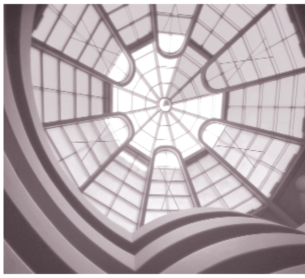


PricewaterhouseCoopers

HealthCast 2010SM E-Health Quarterly

February 2001

Choice: The Salsa of E-Benefits

What's Inside

Executive Summary

American industry has discovered the benefits of e-business. Wal-Mart holds online auctions with its suppliers, Schwab has converted investors to self-service online trading, and e-mail has become a staple of corporate communication. Despite this wave of conversions, the use of the Internet for internal employee processes is in its infancy.

Enter the world of e-benefits. Like the conundrum of the chicken-and-the-egg, many employers and health plans are awaiting the development and implementation of e-benefits and e-insurance products. Health plans don't want to deliver web-based products if employees aren't ready to use them. Employers can't deliver e-benefits products until health plans develop them.

However, starting with online benefits enrollment, this e-health segment is evolving in stages. A byproduct of this evolution is the fusion of employee responsibility and empowerment. Paternalistic urges aside, employers will gradually cede more control for health benefits to employees themselves.

One of the primary drivers of e-benefits is the delivery of self-service tools in which employees can customize their own insurance plans and have ready access to them, just as they do with their brokerage accounts. By putting this information at their fingertips, employees may become more fiscally responsible about those benefits. Ultimately, they may want complete control over more and more aspects of their benefits. To empower employees toward that end, a handful of employers this year will embrace a defined contribution model, also called self-directed or consumer-directed health plans.

This issue of *E-Health Quarterly* draws heavily from our report, *Defined Contribution Healthcare: Reframing Relationships and Benefits Delivery*, which discusses the various models of defined contribution health plans. For that report, PricewaterhouseCoopers conducted interviews with U.S. healthcare stakeholders from July through October 2000. These interviews included more than 50 top executives of employers, insurers, e-health companies, and policymakers. PricewaterhouseCoopers also surveyed more than 800 consumers on their perceptions of and preferences about current health benefits.

Conclusions

- **Choice will be the most prevailing change in employee health benefits in the coming years, and the Internet will be its enabler.** Consumers have more choices in mutual funds, long-distance services, and salsa than ever before. Why should their health benefits choices be limited to one or two health plans? Employers are moving in this direction already, and choices will continue to expand. Just as the Internet enables travelers to view multiple ways and prices to travel from New York to Chicago, so employees will have multiple choices and price designs for their health benefits.
- **Employers don't want to jump into defined contribution plans, but will move incrementally toward web-enabling benefits processes and shifting more responsibility to employees.** Our research indicates that few employers are willing to adopt self-directed, otherwise known as defined contribution, health plans today. However, as they adopt more web-enabled functions, they will move more responsibility for choices to employees. As that balance of responsibility shifts, some employers will need to determine how ready their workforce is to accept increasing levels of responsibility.

- **If a significant portion of the healthcare insurance market moves to self-directed, Internet health benefits accounts, physicians may be most directly and adversely affected.** Some defined contribution health plans have medical savings accounts as a centerpiece. In these, employees pay out of a medical savings account for routine expenses up to $1,500 or $2,000. Physicians must be prepared to deal with patients who are paying cash for their visits and who may shop around for the best value.

- **The commerce of benefits will move toward the Internet and insurers must develop products that serve new and existing customers.** Insurers are developing e-quote products that assist brokers and other intermediaries. They also must follow the changing needs of consumers whose response to defined contribution health products is largely untested.

- **Standardization, a predominant theme of HealthCast 2010, must infiltrate this e-business niche so employees and employers can make apples-to-apples comparisons.** If employers offer their workers greater choices, it could become even more confusing without standard benefit grids with which to compare plans.

The State of Employee-based Health Benefits

Corporate America is adopting web-based tools for human resources tasks with alacrity. Evidence of the e-transformation of benefits administration is already clear in the number of profit-sharing and 401(k) plans that have adopted web-based transaction tools. More than 40% of plans now offer several common functions via the Internet, according to the Profit Sharing/401(k) Council of America. (See Chart 1.)

As employees get used to tracking their profit-sharing plan balances on the Internet, they'll come to expect similar service for health benefits. Industry studies indicate that more than one-third of employers are using the web for annual benefit enrollment.[1]

In the U.S., web-enablement of health benefits must emanate from managed care. Nearly two-thirds of non-elderly Americans have employment-based private health insurance. Of those, about 90% are in managed-care plans, according to the Employee Benefits Research Institute.

However, with healthcare premiums rising at twice the rate of inflation, employers are starting to think about what's next after managed care. Some believe that managed care has exhausted its tools for squeezing waste out of the healthcare system. Consumers, they believe, must take more responsibility for their own healthcare, and thereby their own rising healthcare costs.

This argument is supporting discussion of a new model of health benefits. The concept is alternately dubbed defined contribution, self-directed healthcare, defined care and/or consumer-directed health. Defined contribution is a well-known concept in pension benefits, but less understood in healthcare. Our research indicated that employers and insurers have slightly different ideas about what defined contribution health benefits constitute. However, such confusion is not unique. One could argue that the same is true with managed care. It means different things to different people. In fact, a recent EBRI study found that 61% of workers in managed care plans said they had never been in one.[2]

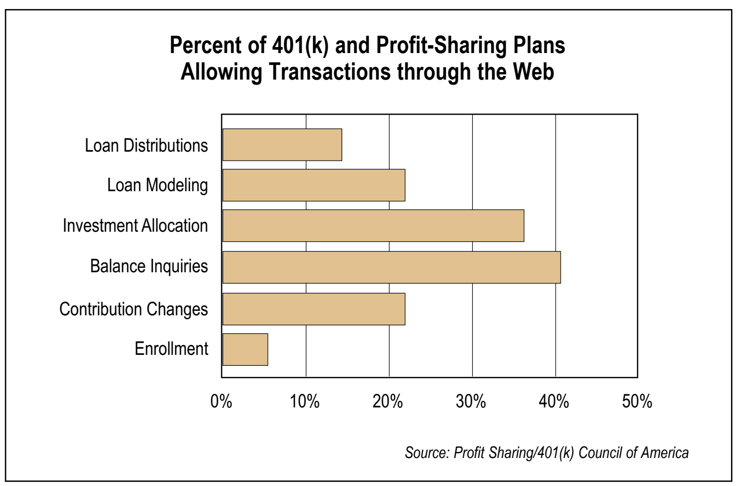


Chart 1

The Problem: Rising Costs, Demanding Employees

Businesses adopt e-business tools to cut costs, generate revenue or forge strategic alliances. For e-benefits, employers see a cost cutter that is arriving in just the nick of time. Health inflation, which had flattened and indirectly contributed to the economic boom of the 1990s, has torqued back up. Employers fear profit erosion at the expense of higher health insurance premiums.

However, rising costs are a complex issue. Our research showed that employers predict premiums will increase by an average of about 10% per year in the short term. (See Chart 2.) In our survey, 80% of the 35 employers we interviewed cited cost as their major challenge in healthcare benefit plans.

In breaking out the source of rising costs, employers saw administrative costs climbing far slower than claims costs. Claims costs are driven, in part, by employee demands. For example, pharmaceutical costs are the fastest rising healthcare segment in the U.S., and consumers are driving that cost to a certain extent. Understandably, employers have tried to temper costs, particularly in pharmaceuticals, the fastest growing category. Nearly all employers (98%) use financial incentives to encourage workers to choose generic drugs.[3]

When health inflation spiraled during the 1980s and early 1990s, employers turned to managed care. Now, they are investigating whether defined contribution could similarly bring costs under control. Defined contribution implies employers would make a core contribution regardless of health plan offerings. Only about one-third of employers now do so, according to a Robert Wood Johnson Foundation study.[4]

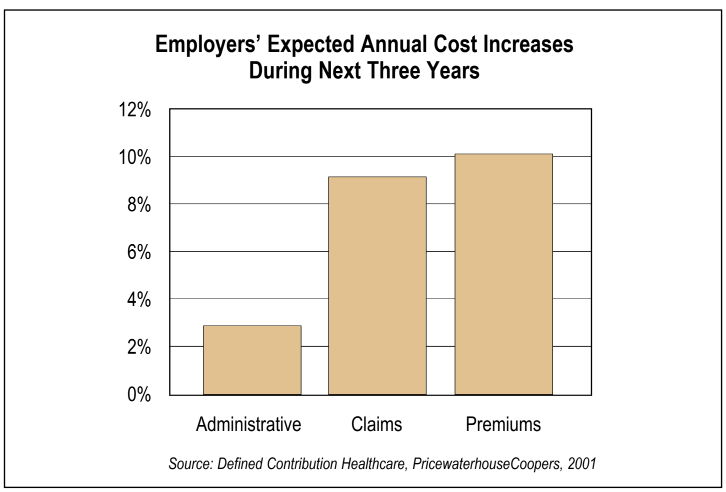


Chart 2

Growing Burden of Healthcare Vendor and Benefits Administration

The administration of healthcare benefits programs is increasingly costly and time-consuming for both small and large employers. Employers are frustrated with how much of management's time is consumed by health benefits processes, ranging from health plan selection to claims administration. Transferring some of these decisions to employees would allow management to focus on revenue-producing core activities.

Nearly 90% of the 170 million agent-carrier transactions in health benefits were done by phone, fax, or paper in 1999, according to Salomon Smith Barney, a New York-based investment bank. Their research also found that the employer purchase of health benefits requires seven steps and takes between 45 and 90 days to complete.

Employers are also finding it more and more difficult to manage health plan vendor relationships. Many are concerned about the quality of service vendors provide and the fallout from health plan and vendor consolidations.

Increased Liability Exposure

In a recent session, Congress stepped up its debate about medical liability. By administering a health plan or participating in benefit decisions, employers may incur increased exposure to lawsuits under federal or state law for treatment decisions made by medical professionals or administrative errors. When employees feel that something goes wrong with benefit outcomes, they look to the employer, often viewed as the point of receipt for many benefits, to correct the situation.

Consumerism

Consumerism is permeating healthcare, and healthcare organizations are responding. Most hospitals now have websites and the percentage of physicians with sites is increasing dramatically. A move to self-directed accounts would put even more pressure on providers to offer quantifiable data about the cost and quality of their services.

Employers need time to assess how ready their workforces are to use the Internet for health benefits choices and to accept more responsibility for those choices. Employers don't want to give employees more responsibility than they're prepared to handle. Even though an employee may buy groceries and books on the Internet, that doesn't mean he's prepared to handle the sensitive choices and trade-offs involved in choosing healthcare providers and financing schemes.

Thrusting too much change on employees may backfire on employers. Our survey showed that consumers generally have high regard for their own health plan. Seventy percent said they were satisfied with their healthcare benefits. The survey showed, however, that satisfaction with healthcare benefit plans depends on how well an employee understands them and whether he pays a portion of the monthly premium. The better employees understand and the less they pay, the more they like it. We can then assume that if workers move to a new model of health benefits that is confusing or costs them more, satisfaction is likely to drop.

Yet, when asked what charateristics they find most important, consumers said choice, service and cost – in that order. Consumers are clearly demanding more choices, which can cause administrative headaches for employers.

Dot's Life

The Internet is becoming a way of life for today's patients. Recent reports indicate that about half of Americans with PCs have Internet access. (See Chart 3.) One in three Internet users in the U.S. goes to the Internet as his or her first source for medical advice, according to PC Data Online. That research firm also reports that healthcare/medical sites are among the most popular sites on the web, with three in five home Internet users saying they visited a site in the past year. In addition, 85% of respondents said they planned to spend the same or more time at healthcare/medical sites next year, PC Data Online reported.

Patients look for content when they have a pressing medical need and want a quick and ready source of information. But, will they use it to actually buy healthcare and insurance?

Consumer empowerment is manifested by renewed interest in selling individual health insurance policies. Some online exchanges typically provide instant quotes on available plans and allow consumers to fill out applications online without the traditional paper forms. In addition, many offer assistance from customer service agents who are available through online chat, e-mail or a toll free number. However, some of the online exchanges do little more than shuttle leads to agents.

The Solution: Self-service E-Benefits

Today's employers are looking for more effective health benefits delivery, more efficient plan administration, easier access to health information and more personalized healthcare plans for their employees, which e-health companies are clamoring to provide. Employers are very interested in the innovative approaches offered by these companies, but, by and large, they would prefer other employers try them first and work out the bugs. Dot.coms will need to establish track records and overcome concerns of employers who are reluctant to experiment with their employee plans.

According to Forrester Research, 38% of employers are currently using the Internet to administer employee health benefits, but 86% plan to use the Internet in this capacity by 2005.

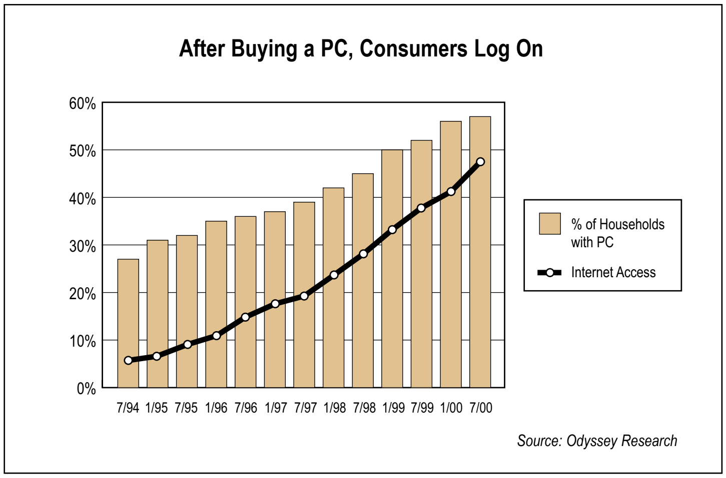


Chart 3

"Managed care organizations and insurers must be ready for enrollment over the Internet by FY 2002. They do not want to miss this first-to-market opportunity," noted Donna Lencki, chief executive officer of Choicelinx, a company that provides technology services that enable companies to operate in the e-health environment.

Our research indicated that many of the characteristics that employers want in defined contribution health plans could be enabled through e-business. (See Chart 4.)

E-benefits companies said they bring market value by educating consumers to become more efficient purchasers and users of healthcare, resulting in lower market costs. They also believe that cost savings are realized through more efficient Internet-enabled administrative processes. These dot.coms see opportunity in defined contribution because they don't think traditional insurers will offer new products and administrative systems swiftly enough to adapt to market expectations. However, many insurers are moving to web-enable tools fairly quickly. For example, Harvard Pilgrim Health Plan recently piloted a product with two dozen employers that allowed them to verify and manage their employees' enrollment. The tool allows members to enroll, select a physician, update their personal demographic information and order an ID card online. The HMO is rolling the product out to its other clients and will add other functions this year, including verification of eligibility and benefits, claims management, billing, referrals and authorization of services.

While more large insurers are offering web-enabled functions, the power of the Internet may have the biggest effect on the small-group market. During the past decade, the healthcare industry has been on a path to consolidation under the premise that larger organizations can wield more power and wrest bigger discounts. Larger employers have more negotiating leverage with insurers; large insurers use their leverage to gain discounts from providers. Providers merge to pressure insurers for higher reimbursements.

However, e-business has the ability to empower small organizations and individuals. This is manifesting itself in tools for small businesses to buy health insurance. For example, Wellmark Blue Cross and Blue Shield recently selected an e-health vendor, FirePond, to integrate its sales, marketing and enrollment efforts into a single platform that will enhance the insurer's small group sales and enrollment process. The Iowa and South Dakota insurer wanted to give its agents the ability to quickly access rating and enrollment capabilities through its website.

E-Quotes Gaining Speed

A half dozen or more dot.coms are offering e-quotes, which has insurers scrambling to decide whether to participate, how to participate and with whom to participate. The power of the Internet to affect pricing could be dramatic. Though the market is sparse now, a Forrester Research report estimated that online insurance sales would soar to $4.1 billion by 2003 and that $11 billion in sales would be influenced by the Internet.

One large corporation that recently attracted attention in industry trade journals was American Airlines, which encouraged health plans to bid online for the company's 35,000 employees and dependents in Texas and California. The June 2000 online auction, handled by dot.com UltraLink, reportedly saved the airline an estimated 2.2% on insurance premiums and cut five or six months off the bidding process.[5]

In many e-business sectors, disintermediation is an issue. However, many insurers and e-benefits companies are trying to assist the brokers and sales agents rather than disintermediate them. For example, companies like BenefitPort and ChannelPoint are working on the distribution end of health insurance, providing e-quoting systems that make brokers' jobs easier. Channelpoint recently signed a contract with Kaiser Foundation Health Plan of the Mid-Atlantic States for its Webquote system.

Hillary's Revenge - Managed Competition Redux

The ability of employers to offer more choices and allow customization sounds somewhat like aspects of the Clinton health plan. That plan called for "managed competition," a concept promoted by Stanford University's Alain Enthoven and embodied in the Federal Employees Health Benefits Program. In that program the federal government contributes a set dollar amount each year to each individual who then can choose from among as many as two dozen health plans. If an individual selects a plan that costs more than the government's contribution, he or she pays the difference. Less, and the employees uses the difference for other expenses.

A self-directed health plan would incorporate the same characteristics with the Internet to disseminate information and keep employees informed. In addition, in some plans, this element of choice would be augmented with more customization and a health savings account/catastrophic insurance component.

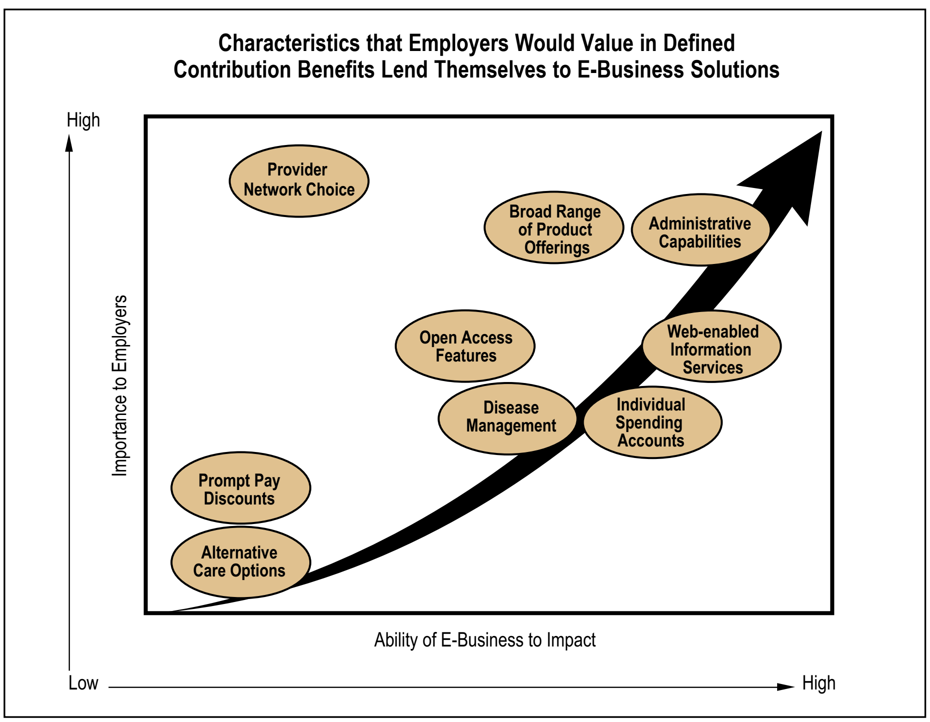


Chart 4

Employers have responded to workers' desire for more choice in health plans. In 1988, nearly half of employers offered only one choice of health plan, according to the Kaiser Family Foundation. (See Chart 5.) However, the tide has turned and now 50% offer three or more plans, the study found.

Employer Experience with Defined Contribution Retirement Benefits Could Ease Transition to Self-Directed Plans

Employers have learned much in the last decade as defined benefit retirement plans transitioned to defined contribution. It has also given them a starting point for discussing defined contribution health plans because they understand and like the idea of limiting financial exposure by determining their contributions in advance. More than half of the employers we interviewed for our survey found that idea appealing.

The growth of 401 (k) and defined contribution pension plans has been dramatic. Since 1994, the amount of money in defined contribution pension plans has doubled to $2.2 trillion, according to the U.S. Department of Labor. At the same time, plan participants have grown 23% to 55 million individuals.

However, government regulation has sometimes hindered and sometimes helped the growth, a fact that may impact defined contribution health plans as well. Congress added numerous layers of regulations that must be satisfied to ensure tax-advantaged treatment. However, in recent years legislators have passed laws that make it easier for small businesses to sponsor defined contribution plans.

One differentiating factor is that employees will know the consequences of poor decision-making much more quickly with defined contribution health plans than retirement plans. Although employees can readily check the financial results of the pension program via the Internet, negative results won't impact them until they're retirement age. Employees will reap the rewards, or risks, of self-directed health plans much more quickly.

Because of the newness of the industry and the changes with the economy, it is difficult to predict exactly when the market will be ready to transition to defined contribution health benefits. Kathy King, Vice President of the Washington Business Group on Health, speaks about the discussions that she has had with the newly developed Council on Employer-Sponsored Healthcare. She notes that this group sees the new model of healthcare as customer-centric, but not necessarily defined contribution. "Defined contribution is on the far end of the spectrum," she said, adding that "companies can use e-health and e-benefits technologies to get there," but employers "will not move straight to defined contribution," especially for employers that deal with highly unionized markets.

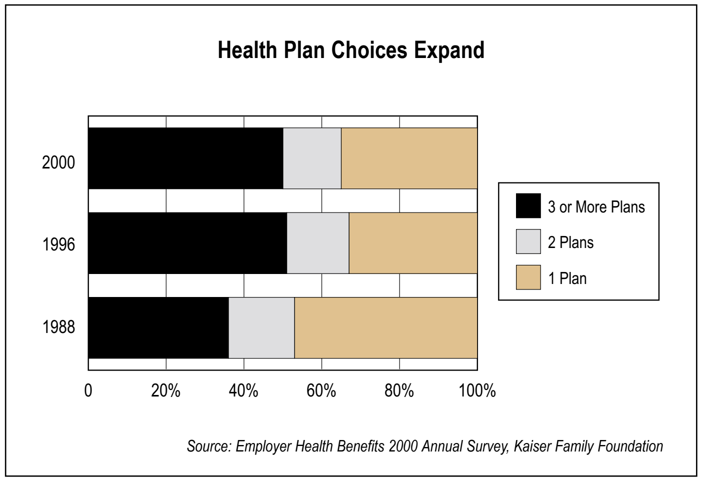


Chart 5

Wealth of Vendors and Variables

On the following pages, we list vendors that provide e-benefits and e-insurance, and provide information about the markets they're competing in.

As in our previous reports, we believe that employers and insurers should consider vendors through the prism of three key tests: **capital, market share** and **technology**.

In terms of capital, investors have smiled on this segment. During the past two years, e-benefits and e-insurance companies have raised more than $400 million in venture capital funds. (See Chart 6.) In addition, four of the companies have gone public. Even while e-health venture capital dried up during the end of 2000, e-benefits companies continued to raise money. For example, eHeathDirect raised $32 million in September 2000. The company has a strong management team, however, that includes John Trustman, a former Aetna CIO who also pioneered online trading at Fidelity Investments. And, eHealthInsurance announced a $32-million third financing round in January 2001.

Like other e-health firms, the business model is in flux, depending on the services offered. For example, many of the e-benefits firms charge between $2 and $5 per employee for administrative services. Some online brokerage firms take commissions on sales.

Market share is difficult to measure in this embryonic state. However, as these companies begin to log successes, they may be able leverage them very quickly.

Bottom line is that the technology must work, but even beyond that it must be user-friendly if employees are to access it. Computer literacy varies widely. An Internet-based tool that is difficult to navigate or crashes frequently can confound even employees who surf the Web routinely. Companies like Ford Motor and Delta Airlines have had programs to give away personal computers with low-cost Internet access to their employees to bridge the "digital divide." Making their employees more technology-savvy, however, can't overcome systems that don't work.

A recent Healthcare Satisfaction Study by Harris Interactive highlights the trend toward self-service benefits through the Web. The study reported that 43% of consumers would be willing to select their doctor based on the availability of Internet systems and 45% are willing to select their health plan based on this.

Our interviews with vendors found a host of niche players, outsourcing companies and technology firms to service what has been estimated as a $19 billion health premium market.

For example, Choicelinx offers to automate the entire benefits process from point of enrollment, through configuration of benefits, disease management and eventually maps to insurer’s claims engines. The Choicelinx technologies include tutorials for employees as they move through the process. By linking all parts of the process, Choicelinx hopes to bring clients to an efficient, web-based and virtually paperless health benefits system. In a similar market, ehealthdirect focuses on one part of the online benefits equation - auto adjudication. Through the creation of a health insurance coding language that is "English-language-like," ehealthdirect will help increase the level of efficiency for insurers. Both of these companies are still in their inaugural year and their products are either in development or the pilot phase, so we were unable to obtain feedback from clients who are presently using their products and services.

Venture Capital Funds Raised in 1999 – 2001

Company	***Amount (millions)***
AtBalance	$2
BenefitPort	$60
Definity Health	$23
Digital Insurance	$20
eHealthDirect	$32
eHealthInsurance.com	$74
Employease	$20
HealthAllies	$36
HealthMarket	$57
Insurance.com (affiliate of Fidelity Investments)	$10
Lumenos	$47
My Health Bank	$5
SimplyHealth	$28
Vivius	$17
Total	**$431**

Chart 6

Source: PricewaterhouseCoopers Moneytree Report and Company Reports

However, as employers cede more control to self-directed health plans, employees must accept more responsibility. As they do, they must have the tools to make informed choices.

Uniondale, N.Y.-based OnlineBenefits focuses on helping employees make educated choices by providing interactive websites, complete with tutorials and multi-media options. "Employees can't be consumers of healthcare without education," noted CEO Alan Cohen. "Many companies offer a wide variety of health plans, which will be the biggest clients for OnlineBenefits."

A core feature of the company's website is cost comparison information, long-term care options, and other information about an employer's health plans. Employees can answer questions about what is most important to them in terms of a health plan, then OnlineBenefits recommends which health plans best suit their needs.

OnlineBenefits CEO Alan Cohen said the type of companies interested in online benefits is expanding. "Whereas just a few years ago the only types of companies who were considering this type of technology were the high-tech firms, now we have law firms and financial services firms wanting our services," he added. For example, in January 2000, Online Benefits had 190 clients. By January 2001,it had grown to 2,000, Cohen said.

There are presently 500,000 adults who use OnlineBenefits' services, with the average unique visit to their website lasting about 28 minutes. About 30% of OnlineBenefits hits are received outside of business hours, indicating that the site is being accessed from home.

Many of the vendors see education as a unique distinction of their services. For example, DoctorQuality.com provides a consumer-rating system for doctors and hospitals. However, like any Internet-based system, ratings quality depends on usage, which is currently fairly small, especially in some geographies. In addition, the company hires doctors and nurses who research the best practices for certain procedures, information that can be communicated to employers and employees.

David Shulkin, M.D., CEO and founder of DoctorQuality.com, cites a study from the Juran Institute that shows employers waste about $1,300 per employee each year on poor quality healthcare. "The problem today is that the market rewards excellent care and mediocre care the same," Shulkin said. His firm was recently awarded a grant by the Robert Wood Johnson Foundation to study a new payment system that would motivate doctors and hospitals to provide quality care. Such a system would provide a place for the Internet in the doctor-patient relationship.

Another dot.com, SimplyHealth, markets some 4,000 products, which offers a level of customization that "can be sold today. We're not waiting for Defined Contribution to get going," noted CEO Eric Grossman. SimplyHealth focuses on the small businesses and individuals, a market where Grossman sees enormous opportunity. Seventy percent of the nearly 43 million Americans who are uninsured are employed by small businesses, he said, noting that creating an insurance product for this market is a $13 billion opportunity.

HealthSync has developed a model that CEO Ray Herschman said eliminates individual underwriting. One of the drawbacks for defined contribution health plans is the risk of adverse selection as employees buy individual health policies. The chronically ill would be disenfranchised with individual underwriting because carriers would want to be paid for increased risk, and there would no longer be a group to pool risk.

Attributes of Selected E-Insurance Companies

Company	Highmark BCBS, Wellpoint	eBenX, HealthSync, Sageo	Definity, Destiny Health, Lumenos	Vivius
Brief Description	Insurer-sponsored and administered multi-option healthcare benefits program. Members choose benefit plan and features (e.g., copay levels) appropriate for them from a single insurer.	Internet-enabled multi-health plan exchange or "supermarket" Members choose health plan (e.g., insurer) most appropriate for them among many health plan choices.	Medical Savings Account (MSA) - "like" combination of catastrophic insurance and Personal Health Account. Members choose, at point-of service, whether and how to spend their allocated healthcare dollars for routine services. Are covered by a high-deductible insurance plan for catastrophic care needs.	Personalized provider network coupled with personal health account and "wraparound" insurance. Members choose their own network of doctors/facilities and benefit design in advance. Selected providers are paid a prospective fee out of member's account. "Out-of-network" care covered by wraparound insurance.
Central role of Internet? (e.g., health information, decision support, plan selection, administration, health account management)	Yes	Yes	Yes	Yes
Employer Stewardship[1] (e.g., vendor and plan design selection, deciding number of options available)	Medium	Low	Low	Low
Employee Responsibility and Control Overspending Decisions	Medium	Medium High	High	High
Employer Ownership over Administrative Processes (e.g., eligibility and enrollment collection, premium billing and reconciliation)	Medium High	Low	Medium	Low
Traditional Insurer/Health Plan(s) as Delivery Vehicle?	Yes	Yes	Somewhat (on catastrophic plan only)	Somewhat (on wraparound policy only)
Role of Personal Health Account	Possible component	Possible component	Central	Central

[1] *Compared to typical employer practices of those offering benefits*

Case Studies

Hospital Employees Sign Up for Consumer-directed Health Plan

Consumer-directed, Internet-enabled health benefits are out of the incubator and in use at three employers that signed on with Definity Health, a Minneapolis-based e-benefits company. Medtronic, Aon Corp. and Riverview Medical Center all have employees covered under the Definity plan as of Jan. 1, 2001.

Industry skepticism about employees embracing such self-directed accounts was dashed last fall at Riverview, where 82% of its 800 employees enrolled in the Definity health plan.

"Our employees wanted more choices and more freedom," said Robert Stevens, CEO of the western Twin Cities hospital where employees in 1999 listed the top workplace concern as health plan lack of choice and high deductibles.

"We pitched it as a radical change," noted Stevens who had predicted that only about 15% of his workforce would elect to go with the Definity plan. Employees also were offered a traditional 80/20 indemnity plan with a $300 deductible.

Yet, an overwhelming majority of employees obviously picked up on Stevens' enthusiasm for change. At enrollment meetings when employees asked him what plan he would pick - he said, "Definity." Interestingly, Stevens said the words – "defined contribution" – were not used to describe the plan to employees.

Under the plan, Riverview deposits $1,000 in a personal care account for a single employee. An employee with one dependent receives $1,500, and a family receives $2,000. The employee can spend it on physician office visits or laser eye surgery or orthodontic care and the unspent amount rolls over to the next year. The next $500 spent on medical services must come out of the employee's pocket. After that, a traditional healthcare insurance policy kicks in.

The Internet is a big part of the new health benefits program. Each plan member has his own personal homepage to access account information. Stevens said most employees have Internet access at work or they can use Internet-enabled computers in the human resources department.

This is the hospital's first foray into e-benefits, and Stevens acknowledges that it's a learning experience. "We intend to collect a lot of information about how employees are spending their personal care accounts," he said. In terms of the long-term outcome: "The jury is still out."

Customizable Insurance

After a successful pilot in the summer of 2000, Highmark Blue Cross and Blue Shield offered a web-enabled defined contribution product to all employers in western Pennsylvania beginning with January renewals. The product, BlueChoice, allows employees to customize their own health plans through 16 options that include deductible and co-pay levels. During the pilot, Pittsburgh-based Highmark found that one employee pointed and clicked his way through the enrollment process in just three minutes. On the other end of the scale, one employee took several days, changing his preferences numerous times.

"We concluded that we were in the right space with the right tools at the right time," said James M. Klingensmith, group executive vice president of Highmark's health insurance group. Employers don't have to embrace defined contribution to offer Highmark's new product. But it's a step closer to defined contribution because consumers can tailor their health plans to a certain extent. Highmark's Klingensmith believes the Web-based process will save Highmark money, but more importantly, it will save employers time and money on their benefits administration.

Publicly Traded Companies Providing e-Insurance or e-Benefits

Name	Ticker	Headquarters	CEO	FY End	1999 Revenues (millions)	1999 Net Income (millions)	9 months Revenues (millions)	9 months Net Income (millions)
Aon	AOC	Chicago	Donald C. Ingram	31-Dec	$7,070.0	$352.0	$5,414.0	$391.0
eBenX	EBNX	Minneapolis	John J. Davis	31-Dec	$17.5	$(5.0)	$19.6	$(7.3)
FirePond	FIRE	Waltham, Mass.	Klaus Besier	31-Oct	$62.0	$(17.0)	N/A	N/A
HealthAxis	HAXS	East Norriton, Penn.	Michael Ashker	31-Dec	$0.3	$(46.6)	$32.8	$(32.0)
Healthextras	HLEX	Rockville, Md.	David T. Blair	31-Dec	$5.3	$(11.5)	$24.1	$(14.9)
InsWeb	INSW	Redwood City, Calif.	Hussein A. Enan	31-Dec	$21.8	$(36.2)	$18.7	$(43.1)
Marsh & McClennan Cos	MMC	New York	Jeffrey W. Greenberg	31-Dec	$9,157.0	$726.0	$7,681.0	$895.0
Quotesmith.com	QUOT	Darien, Ill.	Robert S. Bland	31-Dec	$8.4	$(13.8)	$12.6	$(16.2)

E-Insurance and E-Benefits Companies

							Market
Company	Location	CEO	Phone	url	Broker	Insurer	Employers
AtBalance	New York	Avi Savar	212-420-1000	www.atbalance.com			X
Aon Consulting	Chicago	Donald C. Ingram	312-701-3000	www.aon.com			X
Benefitmall.com	Dallas	Bernard DiFiore	469-791-3300	www.benefitmall.com	X		X
BenefitPoint	San Francisco	Mark A. Pulido	415-277-5600	www.benefitpoint.com	X	X	X
BenefitPort.com	Greenwich, Conn.	Thomas P. Staudt	203-869-7772	www.benefitport.com			X
Channelpoint	Westminster, Colo.	Kenneth E. Hollen	303-404-2022	www.channelpoint.com			X
Choicelinx	Manchester, N.H.	Donna Lencki	603-413-6000	www.choicenilx.com			X
Definity Health	Minneapolis	Tony Miller	612-836-1600	www.definityhealth.com			X
Destiny Health	Bethesda, Md.	Kenneth J. Linde	301-222-0330	www.destinyhealth.com			X
Digital Insurance	Atlanta	Thomas Usilton	404-531-9933	www.digitalinsurance.com	X		X
DoctorQuality.com	Philadelphia	David J. Shulkin, M.D.	877-633-3923	www.doctorquality.com			X
eBenefits	San Francisco	Jim Ketcham	415-495-7585	www.ebenefits.com			X
eBenX	Minneapolis	John J. Davis	763-614-2000	www.ebenx.com			X
eHealth Direct	Lexington, Mass.	Tuan Ha-Ngoc	781-372-3800	www.ehealthdirect.com			X
eHealthInsurance.com	Sunnyvale, Calif.	Gary Lauer	408-541-4180	www.eHealthInsurance.com	X		X
Employease	Atlanta	Phil Fauver	888-327-3638	www.employease.com			X
Firepond	Waltham, Mass.	Klaus Besier	781-487-8400	www.firepond.com			X
Health Allies	Glendale, Calif.	Andy Slavitt	818-546-4690	www.healthallies.com			
HealthAxis	East Norriton, Penn.	Michael Ashker	610-279-3561	www.healthaxis.com	X		X
HealthExtras	Rockville, Md.	David T. Blair	301-548-2900	www.healthextras.com		X	X
HealthMarket	Norwalk, Conn.	Stephen Wiggins	203-229-1000	www.healthmarket.com			X
HealthSync	Cleveland	Ray Herschman	216-431-1103	www.healthsync.com			X
Highway to health	Radnor, Penn.	Angelo Masciantonio	610-293-2062	www.highwaytohealth.com	X		X
Insurance.com	Newton Highlands, Mass.	Louis Geremia	877-808-3435	www.insurance.com			X
InsureZone	Fort Worth, Texas	J. Russell Reid	866-467-9663	www.insurezone.com			X
InsWeb	Sacramento, Calif.	Hussein A. Enan	916-853-3362	www.insweb.com			X
Lumenos	Alexandria, Va.	Chip Tooke	877-481-1552	www.lumenos.com			X
My Health Bank	Portland, Ore.	David Sanders, M.D.	503-445-6000	www.myhealthbank.com			X
Online Benefits	Uniondale, N.Y.	Alan Cohen	516-414-7000	www.onlinebenefits.com			X
Quotesmith.com	Darien, Ill.	Robert S. Bland	630-515-0170	www.quotesmith.com			X
Sageo	Lincolnshire, Ill.	Tom Schmitz	847-771-7000	www.sageo.com			X
SimplyHealth	Atlanta	Eric Grossman	404-873-2334	www.simplyhealth.com	X		X
UltraLink	Costa Mesa, Calif.	Jeffrey B. Graves	800-257-0011	www.ultralink.com			X
Vivius	St. Louis Park, Minn.	David R. Teckman	877-729-9400	www.vivius.com			X

Focus Individuals	Online Exchange	Other Benefit Related Services	Defined Contribution Model	Application Service Provider	Comments
		X		X	ASP provides customized online wellness solutions for mid- to large-sized employers
X	X	X			Web-based business-to-employee platform that provides benefits and human resource information, financial planning, benefits enrollment.
	X	X		X	Provides service and technology infrastructure to sell employee benefits to small businesses via online exchange
X		X		X	ASP providing employee benefits infrastructure for distribution and management of group insurance and financial products
	X	X			Online portal for brokers, employers and carriers that includes e-quotes
		X			Software applications and services to automate insurance distribution, including Webquote system
				X	Automates benefits process through e-business
					Self-directed health insurance that includes personal health account
X			X		Combines insurance with personal medical account managed by individual
X					Individual and small group medical and dental insurance plan sales and service
			X		Services to select providers based on quality measures
		X			Online human resources system called VirtualHR for small businesses
		X			Automated benefits resources
	X			X	ASP-based transaction platform will be released in mid-2001
X	X				E-quotes from 400 health plans for individual and small group market HR and small group market
		X			Employee benefits administration online
		X			Web-based service which enables brokers to generate quotes and provide information about various insurance products
X	X	X	X		Online marketplace for out-of-pocket medical expenses
X					Marketplace/exchange for consumer-driven healthcare service purchases
X					High-deductible medical, life, pharmacy and disability insurance
X	X	X	X	X	Operating systems enabling the administration of self-directed health plans
	X	X	X		Automated selection of employee benefits
X	X				Online health insurance for international students, business travelers
X	X				Insurance quotes; affiliate of Fidelity Investments
X	X				Online insurance fullfillment company that offers private-label capabilities; insurance.com is customer
X	X				Insurance quotes
			X		Health savings accounts
	X	X	X		Features community healthcare exchanges to link consumers and providers
		X			Automated benefits information accessible from company intranet or the Internet
X	X				Online insurance quotes and policy sales
	X	X			Affiliate of Hewitt Associates providing benefits services to companies and employees
X	X	X	X	X	Online health insurance marketplace for consumers; offers customized simplymyhealth page
		X		X	Online employee benefits management system (formerly ibenefits)
			X		Customized health network creation and enrollment

Personal Health Budgets at Work in The Netherlands

Since the mid-'90s, a new form of health financing and delivery of patient-oriented care has been working in the Dutch healthcare system. Its purpose was to create a choice for certain patients between regular health insurance coverage and an alternative form of care more tuned to the personal needs of the patient. This new approach, known as Personal Health Budgets, allocates an annual spending amount to patients and allows them to purchase the care they need through traditional healthcare providers or to seek alternative care. Currently, the only people eligible to apply for Personal Health Budgets are those requiring nursing care (e.g., home care, nursing home, etc.), psychiatric care, or care for mental disabilities.

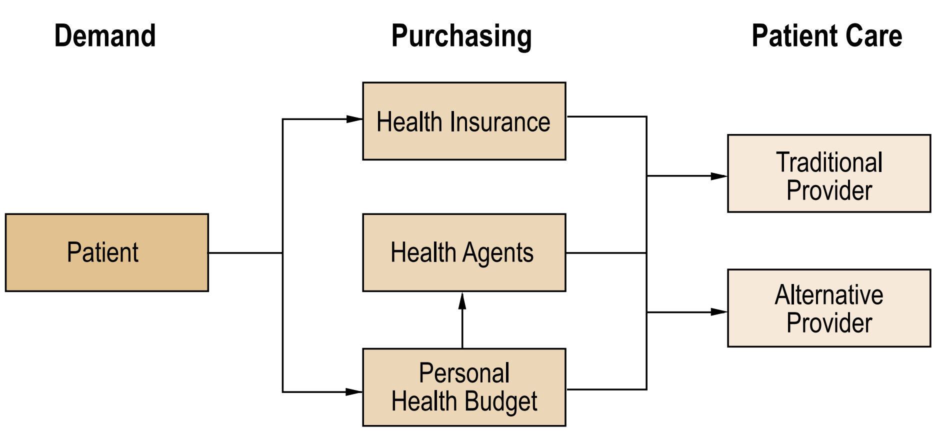
Theoretically, this individualized form of health financing could be applied to any type of care, and in the near future it will probably used in that way in Holland. As part of the discussion to expand Personal Health Budgets, another option being explored is one in which a health insurer would receive the patient's budget, work with the patient to understand his personal care preferences, and implement a customized care approach. The ultimate goal will be to create more competition among health insurers and providers.

Although the concept of individualized health financing and care is quite promising and could be expanded to cover all Dutch citizens, it has not had the opportunity to develop fully due to structural issues, a complex bureaucratic system, and high administrative costs. Because the Dutch healthcare system is a public system in which supply is tightly controlled, it is not yet equipped to support an individual, demand-driven approach. In addition, the administration of Personal Health Budgets has proven to be quite costly due to substantial paperwork requirements and a lack of electronic support mechanisms. In addition to the provider, patients with Personal Health Budgets have to work with three different parties:

- The regional indication body, which determines the form of care to which the patient officially is entitled.
- The social health agency, which performs regional coordination and management of specific forms of care, such as home care, elderly care, nursing homes, psychiatric care, or care for mental disabilities. The dominant health insurer in a specific region normally acts as the social health agency. The patient has to report periodically to the social health agency about the form and amount of care that is provided.
- The Social Insurance Bank, which administers the personal health budget and provides monthly payments. The patient has to report periodically to this body about the status of required payments.

Because of these cumbersome administrative procedures, many patients are using the services of health agents, who manage these procedures and requirements for groups of patients. A health agent may be a not-for-profit agency or foundation or a patient advocacy group. Normally, health agents charge a fee for their services that can be funded out of the Personal Health Budget.

E-health could give an enormous boost to this personal form of care. It would enable consumers to make informed choices with the assistance of a virtual health agent and provide appropriate data links between all parties. It also has strong potential to reduce administrative overhead levels. The ability to achieve successful e-health connections will be a strong factor in the ultimate success of Personal Health Budgets.



Supporting Traditional Organizations with E-Health in Spain

Viasalus, a Spanish multichannel Internet health portal that intends to provide health content and on-line services, will be launched this year by a public-private consortium. Participants include:

- a leading Spanish-language publisher and multimedia company (Planeta)
- a major Catalonian insurance fund (Agrupació Mutua)
- a mobile technology leader (Ericsson)
- PricewaterhouseCoopers Consulting
- an e-health marketing company (Johnson Agency)
- The Catalan Government, represented by the Department of Health, the Radio and TV Corporation and the Telecommunications Centre.

The company also has established strong alliances with leading health providers, academic and research institutions, health professional bodies and patient associations around the country.

Viasalus was born out of the Strategic Plan for Information Society of the Catalan Government, which aims to improve local internet health content and online services, but also intends to offer its model and services to health agents from other regions and countries. Because of the wide opportunities of the model, public-private ownership was considered to be the best option for the initiative. Under this approach, the government will be the guarantor, sponsor, and promoter of quality and ethics on the portal, whereas strong private companies will provide management support, financing, flexibility, and operational know-how.

Since Internet maturity among healthcare participants is at an early stage in Spain, Viasalus wants to be the meeting point and intermediary for health agents (including health insurers, providers, pharmaceutical companies, patient associations, etc.), citizens and other professionals. In a first phase Viasalus will develop services for health agents to support their relationships with clients. In a second phase, the company will develop business-to-business solutions between health agents.

Viasalus is a pure player working for the traditional health industry with a business model based on improving efficiency and client service. The company believes that the main opportunities for e-business still remain in the traditional health industry, and that the best way to succeed as an e-health player is by supporting health agents' core business processes with new technologies.

Among other efforts, Viasalus will offer a marketing channel to private medical insurance companies in Spain, and will also be a channel for disease management programs supported and financed by the same insurers. Insurers expect to use the portal to provide physicians (and eventually other health professionals) with protocols, evidence-based medicine and continuous medical education. In the long term, insurers will use it to manage transactions, including referrals, authorisations and payments.

Viasalus also will be an application service provider to the Catalan Government's health insurance body (Servei Català de la Salut) to strengthen its relationship with citizens and healthcare professionals. Some of the services projected to be online for citizens include registering or changing an individual's administrative data, changing primary care physicians, providing disease management services, promoting health education, and advising and assisting them in the use of different health resources.

Notes:

(1) Web usage for benefits transactions up dramatically, survey finds, CCH Employee Benefits Management Directions.

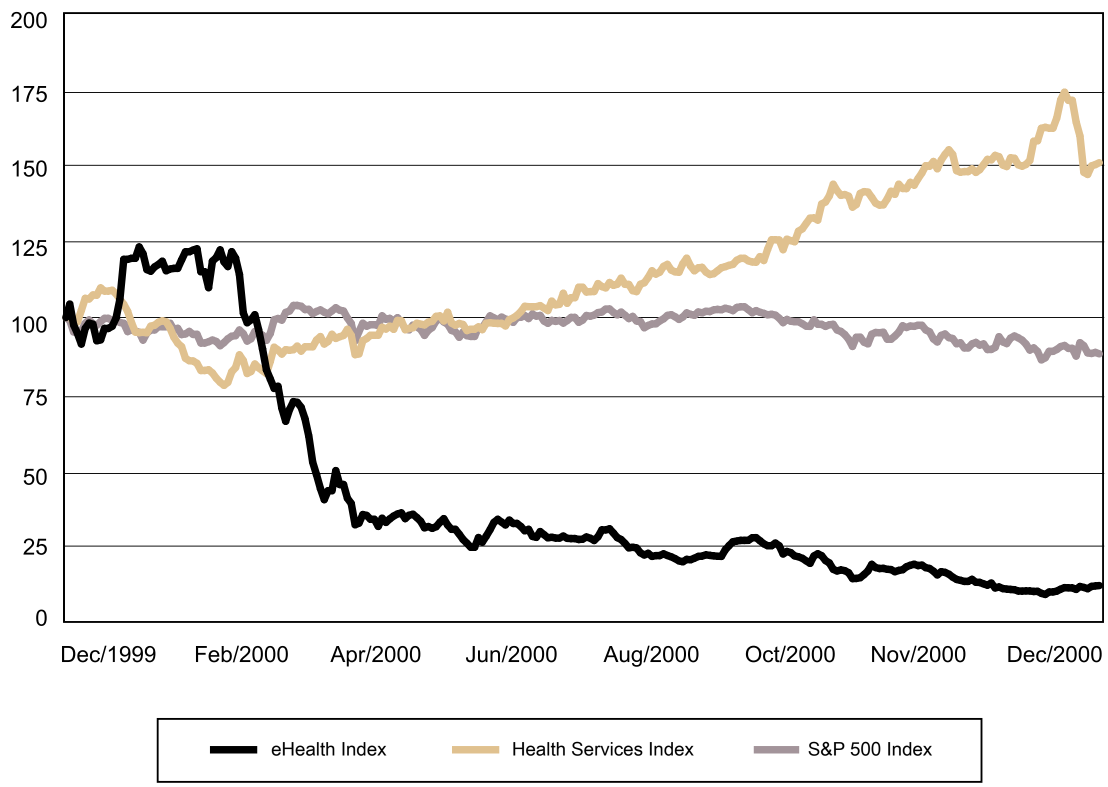
(2) Health Confidence Survey, 2000, EBRI.

(3) International Society of Certified Employee Benefit Specialists, December 2000.

(4) Recent Trends in Employment-based Insurance, Robert Wood Johnson Foundation, 1997.

(5) Airline uses e-auction for HMOs, Business Insurance, Aug. 23, 2000.

Quarterly E-Health Stock Index



From bad to worse: e-health stocks declined almost 50% in the fourth quarter of 2000, and that decline was from a starting point of an 80% decline for the year through the end of the third quarter. With no public or private capital available, many an e-health company board of directors spent the fourth quarter deciding among various grim options including sell, merge, beg existing shareholders for additional capital or close up shop.

Shattuck Hammond Partners' e-health Index is designed to reflect the stock market performance of Internet-related healthcare service-focused companies. The market capitalization-weighted index is comprised of a representative selection of eHealth companies across each of the Internet subsectors including content, connectivity, B2B, B2C, and eCare. Likewise, Shattuck Hammond's Healthcare Service Index is comprised of a representative selection of healthcare service companies across each of the service sectors, including, managed care, hospitals, long-term care, assisted living, home health, laboratory management, physician practice management (PPMs), behavioral health, preferred provider organizations (PPOs), rehabilitation/physical therapy, and pharmaceutical benefit management (PBMs). These two indices are contrasted with the S&P 500, a broad market index of 500 of the largest companies as selected by Standard & Poors. All three indices are "indexed" back to January 1, 2000 and, therefore, illustrate public market volatility during that period of time.

E-Health Affiliations, Partnerships and Mergers

Looking for a Bargain? Consider E-Health.

Pity the poor e-health company that has to raise additional funding from public, private, angel or venture investors. The latest round of deals has begun to reflect the desperation of some e-health companies to secure capital at almost any price.

Medscape recently raised $17.8 million by issuing 5.8 million shares of 9% convertible preferred stock at $3 per share plus warrants for 4.4 million common shares at the trifling exercise price of $0.01 per share. Cybear acquired Mediconsult for about $0.06 per share and agreed to provide interim financing. An earlier bailout of Drkoop.com involved issuing preferred shares convertible into 78.6 million common shares at $0.35 per share.

No wonder the folks at HealthMarket, the defined contribution company, tell us that the company put any thoughts of raising additional capital on hold for fear of having to give up too much of the farm in return. With the market cap of 28 public eHealth companies down 88% in 2000, it's no surprise that funding for e-health ventures has dried up. According to Corporate Research Group's latest report, Seizing the eHealth Market Opportunity, e-health companies raised just $484 million from public offerings in the first nine months of 2000, compared to $1.218 billion in all of 1999.

Wall Street, meanwhile, is officially viewing the beaten down e-health sector as a contrarian play. Now that so many have lost their shirts, savvy investors able to spot the winners at these depressed prices will enjoy a hefty payday down the road.

Drug giant Merck & Co., for example, has formed a new capital ventures unit with plans to sink up to $100 million in private e-health companies involved in e-commerce, distribution, and delivery of pharmaceuticals. Per Lofberg, chairman of the company's Merck-Medco pharmacy benefit management juggernaut, has been named president of the new venture. Given that established drug industry players like PBMs already appear well-positioned to dominate the business-to-consumer e-commerce segment, Merck's new strategy may give it an inside track on some key pieces of the puzzle at bargain prices.

Another e-health deal we've got our eyes on is Per-Se Technologies' plan to purchase Health Data Services, an EDI clearinghouse for hospitals, at the reasonable price of $25 million – or about two times revenues and eight times earnings before interest, taxes, depreciation and amortization. HDS processes about 30 million claims annually and gives Per-Se a much bigger footprint in the hospital and large group EDI marketplace.

Overall, our guess is that 2001 will see a flurry of M&A activity-mostly involving traditional, bricks-and-mortar healthcare institutions buying up e-health start-ups at bargain prices. The stars are perfectly aligned. Traditional healthcare companies are looking to jump-start their lagging e-health efforts. E-health start-ups are running out of money and looking for a savior. It's let's make a deal time.

(This analysis is provided by Corporate Research Group, Inc., New Rochelle, N.Y., publisher of leading heathcare newsletters and research reports, including eHealth Insider, Managed Healthcare Market Report, and Seizing the eHealth Market Opportunity. For more information on products, custom research and consulting, contact Carl Mercurio at 914-235-6000 or visit www.corporateresearchgroup.com.)

E-Health Affiliation and Partnership Activity: October-December 2000

Date	Company	Company	Comments
27-Dec	Diabetic.com	Home Diagnostics	Strategic alliance to distribute co-branded diabetes products
22-Dec	HealthAtoZ	IQHealth	Alliance to add HealthAtoZ applications to IQHealth product line
21-Dec	Medscape	Glaxo Wellcome	Agreement by which Medscape will produce disease management tools
21-Dec	adam.com	John Wiley & Sons	Strategic partnership to distribute adam online anatomy
21-Dec	Descartes Systems Group	BCE Emergis	Strategic alliance to provide Internet logistics solutions
19-Dec	Pointshare	Payerpath.com	Strategic alliance concerning claims management services
19-Dec	Healthwise	British Columbia Ministry of Health	Content deal for distribution of consumer-related health information
13-Dec	Hi-Ethics	TRUSTe	Partnership to develop a seal of approval program for health-related websites
12-Dec	Anthem Blue Cross & Blue Shield	IMcKesson	Disease management agreement concerning nurse care management services
08-Dec	Sickbay Health Media	MPI Investment Corp.	Strategic relationship involving $25 million investment by MPI
08-Dec	Telemedicine Group	Medscape	Strategic agreement concerning provision of virtual housecalls
28-Nov	CancerConsultants.com	HealthGate Data Corp.	Strategic partnership to provide patient-oriented cancer content
28-Nov	Oncology.com	Health Grades	Strategic alliance concerning access to physician ratings and the provision of content
21-Nov	LanVision Systems	Provider HealthNet Services	Services agreement concerning LanVision's electronic medical record product
14-Nov	Athenahealth.com	CodeCorrect.com	Strategic alliance concerning coding database
10-Nov	Humana	AdvancePCS	Partnership to launch a pharmacy website for Humana members
10-Nov	DoctorSurf.com	MDLinx.com	Partnership to provide content for website
09-Nov	Eastman Kodak	Novation	Partnership to offer medical equipment
06-Nov	Cybear	National Data Corp.	Partnership concerning claims submission
26-Oct	MedicineNet.com	MyDrugRep.com	Partnership to develop content
24-Oct	Oxford Health Plans	Medsite	Partnership to provide online procurement services for physicians and other professionals
20-Oct	HealthSouth	Medimorphus.com	Partnership concerning online recruiting
18-Oct	WellPoint Health Networks	EarthLink	Partnership concerning health insurance
13-Oct	Medem	VantageMed	Partnership concerning physician practice management
10-Oct	WirelessMD	PayMD.com	Partnership to develop wireless handheld device for physicians
02-Oct	MedAssets.com	Extendedcare.com	Strategic alliance to serve the alternate site healthcare market

E-Healthcare Mergers and Acquisitions Activity: October-December 2000

Date	Acquirer	Target	Value
29-Dec	NaviMedix	AmpMed	Not disclosed
27-Dec	Eastman Kodak	Lumisys (including Auntminnie.com)	$39 million
18-Dec	HealthCentral	more.com's Comfort Living division	About 5 million shares of common stock
13-Dec	Sickbay Health Media	North Vermont 12	Not disclosed
07-Dec	GeoAccess	Sweetwater Health Enterprises	Not disclosed
06-Dec	TriZetto Group	Resource Information Management Systems (RIMS)	$3 million plus 2.6 million shares of stock
05-Dec	ProAct Technologies	MyDailyHealth	Not disclosed
04-Dec	Quadrant HealthCom	MediConsult.com's HeartInfo.org	Not disclosed
30-Nov	Encounter Care Solutions	Embion	Not disclosed
27-Nov	Cybear	AHT	$4 million
20-Nov	Salu	Medsprout.com	Not disclosed
15-Nov	IknowMed	CancerSource.com	Not disclosed
13-Nov	WGC Enterprises	RxSheets.com (subsidiary of MedCare Technologies)	Not disclosed
03-Nov	Drkoop.com	drDrew.com	$150,000 cash plus 1.58 million shares of stock
02-Nov	Encounter Care Solutions	Embion	Merger
25-Oct	HealthCentral.com	More.com	5 million shares of stock
10-Oct	I-trax.com	MyFamilyMD	Not disclosed
05-Oct	Global Health Care Exchange	CentriMed	As much as $30.7 million (contingent on performance)
03-Oct	Stayhealthy	MyLife.com	Not disclosed
03-Oct	TriZetto Group	Erisco Managed Care Technologies	12.14 million shares of stock
02-Oct	Salu.net	Allergydirect.com	Not disclosed

E-Health Falls from Grace with Venture Capitalists in Third Quarter

Venture capital investments in the healthcare services industry continued to slow in the third quarter of 2000 after peaking in the first quarter of the year, according to the latest results of the PricewaterhouseCoopers Money Tree™ Survey. In the latest quarter, 43 healthcare services companies received total venture funding of $399 million, down 10% from the prior quarter and down 24% from the record-setting first quarter.

The industry is nevertheless on track in 2000 to exceed total investments in 1999. Total venture funding across all industries also fell slightly from the prior quarter, with $17.6 billion going to 1,284 companies, according to the survey. Investments in healthcare services companies represent just 2.3% of that total, a marginal improvement over the second quarter of 2000 when the share of all venture funding going to healthcare sank to an all-time low of 2.2%.

Following the trend that was already painfully evident in the public markets in the second quarter, e-health companies fell out of favor in the third quarter among the venture capital community as well. Of the total investments in healthcare, less than 49% went to Internet-related ventures for the quarter, down from 67% in the prior quarter. The top five investments for the quarter all went to healthcare information technology companies, although only one is an Internet venture. However, two are in the fast-growing handheld sector, which has the potential for future Internet applications.

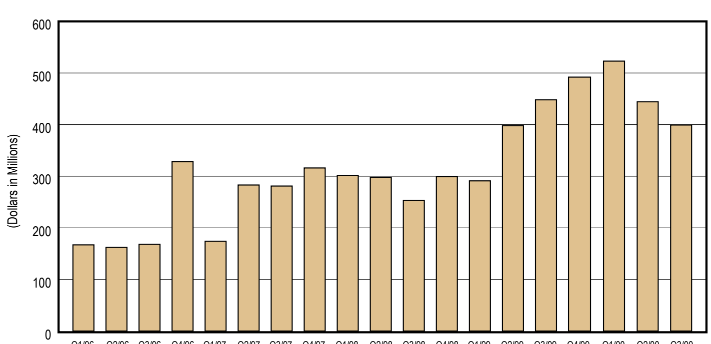
The five largest healthcare services deals:

- Onehealthbank.com, Cranbury, N.J., web technology company that enables online financial settlement of healthcare transactions at the point of service ($42 million)
- ePocrates, San Carlos, Calif., develops handheld clinical applications for physicians ($35 million)
- Parkstone Medical Systems, Weston, Fla., develops point-of-care electronic prescription pad, referral, test, and hospital charge data management tool based upon palm-sized computer technology ($31.5 million)
- Provider HealthNet Services, Dallas, provides information technology, medical records and other business process outsourcing services to hospitals and other healthcare providers ($26.6 million)
- A4 Health Systems, Cary, N.C., provider of computer-based patient record systems ($25 million)

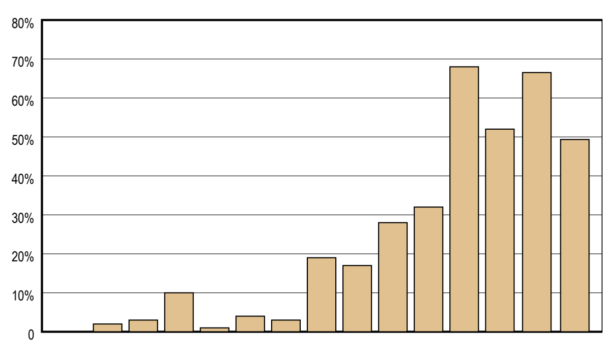
Thirty-six venture capital firms reported making healthcare service investments of at least $5 million during the first nine months of 2000. The five most active firms by deal count during this period were:

- Acacia Venture Partners, San Francisco (10 deals)
- Salix Ventures, Nashville, Tenn. (10 deals)
- Sprout Group, New York (9 deals)
- Pacific Venture Group, Encino, Calif. (9 deals)
- U.S. Bancorp/Piper Jaffray Ventures, Minneapolis (8 deals)

Healthcare Services Venture Capital 1996 - Q3 2000



Percent Healthcare Venture Investment in Internet



Source: The PricewaterhouseCoopers Money Tree™ survey is conducted under the sponsorship of the Global Technology Industry Group and Shattuck Hammond Partners. Shattuck Hammond Partners is the healthcare-focused division of PricewaterhouseCoopers Securities LLC.

Healthcare Surfers Like WebMD and NIH

After hitting a peak in August, traffic to the top 10 healthcare websites seemed to just bump along month by month. But, a December resurgence may indicate that Americans are increasingly searching for healthcare information on those sites again.

The leader continues to be WebMD, which logged 9.4 million unique visitors who averaged a bit over 10 minutes each on the site, according to PC Data Online. WebMD took the lead in healthcare website traffic in September after buying onhealth.com, the previous leader. WebMD also leads in overall reach, a metric calculated by dividing the number of unique users by the total estimated population viewing the Web during the time period.

However, an interesting side story is how a government website continues to move up the charts. Nih.gov, which was the seventh most active healthcare website in June 2000, has steadily moved up to number two. Don't look for it to overtake WebMD anytime soon; the e-health giant continues to draw five times the eyeballs.

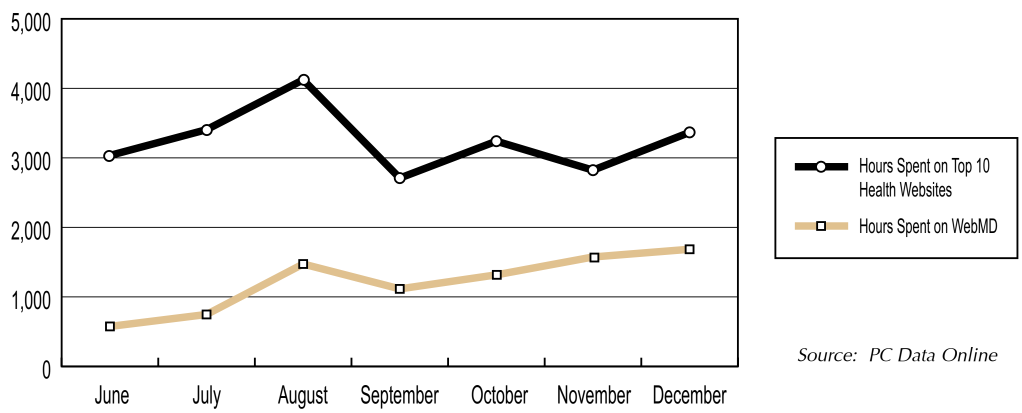
Interestingly, another government site – hcfa.gov – broke into PC Data Online's top 25 health sites in December at the number 25 slot. Perhaps it was the release of the HIPAA guidelines that drew 167,000 unique users to the site.

Top Healthcare Websites, December 2000

Rank	Website	Reach	UniqueUsers (000)	Page Views (000)	Hours (000)	Minutes per User
1	webmd.com	9.9%	9,393	108,967	1,685	10.76
2	nih.gov	1.8%	1,710	19,939	414	14.53
3	drkoop.com	1.3%	1,262	12,261	209	9.94
4	healthandage.com	1.3%	1,258	4,339	61	2.91
5	allhealth.com	1.3%	1,193	8,859	129	6.49
6	healthscout.com	1.2%	1,148	6,530	146	7.63
7	mayohealth.org	1.0%	963	5,212	105	6.54
8	intelihealth.com	0.9%	832	4,587	103	7.43
9	medscape.com	0.8%	795	12,179	257	19.40
10	merckmedco.com	0.8%	715	14,207	258	21.65

Source: PC Data Online

Website Viewership



Source: PC Data Online

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