User Experience of interRAI Assessment Tools in New Zealand

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New Zealand
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New Zealand

AUSTRALIA

North Island

Auckland
Hamilton
New Plymouth
Palmerston North
Wellington
Nelson
Greytown
Christchurch
Mount Cook
Akaroa
Milford Sound
Wanaka
Queenstown
Te Anau
Dunedin
Half Moon Bay

South Island

Massey University
NZ health sector

- Under stress due to:
  - Demographics - Aging population
  - Long term conditions
  - Workforce
  - Increasing costs - Affordability
  - Health inequalities
  - Public expectations
  - New technologies and devices
Response:

- Regionalisation
- ‘Better, sooner, more convenient care’
  - Shifting services from secondary to primary care and between professional groups
  - Primary care will play a greater role in preventative medicine, delivering traditionally secondary care based services and improved access to specialist diagnostic testing
- Multi-discipline team-based community care
- Innovative use of IT
  - Information technology will enable increased integration and self-management
Practices with Advanced Electronic Health Information Capacity

Percent reporting at least 9 of 14 clinical IT functions*

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZ</td>
<td>92</td>
</tr>
<tr>
<td>AUS</td>
<td>91</td>
</tr>
<tr>
<td>UK</td>
<td>89</td>
</tr>
<tr>
<td>ITA</td>
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<tr>
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<td>GER</td>
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<tr>
<td>NOR</td>
<td>19</td>
</tr>
<tr>
<td>FR</td>
<td>15</td>
</tr>
<tr>
<td>CAN</td>
<td>14</td>
</tr>
</tbody>
</table>

* Count of 14 functions includes: electronic medical record; electronic prescribing and ordering of tests; electronic access to test results, Rx alerts, clinical notes; computerized system for tracking lab tests, guidelines, alerts to provide patients with test results, preventive/follow-up care reminders; and computerized list of patients by diagnosis, medications, due for tests or preventive care.

Source: 2009 Commonwealth Fund International Health Policy Survey of Primary Care Physicians.
National Health IT Plan

Enabling an integrated healthcare model

Phase 2 (5 years)

Shared Care
- Patient Vitals
- E-events
- Care Plans
- Decision Support

Phase 1 (2 years)

Clinical Data Repository
- Medicines Reconciliation

Primary - Community
- GP2GP
- E-Prescribing
- Continuum of Care
- Discharge

Secondary - Tertiary
- Referral
- National Specialty Systems
# National Health IT Board

## Priority Programmes for 2012 - 14

### eMedicines Programme
1. Pharmacy Clinical Integration
   - NZ ePrescription Service (NZePS)
   - Pharmacy Services Agreement (CPSA)
2. ePrescribing and Administration (ePA)
3. eMedicine Reconciliation (eMR)
4. Universal List of Medicines (NZULM) and Formulary (NZF) rollout

### Regional Information Platform (DHBs)
1. Transfer of Care
   - eReferrals and eDischarges
2. Clinical Data Repository / Clinical Workstation / ED
3. Imaging/PACS
4. Clinical support – Labs/Pharmacy
5. Patient Administration System (PAS)

### National Solutions
1. Cancer Information
2. Cardiac Health
3. Comprehensive Clinical Assessment for Aged Care
4. Health Identity
5. Finance Procurement Supply Chain

### Clinical Integration Initiatives
1. Shared Care
   - Patient Portal
   - Long Term Conditions
   - Maternity / Well Child
2. Community/Primary Care
   - Summary view of primary health information
   - Urgent and Unplanned Care

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*National Infrastructure – Secure Connectivity – ICT Capability – Standards*
National Health IT Board
Priority Programmes for 2012-14

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National Infrastructure – Secure Connectivity – ICT Capability – Standards

*Draft for Discussion*
### Population

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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</thead>
<tbody>
<tr>
<td>2002</td>
<td>3,948,500</td>
</tr>
<tr>
<td>2012 (est June 2012)</td>
<td>4,433,000</td>
</tr>
<tr>
<td>2022 (projected)</td>
<td>4,840,000</td>
</tr>
</tbody>
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#### Age group (2012)

- Under 15 years: 892,300
- 15–39 years: 1,497,000
- 40–64 years: 1,432,300
- 65+ years: 611,400

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**Estimated New Zealand population, by age and sex, June 2012**

**Population by broad age group**

1951–2061, series 5

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*Note: The break in series between 1990 and 1991 denotes a change from the de facto population concept to the resident population concept.*

*Source: Statistics New Zealand*
The New Zealand Positive Ageing Strategy

- New Zealand government’s commitment to positive ageing
- multidisciplinary comprehensive geriatric (over 65 years) needs assessment be available throughout New Zealand
- needs assessment is the mechanism used to determine older persons’ level and type of need for publically funded disability support services
- the availability of consistent needs assessment supports shared care planning
**InterRAI** ([http://www.interrai.org/](http://www.interrai.org/))

- interRAI is an international collaborative to improve the quality of life of vulnerable persons through a seamless comprehensive assessment system.

- ‘International Resident Assessment Instrument’

- A suite of tools for compatible assessment across health care sectors
  - Core set of assessment items important in all care settings
  - Additional items specific to particular care populations/care setting

- interRAI instrument systems collect information once and use it for many purposes.
  - clinical decision support tools, case-mix classification systems, quality improvement and monitoring measures, and screening algorithms to target priority groups or identify relative risk of adverse outcomes.
NZ implementation of interRAI

- Phased implementation started in 2008
  - the interRAI National District Health Board Implementation Project (2008-2012)
- Operational funding of $12.509 million was provided to twenty DHBs by Government over four years
- Two interRAI tools implemented initially
  - the interRAI Minimum Data Set Home Care (MDS-HC), and
  - the Contact Assessment (CA).
- Research location - the first phase of implementation occurred in July 2009.
- a student project between August and October 2012 over a six week period
Research aims:

- Barriers to adoption of interRAI electronic assessment tools that are identified by unit/service managers and end users

- Organisational support required pre and post adoption of interRAI electronic assessment tools
Research framework

Adapted from the UTAUT Framework
Research approach

- Qualitative approach
- Semi-structured interviews
- Thematic analysis
Results

- Barriers to uptake included:
  - lack of access to laptops to use the software, ongoing technical issues of connection to the software, and lack of knowledge of the outcomes of using the software.

- There was a lack of understanding surrounding what information is being collected and the reasons for the data collection.

- Ensuring that the use of the assessment tools is not added as another task to an already stretched workload was a key issue raised by several respondents and is a critical success factor to encourage adoption and uptake.

- The tools were perceived by clinicians to be useful and the research has found no issues regarding the level of organisational support training or help-desk support, quite the opposite, feedback was overwhelmingly positive towards the respondents’ own management and organisational support and the training support provided through a service of the District Health Board.
Recommendations:

- Provide ready access to individual laptop/computers
- Consistent network connectivity

- Sufficient training and support be provided early on in the implementation
- Ongoing training and support be provided for interRAI assessors

- Education to include understanding of what information is being collected and for what reasons
Thank you