From the Eastern Goldfields Regional Reference Site to GoldHealth—a story of partnerships to develop a managed health network

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What is the Eastern Goldfields Regional Reference Site?

The Eastern Goldfields Regional Reference Site (EGRRS) was established by the Department of Health and Ageing as a key component of the Australian Government’s $60 million ‘Access to Broadband Technology’ initiative.

The aim of the initiative was to provide General Practitioners (GPs) across Australia with access to broadband technology, which will provide the infrastructure to support a range of services to improve health care delivery including the development of shared Electronic Health Records.

As part of the initiative, a regional reference site was implemented in the area serviced by the Eastern Goldfields Medical Division of General Practice (EGMDGP) to test, measure and demonstrate the benefits to health care providers of having high-speed, continuous, higher quality broadband through which they may effectively and securely access a range of relevant information and communication applications.

This was achieved through the establishment of a region wide Virtual Private Network (VPN) that connects a range of health professionals across the region to enable secure communication with a guaranteed Quality of Service (QoS) for phone, data and video applications.

This project was called the Eastern Goldfields Regional Reference Site (EGRRS) and was funded by the DoHA from January 2004 until the 30 June 2006.

Why the Eastern Goldfields Medical Division of GPs?

The EGMDGP which services the Goldfields–Esperance region and constitutes one third the size of Western Australia, was identified as experiencing a combination of metropolitan, rural, and remote conditions, and is typical of the circumstances facing the health service providers within rural and remote areas of Australia and was therefore selected as an ideal location to implement the Reference Site.

In addition to this the Project received significant support from health professionals and local governments across the entire region particularly the General Practitioners through the EGMDGP, who were the key drivers for the project.

This was achieved through thorough consultation with all key stakeholders from the outset of the Project which resulted in significant buy-in for the Project from the stakeholders including 100% of GPs across the region.

Who was connected as part of the EGRRS Project?

The VPN established as part of the EGRRS Project was implemented in two stages. The first phase, which was complete in March 2005, involved connecting the following services to the network:

- 20 GP practices across the region (100% of GP practices supported by EGMDGP)
- 93% of GPs homes
- 2 Aboriginal Community Controlled Health Services (ACCHS) (Bega Garnbirringu in Kalgoorlie and Ngangganawili Aboriginal Community in Wiluna)
• 3 local specialists including a paediatrician, general surgeon and an obstetrician
• the Goldfields Specialist Rooms
• the EGMDGP offices based in Kalgoorlie and Esperance.

In addition to this the following additional services were connected to the network by December 2005 including:

• WA Country Health Services
  – Kalgoorlie Regional Hospital – 12 access points
  – Esperance District Hospital – 6 access points
• Rural Clinical School (in Kalgoorlie and Esperance)
• secure gateway to Radiology, Pathology and the RFDS
• 3 local pharmacies (utilising the Broadband for Pharmacy Program)
• 2 aged care facilities.

Due to some unexpected delays in connecting some of the Phase 2 participants the original 12 month period of the Project was extended until the 30 June 2006 at which point participants were required to make a commercial decision as to whether or not they would be interested in continuing with the network and services provided as part of the Project.

**What was implemented as part of the Project?**

The telecommunications provider, IP Systems Pty Ltd., was contracted by the Australian Government for the purpose of implementing the technology for EGRRS and all participants were connected to the network using high speed high bandwidth broadband technology. The type of broadband utilised for each site was dependent upon the services available in that location and included either 2MB fibre, DSL or satellite connections.

In addition to this a range of ‘value added’ services were provided to the participants as part of the project which aimed to demonstrate the value of broadband to the participants. These services included:

• email service with security features and inbuilt antivirus and spam filtering
• internet access, including firewall, antivirus and filtering services
• videoconferencing
• VoIP telephony
• ability to ‘Remote Access’ Patient Records from home and connect hospitals.

It was also recognised by the EGMDGP and DoHA that the network had the potential to host a range of Additional Applications to further assist the participants and achieve positive health outcomes for the region. The DoHA recognised that it was important that the process of identifying and implementing the Additional Applications for EGRRS was locally driven and supported by the EGRRS participants and offered the EGMDGP a grant for this purpose.

Therefore in March 2005 the EGMDGP undertook an Expression of Interest process through the establishment of a representative committee to select applications to be implemented. A total of eleven Additional Applications were selected through this process and these applications fell into the following categories:

• online education and peer support
online therapeutic guidelines, resources and information services
clinical applications
electronic discharge summaries from local hospitals
new technologies and small business tools that demonstrate the value of broadband connectivity to a health community.

In addition to this an Additional Applications Portal was set up to provide the participants with seamless access to the applications selected to be trialled as part of the Project.

In addition to providing access to the Additional Applications the portal also provided participants with access to information about EGMDGP events, useful links, important EGRRS documentation and information pertaining to the Evaluation of the EGRRS Project.

What were some of the key challenges of the EGRRS Project?

As EGRRS was the only Project of its kind undertaken at the time, there were a number of challenges that were experienced during the implementation and operational phases of the Project.

It is recognised that these challenges are key lessons from the Project that need to be addressed and considered when implementing other similar projects across Australia, particularly in rural and remote areas.

Overall some of the challenges that emerged in relation to the Project included the following:

- change management—GPs and Practice staff are very time poor and to utilise new technology it takes a lot of time effort and training. It is important that when new technology is introduced change management processes are also put in place in order to get biggest impact from the new infrastructure
- governance—dealing with multiple providers with different funding structures is challenging so it is important to have a high level of commitment and strong relationships
- technical issues—EGRRS has experienced some technical difficulties and it is important that the network is flexible enough to address these difficulties
- quality content and applications—applications need to be locally driven, simple to use and relevant to the people using them
- sustainability—the infrastructure implemented for the EGRRS project is ‘gold standard’ and it will be difficult to sustain beyond the duration of the Australian Government funding. This is a key issue that the EGMDGP has been aware of from the outset.

These challenges have been highlighted to the Department of Health and Ageing through the implementation of this Project and will impact upon future policy directions for the e-Health Agenda in the future.

What have we learnt from EGRRS?

A number of key lessons regarding the implementation of IM/IT projects of this nature which involve multiple types of participants (GPs, Pharmacists, Aged Care Facilities, Division of General Practice etc.) and multiple levels of Government.

In summary some of the general lessons of EGRRS include the following:

- it is important to focus on ‘people’ not just technology
• outcomes and achievements can be optimised by building upon existing processes, relationships and infrastructure

• implement according to regional priorities

• a partnership approach is necessary and ongoing communication and consultation is paramount. This needs to be achieved through the development of detailed and effective Communication Strategy

• high level of commitment from participants is required in order to succeed

• high levels of support and trust are important

• training needs to be based on individual and organisational needs

• where possible use national standards and ensure systems are interoperable.

Some of the lessons more specific to the Project include:

• The network can be used to deliver a range of EGMDGP Programs and services (i.e. established links with CPD, Better Outcomes in Mental Health, MAHS etc) and it is important that the Network is considered core business of the Division and used to facilitate the implementation of all Program areas. It is through this that you can achieve stakeholder buy-in.

• Software applications need to relevant, useful and be accessed seamlessly. (In this respect the Applications Portal developed was very useful).

• Access of applications depends upon; type of participant (i.e. GP, Specialist etc), participants’ location, participants’ area of interest, and level of IT skills.

• Training needs to be personalised, regular and focused on changing business processes not just functionality.

• Change management takes time.

**How was a sustainable model for the Project developed?**

As the Project was only funded by DoHA as a ‘Reference Site’ until the 30 June 2006 a key challenge of the initiative from the outset of the Project was the development of a sustainable solution that enabled participants to continue with the Network beyond the Reference Site period.

To achieve a sustainable solution for the Project the EGMDGP worked closely with IP Systems since December 2005 to develop pricing models for the participants that were affordable and value for money based on the services that each Practice/participant was receiving.

To achieve these pricing models IP Systems have invested heavily into infrastructure in the Goldfields region.

As at 30 June 2006 90% of those organisations that participated in EGRRS decided to continue with the solution and as of this date the Network has been re-branded as the GoldHealth Network and continues to be supported by the EGMDGP.

The development of the sustainability strategy for the Project is recognised as a key achievement of the Project by the DoHA, the EGMDGP, IP Systems and all participants in the Project as it demonstrates that the participants recognise the value of being part of a ‘connected’ community of health professionals.
It also demonstrates to the Division that despite the number and range of challenges experienced, health professionals across the region recognised the value and importance of the Reference Site and see value in moving further along the e-Health path in the future.

What are some of the key achievements of the EGRRS Project/GoldHealth Network?

EGRRS has been able to demonstrate in a measurable way through a formal evaluation, the value to health professionals of having access to high quality broadband connectivity through a private managed network. It has achieved this objective through the engagement of a community of health professionals across the region to participate in the project resulting in an ongoing commitment to the Project despite the range of challenges that have been experienced.

The lessons learnt from EGRRS have been used to inform policy development for the Managed Health Network Grants as part of the Broadband for Health Program and will continue to do so under the banner of the GoldHealth Network.

The EGRRS Project has demonstrated how government, the private sector and a non-government organisation can work together in co-operation to achieve a sustainable managed health network which is used to deliver health services in a more efficient and secure fashion in a rural and remote region.

These achievements were recognised by the Australian Telecommunications Users Group (ATUG) in early 2006 when it awarded EGRRS/GoldHealth the title of ‘Best Regional Communications Solution’ which was also a significant achievement for the Project Management Team and participants.

What is the future of GoldHealth?

Now that the network has been established as a commercially viable network under the banner of GoldHealth that is owned by the region, funded by the participants and supported by the EGMDGP it is recognised that there are many opportunities to expand and consolidate the network to provide more efficient and effective health services across the region.

One key objective of the EGMDGP over the next 12 months is to integrate the usage of the Network into other Program areas of the Division. That is, the EGMDGP believes that the GoldHealth Network is core business for the Division and a secure, efficient and cost-effective mechanism for delivering all its Programs to its members.

In addition to this the EGMDGP will be working to expand the network to include additional services and applications such as real time claiming for patients and the extension of the network to other organisations such as Allied Health.

Another key objective of the region is to work in with other areas of Western Australia to further expand the network into other regions so that information sharing between health professionals across the state can take place in a secure and reliable fashion.

On a final note the GoldHealth Network has also established the network infrastructure in the region which would enable a Shared Electronic Health Record to be quickly implemented in the Goldfields and this is a key goal of the Project over the next 18 months although it is recognised that the development of this initiative is largely dependent on the availability of funding and the support and engagement of stakeholders at a local, state and national level.