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Knowledge@Wharton-Wipro Future of Industry Series: Accountable Healthcare Accountability in Health Care: Collaboration and Analytics Are Key



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Accountability in Health Care: Collaboration and Analytics Are Key

The health care industry continues to face demands for cost control, while needing to demonstrate improvements in quality of care and making care more patient-centric. Policy makers are taking the lead to achieve these goals. The U.S. Accountable Care Act, signed into law in March 2010 and upheld by the U.S. Supreme Court in June 2012, identifies these as its core goals. While there seems to be an equal split between enthusiasts and critics of the ACA, the "trend towards accountability in healthcare is irreversible," according to Sangita Singh, senior vice president and global business head - healthcare, life sciences and services business at Wipro Technologies. In the emerging environment, health care and life sciences companies will have to reinvent their business strategies to survive and grow, says Patricia Danzon, Wharton professor of health care management.



One word defines the opportunities and challenges ahead for health care providers, insurers and life sciences companies: accountability. Everybody wants affordable, quality health care that is more easily accessible. While that is the goal, each stakeholder — pharmaceutical companies, medical device

makers, hospitals and insurers – must navigate their own path forward.

Pharmaceutical companies, for example, face expiring patents on blockbuster drugs, with few others in line to replace them, at the same time they are under attack from cheaper generics. Medical device makers are being told to lower costs and innovate for emerging markets. Both have to stretch R&D dollars even more as investors raise the bar on expected returns. Hospitals, meanwhile, struggle to contain overhead and care for the uninsured, while insurers are stingier on reimbursements. And the insurers themselves are now required to provide near-universal coverage. In the background, regulators, politicians and public watchdogs are scrutinizing all players more closely than ever, prompted by recent scandals involving drug recalls, inaccurate regulatory reporting and concerns over the pricing of drugs and medical services.

Given such stern tests, health care and life sciences companies are reworking business models and using technology more aggressively to grow profits. Pharmaceutical companies are adding generic drugs to their portfolios, expanding in emerging markets and working harder to find new blockbuster molecules. Medical device makers are tapping underpenetrated emerging markets with cheaper and often smaller devices. Hospitals are diverting some procedures to out-patient ambulatory care services, and fine-tuning data analytics to boost patient outcomes. And insurers are demanding tighter cost controls and better patient outcomes from health care providers. The entire health care complex is struggling to find a new order.

ALL ROADS LEAD TO ACCOUNTABLE, EVIDENCE-BASED CARE

Policymakers are taking the lead in ensuring universal or near-universal healthcare access at reasonable cost. The best example, of course, is the 2010 U.S. Patient Protection and Affordable Care Act (ACA) that the U.S. Supreme Court upheld in June 2012. U.S. President Barack Obama championed and the U.S. Supreme Court backed in June 2012. It aims to provide affordable care to millions of previously uninsured people. And while the ACA remains controversial, the "trend towards accountability in healthcare is irreversible," says Singh. All industry players will be guided by two principles: accountability and patient-centric care, she says.

The notion of a patient-centric approach is popular, but can be interpreted in many ways, says Danzon. "The useful notion [of patientcentricity] is that there is a push towards trying to measure outcomes and get a better evidence base for medical decisions and treatments." But evidence-based medicine generally means looking at what works on average since it cannot be applied at an individual patient level, she adds. Also, it must incorporate sensitivity to patient preferences and differences in co-morbidities. For example, if one patient is young and healthy vs. another with a heart condition and diabetes, then the optimal treatment may be quite different for each one. Accountability in care also has to do with evidence. "Providers and health care companies are going to have to provide evidence that what they are doing, and what they are asking payers to pay for, does in fact deliver value to patients," says Danzon.

BLOCKBUSTER DRUGS, PHARMA'S BEST BET

For pharmaceutical companies, accountability in care will bring opportunities, according to Singh. True, they are grappling with a diminishing portfolio of blockbuster drugs, which still generate the most profits. "But all that is in no way a deterrent to affordable care, the accessibility and quality of care a patient can get."

The emphasis on accountability begins with new drug discovery. Until recently, "everything was gold plated in R&D," says Singh. "There were no questions asked about the cost of getting a patent." Today, pharmaceutical companies have to strike a tighter cost-benefit balance in innovation. No longer can they charge patent-protected, premium prices for long as they did in the past because the threat from cheap generics arrives sooner.

Singh sees a distinctive strategy shift as pharma weans off the blockbusters. "The problem would be serious if they did not realize what the 'new normal' is. There is declining R&D productivity, a declining flow of new drug patents and the patent cliffs — but I don't think any of the pharmaceutical companies are in denial." Their fundamental challenge is to develop new products that will be sufficiently superior to older drugs whose patents are expiring, says Danzon. Only then can they justify the much higher prices that new drugs command relative to generics.

Singh expects pharmaceutical companies to divest unprofitable businesses, stick to their core competencies and grow more through acquisitions. They already are expanding portfolios to include generic drugs, lifestyle products (for example, health tonics and other wellness offerings) and animal health medicines. Emerging markets are also a big, new area. "If you look at the CEO speeches of any of the top five pharmaceutical companies, you will see them talk about diversification, emerging markets, R&D productivity increases, etc.," Singh says. Generics can absorb only a limited amount of the revenue downturn as patents expire. While generics can bring in some stable revenues with a well-executed strategy, they don't offer the high returns that successful new drugs deliver, Danzon notes. "In a way, the pharmaceutical industry is a victim of its own past success, and we as consumers benefit from that — we now have all these good, cheap generic drugs available."

The potential in emerging markets looks promising. But here again, Danzon sees some obstacles. The market share of MNC pharmaceutical companies in both India and China is well under 40%, she points out. "So they are going into markets where they face tough competitors, limited insurance coverage for drugs and a limited ability to pay on the part of much of the population. There is also often a mismatch between the products the MNCs are currently bringing to market and what consumers in those countries want."

And don't expect big gains from efforts to increase patient compliance. "Improving compliance is something the pharmaceutical industry has been struggling with and trying to achieve for years," she says. "It's just not obvious that there is an easy way to do this." Patients are non-compliant for many reasons – some have to do with costs, some with a dislike of taking medicine, or some with a feeling by consumers they are not getting value. "There is no magic bullet here." Singh agrees that increased patient would add only incremental revenue, whereas one blockbuster drug can generate "a billion dollars."

Still, says Danzon, new drugs offer the "highestrisk, but it's also the highest-return strategy." An industry-wide shift away from chemical-based drugs to biologics [a treatment made from a biologic process] will help. That is because the biologics will not – at least under the new U.S. health care law and regimes in some other countries — face the same sort of patent cliffs when patents expire because the follow-on biologics will not be as numerous, as cheap or as substitutable as the follow-on chemical-based drugs.

Even as Big Pharma companies work to discover new blockbuster medicines, smaller biotechnology firms and generic drug makers will bring more innovation than in earlier years, Singh predicts. She is especially bullish about personalized medicine, where gene-based sequencing and other tools help customize drugs based on patient profiles. Notable work is being done in this area by Amgen, Gilead Sciences, Roche and Genzyme. "Personalized medicine is now beyond the idea stage." It has gained acceptance, and the challenges now are about getting scale and managing the cost of providing such treatments.

WANTED: A STEVE JOBS FOR MEDICAL DEVICES

The opportunities are different for medical device companies, where attention is focused on miniaturizing products "to make them cool and appealing," says Singh. Miniaturization also works well for emerging markets, she adds. "You need a Steve Jobs in that industry." These companies are also sourcing innovation from India and China to cut costs and customize products for those new and expanding markets.

The big medical device companies, including GE, Philips, Siemens and Johnson & Johnson, have already established their presence in emerging economies by supplying devices adapted for those markets and sourcing innovation locally. GE, Philips, Siemens and others also have local manufacturing units in India and China.

Medical device makers increasingly are using technology to respond to the challenges. One example: A large U.S.-based maker of cardiac devices is introducing new product features that enable communication with back-end patient history databases using mobile telephony, cloud technology and business analytics. Some efforts have helped cut manufacturing costs by 80% for select devices. Others are creating new revenue streams, in one case by analyzing patient data from devices such as insulin pumps.

Business transformation is the key theme at another large U.S.-based medical device company. One example: Since 2011, the company has set up a global complaints management center in the Philippines, hiring hundreds of nurses and biomedical engineers to resolve user problems and report adverse events as required by the FDA. The company wanted to reduce the costs of complaints management and harmonize the global complaints management process.

Meanwhile, makers of big medical equipment face business-model changes as hospitals increasingly rent rather than buy. Called the "loaner model," it could be "a very profitable strategy" for makers of expensive equipment, says Danzon. Medical device companies are also improving margins by removing the "bells and whistles" from products, while retaining basic technology and functionalities. Danzon says that helps them extract more sales by varying the features and the price points based on each customer's ability to pay.

HEALTH CARE'S HUNT FOR EQUILIBRIUM

Given that accountability will be the chief driver for health care organizations as policy makers globally seek to rein in costs, expect physicians, hospitals and insurers, to seek equilibrium between the lowest-cost treatments and expanding access to patients, says Singh. That equilibrium most likely will rest somewhere between the U.K.'s taxpayer-funded National Health Service, which provides almost free services for all residents, and the more expensive, private insurance U.S. health care model.

One big organizational issue facing health care providers is the likelihood that payers will move soon towards more bundled forms of payment, according to Danzon. Those "bundles" would cover payments for the pre-hospital diagnosis, hospitalization, post-hospital care and possibly all drugs used in the treatment. That approach would also incentivize providers to be more cost conscious. "The basic idea is to move away from the fee-for-service approach to reimbursement, where the more services you provide, the more you are paid," says Danzon. The transition won't be easy. "In the short run, it could mean pain for some providers as they face the need to reorganize and change the way they practice."

With the pressure to contain costs, hospitals are pushing more for home care, outpatient treatments that avoid hospitalization, the parceling out of specialist services to ambulatory care centers, and remote patient monitoring and wellness programs. Moving some hospital services out of the inpatient sector into more ambulatory care settings "is good news for patients and payers," says Danzon. She is not as optimistic about the impact of wellness programs. Billions of health care dollars could be saved if people could be persuaded to lead healthier lifestyles, she says. "But there is not a lot of evidence that wellness programs actually have such results."

MIXED FORTUNES FOR INSURERS

For insurers, laws such as the ACA may herald new gains, but not without some pain. The focus on coverage for just about everyone means insurers could enroll millions of potential additional "lives," or customers, but there are obstacles. Danzon points to constraints on the types of policies that can be offered, limits on medical loss ratios (a measure of the portion of health care premiums insurers spend on administrative costs and profits), restrictions on policy exclusions and the elimination of caps on total expenditures per patient.

The good news for insurance companies is that the rules apply to all. That will make it easier for them to adjust premiums to accommodate the additional costs, says Danzon. But premiums will tend to go up. "That is a big concern. Payers will have to pay for additional services, and that will add to costs and add to premiums. There is not much [in the ACA] to help them control the fees of providers, or the prices of drugs or the prices they pay hospitals." Insurers will have to develop new strategies to control reimbursements.

Insurers have been eagerly awaiting electronic health records to bring new efficiencies. But despite more than a decade of talk progress is slow, Danzon says. Electronic records will help providers know about a patient's conditions and previous treatments, and that could potentially eliminate duplicated services. But providers will adopt new technologies only if they save both costs and time.

COLLABORATION AND BUSINESS ANALYTICS — THE NEXT FRONTIERS

The key to measuring cost and quality is to aggregate claims, financial and clinical data. But that does not necessarily ensure the appropriate decision making to deliver high-quality care. Delivering truly patient-centric care requires predictive analytics and modeling, where historical data is used to identify risks and opportunities. This would also require a blurring of the lines between the traditionally separate, and often adversarial, positioning of those that provide care and those that pay for it. Payers typically have had access to analytics for patient identification and stratification. However, most of this information is retrospective in nature and has limited ability to affect point-of-care decisions. Hospitals and large provider groups have access to real-time clinical data that can improve pointof-care decision making. However, they have limited historical data for patients.

Clearly, a key need is to integrate data from payers and providers to improve the outcomes and quality. Today, collaboration between providers and payers is occurring on a scale "we have never seen before," says Singh. These collaborations help cut costs, improve care and create better reimbursement models based on outcomes. "It is classic B-to-C consumerization," says Singh. Also of help: technology such as cloud platforms (where data sits on remote servers, accessible to multiple users) connecting hospitals, physicians and patients.

Business analytics is already helping pharmaceutical companies make wiser decisions on which products they should sell where, when and at what price points, including offering suggestions for dealer incentives, stock levels and promotion strategies. Singh points to several examples of the use of data analytics to help improve patient outcomes. AstraZeneca has partnered with insurance and health benefits provider WellPoint to gain more insight into patients. Once equipped with the medical history of patients and their families, insurers can make better-informed decisions on the coverage they provide. GE Healthcare recently joined up with Intel for remote patient monitoring services. In December 2011, it also partnered with Microsoft in care management, using real-time business intelligence on health care quality and patient experiences to boost outcomes. Philips is experimenting with remote patient monitoring where its devices are linked with patients who are connected with paramedics and doctors at its back offices. The UnitedHealth Group has an in-house entity called OptumHealth that

does analysis for wellness, disease and care management programs.

The quest for accountability in care is forcing health care and life sciences companies to retrace their steps, too. Expect medical management to be "the next big thing," with a focus on prevention before cure, says Singh. "There is a shift from treatment to wellness, and everybody in the food chain will be involved." But it should be understood that improving access to health care and making it affordable are to some extent competing goals, says Danzon. "At a simple level, broader access is in contradiction to cost control, because one approach to cost control is to limit access," she says. "Hopefully we will reconcile these goals and get universal access at reasonable cost." The biggest challenges will be complexity, heterogeneity and volume of data. The ability to combine, normalize and harmonize this information from multiple stakeholders will be the key to success. This article was produced by Knowledge@Wharton, the online business journal of The Wharton School of the University of Pennsylvania. The project was sponsored by Wipro Technologies.

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