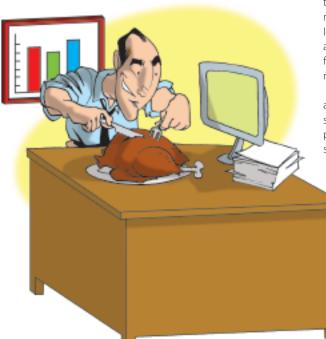
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SALES, MARKETING, AND R&D TRENDS AFFECTING THE HEALTHCARE INDUSTRY



Consumers CONCERNED ABOUT UNNECESSARY MEDICAL TREATMENT

A considerable number of U.S. adults are concerned about the frequency with which patients are medically overtreated by their doctors. This is a finding of a *Wall Street Journal Online*/Harris Interactive Health-Care Poll.

According to the poll of 2,286 U.S. adults, 72% of respondents think that patients who have medical conditions experience problems related to being overtreated, for example receiving too many treatments or getting more aggressive treatment than is appropriate. The study also found that 50% of all adults are somewhat or very concerned, personally, about being overtreated when they are sick or in need of medical care.

As a result of this skepticism, 52% of adults have chosen to question or forego recommended care because they felt it was unnecessary or too aggressive. Specifically, 32% did not fill a prescription that a doctor gave them; 16% did not get a diagnostic test that a doctor recommended because they felt it was unnecessary; 10% did not get a surgical procedure that a doctor recommended because they felt it was unnecessary; and 9% even changed doctors because they felt their doctor's approach was too aggressive.

The public has several theories about why doctors may sometimes overtreat patients. The survey found that, among other reasons, 53% of adults believe that doctors are concerned about malpractice lawsuits; 45% believe doctors want to make more money; and 45% believe doctors want to meet their patients' demands. Other reasons include: to make fast and easy decisions (31%); because of misleading information received from prescription drug and medical device companies (30%); because of faulty medical diagnosis (27%); and to give patients more reason to hope (16%).

"Over the past few years, a great deal of media attention has driven public concerns about aggressive profiteering on the part of pharmaceutical companies and other sectors of the healthcare industry," says Katherine Binns, president of the Healthcare and Public Relations Research Practice at Harris Interac-

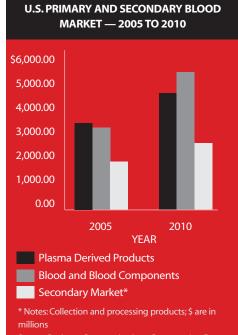
tive. "But these findings suggest, that to some extent, the public is also leery of the motivations behind physicians' decisions regarding patient care."

Growth Expected IN BLOOD MARKETS

Sales for the U.S. primary blood market, which includes the blood and blood components segment, as well as the plasma-derived segment, are currently estimated at \$6.6 billion and is expected to approach \$9.9 billion in 2010, rising at an average annual growth rate (AAGR) of 8.5%.

The secondary market, which includes products used for collecting, processing, and transfusion, will grow from more than \$1.8 billion to almost \$2.5 billion at an AAGR of 7% in the same time period. These are the findings of an updated report from Business Communications Company Inc.

The report identified the driving forces impacting this industry to be the cost of collection and processing, technological advances, an aging population, and the changes in the incidence of diseases and surgical procedures and catastrophes requiring blood



Source: Business Communications Company Inc. For more information, visit bccresearch.com.

transfusions. Additionally, the emergence of recombinant coagulation factors has allowed for safer clotting factor products to enter the market.

Medical-Affairs Role DEMANDS STRATEGIC ALIGNMENT

In today's challenging healthcare environment, the medical-affairs role has become more crucial to pharmaceutical companies' success. To fulfill growing strategic roles, the medical-affairs function needs to continuously reinvent itself by optimizing its overall capabilities.

In a new benchmarking report, Medical Affairs Excellence: Structuring, Aligning, and Funding for Global Success, Best Practices LLC examines areas critical to the operational efficiency and effectiveness of medical-affairs functions in driving business value.

Among the study's key findings are: the number of full time equivalents (FTEs) per compound ranges from four to 83, an average of 27 FTEs per compound for the group studied; on average, medicalaffairs functions outsource about 48% of their work; and at 64% of the benchmark companies, the funding for medical-affairs activities comes from multiple sources, including medical-affairs departments, sales and marketing, and research and development.

Companies Taking Steps **TO BRIDGE** MARKETING AND R&D GAP

One of the pharmaceutical industry's greatest obstacles is uniting R&D with marketing — functions that have never collaborated well because of cultural, political, organizational, and geographic boundaries. Cutting Edge Information researchers and analysts suggest the collaboration of these two functions could bring the most commercially viable products to market.

Pharmaceutical Product Commercialization: Preclinical to Phase III Resource Allocation, a new report from Cutting Edge, explains how many companies have taken steps to merge R&D and marketing with integrated project and therapeutic area teams.



Early commercial teams and project teams — those responsible for managing new product research and commercial efforts — are now comprised of leaders from both R&D and commercial functions, says Jon Hess, Senior Analyst at Cutting Edge Information.

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New strategies include allowing early-phase project teams to join research scientists, pharmacologists, and clinical leaders with representatives from marketing, market-research business development, and key opinion leader management, along with a host of other commercial support functions.

Researchers also found formal tools to enable R&D and marketing to jointly shape early-phase clinical and commercial development. Specific tools include use of a formal, working target candidate profile and proof-of-concept document that gathers both market- and research-based data.

NANOTECH TOOLS Market To Top \$1 Billion



Growth for nanotech inspection tools through 2010 depends on corporate R&D. But in fabrication and modeling, growth prospects look much stronger, says Vahé Mamikunian, an Analyst with Lux Research. will increase from \$580 million in 2004 to \$1.1 billion in 2010, according to a report from Lux Research titled The Truth About Nanotech Tools. The Lux report quantifies the market for the three categories of nanotechnology tools — inspection, fabrication, and modeling tools — as used for emerging nanotechnology applications, excluding established uses in fields such as semiconductors and data storage.

Sales of nanotechnology tools

The current market for nanotechnology tools is dominated by inspection tools, which accounted for 95% of 2004 revenue. This sector experienced dramatic growth during the early 2000s when many university nanoscience centers were constructed. But during the next five years, the prospects for fabrica-

tion and modeling tools look much stronger because much of the inspection market has become saturated.

The predicted growth of nanotech tools as a whole is steady, at a compound annual growth rate of 11%; but growth of the individual categories is more variable. Researchers say modeling will also see higher adoption as vendors offer improved commercial tools.

DEMAND FOR CMOS to Rise

In response to the need for greater efficiency and productivity, pharmaceutical companies are increasingly looking to retain R&D and marketing internally while outsourcing manufacturing.

This trend is fueling an increasing demand for the manufacturing capacities of contract manufacturing organizations, according to new analysis from Frost & Sullivan.

The report, Global Pharmaceutical Contract Manufacturing Markets, reveals that revenue in this industry totaled \$12.38 billion in 2004 and could reach \$25.70 billion in 2011.

In catering to the changing needs of pharmaceutical and biopharmaceutical companies, CMOs are revamping their business models and providing more value-added services that enable pharmaceutical companies to reduce the number of supplychain participants and make optimum use of their internal resources.

"CMOs have been building and acquiring stateof-the-art facilities that rival those of pharmaceutical companies and are constantly upgrading them to enable novel manufacturing processes," says Barath Shankar, research analyst for Frost & Sullivan. "The anticipated influx of biopharmaceuticals is likely to create a huge demand for specialized manufacturing technologies that are not available with pharmaceutical and biopharmaceutical companies."

Still, researchers say the constant changes in regulatory requirements mean that contract manufacturers are at a high degree of risk when investing in manufacturing plants and technologies. They say any radical shift in technology or regulatory norms could result in these companies having to realign their technologies or processes.

COUNTERFEIT DRUG SALES to Increase

The Center for Medicines in the Public Interest has released a report projecting counterfeit drug sales to reach \$75 billion in 2010. This represents a 92% increase from 2005.

The report, 21st Century Health Care Terrorism:

Follow up

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CENTER FOR MEDICINES IN THE PUBLIC

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clearinghouse for up-to-the-minute facts on the development, accessibility, and safety of pharmaceuticals. For more

information, visit rxcmpi.org.

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The Perils of International Drug Counterfeiting, estimates counterfeit drug sales will grow 13% annually through 2010, compared with just 7.5% estimated annual growth for global pharmaceutical commerce.

According to the report, the American debate about healthcare affordability and access is directly linked to international prescription drug counterfeiting. Not only are counterfeit drugs extremely dangerous and many times lethal, but they also are a potential source for funding crime and terror.

Additionally, many of the products sold via drug traffickers contain ingredients that could be harmful, and these products are coming from illegal operations with very poor controls.



Almost \$39 billion, or 11%, of global pharmaceutical commerce, will be counterfeit this year. By 2010, that number will nearly double. We must enact controls to strengthen the security of our healthcare system from outside threats, says Peter Pitts, Director of the Center for Medicines in the Public Interest.

Many of these operations use phony Websites to sell their products.

"The business of selling fake prescription drugs to unsuspecting consumers is burgeoning and is a global industry," says Peter Pitts, director of the Center for Medicines in the Public Interest. "This underground industry represents a major public health risk for citizens of the world."

The group estimates that globally, counterfeit pharmaceutical commerce will become 16% of the aggregate size of the legitimate industry. Researchers also say the U.S. market — which accounts for half of the world's medicine sales — would be an attractive target for counterfeiters.

pharmaceutical industry and the financial services industry. For more information, visit cuttingedgeinfo.com.

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