

An initiative of the Queensland Regional Network Organisation

Health Research Access Project



QRNO

www.qrno.net.au/projects

hra@qrno.net.au

Andrew Fiedler

QRNO Health Research Access Project

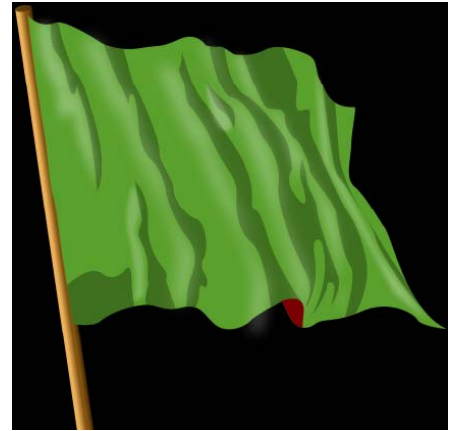
Agenda

- Review of project creation
 - Stage 1 project objectives and outcomes
 - Stage 2 project objectives
 - Current and future activities
 - Q & A
-

QRNO Health Research Access Project

How did the project start?

Recognised need to provide high-speed and reliable network access for university staff & students within hospitals and from hospitals back to their university and the Internet with minimal duplication of effort and infrastructure.



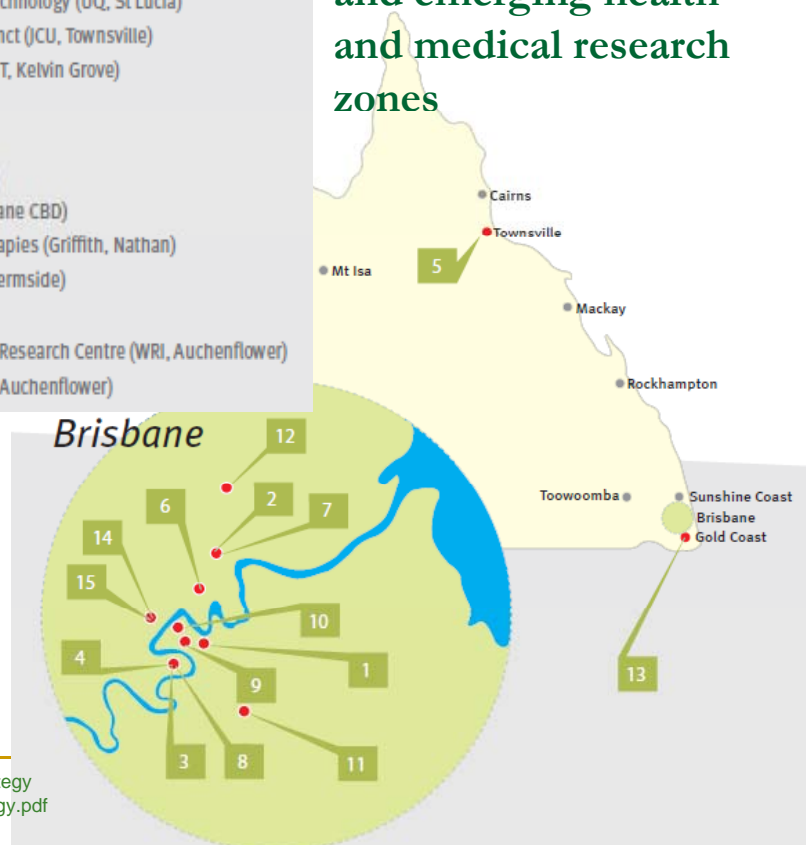
Why was this suddenly an issue?

Growing collaboration between universities, QH and private hospitals in:

- Research
- Joint staff appointments
- Student placements

1	\$334M proposed Translational Research Institute (PAH, Woolloongabba)
2	\$145M proposed QIMR Smart State Medical Research Centre (Herston)
3	\$105M Queensland Bioscience Precinct (UQ, St Lucia)
4	\$82M Australian Institute for Bioengineering and Nanotechnology (UQ, St Lucia)
5	\$76.6M Australian Tropical Science and Innovation Precinct (JCU, Townsville)
6	\$70M Institute for Health and Biomedical Innovation (QUT, Kelvin Grove)
7	\$66M UQ Centre for Clinical Research (UQ, Herston)
8	\$63M Queensland Brain Institute (UQ, St Lucia)
9	\$39M Mater Medical Research Institute (South Brisbane)
10	\$36M Australian e-Health Research Centre (CSIRO, Brisbane CBD)
11	\$34.75M Eskitis Institute for Cellular and Molecular Therapies (Griffith, Nathan)
12	\$25.5M Medical Engineering Research Facility (TPCH, Chermiside)
13	\$22M Institute for Glycomics (Griffith, Gold Coast)
14	\$21.4 The Wesley Research Institute Health and Medical Research Centre (WRI, Auchenflower)
15	\$7.98M The Wesley Research Institute Tissue Bank (WRI, Auchenflower)

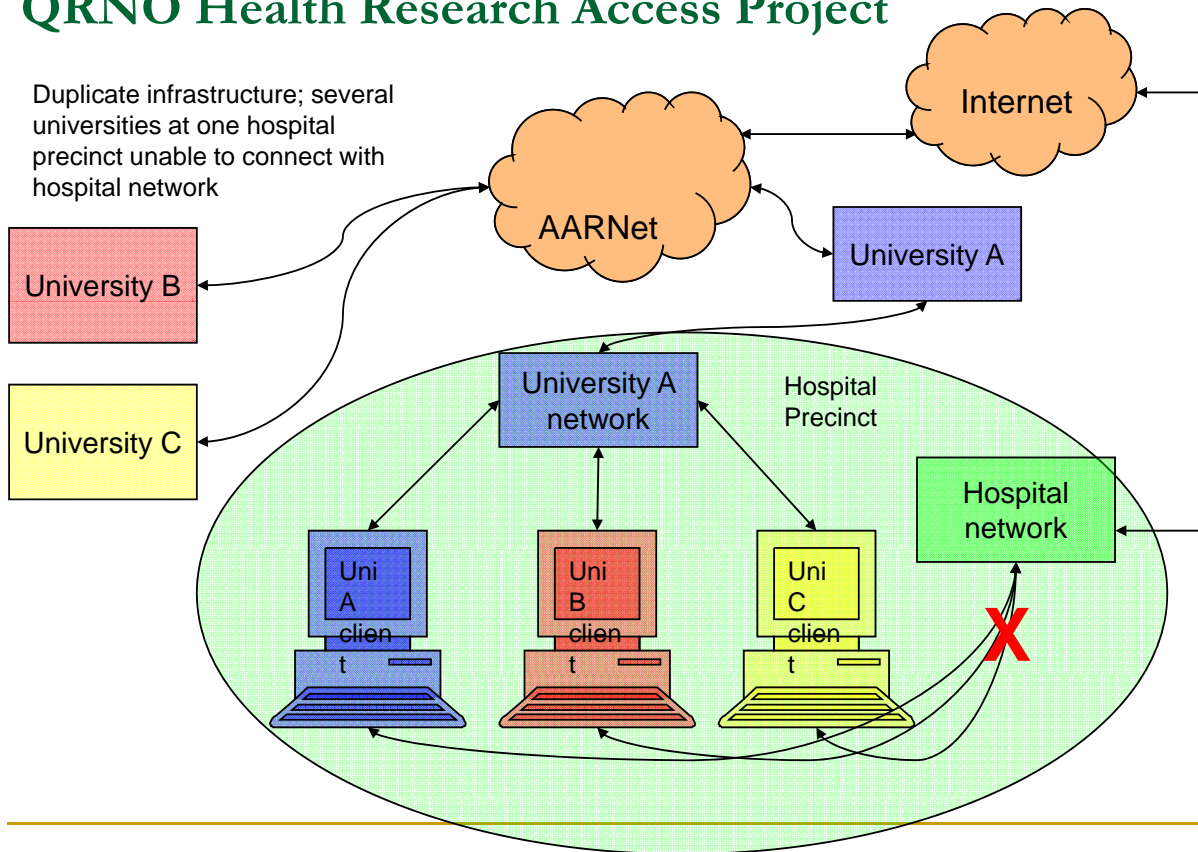
Queensland's existing and emerging health and medical research zones



- \$1, 128M infrastructure investment
- \$25.65M for a Health and Medical Research Program over 4 years

QRNO Health Research Access Project

Duplicate infrastructure; several universities at one hospital precinct unable to connect with hospital network



QRNO Health Research Access Project

Overall Project Aims:

Provide the best possible access to computing resources for staff, students and collaborating clinicians by:

- Implementing suitable network designs and architecture, support and cost sharing arrangements and access attainment
- Piloting and establishing wireless access points at key health precincts
- Formalising agreements with Queensland Health and private hospitals on the sharing of physical infrastructure.



QRNO Health Research Access Project

There are benefits for QH and private hospitals in this project:

- Potential shared access to university infrastructure
 - Known & simple processes for dealing with universities looking for access at hospitals
 - Known support processes to minimise impact on hospital help desks and support
 - Provide an enhanced experience for clinician and joint staff appointments
 - Provide an enhanced experience for students
-

QRNO Health Research Access Project

Stage 1 Objectives and Outcomes

- 1 Determine the no. of staff and student placements at health precincts in Qld
 - 2 Determine the university installed network infrastructure at health precincts in Qld
 - 3 Determine a suitable network design and architecture to meet the needs of these staff, students and collaborating clinicians
 - 4 Establish a common support model for these people at health precincts
 - 5 Establish a process for obtaining network access at health precincts
 - 6 Determine an agreed cost sharing model for implementing network access
-

QRNO Health Research Access Project

Stage 1 Outcomes (Cont'd)

These “in-principle” agreements were obtained from the Queensland Health eHealth Advisory Group:-

- To share cabling infrastructure and network equipment space on sites. At present this occurs at a local level but understandings vary between sites.
 - To share wide area links (fibre) where it is sensible to do so – using Wavelength Division Multiplexing or similar technology.
 - To establish wireless access points on QH sites to meet the needs of students and research staff with laptops and PDAs.
 - To investigate with universities the viability of using a single PC with multiple virtual environments to avoid the requirement for two PCs on a researcher’s/collaborator’s desk.
-

QRNO Health Research Access Project

Stage 1 Outcomes (Cont'd)

- Important relationships developed with a range of “health” staff in universities, Qld Health and the private hospitals.
 - Involved in the IT infrastructure planning for the new SEQ hospitals at Gold Coast, Kawana Waters and South Brisbane.
 - Involved in other collaborative developments eg. TRI building at PAH
-

QRNO Health Research Access Project

Results from In-scope Hospitals

Hospital	Admin staff	Academic staff	Clinical staff	Research students	Coursework Students	Total	Universities
Cairns	2	2	10	3	93	110	JCU, UQ, GU
Gold Coast	1	3	11	10	766	791	GU, UQ, QUT, JCU
Greenslopes	2	8	12	2	155	179	UQ, QUT, GU, CQU
Ipswich	1	0	7	0	197	205	UQ, QUT, GU, JCU, USQ
Logan	1	3	5	2	222	233	GU, UQ, QUT
Mackay	2	0	4	0	86	92	CQU, JCU, GU QUT, UQ
Mater (Bris)	10	6	29	20	684	749	UQ, QUT, ACU, GU
Princess Alexandra	50	216	40	100	1203	1609	UQ, GU, QUT, JCU, CQU
Prince Charles	3	4	21	17	750	795	QUT, UQ, ACU, GU, JCU, CQU
QE II	1	0	2	0	229	232	GU, UQ, JCU
RBWH	150	155	98	212	2117	2732	QUT, UQ, GU, JCU
Rockhampton	0	1	16	0	102	119	CQU, UQ, JCU, GU
St Andrews (Bris)	0	0	2	0	103	105	ACU, QUT, UQ
Toowoomba	5	1	92	1	149	248	UQ, USQ, GU, JCU, CQU
Townsville	5	7	10	10	132	164	JCU, GU, UQ, QUT, CQU
Tweed Heads	0	0	0	0	30	30	GU
Wesley	0	8	13	3	296	320	QUT, UQ, ACU

Total of Administrative, Academic / Research, Clinical Academic, Coursework & Research Students = **11618**

QRNO Health Research Access Project



Stage 1 informing Stage 2

- 2 major standouts from stage 1
 - The HRA Web App
 - Tangible, demonstrational, outward facing outcome
 - <https://hra.nms.griffith.edu.au/index.php>
 - In Principle support gained from stakeholders, especially groups such as eHAG, QHERC

QRNO Health Research Access Project

Stage 2 – build on in-principle agreements

- 13 objectives broken into 5 categories
 - Stage 1 Finalisation
 - Engagement and Investigations
 - Agreements and Guidelines
 - Deployment
 - Funding



QRNO Health Research Access Project

Stage 1 Finalisation

- QRNO BoM acceptance of Stg1 network, support, and cost sharing models
- Produce templates for cost sharing and support agreements to support the above models
- Establish a process for obtaining network access at health precincts using developed models and templates



QRNO Health Research Access Project



Engagement and Investigation

- Engage with Queensland Health (QH) for the planning of new hospitals
 - Investigate with QH single PC's with multiple virtual environments
 - Investigate options including, but not limited to, MPLS, for a WAN solution
-

QRNO Health Research Access Project



Agreements and Guidelines

- Create a network architecture that makes it possible for QH and Private Hospitals (PH) to share infrastructure with QRNO members
 - Produce security guidelines for sharing of QH and PH infrastructure which satisfies all party's concerns.
 - Formalise agreements with QH and PH on the sharing of LAN and WAN infrastructure
-

QRNO Health Research Access Project

Deployment

- Pilot wireless access for QRNO members at QH and PH precincts prioritised in stage 1



QRNO Health Research Access Project



Funding

- Produce applications for funding to relevant authorities (e.g. government, QRNO, QUESTnet, DIISR etc.) that will facilitate Stage 2 objectives.

QRNO Health Research Access Project

Stakeholder engagement (summary)

- Meeting and briefings with
 - Bronwyn Nardi, QH Sponsor
 - Alan Taylor, QH
 - Chris McVeigh, Carmel King and David Paragreen - GCUH
 - Mike Rebbechi, AARNet e-Health Initiative
 - Susan LeBoutillier, transitional head of Clin-Ed-Q
 - QRNO Board of Management
 - QRNO TAC
 - AARNet Eduroam Project Group



QRNO Health Research Access Project

The Mater



- QRNO Working Party met with Mater Technical and Senior Staff
 - QRNO have agreement from Mater for the planning, and pending approval, installation of eduroam over their wireless network
 - Coverage will encompass the Mater precinct at South Brisbane and Redlands Private Hospital
 - Mater will be the first hospital eduroam in Australia
-

QRNO Health Research Access Project

The Mater



- Mater/QRNO Technical Party formed, with the brief
 - Develop a technical plan
 - Tease out issues which need to be addressed by the project
 - Develop controller templates and/or firewall rules
 - Project is to
 - Develop support and infrastructure sharing agreements
 - Design and execute a communications plan with relevant universities and Mater's Marketing Dept.
-

QRNO Health Research Access Project

Queensland Health



- Planning to trial eduroam at three precincts
 - Robina
 - Princess Alexandra
 - Royal Brisbane and Women's Hospital
 - QH has initiated the University Connect Project to allocate resources
 - 1 yr timeline
 - Part of the Identity Management stream of projects
 - Informed by the QH Access Road
-

QRNO Health Research Access Project

Questions?



Comments!
