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Session 72PD
E-Business Trends For Health and Group Nonmedical Business

Track: Health/Computer Science

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Summary: This session explores current and projected Internet trends and how they may change the way the group health and nonmedical business operate.

MR. THOMAS R. CORCORAN: We have three very distinguished speakers here today. The first will be Michael Taylor. He's a consultant, health and welfare principal with Towers Perrin's Boston office. He's got 10 years as national practice leader for delivery services and, more recently, he became a leader of Towers Perrin's Health and Welfare E-Business practice. He worked mostly with *Fortune* 100 clients, such as Microsoft, Verizon, GE, and GM.

He'll be followed by George Hawkins. George is a Fellow of the Society and a member of the Academy. Originally he was a group actuary with a small mutual company in Virginia, and later became senior vice president and actuary of Dun & Bradstreet Planned Services, the largest third-party administrator of small group health plans. Five years ago he became a consultant in the group division of Wakely & Associates, and when Selectica Inc. required the spin off of Wakely Software last August, George became vice president of actuarial services for Selectica's e-insurance division.

†Mr. Michael Taylor, not a member of the sponsoring organizations, is a consultant and health and welfare principal with Towers Perrin in Boston, MA.

Note: The chart(s) referred to in the text can be found at the end of the manuscript.

Our final speaker will be David Tuomala. He's an FSA and director of actuarial services for Definity Health. He's worked as a health actuary for more than 10 years. Previously he worked with Blue Cross/Blue Shield of Iowa and provided actuarial support in areas of large- and small-group insureds, individual, Medicare supplement, and managed care. He's currently vice chair for the Course 8 Health, Group Life and Managed Care Exam committee for the Society of Actuaries. Mike is describing what the customer wants. George is describing how to distribute it, and David how to implement it.

MR. MICHAEL TAYLOR: As Tom said, I really feel that my job here is to set the stage in terms of what the employer/customer is looking for.

As he said, my experience is with large group customers, so I apologize if I'm not oriented perhaps towards the small or middle.

Today you're going to get an employer viewpoint on e-health benefits. You're going to know how they're distributed, and you'll see a framework of how employers are adopting e-insurance benefits.

Internet as Agent of Change

Clearly the Internet is causing a dramatic evolution. We've all been experiencing some of its forces both in our personal and professional lives—searching for costs, looking for information, the potential for lowering transaction costs, and a real sense of broader communication. How many of you for example, with the tragedies of September 11, jumped on the Internet to get your information? It's a different world than we had maybe five, 10 years ago. How many of you are purchasing late at night or going to look for things late at night? These are forces that are very, very strong.

I think realistically one can say that there have been some changes in the past six months. I think one of the things that we're here to talk about today is that some of the promise of the Internet has not manifested itself.

But it's not quite as dramatic as you might think. I think it's very easy to generalize what's going on in the Internet. It's so broad and so deep that you have to be careful.

For example, we recently did an e-mail survey of large employers and some of our clients. One of the things we found is that you have to keep your fingers on the pulse of what is going on in the Web world much more closely than you have in the past, because you'll miss things. For example, we asked some people how they were feeling about the Web—was it meeting their needs, was it living up to the promises?

The good news was that most people still felt that the Internet and the Web were going to change their businesses significantly. They didn't quite use the word

revolutionize as much as they did in the past, but they clearly feel very strongly that it's going to change their business here.

Employer interest in the Internet varied tremendously on the strategy and style of execution. Here we've tried to show you a continuum (Chart 1). You've probably seen this a million times already, so I don't want to dwell on it too much.

In the early days, the Internet was really offering access to information, providing a means to education. As we move to the right of the continuum, we're getting more involved with transactions and interactions, and then finally we'll be able to provide and deliver services through the Web.

Much of the transaction stuff actually is here already. Many of the health plans have access to claim information. You can get ID cards, you can find your position, and in some places, you can actually make appointments and see doctors.

One of my clients in the Seattle area, and the company actually conducts virtual clinics for its employees, because the physicians around their campus have so many of their members. They're so savvy, and they have access to so much technology that they're willing to invest to do these virtual clinics. Employees have little desk cameras and they have conversations with their physicians sort of in a virtual-clinic style.

Hopes for the Web

In light of some of these realities, I think the employer market in general is hopeful that the Internet will help meet their objectives in health care here. I put down four objectives here (Chart 2), and I think in this kind of environment, these four are critical to what's going on here.

Clearly this is your stock in trade around cost escalation. We're seeing a tremendous amount of cost escalation, and employers are looking to find out what's driving it. They want it to be more efficient, and they hope to drive down some of the prices by doing that. They also, to some extent, want to understand how health care gets delivered and what actually is driving costs. Not just price—is it utilization? What is it?

Employers really are looking at the Web to help them get involved potentially with health care management. Now, not every employer wants to do it, but there are some that do. So they're looking to see how the Web can work for them in getting more of a hands-on approach with health-care management.

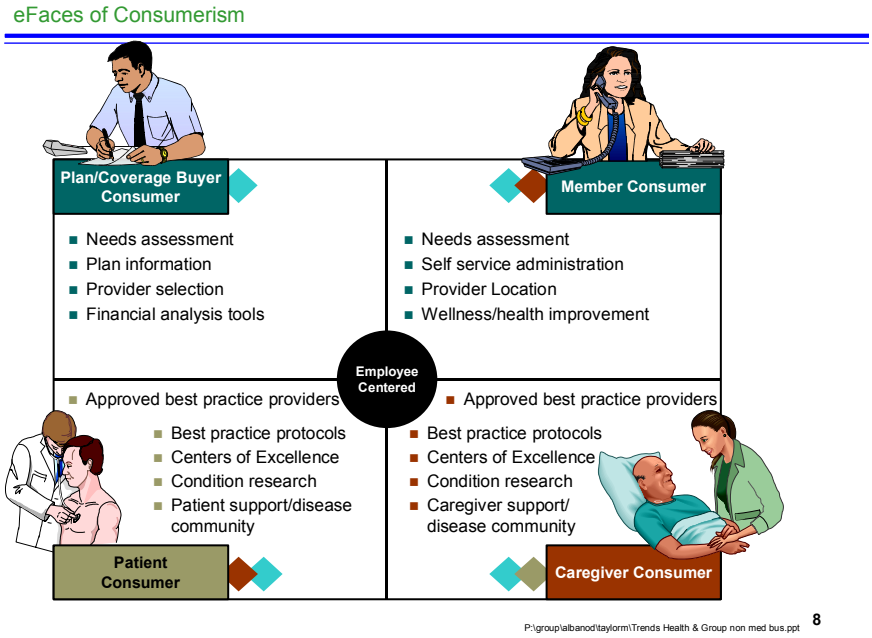
I think also if we move around the circle here, they also are looking to implement public policy. There is a sense that the Web may change the individual insurance market. That's a huge thing, and it is open to a lot of discussion. As the individual market gets rolling, if you add that to all of the other market segments, there is a potential to influence public policy that we're beginning to see in the Health

Insurance Portability and Accountability Act of 1996 (HIPAA).

The Consumer Angle

To some extent, it's very hard to separate the Internet from consumers (Table 1). The whole idea is to allow consumers to have more efficient and greater access to health-related information. The results of our very recent track survey show that while employers were hopeful that Internet- enabling certain processes or adding Web technology to their businesses would produce certain expectations, they have not totally been there. There is a sense in the last six months that the Web has not necessarily met their expectations fully.

Table 1



However, the good news is, they're not completely abandoning it. They're willing to allow that as sort of a growing pain. They are asking the hard question, of course, about "What's the return on investment for the Web?"

While their expectations haven't been met yet, there's optimism that they will be, and that perhaps the Web is more valuable as a management tool in the sales distribution channel. That's a fairly provocative statement to have, and I think the question we need to discuss is: What is the real value of the Web here?

Developing Portals on the Web

How are portals developed by employers? (By portal, I mean clearly that the part of the Web that faces the customer.)

We feel very strongly that an employer needs to segment its customers into various groups here. We've got basically four customers. For example, in Table 1 in the top left, that coverage really is designed to face the benefit manager and the vice president of human resources, and they have different needs from the one on the right-hand side, which is the member consumer. They may need plan information at an aggregate level around health plans. They're also interested in the financial analysis of it. On the right-hand side, the member consumer really is more concerned on a personal level about self-service administration providers and wellness and health improvement.

On the bottom left, we sense there's a change in need when a member goes from being a member to a patient; and perhaps that's one of the dynamics that we are just beginning to understand better—what are the needs of a person when he or she is in acute crisis or some kind of health condition that's impacting life, and that person looking for more information around centers of excellence, conditions, and support and disease information.

The one on the bottom right is one that we're just starting to investigate. This is the role of the caregiver consumer. As the population ages, a lot of us have another role, which is that of a care-giver, either for an elderly parent or a sick child or something, and those needs are different from what they would be for us as individuals.

We did a survey in January 2001, and we looked again at mostly our employer clients—what were their most important health benefit issues? No big surprise here. Quality, cost, and administration topped the list. You know, this was at a fairly high level of importance and clearly ranked first, second, or third with most of the employers that we talked to.

E-health

The interesting one was e-health, which wasn't really on the radar screen about a year ago. E-health is beginning to emerge as a benefit issue for large employers, and it has jumped out of the gate, with 45 percent of respondents calling it "highly important." Eight percent of those responding said they would rank it first, second or third.

In the same survey, we asked them to define e-health. Again, there were no surprises here either. The continuum that I showed you before is exactly the way that employers are viewing e-health. They look at it as a way of getting health-care program information. They look at it as a way of simplifying administrative tasks, whether that's claims processing, ID production, or other things. Finally, they're looking at it as a connection to their health plan vendors.
They're also looking at quality data, online appointments, and push technology.

Portals

One thing that may surprise you is that there is a tremendous penetration of portals

in employers, particularly large employers. Most employers have a portal. In many cases, the portal is not specifically designed for either benefits or health, but around the business. Approximately 60 percent of them have portals already.

Of those 60 percent, around 91 percent of them actually have a health portion of the portal on that. That could be as sophisticated as having a totally functional framework around health benefits, a way to do enrollment, or the ability to get information on the plans. Or they could be as simple as a straight link to a Blue Cross/Blue Shield plan or whatever it is.

The real message here is that there are a lot of portals and connections already in place, and one of the things we as consultants have to do first is track down how extensive that is already.

One of the embarrassing situations we found ourselves in when we started to design these portals for our clients was that we as a company, Towers Perrin, had several links to health plans that nobody knew about. I don't know how they got there, but if you wander around the Towers Perrin Web site, you can find connections to Aetna and a bunch of things, and we still don't know how they got there, but they're there. Take a look at your Web site, because you might find that.

Self-service

Self-service is a big part of the Web. How important is it? Most employers think that self-service empowers consumers. It can improve employee satisfaction, and it also has the potential to cut costs. These are important things for large employers.

We're in a different world today than we were in perhaps six months ago, when the labor market was a lot tighter; but there's still a sense, I think, with large employers, that they need to attract and retain key talent.

One of the things I'm trying to convey is that the Web is broader than just delivering services. It has a variety of uses with large employers, but not without concerns. This is not a perfect solution, and there's no silver bullet.

Employers do have concerns about Web-enabled self-service tools. They're concerned about the site not being designed properly, because if you've already got a portal in your business, and you've got links that aren't particularly well thought-out, you can get into some interesting situations.

For example, you can have an employee at the work site going through the portal, and he finds information about certain treatments and benefits and immediately wants to access them, not realizing that he's not covered for those benefits. How do you explain that away?

Or take conflicting information. There are many recent surveys that say there's a tremendous amount of health-care information on the Web that's not reliable, and that's a problem. I think the issue of not all employees having computer access is a

big one. That's really the first roadblock that we run into when we talk to employers about putting health benefits on the Web site.

You'd be surprised how many of your employees have access either through work or at home. We have a trucking company that we work with that we thought, "They're all truckers, how are they going to have access?" Guess what? They all have computers in their cabs, and they e-mail their families. There was a lot greater penetration than we thought.

Some companies are even facilitating that by giving employees computers. In the last few months, several large companies—Ford and GM, for example— have been buying their employees computers to facilitate the delivery of health benefits on the Web. Then there are other issues—HIPAA compliance and administrative costs, in the short run.

E-benefits Distribution

How are e-benefits distributed? A vast array of companies have emerged in the past five years (Chart 3). As somebody politely pointed out to me when we were preparing for this, I have a few companies on there that aren't there any more.

It's not unusual to see a company that was focusing very much on wellness and self-help, realizing that it couldn't generate revenue and couldn't get venture capital; so it morphs over into the transaction business. The company will either do it by just going over there or by merging with or purchasing another company. There's a tremendous amount of movement within this slide. It's a nightmare, quite frankly, to try to keep up with it.

We also think there are going to be some alliances and some more start-ups that try to address some of these employer needs. It's actually quite interesting when you talk to some of these companies about how much research they've done on the needs of the various employers. If you remember, I've talked about how we've segmented employer needs into four phases; you can segment it even further based on the industry, and we're surprised sometimes at the lack of understanding of the needs of those various groups. I think that's contributed a lot to the failure of some start-up dot-coms.

Product Distribution

All of us think, to some extent, that the Internet is going to be important in distributing products. I think we're going to find our way through and the survey that I just cited conflicts a little bit with this, but this is the research that was done by Gomez Advisors. You can see that there's a fairly optimistic view of how products will get distributed through the Internet (Table 2). People are cautious around insurance—perhaps 15 to 28 percent of premiums in the year 2003. But they're pretty bullish about brokerage, credit cards, and some of the consumer banking.

Table 2

The Internet will be Important in Distributing Products - Even Insurance

ILLUSTRATIVE

Financial Services Online (U.S.)

Product	1999	2003E
Insurance		
■ Term Life	■ <1% of premiums	■ 15% – 28% of premiums
■ Auto/Homeowners	■ <1% of premiums	■ 15% – 28% of premiums
■ Commercial Lines	■ <1% of premiums	■ N/A
■ Health	■ <1% of premiums	■ N/A
■ Annuities	■ <1% of premiums	■ N/A
■ Disability	■ <1% of premiums	■ N/A
■ Permanent Life	■ <1% of premiums	■ N/A
Brokerage	■ 38% of retail trading ■ Approximately 5.7 million customers	■ 50% – 75% of trades ■ 44 million customers
Credit cards	■ 10% of new accounts opened online	■ 30% of new accounts opened online
Consumer banking	■ <10% of households	■ 20% of households
Mortgages	■ 0.5% of origination volume	■ 15% of origination volume

Sources: Gomez Advisors; Morgan Stanley Dean Witter.

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Employer Roles

At Towers Perrin, we talk to our employers about the model that they can think about for incorporating the Web into their benefit-delivery and health-care strategies.

Active, Dominant Role. The first one is really one in which an employer is taking a pretty active role both in strategy and role—the employer is not willing to let go of the traditional way that it has delivered benefits. The business feels very responsible for delivering benefits and has a very strong need to connect with its employees. So it's very much employer-sponsored and branded.

In that particular example, everything is driven through the employer portal. Everything goes to the employer portal, and everything behind it to some extent is nonbranded or is designed to really downplay the role of the vendors.

For example, in many cases, the Web site will have only the employer brand; it would not have the brand of, say, an Aetna or a disease management company. There are a variety of combinations in there, but the whole idea is that the employer still wants to maintain a very strong role in the delivery of health benefits. There are some customized solutions the company can do using the web, so it can disaggregate.

Active, Collaborative Role. In the next one, an employer continues to play a role

in this to some extent but is more willing to allow vendors to continue to brand their own qualities.

Passive Role. The last one involves an employer exiting its role in delivering health care; basically, it is considering the idea of giving its employees a subsidy and allowing them to go out either to the individual market or self-selected group market to purchase health care. The employer is basically out of the business, to some extent.

Benefits Delivery Framework

In one of the frameworks that we use with one of our employers for the portal that faces the employee, the whole idea is to have a trusted, secure place for the employees to get all of their information about health care (Chart 4).

We've organized it around the way that an employee wants to have access—the employee wants information around his or her benefits. That includes coverage, enrollment, and information around contacts for their health plans. That's the "My Benefits" part.

The "My Healthy Life" framework is designed when an employee is not in any kind of acute crisis or condition; the employee is looking for information either for him or herself or for a dependent. That person wants to get their health care content, find out about diseases, and want to do some health appraising with some kind of tool.

The third one is "Online Health," which to some extent is when the employee is in an acute crisis, and wants to get access to the delivery system. So it has connections to appointments, it has connections to nurse lines; it has connections to disease management programs, those kinds of things.

Employer Framework

The benefit managers have different needs, so their portal looks different. For example, they're going to want information on aggregate plans, costs, and modeling tools. In this case, we have one that's designed to have an ongoing connection with consultants so that we can share files, tools, and those kinds of things. Again, the whole point here is that there are different needs for different groups.

We think there's going to be some consolidation. No big surprise, you're seeing it already. We think the business models will continue to grow. This pressure to get revenue and show an ROI is huge. It's the only way that people get venture capital.

We also think that the role of group-health and medical businesses will start to change. With regard to aggregation, which is kind of where the health plans are now—most of the large national health plans are trying to provide as much as they can and grab as much space as they can to keep everybody out. We're not sure that that's necessarily the best for our employers.

MR. GEORGE HAWKINS: First, I'll say a little bit about our company, Selectica. Before acquiring Wakely Software last August of 2002, Selectica was and still is mainly an Internet-selling company, and that's the perspective we're coming from. Selectica developed applications for a lot of big-name companies to sell products and services and complex products over the Web. .

Today's topics will include trends, what these trends mean to actuaries, what actuaries should be thinking about in this context, and some strategies. I think we have four or so example applications that we'll talk about.

The Trends to Watch
So what are the trends? What's been going on? Coming from a group-insurance perspective here, it's a bit of a different angle from what Mike was talking about—he's dealing with the employers.

Web-based Quoting Tools. We provide quoting tools that are Web-based, replacing rating disks that you might send out to all your brokers around the country every quarter or so to say, "Here's how you can get your proposals done."

Web-based Enrollment. Web-based group and member enrollment is coming as more and more people get computer access, as more and more people are using this. It's certainly not a replacement for the paper forms quite yet, so it will be sort of an adjunct.

New Business. With new business and renewal quoting, if you're sending out renewals to a company, it's not a whole lot different from sending out a new business quote and getting that information. It's basically, "Here are the benefits that we'd like to provide for you, and here's what it's going to cost you." If you have a new business in renewal quoting, you want to make sure that you're consistent with the rate calculation process between the two.

Web-based, Web-enabled Applications. I'll mention Web-based versus Web-enabled. If you try to take legacy systems and Web-enable them, you do run into a lot of performance issues. It's maybe a lot better to go with Web technologies to develop any new kinds of things.

E-brokers. Another trend we're seeing is e-brokers—secondary channels to the main-channel distribution that you've had for years. It's becoming a much bigger part.

I saw a presentation yesterday that blew me away. A company is now issuing policies over the Web and is even sending the policy that's issued electronically. You don't send any paper. It's e-mailed back to you in a printable format—it was quite an interesting presentation.

With e-brokers, you'll usually have a simplified subset of products, because they

don't want to try to duplicate everything you have. They're doing the electronic version of spreadsheeting from years ago, and it's also very efficient to try to tie back into your own Web site if you're the company that's being part of the spreadsheet.

In pushing data entry closer to the customers—take enrollment, for example—it's a lot easier for somebody to put in his own date of birth than to write it down on a piece of paper and have somebody transcribe it later. Another very important thing is enabling technology for defined contribution (DC) plans, or just plan selection if there's a multiple-choice situation. You can have a wizard to ask questions like, "Is it important for you to have a smaller out-of-pocket contribution, or is it more important for you to be able to select your own doctor?"

Web Pointers for Actuaries

So what do actuaries need to do to consider all of these things? First, one very important thing is if you have a lot of different distribution channels, you want to be consistent across these channels. You might have one brokerage distribution system. There are a lot of mergers and acquisitions going on these days, and if company A acquires companies B and C, will companies B and C have their own rating? They were just acquired, and they have a different distribution channel, and some people may have been part of a couple of those distribution channels. So you need to try to maintain consistency among all those different channels and also with new business and renewals.

If you're getting quotes over the Web, a lot of times you're calculating these things on the fly, and there are some things that are peculiar to the group, like the census and location and perhaps industry and rating factors such as that.

In some cases, there are a lot of things on the plan design that are very complicated parts of a rating algorithm, and you may not want to recalculate those all the time. You calculate some of the more common ones and have them there—we have this combination calculated already for what we refer to in our company as the "benefit risk factor." You can have those precalculated and do your rate calculations and have the quotes come back a lot more quickly.

If you do have simplified calculations to try to save time and performance and that sort of thing, you suffer from anti-selection. Unisex rates are a good example of that. You want to be able to have your whole rating engine there; you don't want to have to sacrifice because of performance issues.

Another thing that you can be aware of is that if someone requests quotes and does all the things to get the quote produced, you can have the underwriter look at it right there online, and it's miles better than the old paper-form thing in which you send in some census data and a bunch of stuff on paper into the group field office and mail it back and all that. That seems to be centuries ago now, but all that is a lot better.

I mentioned in the design for e-brokers before that you want to have some simplified calculations and plan designs for them, because they don't need to hook all the way back into your Web site. Try to have your full portfolio there; they just want to get some things they can quote and do some spreadsheeting and electronic versions and get the business sold.

With multiple-carrier employee choice, there are obviously some anti-selection concerns, and actuaries have to be aware of what to do in cases in which you may not be the only carrier involved.

Strategies of Distribution
What kind of strategy should we take? What are some good ideas?

Integrated Quoting Tools. One is to integrate your quoting tool across all of your products. It solves a lot of problems. If you have one system for doing your medical and another system for doing your long-term disability and another system for doing life, it makes it difficult to come together and do a quote for multiple coverages. If you have everything in one place, where you're referring to one rating engine and one system, you can do some cross–selling. If the broker is online and requests a certain kind of quote, you ask, "Do you want a voluntary life quote; do you want a dental quote to go along with that?" And you just press a button and you have all the information available.

If it's all in one system, then you can do a lot of cross-selling and additional selling from that. Obviously, if you integrate everything into one system, it's more easily maintainable than a bunch of disjointed systems.

When you're developing these things, you do have to understand that the Web developers who are doing this aren't exactly actuaries or insurance people. In our own company, where we have developers who aren't necessarily well-versed in insurance, the communication is quite interesting, and you have to make sure that you're telling them exactly what you want—a lot of testing goes on to make sure you've gotten what you want.
One thing you can do is try to get control of the actuarial content and have systems that allow the actuaries, or the domain-knowledgeable people, to go in and make changes.

In the old days, I worked for a company where you had to fill out a request for the IT department to look something over, and maybe in six weeks they'd come back and tell you if they could do it a year from now. But if you have systems in which the actuaries can get in and make table changes or other types of changes, the better off you'll be.

When you're looking at solutions, you do have some proprietary things. There are certain things that are general among companies. If you're looking at the vendor solution, a vendor can come in and show you something, and it looks like it works

pretty well. But there are a couple things that aren't quite right.

"Well, we can fix that, OK," they'll say. "And, by the way, if anything happens a year down the line and you want to make some changes, we can handle that for you too."

The more control you have over that and the better you can handle the devil that's in the details of the solution you're looking at, the better off you'll be.

Some examples of that are rate calculations—you may change some algorithms here and there. What happens when you have to change those things? Who has to do it? Do you have to go back to the vendor?

Other Strategies. Integrating enrollment in the quoting process is another good idea. You gather a lot of data that will go into the enrollment and issue process, and to the extent you can save that, duplicate it, and use it, you are better off. I mentioned some scalability issues in the rating calculation thing. You should make sure that your application is scalable. If you put something out to some e-brokers, or if you release something on the Web, you may get 10 hits the first day, you may get 100,000 hits the first day.

In one of the applications we did, I think did have 100,000 hits the first day, and you have to be ready for that. You have to be scalable, and if it wraps up after that, you have to have ways of taking care of that. Let's say you just recruited a whole cadre of new brokers somehow, some way, and some e-brokers come in and they're going to produce a lot of business for you. If they hit your Web site, and it just bogs down the whole machine, they're not going to come back to talk to you. They're going to be selling somebody else's products.

Web-based Quoting Examples

Personalized Screens. One thing that Mike mentioned a minute ago was different faces for different people who come into the system; we refer to this as "roles." If I come into a quoting system, say, as an agent, I might see one screen come up, and it will have a different set of rights to do something than, say, an underwriter who is trying to review that quote for me.

If you have a benefits administrator in the company who comes in to see some things, that benefits administrator is going to see something even different. Sales managers will see something different from that, so your system should have these roles and rights assigned so that you do present a different face for different people who come in.

ROI. Let's look at the benefits for a minute. The biggest thing is return on investment. If you're going to go into a project, you should have some return on investment, or else why do it? And if you have good management, they won't even let you do it, because you have to have some budget dollars to be able to do that.

So you have to realize what the benefits can be.

Fewer Errors. In Web-based quoting, you have reduced errors, because everything that comes in is going to be complete. If you have the right edits in your system, you can't put down that somebody's date of birth was October 12, 2001, for example. It's not going to come in on that piece of paper, so you don't have to go back and redo that. The whole process is made more efficient.

Higher Close Ratios. You're probably going to get a higher close ratio. If you make it easier for the brokers to do business with you, they will. Other things being equal, the brokers are going to take the path of least resistance to get their job done and to make their money. That's one of the major rules of insurance that I learned very early in life.

Single Path for Information. Another thing—if you have a Web-based quoting tool, everything comes in through the Web. It's all done on the server in the home office, and you can develop all kinds of management reports.

The real value of the Web may be in the management reports you can get. If you have a good flexible system in which the actuaries have control over the actuarial content, you have quicker time to market, because after you design the product, you don't have to wait around for the IT area to get the thing online for you.

Web-based Group, Member Enrollment

What's the ROI on Web-based group and member enrollments? Again, reduced costs. We are familiar with one application in which the enrollment costs were taken down from about $7.50 per person to less than $1 with enrollment applications that were on the Web as opposed to paper forms.

You do need to have on the bottom, as I mentioned earlier, a simultaneous support of paper-based enrollment and online enrollment until such time as everyone has a computer—and boy, that's going to happen a lot faster than we think. Every time you hear an Internet presentation or something, you say, "Gee, look where we were five or 10 years ago, and who would have guessed we'd be here today?" Probably something's going to happen in the next five years that's going to accelerate or be accelerated a lot more rapidly than we might have thought, even in our wildest dreams.

Integrated Quoting and Enrollment. You can save the information you've done for the quote, and you can put that into the system benefit configurations. I caution you here not to—I'll refer to it as jerking the agents or brokers around. You don't need to gather all the information for enrollment just to get a quote. For a life quote, you don't need everybody's beneficiary. You don't want to make the agents gather that just so it will make your enrollment system work better—that's not necessary. They're going to go do business with somebody else, and that defeats the purpose of this great Web-based proposal system that you've done.

Rerating and Final Underwriting. Rerating and final underwriting in the final enrollment is key to making sure you've gotten the participation that you need to recalculate rates based on the actual population that did get enrolled.
That gets back to using a single rating engine for all of this. You don't want to have a rating engine that's out there on diskette that maybe isn't quite in sync with what you have on your administrative system, so it's good to have one system to do all that.

Final Rate Acceptance. For final rate acceptance, you send out the final rates, however your company may do it, to make sure that the employer accepted the rates, which may be a little bit different than you had quoted.

Integrating New Business and Renewal Quoting
As you know from experience in rating, you're often blending actual experience rates to a manual rate, depending on some kind of credibility factor.
It is good to have the manual rating right inside your renewal system, as well, so that you can do that.

Another thing that this does for you: If, on the experience-rating basis, you're charging some rates that are different from manual, and the agent or broker wants to get an ultimate quote, you don't have to go through this whole process of getting the thing and then looking at the thing and saying, "Well, our renewal rate is five percent higher than manual for plan A, so we want to make sure that when we quote them plan B, that we're five percent higher than manual, because if we don't, the rates will look out of logical relationship."

You want to maintain that, but if you have all this on one system, you can handle that a lot better, and the agent can come in from the outside and do ultimate quotes. He doesn't have to call back into the underwriters and say, "You know, I really want to present something that's going to help save me some money. I don't want this 10 percent rate increase to go through, I need to get something a little bit cheaper, and you need to help me." Well, now he can do that all by himself.

MR. DAVID M. TUOMALA: Definity Health is a consumer-driven health plan company, essentially. We're a private-equity-owned start-up company founded in 1998 and headquartered in Minneapolis. Our financial backers are some pretty significant players, and I'll talk a little bit more about that later, because I think that can be an important factor in looking at some of the new players in this environment.

The Definity health plan has really three basic components. The first one is personal care accounts, which is really kind of an employer-funded pool of money that employees can use to spend on, kind of the first dollar to help expenses.

The second piece is a high-deductible health coverage plan to cover those things that are in excess of the personal care account—the unforeseen circumstances that

might crop up. We also cover preventive care at 100 percent underneath that health coverage, so people don't have a disincentive to get routine or preventive care.

The third one is what I'm going to focus on most today, and that's the health tools and resources. This really has two components, one of which is our care advantage program, which is kind of the care management feature. We also have some Web-based tools. All together, it's a comprehensive care management program.

One of the things I want to touch on is the employer concerns about Web- based, or e-health, solutions. They might get info on noncovered benefits or things that they find to be great treatments, and unfortunately, they're not things that their plan covers. In addition, information on the Web in many cases is not reliable.

One of the things that we think is very important about our Care Advantage program is that we've packaged all those things together, and we've created a comprehensive source for both of those issues. When you see something on our Web site, we screen that to make sure it's something that would not be a covered benefit; the second time, we have a staff of people that look at the information to make sure that it is clinically reliable. We have MDs on staff that will basically look through that information to make sure it's not hocus-pocus kind of stuff. Those are the first stages for us.

Health Tools and Resources

Self-initiated Services. There are self-initiated services, things like a medical library. We also have health-risk assessment and nurse lines. Those are components of the care-management system that someone can access on their own. We perhaps go a step further than some other plans do on plan-initiated services in that we have care consultants that do the routine typical case-management and care-management-type activities.

Plan-initiated Services. We also have a system that screens through the entire claim system and claim database and will produce care alerts for omissions or commissions of care. If you have a heart attack, and you're not prescribed the beta-blocker by the cardiologist, an alert will pop up, and one of our care consultants then can contact your physician and ask, "Is there some kind of indication why you didn't do this? It is a typical standard of care that you should be getting that medication. That's good for you, it's good for the plan, because it can reduce expenses.

Premium Services. We also have premium care services. We've got Johns Hopkins as our partner to provide the medical content on our Web site—. We do have the ability, or we will have the ability, for an individual to access a specialist at Johns Hopkins and ask questions about his or her particular case. That person can also request a report done by Johns Hopkins that will capture all the up-to-date information about a particular condition. They basically reveal the academic

literature related to your cancer or whatever kind of diagnosis you might have.

Phone-in Web-based Tools. We also have a number of phone-in Web-based tools. The most important is probably "My Account," which drives me into the consumer-driven portion of our plan design. Not only do we supply that kind of first-dollar personal care account feature, but we also give people a lot of information about how much things are costing, how much have they spent, and what their balances are. They can look at their claims, they can look at online explanation of benefits (EOBs), all that kind of stuff, to really give people a picture of what their health-care spending has been for the current period.

We also have provider search capabilities that can be used to find providers by zip code or within a radius of a certain zip code. We have a lot of information on health care prices. We also have technology that actually translates medical terminology into something that the layperson can understand. You don't find really difficult-to-understand medical condition names out there; you'll find something that the average person can understand. We have prices for different procedures, prescription drugs, different conditions. We also have a marketplace section where people can purchase mail-order drugs, get contacts, and things like that.

Web-based, Web-enabled Tools

One thing I want to point out is that one of the things that makes all of this work is that we are using the Web-based technology versus Web enabled technology. All of these things really are interacting on a real-time basis. We're capturing all of the data and have up–to-date technology capacity. I can't give you all the details on exactly what kind of boxes we have and servers and protocols and all of that good stuff, but we know it is basically 1999 technology versus 1969 technology, which is what you find a lot of the time with traditional claim systems.

Effect of Internet Industry Woes

I want to talk a little bit about the state of the market and what we think the downturn of the Internet industry really means to companies like ours.

Certainly the venture-capital market is not what it once was—really for all types of new ventures, not just health care ventures, and not just for Internet ventures. What we found is really a return to basic principles . You're seeing lower, more reasonable valuations. Investors are certainly a lot more conservative than they were before, and they're really looking at proof of concept. I think in the late '90s, you could walk up to a venture capitalist and talk about a great idea that you had that was going to change the face of the world and walk away with $50 million—that really isn't happening any more. Whether that's good or bad, I don' t know. That's probably good in some sense.

I think that's going to really change the scale and scope of any of these new health care business models. Certainly there's less funding available. You can't get $100 million like you once could, so you need to really work on a much smaller scale. It's

probably going to be more localized or regionalized as opposed to a national focus.

I think it means that you have less time to prove that your models work—you know, you don't have the ability to be burning capital at a certain rate and then just go out and access more money. I think it shortens the time that you need to show that you're really gaining some market acceptance and that you're on the road to profitability. Otherwise, you're going to be out of business.

The other thing, I think, is incremental changes. We're going to see much smaller types of things and step-by-step types of things, as opposed to, "We have this grand idea and we're going to reinvent the entire health care industry." We're going to take every component of it, which you might see is more focus on a particular component of the industry.

On the flip side of that, the economic environment has actually been a boon, I think, to companies like ours. With high increases on traditional plans, I think there's a feeling in the market that the promise of managed care has not really come through. I think those things really have created an atmosphere in which employers really are interested in at least trying new things. So it's easier for us to get our foot in the door. That is a good thing, at least for us.

Different Business Models

I guess you could argue whether everyone fits exactly where we've put them, but we've got really two axes— one is the use of information in the center and whether employees have high control or low control through their benefit plan design (Chart 5).

In the upper left-hand corner, we've identified three different types of players—consumer selected network, kind of like the Vivius model, and channel aggregators (there are a bunch of those). Those are the enablers of the direct- or DC-type approach—someone puts a bunch of plans out there that employees can shoot from in some fashion on the Internet. There are a number of players in that. Spot-market plans are more of the help-out or ally health market-type approach, which were trying to create more of a different network mechanism.

Web-enabled managed care is in the lower left quadrant. Down in the lower-right quadrant are what we would call traditional medical savings account (MSA)-type models, which are largely disconnected from the tools for the price and content and types of things that are really nonexistent in those models.

Lastly, I guess we would put Definity Health in the upper-right quadrant. I think there's high information. We have a lot of tools and a lot of information that goes to the consumer, and we also have a lot of employee control over plan design using the personal care account and the rest of this. Over the past year I think we've seen that the health market has gravitated toward the Definity model. We've seen that is has become more of the predominant type of plan design.

Funding

Some information on funding: Lumenos started with about $4 million in 1999 and completed about $43 million in June of 2000. My numbers may not be 100 percent accurate, but we think those are pretty close. Health Market had about $57 million in December of 1999. More importantly, from my perspective, Definity Health started with $23 million in April of 2000 and in the spring of 2001 completed another round for $25 million. This same investor group has also pledged an additional $25 million, subject to reaching some milestones and things like that.

I think the takeaway from that is Definity Health is well funded and has the ability to maintain or capture some additional funding. I think in today's market, this is an important feature.

I think that one model with some variation of a personal care account and some variations of a high-deductible plan really has been the predominant model that's reached some market success. Lumenos has sold a number of groups, largely in the pharmaceutical industry, and we understand that it had its first client enrolled in August.

We know that HealthMarket has an insured product approved in a number of states and that they have a large client in St. Louis. We understand that their first group was enrolled in July.

Definity Health started with its own employees October 1, 2000. We also enrolled three clients January 1, 2001, and ended up with about 5,400 members. We have numerous large employers.

We started out with three populations. We had Aon on a pilot basis for two locations, Metronic (that's a local employer), we offered that in a number of locations. Ridgeview Medical Center is a local hospital and clinic system, and we had very good success with that group.

For 2002 we've got a number of other groups, and at least a couple of them are *Fortune* 500 clients. Some of them have not been announced yet (there is a broadband video service company and a major car rental company in that mix). Look forward to those announcements in the near future.

We've seen fairly substantial enrollment. We started with our January 1 clients. We enrolled about 14 percent of the total population for those, but more significantly, we started out with 5,400 enrollee members, and we're now up to about 6,100.We found that over the course of the year, as new hires come on for those plans, if they choose from all of the plan offerings that are available, they frequently choose Definity Health. We're getting about 30 percent of new hires.

Outlook

So what does this mean for the future? I think it means evolution versus

revolution. We're going to see some evolution of successful models.

We've seen quite a bit of success for that one particular type of model with some variation—some personal care accounts and high deductibles— and we're already seeing competitors adopting those models. We heard that Aetna is coming out with a similar plan design, and I understand that United Health Care is also introducing something similar to that.

I think innovation is going to occur more slowly with reduced investment. I think it's going to create more incremental changes versus really big wholesale, across-the-board changes. I think fundamentally we believe at Definity Health that it will happen, that we will see a shift in the marketplace to more consumer-driven models. We're already seeing a lot of adoption of that, and we think that the future is really there.

MR. CORCORAN: That's the end of our prepared presentations. We have some time for questions.

MR. TUOMALA: In my viewpoint, I would view Web-enabled as trying to take yesterday's technology or existing systems and trying to attach a front-end or back-end Web functionality to them.

I'd look at something that's Web-based as really taking things that have been designed in the past decade or so for Web-based applications—things like Oracle servers and all of that equipment and technology—and really using that as the basis for your data storage and retrieval and all that. I think the functionality that's available using those tools is a lot more robust than using the flip side of that.

MR. HAWKINS: I think that pretty much says it, Dave. I'm not the technology guy, but I did talk to Tom about it, and I think that's about exactly what he said.

You're tying into Legacy systems or something else that just wasn't quite made for the Web, and you're tying into it with tools that were made for the Web. It's a lot more efficient, a little bit bigger hump to overcome, but if you develop from native Web technology to begin with, you'll be better off in the end, because eventually the other stuff is going to go away.

MR. TAYLOR: I just have one thing, too. My sense also is that there's a language issue here. I'm not an expert in it, but there are some new languages that enable people to do, as both my colleagues have said, Web-based stuff.

XML language is something you'll hear a lot about. It enables you to do things that you couldn't do before. For example, one of the issues that we talked about, computer access, is a very big stumbling block for facilitating the Web. We're finding that with this XML language, it's a lot easier to put down, for example, a voice-recognition technology in front of a Web application so that you can use your

phone or a Palm Pilot to get closer to the Web.

It's accelerating pretty fast, and I think it's actually fun to watch. One of the areas that I've been looking at specifically is claim systems. There are still only a few really Web-based claims engines that are under development. Once those get going, it's going to be really interesting, because that's where the large health plans are really struggling—putting these Web-enabled front ends on their massive Legacy systems. They're just not getting the efficiency and the throughput that they would like.

I'm familiar with one product called E-Health Direct. It's totally Web-based and does marvelous things like relaying everything in real time. So trying to track an accumulator is easy. It's real time, so everybody's working off the same database. When I look at it and say, "What's my out-of-pocket accumulator at the moment?", it's the same number that the claims person sees or that the broker sees. There's a real advantage to that.

MR. MARK ALHANTI: A question to Dave, although the rest of the panel is welcome to answer it: Can you talk about an employer who would go with Definity, what percentage of their employees—if it's an option, as opposed to total replacement—would you expect the employer to get? What percentage would choose Definity, and could you talk about the types of employees that typically choose? Is it the younger, more Web-savvy employees, or is it the older, sicker employees looking for information?

MR. TUOMALA: OK. I'd have to say on the expected enrollment, it depends on a couple of things, based on what we've learned so far, anyway.

Typically, we would target for an option group something on the order of 15 to 20 percent enrollment. The clients that we've done up to that January 1 enrollment date, all of those were option–based, except for Definity Health—they didn't let us choose. We get to choose among the Definity Health options, but we didn't have any outside options in there. We saw about 14 percent overall on that. With one client, the hospital client, we wound up with about 82 percent enrollment, and that's where I'd say it varies.

It varies according to the plan designs that are offered, and also, I think, in how it gets rolled out to the employees. At the hospital group, we had the CEO of the hospital go to every employee meeting and basically stand up and say, "I think this is a great plan, you ought to take it." Obviously, that increased the enrollment quite a bit.

In the Medtronic case, we saw a lot more enrollment in their national sales force than against the local HMOs that we had in the Minneapolis location.
It's hard to say. We target something in the 15 percent range, so there are a lot of variables that go in there. If an employer wants to put it in and doesn't do any

employee meetings and doesn't communicate it well, it may be 2 percent.

In terms of the types of enrollees, we've seen, at least from a demographic perspective, is that it's about average. We've seen maybe a slightly higher family content, but we believe that was driven more by contribution strategy than anything else. We've had an unusual contribution strategy for the Medtronic group, and so we got some more families out of that. We haven't seen any indication yet that we have a super-select population or anything like that. We think it's a pretty standard average—average age, average risk would be our best guess at this point.

MR. TAYLOR: If I can, I'd like to concur with that. We've seen exactly that in our clients that have put in a consumer-driven plan as an option. The demographics and the age and sex generally mirrors the total population.

Dave mentioned that Aetna has launched a consumer-driven product for that health fund, and it was very interesting when you talked to them. I hadn't quite realized this, and I don't know why: Aetna finds itself in a little bit different situation than Definity or Lumenos because the reality is, when you put it in as an option, Aetna's very likely to be one of those options, so it's very much in their interest to try to figure out these issues of selection and demographics . They have worked, I think, extremely hard to try and do that. They've got some modelers.

I think for people like you, it's a very critical issue regarding the role that Definity plays. You have to figure out selection and those kinds of things for a certain reason, mostly because you're self–insured; that is the way your products are offered. In Aetna's case, it's a different situation—they're either all self-insured or they have their fully insured products alongside it and they need to calculate very much where the risk is going. It's a different perspective here, and I'm going to be very curious, I think, when United starts to roll theirs out along with some of the others, because they're going to be more in the traditional situation of choice.

MR. DAN PLANTE: David, you mentioned that Definity Health Care Advantage has the ability, once someone has gotten online to ask some questions, to come back to them and say, "Have you checked into hypertension medication?" or some such thing, and you mentioned HIPAA concerns very briefly.

The question relates to HIPAA: Once that is up and going, how is that going to adversely affect the capabilities of the various Web sites in being able to interact with users and get back to them on issues?

MR. TUOMALA: Let me clarify exactly how the Care Advantage or Care Alert system works. It interacts with the entire claim stream. I guess, again, one of the advantages of the technology solution is that our setup has multiple vendors for each of the different areas—we have a PPO vendor, a claims processor, and a care-management vendor. But we bring all of that data into one place, and so we have access to any tool we want. We can pass them back and forth among the different

vendors.

From the Care Alert perspective, though, the system will look at the claim stream and determine that an omission occurred.

For example, take the heart attack scenario. What will happen then is that notification will be sent via e-mail, regular mail, or phone call, depending on the type of case. If it's something that is not urgent, it may simply be a letter to the physician rather than the member. The only way that we would communicate directly with the member is if we've gone through everything else and the physician has never responded. Then we'll alert the member that he or she has a potential issue and that it should be discussed with his or her provider, because we don't want to have a consumer try to practice his or her own medicine.

FROM THE FLOOR: Could you tell us how this relates to HIPAA?

MR. TUOMALA: OK. We believe that we're fully compliant already with the strictures of HIPAA. Frankly, in some ways, Web-based technology makes privacy really more private than a lot of the current systems.

The level of security that you have over the telephone or over the mail is really not as private as you think it might be, and the encryption methods that are available for Web-based things actually are far superior to the conventional methodology. We believe that, as far as I'm aware, anyway, that our current systems are compatible with that already, so we don't really see any big issue.

MR. TAYLOR: I think that when we're designing these for employers, HIPAA is a big concern. There are still a lot of unknowns about that, and it's very easy for us to say we're HIPAA–compliant.

I think I would agree with David that the issues around the securities are actually quite promising in terms of that. Most of the work that we talk about, we try to isolate any kind of individual, identifiable information on a particular server that's hosted outside the employer to be HIPAA-compliant. Any time an employee is exchanging health-care information of a personal nature, that information is stored outside of the employer on a very secure server maintained by another vendor and only the employee can get to it. And it's password protected.

That actually, to some extent, inhibits some of this connectivity that we're all searching so desperately to get. For example, in some of the discussions that we have in which we were trying to have what we call secure sign-on at a third level of connectivity with a health plan or a disease management vendor, that's a blocker for us, because the vendor says, "Hey I don't want to violate HIPAA, and I don't want to have the ability of somebody else to get into my level of security."

I think there's still a lot of room to explore that, and while we think we've got it

covered, my sense is as this thing gets bigger, we're going to have to pay a lot more attention to it. The cost of it is going to be significant, I think.

MR. LAURENCE WEISSBROT: The name of this session is "E-Business Trends For Health and Group Nonmedical Business." We've been talking about medical, but my perspective on this is obviously nonmedical. What about the dental, the vision, short-term, long-term disability, all of the ancillary lines, and where do you see these products fitting in with that or e-business fitting in with that?

MR. TAYLOR: With dental, we clearly have the ability to connect to those plans as we do with health plans. And we're working on that.

In all honesty, I think our employers are still working that through here. One of the things that I talked about, this framework, was that we very much want to design these frameworks so that employers will be able to plug in all of their benefits. That absolutely includes dental and vision and life and disability. We leave spots for those on the Web site, and we try to think it through in terms of the coordination to make sure that they all work properly.

It doesn't appear to be quite as well developed, so as I mentioned before, we're working quite hard with our employer clients to design these single-source places to have access to all this information. We only have a handful of clients that are doing it, but when *we* do it, we absolutely do have connections to dental plans. We fully expect to do that.

I think we all , or at least some of us, feel very much that there are some real advantages to that, and particularly in the disability area. If you look at the issue of the exploding cost environment, there are hopefully some opportunities here to do some integrated disability management with the Web. We're optimistic about that, but it's not quite as well developed, to be honest with you, as it is in the health plan.

MR. CORCORAN: I would add something to that in terms of the strategy for nonmedical operations and where they're going. I think Mike's description is right from the point of view that, at the end of the day, the employer is going to want to have one face for its employees for the benefit package. Medical is bigger and more complicated than anything else put together. So in terms of the strategy that disability companies or dental companies or other companies use in determining what their Web strategy ought to be, I think that has very significant implications. I really doubt, especially for large employers, that you're going to see separate interfaces for separate products. Ultimately they're going to be on one interface, and it's very likely the medical issues will be the driver of that.

MR. TAYLOR: Thank you, Tom. I think one of the things that's very interesting is this issue of scale and scope. When you're talking to a client about connecting, it's a heck of a lot easier to connect to one national carrier than it is to connect to 27

HMOs, some of which are not as advanced as clients are. I think the same issue applies to companies like yours, although there are regional plans. As for Tom's point, the strategy is that you're going to have to have some way of facilitating that connectivity and the economies of that scale. It's going to be very interesting in the next few years to see how smaller dental players, smaller disability companies, and regional and local HMOs are going to deal with this. That is yet another unknown. Right now, there is a little bit of an advantage to being a national in size and scope and scale.

MR. TUOMALA: I think that also goes to another issue that I brought up earlier in that it kind of deals with the whole capital market issue.

We've been forced, I guess, as a company to be very focused, and I think anyone in this industry has to be very focused on a particular element. Right now that focus is on the health benefit portion.

We'd love to put in some form of dental coverage within that as well, but resource constraints make that a long-term objective. I think it's unlikely that you'll find someone, unless they focus on just the front-end kind of piece of that interactivity who brings together a complete solution for all of those things. It's difficult, number one, to find the funding for a broad-based solution. Number two, it's difficult to find a sufficient revenue stream to create a business model that on the front-end piece is a moneymaker. I think that may be a difficult piece to accomplish, and that may be further down the road.

MR. TAYLOR: I keep jumping in here. Another area that we didn't provide an example for is pharmacy.

It's fascinating to me that the current battle that's going around for connectivity around pharmacy, when Merc MedCo, Express Scripts and another company announced they were forming a company to do connectivity with pharmacies and pharmacy benefit managers (PBMs) for claims transactions and eligibility verification, that posed a significant threat to chain drug stores and community pharmacies. Before you know it, they started to form their own group to have connectivity to do verification of pharmacy. It gets pretty intense, and there's another one coming along in the pharmacy business. So already in the space of about six months, we've got three competing entities that want to be national and all want to be connected. It's going to get pretty interesting in the next year or so.

Chart 1

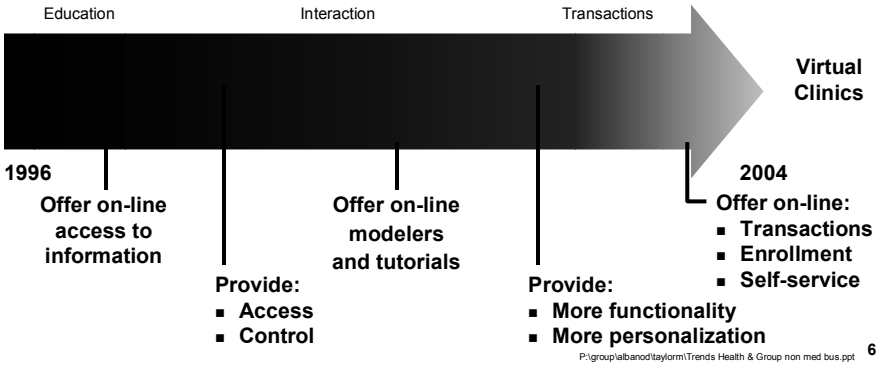
Employers Interest in the Internet Varies Based on their Strategy and Style of Execution. Access to Internet Applications Support Better Education and More Efficient and Effective Interactions and Transactions

Cyber Citizens

50% of Internet users search for health information

70% believe it empowers them

Projected 60+ million on-line health users by 2004



P:\group\albanod\taylorm\Trends Health & Group non med bus.ppt 6

Chart 2

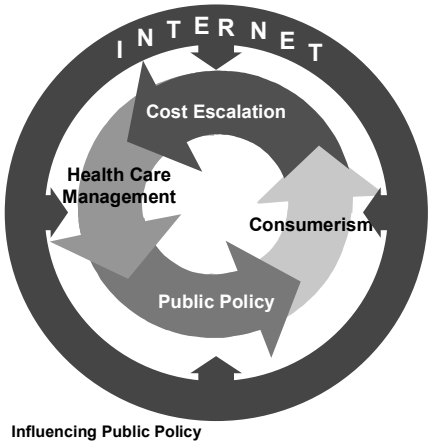
In light of Market Realities, Employers are Hopeful that the Internet Will Help to Meet Employer Objectives

Combating Cost Escalation

- **As access to information becomes more widespread, the market becomes more efficient, thereby introducing downward price pressure**

Enabling Health Care Management

- **As Web-based solutions are developed, the infrastructure to support a more efficient managed care environment is evolving**



Fueling Consumerism

- **The Internet has introduced the most efficient and comprehensive means for consumers to access health-related information directly; historically, this information was held and distributed primarily by physicians**

Influencing Public Policy

- **Advent of Internet solutions may accelerate the development of individual markets**

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Chart 3

More Than 50,000 “E-Health” Companies Have Emerged in the Last Five Years with Services Ranging from Health Care Content to Telemedicine

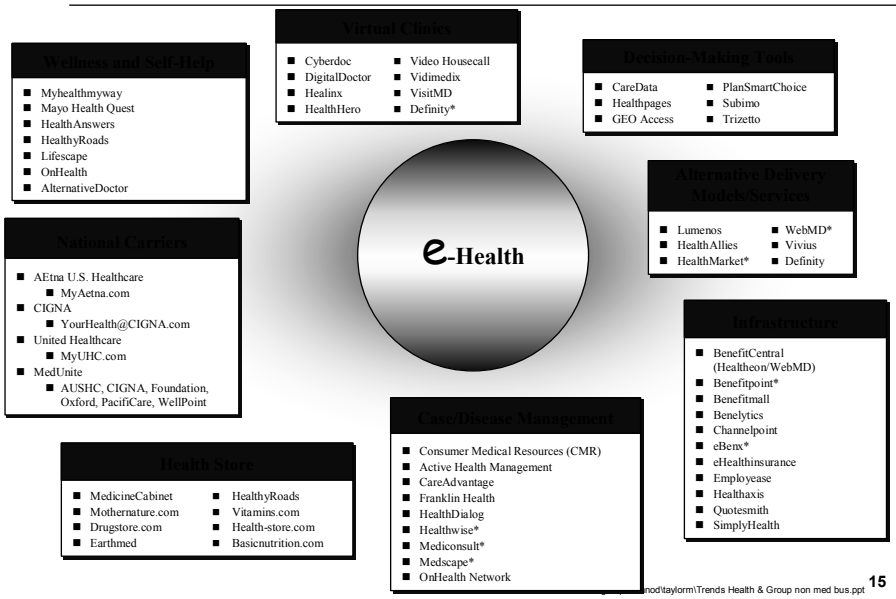
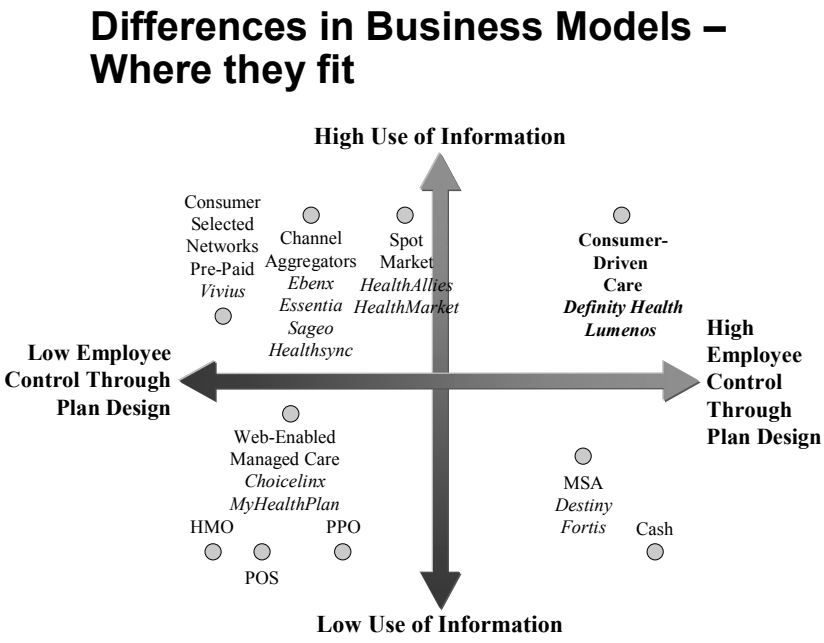


Chart 4

Chart 5


Differences in Business Models – Where they fit
High Use of Information
Low Use of Information
Low Employee Control Through Plan Design
High Employee Control Through Plan Design
Consumer Selected Networks Pre-Paid
Vivius
Channel Aggregators
Ebenx
Essentia
Sageo
Healthsync
Spot Market
HealthAllies
HealthMarket
Consumer-Driven Care
Definity Health
Lumenos
Web-Enabled Managed Care
Choicelinx
MyHealthPlan
HMO
POS
PPO
MSA
Destiny
Fortis
Cash