New Zealand

Population

- 4.1 million People
  - Maori 14%
  - Pacific People 6%
  - Asian 6%
- 39.9 million sheep
New Zealand

Paul Cressey

- The New Zealand Health System
- New Zealand Health Information
- eMedicine NZ Context
- Safe Medication Management Programme
The New Zealand Health System

• 21% Govt Budget
• $12 billion
• 9.45% GDP
• Government Funded 80%
• Primary Care 40%
• Secondary Care 60%
The New Zealand Health System

National Health Strategies

- NZ Public Health and Disability Act 2000
- NZ Health Strategy 2000
- Primary Care Strategy 2001
- Health Information Strategy for NZ 2005
- Accident Compensation Commission
Counties Manukau District Health Board

- Population 410,000
- Budget $1 billion
- Hospitals and Primary Care
- Primary Options Acute Care
- Chronic Care Management
- Lets Beat Diabetes
Health Information Strategy Action Committee

- Ministerial Committee
- Governance, Oversight, Leadership
- Sector Leaders
- Infrastructure Subcommittee
- Health Information Standards Organisation
- National Collections Subcommittee
New Zealand Health Information

Health Information Strategy for NZ

- National Networking
- Anchoring Framework
- Primary Care Information
- Chronic Care Management
- Outpatient Information
- National System Access
- National Health Index
- Health Provider Index
- e Laboratory
- e Pharmacy
- e Discharges
- e Referrals
EMRs in New Zealand

Percent uptake EMR

<table>
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<tr>
<th>NET</th>
<th>NZ</th>
<th>UK</th>
<th>AUS</th>
<th>GER</th>
<th>US</th>
<th>CAN</th>
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<td>98</td>
<td>92</td>
<td>89</td>
<td>79</td>
<td>42</td>
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Percent 7 (14) functions

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Referrals and Discharges in NZ

New Zealand RSD Messages
Jan 05 - Nov 07

Month
No of Messages

January 05 - November 07

235000
95000
115000
135000
155000
175000
195000
215000
235000
NEW ZEALAND HEALTH INFORMATION

Referrals

Receive Information Back from referral (80% or more)

AUS: 76
CAN: 62
GER: 68
NETH: 61
NZ: 82
UK: 75
US: 37
New Zealand Health Information

Hospital Discharges

15 days or more to receive a report

- AUS: 28
- CAN: 58
- GER: 53
- NETH: 48
- NZ: 17
- UK: 52
- US: 23
New Zealand Approach

Point-to-point (push)

Centralised (push and pull)
Information Flows

Appropriate views / subsets of the information below.

Capture, use, and share information locally at the point of care.

Relevant views of information above.

National Views

District / Regional Views

Local Views

Individual

Standards

Indicators

Health Outcomes
NEW ZEALAND HEALTH INFORMATION

Shared Health Event Summary “Patient Vitals”
• Only 27% GP Referral letters had accurate medicines
• Only 52% of Surgical wards medication histories accurate
• 25% inaccuracies in discharge prescriptions
eMedicine NZ Context

HISAC
Health Information Strategy Action Committee

- ePharmacy Sector Leaders Forum
- ePharmacy Action Plan
- Universal “list of medicines”
- GP to Rx Pilot

HISO

- Medicine Term Messaging Stds
- Expert Advisory Groups
- Universal eRx Message
- Medicine Terminology

QIC
Quality Improvement Committee

- DHB Safe Medication Management Project
- Standardised Medication Chart
- Bedside Verification
- Hospital Medication Pilots

Sector Plan
eMedicine NZ Context

Primary

Rest Home / Private Hospital
Medication
Referral
General Practice
Discharge
Report
Community Pharmacy

Secondary

Hospital Clinician
Medication
Referral

Local

CCM Programme

Regional

Hospital Ward
Prescription
Prescription Repository

National

HPaC Payments

Universal Medicine Message
<table>
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<th>Prescribing</th>
<th>New Zealand</th>
<th>Australia</th>
<th>UK</th>
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<td>Australian Medicine Terminology (AMT) (Snomed CT)</td>
<td>NHS Dictionary of Medicines &amp; Devices (dm+d) (Snowmed CT)</td>
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<td>Australian Catalogue of Medicines (ACOM) (GS1 Net)</td>
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<td>PHARMAC schedule</td>
<td>Pharmac Schedule (Pharmacodes)</td>
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Safe Medication Management

Challenge

- 5,000 Patient Medication Errors a year
- 3,500 Patients Temporarily Disabled
- 400 Patients Permanently Disabled
- 150 Patients Die
Safe Medication Management

History

• GS1 NZ
• Ministry of Health Official
• Minister of Health
• “Barcoding Project”
• Quality Improvement Committee
• Lead District Health Board
Safe Medication Management

Quality Improvement Committee Projects

- Optimising Patients Journey
- Management Healthcare Incidents
- Infection Prevention and Control
- National Mortality Review Systems
- Safe Medication Management
- Improving Customer Participation
- Education and Training in Quality Improvement
Objectives

• Reduce the number of medication errors in NZ

• Reduce the number of patients who are permanently disabled or die as a result of medication errors

• Reduce the costs associated with remedial treatment
Safe Medication Management

Eight Hospital Projects

- Standardised Medication Chart
- Medicine Reconciliation
- Standardised Hospital Medicine Systems
- eMedication Record, ePrescribing
- Link Medicine Management Systems
- Unit Dose Packaging
- Introduction Bedside Verification
- Training
Safe Medication Management

Four Sector Projects

- Universal eMedicines List
- Universal eMedicine Messaging
- ePrescribing GP to Rx
- Sector Collaboration