ENABLING REVENUE CYCLE SUCCESS DURING AN IT SYSTEM IMPLEMENTATION

It can be tempting to deprioritize revenue cycle management (RCM) planning efforts during a new IT system implementation because of patients’ limited direct interaction with the revenue cycle compared to other health system functions. Unlike the immediacy of an EHR problem affecting patient care, back-end issues are typically less urgent. However, the accumulation of unresolved problems delayed until after go-live, compounded by the substantial expenses associated with implementing a new IT system, can be the “death by a thousand cuts” that causes serious financial distress. The negative impact a system implementation can have on an organization’s finances has only been reinforced by the latest news headlines, with one academic medical center citing a 60% decline in operating income in the nine months following a difficult conversion, and another 400-bed health system reporting a downgrade in its bond rating after sustained billing delays post-go-live led to a decline in revenue.

Despite the importance—and risk—of RCM system implementation, the focus is often overlooked or considered an afterthought. System conversions are commonly viewed as vehicles to meet regulatory requirements or meaningful use or as means to achieve an enterprise system’s clinical capabilities. The impact to revenue cycle, both in terms of potential functionality and efficiency gains and financial risk, may be underappreciated. Beyond the system conversion, revenue cycle implementations often involve operational changes to workflows or are planned to coincide with other organizational initiatives, necessitating even more careful planning and change management. Engaging key organizational stakeholders, driving efficiency and accountability through workflow redesign, and thorough testing and training enable organizations to realize the gains of a new RCM system while minimizing financial risk.

Leadership Engagement and Communication

Building a Team to Drive an RCM Implementation and Workflow Overhaul

Leadership involvement throughout the installation of an RCM system is essential to support change management efforts and to reinforce the implementation as an organizational priority amid other demands on staff time. Interdependencies between revenue cycle and clinical operations necessitate a broad leadership group to support a successful implementation and should include revenue cycle, clinical, and IT representation. Exact participants will depend on the scope of implementation and organizational structure but should include the roles listed in table 1 below, at minimum.
Table 1: Implementation Leadership Involvement

<table>
<thead>
<tr>
<th>Organizational Role</th>
<th>Project Sponsor Role</th>
<th>Involvement Level</th>
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<tbody>
<tr>
<td>CFO</td>
<td>Revenue Cycle Representative</td>
<td>Oversight</td>
</tr>
<tr>
<td>Chief Medical Officer (CMO)</td>
<td>Clinical Operations Representative</td>
<td>Oversight</td>
</tr>
<tr>
<td>Chief Nursing Officer</td>
<td>Clinical Operations Representative</td>
<td>Oversight</td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td>IT Function Representative</td>
<td>Oversight</td>
</tr>
<tr>
<td>VP or Director of Revenue Cycle</td>
<td>Revenue Cycle Representative</td>
<td>Day-to-Day Oper-</td>
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<td>tional Leader</td>
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Creating a Communication Plan

Effective project sponsors facilitate communication and change management from initial project planning through go-live and beyond. This role is often formalized through an implementation communication plan developed by the implementation project team, which comprises IT and operational owners and is overseen by the project sponsors. Within the organization, this communication plan outlines major implementation milestones, sets project involvement expectations among stakeholders, and socializes workflow or ownership changes occurring with the implementation. External stakeholders should also be included in the communication plan to ensure patients, organizational partners, and vendors are aware of how the RCM implementation may affect them. Such a communication plan, along with well-crafted messaging, executive backing, and plenty of lead time, helps ensure the organization is prepared for the conversion.

Workflow Redesign

The implementation of a new RCM system provides healthcare organizations with the rare opportunity to assess their operations across the revenue cycle with fresh eyes, during which organizations should refine:

» Workflow design.
» Task ownership.
» Work allocation and assignment.
» Handoff processes to ensure the smooth flow of information from preregistration to bad debt.

Stakeholder involvement, thoughtful process design, and consideration of constraints all help to maximize benefits of the workflow optimization process.
Engage Key Stakeholders

Success will require engaging operational and end-user stakeholders, both within and outside of the revenue cycle function, to develop operationally feasible workflows in collaboration with the system IT team. Physician engagement is particularly important to ensure the system conversion does not negatively affect patient care and physician productivity. Common workflows requiring physician input include bed management and clinical charge capture. Regardless of workflow, common clinician areas of focus include streamlining clinical documentation, reducing clicks, and configuring specialty-specific templates and code preferences, including meaningful use requirements.

Failure to include stakeholders in the initial design phase often necessitates major changes or complete redesign when stakeholders discover during testing or after go-live that the workflow as built is inefficient or impractical. Best practice workflows take advantage of clinical integration of new systems and require physicians and clinicians to access the online record for documentation and charge capture. These activities drive core revenue cycle functions, as shown in figure 1 below.

**Figure 1: Key Revenue Cycle Functions Dependent on Clinical Activity and Documentation**

- **Clinical Activity and Documentation**
- **Charge Capture**
  - Triggers charges that reflect services performed (i.e., the basis of reimbursement)
- **Coding**
  - Required by HIM team for coding and chart completion
- **Claim Generation**
  - Increasingly sophisticated logic automatically pulls clinician-entered data elements directly into the claim.

Engaging these stakeholders is critical to ensure workflows support both patient care and the information necessary to be reimbursed for it.

**Avoid Repeating Ineffective Workflows on a New Technology Platform**

Rather than simply duplicating current processes on a new technology platform, take advantage of the opportunity a new RCM system provides to critically consider what each process or report is intended to achieve and how the system can best be configured around that goal. In some instances, the current state may be determined to work well and should be recreated, and in
others, an existing process or report may be identified as no longer necessary and will not need to be built into the new system at all (although if this is the case, the project team and business owners should define what new functionality is meeting the original business need so there is not a functional gap in the system at go-live). Key system build steps include:

» Cleaning up the following records:
  › Item masters
  › Insurance tables
  › Fee schedules
  › Other system files that have lingered from legacy systems

» Accounting for content that will require updates partway through the implementation, such as annual charge master increases or newly released CPT codes.

» Identifying the short list of integrated item masters that will drive the majority of functionality in the new system (often encounter type, account type, financial class, payor, and department, among others). It is important to validate the configuration of these items carefully and, where appropriate, with clinical counterparts.

Allocate Work to Promote Efficiency and Accountability
Greater RCM system sophistication and integration with enterprise EHRs allows for workflow designs to be increasingly operationally efficient and technically feasible. In many legacy systems, the billing office became a backstop for edits created further upstream in the revenue cycle (e.g., registration or authorization) because the RCM system could not capture those edits earlier. As a result, back-end staff often owned edits for much of the revenue cycle. A new system presents an opportunity to create new efficiencies by eliminating or reducing these edits.

To the extent operationally feasible, workflow optimization should make use of this technological advancement to transition work to the most appropriate department. Common applications of this principle during revenue cycle conversions include those outlined in table 2 below.
# Table 2: Workflow Enhancement Opportunities

<table>
<thead>
<tr>
<th>Defining Characteristics</th>
<th>Enhanced Workflow Design</th>
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<tbody>
<tr>
<td>» The billing office owns all edit resolution required to bill or collect for a service, often resulting in rework or duplication of another department's efforts.</td>
<td>» Decentralization of workflow allows departments with the greatest level of expertise to perform a task.</td>
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<td>» There is limited accountability by upstream departments to enter complete and accurate information.</td>
<td>» The billing office role transitions from execution to oversight of departments responsible for decentralized workflow tasks, monitoring quality, and ensuring outstanding work is kept at agreed-upon volumes.</td>
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## Registration and Eligibility Edits

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<td>» No data validation occurs during registration. Errors are often identified and addressed by billers prior to claim submission or after the receipt of a denial.</td>
<td>» Patient registration information is checked for errors at the time of entry, and real-time eligibility allows registrars to confirm insurance benefits preservice.</td>
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<tr>
<td>» Outdated or inaccurate eligibility information results in the provision of uncovered services, shifting liability to the patient.</td>
<td>» Patient access users may bypass all but the most critical of errors to allow registration to continue if needed, but these encounters are routed to work queues for resolution prior to claim submission.</td>
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<tr>
<td>» There is a minimal feedback loop for educating registrars about errors that cause downstream rework or denials.</td>
<td>» Should an affected claim be submitted before the issue can be addressed, the resulting denial can be routed back to patient access users for correction.</td>
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## Patient Access

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<td>» Patient self-service for scheduling, updating patient information, or paying for visits is limited or nonexistent.</td>
<td>» Increased self-service through patient portals allow patients to schedule appointments, estimate the cost of services, and pay copays or deductibles on their computer or smartphone with 24/7 convenience.</td>
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<td>» Interaction with hospital or physician practice is through a staff member or answering service and typically only during business hours.</td>
<td>» Kiosks in provider locations allow patients to perform many of the same functions.</td>
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## Decentralized Revenue Reconciliation and Charge Review

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<td>» Service details are documented on paper charge tickets, and charges are manually entered by back-end charge-entry clerks. Lost or illegible charge tickets result in inaccurate, missing, or delayed revenue capture.</td>
<td>» Clinical departments trigger their own charges via clinical workflow, reconcile revenue against patient encounters, and resolve any related edits themselves.</td>
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<td>» Revenue reconciliation against encounters and clinical documentation is labor-intensive, making review of all but the most egregious errors difficult.</td>
<td>» The RCM system is programmed with specialty-specific edits, limiting manual review to charges with an identified problem.</td>
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<tr>
<td>» Clinical departments trigger their own charges via clinical workflow, reconcile revenue against patient encounters, and resolve any related edits themselves.</td>
<td>» Although this can be a substantial organizational change, clinical departments are much more aware of which patients were seen and what services were provided, making them much better equipped than the billing office to perform these tasks.</td>
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## Specialty Billing Review

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<td>» In order to determine the entity that should be billed for a given charge (such as in transplant or research billing workflows), the billing office furnishes a spreadsheet to researchers or transplant coordinators for manual review.</td>
<td>» Improved system logic increases the portion of review that can be automated by referencing encounter and clinical data.</td>
</tr>
<tr>
<td>» Once liability for each charge was determined, billing office staff would manually update accounts in the billing system to match the reviewed list.</td>
<td>» Researchers and transplant coordinators directly evaluate charges requiring review within the RCM system, eliminating the need for the billing office to manually reconcile charges within the billing system.</td>
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Once departmental ownership for a given task is established, clear division of work among that department’s staff must be defined. RCM systems typically identify outstanding work through a work queue (a task list of records) containing:

- **Encounters.**
- **Referrals.**
- **Charges.**
- **Patient accounts.**
- **Claims requiring manual resolution.**

To drive accountability, work should be divided so that each work queue is owned by a single individual, with a manager responsible for oversight. Revenue cycle leaders should set target work queue volumes, in terms of both outstanding items in the queue and corresponding revenue impact, to support monitoring of work performed by non–revenue cycle departments. These thresholds provide an escalation trigger if outstanding work exceeds predefined acceptable levels. This oversight should be operationalized through the development of dashboards that summarize all work queues by ownership area to allow for at-a-glance review and swift follow-up if a given area is preventing billing.
Consider Operational Constraints

Many organizations want to take full advantage of the functionality enhancements offered by a new RCM system, but do not consider the operational requirements, such as staffing, needed to implement each feature. For example, introducing a battery of new billing edits in the system that did not previously exist may be challenging at go-live if the number of staff working those edits has not changed. These new edits likely have value but should be considered as part of a phased-in optimization once users have become comfortable in the new system and regained or exceeded pre-go-live productivity levels. In general, workflow design and timing should consider operational constraints and balance the need to send clean claims and capture key reporting metrics with staff bandwidth and capacity for change.

Align Policy and Documentation

Once new workflows have been designed and approved by operational owners, policy and procedure documents should be developed or revised to define corresponding organizational expectations so that they can be operationalized. Policies should also define what constitutes noncompliance and establish clear escalation and enforcement strategies for failure to comply with expectations. Again, effective execution of major policy changes often requires engaging the highest levels of leadership to help socialize the change and reinforce its importance. Engaging the leader of the group affected by the policy (e.g., the CMO for a policy around timely completion of clinical document and charge capture) adds legitimacy to the shift.

In addition to drafting policies and procedures, detailed workflow diagrams should also be developed to document discrete workflow steps and their owners. These diagrams are invaluable when developing training and testing materials. Although this may seem like an obvious implementation step, it is often overlooked, and documenting workflow processes as they are designed will minimize rework during later phases of the implementation.

Testing and Training

Although adequate testing and training are established prerequisites to a successful system conversion, they are two areas where there are often gaps resulting in post-go-live challenges.

Complete Thorough Charge Testing

Revenue capture is a critical component to billing and collecting for services and is an aspect of testing that should command meticulous attention. Charge testing should be comprehensive and include a test of all charges from each department from which they could be triggered. All data elements such as price, CPT/HCPCSs, revenue codes, cost centers, and modifiers should be reviewed for accuracy. A gold-standard practice is to have each clinical department or clinic manager review and sign off on their respective charges to validate accuracy. Although charge
testing is a labor-intensive undertaking, it minimizes the more extensive clean-up required to resolve charge issues not identified until after go-live.

Perform End-to-End Claims Testing
All RCM system implementations should begin with testing of individual workflows but culminate in the completion of end-to-end claims testing. In this type of testing, operational owners identify both common and unusual or problematic claims scenarios in the current state. They then select representative claims for each scenario, and the testing team reverse-engineers a testing script, which should result in the reproduction of an identical claim for each scenario in the new system. Because this process is inherently integrated, it often exposes system issues that occur during handoffs or between workflows. As with charge testing, end-to-end claims testing is resource-intensive but beneficial in identifying issues for resolution before go-live.

To the extent feasible, include end users in end-to-end claims testing to maximize its benefit. End-user involvement reinforces training and hones their skills in the system. In addition, billing end users often have the subject matter expertise to identify whether there are issues with the claims produced as part of testing.

While it used to be common to do parallel testing, organizations are now challenged to reproduce identical claims to their legacy systems during testing because of new workflows and charge capture mechanisms. This makes it even more critical to be able to explain any variances in the testing to ensure that there are no errors in the system.

Don’t Forget about Finance
Much of RCM system implementation is workflow-driven, and the finance team can be overlooked because they rely almost exclusively on system extracts and reports. During the implementation, be sure to seek finance sign-off on these items. Prior to go-live, engage the finance team in a dry run of the month-end process to orient them to finance reports, confirm the general ledger is properly configured, and ensure they have adequate information needed to close books at the end of the month. Following go-live, finance teams should reconcile system transactions with the general ledger daily until the first full month-end to identify any system problems and build comfort with the reconciliation process.

Post-Go-Live Stabilization

Monitor Key Performance Indicators
The implementation of a new RCM system should not result in substantial changes in revenue cycle key performance indicators (KPIs), and KPI variance from pre-go-live values is an effective way to identify system or training issues that may not be apparent from an individual account
or encounter review. Some metrics may take time after go-live to stabilize to pre-go-live levels (cash is a common example because there is often a brief cash lag immediately after go-live), while many others, such as case mix index distribution and revenue, should remain constant throughout the conversion.

The first step in implementing this strategy is to collect pre-go-live data to establish baselines against which to compare post-go-live KPIs. Baselines are ideally based on 12 months of historical data to better account for metrics that vary seasonally. In addition to standard billing elements, charge data should also include day of the week to allow for more detailed comparison of weekend versus weekday totals.

KPI reviews should begin on day one of go-live, with operational and IT leaders participating in daily meetings to monitor KPIs and identify related issues. At go-live, metric review will focus primarily on comparing charge counts and dollar totals by department, CPT, and cost center to ensure neutrality with pre-go-live revenue. Over the coming days and weeks, coding, billing, and collection metrics should be added as encounters and admissions created in the new system progress through the revenue cycle. Meeting frequency can transition to weekly as the system begins to stabilize, typically through the first month-end or two to three weeks after go-live, whichever comes later.

**Identify Strategy for Issue Resolution**

Even with the most thorough testing and training, post-go-live challenges are inevitable. Establishing a robust process for identifying issues and tracking their resolution is essential for long-term success.

System issues will seem to come from all fronts immediately after go-live and should be identified and logged in a central repository, often an online ticketing system, as soon they are identified. Central documentation ensures all known issues are communicated to the teams responsible for resolving them, but it also allows all outstanding tasks to be prioritized relative to one another, which is critical following go-live, when issues often far outpace the IT resources available to address them.

The project team should identify a system for prioritizing work before go-live so that issues can be addressed immediately without lengthy discussion of which issue should be worked on first. Three common, though not exhaustive, criteria often used to prioritize issues are financial impact, patient satisfaction, and compliance risk. In an enterprise implementation, patient care and safety are appropriately the most critical criteria in prioritizing EHR issues. However, financial risk should command similar organizational visibility and mobilization of resources when critical issues do arise.
Issue tracking and prioritization should be managed through a regular forum with IT and operational teams, during which time newly logged and in-progress issues can be discussed. These sessions are often consolidated with the regularly scheduled KPI review session.

Organizations sometimes are challenged to engage end users in formally reporting system issues. Issue resolution also affects end users, and they should be notified of any ongoing problems and/or implemented solutions that may impact their work. This ongoing dialogue between the project team and the users they support drives a swifter transition from post-go-live stabilization to ongoing optimization.

**Focus on System Optimization**

No single demarcation exists between the end of stabilization and start of optimization. Generally, optimization occurs when key financial metrics, such as cash posted and outstanding accounts receivable, reach a steady state and major system issues have been resolved. Stabilization often ranges from 6 to 12 months depending on an organization’s size and complexity, but can extend beyond a year.

After an organization stabilizes its new system and staff become comfortable with new workflows, it can begin to consider refinements to further improve revenue cycle performance. Enhancements ruled out of scope for the initial go-live are good candidates for optimization if a business need for the feature still exists. Additionally, billing office leadership and the project team should monitor denials and perform root-cause analysis to identify new system build or training that could prevent those denials in the future. As with the initial implementation, enhancement should be vetted by operational and IT owners, thoroughly tested, communicated to end users, and monitored once the feature is live for any unintended side effects.

RCM system implementations require careful planning and execution on the part of revenue cycle and IT teams to both avoid disasters and realize efficiencies that come with new technology. Most of the pitfalls of system conversions—stalled revenue cycles, frustrated end users, and financial distress, to name a few—can be avoided by incorporating these best practices into an implementation. With thorough communication, thoughtful system design, and engagement from end users to executive leadership, organizations can thrive with an enhanced RCM system that will support ongoing financial health.

This article was written by Robin Settle, Principal and Lisa Carley, Senior Consultant at ECG Management Consultants.

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