



Grampians Rural Health Alliance



Grampians Rural Health Alliance

ICT Strategic Plan 2010 – 2015 ***Part B***

Foreward:

This Strategic Plan is the result of numerous consultations and discussions across the Grampians Rural Health Alliance, conducted both formally through structured interviews and workshops and through individual consultations with stakeholders. The strategy development assisted the region to define a vision for the Alliance that aligns with local, State and National priorities and strategies. The Strategy reflects our understanding of how best we will achieve our vision over the next five years and beyond.

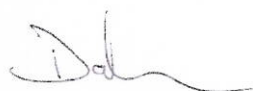
A plan such as this defines our goals and the pathways to achieving them. It is a document that will be used by management and staff at all levels when preparing their action plans, setting their priorities, and evaluating their performance.

A Strategic Plan is not set in stone, and even within its five year life, annually its detail will be subject to constant review and adjusted to reflect changes in health care policy, opportunities, technology and financial realities.

This is your plan, and it is hoped that its goals will also be your goals.



Chris Scott
Chair
Grampians Rural Health Alliance



David Ryan
Executive Officer & CIO
Grampians Rural Health Alliance

Introduction:

The Grampians region health services face many challenges in the near term and the health sector as a whole in Australia is positioned to commence a massive reform program over the next 5 years as a number of key driving factors converge. It is essential that health and community service organisations in the Grampians region understand these driving factors and position themselves so that they can both leverage and align their strategies and investments for both business and ICT strategic plans. This ICT Strategy for the Grampians Rural Health Alliance (GRHA) puts forward the case for continued investment in ICT that builds on a strong foundation of ICT investment in the region and in each public health service, matching local health service strategies, whilst aligning with the emerging service and funding models proposed at the State and National levels.

Executive Summary

This ICT Strategy has been formulated in times of significant reform in the health sector. It has been formulated to contribute to solutions to address many of the key drivers influencing healthcare service delivery in the Grampians region.

Rural Victoria and the Grampians region are facing a number of challenges in the provision of healthcare services including:

- Acute and sub-acute services, both bed based and ambulatory, are becoming increasingly difficult to access.
- As the average age of the population goes up, people rely more on health services to offset health and wellbeing decline.
- Changing health trends associated with such things as ageing population and greater prevalence of chronic health conditions such as diabetes and cancer; leading to more complex needs;
- Changing nature of consumer demand and expectation for example choice, access to services and response time;
- Shift in the model of care whereby different models of care are emerging:
 - Enhanced primary care
 - Home based care
 - Increased need for self-monitoring;
- Providing an integrated model of care including linkages between different providers of care, integrated/electronic records, state-wide linkages, common infrastructure and integrated solutions; and
- Sustaining existing services and equity given the increasing cost of remote care – transport costs, multiple locations etc;
- Attracting and retaining the right skills and sustaining skill levels through training/up-skilling; and the Need for improved productivity in the provision of services given funding constraints and increased workload.

The development of the Strategy has involved review and analysis of the current state of Grampians health service ICT, Victorian health ICT, review of the broader national and international ICT and health ICT landscapes and a structured approach to stakeholder engagement. Various business strategy sessions and interviews were conducted over a four month period toward the end of 2009 involving all of the membership of the Grampians Rural Health Alliance. The outcome of these sessions provided the basis for the creation of this ICT Strategy and focused the key stakeholders on new and innovative service delivery of health and ICT services.

The ICT Strategy has also taken into account the National e-health agenda and proposes early engagement and preparation for the initiatives outlined in the National e-health Strategy.

Although e-health has risen to the top of the health reform agenda in recent months in Australia, the challenges facing a health provider in developing a business and ICT strategic plan in the current changing environment remain significant. Organisations in the Grampians region, including GRHA, must continue to provide existing services as well as position for the future.

In order to develop a comprehensive ICT strategic roadmap, several positioning ICT strategies have been adopted as underpinning principles:

- *Document and make a strategic assessment on the complete business systems and technical architecture.*
- *Limit longer term network/communication investments.*
- *Minimise large financial investments until the national health reform agenda is clear.*
- *Short term solutions to meet NHHRC targets especially eReferral and telehealth.*

When the initiatives in this ICT Strategy and Plan are implemented, through GRHA, health services in the region will:

- *have the technologies in place to deliver clinically appropriate health outcomes*
- *be better able to address increasing consumer demand and expectation of service delivery*
- *have ICT initiatives funded through annual prioritisation within legislative and budget constraints*
- *be able to respond quickly to emerging health trends driving shifts in models of service delivery*
- *be positioned for upcoming health reform*
- *be assisted to attract and retain the right skills in order to achieve each health services' objectives*
- *have equal to or better access to ICT than their metropolitan counterparts to enable equality of access to scarce healthcare resources*
- *operate with clear governance in line with legislative requirements and best governance principles*
- *pursue integration of services through leverage of capabilities across the region and engaging in strong partnerships*
- *leverage existing and emerging capabilities within GRHA and the regional health services to provide an integrated model of care*

Achieving these defined outcomes will require a high level of collaboration between GRHA members, its partners and its funders. The success of this ICT Strategy will also be dependent on strong leadership both in GRHA and within member agencies, in particular clinical leadership, to realize the planned benefits. The plans within the strategy will be regularly reviewed to ensure the continued relevance of the strategy to emerging and contemporary health service delivery.

Vision/Mission:

The Grampians Rural Health Alliance will be the leader in the innovative application and delivery of ICT systems and infrastructure through collaboration, creativity and alignment with each health service's strategies.

Values:

The Grampians Rural Health Alliance will achieve its mission through the following values:

- Being Responsive to service system needs
- Patient and client needs driven
- Providing common solutions and reuse where appropriate
- Providing for flexibility in approaches
- Supporting the strategic goals of members
- Supporting diversity across the health and community services sectors
- Providing Leadership advocacy in ICT
- Emphasis on Collaboration and communication with stakeholders
- Information and resources available to all members on an equitable basis
- Transparency and accountability of governance and decision making to members
- Delivering Cost effective services
- Promotion of Innovative uses of ICT

GRHA Strategic Framework

The Grampians Rural Health Alliance will be the leader in the innovative application and delivery of ICT systems and infrastructure through collaboration, creativity and alignment with each health service's strategies	
Vision	Strategies
Regional health services have the technologies in place to deliver clinically appropriate health outcomes	Leverage current investments in ICT
	Successfully implement HealthSMART applications
	Pursue ICT solutions for clinical care
	Pursue solutions to address demand management
GRHA assists regional health services to address increasing consumer demand and expectation of service delivery	Support research and knowledge management through resources available to members
	A five year initiative list will be developed with annual prioritisation of funding and implementation plans
	Seek additional funding from current and future funders and pursue alternate ICT funding models
	Support regional health services in the pursuit of solutions to address the key areas of chronic disease, complex needs, and aged care
Regional health services able to respond quickly to emerging health trends driving shifts in models of service delivery	Identifying and implementing systems that are flexible enough to support changes in care delivery models
	Provide common applications where benefits identified
	GRHA pursues initiatives outlined in Rural Directions policy, National Health and Hospitals Reform and Sub-regional planning
	Assist regional health services to identify and implement ICT that enhances the amenity of work, making them the employer of choice
GRHA is positioned for upcoming health reform	Continue to build on the strong foundations already laid through the converged IP network (Wide Area Network)
GRHA enhances the ability for regional health services to attract and retain the right skills in order to achieve each health services' objectives	
GRHA regional health services have equal to or better access to ICT than their metropolitan counterparts to enable equality of access to scarce healthcare resources	

	Ensure redundancy, performance, and connectivity of all GRHA ICT services
	Applications provided by GRHA will be supported within agreed Service Levels
	Financial and Committee functions of GRHA are reviewed
	Establish positive relationships with all GRHA members and seek integration of services
GRHA operating with clear governance in line with legislative requirements and best governance principles	GRHA provides service across multiple locations whilst ensuring equity in service
Increased pursuit of integration of services through leverage of capabilities across the region and engaging in strong partnerships	
Leveraging existing and emerging capabilities within GRHA and the regional health services to provide an integrated model of care	

Action Plans:

a) Vision: Regional health services have the technologies in place to deliver clinically appropriate health outcomes

Strategies & Activities

Leverage current investments in ICT				
Activities	Area	Who	When	Notes/Progress
Deliver a consistent and regular technology refresh program	Governance		Year 1 then Annually	
Review Network design for future uses (increased capacity, security and IPv6)	Service Delivery		Year 2	
Utilise current GRHA telecommunications contract to gain bandwidth increases	Service Delivery		Year 1	
Strengthen and extend secure access to the GRHA and local networks via NextG	Service Delivery		Year 2	
Pursue further IP convergence through the conduct of a Unified Communications Strategy	Business Enhancement/Innovation		Year 1	
Assess capability to broaden core and non-core services including Disaster Recovery (DR), Backup and Storage	Service Delivery		Year 1	

In partnership with GRHA Lead Agency, pursue attractive State-Wide software licensing	Service Delivery		Year 1	
Leverage regional and sub-regional ICT services for the benefit of all members	Service Delivery		Year 1 & Ongoing	
Build on success of Clever Health initiatives through the pursuit of remote tele-monitoring of patients and room, mobile and desktop video collaboration.	Business Enhancement/Innovation		Year 3 - 5	Foundation elements in place by Year 3
Establish a desk-top Video capability building on the work undertaken in the Clever Health project	Service Delivery		Year 2	
Enhance access to Local Area Networks through the provision of secure Guest VLAN's	Service Delivery		Year 1	
Build an interconnect with relevant Metropolitan hospitals to enhance communication by video, voice and data.	Business Enhancement/Innovation		Year 2	

Successfully implement HealthSMART applications				
Activities	Area	Who	When	Notes/Progress
Complete the implementation of the ORACLE FMIS across GRHA participating agencies and identify gaps in functionality for further enhancement of systems and identification of additional solutions	Business Enhancement/Innovation		Year 1	
Implement a rostering system across GRHA agencies	Business Enhancement/Innovation		Year 1	
Successfully transition HealthSMART projects into operations and a GRHA support environment	Service Delivery		Year 2	

Pursue ICT solutions for clinical care				
Activities	Area	Who	When	Notes/Progress
Investigate, recommend and standardize on hardware for provision of application at the bedside or Point of Care (Point of Care devices)	Business Enhancement/Innovation		Year 3	
Pursue solutions to enable broader uptake and development of e-referral amongst health providers in the region	Business Enhancement/Innovation		Year 1	
Pursue applications that enable care plans to be shared throughout the region (e-care planning)	Business Enhancement/Innovation		Year 1	
Consider and review clinical document management solutions for applicability to regional health services (specifically considering the scanned medical record)	Service Delivery		Year 2	
Establish a Single Authentication System for all health workers in the region through a single sign on capability and common Active Directory across the Alliance	Service Delivery		Year 3 – 5	
Provide a common email service	Service Delivery		Year 1	

Pursue solutions to address demand management

Activities	Area	Who	When	Notes/Progress
Conduct market analysis of ICT solutions supporting demand management in health, including care planning, care pathways and patient flow with a view to recommending implementation	Business Enhancement/Innovation		Year 2 - 3	
Undertake technology projects that support health service demand management programs, and bed diversion strategies, potentially beginning with HARP and Transition Care.	Business Enhancement/Innovation		Year 2 - 3	

b) Vision: GRHA assists regional health services to address increasing consumer demand and expectation of service delivery

Strategies & Activities:

Support research and knowledge management through resources available to members				
Activities	Area	Who	When	Notes/Progress
Allocate a resource within GRHA for assistance with ICT related submission writing	Governance		Year 2	
Provide web publishing software available to all members and customers	Service Delivery		Year 1	
Investigate potential software solutions for data mining, business intelligence and reporting and recommend for implementation	Business Enhancement/Innovation		Year 3 - 5	

c) Vision: ICT initiatives will be funded through annual prioritisation within legislative and budget constraints

Strategies & Activities:

A five year initiative list will be developed with annual prioritisation of funding and implementation plans				
Activities	Area	Who	When	Notes/Progress
Each year, a capital management plan will be developed and endorsed	Governance		Year 1 then annually	
Each year a prioritized initiative list will be developed and endorsed	Governance		Year 1 then annually	
The initial initiative list will be based on work currently underway in GRHA and the priorities identified in the Strategic Plan, thereafter the initiative list will be reviewed annually	Governance		Year 1 then annually	

Seek additional funding from current and future funders and pursue alternate ICT funding models				
Activities	Area	Who	When	Notes/Progress
Pursue Commonwealth Department of Health and Ageing (through Medicare Australia) to provide Medical Benefits Scheme (MBS) item numbers (charging rates) for consultations that utilise non-face-to-face consultation including video consults and care planning.	Business Enhancement/Innovation		Year 2	
Identify appropriate MBS items for video conferencing and market video consultation to practitioners throughout the region and beyond	Business Enhancement/Innovation		Year 2	
Pursue State and Commonwealth funders to fund alternate service delivery models including shared care planning, remote consults, home based care models and providing access to specialist care remotely.	Governance		Year 1 and ongoing	

Establish exemplar service delivery models supported by ICT and attract funding for both service delivery and ICT under a single model. One service model may include remote monitoring of clients, keeping patients out of hospitals.	Business Enhancement/Innovation		Year 3 - 5	
Active ongoing identification of opportunities with GRHA members	Governance		Year 3 - 5	

d) Vision: Regional health services able to respond quickly to emerging health trends driving shifts in models of service delivery

Strategies & Activities:

Support regional health services in the pursuit of solutions to address the key areas of chronic disease, complex needs, and aged care				
Activities	Area	Who	When	Notes/Progress
Undertake technology projects that support health service CDM programs, and Prevention/Health Promotion efforts	Business Enhancement/Innovation		Year 3 - 5	
Resource a shared systems integration function within GRHA	Service Delivery		Year 1	
Integrate P&CM systems and General Practice systems	Business Enhancement/Innovation		Year 2	
Establish a web-based care planning capability	Business Enhancement/Innovation		Year 3 - 5	
Establish secure messaging between GP's, and the health and community sectors in the region	Business Enhancement/Innovation		Year 3 - 5	

Activities	Area	Who	When	Notes/Progress
Investigate and implement Community care information systems to fill gaps in current applications	Business Enhancement/Innovation		Year 1	
Evaluate options for solutions that focus on shared care models	Business Enhancement/Innovation		Year 3 - 5	
Consolidate and integrate new systems with existing systems	Business Enhancement/Innovation		Year 2	

e) Vision: GRHA is positioned for upcoming health reform

Strategies & Activities:

Provide common applications where benefits identified				
Activities	Area	Who	When	Notes/Progress
Reduce the number of systems in use across Alliance where practicable	Service Delivery		Year 3 - 5	
Identify functional requirements in common across agencies	Service Delivery		Year 2	
Implement the e-Index identifier management system allowing for the implementation of the National Health Identifier and integration with GRHA and State ICT systems	Service Delivery		Year 1	

Activities	Area	Who	When	Notes/Progress
Respond to eHealth policy as it is established including providing information to an Electronic Health Record, National Health Identifiers and National Provider Identifiers.	Business Enhancement/Innovation		Year 2	
GRHA moves towards integrated electronic health records in line with integration of health services across the care continuum	Business Enhancement/Innovation		Year 3 - 5	
Identify opportunities and threats to health services and to GRHA	Governance		Year 1	

f) Vision: GRHA enhances the ability for regional health services to attract and retain the right skills in order to achieve each health services' objectives

Strategies Activities:

Assist regional health services to identify and implement ICT that enhances the amenity of work, making them the employer of choice				
Activities	Area	Who	When	Notes/Progress
Provide regional health services with access to e-learning tools for professional development and peer support	Service Delivery		Year 2	
Provide intuitive and comprehensive Human Resource systems to ensure that regional health services meet legislative obligations and promote benefits of working in technologically advanced workplaces	Business Enhancement/Innovation		Year 1	
Improve remote access in the region to support remote working	Service Delivery		Year 2	

g) Vision: GRHA regional health services have equal to or better access to ICT than their metropolitan counterparts to enable equality of access to scarce healthcare resources

Strategies & Activities:

Continue to build on the strong foundations already laid through the converged IP network (Wide Area Network)				
Activities	Area	Who	When	Notes/Progress
Pursue early adoption of the National Broadband Network	Governance		Year 2	
Prepare for National Broadband Network through interaction with DBCDE	Governance		Year 1	
Increase wireless capacity within the region building on the work undertaken in the Clever Health project	Service Delivery		Year 2	
Provide an upgraded internet service	Service Delivery		Year 1	
Interconnect the GRHA Network with partner health and education services, particularly in metropolitan areas	Service Delivery		Year 2	

Activities	Area	Who	When	Notes/Progress
Improve network monitoring and reporting	Service Delivery		Year 2	
Create a service catalogue – including SLAs, processes and procedures	Governance		Year 2	
Investigate alternate redundant links to HealthNet	Business Enhancement/Innovation		Year 2	

Applications provided by GRHA will be supported within agreed Service Levels				
Activities	Area	Who	When	Notes/Progress
Establish a support framework and service within GRHA for HealthSMART systems	Service Delivery		Year 2	
Establish a technical support model for GRHA services	Service Delivery		Year 1	
Formalise helpdesk and support arrangements for GRHA services – 1 st level and 2 nd level	Service Delivery		Year 1	
Establish training programs for GRHA applications and 1 st level support	Governance		Year 3 - 5	
Assess opportunities to rationalise ICT resources across the region	Governance		Year 3 - 5	

h) Vision: GRHA operating with clear governance in line with legislative requirements and best governance principles

Strategies & Activities:

Financial and Committee functions of GRHA are reviewed				
Activities	Area	Who	When	Notes/Progress
Establish a finance sub-committee	Governance		Year 1	
Develop and clarify the structure of GRHA in line with member expectations	Governance		Year 1	
Define and refine core services including service levels	Governance		Year 1	
Review cost recovery arrangements for services and applications	Governance		Year 2	
GRHA conducts annual "housekeeping" of its functions to ensure all members and customers have knowledge of what is being provided, information is communicated and transparency measures are in place	Governance		Year 1 then annually	
Annual review of GRHA Executive Officer, GRHA Executive Committee, any sub-committees and the GRHA Joint Venture Agreement	Governance		Year 1 then annually	

i) Vision: Increased pursuit of integration of services through leverage of capabilities across the region and engaging in strong partnerships

Strategies & Activities:

Establish positive relationships with all GRHA members and seek integration of services				
Activities	Area	Who	When	Notes/Progress
Improve partnerships with funders, suppliers, members, customers	Governance		Year 1	
Identify and develop partnerships with other sectors and private organisations including Private Health	Governance		Year 2	
Enable integrated health service delivery across Alliance	Business Enhancement/Innovation		Year 3 - 5	
Streamline agency ICT processes	Business Enhancement/Innovation		Year 2	
Identify benefits of active GRHA membership	Governance		Year 1	
Develop Communications Plan with annual review	Governance		Year 1	
Develop value propositions to improve relationship with Lead Agency	Governance		Year 1	
Engage Lead Agency in operation of GRHA and seek to expand Alliance in line with National eHealth Strategy	Governance		Year 3 – 5	

Develop marketing plan to attract additional customers to GRHA	Governance			Year 2	
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j) Vision: Leveraging existing and emerging capabilities within GRHA and the regional health services to provide an integrated model of care

Strategies & Activities:

GRHA provides service across multiple locations whilst ensuring equity in service				
Activities	Area	Who	When	Notes/Progress
Establish technologies for home monitoring of patients/clients	Business Enhancement/Innovation		Year 3 - 5	
Pursue ICT that assists regional health services to reduce travel time and transport costs	Business Enhancement/Innovation		Year 2	
All applications available in a fully mobile environment	Business Enhancement/Innovation		Year 5	
Provide email to a mobile workforce (email to PDA's and phones)	Service Delivery		Year 1	

ICT Initiatives underway:

Some initiatives covered in this ICT Strategic Plan have already commenced or significant discussion about pursuing them have begun.

These include:

- Thin client software enablement at BHS and GRHA
- Remote access review and analysis
- Common Portal access
- Common Active Directory structure
- Single Sign On (SSO) to be implemented once AD integration/structure complete
- Sharepoint availability for document management
- Tandberg Movi desktop video conferencing trial
- Collaboration with Gippsland Health Alliance in Office Communication Server (OCS) (requires common AD structure)
- Network management and monitoring review (in line with review of upgrade of Call Mgr and core network routers and switches)
- Internet upgrade (Telstra proposal to GRHA and VARH market quotes)
- GRHA Executive Finance Sub-Committee nominations

Financing the Strategy

The Strategy and the initiatives it proposes must be affordable and sustainable. To achieve this it must be underpinned by a transparent funding framework that considers not only the cost of new development and implementation of the initiatives but also the ongoing cost of operations and the need for health services to maintain capability in their local ICT infrastructure.

Project costs must transparently recognise all elements, including change management, that are necessary to achieve the planned benefits, not simply the deployment of the technology, and will require equally transparent processes to monitor and assess achievement of the benefits. The extent of funds required to support the proposed initiatives will become clearer through annual project prioritization and business case development processes.

Sources of funds potentially include Government, health services and external bodies. The framework must reflect incentives for action by each of these parties.

ⁱ The process to change the Privacy Act has commenced.

ⁱⁱ This capability has already been developed by Medicare Australia and is based on generating a unique 16 digit number based on the Medicare number for consumers and providers. This work was commissioned by NeHTA and is available for demonstration

ⁱⁱⁱ Department of Primary Industries, Sustaining Rural Communities: *New strategies for managing change in rural Victoria*, Department of Primary Industries, Melbourne 2005

^{iv} Rural directions for a better state of health, Victorian Government Department of Human Services, November, 2005

^v HealthSMART was a six-year \$323 million program, approved in 2003 to implement the Victorian Whole of Health Information and Communication Technology (ICT) strategy across the Victorian Public Health System.

The HealthSMART program aimed to:

- Replace obsolete and unsupported applications in health care agencies with capable industry standard products;
- Reduce the administrative burden on health care professionals; and
- Ease the costs associated with updating technical infrastructure within the Victorian Public Health System (VPHS) by adopting a more standardised approach to information systems.

The scope of HealthSMART includes:

- FMIS – Finance and Material Management Systems
- HRMS – Human Resources Management Systems
- PCMS (PAS – CMS) – Patient and Client Management Systems
- CMS – Client Management System (for standalone community health services)
- Clinical Systems
- Technical services – Hosting and support of core applications and services including networks (HealthNet)