

The Digitization of Medicine

We live in a real-time world. Rapidly developing technologies increase the value of information, and the ability to access it enables real-time clinical decisions.

What are the consequences of all this technology? We can now provide better, more accurate care than ever before. But while the digital revolution makes it easier to share information, the risk of violating patient privacy is also increased.

In this premiere issue of The MarkeTech Group Minute, we're going to take a look at what is happening as digital information systems enter the healthcare industry. From privacy protection to the latest data on trends in PACS sales, The MarkeTech Group Minute may help your technical evolution occur more smoothly.

COUNTRY SNAPSHOT: The French Market

Healthcare Spending:

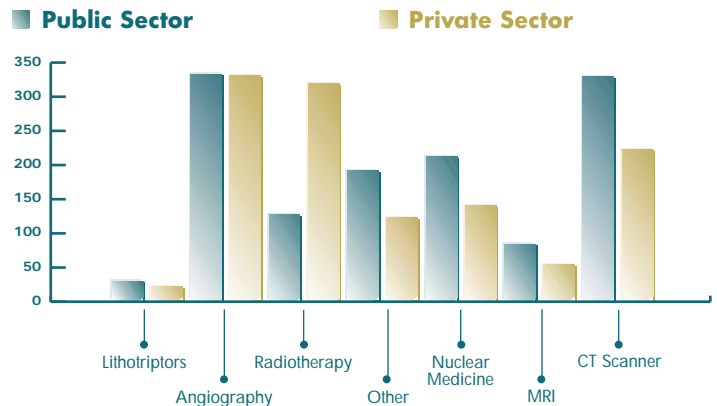
- 9.5% of GDP (871 billion FF - 14 300 Francs per person – up 3.5% over 1998)
- Payers: 74% of healthcare expenses are financed by social security, 13% by private insurance, 13% by out of pocket payments

Market Structure (numbers in thousands unless specified):

- Total of 4,186 hospitals: 75% public/25% private
- Bed capacity: 516.5 in 1998 with 35% private and 65% public
- Physicians: 176.4 of which 88.4 are GPs (will increase) and 88.0 specialists (will decrease)
- Consumers: 59 million

Key Attributes:

- **Strong Government Involvement.** Responsible for public care and the health status of the population, the government works to curb social security debt by limiting consumer use of the medical system and by refusing to pay for unnecessary procedures.
- **Quality.** The ANAES (equivalent of JCAHO) has gained significant control in accreditation of medical institutions in an effort to standardize care and improve quality.
- **IT Spending.** Still low, at around 1.8% of total health bill. The government has launched several initiatives centered on issuing electronic patient cards.
- **Equipment.** France is below normal in large capital equipment. New equipment requires government authorization that evaluates needs and planning. Some good news: MRI investment is expected to increase from the current three to four approved MRIs per million by 2005.



CASE STUDY: Strategic Planning Project

- **The Company:** A Fortune 500 medical equipment vendor
- **The Challenge:** Identify and gauge new market opportunities in the growing software application market in order to develop an acquisition strategy in North America and Europe.
- **Our Solution:** Using market intelligence techniques, including in-depth interaction and interviews with experts, our senior consultants identified key product opportunities in several clinical specialties and developed positioning maps covering relevant players.
- **The Impact:** The company provided 15 potential targets for acquisition.



The MarkeTech Group (TMTG) specializes in market assessment and demand forecast by developing innovative concepts and solutions for healthcare clients worldwide. To find out what TMTG consultants can do to put the latest planning and technology services to work for you, visit our Web site at www.themarketechgroup.com

of the Quarter: **The Privacy Challenge**

PrivaComp was established by Terry Knapp, M.D. to develop Internet-based systems to ensure patient control of medical information in a paper-less world.

Q: What was behind the creation of PrivaComp, and what is the company doing to address this important issue?

A: Medicine involves a number of different types of authorizations for different areas and purposes – clinical, operation, research, power of attorney, informed consent, and so on. While technology is enabling real-time transfer of critical, life-saving information, there is a concern about the industry's ability to protect a patient's private medical information. PrivaComp software is a form of patient authorization that allows disclosure of one specific type of data, and allows the patient to give that authorization over the Internet.

Q: What triggered the latest regulations?

A: The sudden rise in Internet technologies. Before the Internet, the physician was the custodian of patient private information. But with the development of networks and the Internet, a physician's ability to control patient information is at risk. Consumers asked for some form of protection to circumvent or prevent the injuries that could result if their personal information was made public.

Q: Will compliance with these regulations be costly?

A: Investing in privacy control and security is actually good business for providers and payers, as well as those they serve. The U.S. government estimates that the new regulations may create additional expenses at anywhere between \$30-42 billion, but will also drive better standards and produce long-term savings of about \$13 billion. So the net cost is lower than what naysayers are projecting.

Q: What key elements would satisfy both the consumer and the industry?

A: The solution lies in an intermediary third party that can manage authorization on behalf of the patient and monitor the data flow. In other words, looking at the logging and auditing of the transactions so that both sides comply. This is what PrivaComp intends to do – build the infrastructure so that these third party companies can serve as an intermediary.

Q: What does PrivaComp plan to do in the future?

A: The key in this important effort is to adopt a standard approach and underlying technology that will generate the best solution at the lowest cost. PrivaComp is working to facilitate the process of standardization so that all industry stakeholders are working together toward a common goal – payers, providers, and all vendors serving them, such as pharmaceutical companies, medical device, and any IT or e-Health companies.

For more information about PrivaComp, visit the Web site at www.privacomp.com

Long version of this interview www.themarketechgroup.com/news/minute/tmtg-min1-knapp.pdf

ON THE HORIZON: Privacy Compliance, A Growing Business Requirement

HIGHLIGHTS

- Privacy requires patient consent; security requires systems and processes to control access.
- Individual patient information is becoming more specific, such as genetic profiling.
- Personal physicians no longer control the use of, or access to patient information.
- Physicians' exchange of clinical information through e-mail will increase rapidly if privacy and security of medical records are guaranteed (Harris Study, Feb. 2001).
- Third parties—insurers and pharmaceutical companies—find patient information valuable and will seek ways to buy it.
- In response to these trends, US Federal and State regulations governing privacy and security issues are being enacted. Other countries already levy criminal charges against individuals who access and release patient information without consent.

AT STAKE!

- Preventing the unwarranted use or access to patient information could require a \$7-25 billion investment (US only).
- New laws that govern security and privacy are untested; they create uncertainty in future obligations for providers, payers, and vendors.

SO WHAT?

- Providers and payers must become compliant with current Federal laws within 2-3 years or face sanctions.
- Vendors could see sales delayed due to client concerns over accurate implementation of privacy and security requirements. Making products compliant with State and Federal regulations will likely become a minimum requirement for acquisition.

Web Sites: www.healthprivacy.org; www.nationalcpr.org; www.aspe.hhs.gov/admsimp

THE ASSOCIATE CORNER: The Picture on PACS

When it comes to Picture Archival Communications Systems (PACS), the U.S. and Europe are well ahead of Japan. More conservative medical reimbursement policies are holding back the Japanese PACS market.

In the United States, there is significant pressure to keep costs down by limiting the length of patient stays. PACS reduce the time from examination to report. The subsequent decreases in the length of patient stays dovetail nicely with U.S. payer policy.

The Japanese government reimbursement policies actually encourage the continued use of film (which U.S. payers don't), causing this particular technology to lag behind.

Sales of PACS in Japan to date have primarily been archive-orientated PACS systems rather than "full-blown" systems sold in the United States and Europe. While Agfa, GE and Siemens dominate the U.S. and European markets, most Japanese PACS are sold by local companies with limited global presence.

What can we expect to see in the Japanese market of the future? With healthcare expenditures rocketing skyward and their population aging, the Japanese government is likely to shift the policy to one more favorable to PACS in the next two to five years.

Richard Howell is a principal with the Howell Group. His consulting practice includes monitoring medical imaging in all Asian countries.