Virtual grand rounds: a new educational approach in social work that benefits long-term care providers and patients in rural Idaho

BJ Cunningham1, R Vande Merwe2
1Institute of Rural Health, Idaho State University, Pocatello, Idaho, USA
2Idaho Health Care Association/Idaho Center for Assisted Living, Idaho, USA

Submitted: 29 August 2008; Resubmitted: 20 December 2008; Published: 9 February 2009

Cunningham BJ, Vande Merwe R

Virtual grand rounds: a new educational approach in social work that benefits long-term care providers and patients in rural Idaho

Rural and Remote Health 9: 1073. (Online), 2009

Available from: http://www.rrh.org.au

ABSTRACT

Introduction: Nationwide, rural USA is experiencing a shortage of social workers. In rural Idaho, three state-wide non-profit organizations worked together to develop Virtual Grand Rounds (VGRs), a new approach to delivering continuing education to social workers and residential care coordinators, in order to promote their retention in the workforce. This study examined participant satisfaction and the potential for the delivery system to be replicated in other states.

Methods: Between July 2002 and December 2006, 740 person-hours (359 attendees x 2.06 hours) of continuing education were delivered to resident care coordinators and social workers in 9 sessions of VGRs. In total, 287 evaluation forms (79% return rate) were collected on the quality of the presentation, the presenter’s expertise and delivery, the relevance and value of the presentation to the attendee, and the quality of the technology. The questionnaire consisted of 10 questions that aimed to measure participant satisfaction level, using a five-point Likert scale with a comments section.

Results: Programs and presenters received positive scores. Participants approved of the delivery method and the overall satisfaction rating was 4.1. As to whether the information presented would lead to changes in practice, participants responded positively with a score of 3.25.

Conclusion: The Telehealth Idaho program contributed to a thorough training for new healthcare employees and for those in rural Idaho unable to attend the annual conference for essential training. Initial successes led to an expansion of the program to include
other facility staff, and other topics which provided a new training system and infrastructure. This represents one unique contribution to addressing the rural social workers shortage.

**Key words:** access to healthcare, continuing education, frontier, social work, telehealth, virtual grand rounds.

---

**Introduction**

Rural social workers face significant challenges in the delivery of their services to rural and frontier residents. The National Association of Social Workers (NASW) reported that the number of new social workers providing services to older rural adults is decreasing, despite projected increases in the number of older adults who will need social work services\(^1\). The people served have the same basic needs as their urban counterparts; however, they are older than the national average and have higher rates of non-insurance, while their access to technology and technical expertise is more limited\(^2\).

The Idaho Health Care Association/Idaho Center for Assisted Living (IHCA/ICAL) found that education programs specific to nursing home social services were infrequent and were not convenient to those in rural areas. Furthermore, a comprehensive training curriculum was not available to employees statewide. This article explores one approach to addressing this inequity: the delivery of continuing education to health professionals in skilled nursing facilities (SNF) in rural Idaho in the form of Virtual Grand Rounds (VGR). This also represents one contribution to addressing the rural social worker shortage.

**Literature review**

The published literature indicates there are both positive and negative aspects to the application of technology to distance learning. Among the positive aspects are that distance education provides greater flexibility and student convenience, improved access/interaction with the instructor, better grades, and a more positive learning experience\(^3\). The negative aspects of distance education include a reduction in face-to-face interaction, concerns over technology and logistics, increased student workload, and increased costs to the student\(^3\).

However, distance education research has been conducted primarily in educational settings and very limited research has been conducted on adult work populations\(^4\). Existing workplace research suggests that learner needs, technology support and workplace constraints are different from those in education settings\(^5,6\). In addition, there is now industry acknowledgement of the critical importance of lifelong learning, and the focus of training has shifted from teaching specific skills to supporting organizational strategic goals\(^7-10\). The research from this project is unique because it provides a bridge between the educational institution and a workplace population.

**Background**

In August 2001, the Idaho State University Institute of Rural Health received funding to improve access to quality health care for people in rural and frontier Idaho, with a secondary purpose to establish a statewide telehealth resource center. To accomplish these goals, a project was devised with three objectives, to: (i) increase the workforce through new and expanded education; (ii) extend the reach of the existing workforce through telehealth; and (iii) preserve the existing workforce through professional support, thus increasing health professional quality of life and retention, and reducing the negative effects of care-giving.

In November 2001 a ‘request for proposal’ was publicized state-wide to solicit potential project partners. Among the responses, the proposal from IHCA/ICAL and the Idaho
Chapter NASW (IDNASW) stood out because it was from two non-profit, state-wide organizations and was not from a hospital or clinic.

The purpose of their proposal was to address the shortage of qualified social workers in rural Idaho. As background, in 2001 every Idaho SNF (or long-term care facility, or nursing home) was required to have at least one employee who provided social services to residents. According to federal and state law, SNF employees are required to be either licensed social workers or non-licensed employees, and the director of social services in each facility must be a social worker if the facility is licensed for 120 beds or more. In facilities with 119 beds or less (more common in rural Idaho), the non-licensed employees are commonly known as resident care coordinators and generally do not have formal social work training.

Whether licensed or not, these employees provide important advocacy for long-term care residents and are part of the interdisciplinary care plan team. The documentation required is often of a technical nature. The social worker or residential care coordinator must also be able to provide admission and discharge guidance to residents, families and other healthcare professionals.

Facilities throughout the state have experienced difficulties in locating and recruiting qualified social workers to fill SNF positions in rural areas. In addition, few social work programs in Idaho provide adequate training in nursing home social services, so specific initial training was required for any social worker employed. In 2000 and 2001 the IDNASW sought to change the law requiring all facilities to employ a social worker as the director of social services. After 2 years in the legislature a compromise was reached between IHCA/ICAL and IDNASW, such that a residential care coordinator would not be referred to as ‘social worker’, and that they undergo a formal training program.

In 2001 and 2003 IHCA/ICAL and IDNASW worked together and developed a training curriculum for nursing home social workers and residential care coordinators, and this was taught at the annual IHCA/ICAL conference. The training was invaluable for employees hired prior to the conference and for those who were able to participate in the conference. For employees hired throughout the year or who worked in smaller, rural facilities (where a lack of replacement staff meant they were unable to be absent from work for the period of the conference) this was not satisfactory. To address this problem, IHCA/ICAL and IDNASW joined Telehealth Idaho to create the VGRs for resident care coordinator training.

**Rurality and Idaho health professional shortages**

For the purposes of this article, the adopted definition of ‘rural’ is that of the Health Resources and Services Administration (HRSA) Shortage Designation Branch. The HRSA Shortage Designation Branch determines whether a geographic area, population group or facility is a Health Professional Shortage Area (HPSA). Such shortages may be of primary medical care, dental or mental health providers in urban or rural areas, population groups or medical or other public facilities\(^\text{11}\). All 44 counties in Idaho are classified as HPSAs for mental health.

More than 50% of the non-metropolitan populations of Idaho live at least 66 miles (106 km; straight-line distance) from the nearest tertiary healthcare facility, while 25% live at least 95 miles (153 km) and 10% live 106 miles (171 km) away from such a facility (pers. comm., Dr Jaishree Beedasy, 16 December 2008). The actual road distance traveled is even higher, and other factors such as slope, type of road, number of junctions, and weather conditions increase the physical complexities of accessing care.

**The virtual grand rounds design and implementation**

The VGRs were created to address the need for continuing education and to provide professional support for rural health professionals by bringing current evidence-based practice to the rural professional in their community\(^\text{12}\). Essentially, VGRs are grand rounds delivered by statewide
interactive videoconference. Two-way communication allows participants sufficient interaction to gain as much detail as a topic warrants. As in medical grand rounds, specialist presenters (often located outside of Idaho) are assembled to provide current information on a topic, allowing rural professionals access to experts in a variety of fields. Through the VGR process, the IHCA/ICAL provided training to its rural facilities.

Telehealth Idaho used existing videoconference resources across the state and VGRs were delivered using a network approach with Internet Protocol (IP) and Integrated Services Digital Network (ISDN) connectivity. Idaho State University’s distance education network links to five of the state’s largest communities and to eight rural counties in southeast Idaho. Additionally, it connects to the North Idaho Rural Health Consortium, which services five northern rural hospitals. Telehealth Idaho provided the technical infrastructure and support with scheduling, registration, publicity, and data collection. It funded the cost-of-line charges for interactive videoconferencing and staff time to arrange, coordinate, and collect data on each session.

Methods

Between July 2002 and December 2006, 740 person-hours (359 attendees x 2.06 hours) of continuing education were delivered to resident care coordinators and social workers in nine sessions of VGRs. The intervention was evaluated using a questionnaire that consisted of 10 questions, measuring participant satisfaction level with a five-point Likert scale, and a comments section. Volunteer proctors distributed and collected attendance, basic demographic, and program evaluation forms at each site for each session and returned the data to Telehealth Idaho for analysis.

This Telehealth Idaho continuing education evaluation form was approved by Idaho State University’s Human Subject’s Committee.

The curriculum delivered via video conferences and in lecture format, was chosen from the components shown (Table 1).

Results

In total, 283 evaluation forms (79% return rate) were collected on the quality of the presentation, the presenter’s expertise and delivery, the relevance and value of the presentation to the attendee, and the quality of the technology. Programs and presenters consistently received very positive scores. Participants were pleased with the method of delivery. The overall participation satisfaction rating of the VGR was 4.1 (of a possible 5). When queried as to whether the information presented would lead to changes in practice, the participants responded positively with a score of 3.25.

For the first VGR on 23 July 2002, data were gathered differently from the remainder of the research. The summary statistics for 23 July 2002, and the remaining residential care coordinator VGR series from 25 October 2002 to 5 December 2006 are given in Tables 2 and 3.

Discussion

Virtual Grand Rounds is a positive alternative to face-to-face traditional lecture-type learning, and it has the added bonus of reaching professionals at rural sites who are unable to travel to a centralized conference.

Although our results cannot show direct correlations between VGRs and benefits, the possible benefits include:

- More individuals trained, with an average of 90 participants per year
- Improvements in social services delivery
- Improved orientation and greater support for new social workers and residential care.
### Table 1: Resident Care Coordinator Curriculum Components

<table>
<thead>
<tr>
<th>Scope of practice</th>
<th>Adult protection</th>
<th>Facility standards</th>
<th>Role of resident &amp; council</th>
<th>Medical terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic pharmacology</td>
<td>Mental illness</td>
<td>Alcohol and drug abuse</td>
<td>Brain structure and function</td>
<td>The resident care plan</td>
</tr>
<tr>
<td>Documentation</td>
<td>Minimum data set</td>
<td>Resident assessment protocol</td>
<td>Ethical issues at end of life</td>
<td>Federal guidelines &amp; regulations†</td>
</tr>
<tr>
<td>Developing &amp; using outside resources</td>
<td>Social services – a</td>
<td>Idaho State Ombudsman program</td>
<td>Complaint investigation process</td>
<td>Types &amp; effects of various psychotropics</td>
</tr>
<tr>
<td>Preventing or adapting to behaviors</td>
<td>Discharge planning &amp;</td>
<td>Continuous quality improvement</td>
<td>Medicare managed care</td>
<td>Ageism and stereotypes of aging</td>
</tr>
<tr>
<td>Introduction: the role &amp; responsibilities of the Resident Services Director in LTC</td>
<td>How cognitive losses affect behavior</td>
<td>Environmental factors that affect behavior</td>
<td>Patient assessment and plan of care</td>
<td>Psychosocial aspects of aging</td>
</tr>
<tr>
<td>Facility Fire and Life Safety Workshop</td>
<td>Behavior as a means of communication</td>
<td>Interventions for residents with special needs</td>
<td>Types and courses of dementia</td>
<td>Admissions -financial, medical, social &amp; emotional concerns</td>
</tr>
<tr>
<td>Working with families</td>
<td>Losses that residents &amp; families face &amp; phases of loss</td>
<td>Professional burnout &amp; the care of the caregiver</td>
<td>The Resident Services Director Manager</td>
<td>Ethics - definitions, concepts, principles &amp; frequent ethical dilemmas in the SNF</td>
</tr>
<tr>
<td>The Resident Assessment Instrument &amp; related sources of information</td>
<td>Types of assessments (quarterly, change of condition etc)</td>
<td>Resources needed for effective social services</td>
<td>Residents' rights, confidentiality &amp; HIPAA</td>
<td>Body composition &amp; age-related changes that effect behavior</td>
</tr>
<tr>
<td>Care-giving strategies with dementia patient &amp; problem solving</td>
<td>Medicare Part A &amp; Part B benefits in a skilled nursing facility</td>
<td>Information: social services &amp; nursing</td>
<td>Medicare supplements &amp; LTC Insurance</td>
<td>Medicare documentation requirements</td>
</tr>
</tbody>
</table>

†Bolded text in the body of the table relates to the components evaluated in this study.

**HIPAA, Health Insurance Portability and Accountability Act; LTC, long term care.**

### Table 2: Class evaluation summary (30 of 60 students registered), 23 July 2002

<table>
<thead>
<tr>
<th>Question</th>
<th>Average Rating†</th>
<th>Mode Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information presented</td>
<td>7.4</td>
<td>8</td>
</tr>
<tr>
<td>Usefulness of information</td>
<td>7.4</td>
<td>7</td>
</tr>
<tr>
<td>Increased your knowledge</td>
<td>6.9</td>
<td>7</td>
</tr>
<tr>
<td>Improved your ability to do your job</td>
<td>6.9</td>
<td>7</td>
</tr>
<tr>
<td>Satisfaction with training session</td>
<td>7.2</td>
<td>8</td>
</tr>
<tr>
<td>Overall impression</td>
<td>7.3</td>
<td>8</td>
</tr>
</tbody>
</table>

†Of a possible 10.
Table 3: Program evaluation – residential care coordinator VGR series, July 2002, and the remaining residential care coordinator VGR series from 25 October 2002 to 5 December 2006

<table>
<thead>
<tr>
<th>Evaluation statement</th>
<th>Evaluation (n (%)</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The presentations were well organized</td>
<td>3 (1.29)</td>
<td>7 (28)</td>
<td>18 (7.2)</td>
<td>142 (56.6)</td>
<td>81 (32.3)</td>
<td></td>
</tr>
<tr>
<td>2. The instructor/s know the subject/s</td>
<td>2 (0.8)</td>
<td>1 (0.4)</td>
<td>5 (2)</td>
<td>121 (48.2)</td>
<td>2 (0.8)</td>
<td></td>
</tr>
<tr>
<td>3. The level of difficulty of information was appropriate</td>
<td>66 (26.6)</td>
<td>6 (2.4)</td>
<td>35 (14.1)</td>
<td>140 (56.3)</td>
<td>66 (26.6)</td>
<td></td>
</tr>
<tr>
<td>4. Telecommunication learning format or equipment was easy to use</td>
<td>3 (1.2)</td>
<td>9 (3.7)</td>
<td>41 (16.7)</td>
<td>135 (54.9)</td>
<td>56 (22.8)</td>
<td></td>
</tr>
<tr>
<td>5. The objectives of the program, as I understand them, were met</td>
<td>1 (0.5)</td>
<td>10 (5.5)</td>
<td>21 (11.5)</td>
<td>100 (54.6)</td>
<td>51 (27.9)</td>
<td></td>
</tr>
<tr>
<td>6. The program was relevant to my work responsibilities</td>
<td>1 (0.4)</td>
<td>7 (2.8)</td>
<td>16 (6.4)</td>
<td>128 (51)</td>
<td>98 (39)</td>
<td></td>
</tr>
<tr>
<td>7. The presentation/s increased my knowledge of this topic</td>
<td>2 (0.8)</td>
<td>5 (2)</td>
<td>41 (16.5)</td>
<td>113 (45.6)</td>
<td>2 (0.8)</td>
<td></td>
</tr>
<tr>
<td>8. The information presented improved my ability to do my job</td>
<td>2 (1.1)</td>
<td>9 (4.8)</td>
<td>41 (21.9)</td>
<td>95 (50.8)</td>
<td>40 (21.4)</td>
<td></td>
</tr>
<tr>
<td>9. My ability to identify risks and issues in this area has been improved</td>
<td>3 (1.6)</td>
<td>9 (4.9)</td>
<td>39 (21.1)</td>
<td>96 (51.9)</td>
<td>38 (20.5)</td>
<td></td>
</tr>
<tr>
<td>10. The information presented will change my practice</td>
<td>4 (1.6)</td>
<td>13 (5.2)</td>
<td>69 (27.8)</td>
<td>115 (46.4)</td>
<td>46 (18.5)</td>
<td></td>
</tr>
</tbody>
</table>

Because there are regional telehealth resource centers located throughout the USA, the VGR model of education and training could be adapted for and used in other states and regions. However, because technology develops rapidly, other distance learning technologies may have the potential to surpass the breath and depth of video conferencing in the foreseeable future.

Conclusion

The Telehealth Idaho program helped provide new rural healthcare employees with a more thorough training than they may otherwise have received. It also allowed IHCA/ICAL to deliver the training to existing rural healthcare employees who may not have been able to attend training at the annual conference. As a result SNF employees were no longer required to travel across this very large, rural state for training.

Because the training of social workers and residential care coordinators was so successful, the program was expanded to include other facility staff, and other VGR topics. As a result, an entirely new system and infrastructure of training was established for the benefit of long-term health care providers and patients in rural Idaho. At the very least, this represents one unique contribution to addressing the rural social worker shortage.

Acknowledgements

This project is supported by grant #1 D1B TM 00042-01 from the Department of Health and Human Services (DHHS) Health Resources and Services DHHS, Health Resources and Services Administration, Office for the Advancement of Telehealth. The contents of this article are the sole responsibility of the authors and do not necessarily represent the official views of DHHS.
References


