Section 1: Introduction: The Cost vs Quality Debate Rages On

The US health care industry is at a critical juncture. Just as the industry was gearing up to implement the Patient Protection and Affordable Care Act (PPACA) along with Health Care and Education Reconciliation Act of 2010 (signed into law on March 30, 2010), the strong showing by Republicans in the 2010 mid-term elections has raised questions about the future of healthcare reform led by the Democrats. Both the parties and political analysts are currently interpreting the implication of Republican’s new leadership role in the House on healthcare reform. Though most Republican candidates generally opposed the healthcare reform, there is uncertainty as to whether or not the new Congress will have enough votes to overturn the reform’s key provisions, such as expanding Medicaid eligibility, subsidizing insurance premiums, providing incentives for businesses to provide healthcare benefits, establishing health insurance exchanges, and supporting medical research.

In this evolving industry environment, Dell Services recently conducted a survey to analyze the current thinking and perception of patients and healthcare executives about key industry trends including healthcare reform, care coordination, patient involvement, and technologies that stem from changes enacted by healthcare reform. This white paper presents the key findings and analysis of this survey along with insights into new areas of opportunity for the healthcare industry as it transitions from a fee-for-service model towards coordinated care.

Key findings from this survey are consistent with the voice of the people in the 2010 mid-term elections with 63% of healthcare executives and 43% of patients recently released from the hospital responding unfavorably to PPACA. Both the patients and executives feel that healthcare reform will increase the cost of care, but are less confident that it will improve the quality of care as shown by the results below:

- Less than one-third (32%) of the surveyed patients agree that PPACA will improve patient safety and quality of care
- A majority of surveyed hospital executives are “very concerned” about financing Medicaid (74%) and the increased cost of coverage (68%) that may arise in response to the increased role of states in healthcare financing

A comparison of the patient and executive surveys has also shown that patients are willing to use technology to provide more information that informs care providers and improves their healthcare but have serious concerns about their health data being safely and securely stored (69%) and transmitted over the internet (66%). So information security is a top-of-the-mind issue for the patients. On the other hand, executives strongly agree that the use of technology to increase physician-patient contact (50%) is important but are predominantly (85%) “very concerned” with being able to afford the initial and continued technology investment.

All these findings show that cost and quality are the predominant issues in the minds of patients and executives. That is why we are excited to reveal these results at this critical juncture in American political and healthcare history as they will have an impact on initiatives being planned around:

- Increasing coverage and quality of healthcare
- Decreasing healthcare costs
- Expanding insurance reform
- Determining the appropriate funding incentives
- Addressing regulatory mandates

Section 2: Highlights: A Positive Effect on the Economy

Survey methodology

The target audience for these surveys consists of healthcare executives and patients. An online survey of 150 health system and hospital executives took place between September 1 and 10, 2010. Shortly after, from September 10 and 13, 2010, an online survey of 309 patients --- who were hospitalized within the past three months --- was conducted.

The two surveys were designed to obtain information that would allow Dell Services to better analyze and assess solutions to address the following industry trends and issues:

- How ARRA and healthcare reform are changing patient behavior
- Perceptions about care coordination, patient involvement, and technologies that stem from changes enacted by healthcare reforms
An important aspect of this survey was to assess how ARRA and healthcare reform are changing patient behavior and gain insights into what healthcare executives and patients think are the most important issues facing the country. The top issue that emerged from the survey was the economy and jobs, followed by healthcare, and subsequently other issues like illegal immigration, terrorism, and environment and energy.

Section 3: Results and Analysis: Reducing Cost and Increasing Quality is the Need of the Hour

EXECUTIVES

Healthcare Reform
- Executives anticipate that healthcare reform will have a positive effect on the healthcare industry and hospitals but may have a negative effect on physicians.
- Executives are concerned with the cost of healthcare reform.

A divergent view on the impact of healthcare reform has emerged in the survey. While approximately half of the executives anticipate that healthcare reform will have a positive effect on the healthcare industry and hospitals, only approximately 30 percent of the patients believe that the reform will have a positive impact on the healthcare industry and hospitals. Interestingly, while the executives are predominantly positive about the impact of healthcare reform, they think that the reform will have a negative effect on the physicians and specialists.

Q. Please indicate whether you think the Healthcare IT provisions within the American Recovery and Reinvestment Act of 2009 and the PPACA will have a positive or negative effect on each of the following.

<table>
<thead>
<tr>
<th></th>
<th>Patients</th>
<th>Healthcare Executives</th>
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<tbody>
<tr>
<td></td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>Healthcare industry</td>
<td>43%</td>
<td>37%</td>
</tr>
<tr>
<td>Hospitals</td>
<td>42%</td>
<td>31%</td>
</tr>
<tr>
<td>U.S. economy as a whole</td>
<td>44%</td>
<td>31%</td>
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<tr>
<td>Physicians and Specialists</td>
<td>45%</td>
<td>27%</td>
</tr>
<tr>
<td>Insurance Payers</td>
<td>45%</td>
<td>26%</td>
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Increased cost, as a result of greater involvement of states in healthcare financing and technology investments, is a major cause of concern for executives. In fact, this very aspect of the PPACA has left executives very concerned about financing Medicaid and providing expanded coverage.

Health Care Reform

<table>
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<th>% responding very concerned</th>
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<tbody>
<tr>
<td>Financing Medicaid</td>
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<tr>
<td>Increased cost of expanded coverage</td>
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<td>Setting insurance rates</td>
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<tr>
<td>Limiting fraud and abuse</td>
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<tr>
<td>Oversight/approval of hospital mergers and/or acquisitions</td>
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Survey Question: As you may know, states will play a far greater role in health care financing under the Affordable Care Act of 2010. Please rate the level of concern you have for each of the following issues that may arise in response to this change.

Limiting fraud and abuse is important, and over one-third of the surveyed executives stressed this very point. The Government Accountability Office (GAO) lists Medicare as a “high-risk” government program due to its vulnerability to improper payments. The GAO, in one of its reports, has stated that $13.5 billion of processed Medicare fee-for-service claim payments may have been improperly paid, for reasons that ranged from inadvertent error to outright fraud and abuse. In an effort to address this issue, the stimulus package is providing Medicare with an additional $200 million to fight fraud and billions of dollars to computerize medical records and upgrade networks but as seen from the survey response this is still a cause of concern amongst the executives.

The healthcare reform has also set the stage for a surge in consolidations across the industry and in response, the administration has promised to be particularly tough in its review of managed care mergers that require federal antitrust consent. Executives have expressed their concern about stricter federal and state antitrust reviews in the survey.

Patient Education and Coordination

- Executives think hospitals should be involved in educating patients about healthcare reform and both physicians and hospitals should increase their role in coordination
- Executives also think that physicians and hospitals should increase their role in coordinating the care of their patients

With the industry moving towards “coordinated care”, executives think that hospitals should play a more proactive role in educating patients about healthcare reform. Since defined processes and an integrated network of information systems are needed for more efficient hand-offs between health care providers resulting in better care management, executives have highlighted that both hospitals and physicians need to proactively increase their contribution to ensure better provision of coordinated care.

Patient Involvement

- Improved quality of care and reimbursement rates motivate executives to meet a patient’s desired level of involvement
- For enhancing patient involvement, executives identify technologies that increase physician-patient contact and quality of care.

Patient Involvement

<table>
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<tr>
<th>% responding motivates a lot and motivates</th>
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<tbody>
<tr>
<td>Higher quality of care</td>
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<tr>
<td>Improving your reimbursement rates</td>
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<tr>
<td>Differentiating your hospital</td>
</tr>
<tr>
<td>Time savings</td>
</tr>
<tr>
<td>Quicker payments</td>
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Survey Question: Please indicate how much each of the following incentives motivates you to meet the patient’s desire to be more involved in the healthcare process.

Executives strongly agree that the use of technology to increase physician-patient contact, quality of care, and information security could be used to enhance patient involvement in the healthcare process. These technologies that aid in providing higher quality patient care motivate executives to involve patients in the healthcare processes resulting in a win-win situation for both parties. In addition to this, improvement in reimbursement rates, quicker payment turn-around, and differentiating patient care are some of the factors that encourage executives to meet the desired level of patient involvement.
Implementations

- Executives are planning to invest in ICD-10 preparations and establishing an accountable care organization (ACO)
- Executives are planning to implement technology that will enable them to provide patient's access to records via an online portal
- Executives indicate that predictive knowledge management decision support is the most important business intelligence initiative they are focusing on.

Investments

The PPACA aims to simultaneously improve the quality of care and reduce costs by incentivizing formation of ACOs and investments in technologies that provide coordinated care. When questioned about their investment plans, a majority of executives (56%) stated that they are planning to invest in establishing an ACO and 23% are currently investing in ACOs. Since the ongoing transformation of healthcare delivery model requires an integrated information system infrastructure that facilitates vertical coordination between primary care physicians, specialists and hospitals, two-thirds of executives said they are planning to implement technology that will enable them to electronically share medical records with patients (62%) and provide patient’s access to records via an online portal (62%), but have not yet started. Executives have also stated that business intelligence (BI) technologies that support predictive analytics and provide insights into disease management trends are the most important BI initiative for their hospital to implement within the next five years.

Patients

Healthcare Reform

As mentioned in the previous section, less than half of the surveyed patients believe that healthcare reform will have a positive impact on patients, hospitals and physicians. Cost vs. quality of care has, expectedly, emerged as the most important issue for the end-users, that is, the patients. However, while patients believe healthcare reform will increase healthcare coverage to all people, they are less confident it will improve quality of care. Above all, patients want to see healthcare reform lead to a reduction in their personal healthcare costs.
avenues of physician-patient contact increase (like, through more
technological touch-points), the cost of accessing healthcare
would increase and are not sure of the quality of service
delivered through these new channels vis-à-vis the traditional
one-on-one patient-provider interactions. Patient’s responses
also showed a reluctance to ask questions to physicians sending
a clear signal that health care providers need to provide more
information to patients and open additional communication
channels.

**Patient Experience**

Cost and quality issues apart, this survey has also served to gain
insights into some interesting aspects of patient’s decision-
making behavior. The survey reveals that patients select a
hospital primarily for the reputation of service, location, and
by the recommendation of a physician. Also, they are willing
to use technology to provide more information that informs
care providers and improves their healthcare. However, they
are concerned about the security of their information and are
tentative about allowing insurance companies to remotely
monitor their health.

Section 4: The Road Ahead: Facilitating the Transition
towards Coordinated Care

PPACA will usher in the most extensive changes in the U.S. health
care system since the creation of Medicare and Medicaid. Several
areas of opportunity can be identified for the healthcare industry
from this survey.

- Both patients and executives think that the patients are not
  yet comfortably placed to don the hat of a self-manager,
  managing their health at home. This sends a strong message
to the hospital executives to improve their patient outreach
initiatives as the patient community becomes more health-
conscious and more tech-savvy.
- Patients are willing to use technology to provide more
  information that informs care providers and improves their
  healthcare. In fact, nearly two-thirds agree that technologies
  should be implemented to allow physicians to remotely
  monitor a patient’s health. However, at the same time, a
  majority of them are concerned about their health data
  being safely and securely stored and transmitted. Safe
  transmission of electronic data can be achieved by making
  investments in hardware and software, with regulatory
guidelines like those of HIPAA as the frame of reference. This
step will facilitate in addressing one of the main concerns
of the patients resulting in higher patient satisfaction, in the
long run.

- Another opportunity for hospital CIOs to bolster overall
  patient experience is the fact that electronic access to health
  information helps patients determine which hospital to visit.
  So the CIOs need to press the ‘e-button’ to set the ball
  rolling for a higher-quality, higher-productivity system with
  strong incentives for efficient, coordinated care amongst the
  network partners through
  - Sharing of electronic health records between their
    physician, hospital, and laboratory
  - Provision of more information electronically such as
    discharge summary and follow-up care instructions after a
    hospital stay

- Knowledge, Attitudes and Practices (KAP) behavior analysis
  of the patients sheds light on how often patients engage
in online research when it comes to managing their
health. More than 70% of patients surveyed said they use
online resources like WebMD to learn more about their
health issues. Similarly, research on the hospitals to make
a decision on their hospital stay also figures in the list of
patient priorities. This calls for increased efforts towards
creating an engaging online presence and promotion with
interactive media (like chat sessions, discussion forums,
online event sponsorships, etc.) so that the patients are able
to find relevant information that helps them in making the
right decision.

Today, the healthcare and political environment in the
United States is at crossroads. Through the 2010 mid-term
elections and surveys, key industry stakeholders have sent
a clear message that they want access to better healthcare,
at a lower cost! The developments of next 6-8 months
are likely to have a lasting impact on practice of medicine,
patients’ experience of health care and healthcare costs
in the United States. Irrespective of the developments, the
following issues will continue to be of significance:

- Cost and quality of healthcare
- IT infrastructure, safety of patients’ data and patient
  relationship management as a whole
- Enhanced patients’ education, communication and
  involvement in healthcare process

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