Social Marketing of Telehealth

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Well, we're going to move away just a little bit from what we just heard a really interesting talk about really specified to, you know, types of content being delivered via the internet to—particularly via the web—in terms of information and education and a lot of preventive activity and we're going to transition now to talk about a field that is very applied in terms of actually bringing services to folks, and that's telemedicine, telehealth, some people call it eHealth. It's kind of a changing term, but how many people have heard of telemedicine or telehealth before? Most people, that's great. Ten years ago when I would do a talk like this, people would just stare at me like I was talking about something from outer space. So it's really gratifying to actually see the change in at least awareness about this field, and so over the next ten minutes, my agenda is just to really quickly introduce this notion, this thing of telemedicine and then just kind of tease you with this notion of social marketing challenges. So it kind of maybe ties to the purpose of our conference and thinking in that perspective. I do a lot of research in this field in a wide array of areas from, you know, impacts and outcomes to perceptions. So if there are specific issues that you'd like to address in this field then when we get to the talk time we can bring them up then.

Okay, what is this thing? According to the Office for the Advancement of Telehealth, which is the federal agency funded through HRSA for telemedicine, it's using electronic information and telecom technologies to support doing stuff over some type of distance, although we know now that it can actually be in the next room. It doesn't necessary—long doesn't necessarily mean long in terms of miles—to do clinical care, patient and professional related education, public health, and health administration. So that's just a really strategically ambiguous definition to say, telemedicine, telehealth is using some type of communication technology to do something related to health care between and among people in some way. So theres all kinds of technologies that are used. These are samples of technologies that go into the home using the plain, old telephone system that we heard about a few minutes ago that 71% of us still have in our homes, the land line that's in place, certainly moving to a lot of mobile solutions. A lot of providers do this from the desktop. The guy in the upper right picture is a guy name Dave Ermer who's a child psychiatrist who sits in his office in North Dakota and just regularly treats kids, often pretty ill, that are tens or hundreds of miles away from him. A lot of times we see this in more complicated systems. The guy on the left is an adult psychiatrist. The guy in the bottom right, who's name really is Dr. Doolittle, is an oncologist who provides care to people. There are medical peripheral devices in real time. You can listen to heart and breath sounds, you can look in any orifice you want with a camera and I mean any orifice you want and do all kinds of actual diagnosis or treatment or care. There's been a migration to actually sharing and using data in terms of web activities, so certainly, you know, screens and scans and EKG's and then probably the fastest growing area really has to do with monitoring and so using various forms of either land-based or mobile technologies, to grab physiological and psychosocial information about people, literally have it sent in to usually some type of web-based interface and those data are then monitored and then when you, for example, we just finished a project in Indianapolis with—for CHF patients and every day they'd get on and we'd find out, you know, their weight and their blood pressure, etc. We'd also ask them how they slept and some diet etc. issues and the minute that some of their data were out of whack, a nurse would be paged, she'd go on line, see what's going on and contact them and sometimes that would mean they gained five pounds

over night, which if you have CHF is extremely dangerous because it indicates fluid retention and sometimes it would be because it's their birthday and they lived alone and we wanted to make sure that they got a call so somebody talked to them that day. So it's a broad range of care that's actually delivered through these remote monitoring devices.

So today we see applications all over the map and you can think about it from the service that's being provided, whether it's clinical or educational, to the delivery model. There really is not a specialty service I have not seen addressed via telemedicine. You know, as long as there's actually a need in some area, people will find a way to use technology to deliver that care and/or that education of folks. Delivery system, hub, dish, spoke, that's what originally drove telemedicine. A tertiary, quaternary hospital providing specialty services or continuing education or patient education to a spoke site in some way—all over the country those are now. Home health services, the—truly the fastest growing application in the field of tele-home health or home health. School based, we have a project in Lansing, Michigan where we're just launching where a child psychiatrist treats kids with behavioral health disorders in a middle school, in an inner-city, poor middle school. Nursing homes, a little bit, certainly not what it could and should be yet, so a lot more work to do there. Community mental health facilities, tele-psychiatry was the leading initial application in the field of telemedicine. A lot of people thought because it was talking heads more and that felt more normal. Some people think, no, it's because there's such a need for mental behavioral health that that's really what drove its explosion in growth. Delivery systems, it's integrated within health systems. Certainly the military, fortunately or unfortunately, depending on your opinion, is using it pretty extensively now with the soldiers and others getting hurt in Iraq. VA's have some beautiful projects going on, depended upon the VISN, some are doing more than others. The Florida VISN has been for years doing some beautiful work in this area. Socialized health care systems like Norway figured out years ago, maybe we can increase access, maybe we can decrease cost, let's go with this telemedicine thing and they have and then some managed care, but that tends to be fairly proprietary, so we don't necessarily hear a lot of outcomes and results, at least in the US, from what's going on in managed care.

So to transition now just to a quick tease in regard to linking this notion of telemedicine and telehealth to the purpose of our conference which is, how do we influence or impact behavior in some way, in a positive way, whether it's for individuals or society as Ed talks about in this quote. So you know, it's, definitionally, it's the process of developing, distributing, and promoting products or services for the purpose of eliciting a behavior for members of a targeted population that is in their or society's best interest. So how do we socially market impact, diffusion, and adoption in a way to better quality of life, quality of health care, prevent certain bad behaviors, help desired behaviors via telemedicine and technology? And there are huge challenges, significant challenges to this and so I'll just give you a sample of two in closing. The first one is who is the consumer? In the health care system, and I'm just putting two examples of consumers, there's many consumers, there's many stakeholders as you guys all know, but from a simplistic perspective, who is the consumer you're trying to reach? Is it the provider, meaning the doctor, the nurse, you know, the psychologist, the social worker, or is it the consumer? Is it the—ultimately the patient or someone related to the patient? Because if it's the consumer, well, we know that typically, there's still a pretty significant gatekeeper and who's the gatekeeper in many ways for the consumer still? The provider, that's exactly right and so we tend to get pretty

excited in the development of a lot of services including a lot we've heard and read about in this conference and others, but the bottom line is that we still exist within a health infrastructure that has significant challenges in terms of making information available to consumers or making services available to consumers in ways, not only they can access it, but they get at it, and really we should not downplay that because the way health care really works shouldn't be ignored in terms of how we're deploying these things. So we can put together, you know, we created this beautiful website for low literate adults related to diabetes, and that's great and we've studied some really phenomenal outcomes related to it, but they still get to it from their primary care doc or somehow through their health system in the first place in many cases, at least this population. We really can't ignore that and from the perspective of providers, one of the things that we know is that, in terms of adoption of these technologies, the resistance isn't the consumers or the patients, they don't fear this technology, they want to use this technology. The challenge is in regard to provider who will tell us, I'm working 11 hours a day already and my life is busy. I don't have the time to learn something new, right, at this point, or I don't see how it makes my life or my workload any better at this point and so we have real adoption challenges from the provider perspective in many cases. And then just a second example is how we deal with the constraints. Legal and regulatory issues. Again, this is part of the infrastructure of health and we really can't deny its existence; there are policy issues, payment issues, right? Why am I as a provider going to do something in the long term if ultimately I'm not paid for it or reimbursed for it or I don't find cost savings for it? You know, we see this in the great challenge of deploying electronic medical records or personal health records, in creating health information exchanges because this is out of pocket for somebody at this point and so we're all kind of fighting about whose pocket we're going to dip into for that development. And then finally, the notion of access to technology. You know, we do see wonderful numbers about increasing access and—but it really as a last example, the point that drives home to me is there are still lots of people in this country who do not have access to broadband for example, and so when we make these beautiful sites and services and things that work well with broadband, we have to remember at this point, there's still a lot of people in Michigan's upper peninsula or the western part of Kentucky or, you know, the mountains in Colorado, or rural parts of South Dakota, or even parts of California that they have dial up still and when they're trying to play these extens—you know, these extensive sites that have really high download times, they're gone before you actually hit that page or we can't get in their home to actually monitor their care unless they actually have access to cellular service in a decent way and so I was actually—I do some work in Rwanda and I was just there last month and it's a country where 71 percent of the country has access to cell phones. They by-pass the land line as an infrastructure and I walked over there thinking, my little health communications self, well, this is beautiful. We're just going to deliver preventive health services and education via mobile phones. Well, again, because 71 percent of the people have access does not mean 71 percent of the people actually have mobile or cellular service personally, in their own hand, or have a plan in place where they could access or pay it in that way and we need to certainly prescribe that in our own country and look at it hard, as well. There's a reason that the FCC is deploying tens of millions of dollars to create broadband infrastructure right now in states because it's still—it's not as pervasive as we think, those of us that all live in big cities. And so on that preaching note, I think I'll stop and turn over to our final speaker.