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### A National Report on the Use of Telecommunications to Deliver VR Services

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# Research Report DEC 2010

## A National Report on the Use of Telecommunications to Deliver VR Services

The University of Montana Rural Institute

**RTC**  
**RURAL**

Research and Training Center on Disability in Rural Communities

It can be difficult for VR counselors to provide face-to-face services to rural clients. Large caseloads reduce counselors' available travel time to travel to outlying rural communities, and rising fuel costs make such trips expensive (Metzel & Giordano, 2007; Riemer-Reiss, 2000). Telecommunications can increase counselor-client accessibility and provide flexibility to supplement face-to-face services. Telecommunications refers to a variety of information technology (IT) that allows people in different locations to engage with one another, while reducing boundaries of time, distance, and location. Access to telecommunication services, however, may be limited. For instance, people living in rural areas may lack access to certain telecommunication technologies (Porter & Donthu, 2005). And some telecommunication technology may be difficult for people with limited writing or communication skills.

We conducted two studies on the use of telecommunications in the VR process—one from the perspective of VR counselors and one from the perspective of rural VR consumers. Following are the preliminary findings from the survey of VR counselors.

### Methods

To understand how telecommunication technology is used, we developed an online survey for VR counselors. The survey asked counselors about their attitudes on the use of telecommunications to deliver services, their access to and current use of telecommunications, and their view of client characteristics that may factor into the use of telecommunication methods.

Thirteen VR agencies participated in the study (11 combined and two blind). An online invitation was distributed to the entire VR counseling staff at each participating agency.

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## Participants

A total of 1,187 counselors took the survey for a 58% combined response rate across agencies. On average, respondents had worked 11 years as a VR counselor. Eighty-nine percent (89%) of respondents had an advanced degree (87% master's, 2% Ph.D.), predominately in Rehabilitation Counseling.

## Results

**Counselor Caseloads.** Counselors' active caseloads averaged 114 clients. Ten percent (10%) of counselors served only rural clients, 31% served only urban clients, and 59% served a mixed rural and urban caseload. In total, respondents served approximately 38,508 rural clients, of which 56% were served through an itinerant counseling relationship. Itinerant counselors traveled an estimated 108 miles per client for a combined total of 2.3 million miles per year. Twenty-six percent (26%) of counselors who served both rural and urban clients said they contacted their rural clients less frequently.

**Counselor Access to Telecom.** Almost all counselors (98%) had access to the Internet and email. Thirty-one percent (31%) also had laptops with wireless Internet. Sixteen percent (16%) had work-supported cell phones; 6% had cell phones with text messaging capabilities; and 14% had access to video conferencing (e.g., Skype). Counselors who were not provided devices or access to telecommunication technology said they desired laptops with wireless (72%), cell phones (53%), video conferencing/Skype (46%), and text messaging (40%).

**Agency Support.** The majority of counselors agreed that their agency supports the use of telecommunications (65%) and provides adequate technical support (69%). Only 18% of counselors, however, said they had received any training on how to deliver services using telecommunications. When counselors indicated they had received training, most

described technical assistance training rather than training on counseling practices while using telecommunication technology.

### Factors Influencing the Use of Telecom.

Counselors indicated that clients faced transportation barriers to attend face-to-face meetings. Thirty-five percent (35%) of counselors said that transportation was a barrier for "most" of their rural clients, and another 29% said it was a barrier for "some" of their rural clients.

Counselors also said that rural clients had less access and experience using telecommunication methods than their urban counterparts. Table 1 compares counselor answers for rural and urban clients.

Table 1: Access to Telecommunications

What percentage of your rural and urban clients ...	Rural Mean	Urban Mean
Can access a computer with the Internet on a regular basis? *	49%	60%
Know how to use the Internet to find information?*	52%	63%
Know how to use email? *	51%	63%
Can access free or low-cost training in their immediate communities on how to use the Internet and email? *	36%	58%

\* significant differences at  $p < .000$

Communication through email or text messaging requires writing skills. Counselors estimated that about half (53%) of their clients could effectively communicate in writing. Fifty-three percent (53%) felt that written communication was less effective than verbal communication, primarily due to the loss of visual cues and increased miscommunication with clients.

**Counselor Attitudes.** Porter & Donthu (2005) suggest that counselor concerns about technical difficulties, client confidentiality, and client ability to communicate via telecommunications might affect their attitudes toward using it. Forty-one percent (41%) of counselors reported technical difficulties when using telecommunications to

provide services, such as dropped calls, poor Internet connections, and undeliverable emails. Counselors also indicated that fax (39%), email (31%), and texting (26%) introduced greater risks to confidentiality than phone/cell (16%), standard mail (15%), or video conferencing (9%).

Most counselors thought that phone and email were appropriate communication methods for their clients. However, some counselors felt that clients who are blind/low vision, deaf/hard of hearing, or who have physical impairments lack the necessary assistive technology to use these methods. Additionally, 37% of counselors felt that email communication was difficult for clients who have cognitive impairments because they have trouble with comprehension, reading and writing, and have difficulties using technology.

### **Use of Telecom During the VR Process.**

Typically, counselors met face-to-face with clients during the initial intake phase of VR services and moved toward more integrated communication methods as the process unfolded. For instance, while 75% of rural counselors “almost always” met face-to-face during intake, only 35% “almost always” met face-to-face during implementation of the Individualized Plan of Employment (IPE). Forty-three percent (43%) of rural counselors used a combination of phone, email, and face-to-face methods to provide services during IPE implementation.

Counselors serving urban clients used email more often than counselors serving rural clients for IPE development, IPE implementation, and counseling and guidance. Additionally, 31% of counselors said they deliver services differently to their rural and urban caseloads by meeting face-to-face with their urban clients more frequently during all phases of the VR process.

**Counselor Considerations.** Most respondents (73%) agreed that telecommunications has helped them deliver VR services. They reported that

telecommunications eliminated transportation barriers, saved on money and time, and provided a quick way to check in with clients and interact in a timely manner.

However, counselors also described problems using telecommunications to deliver VR services. About a third (28%) had experienced dropped calls, lack of cell phone service, poor Internet connections, and computer crashes. Just more than one-fifth (22%) indicated that clients and counselors lacked access to certain technologies. Further, several counselors said that telecommunication falls short of face-to-face interactions because it can lead to miscommunication, particularly for clients with cognitive impairments or mental illness.

**Steps for Improving Telecom.** Table 2 presents suggested action steps VR agencies can take to increase the use of telecommunications to deliver services.

## **Conclusions**

Counselors already use and rely on some simple telecommunication methods to serve their clients. Additional methods, such as text messaging, appear to be an important avenue for development, particularly for serving clients who are deaf or hearing impaired. Likewise, video conferencing may be an appropriate method for communicating with clients who have mental health disabilities because it allows for real-time communication.

Counselors in this study travel an estimated 2.3 million miles per year to serve rural clients, which translates into \$1.2 million per year in gas costs and approximately 51,000 hours in staff travel time. Reduced travel expenses may likely offset agency costs associated with the expansion of telecommunications.

While nothing can replace face-to-face contact, physical access to telecommunication technology is increasing along with the skills to use it. Telecommunications provides one avenue for increasing VR services to rural clients.

Table 2: Action Steps for Improving Telecommunications

Issue	Possible Action Steps
1. Address technology difficulties introduced by agency policies or infrastructure	<ul style="list-style-type: none"> <li>• Commit agency resources to IT personnel and telecommunications equipment.</li> <li>• Relax or refine SPAM firewalls that block client emails.</li> <li>• Increase email attachment size constraints to facilitate easy exchange of documents.</li> <li>• Update servers.</li> <li>• Purchase cell phones with text messaging capabilities or videophones for counselors serving clients who are deaf or hard of hearing.</li> </ul>
2. Facilitate telecommunications use by clients	<ul style="list-style-type: none"> <li>• Use VR funds to cover the costs of assistive devices such as screen readers.</li> <li>• Provide training on the use of video conferencing to reach clients who are best served through real time visual communication (i.e., individuals with mental illness or individuals who are deaf or hard of hearing).</li> <li>• Assist clients with setting up email accounts and practicing email communication.</li> <li>• Provide opportunities for rural clients to test and use different technologies.</li> </ul>
3. Facilitate telecommunications use by counselors	<ul style="list-style-type: none"> <li>• Provide staff training on developing online relationships, building rapport using the written word, and implementing online and phone counseling methods.</li> <li>• Allow staff to use social networking sites for communicating with clients such as Facebook, Twitter, etc.</li> <li>• Provide opportunities for staff to become better acquainted with various technologies such as video conferencing by promoting internal use.</li> <li>• Develop strategies for easy transfer of email communications into case notes, etc.</li> </ul>
4. Quality control	<ul style="list-style-type: none"> <li>• Gather data from clients about using telecommunications during the VR process, and ask them for suggestions.</li> <li>• Develop protocols for introducing telecommunications (when should it be used in the process, under what circumstances, etc.).</li> </ul>

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