical Necessity</th>
<th>Insurance Verification &amp; Validation</th>
<th>Patient Information Collection</th>
<th>Scheduling</th>
<th>Admission Status Determination</th>
<th>Charge Capture</th>
<th>Medical Records</th>
<th>Coding</th>
<th>Denials &amp; Underpayments</th>
<th>Agency Management</th>
<th>Collections</th>
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<td>Patient Access</td>
<td>Residual Collections</td>
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<tr>
<td>Documentation, Charge Capture, &amp; Coding</td>
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<td>Billing &amp; Collections</td>
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Key points in the revenue cycle requiring clinical intelligence
On the inpatient side, medical necessity evaluation is focused on concurrent review of admission status determination and continued stay. These have remained essential activities as the RAC audits have continued and there is renewed scrutiny on observation status and short-term stays. Better performers put practices in place to evaluate cases before and when each patient presents, ensuring proper status assignment the first time. Case managers review cases based on hospital admission screening criteria, and physician advisors are employed to support utilization review processes and also to communicate with admitting physicians about documentation and specific cases. Hospitals utilize multiple avenues for training on patient status assignments, including newsletters, seminars, and focused training by clinical leadership, helping physicians gain a better understanding of the issues involved. Often, however, organizations find value in leveraging an external partner to ensure 24/7 physician advisor coverage. HBI research continues to show that the expertise of physician advisors is extremely valuable, for while patients are in house and for helping manage denials post-discharge; surveys indicate that more than two-thirds of hospitals have physician advisors in place, either internally or through an external partnership.

### Advancing Clinical Documentation Improvement Through Technology and Collaboration

Once the necessity of the patient’s care has been validated, the emphasis on deploying clinical intelligence shifts to clinical documentation. Engaging clinicians in documentation improvement initiatives is often a challenging endeavor for many organizations, and a lack of support can significantly encumber improvement efforts to ensure records accurately reflect rendered care and, ultimately, secure appropriate reimbursement. Leaders have designated various means to both educate clinical staff members and solicit their support, from employing physician champions to providing monetary incentives. However, making adjustments to support a clinical documentation improvement (CDI) program—including integrating technology solutions, recruiting clinical documentation improvement specialists (CDISs) with clinical backgrounds, and even ensuring CDI program metrics focus on CDIS performance as much as on physician response—can help unify clinical staff, documentation specialists, and HIM staff under the common goal of improving documentation specificity.

That specificity will no longer be optional as industry changes, like the onset of ICD-10, take effect, so it is crucial that leaders continually assess organizational needs and evolve their clinical documentation programs to address performance gaps. In doing so, organizations have employed a number of strategies to achieve gains in physician involvement, overall staff performance, and process efficiency. These include expanding or restructuring their CDI program in order to build service line expertise, employing video technology to train physicians based on their individual needs; utilizing voice recognition software in order to improve patient satisfaction; and choosing CDI software that employs Natural Language Processing (NLP) to increase accuracy and efficiency.

Better performing healthcare organizations emphasize the importance of documentation hospital-wide. CDISs, HIM directors, physicians, and additional key constituents meet regularly to set documentation goals, monitor progress, and develop actionable plans for improvement. 76% of organizations surveyed by HBI now have a CDI improvement program in place. Experienced coders with clinical knowledge and extensive coding expertise are transitioned into clinical documentation specialist roles in order to complete rounding and review records concurrently. For some organizations, there has been significant benefit in transitioning case managers to CDIS roles—or using nurses trained as CDISs in case management roles—in order to improve their working relationships with physicians and grow their knowledge. In addition, multi-faceted educational efforts and communication from clinical leadership emphasize the importance of documentation to physicians and assist in securing their support. This is further bolstered by identifying a respected physician advisor who is consulted in order to provide expertise to documentation specialists, create a sense of urgency among physicians, and communicate with physicians when issues arise.

Research is showing, however, that a tremendous amount of improvement and efficiency in clinical documentation can be best achieved with a technology solution, like NLP, that bolsters an organization’s capability to bring clinical intelligence to this part of the revenue cycle. Technology can give hospitals and health systems the capability to automate review of all content in charts, to identify both lack of specificity and gaps in documentation, freeing CDISs to focus only on cases with CDI opportunities. Technology can also help CDISs prioritize worklists based on criteria like length of stay, total charges, patient status, and working DRG, allowing them to work on the most important cases first.

Beyond the time of service delivery, computer-assisted coding can allow the documentation of patient care to be scrutinized, concurrent with the patient stay, during the coding process to ensure queries have been effectively answered and documentation is complete to support the coding assignment. NLP is a critical component of the best performing computer-assisted coding technology, since it enables the accurate interpretation of meaning and context of medical terminology in electronic health records. NLP technology leverages millions of medical facts to read physician...
documentation and understand grammar and clinical concepts, identifying key clinical facts and mapping those facts to codes.

These solutions allow documentation issues to be corrected prior to discharge and billing, dramatically reducing reimbursement delays while improving the quality of care. They also improve the specificity of coding, yielding better documentation with more complete, accurate codes—an essential step in preparing for ICD-10.

Assuring Claims Submission Success with Clinical Oversight and Technology

The necessity for clinical intelligence extends to the end of the revenue cycle and is particularly noteworthy when it comes to ensuring that clean claims are submitted to third-party payers. Research shows that correcting errors related to charges and coding before submission helps hospitals improve reimbursement rates, support provider compliance and reduce operating expenses. One four-hospital health system in the western United States identified more than $370,000 in charge-related opportunities in just four high-impact areas after implementing a charge audit program. While qualified staff members can perform audits, leveraging clinical editing technology solutions allows healthcare organization to maximize their identification of charge and coding issues that may lead to decreased reimbursement.

Better performing organizations take a number of steps to ensure accurate and timely billing, and HBI’s Revenue Cycle Scorecard shows that top-quartile organizations are able to achieve a clean claim rate of 97% or higher. Financial and clinical leaders collaborate to streamline charge entry steps, develop set policies, and assign and educate staff members responsible for submitting charges. Revenue cycle leaders create an environment of departmental accountability, monitoring late charges to encourage the achievement of performance standards and the inclusion of all charges on claims. Technology augments these efforts though editing systems that are interfaced with patient accounting systems to scrub claims based on the latest payer guidelines and, in some cases, resolve issues without manual intervention. Multiple sources are utilized to obtain, verify, and correct patient address information, from statement vendors to fee-for-service technology to public websites. The ideal end result is that payers pay the expected portion and patients are provided with a clear, concise bill that answers their questions, summarizes charges, shows what they owe, and provides information about any financial assistance available.

Some accounts, however, require even more intensive oversight in the form of concurrent claim review, ideally enhanced by a technology solution. In this case, better performing hospitals and health systems select a dedicated employee or team with knowledge of clinical documentation guidelines and payer requirements to examine all scheduled “at risk” procedures and ensure they have been authorized and contain the necessary documentation before patients are admitted, the employee or team continues to track these procedures and their claims throughout patients’ stays. The individuals responsible for concurrent reviews collaborate closely with utilization management, coders, case managers, and the billing department for each “at risk” procedure and claim; in doing so, the individual(s) correct errors as needed and ensure that claims include the required documentation before patients leave the hospital or before claims are submitted to payers.

As a result, it is extremely important to continually provide updates on payer guidelines to those responsible for concurrent reviews and include them in regular payer meetings. To further improve the hospital’s compliance with payer guidelines and requirements, some healthcare organizations ensure that payers’ contract language states that the payers will staff the hospital with their own onsite nurse reviewers, who are responsible for conducting concurrent reviews and making recommendations to help the hospital provide documentation and prevent denials.

Healthcare organization operations are growing exponentially in complexity, and challenges like managing healthcare reform and implementing ICD-10 will continue that trend. To keep an organization running effectively, hospitals and health systems are likely to benefit from ensuring that clinical intelligence is infused throughout key areas of the revenue cycle. Using that intelligence will allow organizations to address productivity, workflows, clinical documentation improvement and the change management required to make it all happen, in order to maximize efficiency and minimize revenue impact.

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### Edit Example for OB/GYN Care

**Scenario:** Patient is seen for follow-up visit after delivery

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<thead>
<tr>
<th>Code</th>
<th>CPT® Description</th>
<th>Scenario</th>
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<tbody>
<tr>
<td>59618</td>
<td>Routine obstetric care including antepartum care, cesarean delivery, and postpartum care, following attempted vaginal delivery after previous cesarean delivery</td>
<td>Billed for patient’s total care</td>
</tr>
<tr>
<td>59430</td>
<td>Postpartum care only (separate procedure)</td>
<td>Patient returns one week later for postpartum care</td>
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*Edit Type: Historical, CCI unbundle*

Code 59430 is a component of the global code 59618 which includes all routine follow-up care. CPT is a registered trademark of the American Medical Association.

To learn more about clinical intelligence within the revenue cycle, visit: [optum360.com](http://optum360.com)