

# Tele-social work and mental health in rural and remote communities in Australia

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#### Abstract

Rural and remote communities often have complex and diverse mental health needs and inadequate mental health services and infrastructure. Information and communication technologies (ICTs) provide an array of potentially innovative and cost-effective means for connecting rural and remote communities to specialist mental health practitioners, services, and supports, irrespective of physical location. However, despite this potential, a review of Australian and international literature reveals that ICT has not attained widespread uptake into social work practice or implementation in rural communities. This article reviews the social work literature on ICT, draws on research on tele-psychology and tele-education, and provides suggestions on how to enhance engagement with ICT by social workers to implement and provide mental health services and supports tailored to community values, needs, and preferences that are commensurate with the values of the social work profession.

### **Keywords**

Information and communication technologies, mental health services, rural, social work, telesocial work

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### Introduction

A discourse of deficiency emerges from the problematization of mental health service provision for rural and remote areas in Australia. The framework that supports this discourse includes understandings of rural and remote places as geographically and socially isolated, inadequately resourced by Government social service infrastructure, and unable to attract and retain professional and specialist mental health practitioners. Australia is indeed a vast landmass where two-thirds of the population live in metropolitan centers, 23 percent live in regional centers, and 11 percent in small, isolated remote communities (Australian Institute of Health and Welfare, 2006). There are various official geographic classification systems in use, but the Australian Institute of Health and Welfare (2015) and the Australian Bureau of Statistics use the Australian Standard Geographic Classification Remoteness Areas (ASGC RA) which has five categories: major cities, inner regional, outer regional, remote, and very remote. The Rural, Remote, and Metropolitan (RRM) classification system used by the Department of Health allocates geographical regions in Australia to a classification based on population number and an index of remoteness. Such classification systems, however, are problematized in terms of the degree to which they capture essential differences or similar characteristics across geographical places. One way in which geographical location is being problematized is in terms of 'community'. Conceptualizations of community as geographically bounded have been radically challenged with the advent of the technological revolution that has underpinned and driven globalization. Through information and communication technologies (ICTs), rural and remote communities are increasingly opened up to the possibilities afforded by networks of local, national, and global connections for business, consumption, entertainment, social relations, education, and managing health. Given the apparent insurmountable challenges of resourcing rural and remote communities in place, ICT provides an array of potentially innovative and cost-effective means for connecting these communities to specialist mental health practitioners, self-help information, and services and supports, irrespective of physical location. Despite the potential offered by ICT for mental health service provision to rural and remote areas, a review of Australian and international literature reveals that ICT has not attained widespread uptake into social work practice or implementation in rural communities. Indeed, a theme focused on this paradox courses its way through the literature and provides some insights into the reluctance of the social work profession to engage ICT in practice. This article reviews the social work literature on ICT and draws on research on tele-psychology and tele-education to address some of the concerns voiced by the profession concerning the nature of the therapeutic alliance and interpersonal communication via videoconferencing and implementation in rural communities. Finally, this article provides suggestions on how to enhance engagement with ICT by social workers to implement and provide mental health services and supports tailored to community values, needs, and preferences that correspond with the values of the social work profession.

# Rural heterogeneity, complexity and needs challenge mental health service provision

The lack of health and welfare services in rural areas and their decreasing availability over time is an issue that has been well documented (e.g. Bourke et al., 2012, 2013; Dixon and Welch, 2000; Pong et al., 2009; Smith et al., 2008). It is now an expectation that living in rural places is commensurate with inadequate health care and service provision. The challenge for social work is how to deliver services to rural and remote Australia 'to six million people dispersed across the 7.5 million square kilometers' (Liaw and Humphreys, 2006: 1). While distance and spatial dispersion are challenges, equally challenging is how to deliver services to the complex constitution of rural

Australia made up of multiple subjectivities, experiences, histories, and practices (Bryant and Pini, 2011). The understanding of rurality as a unifying concept has had dire implications for service delivery, with people who are constituted outside the dominant understandings of 'rural subject' rendered invisible. For example, Cloke et al. (2001) have argued that rurality and homelessness are discursively non-coupled and Hughes (2004) has shown that despite the growth of single parents in rural areas, the rural is overwhelmingly perceived as sustained by the traditional heterosexual family (Bryant and Pini, 2011). A range of specific health and welfare needs in relation to diversity, multiplicity, and difference require a more appropriate matching of services and needs in rural areas.

In relation to service gaps and multiplicity of need, mental health services are one of the most complex and inaccessible in rural Australia. Rural areas tend to experience higher rates of mental illness and psychological distress (Ellis and Philip, 2010; Jelinek et al., 2011) linked to adverse social conditions in rural communities including higher rates of poverty and unemployment, poorer standards of education, housing and health, and other facets of social disadvantage and marginalization that impact the well-being and mental health of rural people (Alston, 2005; Lonne, 2009). Data from the Australian Bureau of Statistics (2012) show that for men, the standardized death rate from suicide was higher in rural areas compared to metro areas for all Australian States. The Senate enquiry into suicide in Australia recommended prioritizing suicide research in rural areas, recognizing the need to increase suicide training and services (Commonwealth of Australia, 2010). However, research into rural suicide in Australia has offered partial and reductive accounts of rural suicide with a narrow focus on particular populations and communities. Overwhelmingly, studies have focused on the statistically most at risk: farming and younger men in certain agricultural communities (Alston, 2012; Bourke, 2003; Fragar et al., 2008; Hanna et al., 2011; Page and Fragar, 2002). Recently, Berry et al. (2011) noted,

a further limitation of the few studies that have been published in this field is that none has taken account of the heterogeneity of rural communities ... such as young or older farmers, casual farm labourers, women or Aboriginal and Torres Strait Island peoples. (p. 124S)

What we know about rural suicide is limited and documentation of service responses is equally limited; however, what remains known is that delivering services to rural areas remains complex, rural needs are complex, and rural communities are heterogeneous.

Very often rural communities do not have mental health units or specialist services and so people seeking help for mental health issues need to present to emergency departments or general practitioners (GPs) and may be transferred to mental health services outside the community and away from family (Jelinek et al., 2011). Crotty et al. (2012) document some of the issues pertaining to mental health services in rural places, including

lack of access to psychiatrists and reliance upon GPs to provide primary mental health care; limited availability of non-governmental community services for referral; professional isolation; excessive GP workloads; limited facilities for crisis care and transportation to and management of acute clients by metropolitan tertiary services. (p. 213)

While the recruitment, retention, and capacity of mental health professionals are recognized as a major issue impacting mental health service provision (Crotty et al., 2012), the way in which services are socially structured through particular discursive constructions of 'health' and 'mental health' can also create tensions in rural communities. For instance, Muir-Cochrane et al. (2014) found that the separation of mental health and health services as well as an overly clinical focus and

neglect of social support needs was detrimental in terms of the mental health needs of older people living in rural South Australia. The literature also reveals that rural cultures of stoicism and self-reliance, the close social proximity of community members that inhibit anonymity, and the stigma associated with mental illness are considered to prevent help seeking in rural communities (Jackson et al., 2007; Judd et al., 2006; Muir-Cochrane et al., 2014; Rughani et al., 2011).

# Bridging the rural-urban divide using ICT for mental health service provision

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ICT is often advanced as a panacea for delivering mental health services to rural and remote communities (Griffiths et al., 2006; Quinn and Phillips, 2010). This is often because ICT is considered a cost-efficient solution to overcoming social isolation and resource deprivation to reach vulnerable people in order to provide psycho-social services and support drawing on personnel and expertise located in urban centers. However, the advancement of ICT as a potential solution is also an outworking of the expansion and integration of ICT across a multitude of facets of everyday life. Indeed, ICT provides an integral framework for a contemporary form of social organization and social practice coined 'the network' society where 'virtuality becomes an essential dimension of our reality' (Castells, 2010: xviii). In a network society, individuals belong to and participate in virtual communities hosted by social networking sites such as Facebook, Twitter, and Instagram and enabled through web pages and email in ways that both overlap with and extend non-virtual communities. Indeed, to differentiate between 'real' and 'virtual' society is increasingly non-sensical as the boundaries and characteristics of the two increasingly intermesh. The principal feature of ICT is that it enables users to communicate and access information without geographical restriction. However, the technologies that constitute ICT have proliferated to such an extent that to use the term 'ICT' conveys little of the exact nature of the technology or communication in question. The definition offered by West and Heath (2011) captures some of the possibilities:

Broadly speaking, ICT is the term applied to a range of tools and media that provide the infrastructure for communication and includes devices such as telephones and computers with all of their applications including internet, email, mobile telephones, instant messaging and social networking. (p. 211)

Through technologies that connect users to each other and to the virtual spaces of the Internet, ICT includes modes of synchronous interpersonal interaction in real time such as videoconferencing and virtual chat rooms as well as asynchronous modes that do not rely on simultaneous usage such as email and text messages. As Mishna et al. (2012) observe, modes of ICT shape the possibilities for how users interact and communicate. Webcams are a medium for visual and audio communication that provide the closest approximation to face-to-face interpersonal interaction and can be used to facilitate one-on-one or group discussion. Specialized videoconferencing software can enhance this modality through the inclusion of technologies such as online 'white' boards, break-out rooms, and online documents that can be viewed by all. Smartphones provide not only opportunities for audio, textual, and visual communication between users but also a platform for access to the wealth of possibilities for information and communication offered through the Internet and custom-designed software 'apps' and a means for creating and sharing videos and photos. The evolution and permutations of ICT have thus transformed, and continue to transform, the geographical, temporal, and spatial nature of communication and access to information, as well as the possibilities for the ways in which users can connect and communicate using verbal, textual, and visual mediums. Taken collectively, ICT, therefore, provides a diverse range of potential applications for social work services to bridge geographical and resource divides between urban and rural places and communities.

# An ambivalent engagement: Social work and ICT

A number of professions have adapted readily to some of the possibilities offered by a digitalized world including psychology, nursing, pharmacology, and medicine (West and Heath, 2011). Disciplines oriented toward physical health including medicine, nursing, and allied health specialties have been at the forefront of developing and implementing tele-health applications using ICT to provide consultations, recommend treatment, and monitor health information remotely for patients who are socially isolated, unable to travel, or who live some distance from the required service (e.g. Fong et al., 2010; Rodrigues et al., 2012; Smith et al., 2012). However, social work appears to have been slow to engage and incorporate ICT as a useful tool in social work practice (Reamer, 2013). Historically, the social work profession has responded to the technological changes of the Industrial Revolution through the increased use of information exchange and the growing of social organizations, community development approaches, and through the beginnings of the Settlement House Movement (Baker et al., 2014). Yet, the social work profession has been reluctant to embrace rapid technological advancements due to concerns that technology is being imposed through a managerialist approach on the profession rather than through a practice lead approach. The neoliberalist and economic rationalist approaches to the human services and social work sectors in recent decades have incorporated principles of greater efficiencies, risk management strategies, and shrinking resources. Hence, social workers are experiencing greater pressures with increased workloads and accountability processes for increased evidence-based outcomes. The incorporation of technologies is, therefore, often seen as an additional approach to provide social work services in a more cost-efficient manner that has been critiqued in terms of 'the Mc Donaldization' of the social services (West and Heath, 2011). Mishna (2012) has highlighted the dramatic changes that have impacted on traditional social work practices using Internet services and cyber net communication. Traditional principles of social work practice that address professional boundaries, ethical and legal issues, and the helping relationship are aspects of social work which will become increasingly challenging with the advancement of technology. The use of technology has also been considered by the social work profession to negatively impact core practice principles through the dehumanization of the therapeutic relationship. Concerns have also been expressed regarding client confidentiality and the ethical challenges regarding informed consent within an online context of intervention and support (Csiernik et al., 2006; Reamer, 2013).

The delivery of treatment services for mental health through ICTs such as videoconferencing has been well trialed in the field of psychology, and the literature in this field offers a useful evidence base for social work to draw upon (e.g. Davis et al., 2011; Dunstan and Tooth, 2012; Griffiths et al., 2006; Simpson et al., 2001, 2005; Tremont et al., 2013). This literature also points to similar professional concerns regarding the impact ICT has on therapeutic relationships. Dunstan and Tooth (2012), for instance, suggest that while a range of studies have shown the therapeutic equivalence of ICT service delivery 'the uptake rate of videoconferencing by Australian psychologists is relatively low' (p. 88). They argue reasons for this reticence as follows: fears that therapeutic alliance (between client and professional) will be impaired (Rees et al., 2005; Rees and Haythornthwaite, 2004), nonverbal messages will be difficult to detect or interpret (Jerome et al., 2000), and that operating ICT equipment will be troublesome (Rees and Haythornthwaite, 2004). Yet, studies of the therapeutic efficacy of videoconferencing and related tele-psychology initiatives have shown positive outcomes in terms of the subjective well-being of clients equivalent to and in some cases outcomes better than those would be expected for face-to-face service delivery (Dunstan and Tooth, 2012; Griffiths et al., 2006, 2010; Richardson, 2012; Simpson et al., 2014). A study of the delivery of cognitive behavioral therapy (CBT) for the treatment of bulimic disorders by videoconferencing to people living in rural and remote areas of Scotland and Shetland by Simpson et al. (2005) provides a useful insight into 6

what works well in the delivery of services via ICTs. Simpson et al. (2005) highlight that the alliance, positive attachment, and bonding between therapist and client – which is particularly significant in the treatment of eating disorders – were not at all impeded. Clients in this study reported that while 'different', their relationship with their therapist in the videoconferencing process was 'not necessarily any better or worse than a face-to-face relationshop would be' (p. 162). In addition, a recent mixed methods study of psychotherapy delivered by videoconferencing revealed high levels of client satisfaction, comfort, security, and control with tele-psychology (Simpson et al., 2015). Psychology has also been proactive in ways to engage students in the use of ICTs in rural and other settings as a means to increase their confidence and familiarity with working with non-urban populations and contexts (Dunstan and Tooth, 2012; Simpson et al., 2014, 2015).

Despite the reticence of the profession as a whole, there have been some recent examples of the successful use of ICT in social work practice reported in the literature (Callahan and Inckle, 2012; Dodsworth et al., 2013; Mishna et al., 2013). It has been argued that with the use of technology, some clients may feel emotionally safer and able to engage around sensitive or emotionally distressing issues given the higher degree of anonymity and confidentiality that is afforded by some ICT platforms (Baca et al., 2007; Callahan and Inckle, 2012).

For successful uptake of ICT, both professionals and clients are expected to adapt and integrate technology into their ways of being and be able to use the communication platform in a competent manner. This poses major challenges particularly in relation to the digital divide (Wong et al., 2009). This concept refers to some members of community who for various reasons may be unable to fully maximize the opportunities to engage in a digital world. This is due to factors including limited or no access to computers or minimal computing skills, limited access to broadband, or simply due to a nominal understanding or awareness of its potential and benefits. In addition, a number of sociodemographic factors also impact the use of technology including race, language, ability, age, gender, level of education, employment, and income (Bryant and Principe, 2008). Ways of understanding and bridging this digital divide provoke ethical concerns central to the social work profession and to which the development and implementation of ICT will need to respond.

# Sustainable engagement with ICT to meet rural community mental health needs

ICT offers a potential solution to rural mental health service deficiencies by connecting residents in rural Australia with specialist professionals located in urban centers and information resources available on the Internet. Australia like other nations, however, has been subject to ICT projects which have been 'fragmented and uncoordinated, leading to problems of accessibility, scalability, duplication and lack of integration within existing systems' (Liaw and Humphreys, 2006: 2). Technology cannot simply be inserted into complex social systems and rural communities with an expectation that if it is installed, it will be utilized. This is because, as Kearns (1998) work illustrates, mental health care occurs within complex intersections between place, health, and social processes embedded in history and cultural contexts. Therefore, it is not only the level of service need or viability of the technology to be used which warrants consideration. As research relating to ICT use in education has demonstrated, the degree of local participation in the development, design, mode, timing, introduction, and delivery style is important (Fisher et al., 2011; Moran et al., 2009; Tedmanson et al., 2011). In addition, aspirations for the deployment of ICTs to improve human service delivery to people living in remote communities in Australia need to be understood against the broader cultural-historical and political context of Australia's colonial past and the ensuing struggles of Indigenous people to assume self-management and control over their own

affairs (McLoughlin, 2000; Tedmanson et al., 2011; Wood et al., 2014). In analyzing the impact and efficacy of ICT used to provide tertiary education into Aboriginal communities in remote areas of central Australia, a recent study by Wood et al. (2014) suggests incorporating local context and community relevance as critical factors in gaining successful outcomes from initiatives delivering educational or related services in remote, especially Indigenous, community settings. So, rather than simply a technological project, attempts to integrate ICT within complex social systems for mental health services that bridge urban and rural places need to be approached using community collaboration as a platform for decision making. This will help to ensure community ownership and control over the direction, implementation, and use of ICT so that the technology can be tailored to the needs and requirements of the human operators and service users.

As Crotty (2012) observes, relationships between people are important to providing mental health services in rural areas. It is likely, therefore, that the sustainability and success of any technological approach to the provision of mental health services in rural areas will depend on the degree to which it is integrated within human and social relations between urban and rural sites of practice. Professional relationships between psychologists, social workers, mental health nurses, and GPs provide a network of mental health care to support client's needs with ICT simply the mechanism for communication. A study on the delivery of CBT-based psychology services via ICT to mental health clients in rural and remote Queensland experiencing anxiety and depression demonstrates how this might be accomplished to achieve positive results (Griffiths et al., 2006). In this study, Griffiths et al. (2006: 137) map how a psychologist based in the central regional center of Cairns delivered the CBT intervention via videoconferencing facilities. The case managers observed the 'role-modelling' of the CBT intervention via videoconferencing and reinforced the intervention in face-to-face sessions with their clients following videoconferencing sessions. Of interest from a social work perspective is the way that in this study, case managers were engaged to follow-up on the psychology videoconferencing sessions with local visits and face-to-face support work with clients. Such models of professionals working together to maximize client outcomes through using a mix of ICT-brokered external input and local follow through support provide clues to exciting future options for social work engagement in this space.

Through modes of communication and information exchange enabled by technology, mental health professionals and resources can become connected to form a virtual 'network' that spans across urban health and rural health spaces to create new hybrid health systems (see Heley and Jones, 2012). As Bourke et al. (2013) elaborate,

These hybrid forms extend beyond the (constructed) 'typical' disadvantaged rural town struggling to keep a doctor to include the networks of globally connected health practitioners, local leaders, internet-informed health consumers and actors who contribute to reproducing health (and its determinants) locally in different ways. (p. 67)

These hybrid forms of local and global sites and actors enable a 'glocalised' response to social problems such as the provision of mental health services (Kelleher et al., 2000). Some of the benefits of these systems include increases in sharing of client information and regular contact between clients and mental health professionals; building collaborative practice relationships and integrating services irrespective of geophysical distance (Moran et al., 2009; Pollock, 2006; Tedmanson et al., 2011); developing quick response protocols in times of emergency or natural disaster, professional and collegial support, and development for those practicing in rural places (see Meier, 2000); and developing virtual communities for social support (see Dodsworth et al., 2013).

Not only is the deployment of ICT arguably an efficient and viable way to deliver services to rural and remote communities out of the 'reach' of many services currently, it may also be a means

by which to reach those currently underserved such as those with physical, mental health, economic, or cultural reasons for not wishing to engage in mainstream face-to-face delivery options. For instance, the findings from a study by Simpson et al. (2005) suggest that particular groups of clients may respond more readily to ICT-brokered interventions than others; for example, clients with a high need for control may benefit from ICT-related delivery where 'clients have more control over what they see on their screen', and similarly those with high levels of shame and an avoidant coping style may find it easier to adjust to a therapeutic interaction that is not face to face 'due to feeling more protected from outside scrutiny or judgement' (p. 164). The capacity for ICTs to be used as a means for enhancing social justice and community development opportunities is a rapidly developing area of emerging interest to social work which warrants further research (Baker et al., 2014; Eickhoff et al., 2014).

To harness the potential offered by ICT for social work practice in relation to rural mental health service delivery, research is needed that moves beyond a narrow focus on technology and its practical usage or therapeutic effectives of services delivered via ICT for various mental health needs. While this knowledge is needed, it is particularly important that social work develop practice-led approaches that engage ICT within the context of mental health systems that are networked across rural or urban and local or global spaces. Questions that need to be considered include how to ensure that social work practice drives the utilization of ICT rather than practice being technologically driven. This is important if the values and commitments of the social work profession are to direct the nature of engagement with vulnerable and marginalized members of the community. Social work research also needs to consider how the variety of communication mediums of visual, audio, and textual forms be used to enhance social work practice in novel and engaging ways and how service delivery can be tailored to complex needs and different client populations using these forms. This includes developing service-user focused forms of service design and delivery (Parrott and Madoc-Jones, 2008). Research that provides an understanding of how ICT can be successfully implemented in rural communities and an insight into the complexities of the interface between human and technological dimensions of complex mental health systems and how these can be navigated would be particularly useful for guiding future projects. In all efforts to promote and advance the implementation of ICT in rural social work practice, the issue of access needs to be problematized, and solutions need to be identified to bridge the 'digital divide' in rural and remote places (Radoll, 2011).

The uptake of ICT into social work practice is dependent on the willingness of social workers in both urban and rural areas to consider technology as a valuable tool and be comfortable and confident to set up and manage systems that utilize ICT. The social work literature in this area points to the need for ICT training to be embedded within social work education (Baker et al., 2014; Mishna et al., 2012; West and Heath, 2011). Baker et al. (2014) describe some examples of how ICT can be inserted into social work education. To do so will initiate a cultural shift in relation to professional expectations, enable the development of practice-led innovative models of service design, delivery and advocacy, provide a site for examining issues such as human rights and ethical issues in relation to ICT (see Reamer, 2013), and develop competencies in this and proficiency in technology usage. Overall, this would assist in a more progressive approach to the fundamental changes social work has experienced in the transformation to a virtual network society (Baker et al., 2014).

### Conclusion

Through innovative platforms for communication and information exchange across local, national, and global networks, ICT offers innovative and cost-effective possibilities for tailoring

mental health services to complex needs, diverse clients, and engaging otherwise 'hidden' populations in under-serviced rural and remote areas of Australia. While a discourse of cost-efficiency has been usefully mobilized to advocate for the uptake of ICT in rural health systems, it also provides a reductionist stance on the possibilities afforded by ICT. Rather than being 'something which is better than nothing', the modalities of service design and delivery afforded by ICT contain elements that surpass traditional face-to-face therapeutic encounters. Research in tele-psychology is instructive in this regard and points to high levels of client satisfaction with therapy via videoconferencing, less intimidation and shame, greater freedom of expression, and a greater sense of control (Simpson et al., 2005). In addition, ICT also provides greater anonymity and confidentiality to overcome the stigma of seeking support for mental health issues in close-knit rural communities (Baca et al., 2007). In terms of infrastructure, ICT also enables the development of new hybrid forms of networked systems for interdisciplinary mental health, suicide prevention, and social welfare services and supports drawing on people and resources in disparate locations. However, while the technological aspects of ICT provide the medium and possibilities for the nature of communication and connectedness, it is important that these do not overshadow their application in service design and delivery if the uptake of ICT in social work is to be sustainable. Developing practice-based and end-user focused services delivered using ICT according to appropriate and desirable forms of integration of technology with human systems requires social workers to collaborate with IT professionals and project managers in research and innovation. This will ensure that the core values of social work of reaching out to support vulnerable and marginalized communities through services and advocacy based on community development and empowerment will remain central driving forces underpinning the implementation of ICT in social work practice. If the social work profession is to transform the sub-optimal utilization of ICT what is ultimately needed is for social workers to become excited by the possibilities proffered by ICT for social work practice rather than managerial applications. It is only through experiment and experience of trialing ICT and problem solving the ethical and practical problems posed to practice that social work will advance its engagement with ICT and develop an evidence base for the benefits it encompasses. This knowledge can then be used to shape social work education and drive culture change, develop competencies, and engage ICT champions to work with local communities to develop and implement ICT-based services and supports that benefit rural and remote communities.

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