

MINUTES OF THE HOUSE VISION 2020 COMMITTEE

The meeting was called to order by Chairman Tom Sloan at 1:30 p.m. on February 11, 2008, in Room 711 of the Docking State Office Building.

All members were present except:

Representative Doug Gatewood- excused
Representative Joe Seiwert- excused
Representative Lee Tafanelli- excused

Committee staff present:

Art Griggs, Office of the Revisor of Statutes
Scott Wells, Office of the Revisor of Statutes
Corey Carnahan, Kansas Legislative Research Department
Chris Courtwright, Kansas Legislative Research Department
Mary Koles, Committee Assistant

Conferees appearing before the Committee:

Chad Anderson, KVC Behavioral HealthCare
Monte Coffman, Windsor Place
Stephanie Wilson, Community Living Opportunities
Brad Williams, Kansas Board of Regents

Others attending:

See attached list.

Chairman Sloan welcomed the conferees to the committee and introduced each as they spoke.

Chad Anderson, Director of Outpatient Services, KVC Behavioral HealthCare, Olathe, discussed the ways KVC uses video technology and showed three videos: the first exhibited the technology/equipment, the second featured Sharon Cain, MD, who discussed the delivery of child psychiatric Pharmacologic management services via telemedicine, and the last demonstrated a question and answer period between Dr. Cain and Mr. Anderson (Attachment 1).

Monte Coffman, Executive Director, Windsor Place, Coffeyville, reported that Windsor Place's pilot project which uses home telehealthremote monitoring to manage chronic diseases more effectively in the home produced very promising results during the first year. He described the technology, the monitoring process, and the integrated coordination of services utilized in this data driven model. He testified that telehealth can allow seniors to remain at home longer and is cost effective (Attachment 2).

Stephanie Wilson, Senior Administrator, Community Living Opportunities, Lawrence, spoke about remote supervision. A remote night monitoring and supervision program was described in detail; graphs and charts of some of the nighttime data collected were provided (Attachment 3). Staff tech specialist, Lewis Walton, passed around a new sensor that CLO will use to monitor seizures at night. A copy of CLO's Homelink Technologies was distributed to each committee member and is filed with the Legislative Research Department.

Chairman Sloan opened the meeting for questions regarding Mr. Coffman's presentation. Questions were asked by Chairman Sloan and Representatives Bill Feuerborn and Tom Hawk.

Responses were given by Mr. Coffman and Ryan Spaulding, PhD, Director, Center for Telemedicine and Telehealth, KU Medical Center, who is studying the pilot project at Windsor Place (Attachment 4). A brief discussion ensued.

Brad Williams, CIO and Kan-ed Executive Director, Kansas Board of Regents, called attention to a Kan-ed Benefit Sheet for Hospitals which he provided each committee member. He discussed Kan-ed funding, services provided, the drivers of network growth and needs in Kansas. He said that Kan-ed could serve as a network foundation for a statewide e-health network; forty-four hospitals are connected and forty-one are waiting to connect (Attachment 5).

CONTINUATION SHEET

Minutes of the House Vision 2020 Committee at 1:30 p.m. on February 11, 2008, in Room 711 of the Docking State Office Building.

Chairman Sloan opened the meeting for further questions. Questions were asked by Chairman Sloan and Representatives Barbara Craft, Bill Feuerborn, Pat George, Tom Hawk, and Kay Wolf.

Responses were given by the appropriate conferees. Several discussions followed.

Chairman Sloan thanked the conferees for their presentations.

The next meeting is scheduled for February 16, 2009.

The meeting was adjourned at 3:00 p.m.

House Vision 2020 Committee Guest List

Date: Wed. Feb. 11, 2009

| Name | Representing Client/Authority |
|------------------|--|
| Ryan Spaulding | KU MEDICAL CENTER |
| Kirk Bates | KVC Health Systems |
| Chad Anderson | KUC Behavioral Health Care |
| Stephaine Wilson | Community Living Opportunities |
| Lewis Watson | CLD |
| David Wyrath | Windsor Place |
| Brad Williams | KBOR / Kan-ecf |
| Brand Koops | Hein Law Firm |
| Marta Kundhauer | Intern |
| KETH PAUGBOTEW | KEARNEY & ASSOC. |
| Denny Koch | Posinew Law |
| Marta Goffman | Windsor Place |
| Camille Smith | KS OFFICE OF COMMUNITY & PUBLIC HEALTH |
| Kyle Kenler | KVC Behavioral Health Care |
| Chad Austin | KHA |
| Tom Burgess | Hmyk |
| Tom Holt | MACY |



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House Vision 2020 Committee
Informational Testimony on the Use of Telemedicine in Mental
Health
February 4, 2009

Chairman Sloan and honorable members of the Committee, I am Chad Anderson, Director of Outpatient Services at KVC Behavioral HealthCare. We appreciate the opportunity to provide informational testimony on the usage of telemedicine in the field of mental health.

KVC Behavioral HealthCare is a private, not-for-profit organization providing medical and behavioral healthcare, social services and education to children and families. Founded in 1970, KVC touches the lives of more than 18,000 children and families each day. KVC's continuum of services includes a psychiatric hospital, residential treatment facility, outpatient behavioral healthcare, in-home family treatment, foster care, and adoption. In the near future, KVC will finalize its 1,000th adoption in less than four years.

KVC currently has 21 sites with video cameras including 17 in Kansas, one in Missouri, and three in West Virginia where we will soon be adding three more. KVC began using videoconferencing over 12 years ago when we provided telemed from our hospital in Kansas City, Kansas, to a residential program we operated in Pittsburg.

KVC's current use of video technology includes those areas as follows:

- **Telemed**—KVC is fortunate to have Dr. Sharon Cain as one of its psychiatrists. Dr. Cain is a child psychiatrist, who is also on staff and the Kansas University Medical Center (KUMC). Since January 2004 to present, Dr. Cain has served on the "Telemedicine Committee of the American Academy of Child and Adolescent Psychiatry." She has provided telemed for KUMC for over 12 years, has presented her experiences at the American Academy of Child and Adolescent Psychiatry's annual meeting, and has published in the *Telemedicine Journal and e-Health* on the delivery of child psychiatric pharmacologic management services via telemedicine.



House Vision 2020
2-11-2009
Attachment 1-1

- **Training**—KVC provides a great deal of routine staff via video conferencing, some of which is provided by nationally known experts on pertinent mental health issues such as trauma systems therapy, ADHD in children and adolescents, and mood disorders in children to name a few. When speakers are brought in from other parts of the country, KVC simulcasts their training from a technologically equipped training room in Olathe to the other sites.
- **Visits between children and their psychiatrist in our psychiatric residential treatment facility and hospital with parents**—Children enjoy these extra visits with their parents and parents enjoy both getting to see their child and the psychiatrist.
- **Professional agency meetings**—These meetings allow for a group of professionals to consult on specific cases of significant difficulty without the inconvenience of extra travel or the less personal approach of teleconference. An example of such a meeting would include a psychiatrist at the KVC hospital, case managers in our offices, and possibly an adoption specialist in another part of the state.
- **Therapy**—Although video conferencing has been used on a very limited basis, it has worked very well on those occasions where it is deemed necessary.
- **Clinical Supervision**—We currently have an LSCSW (Licensed Specialist Clinical Social Worker) in Topeka who provides clinical supervision to KVC therapists located outside of the most populous counties. The Behavioral Sciences Regulatory Board (BSRB) is in the process of adopting regulations that will limit the use of video supervision of Licensed Masters Social Workers (LMSW) who are seeking their LSCSW or clinical license. Although this is a setback in the use of video conferencing, KVC certainly will comply with the new guidelines.

KVC has adopted a thoughtful and well-designed telemedicine protocol with the assistance of the aforementioned Dr. Cain. The protocol is as follows:

1. Clients arrive thirty minutes prior to the appointment;
2. All consents, specific to telemed, are signed prior to the appointment;
3. Either parents or a case manager are present in the session or has provided written information regarding the child and medication effectiveness before the appointment;
4. KVC staff is always available at the client side of the appointment, and the staff is qualified to provide the psychiatrist with the client's vital signs, current list of medications, list of previous treatment providers and locations, family history information including any substance use during pregnancy or issues with developmental milestones;
5. Information on school performance and lab work is obtained prior to the appointment when the medication dictates;

1. If medication is prescribed, the scripts are generally sent to the parents' home by certified mail or directly to the pharmacy;
2. Services are billed as other services except KVC adds the GT Modifier which is defined as "Via interactive audio and video telecommunications systems;" and
3. Children are generally seen every 30 days as recommended by the American Academy of Child and Adolescent Psychiatry.

KVC touts the many advantages of efficiency that are provided by telemedicine. Some of these advantages are as follows:

- Services being delivered to underserved areas in the rural and frontier portions of the state;
- The provision of specialty providers such as psychiatrists who are able to stay in one place and serve more patients without travel time;
- Savings on mileage cost and cost of staff time commuting for meetings, routine and advanced training, staff meetings, and clinical supervision; and
- The added benefit of staff in rural locations feeling more connected to the organization rather than relying on only email and telephone communications.

In conclusion, those we serve as well as our staff give video conferencing and telemedicine rave reviews. KVC appreciates the time you are spending on this issue. This concludes my testimony. I would be happy to stand for questions.

Home Telehealth

Vision 2020 Committee
February 11, 2009

Monte Coffman
Executive Director
Windsor Place
Coffeyville, KS



*Health Vision 2020
2-11-2009
Attachment 2-1*

Windsor Place is a long-term care company located in Coffeyville.

The continuum of long-term care operations include:

- *A home health agency serving over 1,300 clients
- *2 assisted living facilities, and
- *3 nursing facilities.

In addition to these core services, additional services provided to aged and disabled clients involve:

- *transportation programs
- *outpatient therapy
- *adult day care
- *respite care
- *weekend Meals on Wheels
- *2 monthly support groups
- *The Age to Age Kindergarten classroom (only the second such project in the nation)

Windsor Place has always viewed long term care in a broad sense.

In 1996, Windsor Place At-Home Care was formed and currently serves 1300 clients in their homes.

In 2006, Windsor Place met with and proposed to KDOA Secretary Greenlee and her staff the application of home telehealth and remote monitoring for the purpose of managing chronic diseases more effectively in the home.

In Feb 2007, a KDOA grant funded our pilot project. On August 1, 2007, the pilot program was operational. Extremely promising results were realized during the pilot's first year.

An extension of this grant was awarded last summer. Results continue to be quite exciting in this paradigm shift.

3 Benefits of Telehealth

- Access to care
- Quality improvement
- Efficiency and lower cost of care



Four Key Elements to Telehealth

- Accurate physiological information
- Shared data with patient
- Data-driven coaching/patient education
- Optimized provider involvement



Kansas Medicaid LTC Services

Nursing Facilities

| | |
|-----------------------|--|
| Medical Clinical Care | RN's ----- LPN's |
| ADL and Personal Care | CNA's ----- RA's ----- Other Staff |
| Social Needs | Activity Directors Social Workers |



Kansas Medicaid LTC Services

Home and Community Based Services

| | |
|-----------------------|--|
| Medical Clinical Care | VOID |
| ADL and Personal Care | Attendant Care Workers ----- Homemaker Staff |
| Social Needs | Companion Services (added October 2008) |



Kansas Medicaid LTC Services

Nursing Facilities

Home and Community Based Services

| | | |
|-----------------------------|--|---|
| Medical Clinical Care | RN's ----- LPN's | VOID |
| ADL and Personal Care | CNA's ----- RA's ----- Other Staff | Attendant Care Workers ----- Homemaker Staff |
| Social Needs | Activity directors/Social workers | Companion Services (added October 2008) |



Award-winning Measurement Technologies

Accurate, Reliable, Unobtrusive and Easy to Use

Blood Pressure & Pulse

Takes readings when patient slides cuff up the arm, then presses "Start" button.



Standard Scale

Low step, a wide, steady platform, a large digital display and voice announcement.

TeleStation

Asks simple health questions. Responses are communicated to the clinical software.

ECG/Rhythm strip

Simple wristbands with snap-on connectors.

Pulse Oximeter

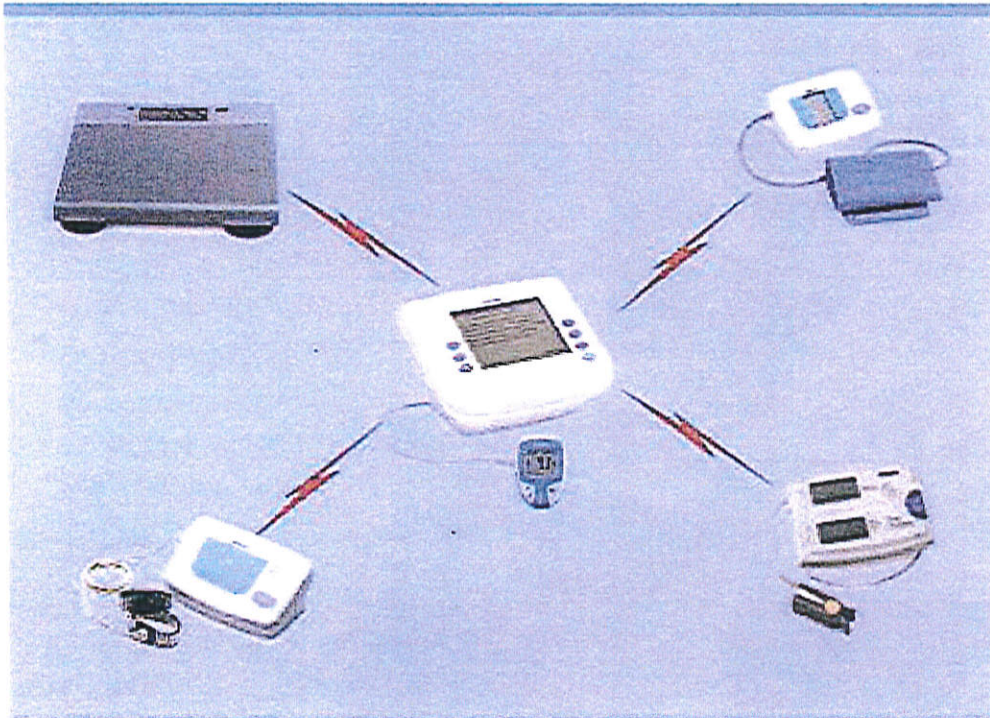
Spot checks oxygen saturation and pulse within seconds.



Glucose meter connection

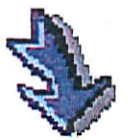
Bayer Ascensia Contour 7151B

Wireless or Manually-Entered Measurements



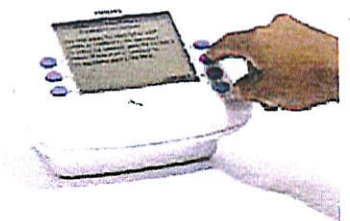
Plus any of these Manual Measurements

- Glucose (blood sugar)
- Peak Flow
- Spirometry (FEV 1)
- Clotting Time
- Temperature
- Hemoglobin A1c
- Respiration Rate
- Zo

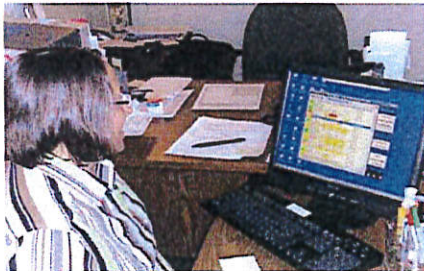
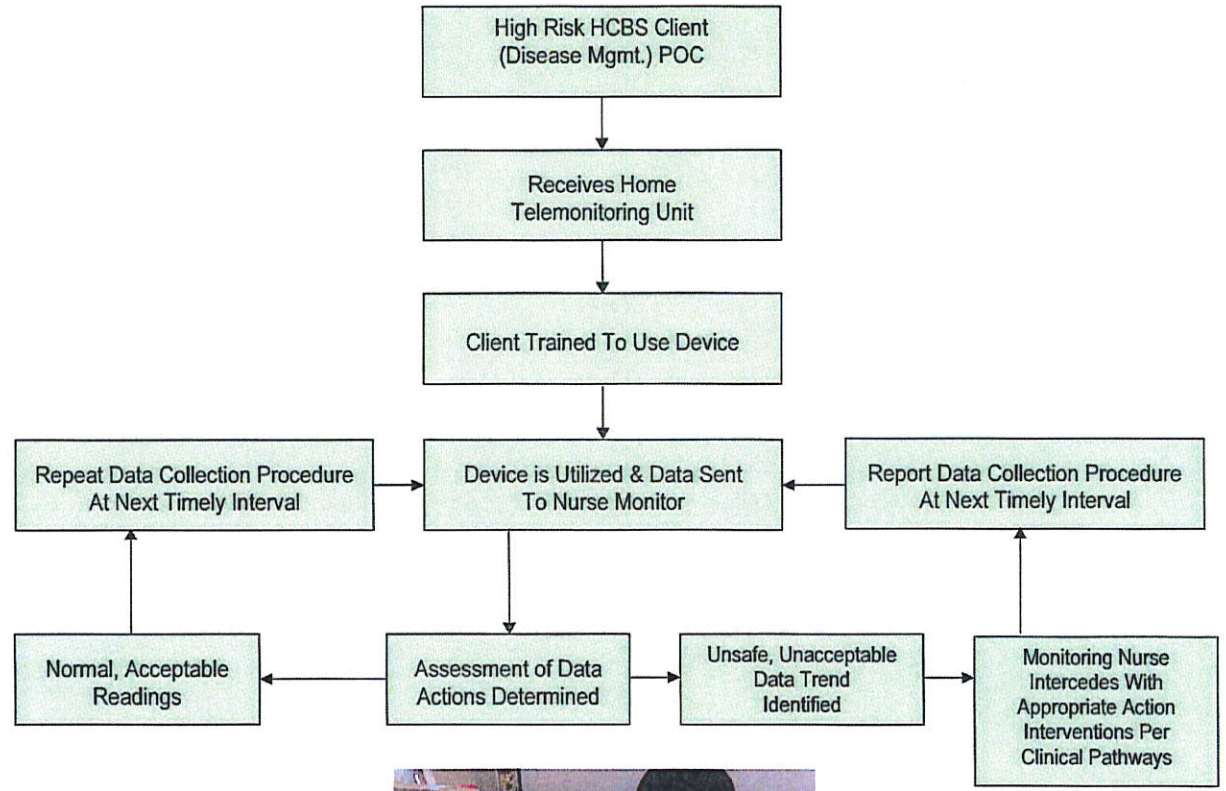


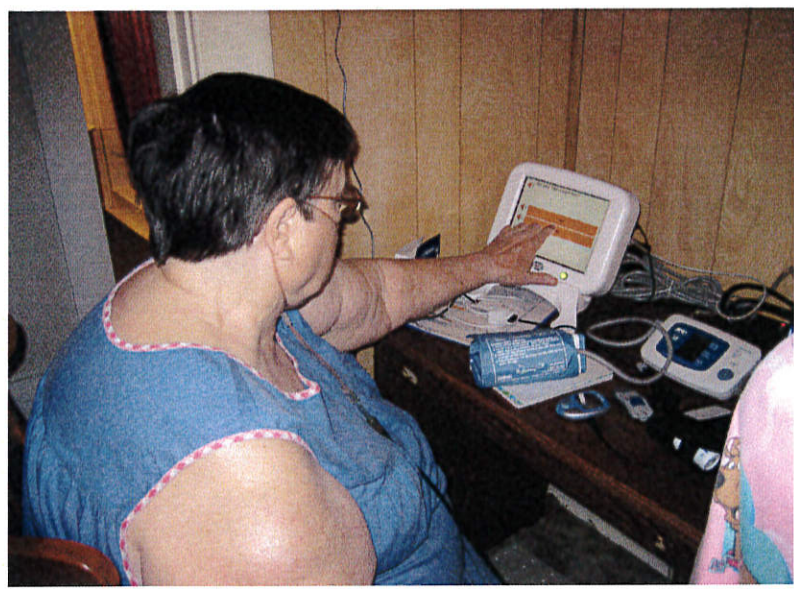
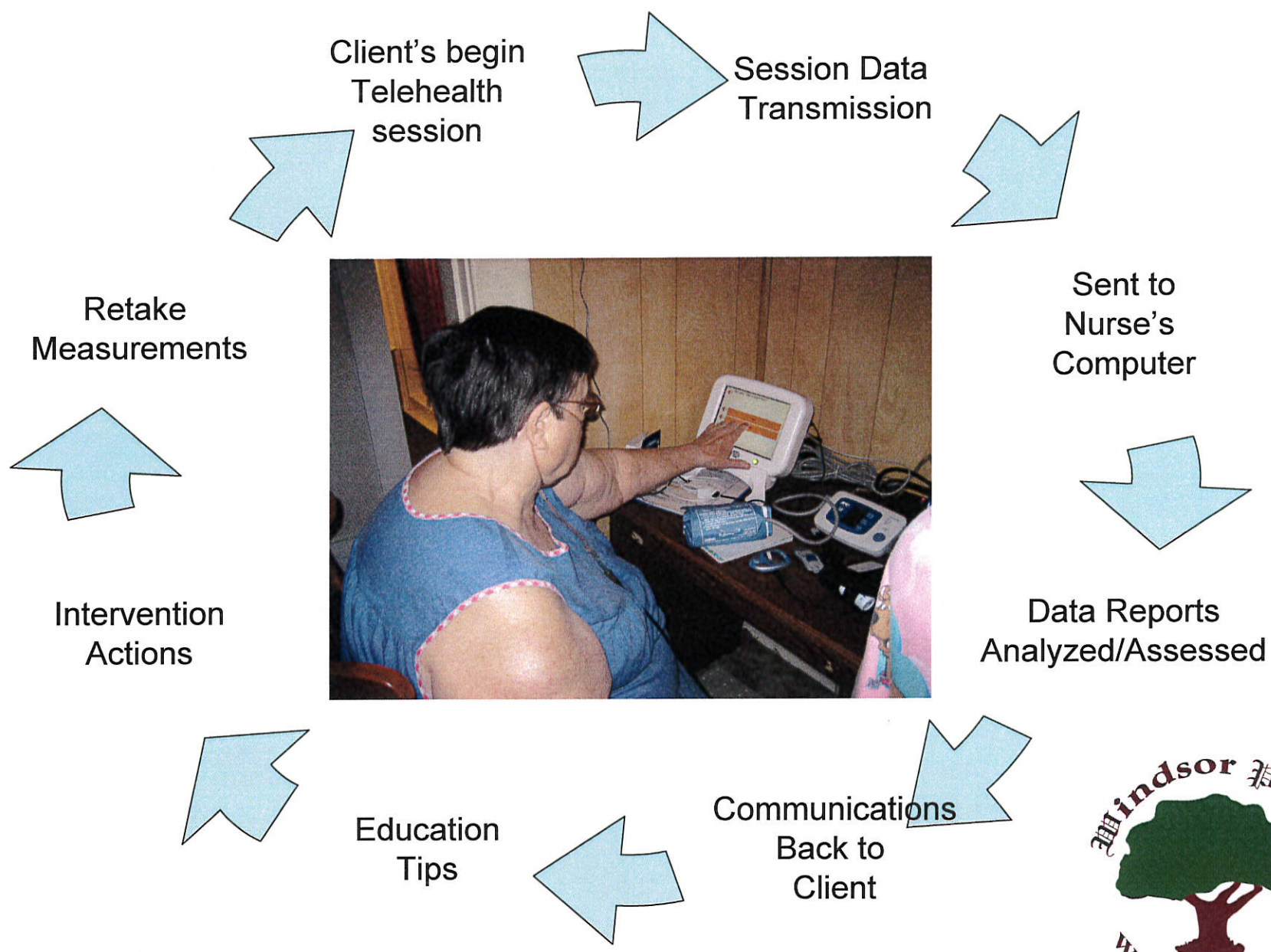
Wireless Measurements

- Weight
- Blood Pressure, Pulse
- SpO2, Pulse
- Rhythm Strip



KDOA-HCBS PILOT PROJECT Monitoring Process High Risk HCBS Client





MARY'S DAY

Mary uses Telehealth equipment to measure her Weight, Blood Pressure, Pulse Oxygen and Blood Glucose readings. A typical day for Mary is as follows:

07:30am Mary wakes, walks into her dining room and sitting relaxed, places the **Blood Pressure** cuff on her arm and presses the START button on the B/P meter. Her B/P is automatically transferred to the TeleStation (main monitor).

07:32 Mary places the **Pulse Oxygen** clip on her finger, presses start and the meter measures the oxygen in her blood. This is transferred to the TS.

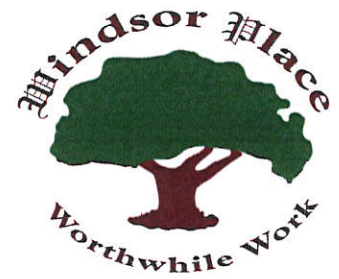
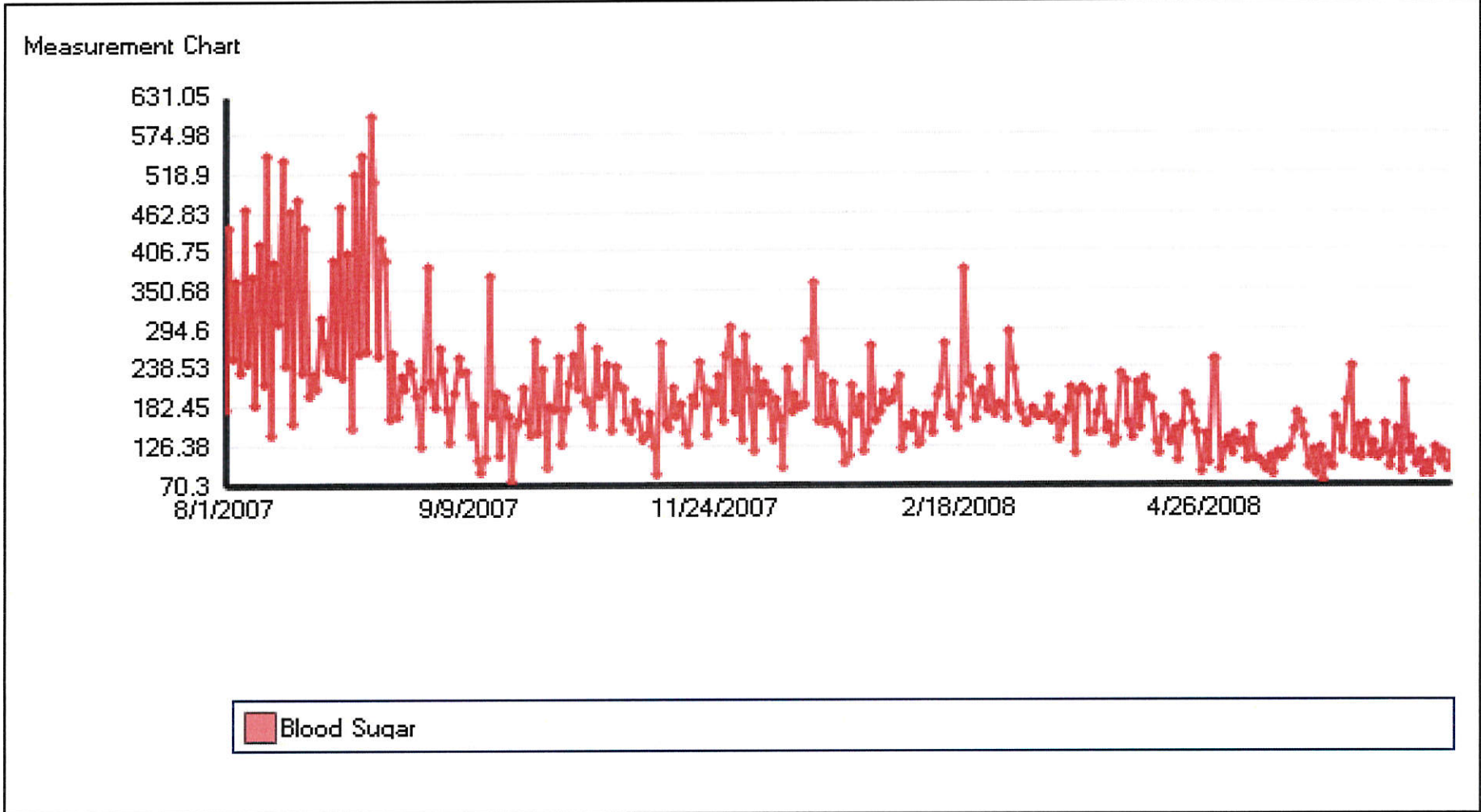
07:34 Mary checks her **Blood Sugar**. Once the measurement is taken, she will plug a cable from the TeleStation into the glucose meter. This transmits that reading to the TS.

07:37 Next, Mary gets up to do her **Weight**. In about 10 seconds, this measurement will automatically go to the TS.

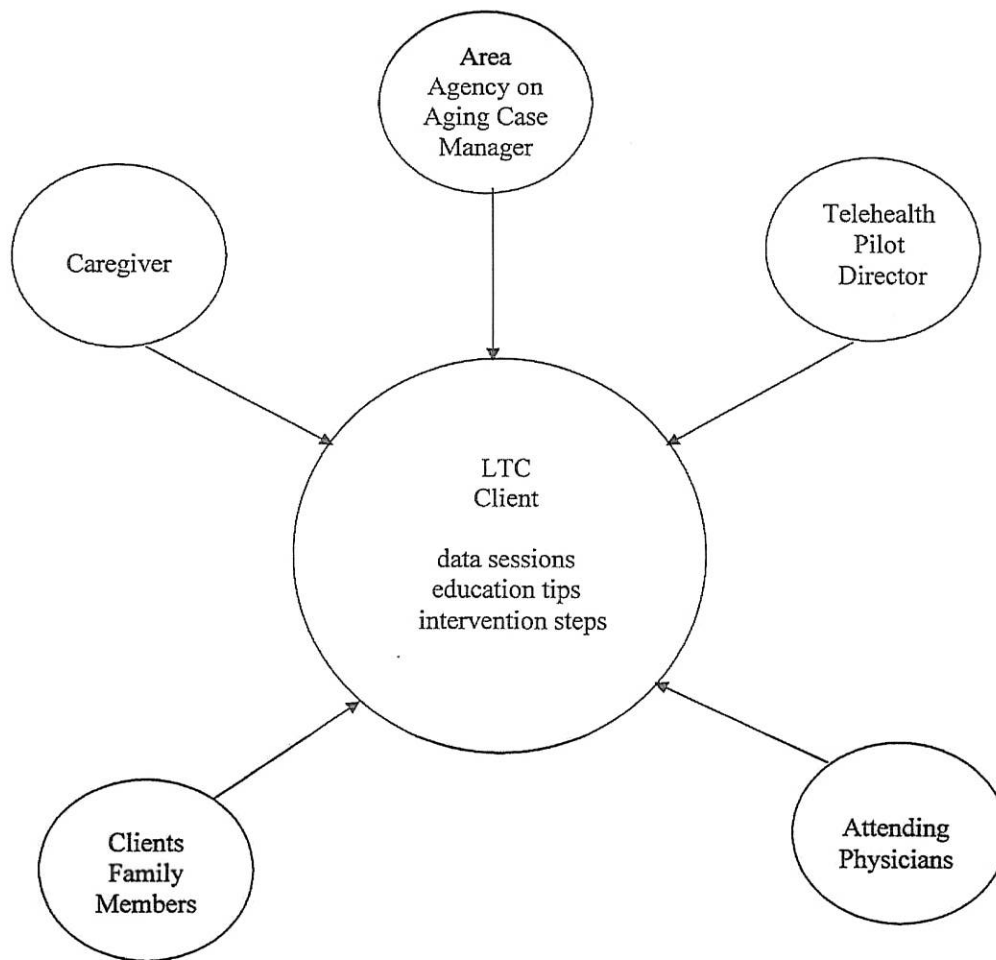
07:40 Taking all these measurements in the comfort of her home, Mary has used about **10 minutes** of her day.

The **TeleStation will transmit** the readings it has received from each device via a **TOLL FREE** number and send them to a **secure, password protected website** so that the **TeleHealth nurse can see them**. This transfer happens about 15 – 20 min after the first measurement was taken, giving Mary ample time to do all measurements.

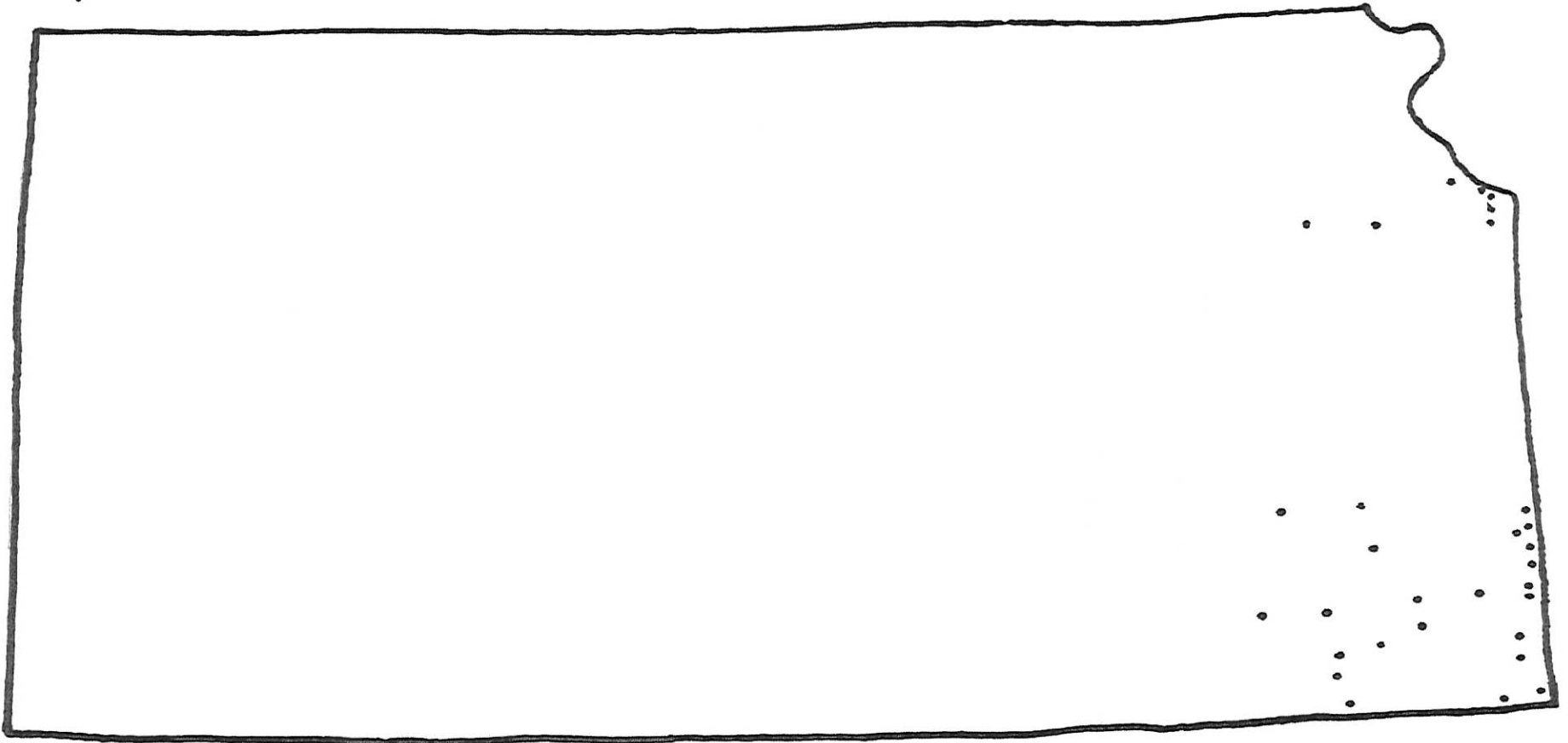
On occasion, Mary will have assessment questions, information or education, or a simple Birthday greeting. She will answer these in a matter of minutes and the TeleStation, as with the measurements, will transmit the answers to the secure website.



Care Coordination and Integration Expansion



KANSAS



Coffeyville - 8

Dearing - 2

Independence - 4

Cherryvale - 1

Neodesha - 3

Yates Center - 1

Iola - 1

Fall River - 1

Chanute - 7

Erie - 2

Parsons - 1

Galena - 4

Baxter Springs - 3

West Mineral - 2

Scammon - 1

Pittsburg - 4

Frontenac - 2

Arma - 2

Mulberry - 2

Englevale - 1

Arcadia - 1

Ft. Scott - 4

Girard - 1

Edgerton - 1

Olathe - 2

Roeland Park - 1

DeSoto - 1

McLouth - 1

Lawrence - 1

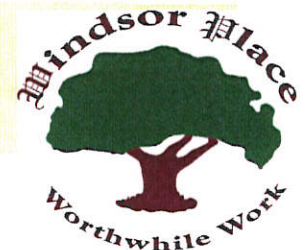
Topeka - 2



Long Term Care

| | NF | HCBS |
|------------------------|--|---|
| | approx 10,500 people are here approx cost \$2950 per month | approx 5800 frail elders are here approx cost \$950 per month |
| | → seniors/funding source want to move this trend from NF to HCBS | |
| medical/clinical needs | RN/LPN's provide care here. | There is a void of care here. Telehealth would fill this need and allow seniors to stay in their homes longer. |
| Personal/ADL needs | CNA/RA's provide care here. | Attendant care and homemakers provide care here. |
| Social Needs | Activity directors/Social workers | Companion services added Oct 2008 |

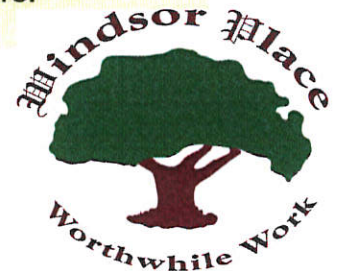
Cost savings opportunities -The monthly cost difference between HCBS and NF is approx \$2,000
 -If 500 Kansas elders could be deferred from NF placement,
 the annual savings would be \$12,000,000.
 (500 x \$2,000 x 12 months)



Long Term Care

| | NF | HCBS |
|------------------------|-----------------------------------|---|
| medical/clinical needs | RN/LPN's provide care here. | <p>There is a void of care here.</p> <p>Telehealth would fill this need and allow seniors to stay in their homes longer.</p> |
| Personal/ADL needs | CNA/RA's provide care here. | Attendant care and homemakers provide care here. |
| Social Needs | Activity directors/Social workers | Companion services added Oct 2008 |

Cost savings opportunities 1372 PD consumers incurred \$24M in Medicaid hospital costs in FY 2008.
 Projected FY2009 Medicaid hospital cost for PD consumers is \$28M.
 If 500 consumers could be averted, savings could be \$8.7M annually or more.



Contact Information:

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Stephanie Wilson

Presented to "The Kansas Vision 2020 Committee," February 4, 2009

13
Stephanie Wilson

CLO's HomeLink Technologies

...Technology that is virtually here today

Breakthrough Technologies...Most improvements in service quality are measured in degrees or inches. Advances come in bits and fits fueled by hard work across time. Every few decades, though, something happens so amazing it creates a whole new way of doing things.

This is exactly the case with CLO's "HomeLink" remote support program. CLO's remote monitoring and support program is a major breakthrough in support technology that has been created to bring "on demand" support directly into the homes of persons with disabilities to maximize or preserve their independence.

Imagine:

- Knowing when people in a home or apartment need support during the day or at night and providing that support on demand;
- Remotely supervising up-at-night staff across town, across a region, or from Kansas to California to make sure that they are up, supported, and that persons served are safe and receiving the care they need;
- Bringing a certified behavior analyst into a home to provide support when needed, or evaluating a behavioral concern in its natural setting--but without disturbing the natural setting;
- Providing a family in a rural Kansas setting remote "super nanny" earbud coaching for a child with significant needs;
- Remotely collecting health vital data and then providing a way for a nurse or even a doctor to make multiple house calls to check in on a person served, or to help provide training or advice to a staff person or family member supporting a person with a special need;
- Knowing exactly when, to the minute, a person is incontinent, has fallen out of bed, or has a seizure; or imagine
- Having someone immediately available to help assist a staff person who is dealing with an emergency, call 911, warn someone about an intruder, remind a new staff person how to properly provide CPR, or even verbally guide a fireman to the window of a smoke filled room where a person is sleeping.

If this technology were available, wouldn't everyone sleep better and feel safer in their home? Couldn't this technology help preserve someone's independence and prevent their move to a more restrictive setting or prevent the need for intrusive night support or continuous staffing? This may sound futuristic, but in truth, CLO is providing much of this technology right now and working on the rest. And while this technology never replaces people, it does completely leverage and help monitor and supervise direct support staff to ensure that support is as affordable as possible, available "on demand" when needed but unobtrusive when it is not, and most importantly, highly effective.

CLO is seeking grants and raising social investments to prepare its HomeLink Technologies program for use on a fee for service basis that will provide significant support at tremendous savings for supporting people with developmental disabilities as they seek to maximize their independent community life.

For more information contact:

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Home Vision 2020
2-11-2009
Attachment 3-1

How does it work?

CLO's *HomeLink Technologies* creatively combines high security and smart home technologies along with specialized training and ongoing support, allowing CLO to remotely monitor and support multiple homes and people from a centralized monitoring center located in Lawrence, Kansas.

It all begins with CLO's "state-of-the-art" central monitoring center, located in Lawrence. From here, a professionally trained HomeLink Technologies support team watches and monitors homes and programs, alarms, and communicates with and dispatches program/home staff, mobile staff, and links professional and community support to provide help when and how desired. The HomeLink team constantly monitors homes and programs according to pre-determined agreements, ranging from responding to alarms and automated help requests by the home; to checking in on a schedule determined by the program or home; to constant live viewing and supervision. The HomeLink Team can view the home and program and communicate to home and program staff or persons supported by live two-way conversations made possible by interactive microphones and speakers. HomeLink is "Onstar" like technology with eyes. And depending upon the needs of the person, home, or program, support is provided in a number of ways from alerting staff in the home, to waking sleeping staff, to directing mobile staff to help, to contacting 911 to dispatch emergency help, to directly communicating (talking) with persons supported or staff to provide the help needed.

Smart home and high security technology are designed for implementing individual home or program applications. A typical application in a home would include positioning multiple low/no light video cameras in a home so that a central site monitoring professionals can view common areas (halls, living areas, kitchen, exits, etc.) of a home. Motion detectors and sensors measuring pressure, door or window opening, smoke, carbon monoxide, movement, sound, moisture, or other types of sensors (including medical sensors) are tailored to meet the needs of the individuals in a home. These sensors will send signals/alarms to the central monitoring station the moment they are activated. Or a person served or staff can simply activate a "need help now" button/alarm in the home. The HomeLink Central Monitoring Team immediately responds to various different alerts in ways that are intended by the type of alert. Also, depending upon the need of persons served, central monitoring staff can complete security "eyes-on" checks of each home on an individually determined schedule.

Current or in Progress HomeLink Application Examples:

Remote Night Monitoring and Night Supervision

Are up at night staff up? Do sleeping staff wake up and help when needed? Do people with developmental disabilities without staff get the help they need when they need it? Do up-at-night caregivers respect privacy, not smoke in the home, and always engage in safe behavior? Do up-at-night staff provide a quiet, dark environment that is conducive of a good night sleep? Are people with developmental disabilities safe from abuse, neglect, or exploitation at night? In truth, the answer is at best "we don't know for sure." The night time workforce nationally is among the least stable with turnover often well in excess of 100%. A significant percent of all up-at-night or sleeping staff caregivers have other day jobs. When do they sleep?

Right now, CLO is using this technology to ensure that persons with developmental disabilities can rest peacefully. CLO remotely monitors over 45 living arrangements scattered across several counties in eastern, southern, and mid-Kansas. This Spring, CLO will be adding 9 more homes located across the Silicon Valley region of Northern California. From 9p to 7a our HomeLink Technologies team in Kansas conducts repeated tours of all homes monitored, and monitors all alarms that might activate. If someone opens a door, gets out of bed, creates motion, presses a help button, or activates a specialized sensor the HomeLink Technologies Team is there. Depending upon the needs of the program, the team independently checks in on the home visually every few minutes to see if there is a need independent of any alarm/sensor. If help is needed sleeping staff can be directed to help or staff moving between multiple homes or apartments in a complex are contacted and redirected. Specialized GPS equipped

vehicles can be monitored by HomeLink Technologies staff to ensure that they are moving between homes as they are supposed to do and not where they are not supposed to be. Up at night staff are assisted and remotely supervised to ensure that they too are supported and focused upon providing the best care possible.

CLO's Virtual Villiage Semi-Independent Living "On-Depand" Support Program (In development in 2009)

Many people with developmental disabilities can be quite independent, and some live without staff support. Some, though, could live without significant staff support IF there was a way to be sure that they don't need help and to provide them the staffing they need on demand. HomeLink Technologies can fill this void through the daytime too. Are daily routines completed correctly? Are medications taken on schedule? Are person served in an a semi-independent apartment program engaging in safe cooking practices? Are only approved guests in the home and visting during appropriate times? Do people need help at unpredictable times? How do you know that the independent living skills taught during structured teaching sessions are used when no one is there?

HomeLink Technologies can create a "Virtual Village" to monitor apartments and homes during the day and provide remote support on demand by contacting mobile support provided by programs that support people with developmental disabilities living independently (or almost independently). HomeLink can also connect staff who live in nearby apartments to allow them to use encrypted technology to visually monitor homes directly and offer training via interactive microphones/speakers located throughout a supported apartment. And, when they are needed to help provide support in one home the HomeLink Team continues visual monitoring of other homes until the staff return to their post and ready to respond if another need arises.

CLO's Remote Behavior Analysis and Earbud Coaching Program (in development in 2009)

Behavior Analysis is both highly effective and necessary to address significant behavioral concerns such as self-injurious behavior or aggressive behavior, pica, inappropriate sexual behavior towards others as well as many other unsafe behaviors. Traditional behavior analysis can also be very expensive, requiring significant time to collect data, analyze behavior, develop an effective intervention plan, and to coach staff to implement plans consistently. This is even more challenging when someone lives in a rural community. In most cases, interventions are developed by Behavior Analysts based upon second hand observations related by family members or staff because the behavior isn't frequent enough or the home isn't close enough to directly observe. And even when direct observation is possible, the presence of a professional often changes the dynamics of both the behavior and how staff members respond to it. And once an intervention is designed and taught to staff persons, it is often difficult to know if it has been implemented consistently and effectively when the Behavior Analyst was not there. Imagine how much better it might be if the Behavior Analyst was "virtually" always available!

HomeLink Technologies offers a very effective vehicle for improving the effectiveness and cost effectiveness of Behavior Analysis. Behavior Analysts can now remotely watch multiple homes from one location and see how persons served exhibit behaviors first hand in their home. This can be done without intrusion and without needing to rely upon second hand observation skills of caregivers or families. Since HomeLink Technologies can passively record activities 24/7 (regardless of whether someone is watching or not), then behavior analysts can view archived home recordings at high speed (like a home DVR) to move forward through the day to capture example after example of a behavior they want to examine. These examples can be downloaded to a DVD and shared with clinical teams to ensure that the best plans are developed based upon direct observation. Once developed, the behavioral analyst can directly observe the home, staff and person served, and coach the staff or family to implement an intervention privately using an ear-bud phone. Since the behavioral analyst isn't present, the person being supported by a coached staff person attends to the staff and not the behavioral analyst (which will promote more effective teaching). Imagine being able to summon a behavioral analyst or a teaching coach at the push of a "Help Now" button in the home to help provide advice on how to handle a very difficult situation as it is occurring? Or imagine "super-nanny" like help with a family having a child with Autism? Imagine knowing that programs are implemented whether the behavior analyst is present or not and that inappropriate behavioral control strategies are not used. With HomeLink all this is now possible.

CLO's Remote Quality Assurance Initiative (in development for 2010)

Good community programs serving people with developmental disabilities have an ongoing and active program of quality assurance. But such programs can be very intrusive. HomeLink Technologies can provide a tailored strategy to provide "eyes on" direct observations of home operations, teaching, interactions, and more. Perhaps a quality review initiative can be developed to provide announced visits where an evaluator will virtually "knock" and then observe and collect data using best the best practice "at-a-glance" observation assessments developed by CLO. Or perhaps daily or weekly DVR archived home recordings can be sampled to gather observational data on teaching and quality-at-a-glance? Imagine assessments being entered automatically in CLO's web-based ISOX (Information System of Excellence) database to create a performance dashboard for an agency to see their own home quality in real time? Consider having reports of care concerns in a home and the ability to examine up to 30 days of continuous archived video data to determine if persons served are safe and well supported.

Possible In-home or In-program Applications

HomeLink Technologies can be designed for local use too (with a mini monitoring station provided). This would allow a preschool to establish a local monitoring station within its preschool to allow a clinical supervisor to watch each classroom and provided ear bud coaching to teachers in training or for working with a challenging behavior. Imagine being able to simultaneously watch all 10 classrooms and help when and where needed. If more clinical help is needed, imagine being able to link up this system to connect University of Kansas clinicians to help provide expertise to that preschool in Great Bend, Kansas.

Fire Safety Training (current application)

Any program that has provided services in the community for any period of time understands the importance of fire safety. State and Federal funding and licensing for community services require that programs implement systems for promoting fire safety, including regular fire drills. National Fire Protection Association (NFPA) safety codes classify the combined capability of staff and persons served to move to a point of safety (evacuate) as either prompt, slow, or impractical, with each classification requiring more stringent building requirements (ranging from smoke alarms, to monitored fire alarms, to automated sprinkler systems and 2 hour rated walls and doors). To live independently in the community in typical housing, being able to evacuate timely is essential. HomeLink Technologies can help by conducting drills remotely, recording them on video, and then providing them to programs to aid in training techniques and as proof to fire marshals that the group can, in fact, promptly evacuate day and night. Smoke alarms, carbon monoxide alarms, and other local sensors can also be tied in to HomeLink as a redundant support for home fire systems. HomeLink team members can also provide verbal prompts and instructions to persons who many not know what to do when a fire alarm sounds. This offers a strategy to make sure that persons who are independent of staff can generalize training to respond correctly to an alarm when they are on their own.

Sensors and switches (in development for 2009)

Want to know if someone gets out of bed at night? How about a pressure sensor under the mattress pad that will alert HomeLink that a weight is not there? Or a door contact to tell you that a door has been opened or shut? How about a moisture alarm to signal for incontinence? Or an alarm that relays that someone has gotten too close to another person or too far from a location in a home? How about a button by each bed that must be pushed by up-at-night staff to ensure that they actually conduct an "eyes on" check every hour to avoid an alarm being sent to the HomeLink Technologies monitoring team? What about having the ability to remotely turn on a light for a person in need of support (perhaps at night) or turn on an appliance that is needed? With the right combination of technology all this can be done. More sensors and support technology are in development that can be compatible with HomeLink Technologies remote support—like remote sensors that are capable of monitoring seizure activities or labored breathing.

Back up Support

Technology is increasingly being relied upon to provide services that we simply can't live safely without. That said, even the best systems can and do fail even for short periods of time. This makes it critical to

understand system vulnerabilities and weaknesses so that they can be minimized and so backup strategies can be tailored. HomeLink Technologies continuously collects system metrics on its performance. Equipment and connections are constantly tested (pinged) to alert the HomeLink Team of a potential issue. Remote strategies can be used to logon and troubleshoot home-based systems and make corrections. Even the HomeLink Monitoring team is monitored and recorded by its own technology! Every alarm generated from a remote location requires a physical response to recognize and resolve the alarm. The latency for responding is measured automatically by HomeLink monitoring software and becomes part of an informational database for later analysis. These data produce standard and custom reports that chronicle home activity and the activity of the HomeLink monitoring staff. Want to see why it took 15 seconds to respond to an alarm? It's stored in archived video so that it can be examined to see what might be causing a delay.

Remote monitoring, though, is dependent upon broadband, microwave, or hard wired connections that might occasionally be interrupted for short periods of time. So backup plans need to be individually tailored for each home or program that will allow redundancy if this is needed. In many cases, though, the loss of technology might just mean that the program is left with what it had in place before HomeLink support was in effect.

Balancing Issues of Privacy with the Need for Direct Care and Supervision

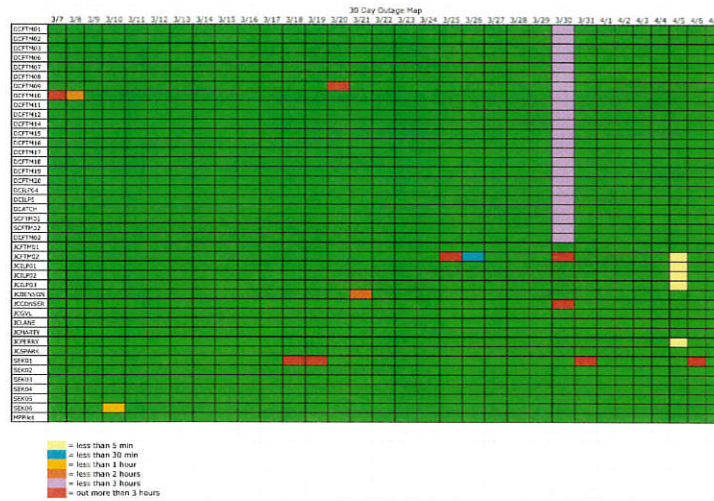
One of the most common questions voiced regarding HomeLink Technologies remote monitoring technology is that, to some, it seems intrusive and concerns are raised about privacy. Privacy is, of course, an important and very reasonable concern. Most of us do not have cameras in the common areas of our home recording passively or actively watching at night while we sleep. Having said that, most of us also don't have an endless stream of people checking in on us, staying in our home, or strangers coming in our home milling about while we are asleep either. And even if we did, most of us would be able to tell someone if that person stole from us, or fell asleep instead of helping us when needed, smoked in our home, made us feel uncomfortable, or committed an act of abuse or neglect against us. Unfortunately, this is not the case for a large majority of people with disabilities living in the community who currently need staff supervision. Most of these individuals do not have the ability to supervise and self-direct those persons who support them possibly alone at night, and many could not tell anyone (or would feel threatened to tell someone) if they were not cared for properly. As a result, many people with disabilities needing support are almost completely vulnerable to the undiscovered possibility of poor care.

Caregivers can and do breach the privacy of persons they support in ways that are not easily controlled or even known by anyone. We cannot be assured about what private areas unsupervised caregivers will intrude upon, client possessions they may use or take, private mail they may read, or private information or even identities they could use or sell (including confidential financial and personal information to protect the identities of persons served or family members and guardians). We only know what they self-report, which is of little assurance to most people.

On the other hand, remote monitoring technology can be tailored to view exactly what is desired and not view or detect what is to be private. Sensors are tailored to the exact needs and abilities of each person served. Motion detection, sound detection, pressure sensors, smoke or carbon monoxide detectors, door sensors and glass-breaking sensors all work together to provide monitoring when and where needed. As important, it can be designed to ensure that some areas are private. Cameras are pointed to common locations and cannot intrude upon unauthorized areas. The risk of theft or assault is highly unlikely because any on-site help would be remotely monitored.

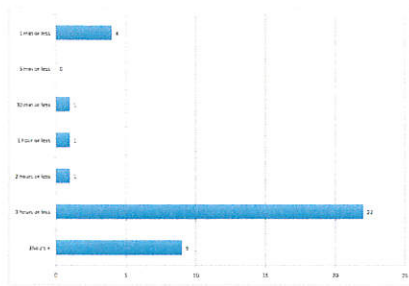
Clearly, people with developmental disabilities who need direct care and supervision are placed in a position where they virtually have no privacy whatsoever. Their personal privacy becomes of secondary importance to their need for care. HomeLink Technologies enables the person in need of support to control the design of support they need and to balance the amount of intrusion relative to the support they need. This sense of security allows for a better quality of life, including a safe and comfortable sleep environment.

March 7 – April 7 Outage Map

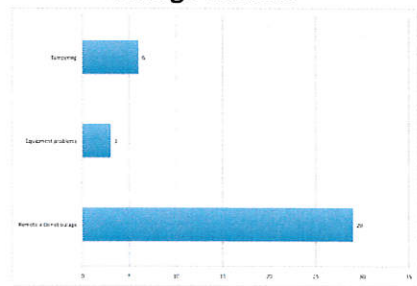


Outage Distribution and Causes

Outage Distribution



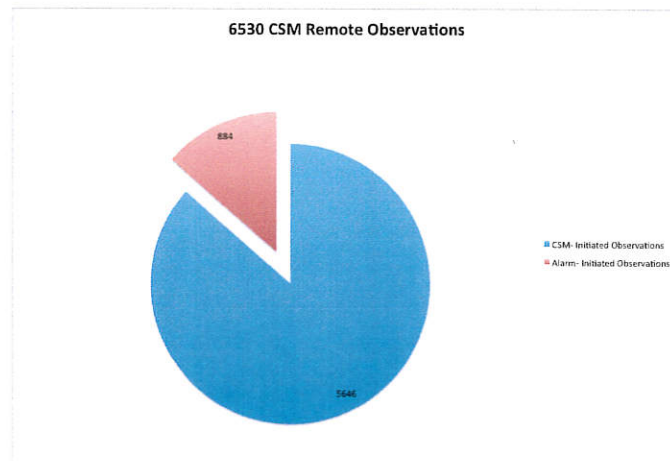
Outage Causes



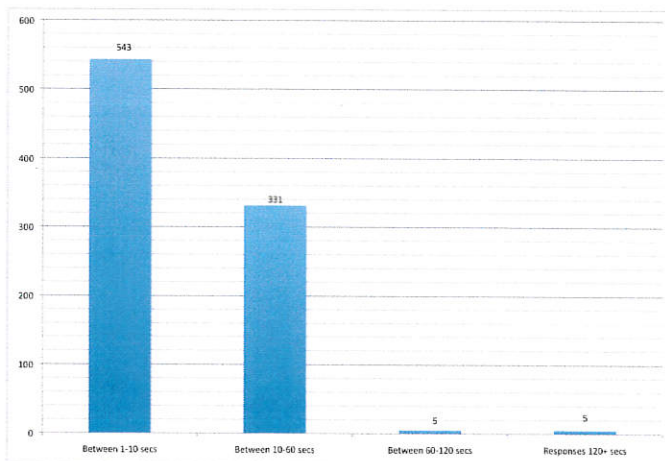
Sample Report Data

| Time | SiteTime | SiteID | SiteName | Type | ResponseTime |
|-----------------|-----------------|----------|------------------------------|----------|--------------|
| 4/8/08 11:13 PM | 4/8/08 11:13 PM | MASTIN | 38. Mastin | Finished | 0 |
| 4/12/08 6:46 AM | 4/12/08 6:46 AM | SEKFTM5 | 44. SEKFTM5 | Finished | 5 |
| 4/10/08 2:59 AM | 4/10/08 2:59 AM | DCFTM20 | 12. 3512 Morning Dove Circle | Finished | 0 |
| 4/9/08 2:57 AM | 4/9/08 2:57 AM | DCFTM20 | 12. 3512 Morning Dove Circle | Finished | 0 |
| 4/12/08 4:07 AM | 4/12/08 4:07 AM | DCFTM20 | 12. 3512 Morning Dove Circle | Finished | 0 |
| 4/8/08 6:48 AM | 4/8/08 6:48 AM | DCFTM20 | 12. 3512 Morning Dove Circle | Finished | 5 |
| 4/13/08 4:51 AM | 4/13/08 4:51 AM | MASTIN | 38. Mastin | Finished | 8 |
| 4/11/08 1:46 AM | 4/11/08 1:48 AM | 608NWRIG | 14. 508 North Wrigley | Finished | 7 |
| 4/8/08 6:57 AM | 4/8/08 6:57 AM | SEK01 | 35. SEK FTM 1 | Finished | 19 |
| 4/13/08 6:51 AM | 4/13/08 6:51 AM | 3510MD | 09. 3510 Morning Dove Court | Finished | 5 |
| 4/10/08 5:35 AM | 4/10/08 5:35 AM | TAURUS | 33. SC-FTM01 3430 SE Taurus | Finished | 0 |

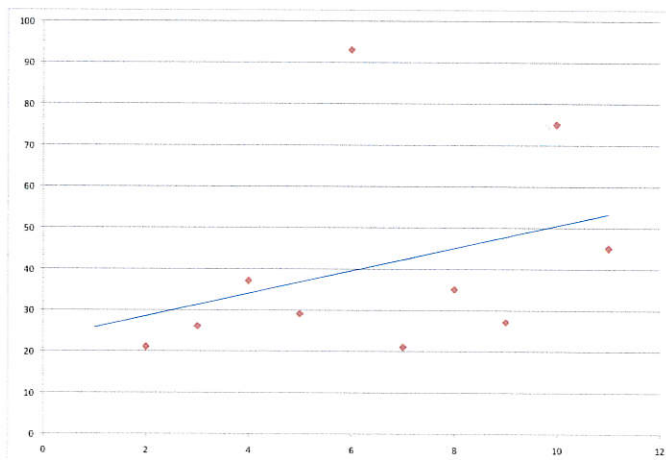
Central Site Observations



Central Site Response Times



Sleeping Staff Response Times



Ryan Spaulding

Ryan Spaulding

**Windsor Place At-Home Care Home Telehealth Project
Project Evaluation – Year 1**

Project Overview

In collaboration with Windsor Place on its *Home Telehealth Project*, researchers from the Kansas University Center for Telemedicine and Telehealth (KUCTT) and the Kansas University Center on Aging conducted a cost-benefit analysis of the telehealth intervention. The research method used in the project was a within group, pre- and post-test design with data collection completed at the beginning of the project for the nine months prior to the telehealth intervention and again at the end of the nine-month telehealth intervention. Patient participants for the study were selected using a stratified sampling procedure to control for confounding variables with the first stratification defined as “at-risk” patients. At-risk was defined as having had two or more hospitalizations in the previous twelve months of home care. Data collected included all CMS claims data during the 18-month period as well as pre- and post-Uniform Assessment Instrument (UAI) data for the participating patients. General client perceptions of the intervention were also gathered during the last month of the project. The 12 perception items assessed such issues as the patients’ satisfaction with the technology, its effect on their health, safety and quality of life, and other items.

Participant Information

During the course of the pilot project, 56 clients were consented for participation in the study. Nineteen of these participants dropped out of the study for a variety of reasons, including discomfort with the technology (2), admitted to nursing home (3), death (6) or other reasons (8). Seven additional patients had incomplete data or were enrolled in the pilot for fewer months than required for data analysis. Thus, 30 patients had complete data for a total of 9 months from September 1, 2007 to May 31, 2008 and were included in the analysis.

Though all 30 study participants were reported by the case managers to have had two hospitalizations prior to the intervention, later CMS claims analysis revealed that a total of 17 patients had 2 hospitalizations. Another 3 patients had 1 hospitalization and 10 had 0 hospitalizations.

Results

The study group consisted of 23 females and 7 males. Ages ranged from 69 to 96 years, with an average age of 78.2. Congestive heart failure (CHF) was the single most common diagnosis, with 7 patients having this condition. The second most common conditions were hypertension (4) and diabetes (4). Two participants had chronic obstructive pulmonary disorder (COPD). The remaining 11 participants had multiple comorbidities of these four illnesses. Table 1 lists participants’ diagnoses by frequency.

House Vision 2020
2-11-2009
Attachment 4-1

| Diagnosis or Diagnoses | Frequency |
|--|-----------|
| Hypertension (HTN) | 4 |
| Diabetes (DIAB) | 4 |
| Congestive Heart Failure (CHF) | 7 |
| Chronic Obstructive Pulmonary Disease (COPD) | 2 |
| CHF, DIAB | 4 |
| CHF, HTN, DIAB | 2 |
| HTN, CHF | 2 |
| HTN, DIAB | 4 |
| HTN, COPD | 1 |
| Total | 30 |

Table 1: Participant diagnoses by frequency

The variables studied in this pilot were not significantly changed as a result of the telehealth intervention. Baseline and intervention uniform assessment instrument (UAI) scores (46.56 and 46.56), total costs (\$2,352,546.06 and \$1,541,453.95), hospital costs (\$1,366,620.56 and \$471,004.25), hospital days (378 and 231), hospital visits (33 and 19), emergency room costs (\$37,034.46 and \$12,747.60) and emergency room visits (13 and 7 visits), respectively, all trended lower but were not statistically different from baseline values. Please see Table 2 for these paired samples results.

| Variable | Baseline Mean | Intervention Mean | Significant Change? |
|-----------------|---------------|-------------------|---------------------|
| Hospital Visits | 1.10 | .63 | No |
| Hospital Days | 12.60 | 7.70 | No |
| Hospital Costs | \$45,554.02 | \$15,700.14 | No |
| UAI scores | 46.56 | 46.56 | No |
| E.R. Visits | .43 | .23 | No |
| E.R. Costs | \$1,234.48 | \$424.92 | No |

Table 2: Comparison of baseline and intervention means of pilot variables.

Participants' perceptions of the intervention were positive. These items were scored on a scale of one to four ranging from strongly disagree to strongly agree, respectively. Two of the items were reverse coded which resulted in lower mean scores but indicated a positive response. The other ten items were all positively scored with means ranging from 2.70 to 3.30 on a four-point scale. For example, patients felt that the technology improved their health care (3.30), would help them live longer in their homes (3.10) and helped them better manage their health care (3.07). In contrast, they did not want to go to the doctor rather than use the technology (2.33) and they were not distrustful of the technology (2.23). See Table 3.

| Item | Mean (On 1-4 scale) |
|--|---------------------|
| This health monitoring technology improves my health care. | 3.30 |
| I would rather go to my doctor than use this technology. | 2.33 |
| This technology improves my life. | 3.13 |
| I am more involved in my health care as a result of this technology. | 3.03 |
| I do not trust this technology to help me with my health. | 2.23 |
| This technology will help me live in my home longer. | 3.10 |
| Using this technology has been a positive experience for me. | 3.27 |
| This technology is easy to use. | 3.23 |
| I am confident that this technology will help me if my health starts to decline. | 3.13 |
| I feel better able to manage my health care with use of this technology than I did before. | 3.07 |
| I have gone to my doctor at least once because of what I found out with the technology. | 2.70 |
| I would like to use this technology for as long as I can. | 3.10 |

Table 3: Mean scores of perception items on 1 (strongly disagree) to 4 (strongly agree) Likert scale.

A simple cost-accounting analysis was conducted to determine the overall costs of the telehealth intervention compared to observed health care savings. Total costs of the intervention, including personnel costs, technology costs, supplies, travel and other items were weighed against the total health care savings of the intervention. Because there were no statistically significant cost savings observed in the project, the costs of the intervention were not offset by any health care savings. For the nine-month intervention period, the intervention cost was \$113,019 and the health care savings were \$0. Thus, the intervention cost more than it saved in this pilot project. However, if either hospital cost savings or emergency room cost savings had been significant, the return-on-investment of the intervention would have been substantial. Hospital savings, for example, would have offset the cost of the intervention by \$895,616.31, for a return-on-investment of +\$782,597.31 ($\$895,616.31 - \$113,109 = \$782,597.31$).

Discussion

The results of this home telehealth pilot project demonstrated that it is technologically and logistically feasible to use home telehealth monitoring to assist older adults with chronic illnesses but that no health care costs or resources were reduced. However, all project variables trended lower in the analysis even though the decreases were not statistically significant. Thus, hospital days, hospital costs and the other observed indicators may become significant over time in a longer project with more participants as more data is included in the analysis. Additional research with a larger sample size and a more longitudinal design is recommended to confirm these results or determine if any benefits can be achieved. Also, the small sample size prevents this study from being generalized to a larger population and is only applicable to the setting in which it occurred.

The findings also indicated that patients were satisfied with the technology and perceived it to be beneficial to them and their health. Interestingly, the participants found the technology in this pilot easy to use, which is contrary to the common perception that older adults are not comfortable with new technologies. While the perception items gathered during this study demonstrated these findings, the following anecdotal comment by one caregiver and one of her clients provides more clarity:

"Score does not indicate the pilot project was effective to keep the client out of the hospital--however this client has not had a hospitalization in the last--I think--was Dec when she had pneumonia." Client and caregiver- 'feels the monitoring has reduced trips to ER' with monitoring such as when BS or BP are not within normals-client's spouse or caregiver will call the doctor avoid crisis."

Taken together, the cost data trends and positive participant responses indicate that an expanded, more controlled study is warranted for better understanding of this mode of health care delivery. Project managers and researchers will implement additional controls for Year 02 of the project.

A number of lessons were learned during the pilot project. One of the significant challenges in the pilot project was the collection and analysis of the CMS claims data. Particular difficulty was encountered when investigators attempted to identify the reason for a hospitalization or E.R. visit. Because it is not clear whether the hospitalization or E.R. visit was related to the chronic illness, all visits were included. Therefore, hospital and E.R. data may be skewed higher than would be observed if more complete claims data were available.

In addition, CMS claims data appears to take up to nine months after the date of service to be fully processed and appear on the CMS claim reports. Thus, intervention claims data for participants may not be available until sometime in early 2009 and should be re-analyzed at that time.

Also observed in this study is a 34% (19 of 56) dropout rate of participants due to a variety of factors. It is unclear if this high rate of withdrawal could be better controlled in a more mainstream telehealth program or if it is related to the age and health of the target population. However, it provides evidence that the at-risk clients targeted for telehealth intervention may not remain on the intervention long enough to realize significant health or cost benefits. A more longitudinal study may provide a better understanding of this issue.

Future research is recommended that explores other important aspects of this model of health care. Completing interviews or focus groups with participants would be useful in enriching our understanding of why they participated or dropped out of the study. Determining physician perceptions of the project and its benefit would also be appropriate. The scope of patient oversight that can be reasonably achieved by one clinician with a home telehealth system is important for implementing future programs. Finally, monitoring larger populations over a more longitudinal period will be necessary for demonstrating a successful chronic care model.

In summary, the home telehealth pilot was a successful project for demonstrating the feasibility and client acceptance of home monitoring for older adults with chronic illness. While more evaluation is needed, these data indicated a positive trend toward reduced health care costs and resource utilization, outcomes that support future exploration of this telehealth model.



Vision 20/20 Telemedicine Presentation

Brad Williams, CIO & Kan-ed Executive Director
Kansas Board of Regents

“to provide for a broadband technology-based network to which schools, libraries and hospitals may connect for broadband internet access and intranet access for distance learning.”



Kan-ed Funding FY2010

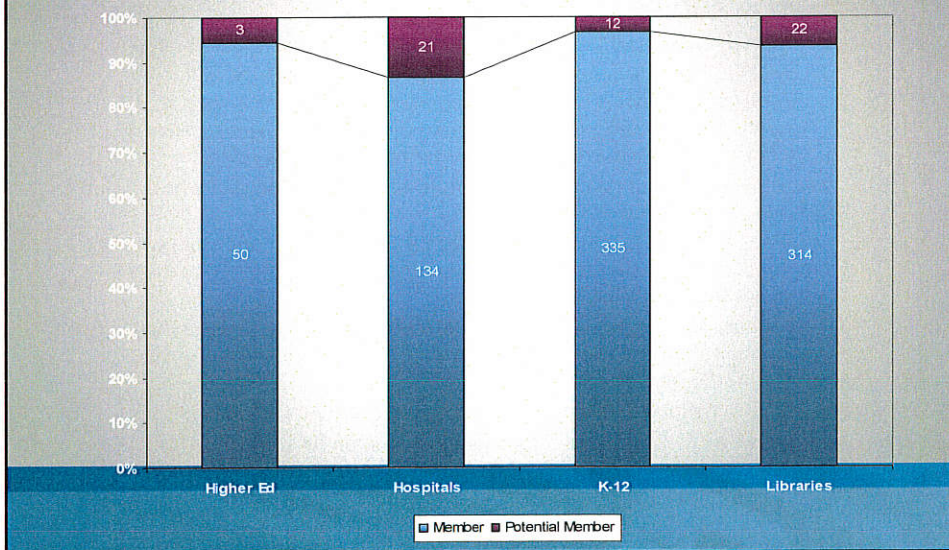
- Kan-ed is currently funded from \$8 million Kansas Universal Service Fund and \$2 million State General Fund.
 - Governor’s recommendation is to fund Kan-ed 100% through the KUSF for FY 2010.
 - The KUSF was established as part of the Kansas Telecom Act of 1996.
 - *Advance the development of a statewide telecommunications infrastructure that is capable of supporting applications, such as public safety, telemedicine, services for persons with special needs, distance learning, public library services, access to internet providers and others;*
- Twenty-seven states use a KUSF type of fund for providing universal broadband to schools, libraries and hospitals.
- The KUSF is collected by phone companies on voice, cellular and VOIP services. These funds are then sent to the KCC and redistributed by the KCC to eligible telecom entities, for which Kan-ed is one.
- Kan-ed meets policy in both the Kansas Telecom Act of 1996 and Federal Telecommunications ACT of 1996 by providing enhanced universal service to schools, libraries and hospitals.
- Broadband is defined as 1.5mb in the Kansas Telecom Act, as well.
- See the Kan-ed Fast Facts Sheet for more information (in your folder).

House Vision 2020
2-11-2009
Attachment 3-1

Kan-ed Member Services

- Kan-ed Empowered Desktop Authenticated Portal* (419,000 subscribers)
- Educational and Research Databases (through Kan-ed Empowered Desktop or State Library card)
- KanGuard Filtered Internet Service (CIPA Compliance)
- Emergency Management Resource – (EMResource)
- E-rate and Rural Health 1-800 telephone support
- Access to Connected Kansas Kids Programming
- Multipoint Control Unit (MCU) Access
- Renovo Scheduled Video Conference Services
- Network Operation Center (NOC) Support 24/7
- Access to a private, secure network for video and data services
- Access to Internet 2 content and services
- Enhancing Technology Grant Program
- Sponsored Education Group Participant (SEGP) paid for by Kan-ed for Internet 2 access

Kan-ed Membership and Potential Membership Disaggregated by Constituent Group



FCC Hospital Grant

- FCC Rural Health Grant
 - Partnership between KU Med and Kan-ed
 - \$1.3 million a year for three years to connect hospitals
 - Must be sustainable after federal funding stops
 - Randy Stout: rstout@ksbor.org or 785-296-7033

5

Drivers of Network Growth and Needs in Kansas

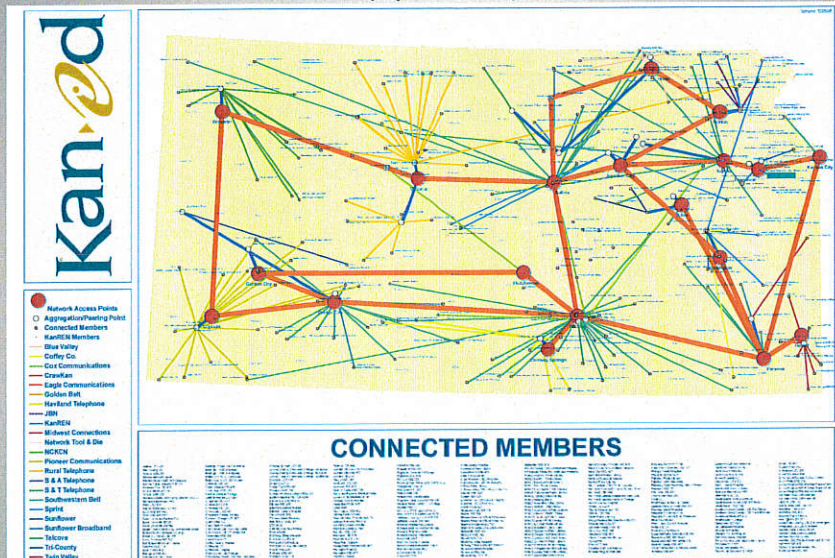
- Telemedicine and Video Conferencing
 - Gartner Consulting lists videoconferencing technology as a "Transformative Technology" in the next 2-5 years.
 - Critical access to services and professionals statewide.
 - Reduction of travel time for consultations and training.
 - Secure data transfers that meet HIPPA guidelines.
 - Not enough medical professionals/teachers/staff.
 - Professional development and training:
 - CNE's, CME's
 - Speakers and Seminars
 - Reduces the carbon footprint.
 - Medical outreach programs and information.
- Rural patients in the state should have access to expert medical practitioners and information regardless of their geographic location .

6

What Can Kan-ed Do?

- Kan-ed could serve as the network foundation for a state e-health network by using hospitals as the “hubs” of the network and the spokes reaching out into providers:
 - Kan-ed recommendation is to partner with KHPA and the Governor’s office to utilize existing Kan-ed infrastructure
 - May require some statutory change to Kan-ed
- Kan-ed has met with AT&T and the State of Tennessee about their e-health network.
 - Tennessee uses the same AVPN layer 3 technology that Kan-ed uses in Kan-ed 2.0.
 - Kansas is further along on the network side, Tennessee is further along on the applications side.
 - Kan-ed is willing to host a Tennessee/Kansas (KHPA, Governor’s Office, Legislature) meeting.
- We should not create another statewide network.

Kan-ed 1.0 Infrastructure (April 2007)



Kan-ed Benefit Sheet for Hospitals

Total Funding to Date: \$2,831,156

Of the 155 eligible hospitals in the state of Kansas, 134 are Kan-ed members and 21 are potential members.

| Organization Name | Hospital Type | Funding Received to Date | Requested Kan-ed 2.0 Connections |
|--|-----------------|--------------------------|----------------------------------|
| Members | | | |
| Allen County Hospital | Critical Access | \$0.00 | No |
| Anderson County Hospital | Critical Access | \$3,000.00 | No |
| Anthony Medical Center | Critical Access | \$36,220.25 | Yes |
| Ashland Health Center | Critical Access | \$16,000.00 | No |
| Atchison Hospital | Critical Access | \$7,135.00 | No |
| Bob Wilson Memorial-Grant County Hospital | General | \$27,558.95 | Yes |
| Central Kansas Medical Center | General | \$0.00 | Yes |
| Cheyenne County Hospital | Critical Access | \$42,287.00 | Yes |
| Children's Mercy South | General | \$0.00 | Yes |
| Citizens Medical Center | Critical Access | \$43,640.20 | Yes |
| Clara Barton Hospital | Critical Access | \$57,027.31 | Yes |
| Clay County Medical Center | Critical Access | \$6,559.00 | Yes |
| Cloud County Health Center | Critical Access | \$11,467.00 | Yes |
| Coffey County Hospital | General | \$19,135.00 | Yes |
| Coffeyville Regional Medical Center | General | \$17,635.00 | Yes |
| Comanche County Hospital | Critical Access | \$4,135.00 | No |
| Community HealthCare System Inc Hospital-Onaga | Critical Access | \$38,135.00 | No |
| Community Memorial Healthcare | Critical Access | \$14,835.76 | Yes |
| Cushing Memorial Hospital | General | \$3,000.00 | No |
| Decatur County Hospital | Critical Access | \$9,534.40 | Yes |
| Edwards County Hospital | Critical Access | \$59,910.25 | Yes |
| Ellinwood District Hospital | Critical Access | \$24,135.00 | Yes |
| Ellsworth County Medical Center | Critical Access | \$37,635.00 | Yes |
| Fredonia Regional Hospital | Critical Access | \$5,335.00 | Yes |

| Organization Name | Hospital Type | Funding Received to Date | Requested Kan-ed 2.0 Connections |
|--|-----------------|--------------------------|----------------------------------|
| Geary Community Hospital | General | \$775.00 | Yes |
| Girard Medical Center | Critical Access | \$8,635.00 | No |
| Goodland Regional Medical Center | Critical Access | \$39,779.00 | Yes |
| Gove County Medical Center | Critical Access | \$45,184.40 | Yes |
| Graham County Hospital | Critical Access | \$42,245.00 | No |
| Greeley County Health Services | Critical Access | \$55,785.10 | Yes |
| Greenwood County Hospital | Critical Access | \$20,135.00 | No |
| Grisell Memorial Hospital District #1 | Critical Access | \$49,246.00 | Yes |
| Hamilton County Hospital | Critical Access | \$17,973.80 | Yes |
| Hanover Hospital | Critical Access | \$0.00 | Yes |
| Harper Hospital District #5 | Critical Access | \$28,760.25 | Yes |
| Hays Medical Center, Inc. | General | \$39,985.00 | Yes |
| Heartland Spine and Specialty Hospital | General | \$0.00 | No |
| Herington Municipal Hospital | Critical Access | \$21,000.00 | Yes |
| Hiawatha Community Hospital | Critical Access | \$8,135.00 | Yes |
| Hillsboro Community Medical Center | Critical Access | \$34,935.00 | Yes |
| Hodgeman County Health Center | Critical Access | \$45,847.05 | Yes |
| Holton Community Hospital | Critical Access | \$3,000.00 | Yes |
| Horton Community Hospital | Critical Access | \$72,298.83 | Yes |
| Hospital District #1 of Rice County | Critical Access | \$20,135.00 | No |
| Hutchinson Hospital Corporation | General | \$19,000.00 | No |
| Jefferson County Memorial Hospital, Inc. and Geriatric Center | Critical Access | \$4,135.00 | Yes |
| Jewell County Hospital | Critical Access | \$6,354.45 | Yes |
| Kansas Medical Center LLC | General | \$0.00 | No |
| Kansas Neurological Institute | Mental | \$0.00 | No |
| Kearny County Hospital | Critical Access | \$29,786.75 | Yes |
| Kingman Community Hospital (Ninnescah Valley Health Systems, Inc.) | Critical Access | \$24,757.65 | Yes |
| Kiowa County Memorial Hospital | Critical Access | \$61,285.00 | Yes |

570

| Organization Name | Hospital Type | Funding Received to Date | Requested Kan-ed 2.0 Connections |
|---|----------------------|---------------------------------|---|
| Kiowa District Hospital | Critical Access | \$7,733.20 | Yes |
| KVC Behavioral Healthcare, Inc. | Private Psychiatric | \$3,000.00 | No |
| Labette County Medical Center | General | \$13,135.00 | Yes |
| Lane County Hospital | Critical Access | \$49,323.64 | Yes |
| Larned State Hospital | Special | \$6,000.00 | Yes |
| Lawrence Memorial Hospital | General | \$0.00 | No |
| Lincoln County Hospital | Critical Access | \$4,135.00 | No |
| Lindsborg Community Hospital | Critical Access | \$10,135.00 | Yes |
| Logan County Hospital | Critical Access | \$16,135.00 | Yes |
| Meade District Hospital/Artesian Valley Health System | Critical Access | \$33,768.48 | Yes |
| Meadowbrook Rehabilitation Hospital | Special | \$0.00 | No |
| Medicine Lodge Memorial Hospital | Critical Access | \$23,075.00 | Yes |
| Memorial Health System (Hospital District #1 Dickinson) | Critical Access | \$16,135.00 | Yes |
| Memorial Hospital | General | \$20,135.00 | No |
| Menorah Medical Center | General | \$0.00 | No |
| Mercy Health Center (Fort Scott) | General | \$3,000.00 | No |
| Mercy Hospital (Moundridge) | General | \$0.00 | Yes |
| Mercy Hospital of KS - Independence | General | \$3,000.00 | No |
| Mercy Regional Health Center, Inc. | General | \$46,135.00 | No |
| Mid-America Rehabilitation Hospital | Special | \$0.00 | No |
| Minimally Invasive Surgical Hospital | General | \$0.00 | No |
| Minneola District Hospital | Critical Access | \$50,895.59 | Yes |
| Mitchell County Hospital | Critical Access | \$11,671.00 | Yes |
| Morris County Hospital | Critical Access | \$11,575.00 | Yes |
| Morton County Hospital | General | \$11,386.25 | No |
| Mt. Carmel Regional Medical Center | General | \$7,135.00 | Yes |
| Nemaha Valley Community Hospital | Critical Access | \$27,135.00 | Yes |
| Neosho Memorial Regional Medical Center | Critical Access | \$10,135.00 | No |

| Organization Name | Hospital Type | Funding Received to Date | Requested Kan-ed 2.0 Connections |
|---------------------------------------|---------------------|--------------------------|----------------------------------|
| Ness County Hospital District #2 | Critical Access | \$6,094.80 | Yes |
| Newman Regional Health | General | \$29,200.00 | Yes |
| Newton Medical Center | General | \$3,000.00 | No |
| Norton County Hospital | Critical Access | \$44,245.00 | Yes |
| Osborne County Memorial Hospital | Critical Access | \$5,335.00 | Yes |
| Oswego Community Hospital | Critical Access | \$3,000.00 | Yes |
| Ottawa County Health Center | Critical Access | \$28,135.00 | Yes |
| Overland Park Regional Medical Center | General | \$0.00 | No |
| Phillips County Hospital | Critical Access | \$72,397.48 | Yes |
| Prairie View Hospital | Private Psychiatric | \$0.00 | No |
| Pratt Regional Medical Center | General | \$38,026.00 | Yes |
| Providence Medical Center | General | \$0.00 | No |
| Ransom Memorial Hospital | General | \$0.00 | No |
| Rawlins County Health Center | Critical Access | \$44,747.00 | Yes |
| Republic County Hospital | Critical Access | \$29,006.40 | Yes |
| Rooks County Health Center | Critical Access | \$47,925.00 | Yes |
| Rush County Memorial Hospital | Critical Access | \$30,603.80 | No |
| Russell Regional Hospital | Critical Access | \$67,973.42 | Yes |
| Sabetha Community Hospital | Critical Access | \$13,135.00 | Yes |
| Saint John Hospital | General | \$0.00 | No |
| Saint Luke's South Hospital | General | \$0.00 | No |
| Salina Regional Health Center | General | \$12,990.56 | Yes |
| Satanta District Hospital | Critical Access | \$27,060.25 | Yes |
| Scott County Hospital | Critical Access | \$65,009.10 | Yes |
| Sedan City Hospital | Critical Access | \$10,374.47 | Yes |
| Select Specialty Hospital of Wichita | Special | \$0.00 | No |
| Shawnee Mission Medical Center | General | \$0.00 | No |
| Sheridan County Health Complex | Critical Access | \$31,383.20 | Yes |
| Smith County Memorial Hospital | Critical Access | \$30,395.00 | Yes |

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| Organization Name | Hospital Type | Funding Received to Date | Requested Kan-ed 2.0 Connections |
|--|----------------------|---------------------------------|---|
| South Central Kansas Regional Medical Center | General | \$2,999.40 | No |
| Southwest Medical Center | General | \$42,498.39 | Yes |
| St. Catherine Hospital | General | \$24,586.84 | Yes |
| St. Francis Hospital and Medical Center | General | \$0.00 | Yes |
| St. Johns Maude Norton Memorial Hospital | Critical Access | \$0.00 | No |
| St. Joseph Memorial Hospital, Inc. | Critical Access | \$0.00 | No |
| St. Luke Hospital and Living Center | Critical Access | \$15,723.94 | No |
| Stafford District Hospital #4 | Critical Access | \$25,144.40 | Yes |
| Stanton County Health Care Facility | Critical Access | \$21,690.30 | Yes |
| Stevens County Hospital | Critical Access | \$26,179.65 | Yes |
| Stormont-Vail Healthcare Inc. | General | \$178,300.00 | Yes |
| Sumner County Hospital District #1 | Critical Access | \$10,000.00 | No |
| Sumner Regional Medical Center | General | \$17,010.40 | No |
| Susan B. Allen Memorial Hospital | General | \$0.00 | No |
| Trego County Lemke Memorial Hospital | Critical Access | \$62,840.00 | Yes |
| University of Kansas Hospital | General | \$131,661.00 | No |
| Via Christi Regional Medical Center | General | \$0.00 | No |
| Via Christi Regional Medical Center-Transplant | General | \$3,000.00 | No |
| Wamego City Hospital | Critical Access | \$9,791.44 | No |
| Washington County Hospital | Critical Access | \$10,525.72 | Yes |
| Wesley Medical Center | General | \$0.00 | Yes |
| Western Plains Medical Complex | General | \$0.00 | No |
| Wichita County Health Center | Critical Access | \$34,896.80 | Yes |
| William Newton Memorial Hospital | Critical Access | \$0.00 | No |
| Wilson Medical Center | Critical Access | \$6,000.00 | No |

| Potential Members | |
|--|---------|
| Doctors Hospital LLC | General |
| Galichia Heart Hospital, LLC | General |
| Kansas City Orthopedic Institute, LLC | General |
| Kansas Heart Hospital | Special |
| Kansas Rehabilitation Hospital | Special |
| Kansas Spine Hospital, LLC | Special |
| Kansas Surgery and Recovery Center | Special |
| Manhattan Surgical Hospital, LLC | General |
| Miami County Medical Center | General |
| Olathe Medical Center | General |
| Osawatomie State Hospital | Special |
| Parsons State Hospital & Training Center | Mental |
| Rainbow Mental Health Facility | Special |
| Salina Surgical Hospital | Special |
| Select Specialty Hospital of Kansas City | Special |
| Select Specialty Hospital of Topeka | Special |
| Specialty Hospital of Mid America | Special |
| Summit Surgical LLC | Special |
| Surgical and Diagnostic Center of Great Bend | Special |
| Wesley Rehabilitation Hospital | General |
| Wichita Specialty Hospital | Special |

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Kan-ed Fast Facts and Legislative Brief

- 1) **Membership:** 94% (837 of 892) of eligible schools, libraries, hospitals and higher education institutions are members of Kan-ed.
- 2) **Connections:** Kan-ed 2.0 has service orders for over 700 connections for 515 members. That equates to 62% of the membership being physically connected to the network.
- 3) **Federal Dollars:** Kan-ed brings in over \$3.3 million of federal assistance to schools, libraries and hospitals. This is in the form of discounts on telecom services.
- 4) **Services:**
 - a. Over 419,000 people use the Kan-ed Empowered Desktop for access to databases, electronic file storage, K-12 assessment practice tests and more.
 - b. Every hospital is connected to EMResource, a real-time disaster tracking and resource to identify medical resources in an emergency.
 - c. Kan-ed provides scheduled video-conferencing services. Over 17,000 video conferences are scheduled from Oct. 2008 through June 2009.
 - d. Kan-ed provides E-Rate services and CIPA filtering for schools and libraries so they may apply for E-rate to maximize federal funding.
- 5) **Internet Connectivity:** Kan-ed has partnered with over 25 local providers to bring schools, libraries and hospitals up to a minimum of a 1.5mb broadband connection. Members can connect using a local Kan-ed Authorized Provider, or the State contracted provider.

Funding for FY2010

The Governor, Board of Regents, and Legislative Educational Planning Committee have recommended that Kan-ed be funded 100% through the Kansas Universal Service Fund (KUSF) in FY2010. Kan-ed is currently funded at 80% KUSF and 20% State General Fund. The current statute requires Kan-ed funding to move to 100% SGF in FY2010. Due to the extreme economic conditions, SGF funding is not possible. KUSF funding is appropriate for Kan-ed since one of the reasons for establishing the KUSF in the 1996 Kansas Telecom Act was to:

- 1) *Advance the development of a statewide telecommunications infrastructure that is capable of supporting applications, such as public safety, **telemedicine**, services for*

persons with special needs, distance learning, public library services, access to internet providers and others;

Twenty-seven states use a KUSF type of fund for providing universal broadband to schools, libraries and hospitals. The KUSF is collected by phone companies on voice, cellular and VOIP services. These funds are then sent to the KCC and redistributed by the KCC to eligible telecom entities, for which Kan-ed is one. Kan-ed meets policy in both the Kansas Telecom Act of 1996 and Federal Telecommunications ACT of 1996 by providing enhanced universal service to schools, libraries and hospitals. Broadband is defined as 1.5mb in the Act, as well.

Myths and Facts about Kan-ed and the KUSF:

- **Myth:** Citizens are moving towards cellular phones and Voice Over Internet Protocol (VOIP) so the KUSF fund will decrease.
 - **Fact:** Both cellular service AND VOIP services (as of January 2009) pay into the KUSF fund. There will be SOME toll bypass, but not as much as projected originally.
- **Myth:** KUSF takes away funding from local phone companies.
 - **Fact:** The KUSF fund is formula driven. If Kan-ed funding decreases from the KUSF, then the fund pool decreases. It does not leave more money for other eligible telecom entities.
 - **Fact:** The majority of KUSF funding Kan-ed receives goes back directly into eligible telecom companies and private industry which drives economic factors.
- **Myth:** Kan-ed is an Internet Service Provider placing the state government in competition with industry.
 - **Fact:** Kan-ed leases services and leases/purchases equipment from the private telecom and cable industry.
 - **Fact:** Kan-ed is not allowed to own or lease to own any equipment or services that are under the E-Rate program. Kan-ed must lease them from eligible telecom carriers.

Please urge your legislators to support Kan-ed funding at \$10 million from the KUSF in FY2010. We must ensure that the Governor's budget recommendation for Kan-ed is approved.