



MANATŪ HAUORA

## **Broadband Enabled Rural Health Care**

Rural Broadband Symposium 2009  
Distinction Hotel, Rotorua

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## Key points

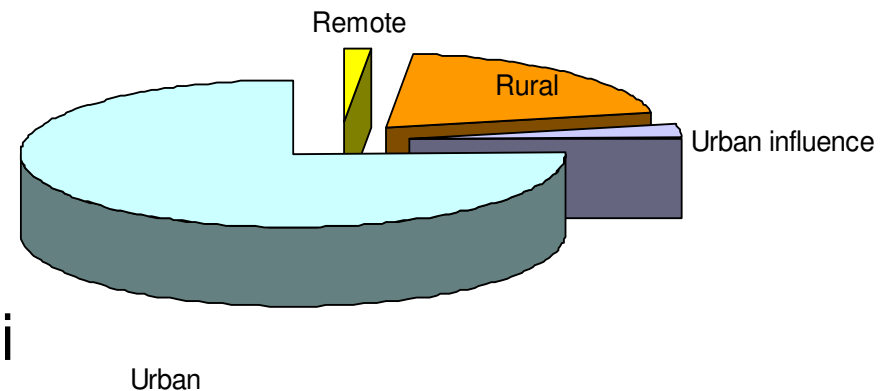
**Rural health care presents some specific challenges**

**Broadband is one component of health service capability – and not just a means to access the internet**

**Broadband can support bringing health services to remote communities**

## New Zealand's "Rural" people

- Highly rural/remote areas (53% of land area) = 66,000
- Other rural areas = 840,300
- Rural with "high urban influence" = 128,000



- 71% European, 18% Maori
- Slightly older than Urban
- On average more children than Urban
- Maori over 45 – 25% Rural cf. 18% Urban
- High Urban influence, 'commuter belt' areas have different work practices and higher population growth

## Living the country life..

### You are more likely to..

- make an ACC claim
- visit outpatients or hospital
- visit A&E
- have neck/back disorder

### and less likely to..

be diagnosed with asthma



### The 66,000 in “Highly Rural” areas..

Have lower median personal income— especially for Maori  
(\$16K versus \$24K national average)

4% have no phone, 51% have Internet access (2006)

4.4% have no access to a vehicle

Have higher suicide risk (men)

## Health Sector provider profile

### Diversity of the Health sector

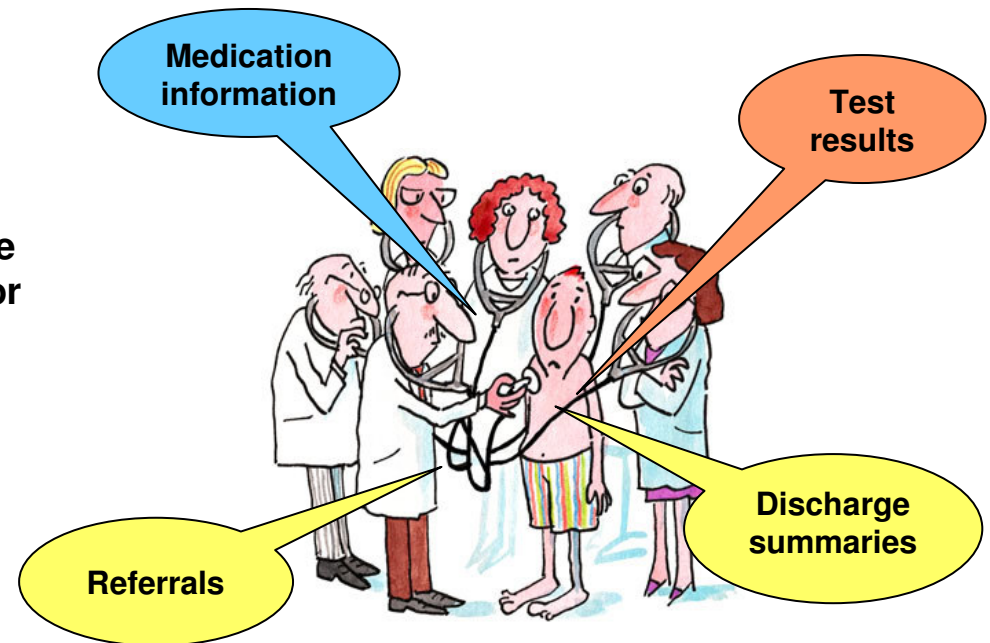
- 19% Clinicians and 25% specialists work in more than one DHB area
- Wide variation in numbers of patients seen/treated per day per clinician
- 34% sector organisations part of a larger group
- 34% sole private practices
- 17% not-for-profit
- 25% GPs work from multiple locations

•Strong agreement across the Sector (94% DHB & 80% Non-DHB clinicians) that improved ICT would help to enhance service delivery - but limited perception of value for money.

•Generally consistent view of top 4 priority information types needed electronically

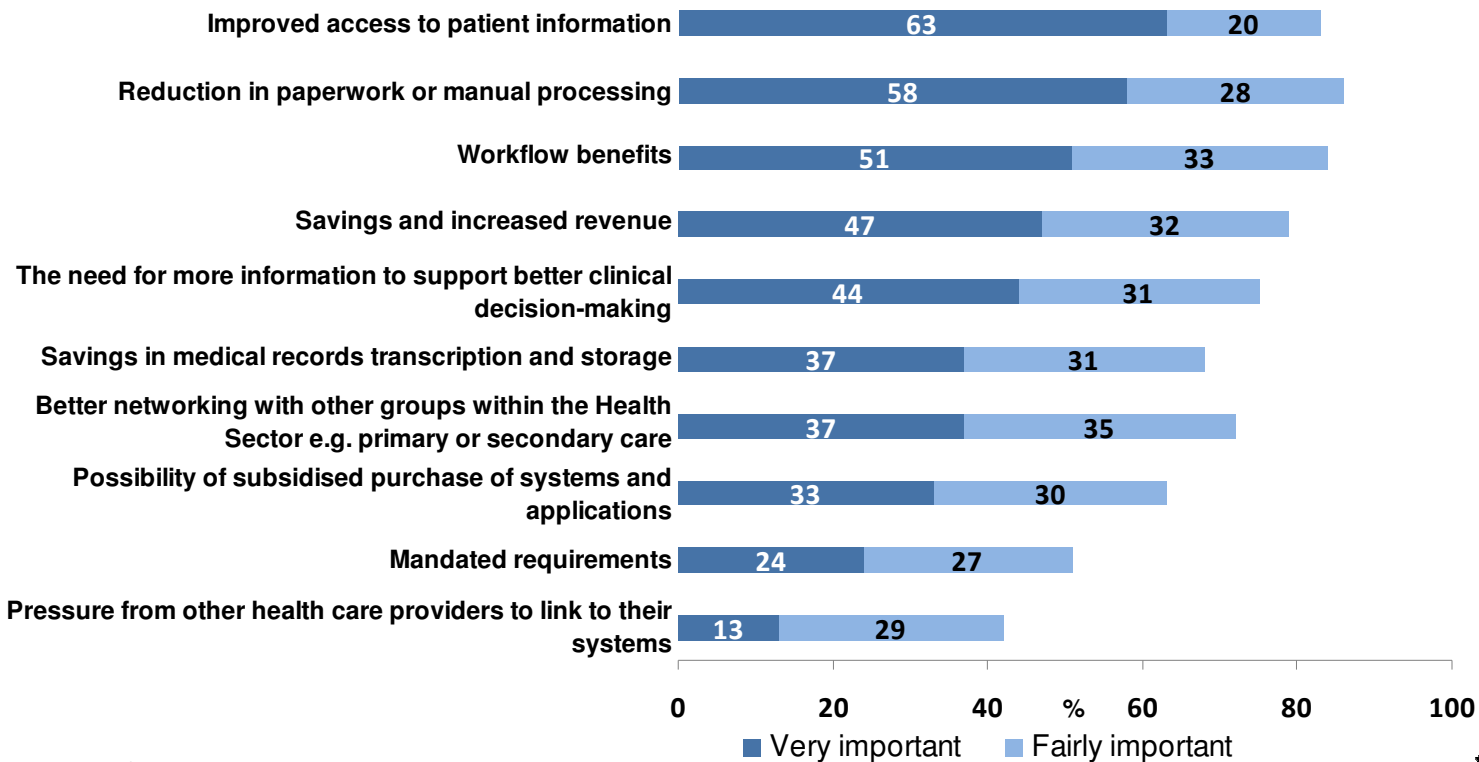
### High level of technology capability in the sector

- 93% Clinicians have internet access and use email.
- 80% Clinicians like to keep up with the latest technology



# What driving ICT investment in Health?

*How important are each of the following factors to your organisation when deciding to invest in electronic systems and applications?*



Base: All ICT Decision-makers (n=784)

Source: Connected Health Research 2009




## Rural Health providers

 **Rural clinicians treat slightly more people per day than urban clinicians (23 v 20) and support more consumers per organisation**

 **Rural Health Provider issues**

 Technology 'speed' and coverage

 Need for good hospital discharge information (E.g. can't pop out to the Chemist if script is needed)

 Access to ICT support services

 Isolation from peers and specialists – support, training, advice

 Referring patients to specialists or Hospital – patient travel

 34% of rural GPs are planning to leave rural practice within five years (2006)

## Addressing the rural challenges of distance, skills and workforce – examples of “emerging” BB enabled services



- **Emergency medicine**
  - On site triage
  - Clinical guidance /support
- **Wound care**
- **Plastic Surgery follow up**
- **Dermatology assessment/review**
- **Heart disease – monitoring and follow up. Ultrasound imaging**
- **Radiology – peer review**
- **Psychiatry**
- **Geriatrics**
- **Hospice care – video phones**
- **Paediatrics**

## Expected benefits of UFB for Health are in deployment of:

- Video based services
- Greater sharing of electronic health information – improved access and workflow
- Integrated Family Health Centres
- Diagnostic Imaging
- Telecare – home based
- Shared systems and applications

## “Ultra-fast” Broadband and Health

In August 09 Cabinet agreed that to take advantage of the UFB investments for Health MoH will work on behalf on clinicians and consumers to ensure that:

- **the priorities for the health sector are understood** and that services are, as much as possible, able to be implemented **in areas of high need**
- *“use of Faster Broadband and the potential for technology enabled improvements in healthcare **are a part of every new Integrated Family Health Centre proposal**”*

## Rural broadband policy

*Most rural hospitals and health care provider sites of significance to rural communities within one kilometre of a rural school connected under the RBI should also be connected to fibre (with funding for the fibre drop cost and any other connection costs being provided from other sources)”*

**Determined on a case-by-case basis by taking into account:**

- the additional cost incurred in connecting the hospital or health site
- the need and potential benefit to be derived from a fibre connection – particularly in terms of **enabling improved primary care services**
- the **significance of the hospital or health site to the local community**, and the **potential benefits that would result** from connecting it to fibre
- the **availability of funds** (outside of funding for the RBI) to contribute to the fibre drop and connection costs
- the **willingness and ability of the health provider** to purchase a fibre-based service.

## Linking Broadband investment to health benefits

### Linked to the Primary Care Implementation Plan – IFHCs.

- IFHCs as centres supporting the community – enabling provision of services such as: videoconferencing, diagnostic imaging and home based Telecare
- EOI selection process informing the prioritisation for funding and roll-out of faster broadband to support.

### Key steps:

- November 2009, EOIs for participation in BSMC selected to proceed to business case. This will inform decisions around which areas require broadband in the first wave of implementation.
- By December 2009, proposals from potential LFC co-investors.
  - Indicate the regions likely to receive the first phase of funding from this initiative.
  - Ministry of Health will provide advice on the requirements identified from EOI process to align, where possible, any plans for fibre deployment.
- Early 2010, identify rural schools and therefore which hospitals and health care provider sites outside the 75 percent coverage are able to be connected.

# Enabling more effective rural Healthcare – Primary Care and IFHCs

SECONDARY

PRIMARY

COMMUNITY

Hospital/DHB



- Consults
- Tests
- Referral & discharge
- Systems access
- Hosting DR
- Share health records

Other provider sites

- Peer review
- Consult
- Train
- Share systems & health records



- Diagnostic Imaging
- Videoconferencing



- Home assessments
- Electronic consultations
- Sharing health records
- Billing/payments
- Monitoring – 24/7
- Support/advice
- Education

Home-based Telecare



- Alerts
- Education
- Self care
- Feedback loop
- Monitoring
- Electronic consultations
- Support – care giver/family/whānau

Early detection  
Education



Community Medicine

# Nine successful EOI respondents = more than 32 proposed IFHCs

The nine successful EOI proposals now going to business case stage:

- **Canterbury Clinical Network** - a consortium of PHC providers covering half a million people. The proposal focuses on **evolving general practice into IFHCs**, developing the wider team of primary health care professionals and improving cooperation between primary and secondary care.

- **Greater Auckland Integrated Health Network** - a consortium of 274 general practice teams, 11 PHOs and 3 DHBs delivering primary health care to a million Aucklanders. The consortium is committed to working together to achieve better health outcomes, better patient experience and better use of money, **establishing up to 12 IFHCs over the next three years..**

- **Health+ Alliance PHO** - three Pacific PHOs providing primary care services at 17 clinics. The proposal highlights new opportunities for Pacific primary care to better coordinate its services and workforce regionally and to build critical mass for the Pacific sector, **including three IFHCs.**

- **Kawerau PHO** - All 3 PHOs in the Eastern Bay of Plenty, merging into one PHO. **They propose one Integrated Family Health Centre in Whakatane within the next three years and two smaller Whanau Ora Centres in Opotiki and Kawerau.**

- **MidCentral PHOs** - all four MidCentral PHOs (Otaki, Horowhenua, Manawatu and Tararua). They **propose five Integrated Family Health Centres (IFHCs)**, collaboration across health and social organisations, mainstream and Iwi providers, more clinical leadership, management of long term conditions, focus on care of the elderly, care of the young and care of those with mental health issues.

- **Midland Network** - 11 providers from Taranaki, Waikato, Tairāwhiti and Lakes districts which cover an enrolled regional population of around half a million people. The proposal identifies consolidating \$66 million worth of services that are currently purchased and managed by four of the Midland region's DHBs and their provider arms that could be devolved into the community. **Also developing 9 IFHCs.**

- **National Maori PHO Coalition** - 11 PHOs from around the North Island. The proposal aims to devolve services and government-held resources to Maori communities. The Coalition aims to develop a national network of Whanau Ora models of care **including IFHCs**, new care pathways, health and social service integration.

- **Wairarapa Community PHO** - A partnership of Wairarapa organisations, including the seven GP practices, the primary health care nurses group, Wairarapa Hospital clinicians and iwi providers. It is clinically led, and aims to establish the Wairarapa Integrated Family Health Model of care as an integrated health system for Wairarapa people.

- **West Coast PHO** - **The proposal is centred around Integrated Family Health Centres**, workforce retention and devolution of suitable hospital based/DHB owned services. The proposal aims to build on existing initiatives including: nurse-led clinics; the PHO Long Term Conditions programme; rural/generalist and rural immersion programmes for Doctors; Clinical and Rural Nurse Specialists.

Successful proposers have until February 2010 to develop Business Cases. Approved business cases will then progress to implementation.

## Summary – broadband enabled rural healthcare

### Removing the isolation of rural health providers

- Peer review
- Confer/advise/guide
- Education
- Reduced travel to provide care

### Being a remote patient...

- Electronic consultations
- Link to secondary services
- Specialists referrals
- Diagnostic services – e.g. dermatology, wound care
- Enabling remote outpatient clinics
- A & E services
- Medications



### Opportunities for broadband to support rural health:

- Supporting IFHCs as technology “hubs”
- Shared services; hosting/DR, billing, administration, assessment, referral
- High definition video; video conferencing, diagnostic imaging

**QUESTIONS?**

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