Hospital revenue cycle operations: Opportunities created by the ACA

Although the ACA will make revenue cycle operations more complex, it also presents an opportunity for providers to improve, excel, and differentiate. By adapting their RCM operations and acquiring new capabilities, providers could open up opportunities to win.

Matthew Bayley, MD; Sarah Calkins, MD; Ed Levine, MD; and Monisha Machado-Pereira

Fifteen cents of every US healthcare dollar goes toward revenue cycle inefficiencies. Of the $2.7 trillion the country spends annually on healthcare, $400 billion goes to claims processing, payments, billing, revenue cycle management (RCM), and bad debt—in part, because half of all payor-provider transactions involve outdated manual methods, such as phone calls and mailings. With passage of the Patient Protection and Affordable Care Act (ACA), the US government signaled an intent to move healthcare toward a more consumer-driven model, which will entail a corresponding evolution in hospital revenue cycles.

Given the already unprecedented pressures on those cycles from recent increases in patient liability and the decreased ability of many individuals to pay even modest balances (due to ongoing economic conditions), it is clear that robust revenue cycle performance will play an increasingly important role in providers’ financial health.

What does robust revenue cycle performance mean? At the highest level, revenue cycle performance should be evaluated along two dimensions: how much does the revenue cycle cost, and how much does it collect? To date, considerable emphasis has been placed on cost; however, an overall cost-to-collect number is too blunt an instrument to reflect the true efficiency of revenue cycle performance. More important, a focus on cost distracts attention from revenue and yield, the second dimension along which revenue cycle performance should be evaluated. The size of the resulting missed opportunity should not be underestimated (see the sidebar on p. 49).

Health reform will expand access to care; however, it will also add complexity, as will current market trends (e.g., more pre-authorization requirements) and other new government requirements. These forces, along with the growing consumer-driven nature of health-

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2 In the retail industry, by comparison, payment transaction costs are 2 percent of every dollar, and less than 1 percent of transactions involve exceptions to the automated payment process.
3 Although variations in the cost-to-collect clearly reflect differing levels of efficiency, the lack of a standard definition of what costs should be included also contributes. For example, Hospital Account Receivable Analysis (Aspen Publishers) does not include health information management in its calculation of the cost-to-collect, despite the fact that health information management is widely considered to be a revenue cycle function. In fact, “most organizations only include the departmental budget of the business office in their cost to collect.” (HFMA. Understanding your true cost to collect. Healthcare Financial Management. January 2006).
4 While the cost-to-collect is one overall measurement of efficiency, it does not address opportunities for process optimization and automation. For example, adding an FTE to audit patient registrations prior to billing would increase the cost-to-collect, yet it could also significantly decrease rework and manual intervention later in revenue cycle.
5 Yield (the capture of accurate payment of amounts due to a provider for services that were indicated and performed) should be seen as the “quality” output of revenue cycle processes. Yield is typically measured as “cash received as a percentage of net,” yet this can be significantly affected by payor mix, limiting the ability to evaluate and compare performance. Other metrics typically focused on by hospital leadership (such as days in A/R or denials) are significantly influenced by accounting policy, payor or acuity mix, and non-standardized definitions, which also limits the ability to benchmark performance.
6 A steady stream of government compliance requirements (e.g., the new MS-DRG system, which has expanded the number and levels of codes; ICD-10 transition; and HIPAA v5010) and increased scrutiny for fraud (e.g., introduction of the Medicare Recovery Audit Contractor program) are also driving the need for more robust RCM capabilities.
Hospital revenue cycle operations: Opportunities created by the ACA

In this paper, we outline the key implications of US health reform for hospital revenue cycles and then discuss the associated imperatives for success.

More complications than simplifications

Three factors related to the ACA will affect hospital revenue cycle operations: the increase in the number of patients with balance after insurance (BAI) and the introduction of both more complicated payment responsibilities and more complex payment methodologies.

Higher BAI volumes

The ACA is expected to provide access to health insurance to approximately 30 million previously uninsured people; this will likely slow the expansion of bad debt, which has grown at 5 to 10 percent annually over the past five years. Indeed, we estimate that by 2018 bad debt levels could be 25 percent lower than they would have been in the absence of the ACA. There is also likely to be a major shift in the mix of bad debt. At present, most bad debt is incurred by self-pay/uninsured patients, from whom the chance of collection is small. In the future, a greater percentage of the debt will come from those with insurance coverage and, as a result, the probability of collection is potentially higher. As Exhibit 1 shows, we estimate that, at a national level today, uninsured individuals account for more than two-thirds of hospital bad debt; BAI and payor disputes account for approximately one-third. That ratio is likely to shift substantially—BAI alone could account for more than one-third of hospital bad debt.

This shift will require that hospitals change from a “wholesale” RCM model (which puts comparatively little emphasis on collecting from individuals) to a retail model that focuses on the cost-to-collect, often at the expense of the amount of cash collected. The intensity of efforts should be reversed, because increasing yield is often easier than reducing the cost-to-collect. For example, decreasing the cost-to-collect from 4 percent to 3 percent (in absolute terms) for a hospital with $300 million in revenue is a substantial—and painful—relative decrease of 25 percent, for $3 million in annual savings. However, at a hospital of similar size, we saw investments in training dramatically increase registrations and point-of-sale collections, to the tune of over $1 million annually just in the emergency department; similar efforts to reduce a 2- to 3-percent error rate in closed commercial claims achieved comparable impact.

Are hospitals reducing the cost-to-collect at the cost of actual collections?

Hospitals typically focus on the cost-to-collect, often at the expense of the amount of cash collected. The intensity of efforts should be reversed, because increasing yield is often easier than reducing the cost-to-collect. For example, decreasing the cost-to-collect from 4 percent to 3 percent (in absolute terms) for a hospital with $300 million in revenue is a substantial—and painful—relative decrease of 25 percent, for $3 million in annual savings. However, at a hospital of similar size, we saw investments in training dramatically increase registrations and point-of-sale collections, to the tune of over $1 million annually just in the emergency department; similar efforts to reduce a 2- to 3-percent error rate in closed commercial claims achieved comparable impact.

8 Most hospital CIOs have prioritized clinical/EHR software upgrades, thus delaying the replacement of RCM systems; less than 1 percent of hospital CIOs surveyed by HIMSS named RCM as a priority (HIMSS 2010 and 2012 leadership surveys).
9 However, the newly insured population is likely to be more difficult to collect from than the “always” insured, which may mean that hospitals will experience a higher percentage of bad debt from BAI. See also the discussion later in this paper.
10 “Bad debt” as used in this paper is deemed to include uncollected reimbursements resulting from payor disputes, BAI, or uninsured care.
11 Projections take into account (1) the proportion of employers offering high-deductible health plans, which rose from 23 percent of employers with 500+ workers in 2010 to 32 percent in 2012 (Mercer Benefits surveys) and (2) the already increasing shift in cost sharing to insured individuals.
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fairly small amounts; we estimate that in 2018, 
the average dollar size of patient balances (ex-
cluding uninsured/self-pay balances) will range 
from $20 to $400, versus an average uninsured 
balance of approximately $1,100 and an aver-
age payor balance of roughly $2,500. Thus, as 
the number of individual patient BAI transac-
tions increases, it will become increasingly im-
portant that providers be able to collect at a 
lower per-unit cost and decide when to write 
off balances below a certain threshold.

Increased effectiveness in collections may also 
be important because the new class of covered 
patients could have very different payment 
behavior. The future individual exchange popu-
lation may be more difficult to collect from 

**EXHIBIT 1** Hospital revenue cycles must adjust to the shift in bad debt from the uninsured to BAI

Breakdown of US hospital bad debt ($ billions, moderate estimates)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2018 (no reform)</th>
<th>2018 (with reform)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-self-pay</td>
<td>32 – 33%</td>
<td>32 – 34%</td>
<td>53 – 55%</td>
</tr>
<tr>
<td>BAI</td>
<td>15%</td>
<td>15 – 17%</td>
<td>35%</td>
</tr>
<tr>
<td>Payor dispute</td>
<td>17 – 18%</td>
<td>17%</td>
<td>18 – 20%</td>
</tr>
<tr>
<td>Self-pay¹</td>
<td>67 – 68%</td>
<td>66 – 68%</td>
<td>45 – 47%</td>
</tr>
</tbody>
</table>

¹Post-discount for uninsured.

Note: all figures account for increased use of HDHPs (based on historical trends) and increased cost sharing 
for commercial plans in light of reform.

BAI, balance after insurance; HDHPs, high-deductible health plans.

Source: McKinsey MPACT and provider models; literature search; McKinsey analysis

12RelayHealth suggests that costs could be as much as three times higher.


14Health Care Advisory Board.
(compared with the currently insured population), given that they are apt to have lower credit scores and fewer household assets.\textsuperscript{15}

**More complicated payment responsibilities**

Payment flows and calculations of both reimbursements and BAI will also become more complex as the ACA introduces cost-sharing requirements for a subset of the newly insured (those with Silver plans), and market forces result in new and innovative insurance products. Although ACA-mandated plan coverage levels appear to simplify the calculation of patient responsibility, providers will face the same difficulties in calculating patient responsibilities as they do today, with the added component of government-mandated cost-sharing caps for those with Silver plans. These complicating factors will likely decrease existing levels of effectiveness in collecting payments not only from individuals, but also from payors, and may also extend the length of the revenue cycle.

For example, although Silver exchange plans have a mandated 70-percent actuarial value, their benefit design (e.g., the split between

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**EXHIBIT 2 The increase in BAI will require improved efficiency to collect many more transactions**

<table>
<thead>
<tr>
<th>Number of discharges/cases/visits</th>
<th>Commercial or government payer</th>
<th>Individual/patient</th>
<th>Average payor/individual responsibility (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+27%</td>
<td>502 – 505</td>
<td>101 – 104</td>
<td>56 – 58</td>
</tr>
<tr>
<td></td>
<td>545 – 546</td>
<td>0</td>
<td>54 – 66</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>68 – 69</td>
<td>69 – 76</td>
</tr>
<tr>
<td></td>
<td>82 – 84</td>
<td>92 – 113</td>
<td>56 – 58</td>
</tr>
<tr>
<td></td>
<td>602 – 603</td>
<td>Commercial\textsuperscript{1}</td>
<td>$3,300 – $3,540</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exchange</td>
<td>$2,850 – $3,350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medicare</td>
<td>$3,255 – $3,450</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medicaid</td>
<td>$890 – $975</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commercial BAI\textsuperscript{1}</td>
<td>$350 – $370</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exchange BAI</td>
<td>$375 – $400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medicare BAI</td>
<td>$65 – $70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medicaid BAI</td>
<td>$18 – $20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-pay/uninsured</td>
<td>$1,100 – $1,200</td>
</tr>
</tbody>
</table>

\textsuperscript{1}Includes both HDHP and traditional commercial plans; accounts for increasing use of HDHPs (based on historical trends) and increased cost sharing for commercial plans in light of reform. BAI, balance after insurance; HDHP, high-deductible health plan.

Source: McKinsey MPACT and provider models; literature search; McKinsey analysis

\textsuperscript{15}According to McKinsey’s 2011 Consumer Healthcare Survey, the mean credit score for the currently uninsured is 649 and for those likely to lose employer-sponsored insurance (ESI) is 664. These two groups will probably constitute most of the people purchasing insurance on the exchanges in the future. In contrast, the mean credit score for those currently having individual insurance is 716 and for those likely to retain ESI is 721. Similar disparities exist when one looks at the percentage of people with credit scores below 550 (uninsured: 13.9 percent; likely to lose ESI: 11.6 percent; individually insured: 4.7 percent; likely to retain ESI: 4.4 percent) and those having household assets between $250K and $500K (uninsured: 4.6 percent; likely to lose ESI: 6.7 percent; individually insured: 10.1 percent; likely to retain ESI: 16.7 percent).
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Revenue Cycle Operations

EXHIBIT 3  The ACA adds upper and lower bounds on cost sharing through out-of-pocket payment caps and subsidies

Cost-sharing breakdown, assuming $10,000 in annual medical expenses for individuals purchasing the Silver plan ($)

| Mechanism of subsidy payment TBD, with government notifying plans of eligible individuals and providing plans with “periodic and timely” payments |
|---|---|---|---|---|---|
| | Individual responsibility | Government subsidy | Plan responsibility |
| 10,000 | 600 | 2,400 | 7,000 |
| 10,000 | 1,300 | 1,700 | 7,000 |
| 10,000 | 2,700 | 300 | 7,000 |
| 9,975 | 2,975 | | 7,000 |
| 10,000 | 3,000 | | 7,000 |
| 10,000 | 3,000 | | 7,000 |

| % of federal poverty level | 100 – 149% | 150 – 199% | 200 – 249% | 250 – 299% | 300 – 399% | > 400% |
| Effective AV | 94% | 87% | 73% | -70% | 70% | 70% |
| Max OOP limit | $1,983 | $1,983 | $2,975 | $2,975 | $3,967 | $5,850 |
| Effective share of income | 4 – 6% | 6 – 8% | 10 – 13% | 8% | 6% | < 5% |

1Applies only to Silver plans purchased by individuals with income <250% FPL.
2Responsibility TBD for remaining $25 of medical expenses, as synchronization of AV and limits/subsidies remains to be determined by DHHS.
ACA, Patient Protection and Affordable Care Act; AV, actuarial value; DHHS, Department of Health and Human Services; FPL, federal poverty level; OOP, out-of-pocket; TBD, to be determined.

Source: Team analysis

Discussions with payors confirm that future plan designs will differ significantly among Bronze, Silver, Gold, and Platinum levels to reflect the risk attraction inherent in such plans’ coverage levels and the resulting likely utilization. In 2014, out-of-pocket payments for all plans will be limited to $6,400 for single coverage and $12,800 for family coverage with lower caps for those with incomes below 250 percent of the federal poverty level (FPL). For example, for those with incomes between 100 percent and 200 percent FPL, payments are capped at $2,133 for individuals and $4,267 for families. Actual plan design will vary.

With cost-sharing subsidies, the Silver plan actuarial value will increase to 94 percent for those with income <150 percent FPL ($16,755 for a single person and $34,575 for a family of four), to 87 percent for those with incomes between 150 percent and 200 percent FPL ($22,340/$46,100), and to 73 percent for those with incomes between 200 percent and 250 percent FPL ($27,925/$57,625).

EXHIBIT 3 illustrates how responsibility varies for individuals of different income levels purchasing Silver plans.

Ideally, the caps and subsidies would reduce bad debt levels, requiring providers to collect only the cost-sharing amount from patients and leaving payors to reconcile the subsidy amounts with the government. There is a proposed regulation to issue advance monthly payments to payors based on their member population; the payments would then be reconciled at the end of each year (similar to the approach used in the Medicare Prospective Payment Systems). How this proposed arrangement—and the potential need to then reconcile payments to providers—would work for providers is yet to be seen.

In the traditional wholesale revenue cycle, the added complexity of payment responsibilities...
would be dealt with much as secondary payors are currently dealt with (usually, issues are resolved over a series of months). In a post-reform world, however, there is likely to be increasing pressure on providers for more “retail” revenue cycle measures, such as real-time adjudication and point-of-service (POS) collections, just when calculating balances due becomes more difficult.

**More complex payment methodologies**

Some of the more attention-capturing provisions of the ACA have centered on alternatives to the traditional fee-for-service reimbursement method that currently predominates in the United States (such as accountable care organizations, or ACOs, and bundled payments). Given the significant investments potentially required for participation in these programs, the alternative reimbursement methods being tested raise a number of questions for the revenue cycle. McKinsey has a series of separate papers devoted to the impact of innovative care and payment models, and so we will only briefly discuss the issues that alternative reimbursement methods raise for a provider’s revenue cycle. Reimbursement is moving away from fee-for-service to payment-for-value, which requires tighter integration of clinical records and other systems with providers’ financial systems. Today, however, a key bottleneck for many hospital revenue cycles occurs in the link with the clinical side. Hospitals that want to run payment-for-value programs that increase provider integration (e.g., ACOs and patient-centered medical homes) will need to be able to answer such questions as, “How do we attribute impact and allocate payments among providers?” Hospitals that want to implement programs that increase the spectrum of care and tie payment to more than one specific patient-provider encounter (such as pay-for-performance and bundled payments) will need to ask whether their systems can seamlessly track and report performance (on population health metrics, for example) as well as whether they really can influence the provision of out-of-hospital services (including post-acute care). To ensure that they can answer these questions affirmatively, hospitals may require significant capital investments, and so they must carefully consider the costs required against the potential benefits, especially because some of the skills they will have to develop (e.g., actuarial capabilities for capitated payments) are beyond a provider’s core competency of care provision and may affect only a small percentage of reimbursement.

Traditional fee-for-service reimbursement is changing as well. A steady stream of government compliance requirements (such as the new MS-DRG system, ICD-10 transition, and HIPAA v5010) and increased scrutiny for fraud (including introduction of the Medicare Recovery Audit Contractor, or RAC, program) are driving the need for more robust RCM capabilities. Payors are following suit on some of these compliance requirements. Furthermore, because payors are no longer able to rely on risk selection as a lever, they are turning to utilization and care management as a key element of their business model. (For example, they are increasing their requirements that providers obtain pre-visit authorizations and clinical clearances.) Because of these changes, providers will need to invest in RCM operations just to stay even with performance today.

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19 Please contact the McKinsey Center for US Health System Reform to receive copies.
20 One good example of this is Medicare’s focus on observation status versus inpatient status, with private insurers following suit.
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challenging for providers in the future. Providers must dedicate real effort to understanding the capabilities required to be successful and then decide how they can best acquire those capabilities (e.g., build internally, acquire, or outsource). In preparation for the impending changes, we have identified five core principles for RCM success. We discuss each of these principles below, as well as some of the key tactical levers that support them.

Understand your revenue cycle

Providers must understand their revenue cycle performance and identify where value creation opportunities exist, both now and post-reform. This may seem obvious, but many hospital executives today see the revenue cycle as a bit of a black box, for a variety of reasons (among them: nonstandardized definitions, siloed functions, limited usefulness of benchmarks, and lags of more than six months in measuring performance improvement). However, a deep understanding of operational performance will be critical for allocating limited resources, particularly as the “make-or-buy” decision becomes increasingly relevant, because it will enable hospital executives to determine which levers are most important to invest in first. (Among the questions the executives must consider: should they focus on Medicare processes because of anticipated volume increases, or should they emphasize commercial operations because of their higher reimbursement requirements?)

Imperatives for success in a post-reform world

As we have discussed, the evolving health-care marketplace is likely to make RCM more

Encouragement offered by administrative simplification

As a counterpoint to some of the added complexity discussed above, the ACA does devote significant attention to administration simplification and standardization of operating rules. Provisions include the streamlining of enrollment procedures, the standardization (in electronic format) of a number of payor-provider transactions, and the requirement that health plans have unique identifiers. Direct savings from these provisions are likely to be limited for hospitals, and the transition could be cumbersome. (For example, just the change from UB-92 to UB-04 claim forms caused months of billing delays for many hospitals.)

Nevertheless, the required modifications will directly enable a number of solutions to mitigate ACA-added changes. For example, standardized operating rules for eligibility will streamline processes for the newly insured—a critical advance (even today, eligibility issues are the root cause behind 30 to 40 percent of initial denials). In addition, streamlined enrollment for Medicaid, the Children’s Health Insurance Program, and exchange subsidies (via a single electronic or paper form that pulls from information already captured in government databases, such as those run by the Internal Revenue Service, Social Security, and Immigration Services) creates the opportunity to significantly decrease the amount of uncompensated care hospitals provide.

21 Section 1104: Administrative simplification; Section 1413: Streamlining procedures for enrollment through an exchange and State Medicaid, CHIP, and health subsidy programs; Sec. 2201: Enrollment simplification and coordination with state Health Insurance Exchanges; Section 2202: Permitting hospitals to make presumptive eligibility determinations for all Medicaid-eligible populations.

22 We estimate that administrative simplification provisions will result in about $2 billion in annual savings for US hospitals, which is less than 5-percent savings on total transaction costs (off an estimated base of approximately $75 billion spent by US hospitals in 2010 on billing and insurance-related activities). Physicians are expected to be the primary beneficiaries of administrative simplification because hospitals have already incorporated electronic transactions along more of their revenue cycles.

A deep understanding of operational performance is also required to determine the likely return on the many potential RCM investments that could be made in light of the ACA. (For example, should hospitals centralize...
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Invest in the journey to an efficient revenue cycle

Because of the lack of investment in RCM IT systems and the focus on keeping the cost-to-collect low, provider revenue cycles are usually highly decentralized, nonstandardized, and manual. In many cases, this approach has been sufficient to deliver acceptable results in a pre-reform world. In a post-reform world, however, decentralized, nonstandardized, manual processes will not be able to meet the evolving challenges and increased need for efficiency. Unless a provider makes appropriate investments in anticipation of the increased numbers of insured lives and transactions, its financial health could be at risk. Exhibit 4 illustrates what could happen if a hospital failed to ready itself for a post-reform world.

Efficient revenue cycle operations in a post-reform world will require process standardization and optimization, specialized expertise (e.g., by payor type or complexity), and aggressive automation. For most providers, the scale required to justify the needed investments may be obtainable only through centralization, consolidation, and/or outsourcing of key revenue cycle functions. In fact, we expect that RCM outsourcing will take off over the next several years—potentially, up to 40 percent of providers may consider end-to-end outsourcing in the near future.

Depending on a provider’s starting point, a strong focus on greater operational efficiency could result in as much as a 35-percent reduction in the cost-to-collect. However, the transformation is not easy, and the dividends are not always as great as those that can be reaped from improvements in effectiveness.

coding to more efficiently comply with new government requirements? Build in-house actuarial capabilities?) Unless hospital executives can understand their true baseline performance at a deeper level than cost-to-collect or days in accounts receivable, even simple attempts to improve efficiency may be misdirected.

What this means is that hospitals will have to be able to track end-to-end performance at a patient level—beginning with patient access functions (such as pre-registration, POS collections), continuing to health information processing (continued stay certification, coding, the intersection with clinicians, etc.), and finally moving on to back-office operations (such as denials management and collections). As an example, the Health care Financial Management Association has defined a set of MAP Keys—a common set of key performance indicators—with the goal of promoting consistent reporting and peer-to-peer comparisons. In general, providers should identify and track a number of more process-driven metrics for diagnostic purposes so that they can identify bottlenecks in operations.

The metrics tracked should not be viewed as siloed information of interest only to the RCM group. Rather, people throughout the hospital should realize their significance. (For example, the staff in the registration department should understand how bad debt levels could rise should they begin to collect less BAI at the point of service.) By developing a deeper understanding of both operational performance and the likely local impact of health reform, hospital executives can begin to understand how they can best adapt their operations to a post-reform world.

23For example, understanding what the cost-to-collect is for a clean claim that drops electronically without any human intervention versus the cost-to-collect for an account that requires manual follow-up and rebilling (including the cost of each activity along the process).
25As noted in footnote 8, hospital CIOs have prioritized clinical/EHR software upgrades, thus delaying the replacement of RCM systems. However, we expect that RCM purchases should increase in the near future as hospitals implement EHR systems and prepare for ICD-10 conversion.
26Based on interviews with about 100 CFO/CIO/RCM directors, we believe that systems with 10+ hospitals have sufficient scale to centralize on their own and do not require a third-party outsourcer.
27Based on McKinsey client experiences with similar centralization and consolidation efforts.
EXHIBIT 4  Neglecting the impact of reform on the revenue cycle could result in significant risk to a provider’s financial health

Assume that a hospital has $500 million in revenue and a 30% commercial payor base…

...unless it improves cash collected, this currently financially healthy hospital could operate at a deficit

<table>
<thead>
<tr>
<th></th>
<th>Today</th>
<th>2018</th>
<th>2018 without improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net revenue</td>
<td>$508 million</td>
<td>$763 million</td>
<td>$741 million</td>
</tr>
<tr>
<td>EBITDA</td>
<td>$12 million</td>
<td>$17 million</td>
<td>—$19 million</td>
</tr>
<tr>
<td>Bad debt</td>
<td>$35 million</td>
<td>$51 million</td>
<td>$35 million</td>
</tr>
<tr>
<td>Transactions(^1)</td>
<td>515 thousand</td>
<td>580 thousand</td>
<td>610 thousand</td>
</tr>
<tr>
<td>Margin</td>
<td>2.4%</td>
<td>2.3%</td>
<td>—2.5%</td>
</tr>
</tbody>
</table>

\(^1\)Based on number of visits.
\(^2\)Within the county.

EBITDA, earnings before interest, taxes, depreciation, and amortization.

Source: McKinsey MPACT model; McKinsey provider model

(Enter, though, that efficiency efforts often result in, and provide the enabling infrastructure for, effectiveness gains.) Any approach to decisions about consolidation and outsourcing must be at the sub-functional level, given the range of activities that happen within the revenue cycle. (For example, patient access should be thought of not just as patient access, but also as pre-registration versus scheduling versus inpatient registration, etc.)

The hard work begins as a provider starts to make decisions about its future state: what are the optimal workflows? What governance model and structure will improve organizational performance and execution? What coordination mechanisms and cross-functional processes will ensure control, collaboration, and knowledge sharing, and also exploit scale benefits? What kind of performance management system is required? At many providers, the lack of a single point of accountability for revenue cycle performance today, coupled with the inherent tension resulting from revenue cycle linkages to clinical care, case management, patient access, and back-office operations, can make it difficult for executives to gain agreement and collaboration across silos for a re-design of the revenue cycle, particularly on contentious issues such as governance, roles and responsibilities, decision rights, and key performance indicators. In our experience,
even the most aggressive transformations are multiyear efforts at large hospital systems.

Many providers have already centralized and optimized back-office operations, as well as some patient access functions (such as pre-registration) and some parts of the mid-revenue cycle (such as charge master maintenance). For these providers, the next critical frontier for efficiency will be the clinical revenue cycle—the process by which medical records for patient care are translated into billing and collections activity. (Greater efficiency in this area can be gained, for example, by educating staff about and then enforcing new documentation practices, and by defining responsibility for managing clinical denials.) Investments in the clinical revenue cycle will be crucial for responding to more stringent payor demands (such as for pre-authorization and medical necessity reviews) and increased reporting requirements (e.g., the need to link payments to quality).

One provider’s RCM group offers an example of how the clinical revenue cycle can be centralized. Instead of sending clinical denials to hospital care managers, who have competing demands for time and may be unfamiliar with contract terms and medical necessity criteria, the organization created a centralized, dedicated, virtual unit called the “clinical resource center” to manage clinical denials, pre-certifications, and pre-authorizations. The center was staffed by a small team of nurses trained in best practices and dedicated to pre-service clinical clearance and appeals; this team served all the hospitals in the provider’s system. This approach enabled the provider to achieve more rapid and effective turnaround of account inquiries, thereby shortening the revenue cycle and significantly improving efficiency.28

Expand the ROI equation to include effectiveness

As mentioned in the previous section, many efficiency investments can also produce significant effectiveness improvements. (Expertise, for example, increases not only speed but also quality of work). When operations are consolidated at one site rather than multiple different hospitals, it becomes much easier to implement process changes, standardize procedures, and share best practices, particularly in systems with significant variability in existing performance. Greater visibility into performance and reduced variability in the approach used for key RCM functions can also improve compliance and a provider’s ability to meet regulatory and payor requirements, such as those for coding, documentation, and records management. Furthermore, efforts taken to improve efficiency that do not also consider effectiveness can be counterproductive.29

In our experience, investments to improve effectiveness also often improve efficiency and can increase cash collections and reimbursements by 3 to 6 percent (worth as much as $18 million for a hospital with about $300 million in net patient revenues). Investments that appear to have negative ROI based on efficiency metrics alone, such as those focused on the cost-to-collect, become no-regret moves once the benefits of increased effectiveness are added in—and this is likely to become increasingly true as the revenue cycle becomes even more complex and requires more specialized knowledge and expertise under health reform.

To prepare for a post-reform, retail healthcare world, we recommend that providers invest in upstream revenue cycle activities to enhance

28 This provider’s 2008 recovery rate was about 67 percent of what was determined appealable, resulting in $56 million—a 75-percent improvement over 2007. Another example of an increasingly common investment in the clinical revenue cycle is the creation of clinical documentation specialists, who assist physicians with payor-appropriate documentation. The returns on this investment are similarly outsized.

29 For example, many providers attempt to measure the efficiency of their collectors by tracking the number of “touches”; however, without understanding the effectiveness of their collection efforts (e.g., percentage of dollars collected against the target for assigned accounts), some collectors may shift their focus to touching as many accounts as possible, without regard for the effectiveness of those touches.
effectiveness. One especially critical area to invest in is frontline operations at the point of service. It is not just that individual balances can be collected much more cost effectively earlier in the revenue cycle—it is much more likely that those balances will be paid when collected at the point of service.\textsuperscript{30} Real-time quality checks on registration information can reduce the need for rework and the amount of incorrect information that limits a provider’s ability to collect. Expanding payment options and counseling about alternatives (such as financing programs for both uninsured patients and those with BAI) can reduce bad debt levels.

Enhancing frontline operations could also increase net revenue by reducing uncompensated care. As noted earlier, approximately 30 million previously uninsured individuals are expected to receive coverage from commercial and/or Medicaid plans. However, given the relatively modest penalties for not enrolling (e.g., $695 in 2019), some of those individuals may not consider obtaining coverage until they present at a hospital.\textsuperscript{31}

Providers must be prepared to recognize such uninsured patients rapidly, support their application for coverage, and track policy issuance. This may require the providers to overhaul some of their front-office admissions processes, add capacity in the early years of reform, and streamline the coverage search as much as possible. Moreover, as patients start to think of themselves as consumers of healthcare services, a customer-oriented approach (such as the use of POS credit card swipe machines and self-service registration kiosks) could become a significant differentiator. In fact, many providers are already investing in more efficient eligibility systems so that they can more efficiently and effectively serve their patients. (One example is a one-click system developed by the Centers for Medicare and Medicaid Services—the 270/271 HETS application—that enables hospital staff to easily and quickly view eligibility information.)

**Invest as much in culture as you invest in technology**

Although automation and technology will be critical future RCM elements, they are not silver bullets.\textsuperscript{32} The effective implementation of technology relies on staff uptake, and while RCM processes can be streamlined and automated, a number of patient-facing processes will continue to require frontline staff support for success. The whole hospital must feel responsible for the revenue cycle success, and this requires a significant shift in culture. Admissions staff and other frontline personnel need to think of themselves as having a necessary role in enabling patients to get access to healthcare and treatment, as well as in ensuring the financial health of both the hospital and the patient.

Providers will need a multipronged approach to successfully change culture, from one in which individual medical bills are low on payer, provider, and patient priority lists, to one in which hospitals seek collection prior to the provision of services and sign people up for coverage at the first encounter. Such a dramatic shift in policy will require thoughtful change management and communication of the underlying reasons to employees. Hospitals will therefore need to ensure that the appropriate incentives, training, and performance management are in place. Finally, physicians will play an increasingly important role in the ability to collect reimbursement for services indicated and rendered, and any

\textsuperscript{30} McKinsey Collections Practice.
\textsuperscript{31} Enrollment on commercial exchange plans may be limited by open enrollment periods (to be determined).
\textsuperscript{32} One of the highest-performing hospital business offices McKinsey has observed relied heavily on manual processes and paper—and their most pressing IT demand was a request for some scanners. The group’s culture, however, was one of accountability and high performance, roles were highly specialized, and significant investments had been made in process standardization. Conversely, one of the lower-performing business offices in the same health system was one of the more technology-driven offices.
incentives, training, and education efforts must engage and include them.

To facilitate the culture change, providers must ensure that their interactions with payors and patients support the change in priorities. Discussions with payors should address subscriber base contributions to bad debt levels; unless payors are willing to grant concessions (such as higher pricing or some responsibility for educating or collecting BAI), providers should ensure that their contracts with the payors allow for POS collections, and they should work with key payors to invest in real-time adjudication. As allowed by law, providers should set patient expectations about payment responsibilities from the very first interactions. (For example, they should discuss coverage and patient financial responsibilities in pre-registration and scheduling.) Providers should also educate patients about payment and alternative treatment options.

**Think beyond the boundaries of the traditional revenue cycle**

Providers should also ensure that all key stakeholders have a “seat at the table” so that the best set of solutions can be developed. In addition to making certain that all revenue cycle functions are represented, providers should be sure to include clinicians and other groups not traditionally seen as part of the revenue cycle. Improved collaboration not only can reduce the contractual terms that often disadvantage providers in RCM collections (such as strict billing limits without corresponding prompt pay provisions), but might also re-align some of the bad-debt-related financial risk. (For example, a provider might be able to get increased reimbursement rates for a plan that has historically attracted individuals who are less likely to pay their BAI.)

As healthcare becomes more consumer-driven, patient input becomes increasingly important. An understanding of patients and what matters to them will benefit providers as patients begin to act like consumers and take a more active role in determining their care. The revenue cycle can, in fact, be likened to a retailer’s check-out process in that it can define “moments of truth” for consumers and the likelihood of future interactions—and moments of truth are likely to be even more prevalent in the healthcare industry, given the emotion-laden patient-provider relationships. As patients become consumers, hospitals will need to develop a more integrated perspective on how to interact with them, something akin to the customer relationship management approach that businesses use.

Providers should also consider breaking down boundaries even more dramatically by reaching out to their most important payors. While the ACA does mandate some standardization that will result in cost savings, we believe the largest opportunities for savings will come from voluntary collaborations between payors and providers to eliminate redundancy. (For example, joint working teams could problem-solve opportunities to reduce system inefficiencies and RCM costs.)

One recent payor-provider collaboration anticipates savings of 10 to 20 percent by:

- Improving coding, billing, and claims practices to reduce the number of rejected claims. Representatives from both the payor and provider will work together to
The post-reform health system: Meeting the challenges ahead

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Although the ACA may contribute some complexity to revenue cycle operations, it also presents an opportunity for providers to improve, excel, and differentiate. Much like the evolution of payment solutions in retail, the changes providers will have to make to adapt their RCM operations to the new post-reform, consumer-driven world could open up opportunities for them to win. Electronic payments in retail paved the way for lower transaction costs, consumer loyalty programs, and new business models, such as eBay and Amazon. What will be the corollaries for the healthcare industry? How can you position your institution for success?

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