

Information technology

Background

Improved internet and broadband connectivity among households, and medical and mental healthcare providers, combined with increasing development and use of e-health and tele-diagnostic applications, is progressing the evolution of mental health service provision and improving mental health outcomes, including in regional, rural and remote areas of Australia. Internet connectivity currently allows many Australians to access a wide range of online mental health resources, including websites, such as <http://auseinet.flinders.edu.au> and <http://www.beyondblue.org.au>, which offer interactive features, such as bulletin boards and support networks. These new modes of online delivery make mental health information available to a wide range of underserved healthcare markets, including in remote areas and Indigenous communities.

Broadband-enabled mental healthcare delivery

Broadband-enabled video-conferencing facilities potentially provide affordable diagnosis and treatment options for many mental health consumers without access to local services. For example, the South Australian Health Commission (SAHC) has provided tele-psychiatry services to 67 South Australian rural and remote communities from 83 video conferencing units in Adelaide's Glenside Hospital since 1994. Broadband-enabled tele-diagnosis applications, such as those deployed by SAHC, are reducing the cost and extending the reach of medical and mental healthcare services, and the productivity benefits to be gained from more widespread use of these applications may be used to contain health expenditure. For example, a 2003 study by Access Economics estimated the net public benefit resulting from an accelerated adoption of tele-diagnostic applications at \$190 million over ten years.

Broadband network infrastructure

The Australian Government, through the Australian Government Department of Communications and Information Technology (DCITA), is supporting the development of broadband network infrastructure required for the effective delivery of medical and mental healthcare services. For example, the \$23.7 million Coordinated Communications Infrastructure Fund (CCIF) initiative is funding regional broadband developments, with an emphasis on the health care sector. The \$107.8 million Higher Bandwidth Initiative promotes equitable and affordable access to higher bandwidth services in regional areas, including for GPs and mental health providers. The National Broadband Health Adviser employed under the National Broadband Strategy's \$8.4 million Demand Aggregation Program currently plays an important role in the development of regional health connectivity solutions and is assisting outcomes in a range of programs including:

- the \$107.8 million Higher Bandwidth Incentive Scheme (HiBIS), which provides registered internet service providers with incentive payments to supply higher bandwidth services in regional, rural and remote areas at prices comparable to those

available in metropolitan areas. (further information is at http://www.dcita.gov.au/tel/higher_bandwidth_incentive_scheme_hibis); and

- \$23.7 million Coordinated Communications Infrastructure Fund (CCIF), which aims to encourage further investment in broadband infrastructure in regional areas to support improvements in the delivery of health, education and government services. (further information is at <http://www.dcita.gov.au/ie/broadband/programs/ccif>).

E-health

The Information Technology Online program (ITOL), an Australian Government funding program administered by DCITA, has been designed to accelerate the national adoption of e-business solutions across a wide range of industry sectors, including in the areas of medicine and mental health care. Since 1996, the government has allocated more than \$12 million to 110 e-business projects.

One of the ITOL funded projects, Health-e-People, used an integrated web management based customer and business system to improve health support services to health professionals and consumers. The first phase targeted mental health, and built on the websites operated by depressionNet and Mensline, which both provide information to health professionals and consumers.

The web-based project is part of a larger initiative to improve health counselling and support services through an online care centre where trained staff will be able to attend to information requests more efficiently using the automatic generation of specific information sets from a large health database. These staff will check the information generated to ensure that it is appropriate before it is sent back to the person or organisation seeking assistance. The database content is shared by multiple service delivery partner organisations, each with the ability to filter or take the entire view of available best practice information or advice.

Within the Australian Government Department of Health and Ageing, initiatives such as HealthConnect and Broadband for Health will support new models of care and have the potential to support advances in the mental health area.

HealthConnect will offer an opportunity to, with consent, access a patient's critical health information anywhere in the country by using enabled software. Providers will be able to access the basics, such as what medications the patient is taking or supposed to be taking.

Australian Government funding for information technology

Name of program	Funding \$s (millions)	Funding period
Coordinated Communications Infrastructure Fund	\$23.7	2003-07
Higher Bandwidth Incentive Scheme	\$107.8	2003-07
Demand Aggregation Program	\$8.4	2003-06
Information Technology Online Program	\$12	1996-06
HealthConnect	\$128	2004-08
Access to Broadband Technology Initiative	\$9.2	2003-05
Broadband for health for groups and aboriginal medical services	\$35	2004-07
Broadband for health for pharmacy	\$14.5	2005