

General Practice in an Online World

Tom Bowden, CEO HealthLink

**All known Health IT
Problems have now
been solved**

Yeah right.



Exactly where are we?

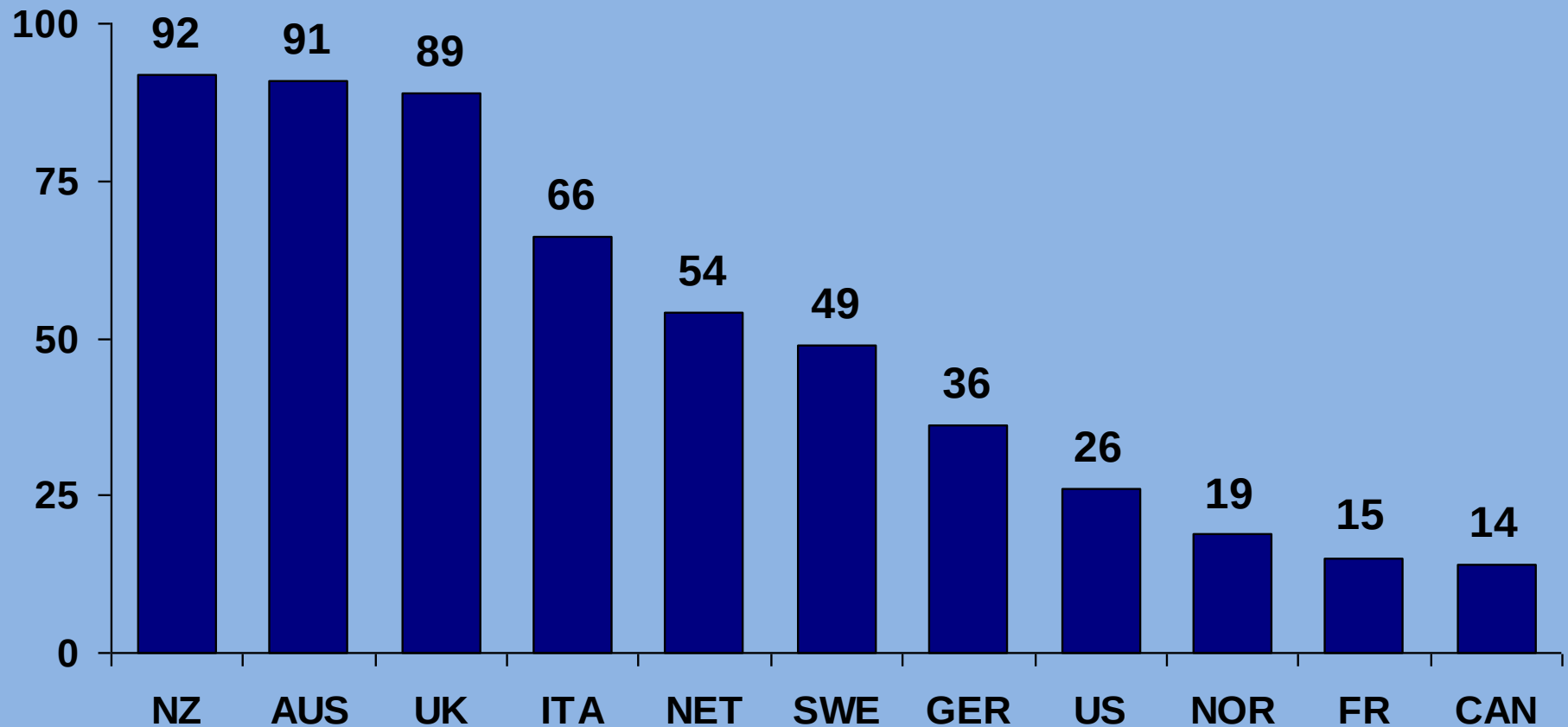


Professor Denis Protti,
Professor of Health Informatics
City University, London and
University of Victoria, British Columbia

“New Zealand’s status as a global leader in integrated healthcare IT has been confirmed in a landmark ten-country study that named **New Zealand** as having the second most integrated advanced country in this field after Denmark.”

Practices with Advanced Health Information Capacity

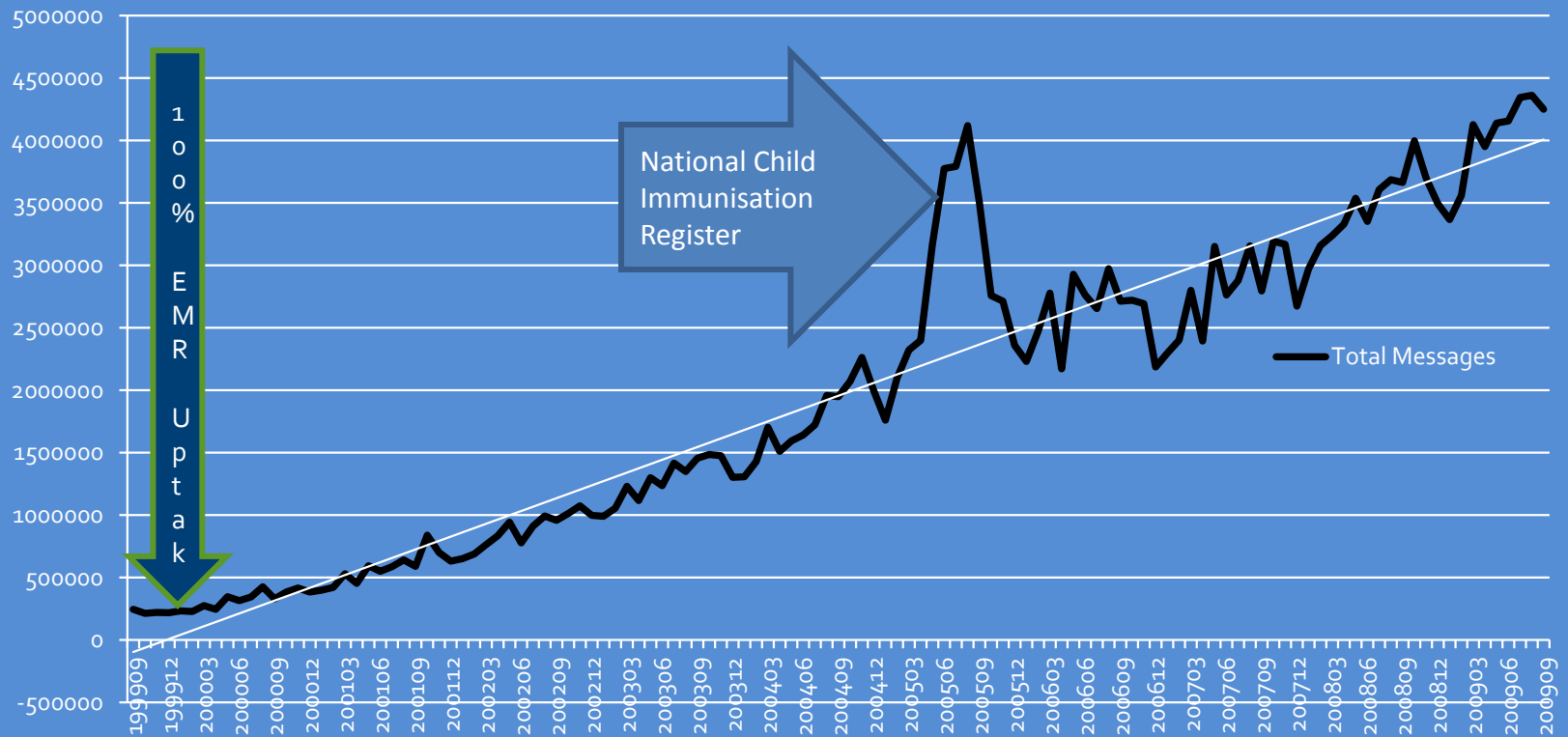
Percent reporting at least 9 of 14 clinical IT functions*



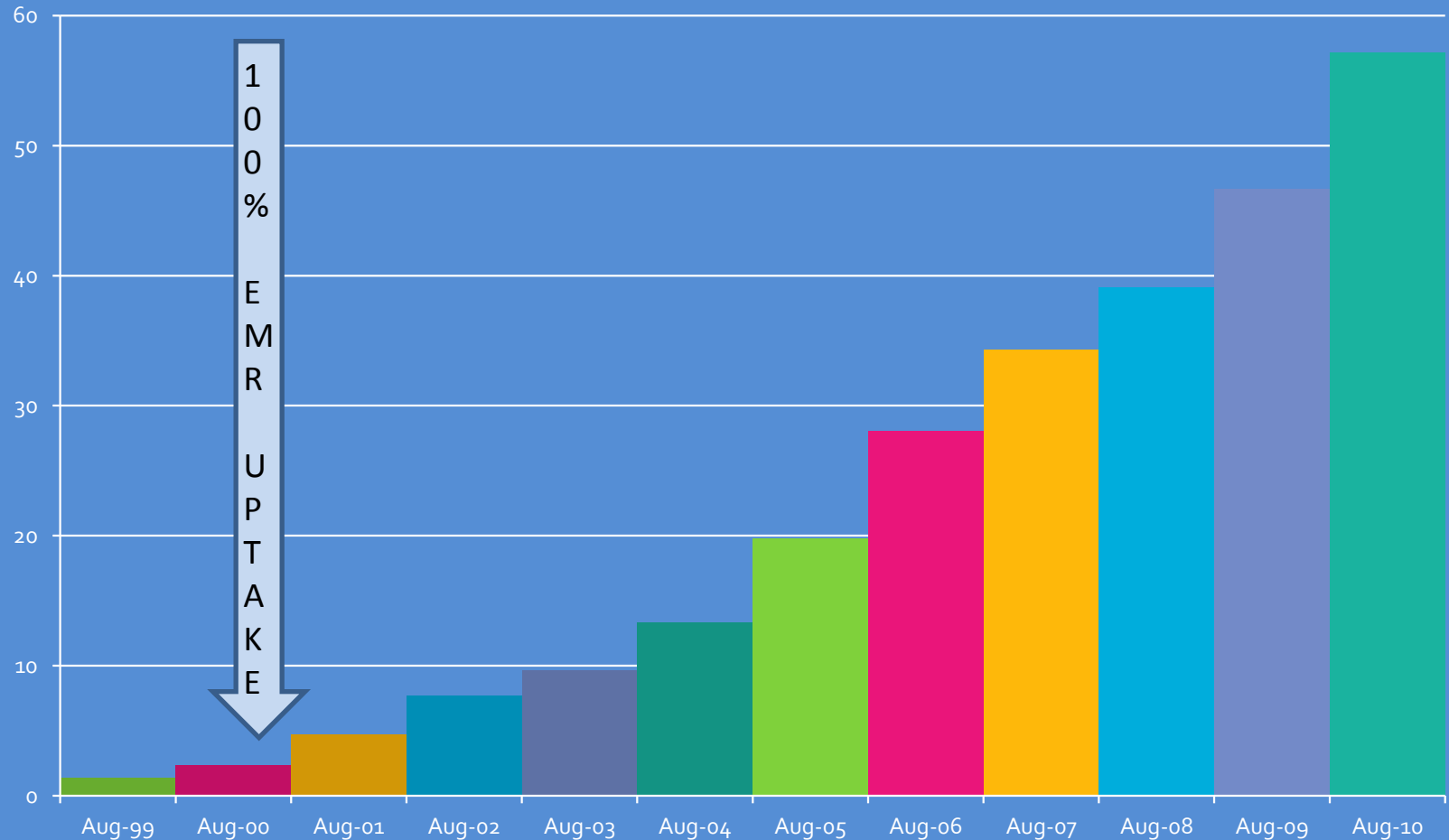
* Count of 14 functions includes: electronic medical record; electronic prescribing and ordering of tests; electronic access test results, Rx alerts, clinical notes; computerized system for tracking lab tests, guidelines, alerts to provide patients with test results, preventive/follow-up care reminders;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

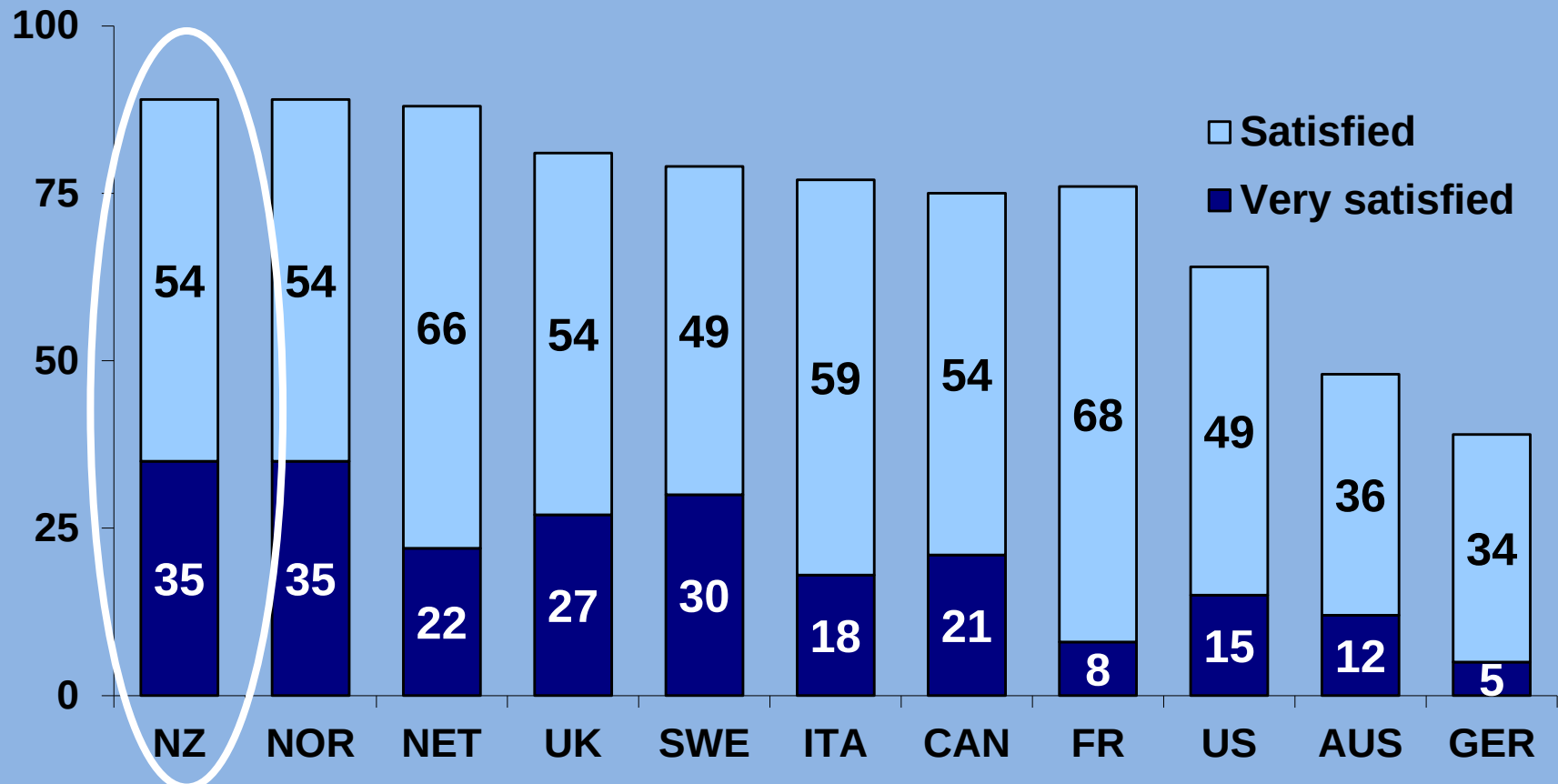
Clinical Transactions



Electronic Partners

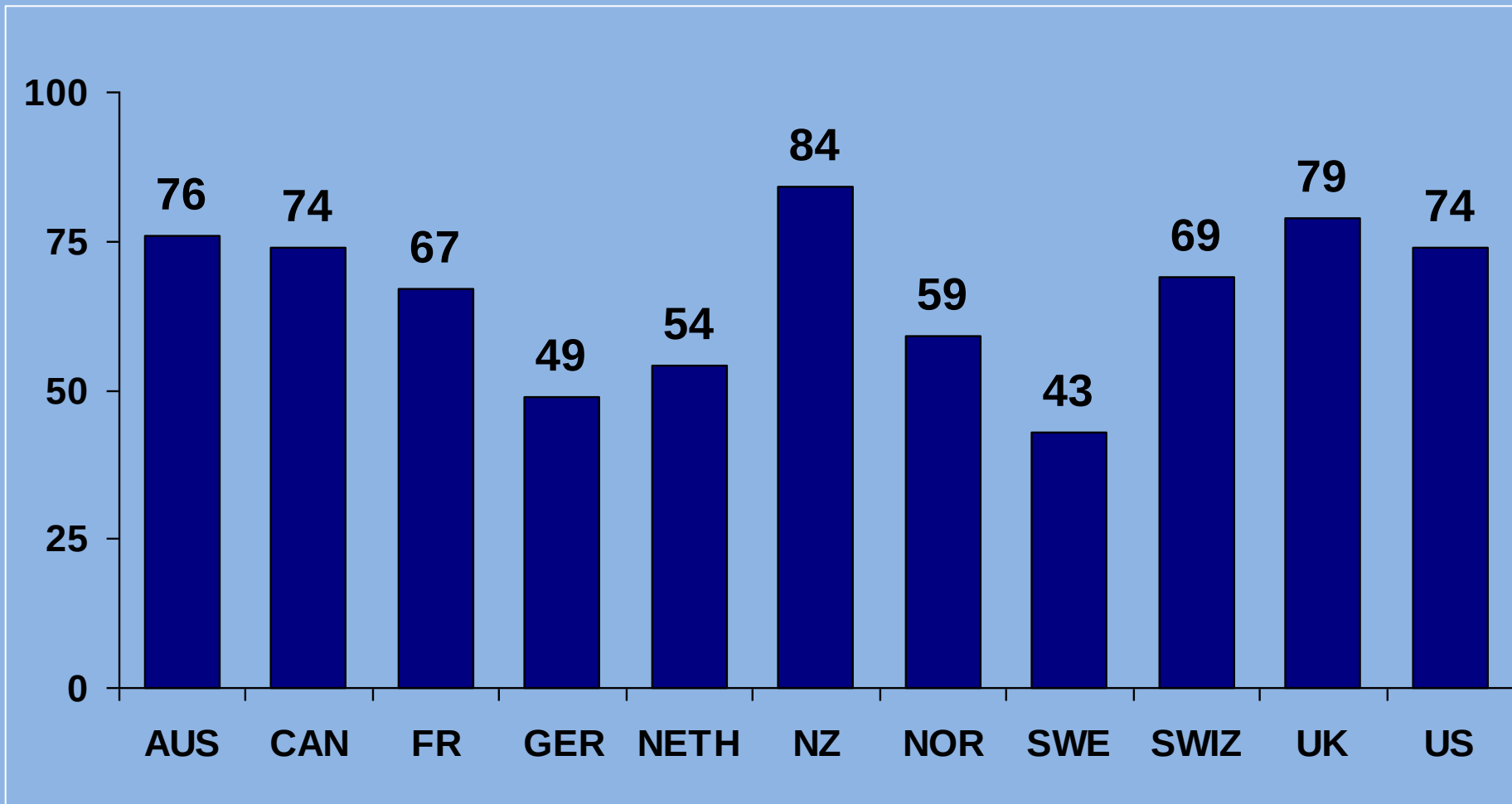


Physician Satisfaction



Quality of Care from Doctor

Percent rated care received in past 12 months from regular doctor
as *very good/excellent*



Base: Has regular doctor/place of care.

Source: ⁸2010 Commonwealth Fund International Health Policy Survey in Eleven Countries.

For the Record

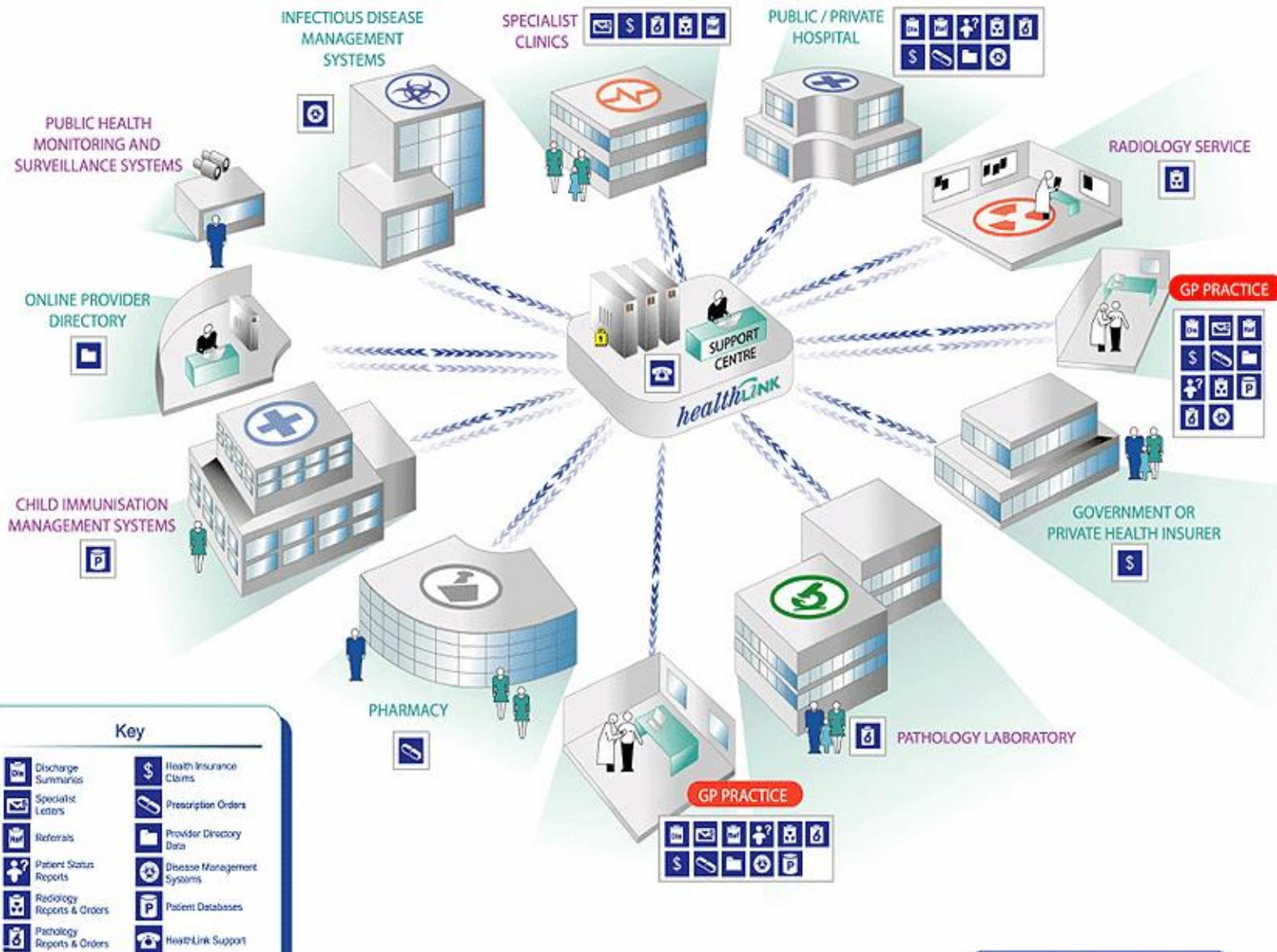
We do have significant strategic Issues that are impeding progress but I am not going to talk about those today

- in question time perhaps

This Presentation?

- Where to from here?
- Moving forward from a position of strength
- Putting broadband to work in the primary care environment

Electronic Messaging



Online Services

Transition – Offline to Online

Offline (messaging)

- Store and forward
- Very dependable
- Easy to support/deliver
- Very useful
- Limited in key respects

Online/Immediate

- Real-time exchange
- Links multiple systems
- Complex to implement/support
- Immensely powerful

Two technologies that complement one another seamlessly
Combined, they are the perfect tools to automate healthcare

Typical Online Services

- E- Lab (Pathology Ordering)
- E-Referrals (Hospitals and Specialists)
- E-Rad (Radiology Ordering)
- E-Prescribing
- Care Insight (Remote enquiry)
- E-Forms

e-Lab Service

- Now being trialled in Wellington
- Based on a Danish System that we have adapted for NZ Use
- Uses the HISO 1014.2 standard and a range of other standards; CDA, LOINC, etc.
- Working well
- Rolling out across Wellington mid-year



Patient

MARY BAKER, ZZZ9994

Send Test - Default

Laboratory

Hlk_Demo_Lab

[News](#)

Profile

Cardiac Panel

Searchkey

[Search](#)

LABORATORY : REQUEST: NORMAL VIEW

[Form view](#)

[Remove tests](#)

[Next](#)

+ RAPID RESPONSE

+ BIOCHEMISTRY

☒ D-DIMER

Normal

+ HAEMATOLOGY

☒ Na K

Normal

+ COAGULATION

☒ Alanine Trans (ALT)

Normal

+ SPECIAL DEMO GROUP

☒ Aspartate Trans (AST)

Normal

+ VIROLOGY

[Form view](#)

[Remove tests](#)

[Next](#)

+ IMMUNOLOGY

[Add all tests-Profile](#)

[Edit](#)

+ DRUGS, SPECIAL CHEM

+ PROTEINS

+ ANTENATAL

+ MICROBIOLOGY

+ CYTOGENETICS AND
MOLECULAR

+ HISTOLOGY

+ CYTOLOGY

[Name Profile]

Cardiac Panel

Demo Prompts

Diabetic

Liver Panel

NTC

Lyme Disease

Pathways 1

CA Lymph Nodes

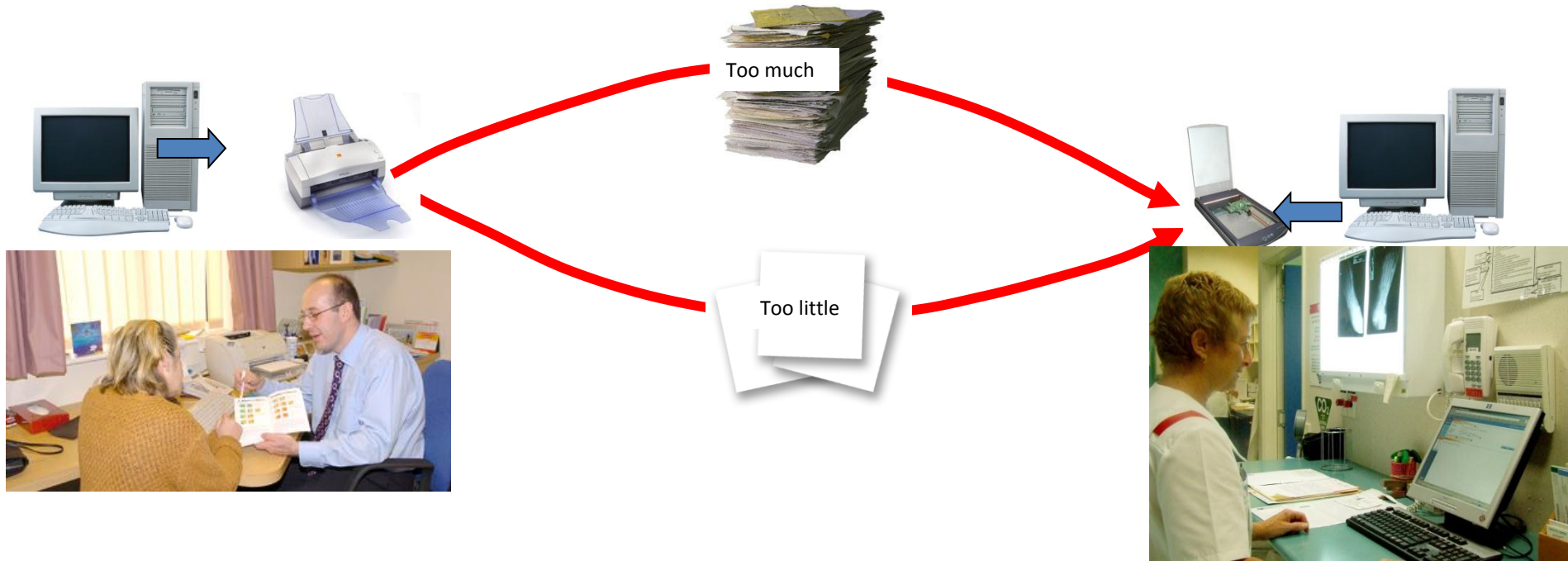
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Electronic Referrals

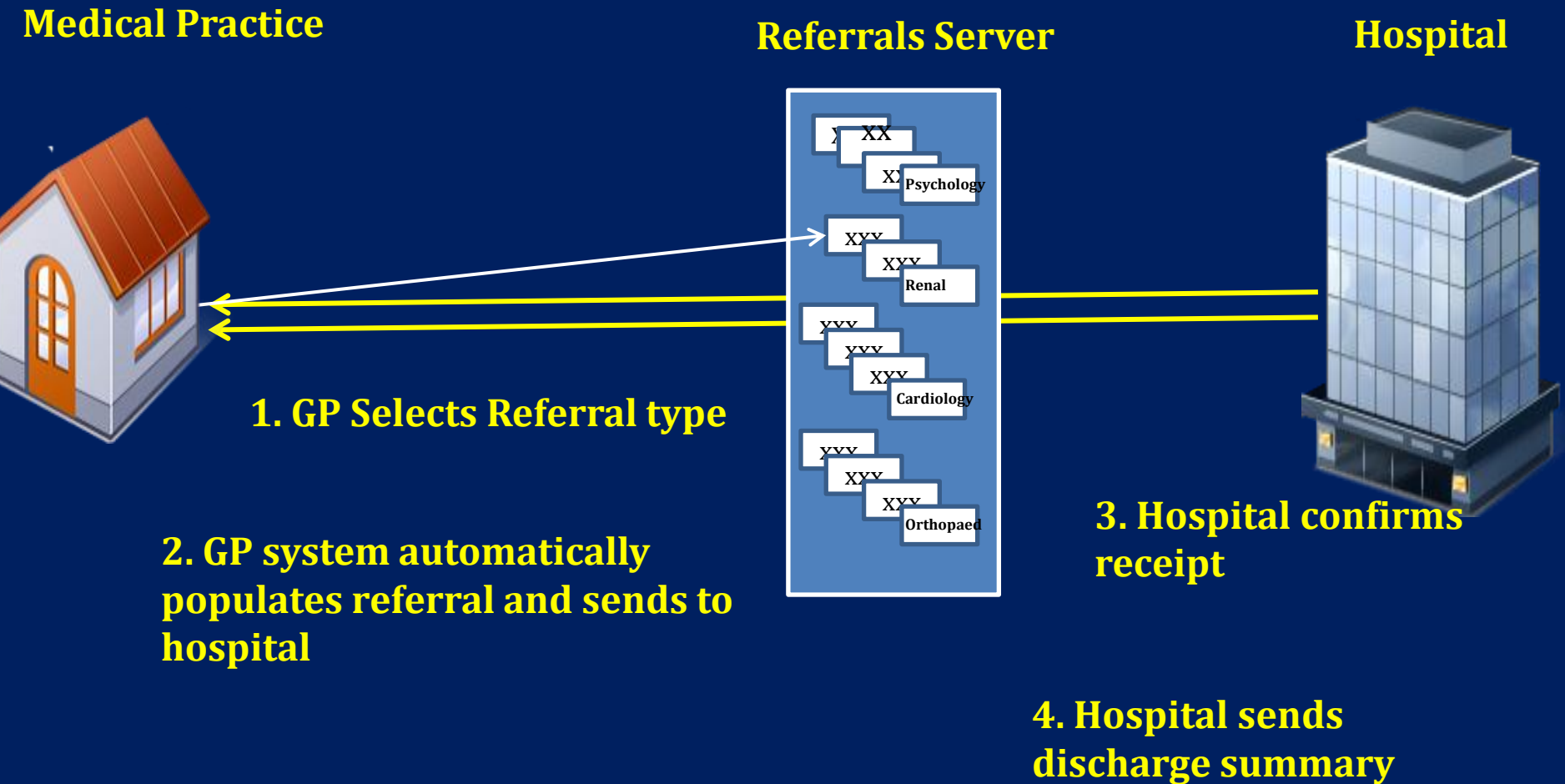
- In use by 50% of NZ by end of 2011
- Approximately 90 standardised referral types in a national e-Referrals library
- Very swift uptake
- Used for 80% of GP referrals within a standard GP consult

Issues with current referral process



1. Frustration with excessive information
2. Frustration at receiving insufficient information
3. Duplication – re requesting inefficiency
4. Re-keying patient data is inefficient
5. Significant risk of lost paper
6. Poor security
7. Slow acknowledgements and updates (if any)

The Electronic Referrals System



Creating and sending an eReferral

General Practice



Hospital



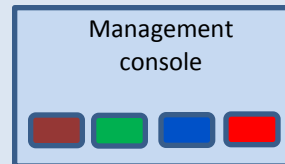
Web services



LEGEND

1. One of 32 eReferral forms is selected and auto populated
2. Referral is sent
3. Receipt is confirmed
4. Treatment option notified

eReferrals Infrastructure



Centralised Forms Library

Technical support



Typical eReferral Form

Cardiology Referral

Submit
Preview
Park
Referral Info ▼

Administration Details:
ADHB
Outpatient Appointment
New Zealand

Patient Information:
SKYWALKER Luke, 31yrs
NHI AAB81234
Ph 09 898 000

Clinical Information:
No referral information provided

Medical History:
No medical history specified

Medications / Allergies:
No long term medicationsbr/allergies /alerts

Patient Disabilities:
No disabilities specified

Referrer Details:
John Watson/Watson & Holmes
Practice/HPI: 88984

Attachments / Reports:
No reports selected, 18 available

Medical Warnings:

Date	Description	
03/11/2000	Warning One	✗
09/09/2010	Warning Two	✗
09/09/2010	Warning Three	✗
09/09/2010	Warning Four	✗

Long Term (Regular) Medications: ⓘ

Date	Details	Dose	Units	Instructions	
03/11/2000	TIAPROFENIC ACID TAB		300 MG	Take 1 tablet twice daily for 2 days, then 1 daily until finished.	✗
09/09/2010	SALBUTAMOL 200 dose, AEROSOL INHALER, 100 MCG PER DOSE [P]	200	100 MCG	Take 1 dose, As Required	✗
01/02/2002	DOXYCYCLINE 50MG TAB	3	50MG	3, Every Four Hours	✗
03/11/2009	GREEN PRESCRIPTION WALK	1		1 Four Times Daily	✗

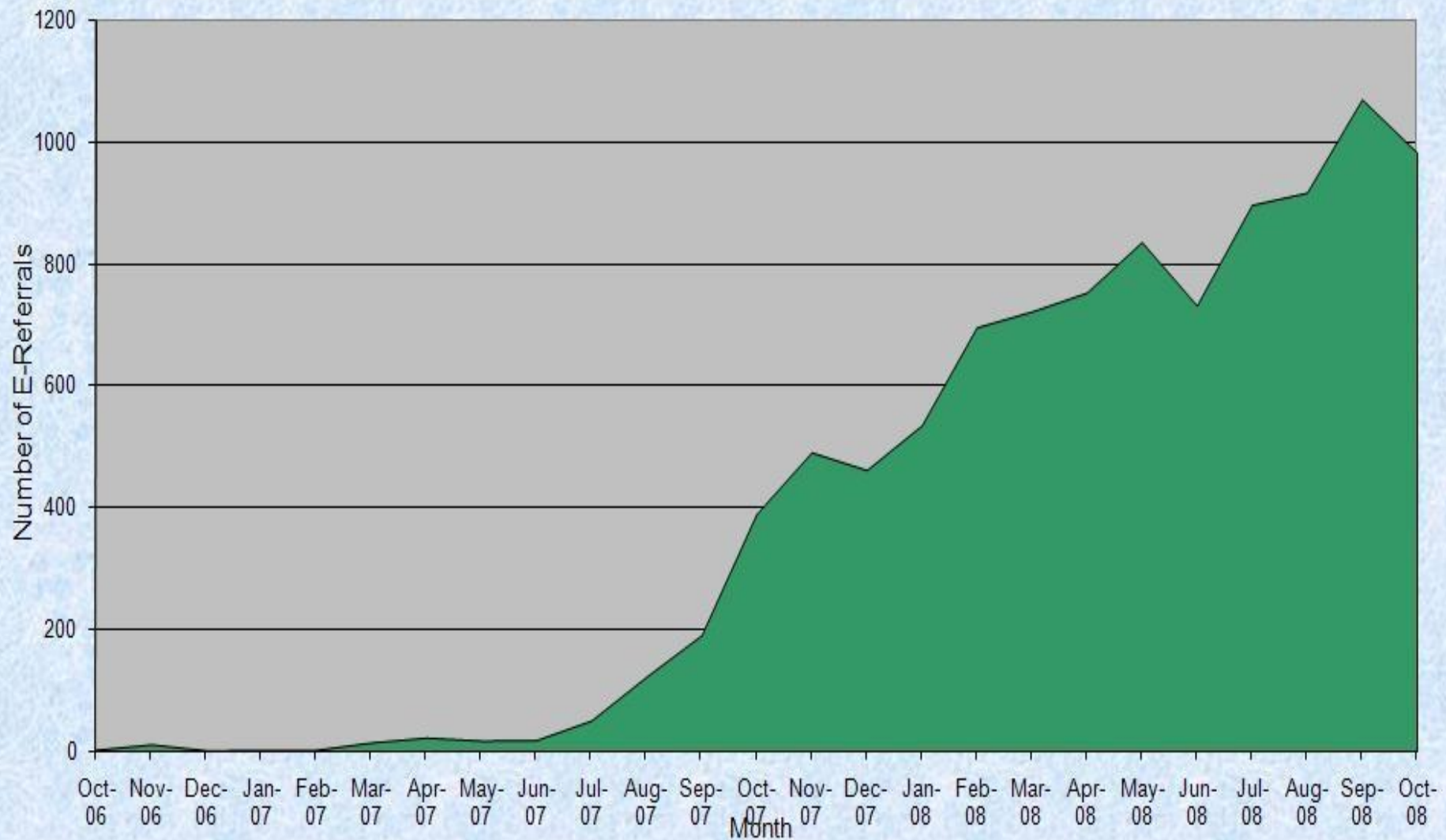
Current Medications:

Date	Details	Dose	Units	Instructions	
03/11/2000	TIAPROFENIC ACID TAB 300 MG [P]			Take 1 tablet twice daily for 2 days, then 1 daily until finished.	✗
09/09/2010	SALBUTAMOL 200 dose, AEROSOL INHALER, 100 MCG PER DOSE [P]			Take 1 dose, As Required	✗
01/02/2002	DOXYCYCLINE 50MG TAB			3, Every Four Hours	✗
03/11/2009	GREEN PRESCRIPTION WALK			1 Four Times Daily	✗



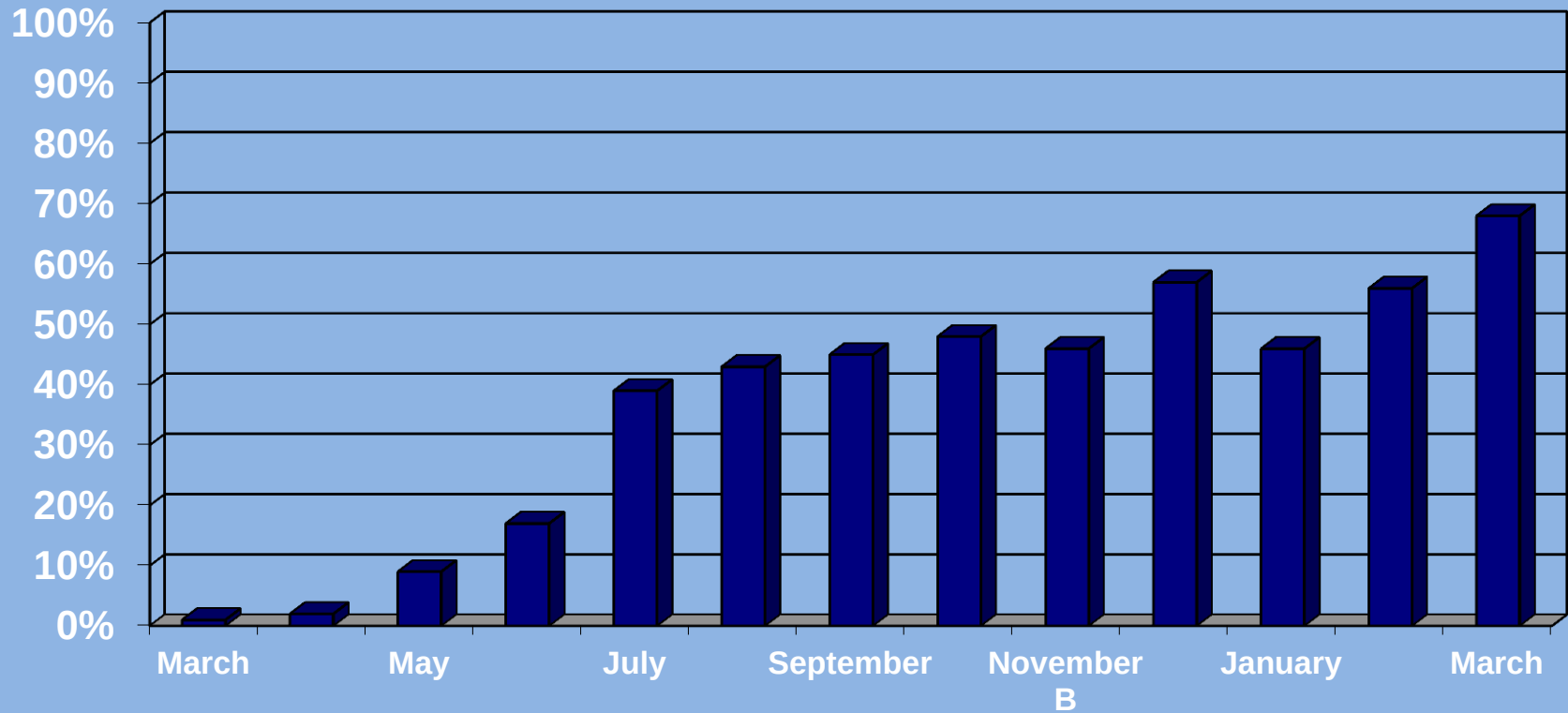
Hutt DHB E-Referrals

Oct 06 - Oct 08



Region Two Northland

(percent received electronically)



Observations from initial rollouts

- 80% of GP referrals electronic within 3 months
- Improvements in management of key services eg Colonoscopy management
- Sharing of referral forms across various regions
- Better determination of urgent/non-urgent cases
- Greatly improved GP specialist - working relationships/effectiveness

Care Insight

- Data from the source
- No repository
- No shared patient record
- Privacy issues straight forward
- Going into place now



A Patient arrives at a
hospital emergency
department or at A&E



The Patient agrees for their
primary care medical card to be
pulled from practices attended
over the past year

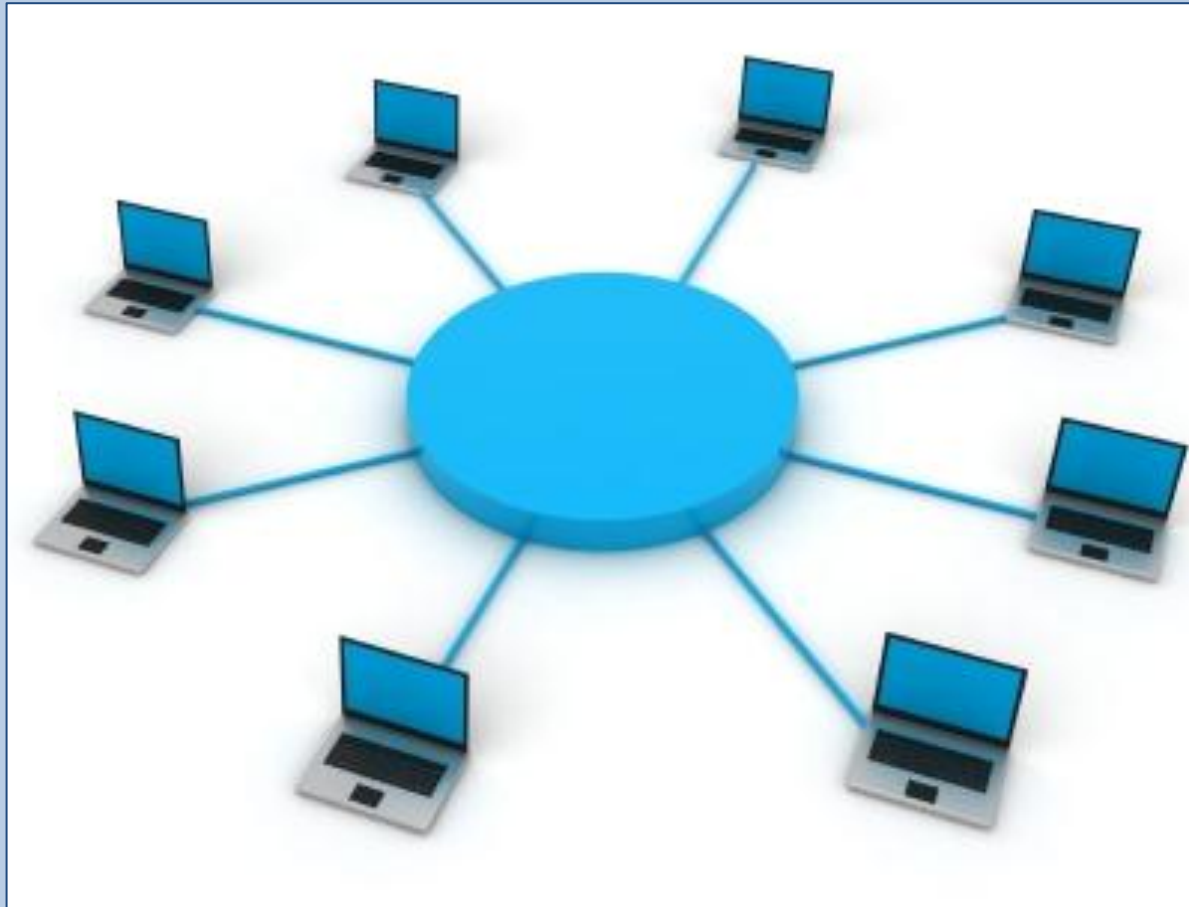


NHI number

[Advanced](#)

GET RECORD

At ED an **Authorised** doctor looks up the patient primary care record, using the patient's NHI number or a name verification process



Within seconds, Care Insight connects to all participating practices and pharmacies and looks up where the patient has been registered and/or seen recently.



Results found in search: 1, select which results the patient consents to display:

General Practices

Consent



The Doctors Napier

Main practice

Display medical cards

Care Insight presents a list of practices and pharmacies where a record has been found (registered or seen recently), the patient (or NK) then needs to consent for records to be pulled



HEALTHCARE PROVIDERS

The Doctors Napier



PATIENT DETAILS



MEDICAL ALERTS

Date Recorded	Generic	Med group	Note
6/05/2009	simvastatin		muscle aches
7/01/2008	sotalol hydrochloride		sob
7/01/2008			inhibace plus - mild renal failure
7/01/2008			select nsalds-aggravates

DISEASE AND HISTORY

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Classification Date	HTL	Date Onset	READCODE	Classification	Note
6/05/2009	0		s50w.11	shoulder strain	
13/11/2008	0		s50w.11	shoulder strain	
16/10/2008	0		s50w.11	shoulder strain	
19/10/2010	0		r090.00	[d]abdominal pain	
7/01/2008	0		r065a.00	[d]musculoskeletal chest pain	1997

PRESCRIPTIONS

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RXDATE	DRUG	PRESENTATION	ONGOING	QTY	SIGS	REPEATRX
31/01/2011	paracare (paracetamol)	500mg caplets		100	2 prn tds	2
31/01/2011	arrow tramadol (tramadol hydrochloride)	50mg cap		100	1 or 2 prn bd for pain	0
31/01/2011	mobic (meloxicam)	7.5mg tab		90	1 or 2 prn bd for pain	0
13/12/2010	arrow tramadol (tramadol hydrochloride)	50mg cap		100	1 or 2 prn bd for pain	0
13/12/2010	paracare (paracetamol)	500mg caplets		100	2 prn tds	2

Summary

- Online Technology is here
- It is a exciting time for the sector
- You are positioned to play a key role in its adoption

Please Diary this date

The HINZ Conference and Exhibition
Working together...Working smarter

23 - 25 Nov 2011, Aotea Centre, Auckland

Thank-you

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