



NATIONAL RURAL
HEALTH
ALLIANCE INC.

Position Paper

Holding the line on health: telecommunications in rural and remote Australia

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This Position Paper represents the agreed views of the National Rural Health Alliance, but not necessarily the full or particular views of all of its Member Bodies.

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Contents

Summary and recommendations	5
Introduction	7
The Alliance position	9
Recent rural telecommunications improvements and the role of the Australian Government	12
How telecommunications helps improve rural and remote health.....	15
Continuing telecommunications difficulties in rural and remote Australia.....	17
Conclusion.....	20
Member Bodies of the National Rural Health Alliance.....	23
Notes	25

Holding the line on health: telecommunications in rural and remote Australia

Summary and recommendations

1. The Australian Government is to be commended for having equity of access and improving access to and use of broadband in the health and education sectors high on its policy agenda, and for publicly emphasising its commitment to achieving more than parity of price and service to rural and regional Australia.
2. The ‘adequacy’ of telecommunications in rural and remote areas should include the notion of reasonable equity with metropolitan areas — in terms of availability, cost, and the range of services resulting from competition and new technologies. As telecommunications advances continue to be made, reasonable equity between metropolitan and rural telecommunications services will remain a moving target. The Australian Government should therefore regard regulatory and investment action to ensure it as ‘an enduring necessity’, not a matter for one-off action.
3. As proposed in the Report of the Estens Inquiry (2002), a strategic plan for regional telecommunications should be developed, or a national plan which would include a plan for regional communications. Such a strategic plan should include mechanisms for a managed reduction of Telstra’s market dominance.
4. An adequate national telecommunications network is now of such economic and social importance that all efforts must continue in order to provide equality of access to adequate services for all residents, wherever they may be, and across all forms of telecommunication. Adequate telecommunications are becoming particularly crucial for health services and health workers in rural and remote areas; national and state government health initiatives increasingly assume sound telecommunications for delivery.
5. The Government should define ‘adequacy’ of services and “the best possible telecommunications services to rural and regional Australia”, basing the definitions around the telecommunications needs of rural and remote populations in the context of the emerging information economy.
6. It is imperative that legislative mechanisms such as the Universal Service Obligation (USO) and Customer Service Guarantee be retained as means by which telecommunications provision and service standards are prescribed and mandated. The USO and Digital Data Service Obligation should be expanded

so that minimum services in rural areas are much closer to the services generally available in urban areas and include, for example, high data transmission speeds, and reliable broadband and mobile telephone access.

7. The USO should be restructured to promote competition in rural telecommunications service provision.
8. The Customer Service Guarantee (CSG) should be extended to provide service quality standards for all telecommunications services. It should cover staged improvements, to encourage continual raising of standards, and each of the standards set under the CSG should be a minimum to be exceeded if possible, not a maximum to be achieved grudgingly. The provisions under the CSG should obviously reflect consumer need, not carrier convenience.
9. To date, competition in telecommunications in Australia is not fully developed, and it is likely that market failure will continue to be a factor impeding rural telecommunications provision for some time to come. Targeted government funding support will continue to be required in the future to support the roll-out of new generations of technology to rural, regional and remote areas, while government action to encourage the continuing development of competition is maintained.
10. Given the speed of technical innovation and adoption in telecommunications, and their importance for health and educational services, the legislated reviews of rural telecommunications promised by the Government should be conducted at least every three years, not five. These reviews will be one of the bases of decisions about how the targeted government funding will be allocated.
11. Governments' targeted investments should not all be made on the basis of competition between rural regions or towns. That is a prescription for lack of uniformity and for inequity between regions. Instead the resources should be targeted to particular categories of market failure, on an equal basis between rural areas suffering that failure.

Introduction

The National Rural Health Alliance (NRHA) is the peak organisation working to improve the health and productivity of rural Australians. It comprises 24 Member Bodies representing the consumers and providers of health services. The Members are national organisations and they are listed at the end of this document.

This paper describes:

- the significant improvements in rural and remote telecommunications access resulting from Australian and State/Territory Government initiatives and funding programs over recent years;
- the ways in which rural and remote health servicing, in particular, and rural people's well-being and productivity in general, is benefiting from improved telecommunications access;
- evidence of continuing problems with telecommunications access that affect the health, well-being and productivity of rural and remote Australians; and, therefore,
- the importance of continued government legislative action, encouragement of competition, and investment to ensuring telecommunications improvements in rural and remote Australia, and to maintain parity with urban telecommunications developments.

The Alliance recognises that with telecommunications, as with other functional areas, exact equality of access and service is unlikely to be feasible for rural and remote areas. However, the Alliance strongly believes that 'adequacy' of telecommunications in rural and remote areas should include the notion of reasonable equity — in terms of availability, cost, and the range of services resulting from competition and new technologies — between non-metropolitan and metropolitan Australians.¹

In the 1990s Australia began its transition from communications provision by a single government-owned company towards a competitive telecommunications system. The Alliance acknowledges that, since then, the Australian Government has made considerable investment in improving telecommunications in rural and remote areas. The improvements have been across the board: to fixed voice telephony, mobile telephony, dial-up internet access, and availability of broadband. Some State governments are also investing in improved rural telecommunications access, particularly in relation to broadband and delivery of their own services.

However, the Alliance agrees with a view put recently by the Australian Consumers' Association (ACA) that reasonable equity between metropolitan and rural telecommunications services is not a state that can be achieved once and for all. Such equity will remain a moving target, as telecommunications advances continue to be made, so it will be 'an enduring necessity' to ensure that rural

consumers maintain their access to advanced telecommunications. Where market failure is present, both the Alliance and the ACA see government necessarily having the role of acting to maintain equity of telecommunications access.²

At present it seems unlikely that market mechanisms alone will be able to deliver up-to-date telecommunications services in rural and (particularly) remote Australia. As a number of commentators have pointed out, competition has not yet fully developed in the Australian telecommunications market. The Australian Telecommunications Users Group (ATUG) argues that despite expectations, competition has largely been at the retail rather than infrastructure level of the market. This has left Telstra with a significant advantage because of its network reach, and because it has both a copper and a cable network. In ATUG's view:

Over the last few years, it has become clear that competitive infrastructure outside urban areas and inter-capital routes develops only when there are new technologies with significantly lower cost structures and/or Government funding (Federal and State) is provided as part of the capital requirements. Targeted funding support will continue to be required in the future to support the rollout of new generations of technology [to regional areas].³

A recent OECD report has suggested that governments should give the rural and regional broadband access market time to develop, and should continue to facilitate competition. Earlier, they advised that governments should be cautious about extending universal service obligations to cover broadband until it was clearer how technology and competition could address supply issues in rural areas.⁴

The Alliance has been reassured by several recent speeches by the Minister for Communications, Information Technology and the Arts (CITA), Helen Coonan, in which she has set out the Government's view.⁵ She has restated the Government's position that:

- services in regional Australia must be adequate before there is a further sale of Telstra;
- the Government would maintain "tough regulatory safeguards such as price controls, untimed local calls, the Customer Service Guarantee and the Universal Service Obligation"; and
- where there is no commercial incentive for the market to service a particular area, the Government would provide targeted funding.

The Alliance is also heartened that the Minister is to reintroduce legislation in August 2005 to implement two 'future proofing' recommendations from the Estens Regional Telecommunications Inquiry (2002). These are: to conduct "regular, public and independent reviews of regional telecommunications" at least every five years, with governments required to table a response to any recommendations made in the reviews; and to require Telstra, as a condition of its licence, to fulfil a Local Presence Plan that the Minister must approve, "ensuring appropriate resources are committed to maintenance of existing [rural] services and delivery of new services".

The Alliance notes and endorses the Minister's view that further regulatory reform in telecommunications is necessary in its own right irrespective of the fate of Telstra, "to deal with the challenges of the future". She has nominated consumer protection, transparency and capacity to deal with anti-competitive conduct, and future network investment and certainty as areas for consideration.

On 9 June the Minister emphasised that "diffusion of [Information and Communications Technology] across the economy will be integral to Australia continuing its strong economic performance". She further stated that "equity of access", and "improving access and use of broadband in the health and education sectors", were two public policy issues exercising the Australian Government. On 7 July 2005 the Minister said:

The Government is committed to achieving more than parity of price and service to the bush. We are striving to deliver the best possible telecommunications services to rural and regional Australia.

The Alliance particularly welcomes these strong statements.

The Minister has further indicated that the Government would provide "an Australian version of operational separation that will apply to Telstra ... to improve transparency and equivalence for wholesale customers in the services they get from Telstra". Few details are available but the separation envisaged seems to consist of a formalised relationship of separate wholesale and retail divisions within the company, transparency of the divisions' operations for audit, and a "tough internal governance structure".

The Senate Environment, Communications, Information Technology and the Arts Committee of the Australian Parliament has recently conducted a further inquiry into the performance of the Australian telecommunications regulatory regime. It reported on 10 August 2005 and is referred to below as 'the current Senate inquiry' where submissions to it are quoted.

The Alliance position

While the Alliance welcomes the Ministerial statements referred to, it hopes the Government will go further in some respects.

- In terms of the 'adequacy' of services, or "the best possible telecommunications services to rural and regional Australia", the Alliance's view is that these concepts should be defined around the telecommunications needs of rural and remote populations in the context of the emerging information economy. It would certainly prefer that they were not left undefined, as at present.
- The Alliance sees a continuing need for legislative mechanisms to mandate telecommunications provision and service standards (the Universal Service Obligation (USO) and Customer Service Guarantee (CSG)). It would like to

see all government action directed to promoting competition, including the USO mechanism. This is discussed further below.

- The Alliance believes that targeted investment by government will continue to be required if the telecommunications market continues to fail to deliver equivalent-to-metropolitan services and standards in rural and remote areas. The Minister’s post-Estens proposal for at least five-yearly reviews of rural telecommunications would be one mechanism for triggering such funding. However, the Alliance would prefer the reviews to be conducted at least every three years; innovation moves so fast in telecommunications that any longer period will create unacceptable time lags for rural business and private consumers, especially for health and educational services.
- The national economic and social (including health) importance of telecommunications is hard to exaggerate. The needs of rural people should be met on the basis of some equality with those of metropolitan Australians, as a matter of human rights and economic necessity. The Alliance also believes that government investment to bring about such equality should also not create inequality within or between given rural areas; this can occur at present because much Australian Government funding has been allocated to rural communities on a competitive basis. There may be merit in revisiting a recommendation of the Estens Regional Telecommunications Inquiry (2002) for a strategic plan for regional communications. Alternatively, a national telecommunications strategic plan could indicate, among other things, how future governments would ensure regional telecommunications kept pace with urban.⁶

The *Telecommunications (Consumer Protection and Service Standards) Act 1999*, administered by the Australian Communications and Media Authority (ACMA), sets out the requirements for the USO, the Digital Data Service Obligation (DDSO) and the CSG. Fact sheets prepared by ACMA give the following explanations.

- The USO means everyone in Australia is “entitled to have reasonable and equitable access to a standard telephone service and payphones”, regardless of where they live or carry on business. Telstra, as the primary universal service provider, is currently the only company obliged to provide this service, although consumers can choose other companies to provide it. The standard telephone service usually means a basic fixed telephone that provides local, national and international calls; 24-hour access to the emergency call service number; operator-assisted services; directory assistance; and itemised billing. There is a standard connection fee of \$209, and a capped charge if network extension is required for the connection (up to \$1540). If trenching is necessary to connect premises to the network, the subscriber must organise and pay for that work.
- The DDSO is the data equivalent: everyone in Australia now has legislated access, “on request, to a data service with a 64 kilobit per second digital data capability” (a rate higher than that generally available over the ordinary telephone network; on the other hand, mid range ADSL broadband is eight

times faster). Telstra is currently the only ‘declared provider’ of the general component of the DDSO (available to at least 96 per cent of people in Australia); the special component (for those unable to access the general component) has two declared providers: Telstra and Hotkey Internet Services. “Services under the DDSO are supplied at commercial prices”; but a rebate is available for part of the costs of the satellite equipment required for special component services.

- The CSG Standard is intended to encourage improvements in service and guard against poor service. It requires minimum performance requirements from telephone companies and provides for the companies to compensate customers where these are not met. The requirements include maximum timeframes for such things as connecting and repairing services.

The USO and DDSO requirements are very minimal and significantly less than the service options most metropolitan customers can expect. The Alliance would therefore like to see these mechanisms redefined to bring the minimum (which is all many rural customers now enjoy) much closer to what is available in urban centres. This would mean requiring providers to continually upgrade data transmission speed, whether for dial-up or broadband; and including access to broadband and mobile phone networks in the USO and DDSO. This reflects the Alliance’s view that sophisticated telecommunications access is so essential for economic and social progress that all people in Australia should have equivalent access.

The Alliance believes the USO should be reformed also to promote competition in rural telecommunications service provision. At present all telecommunications carriers pay a levy, based on their gross revenue and reflecting their market share, to subsidise services to loss-making areas. The levy fills the gap between the revenue from such areas and the cost of providing them with services. However, it is possible to organise matters differently, including using the USO subsidies as incentives rather than compensation, to encourage competition.⁷

The CSG framework, following extension of the USO as argued above, should be extended to provide service quality standards for all telecommunications services. The Alliance believes the framework should include provision for staged improvement: to encourage continual raising of standards, eg in data transmission times, establishment and repair of services, mobile network quality and reliability. Standards should become a minimum to be exceeded if possible, rather than a maximum to be achieved grudgingly, as some commentators believe can too easily be the case at present. Such a framework would and should reflect consumer need, not carrier convenience. Again, effective competition can drive such improvement, but if rural telecommunications are to keep pace with urban, other mechanisms may be needed in those parts of the market where competition remains difficult to achieve. Stiffer penalties for failure to meet standards have been suggested, since the existing ones do not seem sufficient motivation.

Recent rural telecommunications improvements and the role of the Australian Government

Using the funding provided from the sale of Telstra shares, the Australian Government has responded generously to the recommendations of two recent significant inquiries into regional telecommunications: the Besley Telecommunications Services Inquiry of 2000, and the Estens Regional Telecommunications Inquiry of 2002.

The Australian Government's programs have assisted rural telecommunications development in a variety of ways.

- They have provided subsidies to service providers, eg through the Higher Bandwidth Incentive Scheme (HiBIS) that helps reduce price differentials between metropolitan and non-metropolitan supply, and the Mobile Phones on Highways project.
- They have assisted individuals and communities with infrastructure funding through eg the Two Way Satellite Internet and Computer Offer to Indigenous communities, and the Satellite Phone Subsidy Scheme.
- They have provided funds to assist State and local government initiatives for rural service delivery, eg the Building Additional Rural Networks and Local Government Fund initiatives.
- They have provided broad-ranging assistance through the former National Communications Fund (specifically directed to the education and health sectors) and Networking the Nation initiatives, which have delivered benefits across relatively large regional areas.
- They have funded a range of complementary activities including training to Indigenous communities in internet usage and web publishing, brokers to aggregate regional demand to provide a business case for extending infrastructure (health, education and local government agencies can be key here), and research and testing.⁸

The Australian Government has stated that as a result of the HiBIS program, “in the past 12 months more than 600 regional communities have been connected to terrestrial broadband services, such as ADSL and wireless”.⁹ Funding for the program was increased by a further \$50 million in July 2005.

Another national program that seems to be on track for success is one directly targeted at health and educational broadband needs: the National Communications Fund. As well as meeting main program objectives, the program's mid-term review claims that this fund has had the effect of accelerating provision of broadband communications to many small communities. It is also suggested that the program's tendering process has encouraged Telstra to develop two new products (Government Wideband IP and Business DSL) that provide higher speed broadband to regional areas at a much lower price than previously. These products

are now available beyond the funded projects. Some of the achievements of the projects include or will include:

- 47 regional Tasmanian towns connected to high speed broadband, including 28 health facilities; the University of Tasmania's rural health teaching sites provided with support for electronic clinical teaching and service delivery;
- in New South Wales, telecommunications upgrades to 16 hospitals, four health care centres, one Aboriginal medical service and one corrections health facility, benefiting more than 7 000 users;
- in Western Australia, 27 hospitals, two community health facilities and one mental health facility provided with high speed broadband;
- in Victoria, the Grampians Rural Health Alliance Network will connect at least 40 rural and remote towns in a region with more than 200 000 people; and
- Outbacknet@qld, which is intended to deliver a range of advanced health services previously unavailable or infrequent in south-western and western Queensland, such as radiology, new ophthalmology facilities, and improved health videoconferencing for remote consultations and specialist access.¹⁰

The Australian Government has stated that it has spent \$1 billion overall in upgrading rural and remote telecommunications.¹¹ The Alliance recognises the significance of assistance on that scale. However, it also notes that the way in which the funding is provided can increase inequity between or within rural areas, since telecommunications upgrades are dependent upon successful funding applications by organisations or communities, rather than being provided to all communities as part of a universal national telecommunications system upgrade. In line with its vision of national, universal telecommunications access, the Alliance would prefer that money was targeted to particular categories of market failure, on an equal basis between rural areas suffering that failure.

All levels of government are putting increasing emphasis on service delivery by electronic means, which from an equity viewpoint virtually requires that there be reliable telecommunications networks across the country. The Australian Department of Health and Ageing (DoHA) introduced Broadband for Health in 2004 to provide broadband internet access to GPs and Aboriginal Community Controlled Health Services across Australia (\$35 million, plus a separate \$14.5 million for pharmacies). Incentives are available to help meet the costs of professional installation and 12 months' usage of the most economical, qualified service ('qualified services' feature higher speeds and greater security than normal broadband). It has been announced that from July 2005 the program will include enhanced security features, strategies to improve participation in regional, rural and remote Australia, and additional support for health providers to take up new technologies.¹²

DoHA is also implementing *HealthConnect*, a network of secure electronic health records that aims to improve the flow of information across the health sector. Consumer information is collected at the hospital or GP's surgery, and with consumer consent is stored and can be retrieved or exchanged between authorised

health care providers. A further initiative is *MediConnect*, a secure national electronic system to help improve quality and safety in managing medicines.

State and Territory governments, either on their own behalf, or in concert with national programs, are also investing in telecommunications, and particularly broadband, in their own jurisdictions.¹³

The Victorian Government recently stated that:

- nearly 24 per cent of its population is still “without access to genuine broadband services”;
- in June 2004 “only 50 per cent of regional households and businesses” could access ADSL and/or cable broadband; and
- 15 local council areas have no access to ADSL or cable broadband, and most areas have only partial coverage.

In response it issued a Broadband Framework in April 2005. The Framework mentions that improved services, especially in health, will be an important benefit of regional broadband access. A case study describes how demand aggregation by five regional health services has led to each of them having high capacity broadband networks. One of these, HumeNet, is trialling a new approach to delivering radiology services that enables doctors to view Xrays and other medical images on their desktop computers in their practices, discuss them with distant radiologists, and consult immediately on treatment options for patients.¹⁴

All States and the Northern Territory use telehealth facilities to extend health services to rural and remote areas. A key service is videoconferencing, for example to make metropolitan specialist expertise available to clinical staff and patients and their carers through teleconsultations. These activities can result in more appropriate service provision through improved or more rapid diagnosis, and facilitate continuity of care (for example, consultations between professionals at the point of patient transfer, through to the in-home monitoring of patients in remote areas). Videoconferencing also allows collaboration between staff in different locations and from different disciplines; and is becoming widely used for professional development and higher education for health professionals outside the cities.

The Tasmanian Government has claimed that through its Wide Area Network it can run a telehealth training session (including linking to health professionals in other States) for the same cost as sending an email. Funding from both the Australian Government’s Networking the Nation initiative and State sources was used to create these facilities.¹⁵

The NSW Health website contains calculations of the time and money saved for health consumers accessing services through telehealth. The cost of a videoconference call is given as \$113 per hour. A Broken Hill patient would take 3 hours to fly to Sydney, at a cost of about \$730 (and might well incur additional costs for accommodation and other add-ons). The NSW service, similar to those in other States, has over 240 facilities and supports 25 clinical services (eg diabetes

foot care, oncology, chronic pain management, haematology, emergency services, ophthalmology, rehabilitation, mental health).¹⁶

The Minister for CITA has described the testing of a Virtual Critical Care Unit, made possible by the development of multi-gigabit optic fibre networks, funded by the Australian Government's Advanced Networks Program. This technology allows city-based medical specialists to help treat emergency patients in a remote hospital, with DVD-quality video, sound and digital images.¹⁷

Telehealth can only provide certain services, and desirably should be an adjunct to on-ground, face-to-face delivery. However, given the shortage of most categories of medical staff and other health workers, and the difficulties of attracting and retaining them in rural and remote areas, it is critical for consumers that such services be available reliably, and as widely geographically, as possible. And as more and more medical applications and health system processes, including those driven by governments, require or are facilitated by broadband access, health workers in rural and remote areas will expect to have such options available to enable them to give the best care, and enjoy the same efficiency gains their urban counterparts have.

How telecommunications helps improve rural and remote health

All types of telecommunications — voice and mobile telephony, dial-up internet and broadband — bring health benefits to non-metropolitan Australians. Simple **voice telephony** brings social contact, emergency assistance and information. It can also connect people to individual counselling or outreach help through services such as Lifeline, Kids Help Line, Mensline Australia, and a range of family services with health implications such as relationship counselling (including domestic violence), and advice to parents grappling with caring for their babies.

There are numerous examples of how **internet** resources are being used by governments, organisations and private individuals to provide health services and support in rural, regional and remote parts of Australia. In many cases, these internet-based services are provided by agencies that also provide on-ground health services in rural areas. The internet, especially through broadband, can provide some minimum access for country areas where on-ground services are only intermittently or not available, or provide some emergency coverage for health issues that typically require as much support outside normal business hours as within.

DepressioNet, founded in 2000, as an independent non-profit organisation, is tackling the difficult area of non-face-to-face support for mentally ill people, including those in rural areas. The organisation says it is responding to need, although the evidence base that might support the efficacy of web-based services is still lacking. The site goes beyond the simple information provision of other similar sites such as beyondblue and the Black Dog Institute. It enables people living with depression to access not just information, but also help and 24-hour

peer support via the web, on a mutual aid support model. It includes a chat-room (with guidelines and monitoring designed to keep it safe) and many personal stories, as well as help in locating professional treatment and support services. The site has received Australian Government funding from the Information Technology Online initiative.

An older male user described the value of the interactive part of the site in its May 2005 newsletter:

For me, depressioNet provided, firstly, a place where I could 'go' without being patronised or ridiculed for my apparently silly beliefs or feelings, and I could see feedback from other depression sufferers with similar problems to myself. That in itself provided me with a lot more self-confidence, as I knew that I wasn't isolated or struggling on my own in an uncaring world'.¹⁸

A similarly interactive website is being developed at www.acrossnet.net.au, designed to provide support for community workers working in the area of suicide prevention, intervention and postvention.¹⁹

As developments such as **broadband** increase the speed of internet access and the sophistication of transmission, a wider range of services becomes possible. Western Australia has extended its Telecentre program to include the Mobile Interactive Telecommunications Environments (MITE) program and the Telecentres in Remote Indigenous Communities (TIRIC) program. Both of these help very remote communities, who may not have access to basic services, to have access at least to a telecentre facility and the associated benefits of new technology.

The MITE is contained in robust modular buildings transported by low-loader trucks anywhere where there is road access. The facilities are designed to adapt if the power supply and basic telecommunications infrastructure is inadequate. They give access to talkback TV, two-way videoconferencing, and broadband email and internet services. Some of the benefits are the delivery of specialised services such as medical and banking services; the revival of services such as community newspapers; and the formation of a series of communication hubs into a grid for the delivery of government and industry services. Many telecentres also provide access to the Health Insurance Commission's Medicare Easyclaim.

MITEs and TIRICs are currently operating in places such as Burringurrah, Tjuntjuntjara, Noonkanbah, Djarindjin, Jarlmadangah, Warburton and Yakanarra. Program funding has come both from the State government and the Australian Government's Networking the Nation initiative (and TIRIC also receives money from the Rio Tinto WA Future Fund).²⁰

The Rural Specialists Group of the Rural Doctors' Association of Australia has recently presented a report to the Department of Health and Ageing on *Sustainable Specialist Services for Rural Australia*. One of the major issues canvassed in that report relates to 'Infrastructure support and information and communication technology'.

The report argues that information and communication technology (ICT) is of increasing importance in rural areas for both clinical practice and continuing professional development. Its availability to rural specialists is a quality and safety issue. ICT will become increasingly important for the transfer of information between the range of healthcare providers to ensure the quality and safety of services and, given the increasing push towards consumer involvement, there will be a greater need for healthcare providers to communicate with patients and patients with healthcare providers as part of their involvement in decision making and information sharing.

Specialists have in general had a much slower uptake of ICT than GPs for a range of reasons, as documented in the report of the Medical Specialists Taskforce on Informatics in 2004. There has been significant support and encouragement at a Commonwealth level to enable general practitioners to utilise ICT in various aspects of practice and this has assisted with the provision of hardware, software, connectivity and training. To date specialists have not been able to access such support.

Given this need for connectivity, and the initiatives of the National e-Health Transition Authority, and given that it is probably more feasible to link a range of healthcare providers in a geographically discrete rural environment, opportunities exist to assist the sustainability of the rural specialist workforce by ensuring reliable ICT infrastructure is in place and building on the existing infrastructure that is available to general practitioners.

A slightly different view is that, for practitioners in rural and remote areas, communication technology upgrade is a two edged sword. It is important to ensure that upgrades are implemented to support such practitioners and their patients, and not applied in a way that further advantages specialists in urban hospitals to undermine practitioners in more remote areas and degrades services to rural and remote Australia in the long term.

Continuing telecommunications difficulties in rural and remote Australia

Given the central importance of reliable communications of all sorts to the health of non-metropolitan Australians, it is of concern that there are still stories coming in from rural and remote Australia about difficulties in having telephones connected and repaired. Other telecommunications servicing is even more patchy.

The most dramatic report on the state of telecommunications in rural areas has come from the NSW Farmers' Association's T3 survey, released on 13 July 2005. It is said this survey covered most of the farming population in the State. It found that services were worst beyond the Great Dividing Range, "with almost a third of people unable to rely on their basic landline telephone service". Unsurprisingly, some of the worst figures related to mobile telephone availability. In relation to internet speed, more than half of respondents east of the Divide were satisfied (68% in the Richmond electorate being the highest); the lowest level was 21% in

the electorate of Hume. So the survey shows shortcomings with all areas of telecommunications supply.

The survey contains interesting contradictions. There is very high opposition to the further privatisation of Telstra in all areas surveyed (mostly over 80 per cent) but at least east of the Dividing Range around 70 per cent of respondents say the telecommunications industry is satisfying their needs.

A submission dated April 2005 to the current Senate inquiry from the WA Department of Industry and Resources states:

Many WA farmers are subjected to delays of between 6 and 12 months to obtain a new service, depending upon availability of infrastructure. This is an unacceptable timeframe and it gravely impacts upon the livelihood, competitiveness and ability to compete fairly of Western Australia's primary producers.

While farmers are a minority of rural and remote residents, their national economic importance means that their concern about inefficient communications is significant. Farmers may also be more likely to suffer than some other rural dwellers because they live outside towns. Part of the issue with Telstra-supplied ADSL is that rural residents more than about 3.5 kilometres from a town exchange cannot receive it. Minister Coonan revealed in a recent speech that Telstra is trialling a technology that could extend the reach of the ADSL network to around 20 kilometres from a telephone exchange.

In evidence to the current Senate inquiry, bodies such as the National Farmers' Federation and the Combined Pensioners and Superannuants Association of NSW have represented their members' views that rural services are still not good enough. The NFF says that "the Government's own figures show that telephone repair performance in rural Australia is on the decline". The CPSA maintains that, according to Telstra's annual reports, Telstra's capital expenditure has declined in the period of the company's partial privatisation, which leads them to fear the consequences of full privatisation.²¹

A submission from the Orana Regional Development Board, which covers about 20 per cent of New South Wales in the central north of the State, says:

The lack of readily available telecommunications services and relatively high costs of telecommunications services are important factors which are considered to impede economic growth and development in regional NSW. Many of the problems are due to inadequate and expensive telecommunications infrastructure and lack of telecommunications competition in the Region. Telstra, as the incumbent, is the dominant provider in the region.

In June 2005 the Alliance was informed of a situation involving three communities in northern WA with health facilities and new nurses' housing. Telephones for the nurses' houses were ordered before the houses were completed in mid-November 2004. Between November and March, only 50 per cent service to the nurse's house in one settlement was achieved. It is estimated that more than 45 calls have been made so far to Telstra to try to get the job finished. The issue seemed to be

ineffective communication between Telstra and their subcontractors in the nearest service centres (in one case, more than 1000 km away). In an attempt to assist the process, people at one settlement themselves dug trenches from the house to the fenceline where the cable had been laid. Another problem was that when one of the health clinics lost its internet connection, it took 15 weeks for it to be reconnected. The Alliance was advised in July that telephone connections had been achieved for one settlement.

Other evidence to the Alliance has concerned the difficulties experienced by educational institutions in the Northern Territory and Queensland in providing distance education over unreliable telecommunications connections.

Communications consultant Paul Budde, praising the effectiveness of the Australian Government's HiBIS initiative, suggests that it could well be turned into a permanent policy. However, he also comments:

The government also needs to improve the coordination between the various broadband programs. For example, the program that provides broadband to schools and other government buildings often fails to lead to improved broadband in the wider communities surrounding these facilities.

Budde also notes that "while a lot of attention is given to mobile coverage in remote parts of the country, it was interesting ... that large parts of the Hunter Valley, less than 150km from Sydney, are still without any mobile coverage". The situation around some other regional towns appears to be similar.

Budde, like other commentators, also details anti-competitive behaviour by Telstra in rural (as well as urban) environments:

A regional operator launched plans to set up a wireless network in Albury/Wodonga and a few weeks later Telstra chose this town to launch the pilot of its own wireless EV-DO alternative. This scenario has been repeated in other regional towns. As soon as new initiatives are rolled out by regional telcos Telstra follows with DSL upgrades. Over the last year I have come across at least a dozen such cases. This is extremely disruptive to the policies of state governments and local councils. They allocate funds for broadband upgrades, only to see them undermined by competitive tactics from Telstra.²²

It is difficult to get a clear view of the current overall state of telecommunications in rural and remote areas. To set beside the anecdotal complaints mentioned above, one source of data is the *Telecommunications Performance Monitoring Bulletin* issued quarterly by the Australian Communications Authority (now incorporated into the Australian Communications and Media Authority). The latest findings (for the March 2005 quarter) show:

- Telstra connected 91 per cent of new services in major rural areas without infrastructure within the CSG timeframe. The report says Telstra's performance against this indicator had been declining since the September 2003 quarter, and this is the first quarter that it has improved (up from 88 per cent in the previous quarter);

- in minor rural areas Telstra provided 91 per cent of new connections within the CSG timeframe; and
- in remote areas 92 per cent within the timeframe.

Telstra's national rate of fault repair performance on time was also 91 per cent, but the rate in rural areas is not provided. A range of commentators find fault with the CSG and its statistics; for example, the WA Department of Industry and Resources states that the statistics "do not adequately reflect the service delivery problems experienced" by rural and remote Western Australians.²³

Much is made of the possibilities of cheaper telecommunications for rural and remote areas from different delivery mechanisms, particularly satellite and wireless. The submission to the current Senate inquiry from the wireless company Unwired makes the interesting claim, based on their infrastructure development in Sydney, that they "could build a wireless broadband network covering 75 per cent of the Australian population for \$300 million within a few years", compared to Telstra's estimate of \$30 billion over 20 years.

Unwired's claim is untested; and it may well be that the 25 per cent of the population that their network would not reach would include the same people who currently cannot access Telstra broadband, or only at unsatisfactory performance and/or price levels. However, the competitive benefits for rural areas served both by Telstra wire or cable and a wireless-based system could be considerable.

Conclusion

The use of higher level telecommunications has become almost a standard part of the functioning of the health system in Australia. Other government initiatives to increase the supply of young, well-trained health and medical workers in rural areas are reaching maturity. This newly educated rural workforce will take for granted their ready access to the tools for advanced telecommunications. Good telecommunications — at work and at home — will become as crucial to maintaining the health workforce's willingness to serve in rural communities as it is to the functioning of rural businesses, large and small, and the essential social support of rural communities.

At the same time, telehealth service delivery, whether as an adjunct to or replacement for on-ground delivery, is becoming increasingly important to rural and remote communities. Given the worldwide shortage of, for example, nurses and doctors, this importance is not likely to lessen.

The Alliance believes that continuing encouragement of competition in the telecommunications market is vital. However, at present it is not clear how well leaving supply entirely to a competitive telecommunications market might work in servicing rural and (particularly) remote Australia. Further, it may take some time to develop real competition, by reducing the continuing dominance of the previous monopolist and replacing it with a much more varied market in terms of suppliers

and modes of supply. However, the lack of fully effective competition combined with the existing prescribed minimum service levels and the penalties for failure to meet them appears to mean carriers can aim for fairly low levels of service in rural areas.

The Alliance sees an adequate national telecommunications network as of such economic and social importance that all efforts must continue to provide equality of access to all residents, wherever they may be. This equality of access must include all forms of telecommunications services, and must be recognised by government and industry as being not a steady state that can be reached at a given point in time, but as a continuous evolution as technological development continues to drive telecommunications improvements. All appropriate mechanisms — in the market, and government activity where the market fails — need to be mobilised to deliver an effective telecommunications system right across the country.

In summary, the Alliance position consists of three key points. The Alliance **firstly** states that the concept of what is ‘adequate’ in rural and remote telecommunications should be defined around the telecommunications needs of rural and remote populations in the context of the emerging information economy, rather than carrier convenience.

The Alliance **secondly** states that it sees a need for some time to come for a government presence in telecommunications to support the needs of rural and remote Australians, and others with specialised needs wherever they may be. This need exists irrespective of whether the final tranche of Telstra is sold. ‘Adequacy’ for rural telecommunications should also be as equal as possible to urban services and standards.

The government role has two elements. The Alliance restates its view that **legislative requirements** should include:

- reformed Universal Service Obligation arrangements that encourage higher bandwidth services and promote, rather than retard, competition in rural telecommunications provision;
- provision of inbuilt mechanisms to require continuing improvement in service standards in line with the needs of non-metropolitan users, and across all forms of telecommunications delivery (currently voice and mobile telephony, dial-up internet, and broadband), focused on a stronger Customer Service Guarantee; and
- mechanisms for a managed reduction of Telstra’s market dominance, such as precluding the company from owning the cable network that competes with its telephony network and requiring divestment of its half share in Foxtel; requiring the separation of Telstra’s value-added services from its backbone infrastructure and the Customer Access Network; and exploring cost-effective expansions in mobile telephony coverage, including measures to require a greater degree of roaming between carriers.

The second part of the government role is equally important. So, **thirdly**, the Alliance believes that **targeted investment by government** will continue to be required if rural areas continue to suffer from market failure in terms of the time lag between a socially or commercially significant new development being available in metropolitan and in non-metropolitan areas. This investment can build on the types of successful programs the Australian Government has introduced in recent years, but exact timing and nature will depend on the challenges encountered.

There is much discussion about whether or not funds from any further privatisation of Telstra should be set aside, whether through the Futures Fund or some other mechanism, and earmarked for use to support the continuing improvement of rural telecommunications into the future. The Alliance could support such an idea if it would increase the likelihood of investment funds being available for continuing rural telecommunications upgrades; but it is not clear that that would be the case. If the Alliance recommendation that government investment be provided equally to all rural areas, not competitively as is the case for many funds at present, is accepted, the size of the fund required is likely to exceed some of the current estimates.

Member Bodies of the National Rural Health Alliance

AARN	Association for Australian Rural Nurses Inc
ACHSE	Australian College of Health Service Executives (rural members)
ACRRM	Australian College of Rural and Remote Medicine
ADA	Australian Dental Association (Rural Dentists' Network)
ADGP	Rural Sub-committee of the Australian Divisions of General Practice
AHA	Rural Policy Group of the Australian Healthcare Association
ANF	Australian Nursing Federation
ARHEN	Australian Rural Health Education Network Ltd
ARRAHT	Australian Rural and Remote Allied Health Taskforce of the Health Professions Council of Australia
CAA	Convention of Ambulance Authorities — Rural and Remote Group
CRANA	Council of Remote Area Nurses of Australia Inc
CRHF of CHA	Catholic Rural Hospitals Forum of Catholic Health Australia
CWAA	Country Women's Association of Australia
FS	Frontier Services of the Uniting Church in Australia
HCRRA	Health Consumers of Rural and Remote Australia
ICPA	Isolated Children's Parents' Association of Australia Inc
NACCHO	National Aboriginal Community Controlled Health Organisation
NRHN	National Rural Health Network
RDAA	Rural Doctors' Association of Australia
RACGP	Rural Faculty of Royal Australian College of GPs
RFDS	The Australian Council of the Royal Flying Doctor Service of Australia
RGPS	Regional and General Paediatric Society

RPA	Rural Pharmacists Australia — the Special Interest Group of the Pharmacy Guild of Australia, the Pharmaceutical Society of Australia and the Australian Society of Hospital Pharmacists
SARRAH	Services for Australian Rural and Remote Allied Health

Notes

- 1 The existing Alliance position on rural and remote telecommunications is set out in a paper entitled 'Rural Telecommunications — Current status', July 2003, available at www.ruralhealth.org.au. This paper builds on that position and updates it.
- 2 Submission by the Australian Consumers Association to the current Senate Environment, Communications, Information Technology and the Arts Committee inquiry into the performance of the Australian telecommunications regulatory regime, attachment 2. All submissions to this inquiry quoted in this paper are available at www.aph.gov.au
- 3 Submission by the Australian Telecommunications Users Group to the current Senate inquiry (see note 2), especially p 17.
- 4 Organisation for Economic Co-operation and Development (OECD), 'The development of broadband access in rural and remote areas', May 2004, quoted in Parliament of Australia, Parliamentary Library, research note no 52 2004–05, Jeffrey Robertson, 'Regional telecommunications: An overview', 14 June 2005.
- 5 Minister for CITA speeches to the ATUG Conference, 9 March 2005; the Korea–Australia–NZ Broadband Summit, Korea, 9 June 2005; the Adelaide Press Club, 7 July 2005; press release of 13 July 2005; all on www.minister.dcita.gov.au/media
- 6 The Estens recommendation is set out on pp 317–18 of the inquiry report. For the role that national planning played in Japan's recent extremely successful effort to encourage competitive provision of broadband throughout the country, see Thomas Bleha, 'US drops bundle on broadband', *Australian Financial Review Review*, 27 May 2005, p 5.
- 7 For a discussion of some possibilities see Chris Dalton and Mark Armstrong (eds), *Rural Telecommunications Policy Reform*, Network Insight: An RMIT University Research Group, Sydney 2002.
- 8 www.dcita.gov.au/tel/regional,_rural_and_remote_communications
- 9 Minister for CITA press release, 7 July 2005.
- 10 Department of Communications, Information Technology and the Arts, 'National Communications Fund: Mid-Term Review', Canberra, December 2004. Services, Internet sites and activities are mentioned in this paper only as examples of the use of IT and telecommunications technologies. No endorsement is implied of their reliability or effectiveness in health service delivery.
- 11 Minister for CITA press releases, 7 and 13 July 2005.
- 12 www.health.gov.au
- 13 As one of the Alliance's correspondents has argued: "Upgraded communications technology would create efficiencies for State governments in particular. Why don't they invest for efficiency?"

- 14 www.mmv.vic.gov.au/broadband; Department of Infrastructure, *Broadband Framework: Pathway to the Future*, Melbourne, April 2005.
- 15 *Links quarterly*, no 20, June 2004.
- 16 www.health.nsw.gov.au/pmd/telehealth
- 17 Minister for CITA, speech to the Korea–Australia–NZ Broadband Summit, Korea, 9 June 2005.
- 18 www.dcita.gov.au/ie/community_connectivity/community_ict_transformation_case_studies; www.depressioNet.com.au
- 19 National Rural Health Alliance, *Partyline*, no 22, May 2005.
- 20 www.telinfo.gov.au, Community Telecentres, Experience — Australian and overseas; WA Department of Local Government and Regional Development, *Planning for the Future: WA Telecentre Network*, November 2004.
- 21 NFF submission to current Senate inquiry, and to Productivity Commission in response to the draft review of National Competition Policy, December 2004; NFF press release, 16 June 2005; CPSA submission to the current Senate inquiry.
- 22 All quotations from Paul Budde’s submission to the current Senate inquiry, March 2005, pp 11–17. A similar situation of Telstra announcing its plans to introduce broadband (allegedly using a government subsidy) only after a local entrepreneur had gone public with his plans to start supplying the service is described by James Riley, ‘Broadband biffa in the bush’, *The Australian*, 22 February 2005.
- 23 Submission to the current Senate inquiry.