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Technology Selection: The Evolving Care Management Model to Address the Healthcare Crisis

Healthcare Payer IT Strategies

MARKET OVERVIEW #HI218258

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HEALTH INDUSTRY INSIGHTS OPINION

Care management is evolving to address the mounting disease burden because of the increasing prevalence of chronic conditions, many of which are either preventable or can be mitigated by changing unhealthy behaviors. Strategies have progressed from episodic-based medical management and case management to a more holistic disease management approach that embraces health and wellness, in addition to preventive care. Key findings include:

- Effective care management strategies require a strong foundation in data warehousing, business intelligence, and clinical analytics. Population management and consumerism strategies require the ability to define specific microsegments of members.

- Care management strategies must also involve members' physicians and provide the tools physicians need to offer care management services to their patients. The medical literature confirms that members are more responsive to health coaching from their physicians than from their health plan. Medical home initiatives will emerge in 2009 to engage physicians and consumers. Remote patient monitoring will play a supporting role in these initiatives.

- Health plans and employers are expecting consumers to take a more proactive role in their care. Care management has evolved from traditional episodic medical management and case management functions to include consumer disease self-management with a focus on health and wellness, and preventative care.

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SITUATION OVERVIEW

Introduction

A combination of consumer demographics, population health status, and escalating healthcare costs continue to intensify the focus on care management strategies by health plans and the employers they serve. The following statistics have been widely reported, but bear repeating to set the context for why more proactive care management is needed now more than ever:

- Between 2000 and 2030, the number of Americans with chronic conditions is expected to increase by 37% (46 million people).
- More than half of people with serious chronic conditions see three or more physicians, and 81% of people with serious chronic conditions see two or more.
- Healthcare spending for people with chronic conditions accounts for 78% of all healthcare spending, and the number of people with these conditions is rapidly increasing.

If the healthcare crisis in the United States is to be addressed, there must be a greater focus on not only managing, but preventing chronic diseases.

A Brief History

The model for care management has evolved since the managed care days of primary care physicians as gatekeepers and utilization review nurses monitoring inpatient lengths of stay, where the focus was on episodic or procedurally based care management. The increasing prevalence of chronic conditions and an aging population is driving a more holistic approach that contemplates the whole patient and not one specific disease state or acute episode, and embraces health and wellness along with preventive care. Many consumers with chronic conditions have multiple comorbidity factors such as obesity or hypertension that increase the complexity of managing their care.

In addition, many chronic conditions are the result of or exacerbated by lifestyle choices, and are therefore preventable or could be mitigated. An increased focus on behavioral health is thus required to change unhealthy behaviors in order to improve health status. To that end, health plans are adding health coaching and incentives programs to reward members for modifying certain behaviors and achieving specific health status goals.

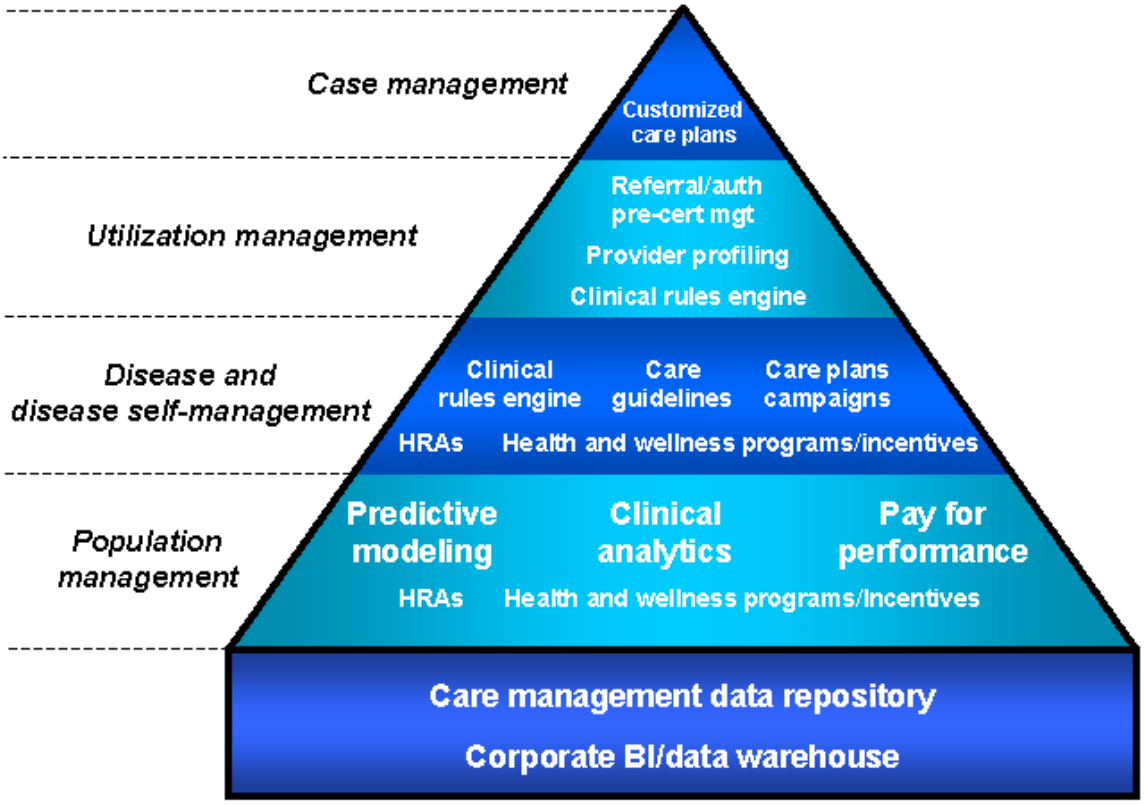
The concept of a medical home will play an important role in care management initiatives in 2009. Health plans will begin to evaluate and execute shifting investment in third-party disease management programs to investing in IT that supports the medical home concept (e.g., disease registries, clinical gaps in care alerts to physicians) and value-based reimbursement to compensate physicians for taking on care management responsibilities.

How Does It Work?

Figure 1 presents the framework Health Industry Insights uses to evaluate care management IT. The underlying foundation is the care management data repository and corporate business intelligence platform. The widest net is cast by population management, at the base of the care management pyramid, which stratifies the membership into various risk categories. At the next level is disease management and disease self-management which focuses on those members who are at risk or near at risk for specific chronic conditions. Utilization management focuses on a smaller subset of members that consume more care than anticipated and case management focuses on the approximately 5% of members who consume the most healthcare resources.

FIGURE 1

Care Management Solution Components



Source: Health Industry Insights, 2009

Population Management

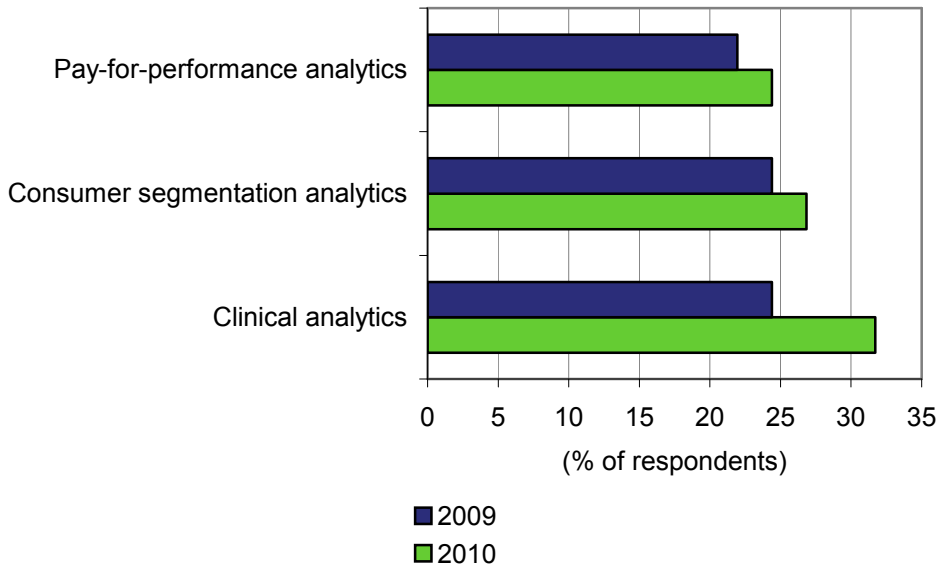
Central to population management are the steps of first defining the population to be managed, then analyzing the claims and any clinical data available to identify members who meet that criteria (evidence-based medical protocol, care guidelines) and subsequently enroll them into the appropriate disease management program(s) to receive targeted communications from a care manager or health coach regarding how they can improve their health status. This is an iterative process in that definitions to identify specific populations and the programs themselves are evaluated and refined as necessary.

The underlying foundation for population management and other care management activities is a combination of a care management data repository and the corporate business intelligence infrastructure and data warehouse. Care management programs are the leading driver for health plan investment in business intelligence/analytics, according to the 2009 Health Industry Insights survey of health plans. Payers are

beginning to make investments in clinical analytics, along with clinical consumer segmentation and pay-for-performance analytic tools in 2009, and will continue to invest more in 2010 (see Figure 2).

FIGURE 2

Payer Investment in Analytic Categories That Support Care Management, 2009 and 2010



n = 41

Source: *Health Industry Insights Payer Survey,* February 2009

Population management tools such as predictive modeling and clinical analytics begin the process of stratifying the population and identifying those members most at risk and who would benefit from being enrolled in a disease management program(s) or targeted for pay-for-performance initiatives whereby their physicians receive additional compensation if certain health objectives are met (e.g., their diabetic patients manage their A1c levels within a satisfactory range).

Consumer-facing tools, such as health risk assessments (HRAs), are now commonly available on member portals (as well as employee and third-party health portals) and may also be embedded into the personal health record system offered by the health plan or employer. Consumers are often encouraged to complete an HRA through incentive programs that pay members cash for simply taking an HRA and then further reward employees for achieving or diligently working toward health goals they established in the health and wellness program.

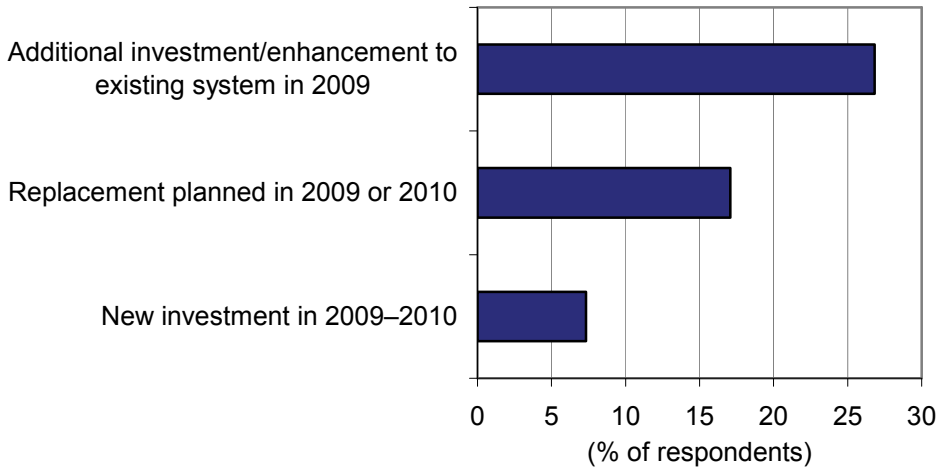
Disease and Disease Self-Management

The prevalence of chronic conditions is increasing significantly; 90 million Americans have at least one chronic condition, and 125 million Americans have multiple chronic conditions. Chronic conditions are the leading cause of death and disability in the United States. More than 4,600 Americans die daily from a preventable chronic disease. These alarming statistics are driving health plans to place a greater emphasis on disease and disease self-management, and cast a wider net to include those who may be at greater risk because they have several comorbidity conditions (e.g., obesity, hypertension).

Members identified as having one or more chronic conditions through population management segmentation and HRAs are strongly encouraged to enroll in the appropriate disease management, health coaching, and health and wellness programs. Member-centric care management workflow engines facilitate monitoring care management campaigns and enrollment outreach efforts that employ the appropriate channel(s) for the member (e.g., voice, secure email, print). Increasingly, health plans are investing in communications strategies to ensure timely, targeted, multichannel, and interactive messaging to constituents (see Figure 3).

FIGURE 3

Health Plan Investment in Automated Consumer Communication/Interaction System



n = 41

Source: *Health Industry Insights Payer Survey*, February 2009

A combination of clinical rules engines and care guidelines are applied to ensure that the member is receiving care appropriately according to evidence-based medical protocols. Clinical rules engines and care guidelines can also be used effectively to identify gaps in care. It is just as important to identify those members who are not complying with their care programs. According to a study by McGlynn (et al.) published in the *New England Journal of Medicine,* consumers with chronic conditions receive only 56.1% of recommended care.

Increasingly, consumers are being encouraged to take a more active role in their healthcare. Payers have made considerable investment in 2007 and 2008, according to a Watson/Wyatt study, and will continue investing in 2009 (see Table 1). Although this survey predates the economic meltdown, these findings are consistent with the recent Health Industry Insights survey which indicates that more than half of surveyed health plans have outsourced health and wellness programs and will continue to invest in health and wellness by either expanding existing programs or adding new ones (see Figure 4).

TABLE 1

Payer Investment in Programs to Encourage Healthy Behaviors, 2007–2009 (% of Respondents)

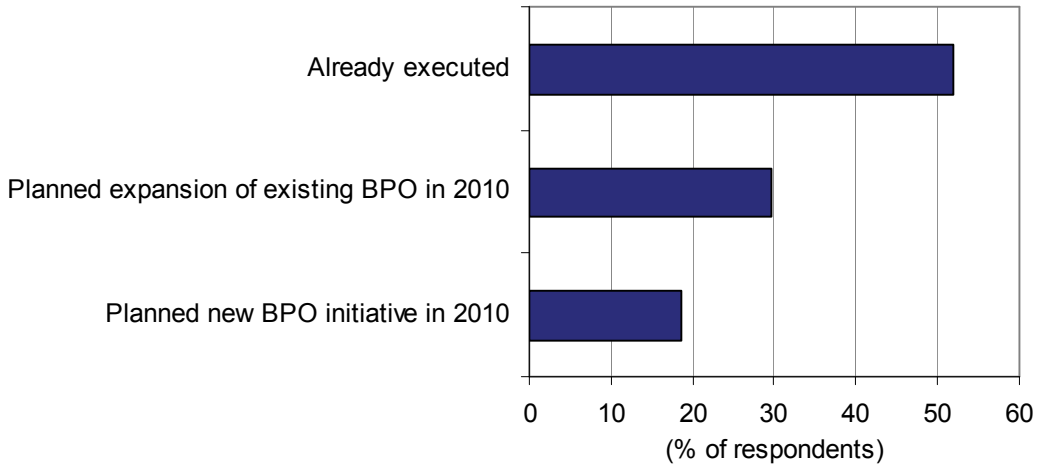
	2007 and 2008	2009
Tools that encourage safety/wellness	85.0	7.0
Promote emotional health	82.0	7.0
Educate employees on work safety	63.0	9.0
Involve senior management in promoting health and productivity	52.0	16.0
Offer economic incentives	46.0	26.0
Educate medical providers on work environment and health initiatives	33.0	7.0
Connect wellness programs to broader (care management) initiatives	29.0	26.0

n = 355 (large employers)

Source: Watson/Wyatt, November 2007

FIGURE 4

Health Plan Investment in Outsourced Consumer Health and Wellness Programs



n = 27

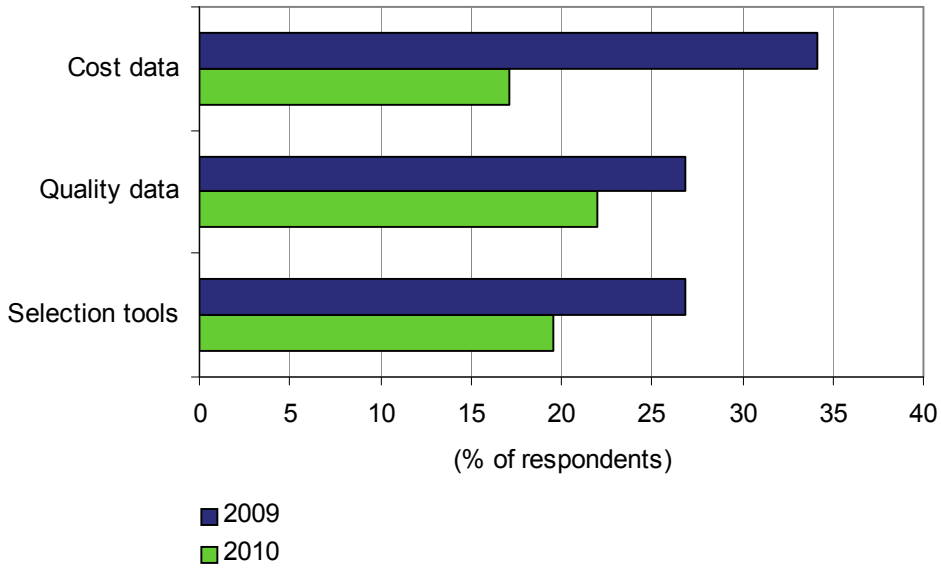
Source: *Health Industry Insights Payer Survey*, February 2009

Utilization Management

Utilization management leverages traditional medical management applications to evaluate the medical necessity and appropriateness of high cost or overutilized procedures. Referrals, authorizations, and precertification requests have been used for decades to control utilization. They have evolved from paper-based to automated processes that are becoming more integrated into the clinical workflow. Transparency initiatives that provide cost and quality information to consumers and physicians help identify appropriate providers to deliver care. While payers have made investments in IT tools to support transparency initiatives since the Four Cornerstones initiative was launched by then Health and Human Services Secretary Mike Leavitt, payers will continue to make investments in transparency tools (see Figure 5). Provider profiling allows health plans to compare provider performance and monitor both over- and underutilization. The latter is equally important when it comes to care management as it contributes to gaps in clinical care and lack of preventive health maintenance.

FIGURE 5

Payer Investment in Transparency Initiatives



n = 41

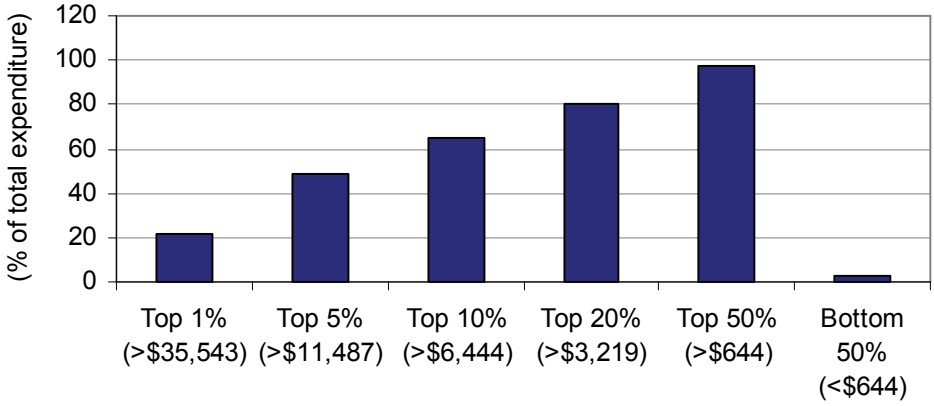
Source: *Health Industry Insights Payer Survey*, February 2009

Case Management

Case management activities target members with acute or complicated, serious chronic conditions that put them at risk for consuming the expensive healthcare resources. The top 5% of the population represents nearly half (49%) of the total healthcare expenditure, with an average per person spend of more than $11,487. Figure 6 depicts the distribution of healthcare expenditure.

FIGURE 6

Healthcare Expenditure Distribution



Note: Figures in parentheses are expenses per person.

Source: Conwell LJ, Cohen JW. Characteristics of people with high medical expenses in the U.S. civilian noninstitutionalized population, 2002. *Statistical Brief* #73. March 2005.

Case management, like disease management programs, involves multichannel outreach to help members receive appropriate care in terms of cost and improved outcomes. Because of the unique circumstances of most cases, case management activities tend to be highly customized to meet the individual consumer needs.

FUTURE OUTLOOK

Industry Impact

Employers continue to pressure health plans to control healthcare costs to mitigate premium increases. Health insurance premiums rose by 5.0% from 2007 to 2008, and health insurance expense is the fastest-growing cost component for employers. Much of these healthcare expenses are related to treating chronic conditions. Consequently, employers and health plans are focusing on consumerism strategies that encourage consumers to be more financially accountable for their health plan decisions and take a more proactive role in managing their healthcare. Examples include consumer defined health plans with medical savings accounts, incentives to complete health risk assessments and establish a personal health record, and health couching opportunities.

Demographic factors, such as an aging baby boomer population and increased prevalence of chronic diseases, are major contributors to the increasing cost of healthcare in the United States. By 2030, almost one

in five Americans will be 65 or older, up from the current 12%, according to a U.S. Census report issued in March 2006. Among people aged 65 and older, 62% have two or more chronic conditions. By age 80 and older, 70% have two or more such conditions.

Most chronic conditions are preventable. The three major lifestyle factors that contribute to chronic disease conditions are tobacco use, poor diet, and physical inactivity. Consequently, health plans and employers are focusing efforts on preventive care and health and wellness programs to modify unhealthy behavior. According to a 2008 Health Industry Insights survey of chief medical officers, health and wellness programs, health and wellness information, health incentive programs, and health risk assessments were ranked in the top 5 care management initiatives.

Despite the economic downturn, payers will continue to invest in care management technologies. According to the recent 2009 Health Industry Insights survey of health plans, more than a third of respondents (36.6%) reported that they plan to invest in care management applications to improve information delivery.

Market Trends

The current care management IT market remains fragmented with some vendors offering a broad suite of care management applications that include analytic tools, clinical rules and decision support, and workflow engines to manage care campaigns and related tasks performed by care managers to vendors that specialize in niche areas such as health and wellness. No one size fits all and partnerships abound between vendors, and sometimes even between competitors for supporting applications. McKesson is a notable example: in addition to its care management suite CareEnhance Clinical Management Software (CCMS), it has partnered with other care management vendors to offer its evidence-based clinical decision support guidelines product, InterQual, to its customers.

A number of health plans haven chosen to outsource disease management functions either to disease management vendors that specialize in one or more diseases or those that take a more holistic approach and consider comorbidity factors that add to the burden of chronic disease. Nearly 40% of respondents to the 2009 Health Information Insights survey indicated that they currently outsource care management programs. In 2010, 46.4% and 14.3% reported that they plan to expand existing, or added new BPO care management programs, respectively. Less than 10% of care management executives responding to an earlier Health Industry Insights survey conducted in mid-2008 stated that they planned to bring these functions in-house.

Health Industry Insights anticipates that in the next 12–18 months, the medical home will begin to play an important role in payer care management strategies. To date, physicians, particularly primary care physicians practicing in small physician practices, have not widely invested in the requisite technologies to support the medical home (e.g., patient portals, disease registries, and electronic medical records that supported basic population management reporting). The American Recovery and Reinvestment Act of 2009 (ARRA), with its incentives for investment in certified EHR/EMR applications, addresses one of the more notable barriers to physician HIT investment, namely cost. Pilots will emerge in 2009 to test not only care management programs but reimbursement strategies which will need to evolve to compensate physicians for these additional services.

In addition to the medical home, remote patient monitoring will increasingly play a role in managing patients with chronic conditions. To date, most payers have not reimbursed for home monitoring devices or monitoring services. The "who pays" question remains the perennial "Gordian knot" when RPM and telehealth are discussed, especially given the absence of definitive ROI studies to justify the investment by payers or providers in the devices and infrastructure. Health Industry Insights will be conducting additional research in the area of telemedicine and remote patient monitoring.

ESSENTIAL GUIDANCE

Actions to Consider

Payers

Payers have long struggled with multiple and disconnected programs as a result of mergers and acquisitions and rapid product development to address employer and consumer demand. Consequently, payers must now rationalize information technology and business processes to integrate related programs that support care management initiatives such as pay for performance, health and wellness, payer-based health records, and personal health records. IT rationalization also includes creating a single source of information for provider, consumer, and clinical information to share (with the appropriate levels of security and privacy provisions) with external sources such as employers, providers, and outsourced disease and health and wellness programs. The complexity of these activities suggest opportunities for business process management technologies.

The need for more and better information to manage costs and care is a long-standing healthcare theme. Recent economic conditions highlight and exacerbate urgent needs. Strong analytic tools and/or partnerships with analytics/business intelligence vendors should be a primary selection criteria. The ability to combine clinical and financial data,

and drill down to identify and resolve high-cost cases or care not delivered according to evidenced-base medical protocols, will create a competitive advantage for health plans.

Payers evaluating any application involving procedure and diagnosis coding should inquire about the vendor's strategy for achieving ICD-10 compliance. Health Industry Insights anticipates that some vendors' legacy products will be sunsetted rather than remediated. It is critical that health plans understand the timeline and critical milestones for remediation of incumbent and prospective vendors in order to ensure the new applications will fit in the health plan's overall plan for ICD-10 compliance.

Vendors

Next-generation products are being developed using service-oriented architecture (SOA) and offered on a software-as-a-service (SaaS) basis. A complete rip-and-replace strategy for care management application suites was always a challenge for payers to absorb, but in this tough economic climate, payers are favoring applications that can be incrementally deployed as a proof-of-concept implementation to demonstrate ROI before rolling out new technologies to the entire organization and across multiple business lines. The technology of any newly acquired care management application must be flexible and agile to respond to care management programs as they evolve. There will be an increased need for further customization as the personalized health model continues to evolve.

Lack of demonstrable ROI has long been a barrier to execution of care management strategies. Vendors should expect that return on investment studies will be included in technology selection criteria and should be prepared to provide them during the sales cycle.

LEARN MORE

Related Research

- *BPO Adoption in the Healthcare Payer Market, 2009* (Health Industry Insights #HI217476, March 2009)
- *U.S. Healthcare Payer 2009 Top 10 Predictions* (Health Industry Insights #HI216014, January 2009)
- *Care Management: What Strategies Will Payers Pursue in 2009?* (Health Industry Insights #HI215500, November 2008)
- *Solutions to Watch for in Healthcare Payers Communications — The Next Big Thing* (Health Industry Insights #HI214955, November 2008)

- *Healthcare in Canada: Chronic Disease Management — Health Information Technology (HIT) Can Help* (Health Industry Insights #CA1HC8, April 2008)
- *Healthcare Payer Business Intelligence Solution Evolution, 2008–2010* (Health Industry Insights #HI210376, February 2008)
- *The Next Frontier of Healthcare Payer Business Intelligence Strategies* (Health Industry Insights #HI210054, December 2007)
- *Next-Generation Transparency Attributes: The Maturity Model* (Health Industry Insights, #HI209471, November 2007)
- *Proactive Care Management on the Rise* (Health Industry Insights #HI207661, July 2007)
- *Care Management: How Health Plans Are Successfully Controlling Rising Medical Costs* (Health Industry Insights, May 2006)

Synopsis

This Health Industry Insights report describes an evolving model for care management and the various technologies that support it, used by health plans, providers, and consumers in an effort to improve the quality of care and patient outcomes, while reducing healthcare costs.

"A combination of consumer demographics, population health status, and escalating healthcare costs continue to intensify the focus on care management strategies by health plans and the employers they serve," said Lynne A. Dunbrack, program director, Health Industry Insights. "Strategies have progressed from episodic-based medical management and case management, to a more holistic disease management approach that embraces health and wellness, in addition to preventive care."

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