

COMMENTARY

Tele-web Psychology in Rural South Australia: The Logistics of Setting Up a Remote University Clinic Staffed by Clinical Psychologists in Training

Susan Genevieve Simpson,¹ Shirley Rochford,² Andrew Livingstone,² Sandra English,¹ and Carly Austin¹

¹Psychology Clinic, University of South Australia, ²Rural and Remote Network, Country Health SA Mental Health Service

There is a significant shortage of clinical psychology services in rural and remote Australia. It is proposed that tele-web psychology may provide one potential solution to this inequity in health provision. A tele-web psychology project was developed through a partnership between a university and country health service setting in rural South Australia. Tele-web psychology was conducted by Provisional Psychologists on their first clinical placement, with patients attending sessions in a community mental health team hub in a regional centre north of Adelaide. This article describes the logistics of setting up a collaborative tele-web psychology service and makes recommendations on how to expedite the success of this type of venture.

Key words: clinical training, rural and remote, telehealth, telepsychology, videoconferencing, video therapy.

Clinical Psychology in Rural Australia

Rural Australians have a greater prevalence of mental health problems than their urban counterparts, with completed suicide rates reaching 1.3–2.6 times higher (AIWH, 2010; National Rural Health Alliance, Inc. 2009). Evidence points to a number of factors that may increase the likelihood of mental health problems in rural areas, including socioeconomic disadvantage, loneliness, and isolation, a harsher natural and social environment alongside vulnerability to natural disasters such as drought, floods, and bushfire (Morrissey & Reser, 2007). Indigenous Australians have the highest rates of serious mental health difficulties in remote and rural areas (Hunter, 2007).

In spite of aspirations to improve access to mental health services in rural Australia, clinical psychology services are sparse (National Rural Health Alliance, Inc., 2009). At the time of this project, there were 7.7 full-time equivalent (FTE) psychologists employed by Country Health SA to cover a total of 983,776 km² (98% of the state), with a population of approximately 490,635. Of these, 5.6 FTE psychologists were actually located in rural and remote areas.

Some remote areas are served by visiting or fly-in/fly-out psychologists working privately, but it is difficult to sustain a weekly psychotherapy service on this basis. Although those psychologists who run outreach clinics often develop skills as

“generalists,” many client groups who require specialist services (e.g., eating disorders, substance misuse, personality disorders) continue to be neglected. There are a number of deterrents to psychologists moving to rural and remote areas, including lack of access to professional development and peer supervision opportunities, and often a requirement to cover several communities over vast distances. The rural sector tends to attract the youngest and least experienced clinicians (National Rural Health Alliance, Inc., 2009), and this may be linked to the lack of availability of positions which reflect the 6-year (minimum) training for the clinical psychology profession, with many rural posts filled by generalist psychologists. It is clear that a new model of psychology service delivery is required which can meet the needs of remote and rural populations, while capitalising on the specialist expertise available in urban Australia.

Videoconferencing is arguably an ideal medium for the provision of psychological services to rural and remote communities because of the fact that it allows for real-time high-quality connection between distant sites through digital compression of audio and video streams, with full access to verbal and non-verbal channels of communication. Videoconferencing enables both general and specialist clinical psychology services to be provided at a distance, removing the cost and disruption associated with travelling to appointments, thereby also reducing potential carbon emissions.

Preliminary findings from several small-scale pilot studies and a handful of randomised controlled studies indicate that efficacy is equivalent for tele-mental health and face-to-face contact across a range of clinical populations and settings (e.g., De Las Cuevas, Arredondo, Cabrera, Sulzenbacher, & Meise, 2006; Fortney et al., 2013; Frueh et al., 2007; Griffiths, Bignault, & Yellowlees, 2006; O’Reilly et al., 2007; Ruskin et al., 2004; Simpson, Bell, Knox, & Britton, 2005; Simpson, Deans, & Brebner, 2001; Simpson et al., 2006).

Correspondence: Susan Simpson, Psychology Clinic, N Building, Department of Psychology, Social Work and Social Policy, University of South Australia, Magill Campus, GPO Box 2471, Adelaide, SA 5001, Australia. Fax +08 8302 4894; email: susan.simpson@unisa.edu.au

Accepted for publication 6 January 2014

doi:10.1111/ap.12049

Telepsychiatry has been used extensively within health services in Australia (e.g., Guha, 2009; Hyde & Fielke, 2009) but this enthusiasm is yet to be shared by psychologists (Rees & Stone, 2005). It seems likely that this may stem partly from a lack of training and experience, as well as the absence of financial incentives for psychologists to partake in telepsychology consultations. However, evidence suggests that given the opportunity, psychologists do quickly adapt to the technology and report satisfaction after using it (Austen & McGrath, 2006; Starling & Foley, 2006).

In order to explore the feasibility of providing clinical psychology services by videolink in rural South Australia, the authors developed a pilot project whereby a tele-web psychology service (i.e., the provision of psychology services via internet-based videoconferencing) was set up, and run by provisional (master's level) psychologists undertaking their first clinical placement.

Context of Tele-web Psychology Project

Port Augusta is located 256 km north of Adelaide and is the gateway to numerous mining communities further north. The Port Augusta regional health service provides outreach services to several remote communities, including Roxby Downs, Andamooka, and Leigh Creek. At the time of this project, like most community mental health teams (CMHT) in SA, the Port Augusta team had no direct access to locally provided clinical psychology assessment and treatment services.

The University of South Australia psychology clinic hosts the first placement for provisional psychologists who are completing their 2-year master's in clinical psychology degree. There is some evidence to suggest that trainee psychologists produce similar (Buckley, Newman, Kellett, & Beail, 2006) or even superior clinical outcomes (Vollmer, Spada, Caspar, & Burri, 2013) to qualified psychologists. The development of a tele-web psychology pilot trial was considered an opportunity to develop skills for working with rural populations through a range of technologies. This has been trialled in three other Australian university settings to our knowledge, with promising preliminary results (Dunstan & Tooth, 2012; Richardson, 2012; Stubbings, 2012). This is the first article to our knowledge, reporting on the logistics of setting up a telepsychology service from a University setting.

This initiative was developed to address four central goals:

- To enhance access to psychological services for people in rural South Australia by forming an e-health partnership with existing mental health services. We anticipated that this integration with mental health teams would facilitate a more seamless model of service delivery to rural and remote clients.
- To address the lack of confidence in the utilisation of video therapy among clinical psychologists by incorporating tele-web psychology training into a postgraduate training course for clinical psychologists. This would give trainees an opportunity for hands-on experience with using tele-web psychology under supervision, while learning about the issues specific to working with a rural population.
- To pilot and identify factors which improve or detract from the success of such a service.
- To develop a model that is uniquely applicable to state mental health services which aim to provide more equitable, inte-

grated and seamless mental health services across rural and remote Australia (South Australia's Mental Health and Wellbeing Policy 2010–2015, 2010).

This article reports on the logistics of setting up such a service, and recommendations based on our experience.

Logistics of Setting Up a Tele-web Psychology Service

Establishing Links

A partnership was developed between the psychology clinic at the University of South Australia and Country Health SA, after expressions of interest were sought from stakeholders in remote and rural SA for a telepsychology pilot research trial. The advanced clinical lead of the Psychology Rural and Remote Network was central in providing opportunities to meet and forge a partnership with psychiatrists who were already engaged in telepsychiatry through Country Health SA.

An initial face-to-face meeting between stakeholders took place in Port Augusta which included the CMHT, the General Practice division (now Medicare Local), the Pika Wiya Aboriginal Health Service, and the University Psychology Clinic Director.

The terms of the new service were discussed, with agreement that referrals from all sources would in the first instance be triaged by the CMHT. Telephone meetings were undertaken between the University psychology clinic director (author 1) and the team leader of the CMHT (author 2) and the director of Nursing for Country Health SA in order to determine the terms of the partnership and to develop a referral pathway between the two services. A Memorandum of Understanding between the University of SA and Country Health SA defined the terms of the pilot trial and stated that overarching responsibility for client health care and management of risk would remain with Country Health SA.

Equipment and Technology

The first stage of the project was facilitated by the national broadband roll-out to regional SA and coincided with the Country Health SA upgrade of local videoconferencing equipment from Integrated Services Digital Network to IP (Internet Protocol)-capable broadband services. IP-based videoconferencing (i.e., able to connect with other videoconferencing units via the internet) is currently the most efficient and economical means of connection. The videoconferencing equipment at the CMHT hub in Port Augusta was a Cisco C20 endpoint (Cisco Systems, Inc., San Jose, CA, USA) with a 50" plasma display, and at the university site was a Lifesize Express 220 unit (Life Size, Austin, TX, USA) with 40-inch LCD display. Both sites were set up so that all calls would be encrypted, ensuring high levels of security.

Videoconferencing calls were connected via a "bridge" through numerous gateways from the SA Health network to the State government network and then via the internet to the University of SA network. A videoconferencing "bridge" utilises special software to convert video and audio streams into a single video output that is directed to conference participants. In our

project, the bridge enabled video calls between sites to be “locked down” so as to protect calls from interruption by other potential users.

The bridge initiated the call to both sites at the start of each clinic, minimising administrative responsibilities at either end. Clients were prepared in advance for the possibility of occasional technological problems, such as when calls “drop out” or the video image becomes frozen, and were advised to report the problem to the remote administrative assistant who would re-establish the call by re-connecting manually.

Provisional psychologists and office administrative managers were trained and supervised in the use of equipment. They were instructed to focus the camera on the torso and face in order to maximise visibility of non-verbal gestures, expressions, and eye contact, but were able to pan and zoom the camera in or out if required during sessions. The camera at the remote site could also be controlled by provisional psychologists, facilitating the best possible view of the client.

Participants

Clients were referred to the tele-web psychology service by members of the CMHT. In total, 24 clients (mean age = 38.17; range = 19–61 years) were seen by 14 provisional psychologists via video link over the first 17 months of the project, with a mean treatment length of 14.33 sessions (range = 1–52). Approximately 18% of the 344 sessions were either cancellations (39 sessions) or DNA's (did not attend: 39). There was a high demand for the service, with a waiting list at all times. Exclusion criteria for this pilot study were current acute psychosis, acute suicide risk requiring immediate hospitalisation, high level of substance misuse, and recent forensic history. A significant proportion of referrals were for severe and enduring psychological difficulties. Typical diagnoses of clients referred to the tele-web psychology service included post-traumatic stress disorder (with complex and multiple traumas), schizophrenia, avoidant personality disorder, borderline personality disorder, major depressive disorder, substance misuse, chronic generalised anxiety disorder, and panic disorder.

Training Tele-web Therapists

Training consisted of two 2.5-hr group workshops plus assigned reading, which included information on the following topics: ethical practice, adapting clinical competencies to the tele-web therapy setting, carrying out assessments, cultivating tele-web therapy etiquette, developing a therapeutic alliance via video link, communication with multidisciplinary teams, managing risk, dealing with crises, and suicidality and psychometric testing. This was followed by several opportunities for practice sessions. Participants had the opportunity to role-play running a therapy session with a range of clinical presentations using the two videoconferencing kits on the university campus. This raised discussions about ways in which they could deal with difficult scenarios (e.g., a client who arrives in an intoxicated state, a suicidal client) and how this might differ from face-to-face psychotherapy sessions. Training was partly based on published guidelines including *Guidelines for the Practice of Telepsychology* (American Psychological Association, 2012) and *Practice Guidelines for Videoconferencing-Based Telemental Health* (American

Telemedicine Association, 2009) and competencies identified by Gifford, Niles, Rivkin, Koverola, and Polaha (2012). This was followed by intensive weekly supervision sessions and assistance by a qualified clinical psychologist who was experienced in the use of videoconferencing for psychotherapy. Supervisors were trained in how to use the videoconferencing and provided with back-up support by an experienced qualified psychologist. A range of measures were utilised to assess trainee competence and confidence.

Development of competence and confidence in tele-web psychology

In the first year of the project, provisional psychologists were monitored for change in confidence and competence in tele-web psychology skills.

Quantitative measures. A range of measures were used to assess self-rated confidence and competence in telepsychology. The CORE ARM-5 (Cahill et al., 2012) is the shortened version of the Agnew Relationship Measure and consists of five questions. For this study, the therapist version was utilised. In the current study, the internal consistency was adequate with a Cronbach's alpha of 0.7. The Counsellor Self-Efficacy Scale—therapist version (CSES) (Melchert, Hays, Wiljanen, & Kolocek, 1996) is a 20-item measure rated on a 5-point Likert scale that assesses the knowledge and skill levels of the counsellor in the context of a therapy session and was slightly modified to suit the present study by removing five items which were not relevant. Scores ranged from 15 to a maximum possible score of 75. In the current study, the internal consistency was Cronbach's alpha of 0.8. The Counseling Self-Estimate Inventory (COSE) (Larson et al., 1992) is a 37-item scale rated on a 7-point Likert scale, which measures therapist confidence in performing certain behavioural, cognitive, and affective activities related to counselling. Scores ranged from 37 to a maximum possible of 259. In the current study, the internal consistency was reported as Cronbach's alpha of 0.7. The Cognitive Therapy Self-Rating Scale (CTSS) (Bennett-Levy & Beedie, 2007) measures self-ratings of competence in cognitive therapy skills. The CTSS consists of 13 items divided into three subscales: general interview procedures, interpersonal effectiveness, and specific cognitive behavioural therapy techniques. Participants estimated current level of competence using a 10-point Likert scale ranging from *no skill at all* (1) to *master skill level* (10). In the current study, the internal consistency was a Cronbach's alpha of 0.96. The CORE ARM-5 and CSES were filled out by trainees following each tele-web psychology session. The COSE and CTSS were completed at pre, mid, and posttreatment.

Outcome: Competence and confidence in tele-web psychology

Comparisons between time points indicated that there was an improvement across all questionnaires from the Stage 1 to Stage 2, and this continued to increase at Stage 3 for the CSES and CTSS. Changes were not found to be statistically significant for any of the questionnaires (ARM 5: Wilks' Lambda = .35, $F(2, 12) = 4.59$, $p = .07$, multivariate partial eta squared = .64; CSES: Wilks' Lambda = .45, $F(2, 12) = 3.07$, $p = .14$, multivariate

Table 1 Measures and Confidence and Competence in Tele-web Psychology

Questionnaires	CORE ARM 5 mean (SD)	CSES mean (SD)	COSE mean (SD)	CTSS mean (SD)
Stage 1 (start)	5.69 (0.96)	60.82 (6.43)	158.00 (17.07)	85.86 (22.06)
Stage 2 (mid)	6.28 (0.55)	62.65 (5.51)	163.57 (16.15)	87.43 (20.11)
Stage 3 (end)	6.14 (0.81)	63.11 (5.33)	158.14 (15.66)	89.14 (22.71)

CSES, Counsellor Self-Efficacy Scale—therapist version; COSE, Counseling Self-Estimate Inventory; CTSS, Cognitive Therapy Self-Rating Scale; SD, standard deviation.

partial eta squared = .55; COSE: Wilks' Lambda = .64, $F(2, 12) = 1.42$, $p = .32$, multivariate partial eta squared = .36; or the CTSS: Wilks' Lambda = .97, $F(2, 12) = .059$, $p = .94$, multivariate partial eta squared = .023; however, scores were high across all time frames, indicating a trend for trainees to rate high levels across all questionnaires. Means and standard deviations are shown in Table 1.

Tele-web Psychology Procedures

A flowchart was developed to clarify the process from initial referral to final discharge. The tele-web psychology clinic was run over 3 days per week, with each clinic consisting of 3 × 50-min psychology consultations. Each of the provisional psychologists carried out tele-web psychology consultations with one or more clients over the entire course of their year-long internship.

All potential clients were triaged by the CMHT in Port Augusta, and those who met eligibility criteria were assigned to a case worker from the local CMHT before being referred to the tele-web psychology service. Referral letters were screened by the psychology clinic director before being allocated to a provisional psychologist or placed on a waiting list. Clients were given information sheets explaining the tele-web psychology service. Consent forms specified that by participating, they would be partaking in the pilot trial and that all sessions would be audio recorded for internal supervision purposes. An initial session was then arranged, whereby a comprehensive assessment was carried out by the provisional psychologist, with the client attending at the remote site within the CMHT hub. As development of therapeutic rapport was considered paramount, general clinical interviews were considered preferable to structured clinical interviews, in order to allow trainees flexibility to adapt interviews while facilitating adjustment to the technology. Unlike traditional videoconference psychiatric consultations in Country Health SA, clients were unaccompanied at the remote site for their tele-web psychology session. This one-to-one exchange was considered more conducive to building a therapeutic rapport via videoconferencing. Those clients considered appropriate for therapy were offered six initial sessions, followed by a review appointment. This pattern continued until termination, with reviews arranged at sessions 6, 12, 18, and so on, in order to provide the opportunity to discuss progress in treatment, ongoing treatment options and to plan discharge.

Monitoring Outcome and Risk

Outcome measures from the CORE OM system (Evans et al., 2000) were collected at pre- and post-therapy and 3-month follow-up. Therapeutic alliance and clinical change and risk to

self or others were measured with a short questionnaire (CORE-10 [Barkham et al., 2013] and CORE-ARM) just prior to and after each therapy session. Clients were instructed by provisional psychologists to fill these out prior to each session, and then return to the remote administrative officer to be scanned and emailed back to their therapist. These findings are presented in a separate paper. According to usual protocol, session progress notes were recorded by provisional psychologists and stored in a secure location. More recently, a new online system (goACT journal; <http://goact.com.au/technology>) has been developed to enable all questionnaires to be filled in either on an internet capable mobile phone or computer screen prior to sessions. This gives the provisional psychologists access to any change in distress levels and risk at the outset of each session, and can also be used to send secure messages to clients between sessions for behavioural activation, to increase homework compliance and facilitate continuity between sessions. It is beyond the scope of this article to report outcome data; this will be the focus of future articles.

The ideal model for expanding into rural areas in our experience is to start in one area and to extend on a gradual basis. This project began with a regular tele-web psychology clinic between Adelaide and Port Augusta. In the interest of improving availability of the tele-web psychology service, it was considered important to extend the service to include more remote communities within the jurisdiction of the Port Augusta CMHT as soon as equipment and support staff became available. Because of a high demand for and low availability of psychology services at Roxby Downs, this was the first additional location to be extended from the "hub" in Port Augusta.

Practical Lessons Learned

Setting up/preparation

- The success of collaborative projects such as this depends heavily on the considerable preparative ground work, especially the development of strong links between key personnel in both institutions. In the case of this project, the involvement of the Country Health SA advanced clinical lead of Psychology and director of Nursing were essential in progressing the project through executive decision-making bodies within the health service. This facilitated the development of an alliance between the CMHT and the university psychology clinic with attendant guidelines for the terms of this working relationship. Initial face-to-face meetings and presentations showing the evidence base for tele-web psychology facilitated the development of a partnership and supported the credibility of the project.

- It is of utmost importance to identify a “telehealth champion” at all sites. The telehealth champion is key in increasing participation in the project through enthusiastic promotion. This role also provides legitimisation through promoting the notion that telehealth is effective, safe, and normal practice. This role is essential for building relationships and trust between clinicians, smoothing transitions of change, creating referral pathways, and providing education and training.

Equipment and Training

- Hands-on training for staff at all sites is of utmost importance for the success of a tele-web psychology service. This should cover basic technical skills (e.g., initiating videoconference calls, re-connecting after dropped calls, management of technical difficulties, positioning the camera to maximise eye contact, panning and zooming the camera, setting up a room for tele-web therapy), adaptation of therapeutic skills to a tele-web therapy environment, video therapy etiquette, opening a conversation, developing rapport and connection via video link and expressing empathy and concern via video link, and providing support for distressed clients by video link. Reading of research articles and relevant literature on a range of topics including video therapy processes and alliance, evidence base and ethics should form part of training.
- Providing exposure to videoconferencing early in training facilitates the development of competence and confidence. Trainees should practice and experiment with the equipment before sessions with clients begin. Ongoing access to clinical supervision provided by a clinician experienced in tele-web therapy is ideal.
- IP-based videoconferencing facilitates high-quality audio and visual communication. In spite of initial scepticism by therapists, experience indicates that both therapists and clients quickly adjust to the technology and focus on the therapeutic work, with minimal distractions. Therapeutic engagement in this project was high, with several clients with more complex problems attending tele-web psychology sessions for 6 months or more.
- The availability of IT personnel is essential for providing guidance on setting up “bridges” and “gateways,” providing training or advice when required and rectifying occasional technical difficulties.
- Videoconferencing clinic sessions should be block booked to ensure simplicity of booking appointment slots at the same time each week. Psychologists should be ideally equipped with whiteboard, document camera, email, and fax to support communication during sessions.

Protocols and Risk Management

- Referrals to tele-web therapy services should provide comprehensive details of clients’ presenting problems, history, risk factors, previous therapy outcomes, any drugs or alcohol problems, recent episodes of psychosis, forensic history, and any evidence of hearing difficulties.
- Systems must be developed to ensure that outcome measures are collected and returned for scoring. The ideal solution is an online health system that clients can access through a

range of modalities (i.e., internet-capable telephones, computers, tablets), removing the necessity for collecting, faxing, and scoring realms of paper questionnaires.

- Personal client data must be securely stored. Client confidentiality is limited by the security of any technology. Our online system (goACT Journal) utilises similar security mechanisms as online banking.
- Regular communication between local and remote team members is essential to enhance both client care and cohesion between remote team members. A range of methods can be utilised to facilitate this, such as by arranging regular meetings by video link, and keeping caseworkers informed of client progress via regular email updates, and telephone calls. Occasional face-to-face (in-person) meetings can also be useful to enhance team cohesion and to facilitate future planning and development of protocols.
- In order to ensure a seamless model of service delivery to rural and remote clients, good team relations between the local and remote sites are essential. Working remotely can at times be fraught with minor disruptions within the administrative systems and also the video link itself. Subsequently, stress levels can run high, leading to misunderstandings, a common phenomenon associated with email conversations. It is essential that both administrative and therapeutic staff meet face-to-face regularly via video link, to ensure that problems are ironed out and solutions are discussed and agreed on.
- The same professional standards of care apply for both in-person and tele-web therapy, including the provision of thorough assessments and use of evidence-based therapeutic models. There are a range of guidelines available, such as the American Telemedicine Association Videoconferencing Practice Guidelines (Practice Guidelines for Videoconferencing-Based Telemental Health, October, 2009), but ultimately, it is imperative that local guidelines appropriate for the Australian context be developed.
- Clients at risk must be monitored closely. It is essential that a keyworker is identified at the remote site to take responsibility in the case of suicidality or self-harm. Physical monitoring (e.g., of eating disordered clients) is carried out by medical staff at the remote site. Our tele-web psychology clients are required to give their consent to treatment and give us permission to contact their keyworker and General Practitioner in the case of emergency.
- Clinicians should only work within their areas of clinical competency and ensure that clients provide written consent for their participation in this type of work. Good clinical records are imperative and regular communication with personnel at the remote site is essential to improve collaboration and reduce risk. A further article will describe the ethical considerations of tele-web therapy in due course.

Future Developments for Tele-web Psychology

- The ideal model for expanding into rural areas in our experience is to start in one area and to extend on a gradual basis. This project began with a regular tele-web psychology clinic between Adelaide and Port Augusta. Once systems were established, it then became possible to extend the project to include an additional remote location.

Conclusion

Clinical psychology services in remote and rural Australia are in short supply, with few incentives for psychologists to live and work in remote areas. A new paradigm is needed to increase equity of access to clinical psychology services in remote regions, while capitalising on the availability of clinical psychology services in urban areas. In this project, a university psychology clinic and government-run mental health services were shown to be ideal partners. Tele-web psychology sessions have given clients in Port Augusta the opportunity to access the wide range of expertise linked to academic supervisors and teachers at the university via provisional psychologists. Provisional psychologists gained first-hand experience in the provision of tele-web psychology, giving them an opportunity to develop skills in working with a multi-disciplinary team, and to learn about cultural differences of working with rural populations. We would recommend this as an exemplary training model for clinical psychology courses, and an ideal mechanism for increasing uptake of technological advances among clinical psychologists of the future.

This study highlights the need for further research into this area, examining community attitudes and barriers to the provision of clinical psychology services via videoconferencing. The challenge of telehealth services of the future will be to develop ways to adequately begin to offer a service to both white and Indigenous populations, including the possibility of “drop-in” tele-web psychology services.

Larger scale trials are required to further examine the efficacy of tele-web psychology in an Australian setting.

References

- Australian Institute of Health and Welfare. (2010). *Australia's health 2010 Australia's health series no. 12. Cat. no. AUS 122*. Canberra: AIHW. Retrieved from <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442452962>
- American Psychological Association (APA). (2012). *Guidelines for the practice of telepsychology*. Retrieved July 15, 2013 from http://apacustomout.apa.org/commentcentral/commentcentralPDF/Site26_Telepsychology%20Guidelines%20Draft_July2012 posted .pdf
- American Telemedicine Association. (2009). *Practice Guidelines for Videoconferencing-Based Telemental Health*. Retrieved from <http://www.americantelemed.org/docs/default-source/standards/practice-guidelines-for-videoconferencing-based-telemental-health.pdf?sfvrsn=6>
- Austen, S., & McGrath, M. (2006). Attitudes to the use of videoconferencing in general and specialist psychiatric services. *Journal of Telemedicine and Telecare*, 12, 146–150. doi:10.1038/sj.bjpp.0701742
- Barkham, M., Bewick, B., Mullin, T., Gilbody, S., Connell, J., Cahill, J., . . . Evans, C. (2013). The CORE-10: A short measure of psychological distress for routine use in the psychological therapies. *Counselling and Psychotherapy Research*, 13(1), 3–13, 11. doi:10.1080/14733145.2012.729069
- Bennett-Levy, J., & Beedie, A. (2007). The ups and downs of cognitive therapy training: What happens to trainees' perception of their competence during a cognitive therapy training course? *Behavioural and Cognitive Psychotherapy*, 35, 61–75. doi:10.1017/S1352465806003110
- Buckley, J. V., Newman, D. W., Kellett, S., & Beail, N. (2006). A naturalistic comparison of the effectiveness of trainee and qualified clinical psychologists. *Psychology and Psychotherapy: Theory, Research & Practice*, 79(Pt 1), 137–144. doi:10.1348/147608305X52595
- Cahill, J., Stiles, W. B., Barkham, M., Hardy, G. E., Stone, G., Agnew-Davies, R., & Unsworth, G. (2012). Two short forms of the Agnew Relationship Measure: the ARM-5 and ARM-12. *Psychotherapy Research: Journal of the Society for Psychotherapy Research*, 22(3), 241–255. doi:10.1080/10503307.2011.643253
- De Las Cuevas, C., Arredondo, M., Cabrera, M., Sulzenbacher, H., & Meise, U. (2006). Randomized clinical trial of telepsychiatry through videoconference versus face-to-face conventional psychiatric treatment. *Telemedicine and e-Health*, 12, 341–350. doi:10.1089/tmj.2006.12.341
- Department of Health, Government of South Australia. (2010). South Australia's Mental Health and Wellbeing Policy 2010–2015. Retrieved from <http://www.sahealth.sa.gov.au/wps/wcm/connect/3ae2ab80430c70968be5db2cf7cfa853/sahealthmentalhealthandwellbeingpolicy-conspart-sahealth-30062010.pdf?MOD=AJPERES&CACHEID=3ae2ab80430c70968be5db2cf7cfa853>
- Dunstan, D., & Tooth, S. (2012). Treatment via videoconferencing: A pilot study of delivery by clinical psychology trainees. *Australian Journal of Rural Health*, 20(2), 88–94. doi:10.1111/j.1440-1584.2012.01260.x
- Evans, C., Mellor-Clark, J., Margison, F., Barkham, M., Audin, K., Connell, J., & McGrath, G. (2000). CORE: Clinical outcomes in routine evaluation. *Journal of Mental Health*, 9, 247–255. doi:10.1080/jmh.9.3.247.255
- Fortney, J. C., Pyne, J. M., Mouden, S. B., Mittal, D., Hudson, T. J., Schroeder, G. W., . . . Rost, K. M. (2013). Practice-based versus telemedicine-based collaborative care for depression in rural federally qualified health centers: A pragmatic randomized comparative effectiveness trial. *American Journal of Psychiatry*, 170, doi:10.1176/appi.ajp.2012.12050696
- Frueh, B. C., Monnier, J., Yim, E., Grubaugh, A. L., Hamner, M. B., & Knapp, R. G. (2007). A randomized trial of telepsychiatry for post-traumatic stress disorder. *Journal of Telemedicine and Telecare*, 13, 142–147. doi:10.1258/135763307780677604
- Gifford, V., Niles, B., Rivkin, I., Koverola, C., & Polaha, J. (2012). Continuing education training focused on the development of behavioural telehealth competencies in behavioural healthcare providers. *Rural and Remote Health*, 12(2108), 1445–6354.
- Griffiths, L., Blignault, I., & Yellowlees, P. (2006). Telemedicine as a means of delivering cognitive behavior therapy to rural and remote mental health clients. *Journal of Telemedicine and Telecare*, 12, 136–140. doi:10.1258/135763306776738567
- Guha, S. (2009). Experiences of a residential psychiatrist in rural South Australia. *Australian and New Zealand Journal of Psychiatry*, 43(Suppl. 1), A3–A17. doi:10.1080/00048670902940067
- Hunter, E. (2007). Disadvantage and discontent: A review of issues relevant to the mental health of rural and remote Indigenous Australians. *Australian Journal of Rural Health*, 15, 88–93. doi:10.1111/j.1440-1584.2007.00869.x
- Hyde, G., & Fielke, K. (2009). Sustainable telepsychiatry – walking the talk. *Australian and New Zealand Journal of Psychiatry*, 43(Suppl. 1), A3–A17. doi:10.1080/00048670902940067
- Larson, L. M., Suzuki, L. A., Gillespie, K. N., Potenza, M. T., Bechtel, M. A., & Toulouse, A. L. (1992). Development and validation of the Counseling Self-Estimate Inventory. *Journal of Counseling Psychology*, 39(1), 105–120. doi:10.1037/0022-0167.39.1.105
- Melchert, T. T., Hays, V. L., Wiljanen, L. M., & Kolocek, A. K. (1996). Testing models of counselor development with a measure of counseling self-efficacy. *Journal of Counseling and Development*, 74, 640–644.
- Morrissey, S., & Reser, J. (2007). Natural disasters, climate change and mental health considerations for rural Australia. *Australian Journal of Rural Health*, 15, 120–125. doi:10.1111/j.1440-1584.2007.00865.x

- National Rural Health Alliance Inc. (May 2009) Fact Sheet 14: Suicide in Rural Australia. Retrieved from http://ruralhealth.org.au/sites/default/files/fact-sheets/fact-sheet-14-suicide%20in%20rural%20australia_0.pdf
- O'Reilly, R., Bishop, J., Maddox, K., Hutchinson, L., Fisman, M., & Takhar, J. (2007). Is telepsychiatry equivalent to face-to-face psychiatry? Results from a randomized controlled equivalence trial. *Psychiatric Services, 58*, 836–843. doi:10.1176/appi.ps.58.6.836
- Rees, C. S., & Stone, S. (2005). Therapeutic alliance in face-to-face versus videoconferenced psychotherapy. *Professional Psychology, Research and Practice, 6*, 649–653. doi:10.1037/0735-7028.36.6.649
- Richardson, L. (2012). "Can you see what I am saying?" An action-research, mixed methods evaluation of telepsychology in rural Western Australia. PhD Thesis. Retrieved from <http://researchrepository.murdoch.edu.au/7023/2/02Whole.pdf>
- Ruskin, P., Silver-Aylaiian, M., Kling, M., Reed, S., Bradham, D., Hebel, J., & Hauser, P. (2004). Treatment outcomes in depression: Comparison of remote treatment through telepsychiatry to in-person treatment. *American Journal of Psychiatry, 161*, 1471–1476. doi:10.1176/appi.ajp.161.8.1471
- Simpson, S., Bell, L., Britton, P., Mitchell, D., Morrow, E., Johnston, A. L., & Brebner, J. (2006). Does video therapy work? A single case series of bulimic disorders. *European Eating Disorders Review, 14*(4), 226–241. doi:10.1002/erv.686
- Simpson, S., Bell, L., Knox, J., & Britton, P. (2005). Therapy via videoconferencing: A route to client empowerment? *Clinical Psychology and Psychotherapy, 12*, 156–165. doi:10.1002/cpp.436
- Simpson, S., Deans, G., & Brebner, E. (2001). The delivery of a tele-psychology service to Shetland. *Clinical Psychology & Psychotherapy, 8*(2), 130–135. doi:10.1002/cpp.279
- Starling, J., & Foley, S. (2006). From pilot to permanent service: Ten years of pediatric telepsychiatry. *Journal of Telemedicine and Telecare, 12*, S80–S82. doi:10.1258/135763306779380147
- Stubbings, D. R. (2012). The effectiveness of videoconference-based cognitive-behavioural therapy, PhD Thesis. Retrieved from http://espace.library.curtin.edu.au:80/R?func=dbin-jump-full&local_base=gen01-era02&object_id=188325
- Vollmer, S., Spada, H., Caspar, F., & Burri, S. (2013). Expertise in clinical psychology. The effects of university training and practical experience on expertise in clinical psychology. *Frontiers in Psychology, 4*, 141. doi:10.3389/fpsyg.2013.00141