

# WhitePaper

## A CEO's Guide to Next Generation Revenue Cycle Management

### What Service Providers Need to Know to Survive the Changing Diagnostic Healthcare Environment

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## Table of Contents

<b>Introduction</b>	3
<b>Chapter 1: The Perfect Storm of Healthcare Change</b>	4
Macroeconomic Pressure	4
Governance	5
Organizational Changes	7
Technological Changes	9
How Changes Impact Diagnostic Healthcare	11
<b>Chapter 2: Diagnostic Market Reaction to Changes</b>	14
Interoperable	14
Informative	15
Intelligent	15
Instantaneous	16
<b>Chapter 3: What Does this Mean for Your Business?</b>	17
Clean Claims Up Front	17
Costs of Not Changing	18
<b>Chapter 4: Options for Change</b>	20
Purchase vs. Patch	20
Interoperable vs. Integrated	20
SaaS vs. ASP	21
Partner vs. Vendor	22
<b>Conclusion</b>	24
<b>References</b>	25
<b>Appendices</b>	
A-1 About Authors	31
A-2 About XIFIN	33
A-3 About DARK Daily	34
A-4 About The Dark Intelligence Group, Inc., and THE DARK REPORT	35
A-5 About the Executive War College on Laboratory and Pathology Management	36
A-6 About The Editor	38
<b>Terms of Use</b>	40

*"It is not necessary to change. Survival is not mandatory."  
– Edwards Deming*

## Introduction

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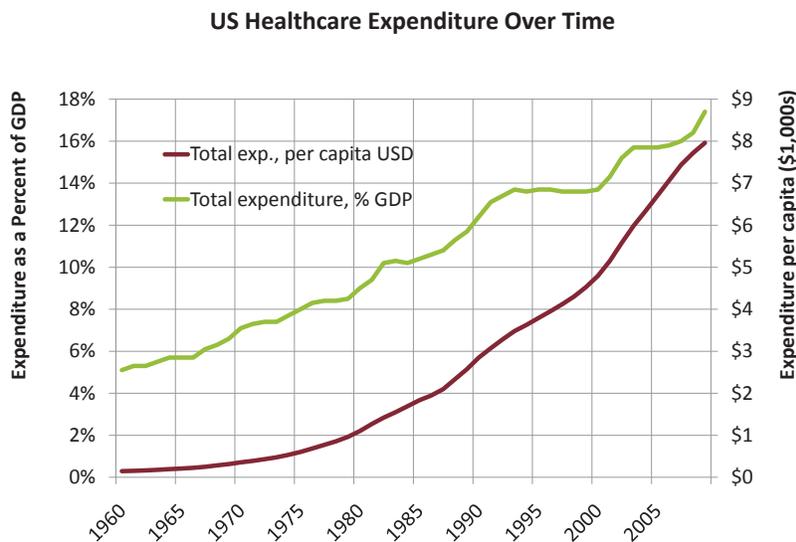
Macroeconomic pressure, increased governance, organizational changes, and technological advances are driving pervasive and lasting changes in the fabric of the healthcare system. Because diagnostic services influence the majority of healthcare decisions, changes to healthcare are magnified in the diagnostic services segment. Failure to aggressively adapt to this dynamic environment can easily imperil diagnostic service providers. The system of record and the lifeblood of diagnostic service providers is the Revenue Cycle Management (RCM) system. A dramatic rethinking of the role of RCM systems is critical to ensuring service providers are able to successfully compete in the marketplace.

## Chapter 1:

# The Perfect Storm of Healthcare Change

### Macroeconomic Pressure

Healthcare expenditures have been rising dramatically over the past half century, both in relation to GDP and on a per capita basis.<sup>1</sup> The Balanced Budget Act of 1997<sup>2</sup> introduced sustainable growth rate calculations tying physician payments to GDP<sup>3</sup> and effectively set healthcare price controls. Newer legislation such as the Deficit Reduction Act of 2005<sup>4</sup> (effectively cut imaging by \$1.7 billion in one year), the Patient Protection and Affordable Care Act (PPACA) of 2010<sup>5</sup> (explicitly decreased laboratory reimbursements by 1.75% “for each of 2011 through 2015”<sup>6</sup>) and the proposed Medicare Fee Schedule Rule for 2012 (would extend 50% multiple procedure payment



**Figure 1** Spending on healthcare is increasing at an unsustainable rate on both a percent of GDP and per capita basis.

reduction (MPPR) to the “professional component” of imaging studies<sup>7</sup>), all lead to significant cuts to healthcare funding. The private health insurance sector, unable to enforce price controls, has resorted to dramatic increases in premiums.

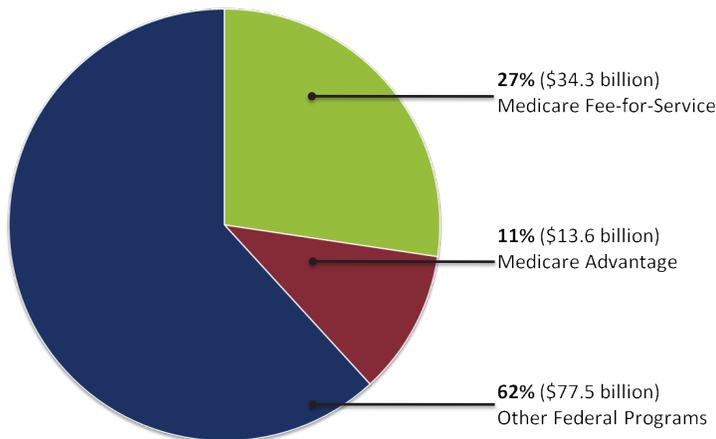
While expenditure limits are unavoidable, the current government system does not seem to account for the

increased costs of providing more advanced services or the increased value those services provide. During the past decade, although Medicare spending for clinical laboratory services has increased over 100% to \$8.1B in 2010, almost all of the increased spending was the result of increased volume<sup>8</sup>, not more expensive services. Advanced imaging techniques and molecular diagnostic tools are both costly to develop and costly to use; however these costs pale in comparison to the value these services provide.<sup>9</sup>

From 2002 through 2009 health insurance premiums increased over 60%, averaging over 7% per year.<sup>10</sup> According to the Congressional Research Service, the “rise in medical costs [among private insurers] is primarily attributable to the price of services, not increased utilization.”<sup>11</sup> This difference, from trends seen in Medicare, is likely the result of the “Silver Tsunami,” impacting Medicare to a much greater extent than private insurers. Whether the metric is public or private funding, more costly tests or more patients, macroeconomic conditions are putting extreme pressure on healthcare to provide increasing levels of service

at lower and lower costs; exacerbating the need to capture every dollar earned and increase efficiency. RCM systems provide the mechanism by which the dollars can be captured and efficiencies realized.

### Improper Payments for Federal Programs



Source: GAO summary of 20 federal agencies, 70 programs.

Figure 2 Medicare and specifically Fee-for-Service is squarely in the sights of regulators — biggest target.

### Governance

In addition to the macroeconomic factors above, increased governance is also driving change in

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the diagnostic services industry. For over 20 years, the Government Accounting Office (GAO) has designated Medicare as a high risk program due to its size and complexity. The GAO estimates that including all types of payment errors, there were about \$70 billion in improper payments for the Medicare and Medicaid programs in fiscal year 2010.<sup>12</sup> According to a July 2011 GAO report, Medicare led a partial list of 70 federal programs in terms of bad payments.<sup>13</sup> CMS calculated that Medicare made \$48 billion in improper payments out of the \$516 billion it paid to physicians, hospitals and other health professionals in 2010.<sup>14</sup> Although there is significant disagreement about the exact amount of improper payments and varying definitions about what constitutes errors versus waste versus fraud, all sources agree that the system is losing huge amounts of money.<sup>15</sup>

It is important to note that Medicare payment errors often are the result of billing and administrative mistakes and not outright fraud. However, Section 13410 of the Health Information Technology for Economic and Clinical Health Act (HITECH Act) states that “a violation . . . due to willful neglect is a violation for which the Secretary is required to impose a penalty.”<sup>16</sup> While the Social Security Act does outline remedies to correct violations,<sup>17</sup> it is clear that improper payments will be aggressively pursued. Four common reasons for payments being designated as improper are:

- Documentation for a service by a health professional was insufficient.
- Services provided to a patient were not deemed reasonable and necessary.
- Claims for services were coded incorrectly.
- Services were billed with no documentation to support the claim.

CMS has launched a number of financial management tools to help lower payment error rates, including recovery audit contractors (RAC) operating in all 50 states. RACs identify overpayments and

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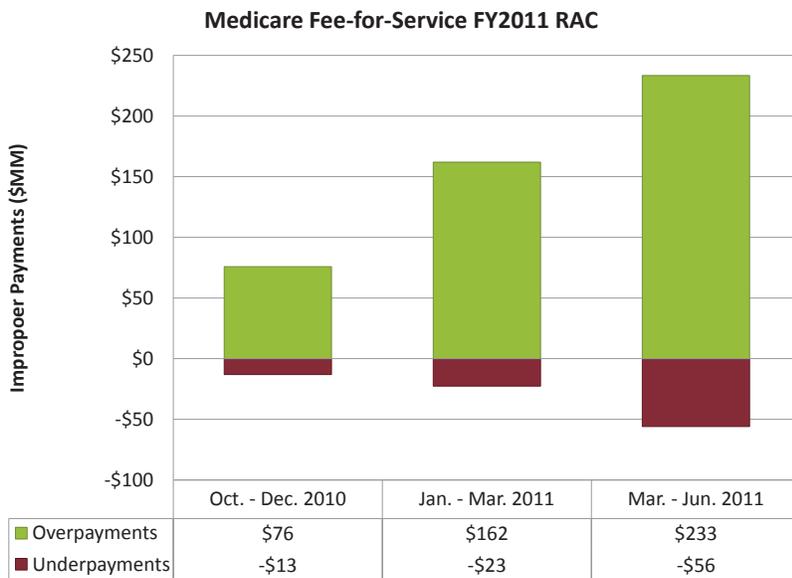
underpayments in the Medicare program and receive contingency fees based on the amount returned to Medicare. In the case of underpayments, contractors are compensated when money is recovered for physicians. In 2010, the Chief Financial Officer of CMS estimated that the RAC demonstration program cost approximately 20 cents for each dollar returned.<sup>18</sup> In the first six months of 2011, the RAC program has collected nearly \$400 million in overpayments.<sup>19</sup> Funding for the program was \$30 million in 2010,<sup>21</sup> \$259 million in 2011, and \$500 million is requested for 2012.<sup>22</sup> Starting in 2011 along with increased funding, contract auditors also have expanded purview to audit “medical necessity” at laboratories.<sup>23</sup>

This significant increase in governance may seem overly burdensome; however, a recent article entitled “Navigating the Recovery Audit Contractor Process,” states that “most organizations have staff who are capable of managing the RAC process if given proper tools and encouragement.”<sup>24</sup> In a similar vein, a 2009 article states that “Optimally, all Medicare denials should be tracked on one platform.”<sup>25</sup> These statements give hope that the challenge is tractable, but requires

the right partner and right tools to remain compliant. This compliance is focused almost exclusively on the billing practices maintained by the RCM system.

**Organizational Changes**

With budgets being cut and an increased need for services, the healthcare system is increasingly looking to value-based pricing



**Figure 3** Identification of improper payments is rapidly increasing.

*The challenge with pay-for-performance systems is that unless the metrics are constructed very carefully, the system will favor (and pay) the providers with the healthier patient populations.*

models, including Comparative Effectiveness Research (CER), Pay-for-Performance (P4P), Accountable Care Organizations (ACO), capitated payments, and bundled payments to maximize efficiencies.

CER is based on a body of research stemming from a 1973 study positing that “health information about total populations is a prerequisite for sound decision-making.”<sup>26</sup> Over a thousand additional articles citing this study and nearly 40 years of research has led researchers to believe that eliminating unwarranted variations in healthcare would result in an increase in the quality of care and as much as a 30% decrease in the cost of care.<sup>27</sup> In 2009, the Patient Protection and Affordable Care Act earmarked \$1.1 billion for CER studies.<sup>28</sup> Although debate remains as to which treatments or protocols should be compared, clearly CER is seen as a tool to reduce overall healthcare costs. The critical observation for diagnostic service providers however, is that regardless of the specific studies being funded, they all will rely on fluid access to the data (both clinical and financial) produced by diagnostic service providers.

P4P, like CER, is a tool that looks to identify and reward the most valuable services. Whereas CER is largely focused on treatments or methodologies, P4P applies the same Darwinian pressure to physicians and institutions.<sup>29</sup> The challenge with pay-for-performance systems is that unless the metrics are constructed very carefully, the system will favor (and pay) the providers with the healthier patient populations. Like the details of CER, irrespective of the methodology selected for P4P, it will likely require ready access to diagnostic and pricing data.

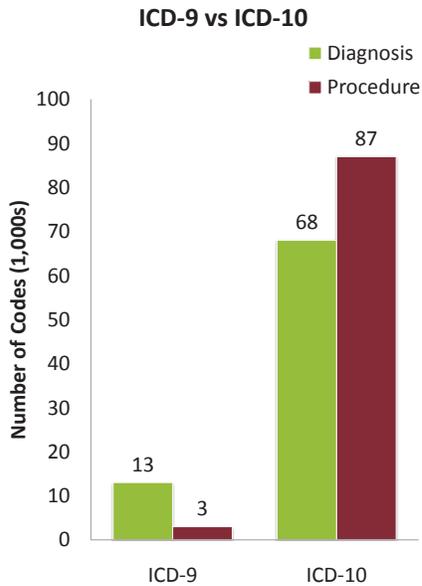
An ACO, as defined by the American Medical Group Association, is a “physician-led, patient-centric entity that has invested in the necessary infrastructure to measure, assess, and advance the effectiveness and efficiency of patient care.”<sup>30</sup> While involving a

much larger shift in the practical organization of healthcare provider organizations, ACOs bear a number of the same hallmarks of P4P and CER; they aim to reduce overall healthcare costs and will need access to both cost and clinical data from diagnostic service providers. Similarly, Capitated Payments (fixed payments regardless of service) and Bundled Payments (paying for high-level services, e.g., heart-attack, rather than each procedure or test) place the onus of selecting the most cost-effective treatment with the providers. As a starting point, all of these organization and payment structures require that diagnostic service providers be able to readily provide diagnostic results and the associated costs of those results. The primary source for cost and procedure data is the RCM system.

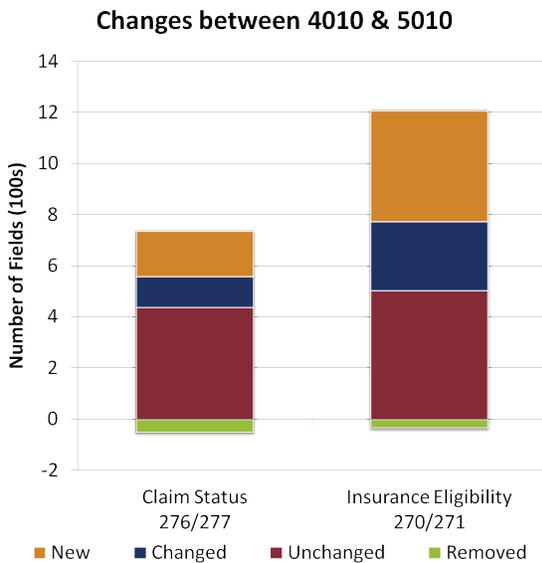
### **Technological Changes**

Automation and data exchange standards are being tightened to provide better information for claims management. Title II of the Health Insurance Portability and Accountability Act (HIPAA) of 1996<sup>31</sup> defines rules for, among other things, protecting individually identifiable health information (PHI) and standard transactions and code sets (HIPAA/EDI).

Another key feature of HIPAA is the January 2012 switch to the ASC version 5010 transaction set from 4010. This transaction set represents a significant increase in the specificity of data submitted and returned through electronic inquiries. According to a CMS publication, “The implementation will require changes to the software, systems, and perhaps procedures that you use for billing Medicare and other payers.”<sup>32</sup> One driver for this change is the need to accommodate the International Statistical Classification of Diseases and Related Health Problems with Clinical Modifications (ICD-10CM) codes set for implementation in October 2013. The ICD-10 code set offers nearly 10 times as many codes for increased specificity as ICD-9.<sup>33</sup>



**Figure 4** ICD-10 offers more complex and descriptive procedure and diagnosis codes. Systems must be able to accommodate these new codes.



**Figure 5** 5010 introduces many significant changes to standard transactions.

For two common transactions, claim status and beneficiary eligibility, version 5010 adds and changes hundreds of data items.<sup>34</sup> In the case of eligibility, more than half of the transaction changed. June 15, 2011 was the first national testing day for 5010. There were no significant errors in the 974 files submitted by 349 trading partners<sup>35</sup> so it appears that those partners working on 5010 have it under control. One point to keep in mind however, is that some vendors may attempt to “wrap” 4010 transactions to look like 5010 transactions. While this solution will allow for the transmission of data and may allow some claims to be accepted, it assumes that payors will not really be requiring the additional richness in the 5010 transaction set; 4010 data cannot accommodate the ICD-10 codes. Wrapping 4010 transactions to emulate 5010 is the technological equivalent of putting a lawnmower engine in Ferrari; on the outside it looks fine, but it can't perform as required.

The HITECH act also provided an impetus for the “Adoption and Meaningful Use of Certified EHR Technology,”<sup>36</sup> by offering individual physicians up to \$44,000 from Medicare and \$63,750 from Medicaid (in selected states).<sup>37</sup> All of these changes are driving towards the increased digitization of healthcare, which in turn facilitates outcomes analysis and value-based pricing. RCM systems need to leverage

the latest X12 and HL7 transaction sets to be able to meet the demands of healthcare.

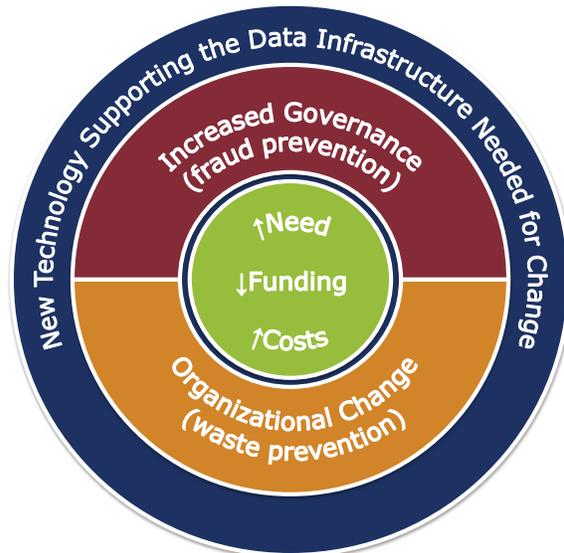
### How Changes Impact Diagnostic Healthcare

Macroeconomic pressures (including rising need, rising costs, and decreasing funding) make up the core that is driving healthcare change. To contain this (currently unstable) core, increased governance has been instituted to address fraud, and a number of organizational changes promoting value-based pricing are being considered to minimize waste. Supporting all of these changes, new technology guidelines have been established to ensure the efficient and secure exchange of data. It is data, both clinical and financial, that the U.S. healthcare system is relying on to take it into the future.

In a 2002 study, it was estimated that 60-70% of all critical patient care decisions were impacted by laboratory results. At the same

### Schematic of Emerging Healthcare System

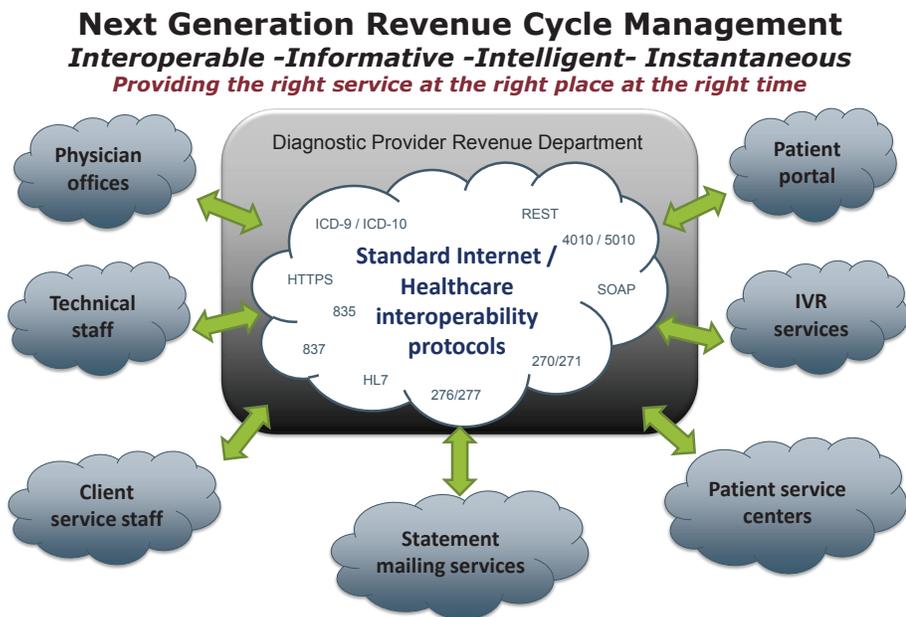
- Macroeconomics
  - At the core, an out of control reaction with costs and needs growing out of control and funding decreasing
- Governance and Organizational Changes
  - To contain the core, controls are put in place to limit fraud and waste
- Technology
  - The entire system is based on increased ability to gather, exchange, and use data



**Figure 6** Macroeconomic conditions are creating a volatile core of opposing forces. Increased governance, new organization types and new payment structures are being implemented to contain and control the core. Data exchange allows the core forces to be contained

time laboratory costs accounted for less than 5% of the total budget for most health systems. The same study demonstrated that within the Mayo Health System, laboratory data can contribute as much as 94% of the objective data in electronic medical records.<sup>38</sup> Despite the relatively small amount spent on laboratory data, the value of that data can be enormous.

Due to the central role that data in RCM systems plays in the healthcare industry, traditional RCM systems, confined to the billing department of the laboratory, are insufficient. Diagnostic service providers cannot remain competitive if their system-of-record is only accessible by a limited number of people, during 9-to-5 business hours. The RCM system must leverage work done by other individuals; technical staff should be allowed to set up new tests, client services staff should be able to update client demographic data, patient service center staff



**Figure 7** RCM systems have been traditionally confined to the revenue department of the diagnostic service provider. Cloud-based RCM systems using standard Internet and healthcare interoperability and security protocols can effectively allow other stakeholders (e.g., physicians, patients, customer support staff, etc.) controlled access to reduce errors and increase efficiency.

should be able to update patient demographic data. Additionally, through self-service portals providing controlled access to the billing system, patients and clients should have 24/7 access to real-time data about their healthcare costs. All of these capabilities increase efficiency and satisfaction while decreasing the probability of errors; but they all require that at least some aspect of the RCM system be available outside the billing department.

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External forces are driving the need for data. Diagnostic service providers have, and generate, the majority of that data. Diagnostic utilization, and consequently reimbursement, must be value based, rather than frequency or diagnosis based, to reflect (and pay for) the investment service providers are required to make in support the data needs of the rest of the healthcare system.

## Chapter 2:

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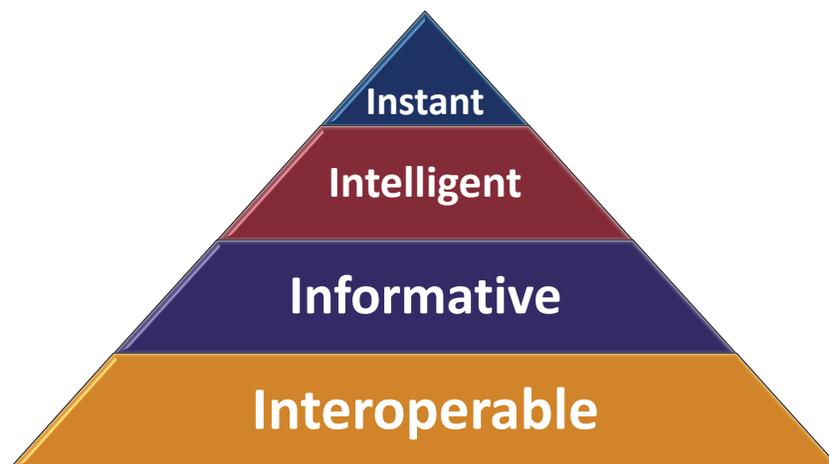
# Diagnostic Market Reaction to Changes

What is emerging in healthcare is an unprecedented need for agility and responsiveness to keep pace with the rapidly changing landscape. Four key technological aspects of systems can be used to understand the changes and suggest appropriate actions: interoperable, informative, intelligent, and instantaneous. Next generation systems that incorporate these aspects are capable of optimizing business practices and adapting to the changing environment.

### Interoperable

Using standard Internet (e.g., REST, SOAP, HTTPS) and healthcare interoperability and security protocols (e.g., HL7, 5010), interoperable systems have the ability to share communications, information and services with disparate and distributed systems. Interoperable systems possess the fundamental infrastructure requirements that allow them

to communicate with other systems. Without interoperability, an Order Entry system would not have the ability to interact with an RCM system; the Order Entry system would not be able to know if the patient were eligible for services. At a higher level, almost all organizational changes (e.g., CER, P4P, ACOs)



**Figure 8** Interoperability forms the foundation allowing informative systems to exchange the right data at the right time. Intelligent systems apply analytics to that data and instantaneous systems allow the entire model to adapt in real time to external factors.

and monitoring groups (e.g., RAC, MIC, MAC, etc.) are dependent on large amounts of data from various systems. Almost none of the healthcare reform efforts can be successful without interoperable RCM systems.

### **Informative**

Informative systems use their interoperable capabilities to actively send and receive information with other systems. Whereas an interoperable RCM system may have the ability to identify problems in a list of accessions imported from an LIS or RIS, an informative RCM system would identify and correct problems in real time as accessions were being created, preventing errors from entering the system. Informative systems impart a higher level of integration to disparate systems than simple interoperability. From a governance perspective, this level of integration will be required to avoid unsynchronized data between systems that can result in denials or fines. From an organizational perspective, the overhead cost savings from switching from manual reconciliation of various systems can potentially be enormous.

Additionally, interoperable and informative RCM systems can impart additional value to modern Electronic Medical Record (EMR), practice management and Computerized Physician Order Entry (CPOE) systems by allowing payor edits, eligibility checking, error processing (EP) correspondence, etc. to be handled at the physician office or service center. Embedding these “billing,” functions within systems outside the billing department, will increase the value of these systems, reduce the number of front-end errors, allow for easier EP correspondence, and ultimately result in cleaner claims to the diagnostic provider.

### **Intelligent**

Today, only the most advanced intelligent systems can apply rules to data or patterns of data. These systems automatically compare diagnosis codes with procedure codes to evaluate medical necessity

or embed rules to automatically route various types of payor denials. These types of intelligence do provide advantages, but they only scratch the surface of what is possible.

The future of intelligent systems is all about analytics. Intelligent systems form the basis for healthcare reform, by combining large amounts of clinical and financial data to identify the most cost effective procedures. These systems will make full use of both underlying interoperability and informative capabilities to reliably capture the right data at the right time from the right place. Ultimately, intelligent RCM systems make the healthcare infrastructure more efficient and reduce the opportunity for errors.

### **Instantaneous**

Instantaneous systems operate in real time, both to keep the system current, and to enable immediate data correction at the point of entry. Due to rapidly evolving standards, tests, and payor rules, it is critically important that any system be agile. When a standard is updated or rules or tests change, all relevant systems must be quickly updated. Failure to be able to adapt to changing standards can result in lost revenue or non-compliance.

The second aspect of instantaneous systems is that expectations today are different than they were a decade ago. In 2002, there was no expectation that invalid insurance information would, or even could be identified and corrected while the patient was still there. Today, with ever-increasing test volumes and a greater need for efficiency, the technology exists, and there is no reason to not expect that these types of front-end errors would be avoided. Avoiding front-end errors results in significant labor (i.e., cost) savings from not having to go back, contact the appropriate parties, and re-enter information and increased revenue by not having reimbursements delayed.

## Chapter 3:

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# What Does this Mean for Your Business?

*A key feature of next generation RCM systems is that they present the right functionality, at the right time and at the right place whether inside or outside the billing department.*

We now have a backdrop of large-scale changes in the healthcare industry and a clear indication that diagnostic service providers will be called on to produce and maintain much of the data needed for those changes. We also have a framework highlighting four key technological aspects of systems that can adapt to, and support, those changes. The question now becomes, what are the most important steps diagnostic service providers can take to ensure they are ready for the changes?

### Clean Claims Up Front

The largest single factor in being able to remain consistently compliant and being able to support the data requirements of other entities (e.g., EHRs, Practice Management solutions, ACOs, P4P systems) is to ensure clean claims enter your system. It is true that next generation systems make correcting errors easier; however, properly implemented, next generation systems minimize the number of errors that enter a system initially.

A key feature of next generation RCM systems is that they present the right functionality, at the right time and at the right place whether inside or outside the billing department. In the case of ordering a new test, this means that as the order is being entered both insurance eligibility and medical necessity are checked. Not checking these data at the time of entry means that prior to submitting a claim the diagnostic service provider would need to contact either or both the patient (for invalid insurance information) and the prescribing physician (for claims failing medical necessity). Checking these data at the right time and right place saves time for all parties involved.



**Figure 9** Data for clean claim submission/reimbursement can be collected at various points in the accession workflow. Correcting errors in the billing department (i.e., working denials) is not good. Validating data manually (est. 500-700 per FTE per day) at the time of order entry is good, but can lead to errors and inconsistencies. Validating data at the patient service center is better because the patient is present to review all of their data and correct errors in their demographics. Best, is for all information to be validated when the ordering physician and patient are both present; this eliminates the major sources of error.

### Costs of Not Changing

Starting with clean claims and having rules in place to handle denials sounds like a nice idea, but is it really something that needs to be addressed today? The simple answer is “No.” As the 20th century American statistician, professor, author, lecturer, and consultant Dr. Deming said, “It is not necessary to change. Survival is not mandatory.” With the rapid pace of change in the healthcare industry, increased scrutiny on billing practices and handling of PHI, and the highly competitive nature of the diagnostic services business, facilities lacking the basic infrastructure to adapt and comply will not survive.

In the “forward-looking statements” risk section of the most recent SEC 10-K filing for both Quest and LabCorp, RCM issues make up one-third of the highest-level concerns listed.<sup>39, 40</sup> The remaining non

RCM-based risks ranged from research and development delays to hurricanes and terrorist attacks to patent enforceability. Clearly, RCM concerns are top-of-mind at the nation's largest laboratories. Through assessments of the RCM practices at dozens of the best laboratories, XIFIN found most laboratories are losing 8-15% of their daily revenue, due to inefficient RCM systems and practices.<sup>41</sup>

## Chapter 4:

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# Options for Change

### Purchase vs. Patch

*Proprietary software, and not commercial software, poses the greatest risk of being intentionally designed to produce improper or inaccurate claims.*

Once the need to change to an adaptable system has been internalized, there are a few options. The option most commonly considered, because it is seemingly the simplest, is to tweak an existing system, or “hire a couple of coders.” Modifying an existing RCM system in an attempt to create a next generation system is extremely challenging. In some cases, interoperability can be “bolted-on” to existing RCM systems; however, these solutions almost always require recoding as standards and procedures change (i.e., they are not instantaneous). In-house systems can be designed as next generation systems but they generally are tested only against the relatively small set of data and variability seen within the facility. According to the Office of the Inspector General at the Department of Health and Human Services, “proprietary software may present the greatest risk of misuse. . . Proprietary software, and not commercial software, poses the greatest risk of being intentionally designed to produce improper or inaccurate claims.”<sup>42</sup> Using a limited set of test data increases the probability that untested scenarios will occur and delay reimbursement or result in denials.

### Interoperable vs. Integrated

Another common response to the need to change and adapt is to look to integrated all-in-one solutions. In theory, these systems offer the ultimate. Rather than interoperable (a system capable of communicating with external systems) integrated systems have no need to communicate with external systems. They are a one-stop-

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shop for EHR, Order Entry, RCM, and all other aspects of medical recording. While ideal in theory, in reality all systems must interact with other systems. Whether it is the need to send error processing correspondence to ACOs using software from a different vendor, communicate with physician offices on other EHR systems, or supply data to regulatory agencies and management teams, all RCM systems need the ability to effectively communicate with external systems. Integrated systems are not necessarily interoperable.

#### **SaaS vs. ASP**

Determining how your laboratory interacts with an RCM system is another important consideration. Options here include software installed at your facility, Application Service Provider (ASP) delivery or SaaS delivery. In the 1980s and early 1990s, stand-alone software was designed to be installed on PCs. While a significant improvement over paper ledgers and adding machines, these systems could not be easily updated and had no real concept of exchanging data with other systems.

With the popularization of the internet in the mid 1990s, the Application Service Provider model became feasible. Under this model, software vendors maintained servers running their software and allowed customers to use the software. This essentially outsourced the maintenance of the computers to the software provider. ASP was then largely superseded in the 2000s by the SaaS model.<sup>43</sup> Some of the key reasons that the SaaS model replaced the ASP model were setup time (SaaS is instantaneous), update frequency (SaaS can be continually upgraded), scalability (SaaS runs on unlimited servers), and accessibility (SaaS works within a web browser and does not require installed software).<sup>44</sup> For mid-sized to large or rapidly growing diagnostic service providers, SaaS-based systems provide the best RCM technology.

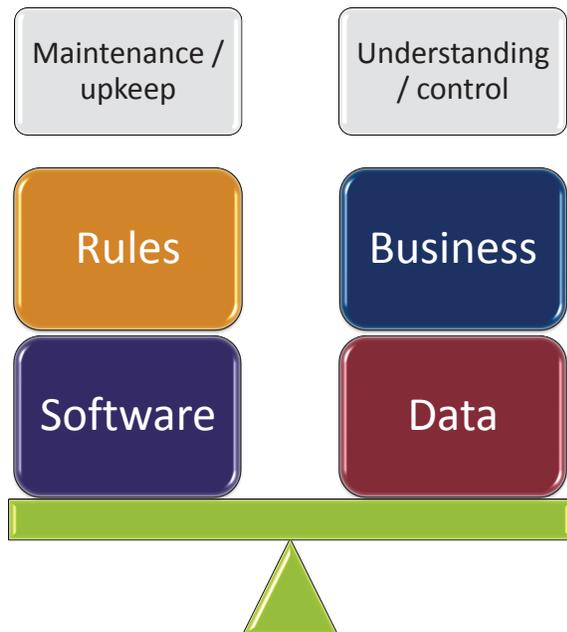
### Partner vs. Vendor

*The critical considerations in deciding on the best type of relationship for you with an RCM provider are the software, rules and data.*

In addition to technical options for RCM systems, there are also various types of relationships with RCM providers. These relationship types range from vendor (i.e., you buy software and you own and maintain the software, rules and data) to outsourcing (i.e., you pay someone else to own and maintain the software, rules and data on your behalf). Importantly, neither of these options necessarily offers best practices to guide your decision making. Software vendors will build what you ask them to build, regardless of industry best practices and outsourcing vendors will continue what they have been doing, generally providing little visibility into the daily handling of your claims. The critical considerations in deciding on the best type of relationship for you with an RCM provider are the software, rules and data.

Software is important because given the significant mandated changes, software must necessarily change. The 5010 transactions are not currently supported by most payors (i.e., cannot be used), yet by January 2012 they must be used. This means that software must change to comply with the standards. Similarly in October 2013, when ICD-10 is required, software must change. If you own and maintain your own software, you must install the updates, patches, hot fixes, et al., and ensure that the changes have been effective. Over the next few years, this is a significant drawback to working with a vendor that simply provides the software.

The next critical consideration is rules. The rules directly influence both the number of denials (payor edits) and how those denials are handled (internal routing rules). Because payor rules are continually changing, it is important that you are working with the most up-to-date rule set possible. If payor rules are only updated quarterly, then the diagnostic service provider risks months of denials because its rule set is out-of-date. Similarly, once denials are observed, it is important that the system be easily configurable so that the denials are re-routed and put into a standard workflow as quickly as possible



**Figure 10** When selecting a software or outsource vendor, buyers must make trade-offs between control of their business and doing IT/clerical work. Partnering can offer an alternative.

– rules directly impact reimbursements. Again, this is a drawback to working with vendors that provide only quarterly rule updates, do not have easy mechanisms for customizing error handling rules, or cannot help guide your facility in implementing best practices.

A final consideration is the data itself. To again quote Dr. Deming, “there is no substitute for knowledge.” Owning, and being intimately involved with your data is critical to understanding your business and trends. Without having daily insight into which claims are being rejected, which payors are underpaying, and which clients are producing front-end denials, significant time is wasted in correcting the errors, and payments are delayed. Coupled with the costs of outsourcing, most facilities find this option less than ideal.

There is an option for working with an RCM provider that offers the best of both worlds. True SaaS-based RCM solutions remove the work of maintaining software and rules, while still allowing your internal staff daily, hands-on, interactions with your reimbursements. This type of partnership allows your staff to identify and completely focus on working the most import denials and contacting the payors with the largest underpayments. SaaS-based RCM solutions have the capability of allowing a team of subject area experts (at the RCM provider) to work behind the scenes continually updating rules, payors, clients, edits, etc. This work happens in the background at the same time your billing staff is working your highest priority denials or underpaying payors. This combination of features is a powerful tool for optimizing your business.

## Conclusion

One could easily envision how next generation systems will be able to control healthcare costs by reducing administrative overhead and controlling utilization through decision support capabilities or enable a real-time claims adjudication process for diagnostic claims, streamlining the costly billing process for both payor and provider. These systems could also combine data from pharmacy claims and

diagnostics claims with outcomes data and apply high-end analytics to produce predictive models for optimizing utilization, effective treatment and monitoring quality.

The changes to the healthcare system present challenges as well as opportunities. Regardless of how these changes are viewed, their consequences will undoubtedly be pervasive and lasting. It is important to dramatically rethink the role RCM systems should play in a modern healthcare system. Extending RCM functionalities outside the billing department — putting the right services at the right places at the right times, will allow these system to capture high-quality data, support the changing healthcare landscape, and produce significant and measurable financial improvements.

	Yes	No
<b><u>Interoperability</u></b>		
• Can our system inherently communicate using standard internet and healthcare interoperability protocols (HTTPS, SOAP, REST, HL7, ASC X12, 5010, ICD-10) or are they bolted on as an afterthought?	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>Informative</u></b>		
• Can our system keep LIS, EMR, CPOE, and other systems synchronized using embedded code for real-time data?	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>Intelligent</u></b>		
• Is our system rules driven?	<input type="checkbox"/>	<input type="checkbox"/>
• Can our system integrate billing and clinical data to support advanced analytics and decision support systems?	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>Instantaneous</u></b>		
• Can our system be easily updated as formats or payor requirements change?	<input type="checkbox"/>	<input type="checkbox"/>
• Can our system provide real-time data to physician offices, patients, payors and other entities involved in the process?	<input type="checkbox"/>	<input type="checkbox"/>

**Figure 11** Using a simple framework, there are a number of questions to ask of your system to see if it will be able to take you into the future.

## References

1. OECD Health Data 2011, June 2011 <http://www.oecd.org>, Accessed August 20, 2011
2. “Balanced Budget Act of 1997” <http://www.gpo.gov/fdsys/pkg/BILLS-105hr2015enr/pdf/BILLS-105hr2015enr.pdf>, Accessed August 22, 2011
3. Social Security Act Section 1848(f) [http://www.ssa.gov/OP\\_Home/ssact/title18/1848.htm](http://www.ssa.gov/OP_Home/ssact/title18/1848.htm), Accessed August 22, 2011
4. “Deficit Reduction Act of 2005” <http://www.gpo.gov/fdsys/pkg/PLAW-109publ171/pdf/PLAW-109publ171.pdf>, Accessed August 21, 2011
5. “Patient Protection and Affordable Care Act” <http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>, Accessed August 21, 2011
6. Social Security Act Section 1833(h)(2)(A)(i) [http://www.ssa.gov/OP\\_Home/ssact/title18/1833.htm](http://www.ssa.gov/OP_Home/ssact/title18/1833.htm), Accessed August 21, 2011
7. “Imaging Cuts in Proposed Medicare Fee Schedule Rule Would Restrict Access to Care and Potentially Raise Costs” American College of Radiology, July 4, 2011. <http://www.acr.org/HomePageCategories/News/ACRNewsCenter/2012-Proposed-Cuts.aspx>, Accessed August 22, 2011
8. “Medicare spending for clinical laboratory services, fiscal year 2000-2010” A Data Book – Health Care Spending and the Medicare Program. Medicare Payment Advisory Commission. p. 203 <http://www.medpac.gov/documents/Jun11DataBookEntireReport.pdf>, Accessed August 21, 2011
9. “The microeconomics of personalized medicine” McKinsey Quarterly. February 2010

10. "Medical Expense Trend Declined in 2009" Healthcare Business Strategy. <http://www.markfarrah.com/healthcarebs.asp?article=84>, Accessed August 22, 2011
11. "Private Health Insurance Premiums and Rate Reviews," Congressional Research Service, January 11, 2011. [http://assets.opencrs.com/rpts/R41588\\_20110111.pdf](http://assets.opencrs.com/rpts/R41588_20110111.pdf), Accessed August 20, 2011
12. "FRAUD DETECTION SYSTEMS Centers for Medicare and Medicaid Services Needs to Ensure More Widespread Use" United States Government Accountability Office June 2011. <http://www.gao.gov/new.items/d11475.pdf>, Accessed August 22, 2011
13. "IMPROPER PAYMENTS Reported Medicare Estimates and Key Remediation Strategies" United States Government Accountability Office July 28, 2011. <http://www.cms.gov/MLN MattersArticles/Downloads/SE1126.pdf>, Accessed August 31, 2011
14. "IMPROPER PAYMENTS Reported Medicare Estimates and Key Remediation Strategies" United States Government Accountability Office July 28, 2011. <http://www.cms.gov/MLN MattersArticles/Downloads/SE1126.pdf>, Accessed August 31, 2011
15. "Medicare Fraud Estimates: A Moving Target" The Sentinel. [http://www.smpresource.org/Content/NavigationMenu/AboutSMPs/MedicareFraudEstimatesAMovingTarget/Medicare\\_Fraud\\_Estimates.pdf](http://www.smpresource.org/Content/NavigationMenu/AboutSMPs/MedicareFraudEstimatesAMovingTarget/Medicare_Fraud_Estimates.pdf), Accessed August 22, 2011
16. "American Recovery and Reinvestment Act of 2009", (A) (XIII)(D) [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_bills&docid=f:h1enr.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf), Accessed August 23, 2011

17. Social Security Act Section 1176(a)(1)(C) [http://www.ssa.gov/OP\\_Home/ssact/title11/1176.htm](http://www.ssa.gov/OP_Home/ssact/title11/1176.htm), Accessed August 23, 2011
18. "Preventing and Recovering Medicare Payment Errors", Congressional Testimony <http://www.hhs.gov/asl/testify/2010/07/t20100715a.html>, Accessed, August 22, 2011
19. "Medicare Fee-for-Service Recovery Audit Program as of March 2011" CMS. <https://www.cms.gov/Recovery-Audit-Program/Downloads/FFSNewsletter.pdf>, Accessed August 22, 2011
20. "Medicare Fee for Service National Recovery Audit Program, 3rd Quarter, FY 2011" CMS. July 2, 2011. <https://www.cms.gov/Recovery-Audit-Program/Downloads/FFSUpdate.pdf>, Accessed August 22, 2011
21. "Fiscal Year 2011: Justification of Estimates for Appropriations Committees" Department Of Health And Human Services. <https://www.cms.gov/PerformanceBudget/Downloads/CMSFY11CJ.pdf>, Accessed August 22, 2011
22. "Fiscal Year 2012: Justification of Estimates for Appropriations Committees" Department Of Health And Human Services. <https://www.cms.gov/PerformanceBudget/Downloads/CMSFY12CJ.pdf>, Accessed August 22, 2011
23. "Warning to Clinical Pathology Laboratories: Medicare's RAC Program Expands on December 31st!" Dark Daily, December 8, 2010 <http://www.darkdaily.com/warning-to-clinical-pathology-laboratories-medicares-rac-program-expands-on-december-31st-1208>, Accessed August 22, 2011
24. "Navigating the Recovery Audit Contractor Process" <http://www.hfma.org/Templates/Print.aspx?id=2793>, Accessed August 22, 2011
25. "Warning: MACs More Severe Than RACs," Healthcare Finance News. June 10, 2009 <http://www.healthcarefinancenews.com/blog/warning-macs-more-severe-racs>, Accessed August 22, 2011

26. "Small Area Variations in Health Care Delivery" Wennberg & Gittelsohn, *Science*. Dec. 1973 182 (4117) p.1102-1108
27. The Dartmouth Atlas <http://www.healthdialog.com/Main/Research/TheDartmouthAtlas>, Accessed August 22, 2011
28. "HHS Names Federal Coordinating Council for Comparative Effectiveness Research," US Department of HHS press release March 19, 2009 <http://www.hhs.gov/news/press/2009pres/03/20090319a.html>, Accessed, August 22, 2011
29. "Value-Based Purchasing and Comparative Effectiveness Research: Why the Pharmaceutical, Biotechnology, and Medical-Surgical Device Industries Should Embrace the Coming Market Evolution" MarCom Group International 2009 [http://www.marcomgroupintl.com/pdf/MarCom%20VBP\\_CER%20White%20Paper%20copy%202.pdf](http://www.marcomgroupintl.com/pdf/MarCom%20VBP_CER%20White%20Paper%20copy%202.pdf), Accessed August 22, 2011
30. "Accountable Care Organizations: Principles," American Medical Group Association, [http://www.amga.org/AboutAMGA/ACO/principles\\_aco.asp](http://www.amga.org/AboutAMGA/ACO/principles_aco.asp), Accessed August 26, 2011
31. "Health Insurance Portability and Accountability Act of 1996" <http://www.gpo.gov/fdsys/pkg/PLAW-104publ191/pdf/PLAW-104publ191.pdf>, Accessed August 23, 2011
32. "An Introductory Overview of the HIPAA 5010", MLN Matters, CMS. May 10, 2011. <https://www.cms.gov/MLNMattersArticles/downloads/se0904.pdf>, Accessed August 23, 2011
33. "The differences between ICD-9 and ICD-10" AMA June 2010. <http://www.ama-assn.org/ama1/pub/upload/mm/399/icd10-icd9-differences-fact-sheet.pdf>, Accessed August 23, 2011
34. "5010 – D.0 HIPPA Standards," CMS. [https://www.cms.gov/electronicBillingEDITrans/18\\_5010D0.asp](https://www.cms.gov/electronicBillingEDITrans/18_5010D0.asp), Accessed August 25, 2011

35. "First National Version 5010 Testing Day Results Now Available"  
CMS, August 9, 2011. <https://www.cms.gov/FFSProvPartProg/EmailArchive/itemdetail.asp?filterType=none&filterByDID=-99&sortByDID=1&sortOrder=descending&itemID=CMS1250797&intNumPerPage=10>, Accessed August 25, 2011
36. Social Security Act Section 1848(o) [http://www.ssa.gov/OP\\_Home/ssact/title18/1848.htm](http://www.ssa.gov/OP_Home/ssact/title18/1848.htm), Accessed August 23, 2011
37. "Notable Differences between the Medicare and Medicaid EHR Incentive Programs" CMS <http://www.cms.gov/EHRIncentivePrograms/Downloads/ComparisonChart.pdf>, Accessed August 23, 2011
38. Forsman RW. The value of the laboratory professional in the continuum of care. *Clin Leadersh Manag Rev* 2002;16:370–373.
39. "Quest Diagnostics 2010 FORM 10 – K," Quest Diagnostics. [http://www.sec.gov/Archives/edgar/data/1022079/000093041311001115/c64010\\_10-k.htm](http://www.sec.gov/Archives/edgar/data/1022079/000093041311001115/c64010_10-k.htm), Accessed August 25, 2011.
40. "Laboratory Corp. of America Holdings 2010 FORM 10 – K," Laboratory Corp. of America Holdings, <http://www.sec.gov/Archives/edgar/data/920148/000092014811000021/labcorp10k.htm>, Accessed August 25, 2011.
41. XIFIN internal data
42. "Medical billing software and processes used to prepare claims," Office of Inspector General, Department of Health and Human Services. 2000, <http://oig.hhs.gov/oei/reports/oei-05-99-00100.pdf>, Accessed August 25, 2011
43. "Two new tools that CIOs want" McKinsey Quarterly. May 2006
44. "Difference between the ASP model and the SaaS model," Luit Infotech <http://www.luitinfotech.com/kc/saas-asp-difference.pdf>, Accessed August 25, 2011

# Appendices

## A-1

### About Lâle White

#### Executive Chairman and CEO, XIFIN, Inc.



Lâle White is a nationally recognized expert in the field of medical financial management and regulatory compliance, with over 25 years of experience in information systems development and medical billing. She lectures extensively on these topics and has consulted for major laboratories and laboratory associations throughout the U.S. She worked with HCFA and the U.S. Office of the Inspector General to develop the first OIG Model Compliance Program. Ms. White was previously Vice President - Finance of Laboratory Corporation of America (NYSE: LH), one of the largest clinical reference laboratories in the U.S., and its predecessor National Health Laboratories (NYSE: NHLI), where she led the software development of several accounts receivable, inventory, cost accounting and financial management systems for the laboratory industry. Ms. White has a B.A in finance and an M.B.A. from Florida International University.

A-1

David Lorber

Director of Business Development, XIFIN, Inc.



David Lorber is the Director of Business Development at XIFIN. Before joining XIFIN, he was the Director of Global Sales Operations at Accelrys; a leading scientific informatics company. He also held various marketing and product management roles at Accelrys, bringing new products to market and redesigning the corporate pricing strategy. He began his career as a computational chemist designing early-stage drug leads for oncology targets. He holds a Ph.D. in Computational Chemistry from Northwestern University and an MBA from the Rady School of Management at UC San Diego.

## A-2

### About XIFIN

XIFIN delivers revenue cycle management (RCM) solutions that provide diagnostic service providers—from early stage startups to the nation's largest laboratories and imaging facilities—with new levels of automation and actionable information to refine revenue cycle processes, improve the bottom line, reduce the risks associated with regulatory compliance and tap into critical strategic information needed to better manage their business.

XIFIN's RCM solutions help diagnostic service providers capture revenue faster, manage medical claims filing more effectively, and maximize productivity and profitability.

The XIFIN iNet platform is a next-generation, cloud-based, revenue cycle management system that maximizes cash collection, improves operational efficiencies, increases profits and reduces the risks associated with regulatory compliance. By taking advantage of cloud computing's powerful connectivity web services technology, and data management capabilities, XIFIN iNet provides powerful, always-current revenue management; delivering the right billing functionality, at the right place, at the right time. XIFIN iNet scales to accommodate any size operation, while providing the strategic reporting capabilities essential for any well-managed laboratory or imaging center.

XIFIN iNet's flexible and highly automated workflow and financial analytical information, coupled with best practices expertise enables XIFIN clients to significantly improve financial performance while eliminating the majority of billing IT infrastructure and maintenance costs. XIFIN iNet's sophisticated reporting and analysis empowers customers with the information necessary to improve decision-making, enhance contracting and account management, identify areas that could benefit from process optimization, and ensure accurate financials.

XIFIN processes more than 100 million claims annually across a wide variety of healthcare segments including clinical, radiology, molecular diagnostics, hospital outreach, anatomic pathology, toxicology and more. XIFIN Customers see significant

improvements in profitability by collecting 8% additional cash on average in the first 12 months, and have realized cumulative gains of \$1 billion in net cash collection, adjusted for growth.

As a partner and advocate, XIFIN not only works with customers to ensure success using the system, the company also advocates within the medical billing industry and actively works with trade associations, standards committees and third party payors on the development of the policies and practices that affect medical reimbursement. XIFIN has received continual industry recognition, including being named to the Inc. 5000 fastest growing privately-held companies 2007 through 2011, and ranking among Deloitte's Technology Fast 500.

## A-3

### About DARK Daily

*“Dark Daily is a concise e-news/management briefing on timely topics in clinical laboratory and anatomic pathology group management. It is a solution to the dilemma facing anyone in the laboratory profession.*

DARK Daily is a concise e-news/management briefing on timely topics in clinical laboratory and anatomic pathology group management. It is a solution to the dilemma facing anyone in the laboratory profession. New developments, new technology, and changing healthcare trends make it imperative to stay informed to be successful. At the same time, the Internet, cell phones, blackberries, laptop computers and wireless devices are overwhelming any one individual's ability to absorb this crushing Tsunami of data.

DARK Daily is a quick-to-read, easy-to-understand alert on some key development in laboratory medicine and laboratory management. It has no counterpart in the lab world. Why? Because it is produced and written by the experts at THE DARK REPORT and The Dark Intelligence Group, who know your world, understand your needs and provide you with concise, processed intelligence on only those topics that are most important to you!

You will find DARK Daily to also be an exceptionally valuable resource in laboratory and pathology management. Some of the lab industry's keenest minds and most effective experts will be offering their knowledge, their insights and their recommendations on winning strategies and management methods. Many of these experts are unknown to most lab directors. As has proven true with THE DARK REPORT for more than a decade, DARK Daily will be your invaluable—and unmatched—resource, giving you access to the knowledge and experience of these accomplished lab industry professionals.

## A-4

### About The Dark Intelligence Group, Inc. and THE DARK REPORT

*“Membership is highly-prized by the lab industry's leaders and early adopters. It allows them to share innovations and new knowledge in a confidential, non-competitive manner.*

The Dark Intelligence Group, Inc., is a unique intelligence service, dedicated to providing high-level business, management and market trend analysis to laboratory CEOs, COOs, CFOs, pathologists and senior-level lab industry executives. Membership is highly-prized by the lab industry's leaders and early adopters. It allows them to share innovations and new knowledge in a confidential, non-competitive manner. This gives them first access to new knowledge, along with the expertise they can tap to keep their laboratory or pathology organization at the razor's edge of top performance.

It offers qualified lab executives, pathologists and industry vendors a rich store of knowledge, expertise and resources that are unavailable elsewhere. Since its founding in 1996, The Dark Intelligence Group and THE DARK REPORT have played an instrumental role in supporting the success of some of the nation's best-performing, most profitable laboratory organizations.

The Dark Intelligence Group (TDIG) is headquartered in Austin, Texas. This location makes it very accessible for any laboratory organization seeking input, insight and support in developing their business operations, creating effective business strategies and crafting effective sales and marketing programs that consistently generate new volumes of specimens and increasing new profits. The Dark Intelligence Group, Inc. owns and operates two websites in the TDIG website network:



<http://www.DarkReport.com>



<http://www.DarkDaily.com>



## A-5

### About the *Executive War College* on *Laboratory and Pathology Management*

Every spring since 1996, the lab industry's best and brightest gather at the *Executive War College on Laboratory and Pathology Management* to learn, to share and to network. Many consider it to be the premier source of innovation and excellence in laboratory and pathology management.

Each year, a carefully selected line-up of laboratory leaders and innovators tell the story of how their laboratories are solving problems, tackling the toughest challenges in lab medicine and seizing opportunities to improve clinical care and boost financial performance. The *Executive War College* is the place to get practical advice and solutions for the toughest lab management challenges. A unique case study format brings participants face-to-face with their most successful peers. They tell, first hand, how their laboratory solved intractable problems and successfully used new technology.

Many lab management secrets are shared, along with specific "what-not-to-do's" gained from hard-won experience! It's not pie-in-the-sky theory, but useful knowledge that can be put to use in any lab. The *Executive War College* offers superlative networking, with lab administrators and pathologists attending from countries as far away as the United Kingdom, Germany, Brazil and Australia. It makes the *Executive War College* a melting pot for all the best ideas, new lab technologies and management strategies now reshaping the laboratory industry. It's also become a recruiting ground used by headhunters and major lab organizations.

In the United Kingdom, The Dark Intelligence Group and the Association of Clinical Biochemists (ACB) have co-produced a meeting every February since 2003. Known as *Frontiers in Laboratory Medicine* (FiLM), it attracts laboratory leaders and innovators in the United Kingdom. Also featuring a case study format, this meeting pioneered the international laboratory side-by-side case study, where a North American laboratory and a United Kingdom laboratory prepare a comparison of best practices and an operational assessment of their two organizations.

In September 2005, a laboratory management meeting called *Executive Edge* was conducted in Toronto, Ontario, Canada, by The Dark Intelligence Group and QSE Consulting. It provided pathologists and lab directors in Canada with a customized meeting devoted to the strategic and operational issues of laboratory management in Canada.

## A-6

### About R William (Bill) Taylor Chief Marketing Officer, XIFIN, Inc.



Bill Taylor brings over 25 years of high technology experience focusing on software companies ranging from start up to multibillion dollar enterprises. Most recently Mr. Taylor served as VP, Marketing and Corporate Development for Accelrys Inc. where he drove the re-invention of the company's mission and grew revenues from new markets at 50%/yr. resulting in a bookings increase of over 300% in three years. Prior to Accelrys Mr. Taylor served as an IBM Strategy Executive where he drove the strategy for the rapid growth of the Rational brand within IBM Software Group.









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