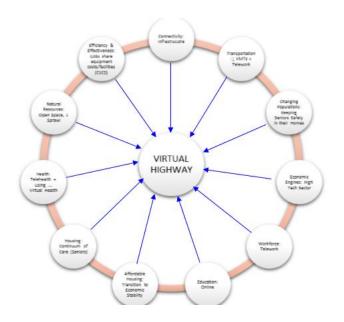




Building a Resilient Region Telehealth Assessment By Dr. Stacey Stockdill & Sonya Hills







Acknowledgements:

The following synthesis was prepared by Dr. Stacey Stockdill (CEO) and Sonya Hills (analyst) for the Resilient Region Virtual Highway: Telehealth Project.

The Virtual Highway Task Force includes all the champions listed on slide 3 as well as: Tri-county Hospital; Brainerd Lakes Area Economic Development Corporation; Community Development of Morrison County; City of Staples Community Development; Wadena Economic Development Corporation; the Brainerd Lakes Chamber; Good Samaritan Society; Minnesota State Community and Technical College (M-State); Resilient Living Council, Leech Lake Band of Ojibwe, and Public and Private Health care providers. We also coordinate our work with the BLAEDC and Brainerd Lakes Area Chamber of Commerce High-Tech Sector Task Force and the CLC/MNSCU High Tech IT Task Force. We have letters of support from: Commissioner Mary Tingerthal (Minnesota Housing Fund), Warren Hansen, (CEO, Greater Minnesota Housing Fund -GMHF), and Bernadine Joselyn (Blandin Foundation) with the Ioan of their broadband expert, Bill Coleman.

We represent 40,500 (seasonal and year-round) residents, 24,877 K-12 students (49% eligible for free or reduced school lunches), more than 401,605 northbound cars loaded with visitors (continuous traffic monitors August 2009), and 11,252 home-based businesses who generate \$407,786,000 in revenue for the five-county region (Crow Wing and Cass Counties: Census 2010 and Morrison, Todd and Wadena Counties: ACS 2007). Advocates for improved broadband access come from ALL local units of government within the region (65 Cities & 5 Counties); hundreds of private sector companies; 27 school districts', 2 community colleges (CLC and Minnesota STATE Community Technical College) and the 600 residents who worked on the creation of the regions "Resilient Region Plan".





Resilient Region Theme Champions CHAMPION CHAIR:

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Partnership

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CONNECTIVITY

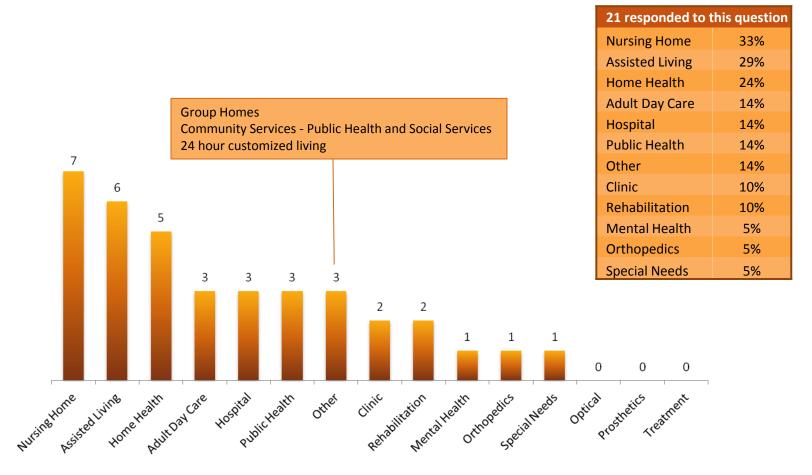
Pam Mahling (Corporate Resource Specialist) West Central Telephone Association (WCTA) Kevin Larson (CEO) Consolidated Telephone Company (CTC) Janelle Riley (CEO) Syvantis Technologies Stacey Stockdill, (CEO) EnSearch, Inc. Sally Fineday (Business Manager) Leech Lake Telecommunications Paul Drange, Director of Regional Programs (NJPA)

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What category best describes your facility?

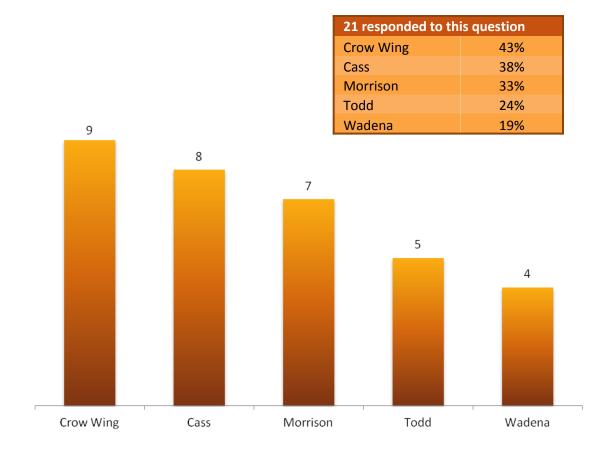


21 responded to this question





In what counties do you provide services?







The following are five common medical conditions using telehealth.

Please check any technologies you think would be appropriate for each of these medical conditions.

17 responded to this question	CHF: C Heart I	hronic Failure	COPD: C Obstru Pulmonary	ictive	Deme	entia	Depre	ssion	Diab	oetes
Digital record sharing	17	100%	16	94%	13	76%	13	76%	16	94%
Medication dispension/tracking	12	71%	13	76%	12	71%	12	71%	14	82%
Providing talk services										
(e.g. psychotherapy, patient education, etc.)										
(using tools other than the telephone)	9	53%	8	47%	5	29%	11	65%	12	71%
Remote patient monitoring-										
patient at home,										
monitored by outside agency	12	71%	10	59%	8	47%	7	41%	12	71%
Remote patient monitoring-										
patient at home,										
monitored by us	13	76%	12	71%	9	53%	7	41%	12	71%
Remote patient monitoring-										
patient at our facility,										
monitored by outside agency	7	41%	7	41%	7	41%	6	35%	7	41%
Remote patient monitoring-										
patient at our facility,										
monitored by us	10	59%	9	53%	8	47%	8	47%	10	59%
Tele-consulting for diagnosis										
(using tools other than the telephone)	11	65%	11	65%	9	53%	13	76%	10	59%
Tele-consulting for treatment plan										
(using tools other than the telephone)	11	65%	12	71%	12	71%	12	71%	13	76%
Tele-surgery	1	6%	1	6%					1	6%





Are you currently using any of the following telehealth technologies?

		sing, not ed in using	wou intere	sing, but uld be ested in loring	the n	g to use in ext two ears	Curren	itly using	Responded
Digital record sharing	1	6%	9	56%	3	19%	3	19%	16
Medication dispension/tracking	2	14%	8	57%	1	7%	3	21%	14
Providing talk services									
(e.g. psychotherapy, patient education, etc.)									
(using tools other than the telephone)	1	7%	11	73%			3	20%	15
Remote patient monitoring-									
patient at home,									
monitored by outside agency	4	27%	8	53%	1	7%	2	13%	15
Remote patient monitoring-									
patient at home,									
monitored by us	2	13%	10	67%			3	20%	15
Remote patient monitoring-									
patient at our facility,									
monitored by outside agency	5	38%	7	54%			1	8%	13
Remote patient monitoring-									
patient at our facility,									
monitored by us	2	14%	11	79%	1	7%			14
Tele-consulting for diagnosis									
(using tools other than the telephone)			11	79%			3	21%	14
Tele-consulting for treatment plan									
(using tools other than the telephone)			12	80%			3	20%	15
Tele-surgery	6	55%	5	45%					11
Other			1	100%					1





For the telehealth technologies you're not using and not interested in using, please check all that apply.

		n't know h about it.	applica	eeded or able to the s I provide.	Can't	afford it.		ve the staff to nage it.	Responded: Not using, not interested in using
Digital record sharing			1	100%					1
Medication dispension/tracking			2	100%			1	50%	2
Providing talk services									
(e.g. psychotherapy, patient education, etc.)									
(using tools other than the telephone)	1	100%			1	100%	1	100%	1
Remote patient monitoring-									
patient at home,									
monitored by outside agency	1	25%	3	75%					4
Remote patient monitoring-									
patient at home,									
monitored by us			1	50%			1	50%	2
Remote patient monitoring-									
patient at our facility,									
monitored by outside agency	3	60%	2	40%			1	20%	5
Remote patient monitoring-									
patient at our facility,									
monitored by us	1	50%					1	50%	2
Tele-consulting for diagnosis									
(using tools other than the telephone)									
Tele-consulting for treatment plan									
(using tools other than the telephone)									
Tele-surgery	3	50%	5	83%	1	17%	3	50%	6





For any telehealth technologies you are currently using, please answer the following questions.

	Product or vendor name	Are you satisfied with this product or vendor?	Used for what medical conditions?	Responded: Currently using
	"American data, Paragon, centricity"	Yes	CHF COPD Dementia Depression Diabetes	
Digital record sharing	"Meditech, Allscripts"	No	CHF COPD Dementia	3
	Point Click Care	Yes	CHF COPD Dementia	
	Meditech	No	CHF COPD	
Medication dispension/tracking	not sure	Yes	CHF COPD Dementia Depression Diabetes	3
	Point Click Care		CHF COPD Dementia	
Providing talk services (e.g. psychotherapy, patient education, etc.) (using tools other than the telephone)	Don't know	Yes		
	internet	Yes	Depression Diabetes	3

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Continued- For any telehealth technologies you are currently using, please answer the following questions.

	Product or vendor name	Are you satisfied with this product or vendor?	Used for what medical conditions?	Responded: Currently using
Remote patient	not sure	No		
monitoring- patient at home, monitored by outside agency	Nystroms	Yes		2
	"not sure, varies"			
Remote patient	honeywell	Yes	CHF COPD	
monitoring- patient at home, monitored by us	Lifeline for Homecare	No	CHF COPD Dementia Depression Diabetes	3
Remote patient monitoring- patient at our facility, monitored by outside agency	Phillips E-ICU	Yes	CHF COPD Dementia Depression Diabetes	1
Remote patient monitoring- patient at our facility, monitored by us				





Continued- For any telehealth technologies you are currently using, please answer the following questions.

	Product or vendor name	Are you satisfied with this product or vendor?	Used for what medical conditions?	Responded: Currently using
	not sure	Yes		
Tele-consulting for diagnosis (using tools other than the	Don't know	Yes		3
telephone)	Tele-Stroke - Allina	Yes		5
	"not sure, need to survey IT"			
Tele-consulting for	Don't know	Yes		
treatment plan (using tools other than the telephone)	"Telemed for Rheumatology - St. Lukes, Telemed for Genetic Counseling - Allina"	Yes		3
Tele-surgery				
Other				





Please provide any additional comments, questions, or concerns about the telehealth technologies you are interested in or currently using.

	"This is happening in some ways, but definitely could be improved upon."			
Digital record sharing	"we do have an emr that is shared across our locations, we do not			
	share it with outside agencies"			
	electronic charting/record keeping			
Medication dispension/tracking	as above			
	This has also occurred through Public Health			
	"We currently use telehealth for psychiatry/psychology services in			
Providing talk services	other locations, however, not in our Cass county location"			
(e.g. psychotherapy, patient education, etc.)	live in a rural area			
(using tools other than the telephone)	Nystroms and Northern Pines have this in place			
	We see this expanding into the future but it will be limited by the			
	available broadband connection at the patient's home.			
Remote patient monitoring-	This is also offered to elderly consumers in our community.			
patient at home,	better management of s/s with earlier intervention avoiding			
monitored by outside agency	hospitalization			
Remote patient monitoring-	We currently would like to offer expanded lifeline service but are			
patient at home,	limited by broadband at the patient's home.			
monitored by us	as above			
Remote patient monitoring-	We have no broadband concerns at the facility.			
patient at our facility,				
monitored by outside agency	as above			





Continued- Please provide any additional comments, questions, or concerns about the telehealth technologies you are interested in or currently using.

Remote patient monitoring-	No issues inside the facility.
patient at our facility,	
monitored by us	as above
	Patients need to come to the hospital.
Tele-consulting for diagnosis	Nystroms - Psychiatry
(using tools other than the telephone)	avoid long drives to see specialists
	"currently used in other locations, not in Cass county clinics"
	Patients need to come to the hospital.
Tele-consulting for treatment plan	Nystroms - Psychiatry
(using tools other than the telephone)	as above
	"currently used in other locations, not in Cass county clinics"
Tele-surgery	
	Need to survey out IT department
	We are changing from Meditech and Allscripts to Epic in September
	When patients are at the hospital we have no concerns about
Additional Comments	connectivity the issues come up when trying to communicate to the
	patient's home.
	Will be interesting to watch as technology continues to grow &
	improve.





How are you using the data you receive?

"Standard reporting, statistical measures, quality management, etc." "Transitions of care, treatment plans, diagnosis, etc." patient monitoring Verification of accurate service. Quality Assurance comparisons & data.

What additional data would be useful?

It would be very helpful if we had a system in place with the three area hospitals so we have information in a more timely fashion - case workers and public health nurses are many times setting up transitions of care plans in the community or have the ability/authority to increase services if they have been ordered or are needed. More efficient and effective process.

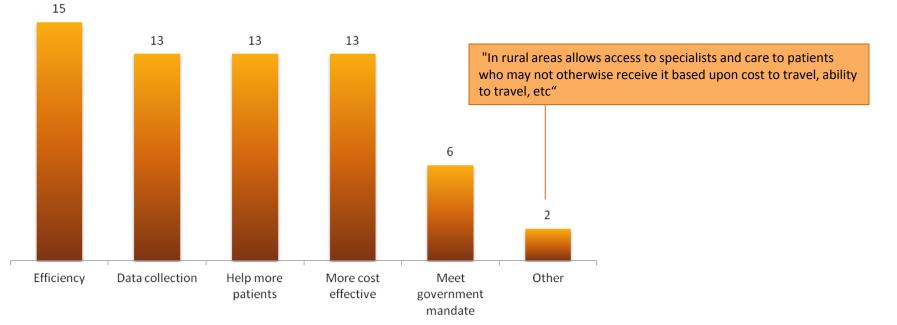
None known at this time.





What do you see as advantages/benefits of using telehealth?

17 responded to this question				
Efficiency	88%			
Data collection	76%			
Help more patients	76%			
More cost effective	76%			
Meet government mandate	35%			
Other	12%			







Do you see any potential disadvantages of using telehealth?

"no.....I used it at the LTC where I worked, and have been without it for nearly a year at my current place of employment. I really miss it"

"Telehealth can certainly help bring very specialized services to rural areas, however the optimum process continues to be a personal interaction between the patient and providers. There needs to be substantial amount of trust between the patient and the provider to ensure the best outcomes and building that trusting relationship via remote interactions is much more difficult."

"Yes, often the generation currently in the nursing home want to see their Doctor in person, not through a television/computer."

Cautious about HIPPA compliance & data sharing.

Cost

face to face quality care by person in person

Impersonal

Learning period for providers.

Loss of personal connection

many patients get frustrated with the machine because they feel it is to confusing to use. Most of are clients are over the age of 65 and do not use a computer.

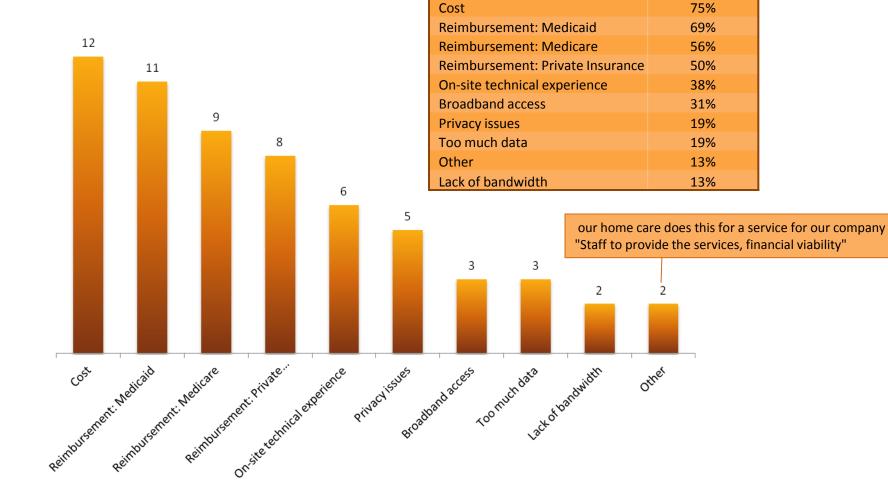
Need some comfort level with technology. Patient 's may feel less connected to the provider compared to a face to face visit.

Some concerns regarding data privacy - need to develop process and protocols to ensure data privacy.





Which of the following limits your ability to adopt telehealth applications?



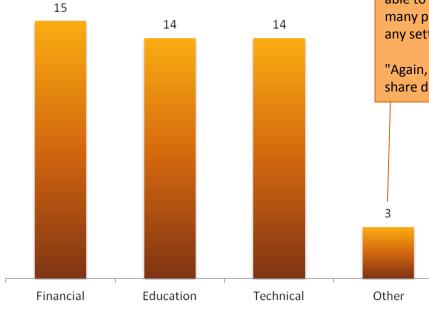
16 responded to this question





What kind of assistance will you require to implement telehealth or expand current use?

17 responded to this question					
Financial	88%				
Education	82%				
Technical	82%				
Other	18%				



If you want it it needs to be covered and paid for by insurance and government programs

"most of our telehealth services are focused around provider telehealth visits, need to have capacity for our providers to be able to increase services (i.e., a provider who is already seeing as many patients as possible on a day cannot see more patients in any setting)"

"Again, at the facility we have the technology and connectivity to share data and video the limitation is at the patient's home."