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## **High Impact Technologies on the Health Horizon: Sam Robinson & Dr. Dennis Schmuland**

Dr. Dennis Schmuland: Good morning and thanks Steve. Microsoft's long-term vision for health, as Steve just described, is one that we look forward to exploring with you, knowing how active your companies are already in the arena of consumer health enablement. The types of things achievable through this vision are complementary to the exciting work that we already do with health plans here in the U.S. and government funders around the world.

In fact, the Investments that we made several years ago are paying off now for our customers and partners who have proven together with us that breakthrough improvements in healthcare using software are not only possible, but they can be achieved quickly, affordably, with fewer consultants, and with less complexity. Under Knowledge Driven Health Plans, our shared vision and solutions framework, Microsoft is working with companies from across your industry, to realize the promises of the vision for health plans: "affordable personal and population health through informed decisions and coordinated, evidence-based care."

At Microsoft, we view health plans and government funders as the only stakeholders with the reach and the business motivation to connect with the critical mass of providers, consumers, and employers, at the economy of scale needed to transform our healthcare system. You are in a unique position to apply what we see as the three key transformational levers that are needed to move us from a transaction model to a shared accountability model. Accelerated through new technology capabilities in our pipeline, this shared accountability model ensures that each stakeholder, across plans, providers and consumers, has the incentives and actionable information they need to positively impact the quality and affordability of care.

Those three key transformational levers are:

- Supply and demand side incentives (pay-for-performance and consumer rewards for HRA and coaching are good examples of this);
- Actionable information and insights to providers and consumers which enables people to make informed decision and act on them; and
- The coordination of the care for those with chronic conditions to keep these patients from slipping through the cracks in our fragmented system that denies these patients from receiving evidence based care as they receive care across multiple provider offices and facilities.

We at Microsoft recognize the challenges ahead for the health plan industry. Knowledge Driven Health is our vision for addressing those challenges in ways that adds value to your company where you need it most. As I mentioned earlier, partners and customers are actively working with us to realize breakthrough improvements in your most pressing areas of need. Three areas in which we have seen remarkable success are:

- Business performance – this includes business agility;
- Quality and affordability of care; and
- Customer experience

In an environment that demands that your business be at the peak of its competitive performance, even the smallest improvement in everyday decision-making can improve profitability and consumer health. Because every health plan has similar access to customers, provider networks, and claims data, competitive advantage is increasingly built on your ability to control administrative and medical costs by empowering staff, customers, and partners to make better-informed financial and clinical decisions. This requires the people within your organization to integrate business processes internally and externally with the daily workflow of providers, digital lifestyles of consumers, and with partners and their legacy systems.

1. As an example of customers realizing success in business performance, the two largest HMOs in the world and a growing number of major Blues have now standardized on Microsoft's service oriented architecture to streamline their systems for business success. One HMO is benefiting from Microsoft's interoperable technology to connect over 1700 back-end systems to new applications and scenarios, enabling them to respond to new business requirements and improve the health of their members.
2. Horizon BlueCross BlueShield used a Microsoft-based service-oriented architecture to interconnect their core and legacy back-end systems to new applications and create a platform that enables people and teams at Horizon to compete in a consumer-focused market. They now have a structure in place that enables them to be much more responsive to their members, which is increasingly critical as health plans compete for member loyalty. Last year, Horizon was recognized by the Technology Manager Forum, for its service oriented computing solution, emerging the winner against Fortune 1000 companies.
3. Aetna's Broadspire, subsidiary (TPA) moved core claims processing applications from a mainframe environment onto a Windows Server and SQL Server database. After a short period of time, they were able to cut long-term costs by 98% over what mainframe hosting services were costing them.

To reap the benefits of coordinated care management requires a new generation of collaboration capabilities, and externalizing those processes across the ecosystem, as patients navigate their way across the continuum of care. Solutions must be in place, which enable each person to communicate and share information in ways that lead to better decisions and outcomes

1. Premera Blue Cross showed that breakthrough improvements in case management productivity were possible, fast, affordable by using

components of Microsoft Office to improve their case management process.

The solution took just four months to build and case managers were actively using it after only a two-hour training session. The business unit demonstrated a 25% overall gain in case load capacity and calculated their annual medical cost savings to be \$9.6M as result of improving team productivity and quality care.

2. The top two commercial health plans in the US have now standardized on Microsoft's business intelligence platform to transform their businesses into ones that are customer-centered, highly collaborative, and knowledge-driven. They're turning their information assets into strategic assets by delivering actionable insights, information and scorecards. Armed with this information, providers can more consistently deliver evidence-based care and consumers are enabled to proactively manage their health, their care, and their finances.

Using the built-in interoperability capabilities, analysis services, and data mining capabilities in the business intelligence platform, they are generating predictive scores that precisely identify those most in need of proactive care.

As you heard yesterday in Bruce Temkin's session, today's consumers expect answers on-demand from any industry. As they assume greater financial responsibility for their own healthcare, they will expect health plans to reciprocate with ever-better levels of service. It is no longer enough to just meet expectations around customer service levels, but rather stay ahead of the growing service expectations of individual members as well as of employer groups. To date, health plans don't have a strong customer service reputation with customers. However, today's technology solutions are enabling health plans to provide the superior levels of customer experience that will ensure they stay competitive and reach the status of trusted health advocate.

Mercy Health Plan is using Microsoft's open, standards-based Customer Care Framework to gain a competitive advantage and position themselves as customer advocates at the point of every customer service encounter. This happens on any channel that the customer prefers –whether it's a live agent, e-mail, speech recognition, chat, web self-service portals, and even mobile devices and devices in the home.

Because their business rules and legacy data systems are integrated across their full- and self-service channels Mercy can offer a seamless and consistent customer experience across any channel. This puts them in a strong position to exceed the rising service expectations of their customers,

by enabling their customer service teams to seamlessly handle more complex service requests.

Collaboration is a recurring theme, which is no surprise given how hard it is to improve business performance and clinical outcomes within the context of our fragmented health system. But collaboration also factors significantly in the technology that we develop at Microsoft, as we believe in the largely untapped power of collaboration – and especially collaboration in healthcare. In a few minutes we will share with you some of the communications and collaboration tools that we are working on currently – a quick glimpse under the hood.

Successful solutions at any level of the health system - whether it's driving business performance, improving the quality and affordability of care, or improving the customer experience - are going to require that stakeholders work together, sharing insights and information - but also working together and acting together on that information to improve health and the bottom line.

We believe that technology solutions that make collaboration and communications easier and less time consuming both within your organization and across the healthcare continuum are key to the industry's transformation. The best technology solutions put people back in control so that they spend less time coordinating the flow of information and more time effectively using that information.

Microsoft understands that people are at the center of business and clinical success, and designs software that empowers people to make the best decisions. We do this with technology that facilitates seamless collaboration and access to the most relevant information from all manner of systems – both within your companies and from across partner organizations. When armed with actionable information and insights delivered through our software, people and teams can more effortlessly collaborate, innovate, and contribute to better health and the bottom line.

Before people can collaborate easily however, they must have communications tools that are intuitive and streamlined. In today's business environment, we struggle not only with the amount of information that's out there, but also with the increasing number of communications tools that have become part of our daily routines. For example, in a single day, you probably send and receive volumes of email, make and receive dozens of phone calls from your desktop and mobile telephones, and check messages in multiple mailboxes. You might participate in several audio conference calls, use instant messaging, maybe web conferencing, and schedule meetings with your calendaring application.

Communications overload has insidiously crept up on us to become just as much of a drag on productivity as information overload.

The irony is that, rather than making it easier to reach and work together with people, the proliferation of disconnected communications tools and devices has actually made it more difficult and more time consuming. And in an age when your business success increasingly depends on how quickly and easily people can share

information and insights –and act on them, you can't afford to spend your days juggling a collection of standalone communications tools and devices.

We understand that – in fact we live that as well – and have focused research and development efforts at Microsoft on unifying communications and collaboration tools. To give you a glimpse of what this might look like, we've prepared a demonstration that showcases how communications and collaboration for people and teams can be easier, less time consuming, and should not require people to step outside of their business context to initiate or receive communications. What you'll see in a few minutes incorporates some of what's available in the upcoming release of Office 2007 as well as a number of applications that are still a few years out.

I'd like to introduce to you, Sam Robinson, our health plan industry solution specialist, who many of you already know. Sam has boldly offered to host a demonstration of some visionary technologies – with all the risks that we all know come with presenting early prototypes before a live audience.

Sam Robinson: Thank you Dennis. The desktop I have just brought up is an example of a desktop, by which I mean any device where your environment is displayed, you might use in the future. The unified look and feel surfaces a great deal of information at the desktop level, similar to what you'll see in our upcoming Vista release, the newest version of Windows. Notice the left side of my desktop provides an ongoing and consolidated look at the people and information that is most relevant to me in my role at Microsoft. This includes my team members, for whom I can track where they are and their current communication standard, (and by this I mean are they online, are they on their mobile, etc.), current documents I am working on, and key indices I may be tracking.

The right side of my desktop is currently showing what we call my desktop assistant. The idea behind it is to offer a snapshot view of everything that's important to me today. This includes my communications timeline, which maps appointments and all incoming communications according to when they were received and how they fit into the priorities of my workday. As to when they arrived and their priority to my workday. These may include emails, instant messages, meeting invitations, conference calls, and phone calls.

When Dennis talked about communications overload, I saw many of you knowingly nodding your heads. The volume of information that you are required to manage, coming at you from an increasing number of communications channels, can be overwhelming. By unifying your communications and collaboration tools, you are able to spend less time managing and searching for the information and more time using it effectively to drive your business.

If you notice across the top I have what's called a filter slider. This tool allows me to prioritize the actions I need to take throughout my day, based on rules that I predetermine or rules that are built dynamically by the software by analyzing what's most important to me. The rules analyze and prioritize based on:

1. The content of the communication;
2. The individuals sending or included in the communication; and
3. What is important to me today.

As you can see, if I set the filter to high priority, well it is not really clear why I even came into work today, but let's move this back to a more normal range so I can take a closer look at the critical communications that I need to handle over the course of my day.

I first want to check on my 2:00pm meeting regarding our new generic substitution study. As you can see, even though this pops up as a meeting request, if we click on it we begin to see that the software has pulled in all the information and resources I need to collaborate on this meeting: my core pharmacology team; the report itself; and lastly all related communications - regardless of format - pertaining to this meeting.

This illustrates a key component of our communications and collaboration strategy. Using the power of the software, your computer identifies and collects the relevant resources for you, from across systems and across communications channels, bringing them forward to your desktop or laptop in a consistent, consolidated view. As a result, your communications and collaboration becomes easier, less time consuming, and you don't have to step out of your business context to initiate or receive a communication.

As you can see this holds true for all communications on my timeline. Here we have an instant message regarding a report that is due. Opening this appointment also opens access to all the people, documents and any preceding communication related to the meeting request. And yes this even applies priority rules for personal items. As such, you can more easily manage personal communications so that they have minimal impact on your work productivity, while still attending the personal matters that may be urgent. As you can see my most important meeting of the day is a parent teacher conference at my son's school and the request has brought forward his last status report. The software seamlessly helps me handle all aspects of my life.

Let's focus now on a different view of my communications through a tool we are calling our message center. This dashboard gives me a quick look at the extent of my communication traffic, whether I've read it or not, in one clear easy-to-digest format. Below that, I have all documents that I need for the day, people that I'm working with on various projects, and my current tasks again all tailored around my priorities for the day by the underlying software application. But for now I'd like to focus on one form of communication, specifically my voice messages. By selecting my voice messages the software now gives me a visual display of all the phone calls I have received. This illustrates a concept we call best communication.

Best communication provides a multi-modal view of all my communications. In other words, the software shows me all my communications in multiple forms such

as text, voice, visual icons regardless of the way a message came in or how I may choose to communicate back.

Let's take a look at this voice message from my financial analyst, Bob Lyons, as an example. As you can see even though Bob left a standard voice message the software has converted and presented this message to me as text. It has done so because it knows that I'm currently at my desk, and knows that when I'm at my desk, my best communication method is to read the message rather than listening to the recording. Notice however this paperclip icon indicates I have an attachment to this converted message. This attachment is the actual voice message, which I can play via my computer if required and is fully preserved. Imagine never needing to pick up a phone to get your messages regardless of how they came in and what's more, to be able to respond in true multi-modal fashion with a text message, an email, or even a recorded voice message.

This is a key to making it easier and less time consuming for people to collaborate and communicate. The software needs to support and enable the way you work, wherever that may be, without limiting your options to any single, communication mode. On the other end, Bob will receive my message via his best communication method. In this case the software will convert my text message to voice because it knows that Bob is away from the office and only available by his cell phone. The power and flexibility afforded by best communications, allows our team to continually keep in touch on key business issues throughout the day.

And speaking of key issues Bob is calling me about our third quarter sales forecast, which we need to post tomorrow. As you can see even though I entered this message via the message center as opposed to going through my timeline, the same related content is available to me, in this case the third quarter reporting. Even while I am in this communication, I can raise the importance of any messages from Bob about the Third Quarter results to high, ensuring that I will get all communications on any changes, via my best communication method where ever I am today. Notice the green icon tells me that Bob is available right now and again provides me multiple communication channels to reach Bob, should I wish to contact him now. But in this case I simply will set his priorities within the properties area and close out this message.

Speaking of prioritization, were getting a message now from Russ who helped me develop this demo. Now normally, Russ wouldn't be allowed to get through during a presentation. However, before this presentation I escalated his privilege in order to illustrate this capability to you.

Another thing we've been working on is this idea of changing modality in communication but all within the same application. Rather than jumping between email, Instant Messenger, a phone conversation, web conferencing, or even videoconferencing, the software allows me to effortlessly –and almost instantly-- change to the modality that maximizes my productivity as well as that of the entire team. In this case, as we saw with Bob just a moment ago, I can see by Russ'

presence (the green icon), that he's online and available. Instead of replying to this mail, I'm just going to convert this to an Instant Message.

Notice I'm in the same application, but the activity changed to become an instant message. Also note that I still have the email in thread for context. Let me type a quick reply here: "I'm currently giving the demo but I'll be sure to mention it".

Looks like Russ wants to interrupt the demo and say a few things. This illustrates again the ability to switch modalities within one form of communication. Here within my Instant Messaging string I have a link to instantly convert this text conversation to a video conversation. In this case the request is for a one-on-one video chat with Russ but just as easily could have been a one-to-many video chat with your team...whether here in the building working on-site, at home, or even in a conference room.

It's our hope that this demonstration gives you a glimpse into the future of how communications and collaboration technologies can increase the productivity of people and teams and the impact on your bottom line.

- Imagine how these technologies could increase the productivity and the impact of care management interactions or health advocacy interactions with consumers.
- Imagine holding a consultative dialogue with your key providers or employer groups and having not only the relevant documentation but instant, secure access to all of the people you need to complete the dialogue.
- Imagine holding a key team meeting with voice, video, and application sharing with the click of a mouse.

This is the vision we have for the future of health plan collaboration. I'd like to thank you for your attention and hand over the floor to Dennis to conclude our discussion.

Dr. Dennis Schmuland: Thank you Sam. What you saw in this demonstration is just a quick look at how we're evolving the desktop—whatever form it may take—to become an interface for contextual integration. Microsoft Office is no longer just about creating information but about enabling information and communications management. The Microsoft vision is about fusing communications and collaboration so that you no longer need to integrate communication tools, collaboration tools, and applications, but rather the tools, the information, and the applications snap into place depending on the business context and your digital work style.

We see this kind of advanced, unified desktop interface playing a significant role in helping health plans move beyond today's transactional interchange to becoming a truly collaborative channel for both internal and external communications.

For example, think of a scenario where customer-facing employees and teams are proactively provided with all information relevant to every customer service request, as well as access to anyone within your company who can collaborate on that interaction. This kind of streamlined approach would ensure that your member experiences a seamless interaction with your company and receives the most informed answer to his or her query.

As we continue to refine the development of this technology, and research additional applications, we welcome your feedback. The best insights come from customers who live the industry issues on a daily basis. We are pretty excited about where our technology is headed and look forward to working with each of you – as industry leaders and as thought leaders – to achieve this vision and realize breakthroughs that will enable you to improve personal health, the quality and affordability of care, the customer experience and your bottom line.

The next few years will see dramatic change in the healthcare system and we believe that health plans have a pivotal role in driving that transformation. We think that technology will bring new capabilities that we never before dreamed of. Ultimately, we are all consumers of health and aspire to the same vision – affordable, personal and population health through coordinated, evidence-based care. We know that this vision is not achievable by any single company, but, by partnering more closely with your companies, government and other industry leaders, we know that we can make it real.

Above all, our commitment to the health plan industry should be heard loud and clear. We hope that this presentation has compelled you to think of Microsoft as a new kind of partner – one that can help you innovatively tackle your most critical business issues. Let this be the start of deeper conversations that explore how we can realize the promise of health that's consumer-enabled and knowledge-driven. To that end, we look forward to speaking with you further in the upcoming months and welcome your thoughts, insights and feedback on what we've presented.

Thank you.