

# HIGH-TECH MEDICINE: REACHING OUT TO SENIORS THROUGH TECHNOLOGY

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**HEARING**  
BEFORE THE  
**SPECIAL COMMITTEE ON AGING**  
**UNITED STATES SENATE**  
**ONE HUNDRED SEVENTH CONGRESS**  
**SECOND SESSION**

POCATELLO, ID

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# **FIELD HEARING ON HIGH-TECH MEDICINE: REACHING OUT TO SENIORS THROUGH TECHNOLOGY**

**TUESDAY, JULY 2, 2002**

**U.S. SENATE,  
SPECIAL COMMITTEE ON AGING,  
*Pocatello, ID***

The committee met, pursuant to notice, at 5 p.m., in the ISU Media Distance Learning Center, Room 66, Idaho State University, Pocatello, ID, Hon. Larry Craig presiding.

Present: Senator Craig.

## **OPENING STATEMENT OF SENATOR LARRY CRAIG**

Senator CRAIG. I would like to call this meeting and hearing of the Senate Special Committee on Aging together. I want to thank you all very much for coming out this afternoon. This is a first and a very unique hearing that we are holding here in Pocatello and on the campus of Idaho State today because it is not only being heard here, and we have testifiers here for the record today, but also we will take testimony from people in Boise and in Coeur d'Alene.

I think if you look at the screen behind me now you will see people in Boise. Then we will also be tied into Coeur d'Alene, to a conference room in the medical center in Coeur d'Alene. We are doing this first and foremost to demonstrate the capability our State now has and is developing and enhancing in telemedicine.

As most of you know, I grew up in rural Idaho. I was telling someone with a local television station here that I grew up on a ranch. The nearest doctor was 50 miles away.

So rural health in Idaho has always been a challenge. But it becomes increasingly so as we lose some of our small hospitals in our communities, as health care begins to regionalize, and as our citizens grow older and want to stay in their small communities and be safe in those small communities and at the same time find themselves at a stage in their life where their need for health care rapidly increases.

As many of you know, I was once Chairman and am now the Ranking Member of this Special Committee on Aging in the Senate. We spend a good deal of our time looking at the Federal programs that are provided for seniors today and what can be done to enhance overall health care for our seniors.

My staff director is with me today who works on my behalf in that committee, Lisa Kidder, who handles health care on that com-

mittee. Also some of my personal staff is with me today along with Françoise Cleveland of my Pocatello staff and some of my folks both from Boise and from Washington.

One of the opportunities I have had in working with the facility here at Idaho State and in my capacity on the Appropriations Committee in the Senate is to look for opportunities and help facilitate grants that have been able to expand the capability and the capacity here in Idaho for telehealth. We have been able to do that in a variety of ways both here at Idaho State and in north Idaho over the last several years that rapidly accelerates our ability to bring this kind of health care system to the seniors of our State.

We have a variety of folks this afternoon who are Idaho specialists in the field of telehealth to testify to the committee. Also I am going to at a point in the program break and go to the back of the room and have a health exam. Now, last I checked, I was in pretty good health.

But what is important about the health exam that you will see today is that this unit is the kind of unit that can now be brought into the home anywhere in Idaho, plugged into the telephone, and instantly you have not only the ability to transmit information digitally, but you can transmit active video so that a nurse can actually bring this into the home of a senior and read their vital signs, if you will. You will see that this afternoon.

I think that is clearly an exciting feature for our State that we have watched grow and now with this new technology, it is becoming real to all of us.

About a decade ago when I began to work with Qwest and pushed them, as did the State legislature in Idaho, to wire Idaho with fiber optics, we knew that in the future these kinds of technologies could become readily available to our entire State. That is now pretty much the case. Nearly all of Idaho is wired in that regard; and, therefore, the ability to transmit high quality is the kind of stuff you will see this afternoon that is being transmitted on the fiber optic cable across our State that makes this kind of telecommunication literally real-time. Of course, in health care that becomes extremely valuable.

Let me now turn to our witnesses. We're going to ask them in giving testimony this afternoon to talk about their relationship to this program and what it offers. Also I will be asking a few questions of them. As I say, you will hear testimony from two witnesses here, one in Boise, and two in Coeur d'Alene.

Our first witness is really—I doubt that Dr. Beth Hudnall Stamm wants to be called a pioneer, but she is. She truly is a pioneer in Idaho's telemedicine area. She is Director of the telehealth facility here at Idaho State. We are using that facility this afternoon for this hearing and demonstrating it. So Beth has done a marvelous job in working across the State, but also in bringing resources to Idaho State University to head up this program.

So Doctor, let me turn to you to offer your testimony.

**STATEMENT OF DR. BETH HUDNALL STAMM, RESEARCH PROFESSOR AND DIRECTOR OF TELEHEALTH, INSTITUTE OF RURAL HEALTH, IDAHO STATE UNIVERSITY**

Dr. HUDNALL STAMM. Thank you, Senator Craig. Senator Craig, members and staff of the Senate Special Committee on Aging, and your personal staff, we are honored to have you here with us tonight. We are very excited that the Special Committee on Aging has chosen Idaho for this field hearing on telehealth. We are also appreciative of the support that you have given us to make telehealth happen in Idaho.

My name is Dr. Beth Hudnall Stamm, and I am a Research Professor and Director of Telehealth at the Institute of Rural Health at Idaho State University. I am also the principal investigator of Telehealth Idaho, a state-wide telehealth project funded by the Office for the Advancement of Telehealth at the Health Resources and Service Administration of the Department of Health and Human Services.

As you know, tonight we have connected three regions of our State for tonight's hearing. As we progress through the testimony tonight, we will virtually travel across our State.

Let me begin here in the southeast corner. I will begin by providing an overview of telehealth and share with you information about Telehealth Idaho and about our Senior Health Mobile. Mr. Wallace Whitehead, who is here with us, formerly the Postmaster in Lava Hot Springs, will share his experiences as a consumer of services provided through the Senior Health Mobile.

After our testimony tonight and you have asked us the questions that you would, we would invite you to come out to the yard and to enjoy ice cream to kick off the Fourth of July weekend. We thought that would be an appropriate thing. We also have the Senior Health Mobile parked outside. We would invite you and all of the other participants to view and come through the Senior Health Mobile.

The first thing I would like to do tonight is to define telehealth. People ask that often.

According to the Office for the Advancement of Telehealth, telehealth is the use of electronic information and telecommunication technologies to support long distance clinical healthcare, patient and professional related health information, public health, and health administration. Telemedicine, which is a subset of telehealth, refers to the use of telecommunications to provide clinical care at a distance.

The application of technology to telehealth is nearly limitless, but it can generally be categorized into two types—store-and-forward technologies or what we call asynchronous technology, or real-time technology which is what we call synchronous technology.

Store-and-forward technology allows one party to collect and manipulate information and then send it to another person who can then look at that information at their convenience. It is similar to sending an E-mail. Of course privacy concerns mean that we do not do it exactly the same as sending an E-mail, but it would be like sending an E-mail with an attachment.

The second type of activity, synchronous activity, is what we are doing here tonight. In that case a patient may be in one place and

a provider in another. Other than the telephone, viewing of health information such as on the web is the most common telehealth activity. According to studies in 2000, about 37 percent of Americans have viewed health information online at least three times in the past year.

When considering applications that involve two or more parties, asynchronous or store-and-forward applications are the most common. Synchronous applications where a patient would be in one place and a provider in another are an important part of what we do, but actually a small percentage of the overall activities.

At this point I would like to shift from technology to talking about the older rural residents of the United States, and particularly of Idaho. Statistically older rural adults have more health risk factors than their urban counterparts.

This resident may be a man, but is statistically more likely to be a woman. She is dependent, at least in part, on the public sector for her health care. She has access to fewer resources for independent living, and she is one of the growing number of older rural residents who form a disproportionate share of the rural population. As you know, her economy is fragile, often dependent on retirement income rather than on production economy to keep their businesses open.

If she is a rural woman, she is more likely than her urban counterparts to have been exposed to a traumatic event. She also has an ongoing problem with access to care because she is served by fewer and less highly trained health professionals who are often reimbursed by Medicaid at lower rates. She is likely taking psychotropic medications prescribed by someone not trained in their use.

Access to healthcare is more difficult for Idahoans than almost any other people in the United States. U.S. federally designated physical, mental/behavioral, and oral health profession shortage areas cover 73 to 93 percent of our State. Idahoans face many health care challenges including severe work force shortages, difficult geography and climate, inadequate infrastructure, and isolation.

These factors make it difficult for patients to get care and difficult for providers to provide care. For example, providers in rural areas often face working conditions that induce negative consequences such as burnout and compassion fatigue that can lead to high turnover and increased risk for medical error.

Telehealth is one way we can address these challenges. We can increase the number of providers we have through new and upgraded education. We can extend the providers that we have through telehealth through case conferences, supervision, consultation, and home health. We can also preserve our existing professional work force through increased quality of life, and reduce the negative effects of care giving by providing them with professional support.

Telehealth Idaho seeks to improve Idaho health care access through its health care work force. The project has three parts—the Telehealth Idaho Toolbox which is an online professional health resource center that includes virtual program centers; we also have an Integrated Care Center for consultation, supervision, case conferencing and home health. The third area that we work in is edu-

cational telecommunications which uses the existing telecommunications resources to reach 50 of Idaho's 202 towns with the kind of technology we are using tonight.

One of the projects we extend our existing providers with is the Senior Health Mobile. This mobile health van is a collaborative project of the Idaho Rural Health Education Center of Mountain States Group and the Kasiska College of Health Professionals here at Idaho State University, and the Idaho Area V Agency on Aging.

The Senior Health Mobile travels around southeast Idaho and performs health/functional assessments, identifies imminent needs, and offers short-term intervention. The project, which won the 2001 Governor's Award of Excellence, provides care for seniors and also importantly provides training for students.

One of the things we are doing to extend telehealth into the Senior Health Mobile is to put videophones on the Senior Health Mobile. Those allow us to provide supervision to the students, and to increase the areas of supervision for the supervisors who travel on the van. For example, a nurse may be accompanying the students on the van. But the students may be in nursing, they may be physical therapy, or they may be in counseling. So we can actually link them back to a supervisor in a specialty area if we need that.

The other thing that I think is actually the most fun thing that we are doing with the Senior Health Mobile is that we have a lending library of videophones. If somebody who gets care from the Senior Health Mobile needs follow-up, we can actually loan them a videophone, and leave it in the community. Then the next time the van comes by, if they don't need the phone anymore, we pick it up.

I am sure you immediately recognize the rural "book mobile" concept, but we've extended it down to technology. We really feel excited about it because our students are able to go with the family members into the home, help them connect to the videophone, and then we can stay in touch with them through a period of transition.

Thank you, Senator, for hearing our testimony tonight. I look forward to continued exciting development in telehealth in the State of Idaho.

Senator CRAIG. Doctor, thanks very much for that testimony. I'm sitting here thinking of the application of this technology and how it gets used in the field.

I came to the State senate in 1974 as a State senator. A doctor in Council, ID who had been a State senator in the mid 1960's had pushed through the concept of a nurse practitioner in an effort to reach out into rural areas where doctors were not or could not serve, would not serve oftentimes. But the application of that oftentimes ran into difficulties when doctors would not back up, if you will, the nurse practitioners.

So while it pioneered here in Idaho in an effort to outreach to those rural communities—and it was successful and it remains successful today—in many ways it still had the lack of connectivity oftentimes. I'm sensing that that is in part what this offers.

You talk about students in the field or, let us say, certainly less than the certified skilled but being fully monitored, or the information flowing back to a center where the professionals are to review it and, of course, give their advice from it.

Am I thinking about this in the right context?



Dr. HUDNALL STAMM. Absolutely, Senator. Actually the situation you described is one of the very first applications of telehealth that I worked on in the early 1990's where we had people who were mid-level and professionals working in small communities scattered around, in that case the State of Alaska. We were able to link them using telehealth, both store-and-forward and real-time, to people who had higher levels on expertise in a more urban area which allows the local providers to provide care to the residents so that they didn't have to travel away from their homes.

It would help them stay with their social support and really build a strong network. It allows people when they do have to travel to a city to be able to return home sooner and really, really supports continuity of care. For people who are aging, it supports aging in place.

Senator CRAIG. With your experience now and the application of this knowledge, look forward if you will. Tell me what you see in the future as it relates to this technology and what it might do for us.

You mentioned a lack of skilled people. We are in a nurses shortage both here in Idaho and nationwide. So I know technology has always been one of those—not a substitute, but it allows a single individual to multiply at least the application of their talent. I sense that can be part of all of this.

But what else might you see that being?

Dr. HUDNALL STAMM. Well, one of the things that you are probably very familiar with, being a resident from a rural state and dealing with so much health care, is the concept of windshield time—that amount of time that circuit riders have to spend in the car going from patient to patient. As we build out our technological capacity, we're able to leave the provider in one location. They can visit virtually—they can circuit ride virtually which really may double or triple their ability to see patients, reducing wait time, and improving quality of care.

We can also see, I believe, an increase in the amount of technology that is easy, that is in the home. I appreciate the comment about being a pioneer because that touches my heart, and I truly appreciate that. But some of things that pioneers do is that we mess with things that don't work very well. The technology that we have done for years has been sometimes very difficult.

Now it is becoming easy. When we place it in people's homes, it is no longer a technological bafflement of how to make it work. So it becomes a very simple thing, and I think that is a very positive change that we are seeing in the future.

Senator CRAIG. Well, I meant the term "pioneer". When we talk about the different definitions of health care in settings in national policy and we talk about frontier medicine and those various areas, we have areas in Idaho that are outside those definitions that do not fit. So in that case I think it is most appropriate.

Well, thank you very much.

Dr. Stamm mentioned in her opening comments that we had with us Wallace Whitehead. Mr. Whitehead was the Postmaster of Lava Hot Springs and has, I think, a unique first-hand experience to visit with us about as relates to the Senior Health Mobile.

So Wallace, if you would please proceed.

**STATEMENT OF WALLACE WHITEHEAD, FORMER  
POSTMASTER, LAVA HOT SPRINGS, ID**

Mr. WHITEHEAD. Thank you, Senator, for the opportunity to tell you my experiences with the health mobile. I thank Dr. Beth for her inviting me to do this. I guess she did it through Judy Robinson, which is a friend of both of us. I appreciate this opportunity.

It's always been my experience to want to be—the program to come that can keep people in their homes, older people, as long as possible. I seen that happen through the senior citizen program. Especially in Lava we've had people that have still been working as seniors when they're 92, or 93, or 94 years old, and staying in their own homes. This is a very important part of that from the medical side of that to be able to keep their health.

The health mobile started coming to Lava. They got some excellent personnel working in that health mobile. It has been a great opportunity, I think, for the students to be for hands on help too. It helps them, and it helps us old senior citizens who are needing help.

When I went and they first talked to me about having my health assessment made, well, I kind of kept not wanting to do it and kept kind of putting it off.

Senator CRAIG. You sound pretty normal.

Mr. WHITEHEAD. I thought, "I don't need that." I'm healthy and everything. We do have a good program there, and we enjoy it.

But they stayed with me, and they did get me to do that. As a result of doing that, I had no idea in the world I had high blood pressure. As I was doing this assessment, the young man took my blood pressure. Why, it was 220.

It was a day that we had the orchestra there and playing. I said, "Well, OK. I will just go dance it down," I said.

Of course, the young man looked at me; and the supervisor, she came over. He told her what it was. Then Judy came over, and they all looked at me and said to each other "do you think we should let him dance with that high of blood pressure? He probably should not be dancing." They discussed it a little bit and decided, well, it would be OK; just dance quietly; and you don't get carried away.

Senator CRAIG. So no square dances, no polkas, just the waltzes. [Laughter.]

Mr. WHITEHEAD. I don't know why, whether it's just the power of suggestion; but as I did start dancing, I got feeling kind of funny, you know. I thought, well, so I did kind of sit down a little bit more and just listen.

But that got me going to the doctor to have it checked out and because I'd been staying away from the doctors as long as I possibly could. I did not want to go to doctors. I had been taking my vitamins and, you know, doing all those things. We think we are pretty healthy.

So my wife and I, we visited a couple of friends of ours, and she has had a lot of health problems. I kind of went along and decided—I'd looked up in my health books and decided all the things I needed to do to get it down.

Then we went and visited them. She had had a little high blood pressure, so she had the machine. She took mine; and it was, I think, 175 or something then.

So that night we decided we better go see our doctor, and so we did. As a result he has me on blood pressure pills, and he has run me though a lot of other sets of tests to check out everything. I wouldn't have done that if it hadn't been for this health mobile and if it hadn't been for these people working with me and getting me to get a check up on my health.

Incidentally, another woman from Bancroft, by her doing this, she found out that she had breast cancer. She had no idea that she had it. So that was really a big help to her also.

Others that have taken that, I'm sure it's helped them, too, their health—checking on their health and realizing that sometimes we do need those things to help us.

The big thing I think is important, they go into the home to people that can't get out and things like that, which is very important, too. It's hard for—you get out there, and it's hard for people to get to Pocatello to a doctor. Incidentally, we do have Mike down there in the clinic, too. But even then you stay away from it as long as you can.

Senator CRAIG. Wallace, I appreciate that testimony. All of the questions I was going to ask you, you have answered. I say that because of the idea of discovering your high blood pressure in large part due to the health mobile's availability. Obviously the examination you had tells an awfully important story.

Let me also recognize Alice, your wife, who is with you today. It is nice to have you here. Thanks for being here.

Your testimony, I think, is oftentimes quite typical of not just men, men and woman, but I think predominately men of your age who have largely lived their lives in a very healthy way and have had no illnesses to speak of and do not go get checkups, do not go do the things that they probably ought to do—or not only probably, should do simply because they feel well.

I know. I have a father at 84 years of age who is testimony to very much the kind of health and lifestyle you have talked about. Through his son and daughter's urging and a wife, he gets his regular checkups today because as a result of one of those urgings he discovered he had prostate cancer. So I think that's an awareness that men must come to. That will save a lot of lives if we do. But certainly the blood pressure.

Doctor, can they actually take blood for blood test purposes through the mobile?

Dr. HUDNALL STAMM. I am going to look to one of my colleagues because I'm not real certain about that.

Senator CRAIG. Do you know if that can be done with the mobile?

Dr. HUDNALL STAMM. I am going to answer that question that technologically it can be done. I think some of the things we have to clear are the supervision and also the sanitation issues around the health mobile. I do not know whether they are doing that at this point or not.

Senator CRAIG. I do not mean analyze. I mean simply to bring it in for purpose of analysis.

Dr. HUDNALL STAMM. I do not know for sure.

Do you know, Mr. Whitehead?

Mr. WHITEHEAD. I do not know for sure about that, whether they take the blood. Then we had those health fairs. They do that where

they take blood. When I was about 72 years old, I got diabetes and also prostate cancer at the same time.

Dr. HUDNALL STAMM. One of the things that the health mobile does do is that they work closely with the local providers. They park at the senior center, but they work closely with the local providers so that any services that the health mobile cannot handle, they are able to work directly with the providers. There have been cases where people from the health mobile have literally walked down the street with someone to a provider's office.

Senator CRAIG. Excellent. Is this the point at which I am to have my exam? We really need to move right on to Coeur d'Alene and Boise, but I am going to take a moment and go back and have my blood pressure checked with this marvelous new piece of equipment. The equipment that I am being tested on, we are going to have a nurse back there who will explain it; but it is the very kind of equipment that can actually be brought into the home, plugged into a telephone receptacle or connection and as a result, immediately sent back in real-time to the center. So let me move back and do that.

I guess Alice is going to testify before I have my exam. Alice Ennis, thanks for bringing me online. Alice Ennis is Director of Home Health at Saint Alphonsus in Boise. Alice is here, and she's going to walk me through this, I guess, at least explain it. Then we will go with Alice's instruction to the back of the room for this technology. Please proceed, Alice, and welcome.

**STATEMENT OF ALICE ENNIS, DIRECTOR OF HOME HEALTH,  
SAINT ALPHONSUS REGIONAL MEDICAL CENTER, BOISE, ID**

Ms. ENNIS. Thank you, Senator Craig and distinguished guests. Good afternoon and thank you for the opportunity to talk about telehome care. I would like to make some opening remarks, and then we will move into your examination that we have all been waiting for.

Like North Idaho, telehealth's network and Telehealth Idaho from Idaho State University, Saint Alphonsus Regional Medical Center is dedicated to providing access to quality health care and education using telehealth technology. With this technology, the same standard of health care available in the cities of Idaho is made available to the elderly and non-elderly in the rural communities.

As part of the commitment, the Saint Alphonsus Foundation provided a grant this past year to our home health to implement telehome care. Telehome care will make it possible to deliver high-quality wound care to home-bound elderly outside of the Boise area.

To illustrate the value of telehome care, I would like to relate the case of a real patient. Last winter a physician referred a patient to us who lived in Centerville. The patient required daily wound assessment and care. In addition, the home health nurse was teaching the caregiver how to do the dressing changes. For those 2 weeks, a nurse spent 3½ hours each day driving to Centerville, and spent about 30 to 45 minutes on each visit. This one patient consumed 4 hours of nursing care per day. In addition, the patient

and caregiver often voiced their concerns about the nurse's driving to Centerville in the winter on the ice and in the snow.

That scenario would be very different with telehome care technology. On the first day the home health nurse would admit the patient to service, assess the wound, start the teaching, install the patient unit, and provide instructions on how to use the equipment. That visit would take about an hour. The nurse may even make a visit the next day; however, from that point on, the visits could be done from Boise using the telehome technology.

The audiovisual capabilities will make it possible for the nurse in Boise to see the patient, take the patient's vital signs, listen to heart and lung sounds, assess the patient's wounds and even measure the glucose level in the blood if that is necessary. The care giver can do dressing changes while the nurse observes technique and gives instructions as needed. The nurse, patient, care giver, and physician will agree upon the proper balance of in-person visits and telehome care visits based on the patient's needs.

This is one example of how Saint Alphonsus home health will use telehome care technology. Telehome care will help Saint Alphonsus respond to an increasing number of the home-bound elderly population with increased needs and declining Medicare reimbursement. Later this month, Saint Alphonsus home health will launch the telehome care pilot project with a base unit in Boise. Five patient units in the Boise area and one in Jerome with Saint Benedict's home care staff.

The unit you have there, Senator Craig, is an example of the patient care unit. The focus of the pilot will be patients with wounds. These patients were chosen for two reasons. They create a major drain on prospective payment reimbursement because of the cost of supplies and the need for frequent nursing visits.

Second, patients with wounds make up about one third to one half of our patient census. With telehome care technology, we feel that Saint Alphonsus Regional Medical Center can provide home health services to under-served areas in the State.

Telehome care home units can be placed in any home that has a telephone line. Wound care nurses, through a scheduled appointment in our office, can work with non-wound care nurses onsite to provide treatment options.

Once telehome care is established, and we have demonstrated its value in caring for patients with wounds, we will branch out to other specialties—oncology, diabetes, and congestive heart failure just to mention a few.

Now for what we've all been waiting for. Marilyn Richards, a certified wound care nurse with Saint Alphonsus, will provide a demonstration of the user-friendly American telecare equipment that you have there in Pocatello. Thank you very much.

Senator CRAIG. Alice, thank you very much not only for that explanation, but also what Saint Alphonsus Regional is doing at this time and the outreach that will result from that.

So now can I go to the back of the room? All right. Marilyn, thank you. I am wired so I can move and talk at the same time.

**DEMONSTRATION BY MARILYN RICHARDS, CERTIFIED WOUND CARE NURSE, SAINT ALPHONSUS HOME HEALTH**

Ms. EWERT-NEILSON. We are going to wait for the phone to ring; and when the phone rings, we're going to press the green button. You'll see your picture right here. Then when they convert it over, you'll see them, and they will see you. When the phone rings, press your button.

There you are. It takes 30 seconds for it to convert over, and then when this 30 seconds has completed and it is it is just the plain old telephone system which we are connected to—you will see their picture, and they will see yours. You can see how many seconds have arrived with the counter is showing us.

Senator CRAIG. All right.

Ms. EWERT-NEILSON. Like Alice was saying, six of these will be placed in the community, and the central station will stay in Boise. The nurse will be able—there is your nurse.

Senator CRAIG. I am now on their screen.

Ms. RICHARDS. Can you see me?

Senator CRAIG. Yes, I can. Marilyn, give us your full name again and what you do.

Ms. RICHARDS. Marilyn Richards, and I am a certified wound care nurse for Saint Alphonsus Home Health.

Senator CRAIG. Wonderful. I do not think I have any wounds today that I know of, but please proceed.

Ms. RICHARDS. Well, I appreciate you being our patient today. It gives us the opportunity to test the equipment. Since we have not had an opportunity to come and instruct you in the use of the equipment, Paula will help you, and I will as we go along.

Senator CRAIG. All right.

Ms. RICHARDS. OK. Let's start by taking your blood pressure. Paula will help you put on the blood pressure cuff. Tell me when you are ready.

Senator CRAIG. I am ready.

Ms. RICHARDS. OK. Great. I am going to activate the remote blood pressure, and you should feel it start pumping in a second.

Is it working?

Senator CRAIG. Yes, it is now.

Ms. RICHARDS. OK. You will be able to see your blood pressure on the monitor there in front of you, but I will not bring it up on my screen to protect your confidentiality.

Senator CRAIG. Now it's going back down, you see. How fascinating. OK. Now that the pressure is coming off from the—

Ms. RICHARDS. Can you see it on the monitor?

Senator CRAIG. Yes.

Ms. RICHARDS. OK. Great. Now you can push the blue button and take off the cuff, and that will erase it.

Senator CRAIG. OK. How about that.

Ms. RICHARDS. I would like to listen to your heart.

Senator CRAIG. All right.

Ms. RICHARDS. Your lungs. No one else will be able to hear that because I will have on a set of headphones.

Senator CRAIG. Oh, all right.

Ms. EWERT-NEILSON. Now, here is the picture for you to look at so you can see where she would like you to place it.

Senator CRAIG. Yes.

Ms. RICHARDS. You should have a card showing you where to place it. You definitely have a heart. [Laughter.]

Senator CRAIG. Thank you for saying that. Some people think I do not.

Ms. RICHARDS. Now over to the other side. OK. That sounds great. Go ahead and put the stethoscope away.

Senator CRAIG. OK.

Ms. RICHARDS. Next we would like to have you step on the scale, if you would like to.

Senator CRAIG. With or without my shoes? [Laughter.]

Ms. RICHARDS. Nobody will know.

Senator CRAIG. Well, I am what is known as random security today. My shoes have already been off at the Cincinnati airport.

Ms. RICHARDS. Now, I could also bring this information to my monitor; but I will not today.

Senator CRAIG. OK.

Ms. RICHARDS. OK. Thank you. The last thing we would like to demonstrate is the ability of this equipment to do medications.

Senator CRAIG. Oh, yes. OK.

Ms. RICHARDS. You can see what I see.

Senator CRAIG. All right. [Holds up bottle to camera.] It's getting readable.

Ms. RICHARDS. Now you'll be able to read medication labels and also do prescriptions. OK. Great. That completes our demonstration.

Do you have any questions?

Senator CRAIG. Well, no, but I all of a sudden sense why a novice or someone who is inexperienced with technology would be willing to use this because you are here.

Ms. RICHARDS. It is very simple to use, too.

Senator CRAIG. It is simple, and it is interactive. There is actually a face and a person talking to you, and that is probably very helpful to someone who might be a little skeptical about the use of this kind of equipment.

Ms. RICHARDS. I appreciate you being a patient today.

Senator CRAIG. Thank you. Now tell me about the use of this technology for a wound. You mentioned that as an application of the type of person that you are seeking out with this technology. How would that work?

Ms. RICHARDS. What we would have is a camcorder that we would be able to use so we will be able to look at the wound and what is going on. If there's an infection going on, we'd be able to see that also.

Senator CRAIG. So this camera that comes with it is not the camera that would be used to examine the wound?

Ms. RICHARDS. No.

Senator CRAIG. OK. Well, thank you. I'll tie my shoes and go back to the table. How is that?

Well, Alice, thank you very much for allowing us not only to see that technology, but see it in action. I think that is even more exciting.

Do you have anything further or any further comments to make in relation to that technology.

Ms. ENNIS. My only comments are that we are very excited about having it and anxious to get it up and running and to demonstrate the value that it is going to be. I thank you for the opportunity.

Senator CRAIG. Thank you. Dr. Beth was suggesting that we might have made history today, that your guinea pig in this instance was a Senator. I think that is what she was suggesting. [Laughter.]

Dr. HUDNALL STAMM. I don't think it's in the Congressional Record anywhere else. [Laughter.]

Senator CRAIG. Well, thank you very much. Now we are going to go to Coeur d'Alene.

Tom, thank you for joining us. Tom Hauer is Director of Telehealth at North Idaho Rural Health Consortium.

Tom, are you going to lead off here with your testimony?

**STATEMENT OF TOM HAUER, DIRECTOR, TELEHEALTH, NORTH IDAHO RURAL HEALTH CONSORTIUM, COEUR D'ALENE, ID**

Mr. HAUER. Yes. If I could, I would like to give you a brief overview of what we have been doing up in the northern part of the State, and then I will turn it over to our real witness here who has had some experience doing this real-time, Dr. Miewald. But first I thought I'd give a brief overview.

I'd like to first thank Beth for setting this up so that—inviting us so we could join in. We also have other sites that have joined us in the northern part of the State. Bonner General Hospital in Sandpoint is also on the connection here along with Wallace High School and Beniwah Community Hospital in St. Marie's. So we have got quite a number of people that are joining in just to watch today.

Senator CRAIG. Did you see my blood pressure, Tom?

Mr. HAUER. No, we couldn't see it very well up here.

Senator CRAIG. I was just checking to make sure Alice was true to her word. [Laughter.]

Mr. HAUER. I'd take her word for it.

Senator CRAIG. Please proceed.

Mr. HAUER. The North Idaho Rural Health Consortium is a consortium of five county hospitals that in 1991 formed a group; that their group's objective was to provide a regional, integrative approach to the delivery of rural health care; and they joined forces to share all their objectives—or to share their resources to try to provide better health care for rural north Idahoans in the north part of the State.

I came on board in 1996. Five years later we purchased our video conferencing equipment, and the objective at the time was to provide professional education to physicians and other health care professionals up here. That could mean weekly we bring in a speaker to provide continuing medical education for the physicians, and we broadcast those to our four neighboring county hospitals so that those physicians can take advantage of those speakers.

I also got involved in some of the trials, some of the early clinical applications which were to provide surgical follow-up for some surgeries where the physician or the surgeon would need to check range of motion or simple things where they would not need to get



their hands on the patient. We have also been doing cancer conferences which are where you have a patient that has a tumor that is not defined easily and the physicians can get together and discuss what's the best course of treatment.

We've been doing those things since 1996, and in year 2000 we were approached by some of the other community groups that were interested in seeing if telehealth could benefit their organizations. These groups were not only the hospitals, but some of the mental health providers locally, the school districts, and their special services group which take care of special service needs children, the Idaho Department of Health and Welfare, some of our local judicial system members, and then a school up in Bonners Ferry which is the private school for troubled adolescents. We sat down with all these people that have diverse needs. We said "look, we have got this equipment, and we have got the means to provide some of these services to you. Let us talk about what your needs are, and let us plan a course of action and try to see what we can do." So that group had a representative from each group meet for about a year. We analyzed our needs; we analyzed what types of systems we had in place, what types of technology we had and where—was the technology compatible or not; and the group then selected two pilot programs.

This was a year ago, approximately, where we would see if this could work clinically. The two pilot projects that were selected were mental health and special needs children. The mental health pilot, Dr. Miewald is going to speak to here in the second, that was something where he is seeing patients that he has a relationship with already.

Then the other pilot program is special needs kids, and that is in conjunction with two of the school districts that we are starting this pilot with. It will provide physical therapy and occupational therapy from physical and occupational therapists at Bonner General Hospital to two of the school districts in the Kellogg area and St. Marie's.

So we are really excited about this, and we are also excited with the fact that you are in a position to help us out with an appropriation, we understand we received early this year that will go toward making these pilot programs a reality. So we really appreciate that and want you to know that.

I know this hearing is focused mainly on the geriatric population in a rural setting. While our pilots do not go after the geriatric population, I think some of the lessons we have learned and will be learning over the next year can easily be transferred to some of those programs. So we are excited that Beth has brought us on-board with this statewide effort to coordinate telehealth and that we can share some of those things, some of our experiences and then learn from some of their experiences in the south and southwest, southeast also. Please keep that in mind as you're listening to Dr. Miewald as these are some of the things I think we can go forward and learn from.

I will introduce Dr. Miewald. He is a psychiatrist here in Coeur d'Alene. He did his undergraduate and graduate work at the University of Montana. This is long. [Laughter.]

He received his M.D. at the University of New Mexico. I will not go through all of what he did in Pittsburgh, but he has been here since 1990 working in conjunction with Kootenai Medical Center, and behavioral health here. He is now the attending Psychiatrist at Kootenai Medical Center and the Medical Director of Child and Adolescent Psychiatric Clinic, and the Medical Administrator of the Outpatient Residential Youth Services at North Idaho Behavioral Health.

I also want to thank him because he has been a driving force to making telepsychology a reality up here. So I'll turn it over to Dr. Miewald.

Senator CRAIG. Dr. Miewald, welcome.

**STATEMENT OF DR. MIEWALD, ATTENDING PSYCHIATRIST, KOOTENAI MEDICAL CENTER; MEDICAL DIRECTOR OF CHILD AND ADOLESCENT PSYCHIATRIC CLINIC; AND MEDICAL ADMINISTRATOR OF THE OUTPATIENT RESIDENTIAL YOUTH SERVICE, NORTH IDAHO BEHAVIORAL HEALTH**

Dr. MIEWALD. Thank you. Senator, I want to thank you for two things. One is, again, what Tom was mentioning about all of your support through the Senate to get the funding so we can get more resources to expand telepsychiatry. I also want to thank you for pronouncing my name right. It's one that most people have trouble with. [Laughter.]

Tom is being a little too modest about what he and all the other people on the committee have been doing. I kind of came into the picture a little bit late.

What happened was I have a lot of different projects that I'm involved with. As Tom mentioned, one of them is an administrative position at North Idaho Behavioral Health which is part of Kootenai Medical Center. The other part is I have had a contract for many years to do consulting for family and children's services through the Department of Health and Welfare. So when I got appointed to this committee for telehealth, it just made a lot of sense to try to expand it to the clients that I see through family children services.

What I do through that contract is I do evaluations and then follow-up appointments for children, adolescents for the whole northern region. It has been a problem to have the children and their families and case workers to have to come into Coeur d'Alene for these follow-ups, especially in the winter. It is often a real long drive from Bonners Ferry or the Silver Valley. Sometimes they have to cancel or they show up late. So what we have done is we've done really what I call more of a pilot, pilot project to try to work some of the bugs out of doing follow-up appointments over the telehealth hookup.

So I have seen probably a total of five or six different individual patients. Several of them I have seen for two or three times. So I am guessing I have probably done a total of ten or so appointments over a several-month period since last fall. I've seen clients from Sandpoint, from Bonners Ferry, and from Kellogg. Though we haven't done any formal studies, that's kind of the next step that we're trying to develop with Dr. Stamm and the rest of the group, but informal follow-up has been very positive.

The patients and their families and the case workers all have been very positive in their feedback. They mostly cite how much more convenient and safe it is not having to drive down here. Most of the kids like kind of the cool part of the television. They fool around with the zoom and move it around and all that; but usually after 5 or 10 minutes they kind of settle down and, to me, act pretty much like they would normally act and talk as if I was seeing them live.

So the case workers who are usually distant with the patient and the family have felt that the follow-up has been just as helpful as it would be if it was live. The families and the patients have all felt that they have at least—they have told me that they have all received just as good a service as if they had come into Coeur d'Alene and seen me face to face.

So I think the next place that we want to expand—and I have been talking with the other psychiatrists here in Coeur d'Alene—is to expand the number of patients that we are seeing and then the age range. I think it is more just coincidence that I have worked mostly with children. There is no reason why we cannot be using this technology for all age groups. Again, I think it would be a lot more convenient for the patients and their families to not have to drive in.

The biggest problem—the technology is really tremendous. I am very impressed with the quality of the sound and the picture is very good. The biggest problem we have had is scheduling where my schedule, the patient's schedule, the schedule for the hookup here in Coeur d'Alene, the schedule for the remote hookup, that has really been the major stumbling block. I think we can work around that. We are hoping to use some of the additional funding we have gotten to be able to buy further hookups. I think that has a tremendous potential there.

For example, we have a lot of patients that are in long-term residential programs here in Coeur d'Alene, but their families are down in Idaho Falls or Saint Anthony's or something like that. I think it would be a tremendous help to be able to do family therapy over the television. Right now we are probably stuck doing it over the old telephone. That is one area that I think there is lots of potential.

That is about all the comments I had. I do not know if anybody has any questions.

Senator CRAIG. Doctor, a couple of questions as it relates to the experience you have had to date. I gather from your testimony that you feel that this is serving your clients or your patients adequately and as adequate as if it were a face-to-face, in person, kind of, consultation or relationship.

Dr. MIEWALD. Yes, I do. We have not done any initial evaluations. Apparently in some other States like Nebraska and Kansas they will even do initial evaluations. But so far we have pretty much kept it to follow-up appointments.

Senator CRAIG. As a provider, what has your experience been with reimbursement through telehealth services? Any problem with that?

Dr. MIEWALD. Not yet. But that is the fluke of how we have set it up is that I have just continued to charge Health and Welfare

the same rate I would charge them if I was seeing the patient live. So from my end, it has not been an issue.

We are trying to work with Medicaid to do a pilot project to look at reimbursement for telehealth for Medicaid clients. That is a concern some of the psychiatrists have raised is whether they will be getting paid for this work or not. But for me individually it has not been an issue so far. It has saved the state money, I think, because, if nothing else, they have not had to pay for the case workers to drive down, pay reimbursement for the travel time and all that. I don't think anybody is keeping track of that, but I think it has saved the state a little bit of money in that way.

Senator CRAIG. All of your clients to date have been state or state reimbursed?

Dr. MIEWALD. Right.

Senator CRAIG. You mentioned Medicaid. Are you sensing there would be a problem, or is there just a necessary procedure you feel you have to go through to identify?

Dr. MIEWALD. Well, my understanding is that right now Medicaid will not pay for telehealth services. The director has said that they will be willing to do that in a very small pilot project here while we are gathering data on patient satisfaction and then savings and things like that. So for right now my understanding is we have approval for this pilot project. It's certainly not the routine setup at all.

I also understand that Medicare will pay for telehealth; but to my knowledge, nobody in Idaho has done that yet. So it's actually gone through and tried to bill Medicare for that. The rumor on the street is that that is reimbursed at Medicare rates.

Senator CRAIG. I'm getting a positive response from here in the room, so there has apparently been some experience and/or knowledge about that.

Doctor, again, thank you very much for giving us some firsthand experience of the kind that I think clearly in building the record to the application of telehealth is extremely important.

Tom, do you have anything additional you would like to add or comments you would like to make?

Mr. HAUER. If I might, I would like to introduce Mary Hendrickson who will be taking the lead in the physical therapy, occupational therapy portion of this. She is up in Sandpoint.

Mary, can you hear us?

Ms. Hendrickson. I can. Good afternoon.

Senator CRAIG. Mary, thanks for joining us.

#### STATEMENT OF MARY HENDRICKSON

Ms. HENDRICKSON. Thank you. This is a great opportunity for us to be able to interface with you, sir. Let me start by thanking you very, very much with regard to the help that you have given us with regard to the appropriation.

This appropriation will definitely further our opportunity to advance telehealth. We have been so fortunate in the north here to have the bi-northern county hospital administrators supporting Tom and I and Dr. Miewald as we have forged forward in the effort to bring telehealth to the point that it is here in the north. We are

incredibly proud of where we have been up to this point and where we are going now.

Because we have forged also forward in this opportunity to bring the other community leaders involved in this project, one of the things that we have done is to work very closely with the school districts. We were fortunate enough to have a school nursing grant that we did most of it through the interactive video conferencing equipment. It was also through the Office of Advancement of Telehealth is where that funding was administered.

In the process of doing that, we were able to develop just an incredible relationship with the superintendents as well as with the school nurses; and given that opportunity, we continued in that effort as we decided what projects we were going to take on.

Our larger telehealth working committee, as we decided on the two pilot projects that we were going to work on we looked at something that was already funded and mandated and funded because we knew that the State of Idaho at this point in time Medicaid-wise was not paying for telehealth services. So we knew that we had to take that project on separately.

So as we looked at what was already currently mandated and funded, as what you can tell, too, from what Dr. Miewald has testified, that we looked at psychiatric services because that is being paid for at the state level. In addition to that—and also because of our highest need.

In addition to that, then we looked at the occupational therapy, speech therapy, and physical therapy needs of special education students in the school districts. It is mandated and funded, sir; but in addition to that, it also is an opportunity where there is a great health shortage as far as health care professionals and especially here in the north.

We are fortunate enough here at Bonner General Hospital in Sandpoint to have a leader that has hired Dean Tompt who has allowed us to hire occupational therapists and physical therapists. We have got a full complement of rehab staff and an excellent rehab program so we are now able, with this appropriation funding, we will be able to put our pilot project into full fruition, and we will be able to provide those services to students that are down in the Wallace, St. Marie's. This would be car-wise a minimum of a 2-hour to 3-hour drive, and you can imagine what that is like in the winter time and the mountainous roads.

We so far have conducted three occupational therapy and physical therapy sessions with the students via this current interactive video equipment. With the additional roll-around units, things will become enormously easier plus infinitely more expanded because of the fact that we will have the different stethoscopes, et cetera; otoscopes, ear scopes, those kind of things that you've kind of seen today.

One of the biggest advantages that we have found, sir, is the peer-to-peer contact. We have one occupational therapist down in the St. Marie's area that was on the other end helping with the student visits, and what she found was enormous by being able to connect with a therapist here because of the isolation. That is one of the things that Beth has mentioned as well.

So the benefit of the mobile interactive units, as I've said, will greatly enhance what we are able to do here in the north.

Again, I thank you and appreciate the opportunity to be here today.

Senator CRAIG. Well, thank you very much. By my schedule here, you are a surprise witness; but I am tickled to death Tom has connected you in because—I mean, not only for those of us sitting here at Idaho State University in the south because for you to come almost instantly on screen and give us your firsthand experience, I think, demonstrates the value of this technology.

Ms. HENDRICKSON. Thank you, sir.

Senator CRAIG. This was going to be a three-community hearing today; we have gone to four.

Tom, are there anymore? [Laughter.]

Mr. HAUER. I believe that Wallace High School and St. Marie's are also listening in, but they are not going to be speaking.

Senator CRAIG. Well, thank you all very much.

Tom, any additional comments before we come back to Pocatello?

Mr. HAUER. No. I think we are finished here. Thank you very much.

Senator CRAIG. Thank you. Well, let me thank all of you here in Pocatello and in Boise and in Coeur d'Alene and in Sandpoint for joining us today not only to get firsthand testimony as to the application of telehealth, but to actually see the technology function and to begin to sense how valuable this can be to transmit to a center to the expert, if you will, the kind of information where diagnosis or assistance can be offered that might not be able to be offered, and then the sheer time and distance.

I think all of us who live here in Idaho understand the issue the mayor was talking about—the snowy roads or waking up in the morning and knowing that you simply cannot physically get from point A to point B because of the road conditions that are often-times the case here in the winter time. So it is extremely important. This application, I mean, just fits Idaho so very well.

Of course, Beth, you came from Alaska with the experience you have had up there. Of course there, it is even all the more important from the standpoint of distance. Roads do not even exist in some of those places that I am sure that you experienced or provided service to. So I played a small role. But to watch these appropriations get on the ground and begin to work and know that they are providing real services to people that might not otherwise have the quality of service makes this all worth while.

As we reshape health care in States like Idaho, I think all of us were tremendously concerned when we saw payment levels and reimbursements either flat and, in some instances, adjusted and/or declining and small rural hospitals closing. Many communities were extremely fearful that we simply would not be able to provide—have provided to those communities the quality of health care that they had in the past. I think that is less the case now with technology; and, of course, I'm always amazed at the application of technology.

I was telling Dr. Beth that I was on an airplane recently where a doctor was sitting beside me, and we got to talking. He had just been assigned to a new program at Wayne University Medical

School, and his talent was that he had developed a new software package that was applicable to the very technology that we have here today. You simply move it through a computer and through this new software package on its way into transmission and it becomes almost fully real-time. It takes away the slight lag time that we all experienced here today so well that they are now using it to—Wayne University doctors just conducted a surgery at a hospital in Los Angeles via this technology by actually hands on and helping actually manipulate the devices that were conducting the surgery.

Of course this doctor, as I was telling Dr. Beth, happened to have the software package right along on his laptop and showed me a blow-by-blow account of the surgery. It was a gall bladder removal.

But the point is that it is all happening out there now in a way that is certainly going to facilitate rural Idaho.

As I close, let me remind folks that we have an ice cream social as we go out this evening to—we are going to go out and see the van, have a chance to see that and share some ice cream. This is going on in a couple of other locations for those of you who attended to enjoy the ice cream.

Also I want to thank the Chairman of the full committee in Louisiana. John is the Chairman of the Special Committee on Aging in the Senate. We have a very positive working relationship, and thanks to him we were able to bring this field hearing to Idaho today.

Where is Phil? Phil, take your bow. Phil is on staff with the Special Committee, and I want to thank you also for coming out and helping facilitate this hearing today.

All of this becomes a record of the committee. As some of you may know, this is not an authorizing committee; but the special committee itself plays a very valuable role both in hearings, investigative work, scoping, all of those kinds of things to analyze the problems of the senior community of America to develop the reports.

Oftentimes our material goes directly to the Finance Committee itself which is charged with Medicare, social security, and a variety of the health care areas that we oversee through this committee and, therefore, then hand our reports through to them. So this will all become part of the record; and it enhances not only further application here in Idaho, but my guess is it will help across the county.

So thank you all for coming out today, and a very special thanks to Dr. Beth and the center here and the work you do. Obviously your outreach statewide was very evident by the contact and the relationships today. So thanks to you and your work and the work here at Idaho State.

With that, the field hearing will stand adjourned.

[Whereupon, at 6:10 p.m., the committee was adjourned.]

