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Healthline and Beyond: Prospects and Possibilities - Concurrent Workshop Repeated

Saturday, 17 August 2013

Start 11:00am

Duration: 55mins

Lounge 1

Start 12:05pm

Duration: 55mins

Lounge 1



South GP CME 2013

General Practice Conference & Medical Exhibition

15-18 August | Edgar Centre | Dunedin

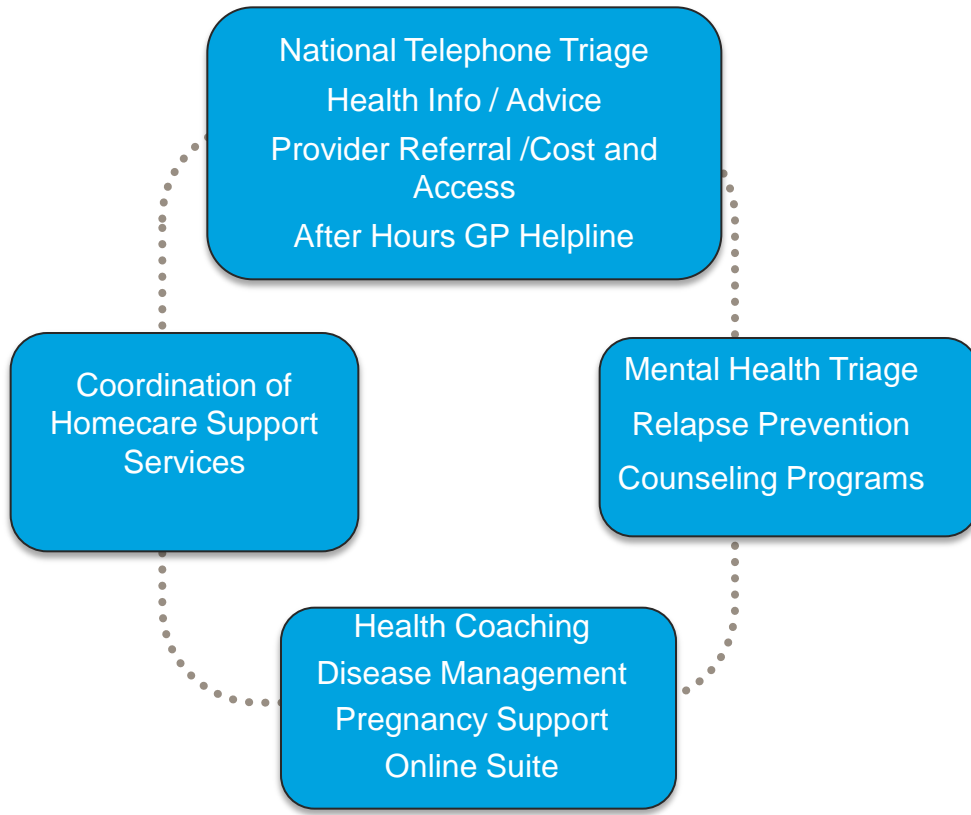


An overview of Telehealth services in New Zealand

medibank
health solutions

Andrea Pettett & Richard Medicott
General Manager & Medical Director
August 2013

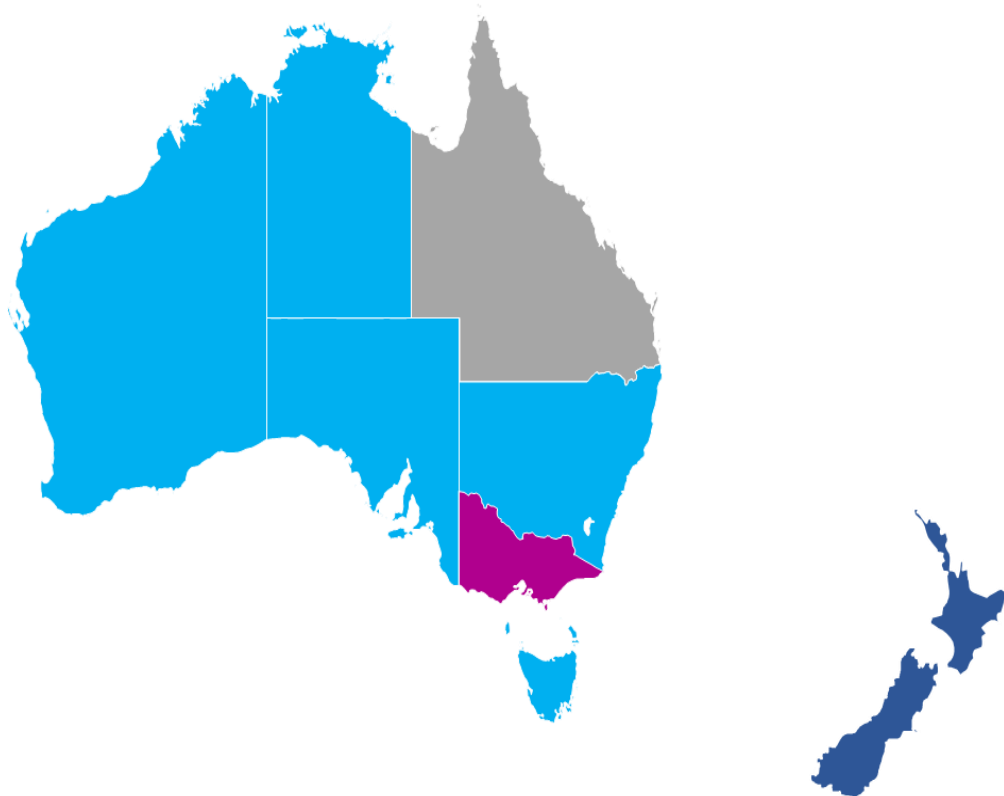
Telephone and On Line Services



- Services delivered face to face, on line, telephone, secure on line video conferencing:
- 2,000 employees (1,500 are clinicians)
- Over 150,000 mental health and counselling interactions per year;
- Over 2 million telephone and on line triage and care management interactions per year;
- Over 40,000 participants enrolled in chronic disease management and wellness programmes;
- Over 250,000 Immigration/Visa Medical interactions per year;
- A comprehensive 'On Line Health Hub'
- Symptom Checker App



Nurse Triage Services



healthdirect Australia



NURSE-ON-CALL



Healthline

New Zealand Services

MHS currently delivers over 14 services, successfully delivering healthcare services to millions of New Zealanders and Australians. The New Zealand Services are in **red**



Medibank Health Solutions NZ – Overview

Provider of Healthline, National Telephone Advice Service since 2000

Core services include:

- **Healthline** Telephone triage (health information, advice and referral)
- **Ambulance Secondary Triage** transfer of lower acuity calls to Healthline
- **Mental Health Line** after hours triage and case management
- **Life test** program (insurance paramedicals)
- **Patient Access Centre** for Midlands Health Network
- **Home Care Support Services** sub contractor network (ACC Lead Supplier)

Healthline in summary

- 400,000 answered calls per annum (>1000 calls per day)
- National utilisation 9.6%
- 19% of callers using Healthline state their ethnicity as Maori
- Staffed by Registered nurses using electronic decision support software CECC™
- Ability to cope with a surge in demand i.e. earthquake, pandemic and health alerts such as the recent botulism scare.
- Health emergency surveillance and response; Daily reported data from Healthline callers is analysed and statistical deviations are identified.
- Growing GP utilisation after-hours
- Secondary triage pilot commenced with Wellington Free Ambulance on 1 Oct 2012

Ambulance Secondary Triage

- Redirect non-urgent 111 calls away from emergency ambulance transport and subsequent ED presentation
- Deliver a telenurse triage, assessment, advice and referral service for calls made via 111 that are deemed appropriate for secondary triage
- Provide callers with alternative advice and service options while also enabling WFA to better manage the ever increasing demand placed upon the service
- Reviewed Pro-QA 'grey' determinants suitable for further clinical assessment
- MOH external evaluation completed

Key Secondary Triage Points

- 8400 calls per annum eligible for secondary triage in Wellington region
- Warm Transfer of call to and from Healthline
- Use dedicated weighted lines for improved access and reporting
- Secondary Triage is completed by a Registered Nurse using an electronic clinical decision support tool following a standardised call process
- WFA and MHS have a secure process for sharing patient management plans
- The telenurse can refer patients to the Kapiti Urgent Community Care Service
- Proposal to extend to St John North Comms

Mental Health Line

- Delivered to 7 DHBs (Bay of Plenty; Counties Manukau; Hutt Valley; Mid Central; Northland; Waikato; Wairarapa)
- 50,000 calls per annum, 420,000 calls to date
- Calls answered by registered mental health professionals
- Mental health risk assessment for each call
- Care plan shared with MHL to ensure consistent support
- Provide brief supportive counselling to achieve the most independent outcome
- Enable CATT /Crisis teams to maximise their availability to carry out crisis work
- 25% of callers accessing the service are Maori

Patient Access Centre / Midlands Health Network

PAC provides a virtual telephonic reception service during business hours for a number of Integrated Family Health Centres supporting the new model of care:

- Filter out and manage non-clinical calls and direct callers seeking same day appointments to an immediate clinical triage with own GP, practice nurse or MHS PAC nurse
- Currently provides services to 6 practices, (34,000 enrolled service users) and handles 144,000 calls per annum
- Employs 12 Customer Service Representatives and 2 full time registered nurses.
- Access to each practice's appointment book, patient account records and status of patient pathology and radiology results stored in the Medtech patient management system.

ACC Homecare Delivery

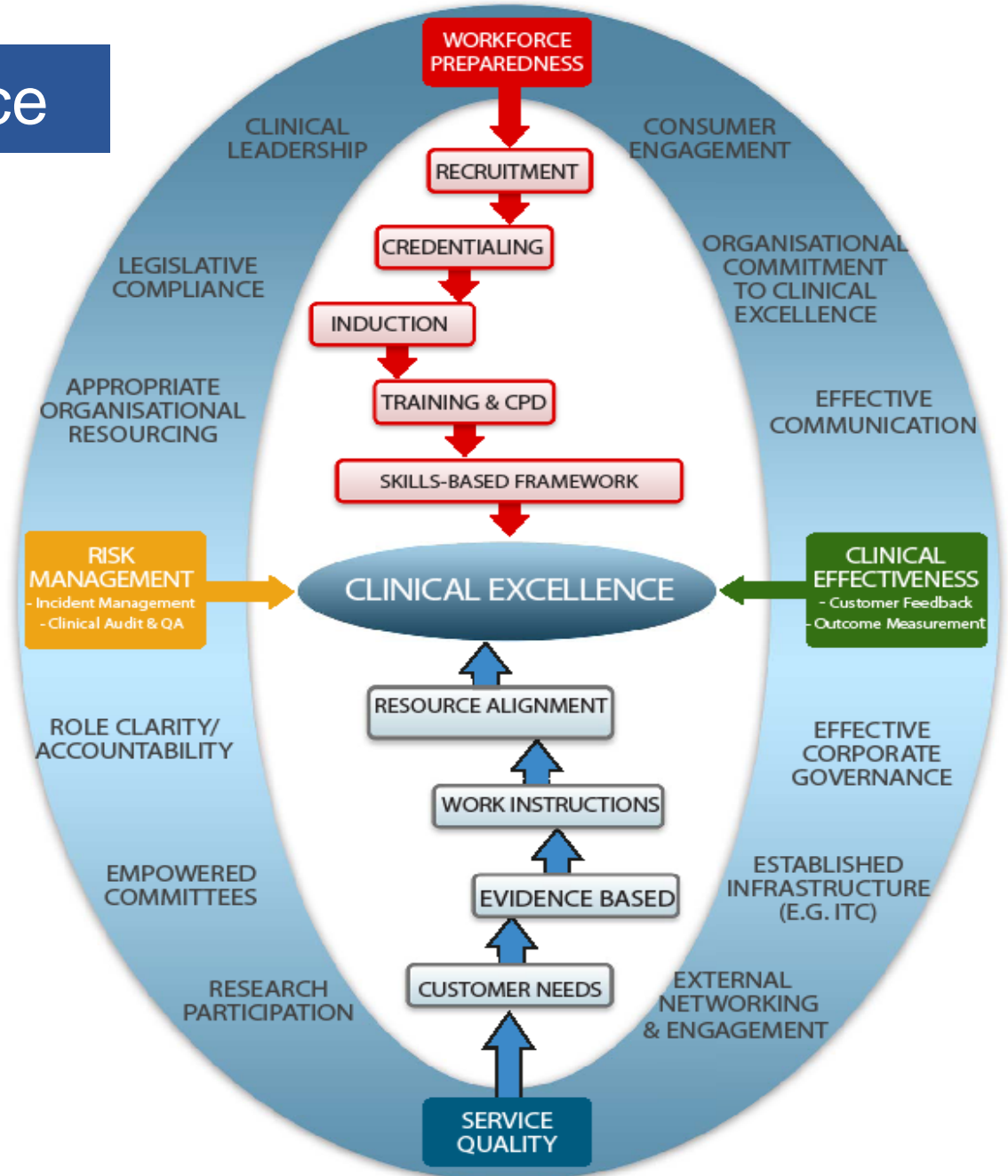
- MHS is one of 4 national providers contracted to deliver homecare services to ACC clients
- Coordinate homecare services through a contracted network of 22 providers for short, long term and serious injuries (home help, attendant care & childcare)
- Initial screening, Clinical triage and information provision
- Subcontractor choice provision in their respective area
- Setting goals - assisting claimants on their journey towards independence
- Customer Service Satisfaction quality checks on all clients

Life Test

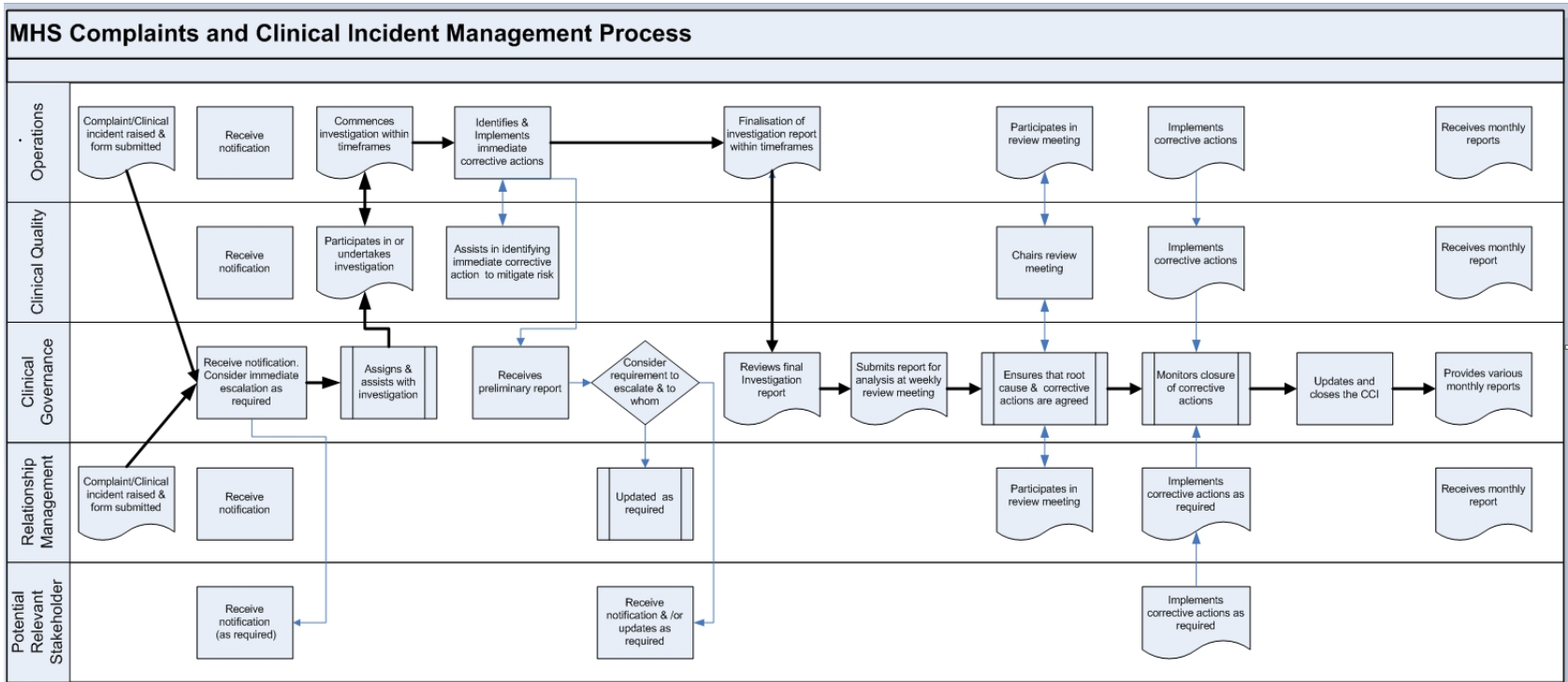
- MHS has been providing the Life Test service to 7 leading life insurance companies in New Zealand for more than 10 years
- A network of 50 contracted registered nurses nationwide
- The service coordinates and carries out blood tests and assessments for life insurers on their prospective clients
- Test results are forwarded to insurers within the agreed timeframe
- Life Test nurses follow best-practice paramedical assessment process

Clinical Governance

The four pillars of clinical quality, and the activities that comprise them, are all parts of clinical governance



Complaints and Clinical Incident Process



Healthline Service Reference Group

Monitor and provide advice on training, nurse professional support and development, and service provision to ensure the service meets current best practice in consistent, safe, evidenced-based telenursing.

Group Members External:

MOH Clinician; ED Director; ED Senior Nurse; Paediatrician; Nurse Practitioner; Rural GP

Group Members Internal:

Medical Director; Senior Nurse Advisor; National Operations Manager (RN); GM.

Clinical Content Review

- Guidelines are updated annually and then localised
- Content can be customised to reflect New Zealand local clinical practice
- If urgent changes are needed they can be loaded into the database immediately
- The clinical information and clinical decision architecture is also constantly being reviewed and refined
- Updates can be done with little technical difficulty as the protocols and content are created using a clinical editor, which then translates the information directly into the database after going through an electronic verification process
- The formal development and review process has multilevel input from internal and external clinicians including those in internal & emergency medicine, general practice, and psychiatry

Hand foot and mouth update

18615 Any Neurological symptoms; Such as myoclonic (muscle) jerks, urinary retention, neurological signs, altered consciousness

See Doctor Immediately

Care Advice

17753 Although Hand Foot and Mouth disease is usually a mild self limiting illness, occasionally it can progress to more severe illness. The symptoms described require immediate assessment by a doctor.

Too little or too much?

Damned if we do and damned if we don't.

The nature of triage is not diagnosis.

'Where is the best place to treat this caller with these symptoms right now?'

Clinicians supported by decision support and guidelines

The Nature of Triage



The lucky country



17613 Unconscious or unable to rouse by verbal or physical stimulation.

Activate 111

Care Advice

- 164 Do not leave patient alone.
- 16986 Maintain a clear airway
- 16987 Place person on his/her side
- 17481 Advise to take current prescription and/or OTC medications with them to hospital

17910 Massive episode of vomiting red, bloody or coffee-ground material

Activate 111

308C Bleeding may be more likely to occur and be heavy if patient is taking anticoagulant medication to reduce clotting (such as warfarin or heparin); chemotherapy or transplant medicines; or has a known bleeding tendency (such as leukaemia, von Willebrand's disease, haemophilia, or Christmas disease)

Care Advice

- 7500 An adult should stay with the patient, preferably one trained in CPR.
- 15552 If conscious lie the person flat with legs elevated above level of heart. If unconscious, turn patient on side.
- 5503 Turn patient's head to side to avoid aspirating fluids.
- 1561 Do not give the patient anything to eat or drink.
- 17481 Advise to take current prescription and/or OTC medications with them to hospital

Electronic Decision Support

- Care Enhance Call Centre (CECC™) is a clinically rigorous, evidence based Triage System developed and owned by Medibank. It is the leading electronic telephone triage system in large-scale use in the Asia Pacific region
- There are currently >400 symptom based Guidelines accessible and >500 General Health Information topics
- The clinical decision support software guidelines are used to prioritise the presenting symptoms and support the registered nurse to assess the urgency of the callers presentation
- The recommended level of care may range from emergency (111), ED/GP immediately, GP within 4 or 8 hours, 24hrs or a routine appointment
- Health advice may also be given to support a self care /stay at home recommendation

Care Enhance Call Centre Software (CECC™)

The screenshot displays the CECC software interface for a user named Motu Afia (39, F). The interface includes a menu bar (File, Edit, Encounter, Message, Service, Person, Tools, Help) and a toolbar with various icons. On the left, there is a navigation tree with sections for Encounter, Message Center, and Task Pane. The main area shows a 'Contract (select one):' section with a table of contracts. The 'Capital Coast DHB' contract is selected. Below the table, there is a description for the highlighted contract. At the bottom, there is a 'Person Overview' section with fields for Name, Gender, Age, Plan, PCP, OBGYN, and Language. The status bar at the bottom shows 'Current Handle Duration: 00:13:02' and 'Transfer Queue: Total=3 / Urgent=0'.

Master Contract	Contract Name	DNIS	Phone Number
<input type="checkbox"/>	Healthline NZ		Bay of Plenty DHB
<input type="checkbox"/>	Healthline NZ		Canterbury DHB
<input checked="" type="checkbox"/>	Healthline NZ		Capital Coast DHB
<input type="checkbox"/>	Healthline NZ		Counties Manukau DHB
<input type="checkbox"/>	Healthline NZ		Hawkes Bay DHB
<input type="checkbox"/>	Healthline NZ		Hutt Valley DHB
<input type="checkbox"/>	Healthline NZ		Lakes DHB
<input type="checkbox"/>	Healthline NZ		Mid Central DHB
<input type="checkbox"/>	Healthline NZ		Nelson Marlborough DHB
<input type="checkbox"/>	Healthline NZ		Northland DHB

Description (for highlighted contract 'Capital Coast DHB'):
Wellington region North to Waikanae and excluding Hutt Valley

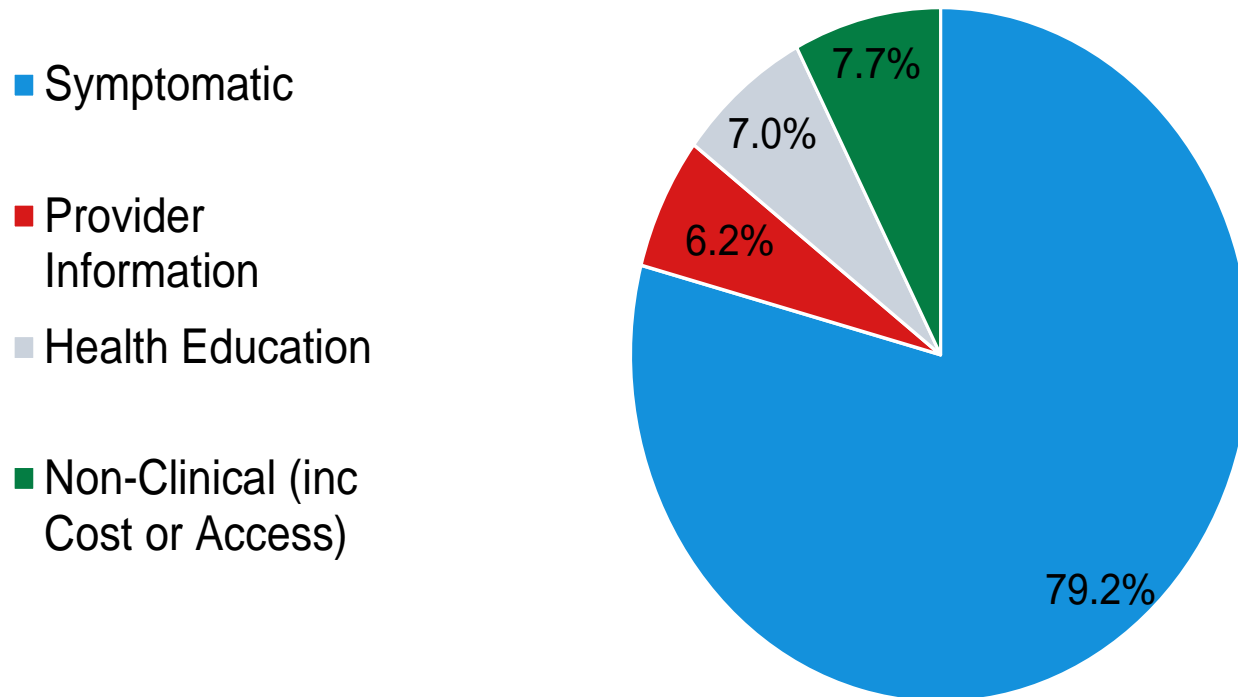
Encounter Type: Telephone
Start Date/Time: 09/08/2010 12:36 PM
End Date/Time: 09/08/2010 12:36 PM

Person Overview	Presenting Problem	Service Notes
Name: Gender: Female Age: 39	PORIRUA, ALL 0 64 04 905 (Home)	Plan: PCP: OBGYN: Language: New Zealand English

Current Handle Duration: 00:13:02 | Transfer Queue: Total=3 / Urgent=0

Healthline Call Types

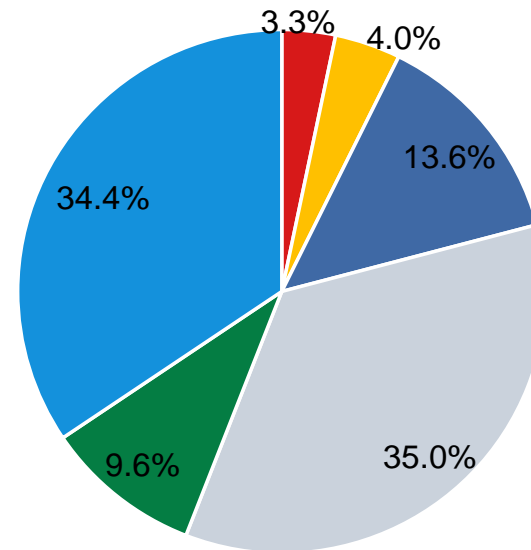
Healthline Call Types: April - June 2013



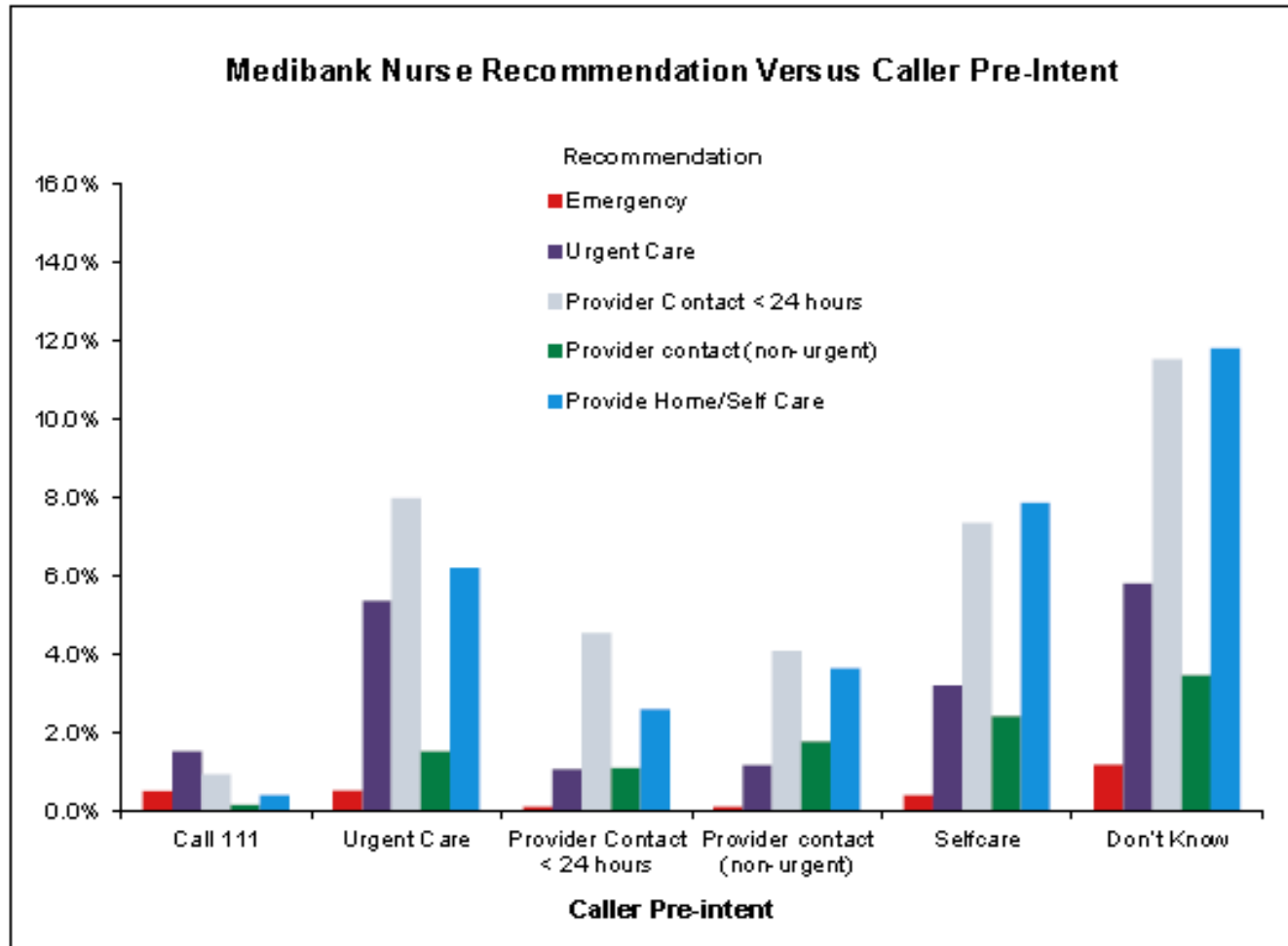
Healthline Call Outcomes

Healthline Triage Outcomes: April - June 2013

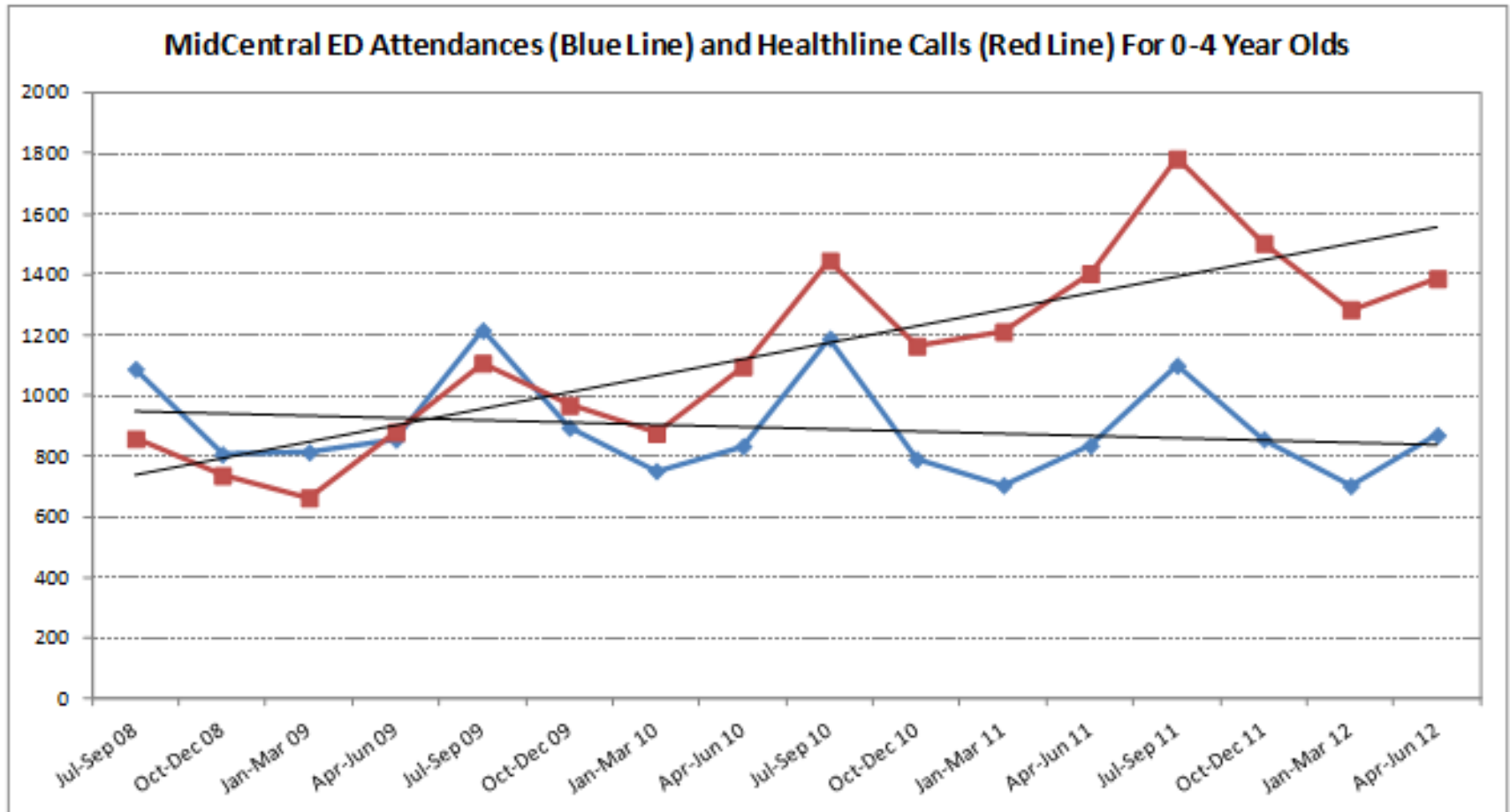
- Emergency
- Urgent Care (ED)
- Urgent Care (GP immediate)
- Contact Provider (< 24 Hrs)
- Contact Provider (non-urg)
- Self/Home Care



Changes in disposition



ED Presentations



Reducing Disparity

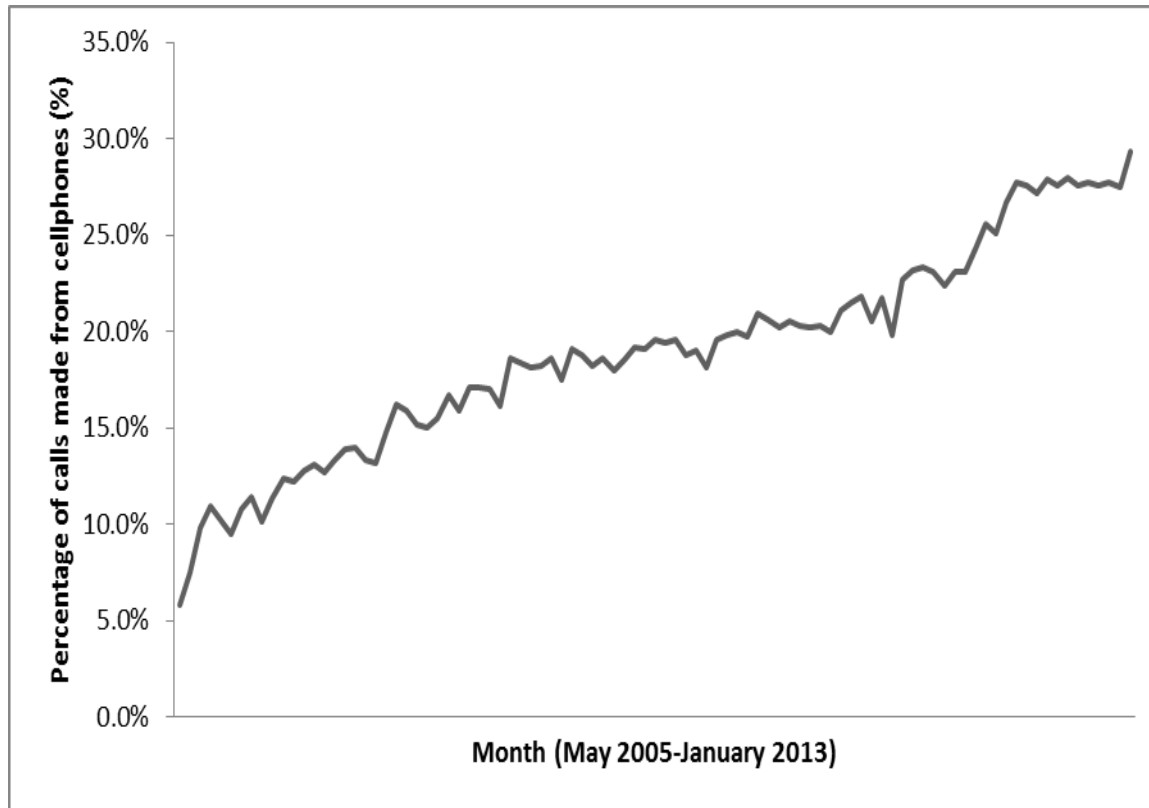


District nurse, Waihara Gumfields, Northland.

High needs groups

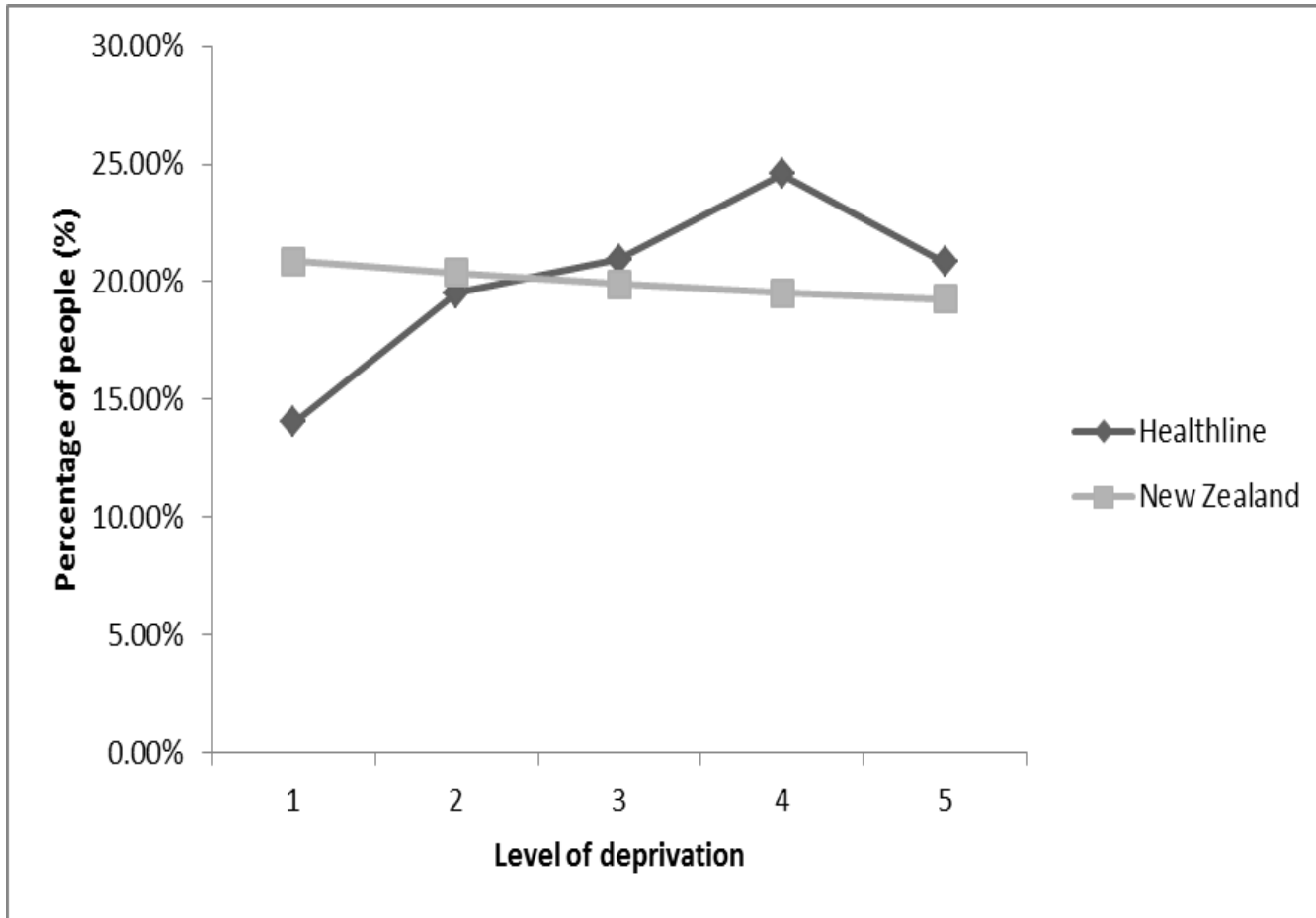
- **Māori**
- **Rural & remote**
- **Very young and very old**
- **Low socioeconomic status**

Increase in cellphone use over time



Percentage of calls to Healthline made by cellphones between May 2005 and January 2013.

Deprivation



We Have Established That...

- Most callers are seeking advice about a current symptom after hours
- The symptoms reflect typical acute primary care in nature and acuity
- Most callers would have sought a higher level of care without Healthline's advice
- Primary care doctors agree with Healthline's advice
- Healthline reduces the number of calls to EDs and after hours to GPs
- These findings are international for telenursing triage services that use sophisticated decision support software; services that rely on nursing nous or protocols have much higher acute referral rates to EDs and GPs
- In proportion to their population children, Māori and the socioeconomically deprived are over-represented among callers. Tagata Pasifika are under-represented.
- For acute conditions older people use Healthline and general practice less than younger groups
- Telenursing from home is safer than from a call centre, nurses are happier, there are fewer complaints and nurses stay longer in their jobs.

Training and Professional Development

Training

- 10 days initial training
- 5 preceptor shifts (remote or side by side)
- Three month competency assessment
- Monthly and annual performance reviews
- 1% of all calls reviewed
- Self and peer review
- Debrief opportunities post call
- Team Leader support
- Access to EAP

Professional Development

- Access to a resource nurse each shift
- In house virtual clinical forum facilitated by senior nurse and medical director
- Monthly professional educational sessions with internal and external presenters
- Educational allowance to support personal study, course or conference attendance

Healthline Integration

- Fax service to Emergency departments for ED referrals where caller has consented: Canterbury, Hutt Valley, Taranaki and Wanganui ED's.
- HL7 electronic call summary report to GP's PMS inbox when disposition within 24 hours is reached and caller consents, positive feedback from GP's regarding this initiative.
- GP on call roster management, warm transfer to GP on call. Provider data base tailored for individual GP after-hours arrangements and urgent community care ambulance services.
- Secondary triage pilot with Wellington Free ambulance and extending to include St John
- Transfer of symptomatic and well child calls between PlunketLine and Healthline services.

Electronic HL7 Call Summary Report

Patient Name: **Steve Lewis**

DOB: **17/07/1987**

NHI No:

Phone No: **61 03 89718537**

Service: **Department of Health, Victoria (NURSE-ON-CALL)**

Date of call: **2/04/13** Time of call: **10:27**

Healthcare Provider: **Royal Melbourne Hospital - ED**

Steve Lewis was assessed today with the following history: **Painful blistered rash on neck**

Location Cause: **Neck**

Onset/duration: **8 Hours**

Tx tried and results: **nil**

Relevant history: **nil**

The triage nurse completed a clinical assessment using the **Skin Lesions / Skin Irritation** guideline, and advised the caller to **See Doctor within 4 hours**. The patient gave your name as their health care provider and consented to this information being sent to you.

Please email us on msg.feedback@medibankhealth.co.nz if you have any questions. [Our reference: **CECC57004**]

GP appointments?

We would like to be able to make appointments for patients at their nominated practice. There are funding considerations, but it is the right step for integration.

This may be possible via Medtechs ManageMyHealth platform

It does NOT require the practice to offer the MMH portal to patients.

The practice could configure which appointments, if any, would be available to our service.

We would only book patients that are registered with the practice, unless specific agreement for casual patients, e.g. for A&M clinics.

Comments?

Virtual Call Centre Operations

- Sophisticated workforce planning and methodologies to meet demand
- Flexible staffing model with scalability to meet increased demand
- 100% call recording with 10% screen capture
- Supported by 6 team leaders home and office based
- 84% of nurses work from home via secure Citrix platform

MHS@Home model:

- o Improved recruitment, staff retention
- o Greater rostering flexibility
- o Enhanced disaster-recovery /BCP
- o More environmentally friendly saving time, travel and mo



Visibility of Virtual Call Centre Model

The screenshot displays the Director software interface, which is used for managing a virtual call center. It features several windows and reports:

- Agent Report - HL NZ:** A table listing agents with columns for Agent Name, Login ID, Ethn, AUX Reason, State, Split/Skill Time, and VDN Name. Agents include Toni Fraser, Allison Hams, Catherine Neilson, Grace Chiam, Louanne Fourie, Amanda Zinski, Kate Stokes, Frith Walker, Jan King, Karen Seate, Yvonne Renton, Annette Mabey, and Sheryl Saunders.
- Agent Report - Team Leader M:** A table listing team leaders with columns for Agent Name, Login ID, Ethn, AUX Reason, State, Split/Skill Time, and VDN Name. Agents include Diana Rogers TL, Karen Webb, Sue Worts TL, and Jacqui Swain.
- McKesson Comparison Report #3:** A table showing performance metrics for various Split/Skills, including Agents Staffed, Calls Waiting, Oldest Call Waiting, ASA, % AEN, AHT, NCO, NCH, NCA, and C. Skills listed include HL NZ, Plunket Tmp# Line, AH Taranaki Pilot, and Ambulance Transfer.
- Rosemary Mallan - Conversation:** A chat window showing a conversation between Anne O'Brien and Rosemary Mallan. The message from Anne O'Brien reads: "hi Rosemary, how are you today , i hope you are feeling better 😊".

Call Centre Metrics

Service level requirements 80/20 with <10% abandonment rate

- Number of calls offered, handled and abandoned
- Average speed of answer
- Average handle time
- Adherence to schedule:
 - o Availability to take calls
 - o Rostered breaks and meetings
 - o Off line coaching and E learning

Workforce Planning

Workforce planning team provides operations with staffing requirements to meet program service level and maximise staff efficiency

- Recruitment, forecasting and scheduling
- 12 month resource plan based on historical call volumes and arrival patterns
- Rosters built on individual preferences and forecasted requirements
- Roster issued 6 weeks ahead
- Real time service planners and monitoring via CMS with half hourly reporting
- Optimisation and shrinkage management daily, based on current call volume distribution patterns including:
 - o Coaching and training sessions, planned and unplanned leave, shift adjustments and break optimisation

Comparable International Services

UK



NHS
24



NHS
Direct



CALL
111

when it's less
urgent than 999

Australia



healthdirect
AUSTRALIA



NURSE-ON-CALL
1300 60 60 24



Call
13 HEALTH
(13 43 25 84)

after hours GP helpline
healthdirect
AUSTRALIA
1800 022 222

Canada



HealthLinkBC



Ontario



MyHealth.Alberta.ca



HealthLine
HEALTHLINEONLINE.CA 811

USA

Multitude of health
plan, hospital, and GP
Group health advice
phone, web and mobile
services

Predominantly non-
clinician 'receptionist'
services with nurse
support

Comparable International Services: UK



- Transition from a predominantly nurse led model to a primarily non-clinician staffed service
 - Currently 70-80% of calls are resolved by nurses
 - Proposed 70-80% of calls to be resolved by non-clinicians
- Higher use of call backs rather than real time interactions
- Driven largely by cost considerations
 - Aspiration to reduce call costs by more than 50%
- Poor implementation in NHS 111
- NHS24 to go live in September



Comparable International Services: UK



- Major issues on implementation
- Poor training of non-clinical staff
- Guidelines and decision support systems not sufficiently robust
- Costs shifted to ambulance and ED
- Significant number of reported adverse events

Comparable International Services: Australia



NURSE-ON-CALL
1300 60 60 24



after hours GP helpline
healthdirect
AUSTRALIA
1800 022 222

- Mix of state based and national service models
- Nurse led service
- No non-clinician usage
- Highly robust triage process - guidelines and decision support tested over tens of millions of calls
- Integrated with after hours GP helpline, ambulance, poisons control etc

Comparable International Services: Canada

- State based 811 services
- Each with a different focus (health and wellness focused, mental health focused)
- Mix of nurse and non-clinician receptionist service models with various other clinicians used including Dietitians, Psychiatric Nurses and Social Workers
- Services complemented by consumer health portal, online and mobile symptom checker

HealthLinkBC



Non-Clinician Service Models

- Non-clinicians answer all calls, uses clinical decision support
- Non-clinician performs ROE/ABC
 - Refer directly to ambulance for emergency calls
- Non-clinician collects caller contact and demographic data
- Non-clinician handles all non-symptomatic calls to completion

Non-Clinician Receptionist

- Non-clinician collects 'chief complaint' and refers to nurse
- Nurse resolves the call to completion

Non-Clinician Dominant

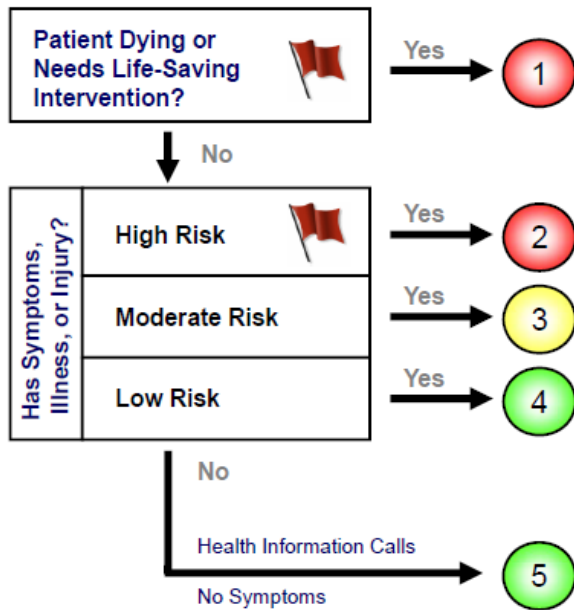
- Non-clinician handles 'non-complex' calls to completion
- Refers to support nurse for complex cases (driven by decision support system) often on a call back basis

Key Considerations: Quality and Safety

- If using a Non-Clinician Receptionist model then it is critical to pre-assign acuity to presenting complaints and queue calls to nurses accordingly

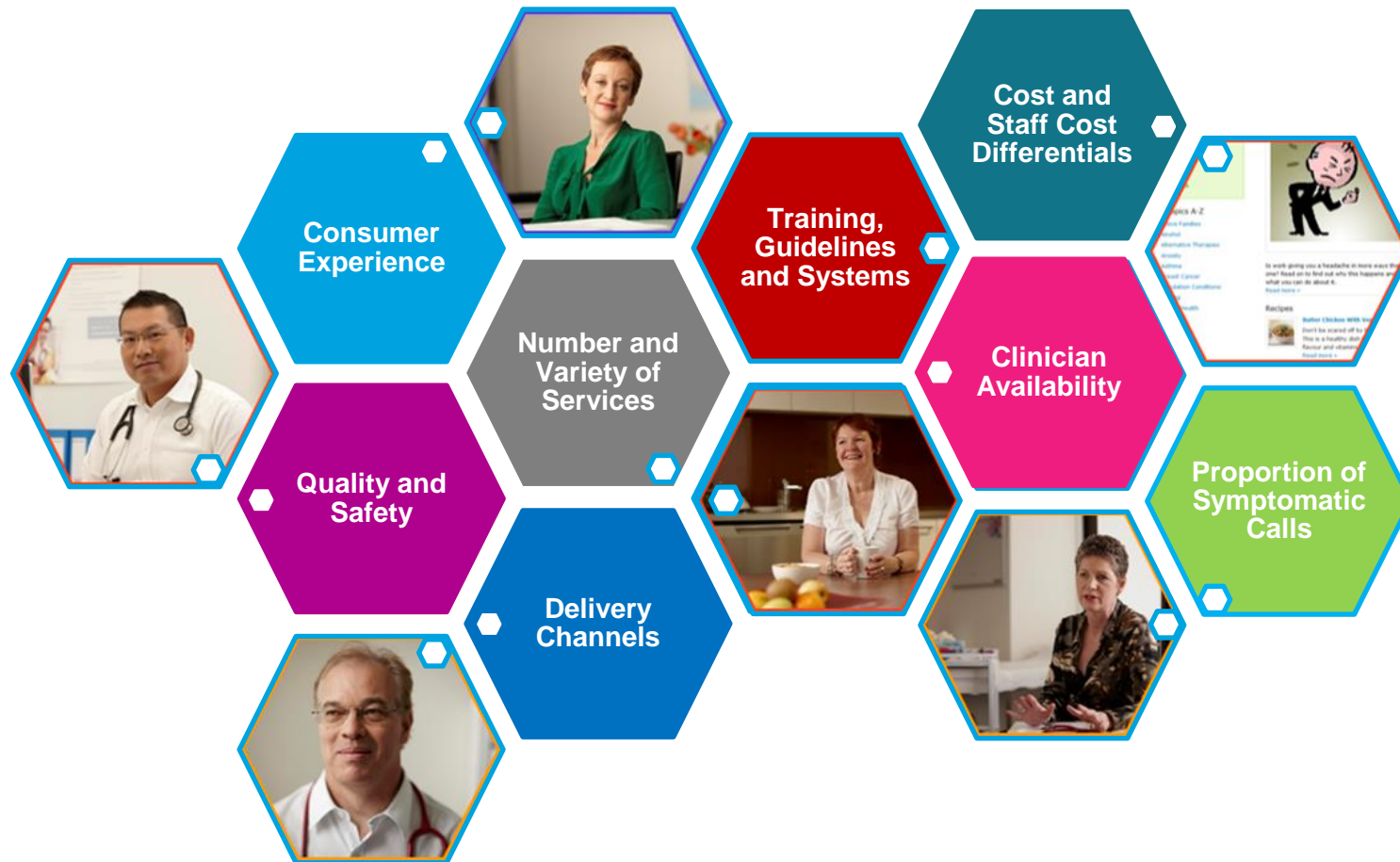
Call Prioritization Index

Conceptual Flow Chart



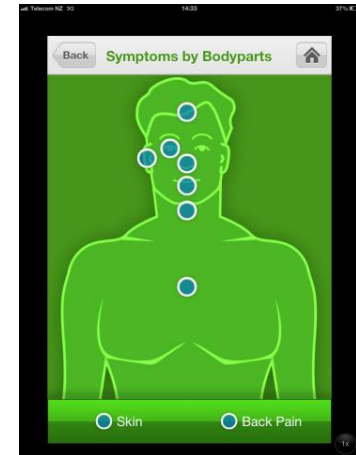
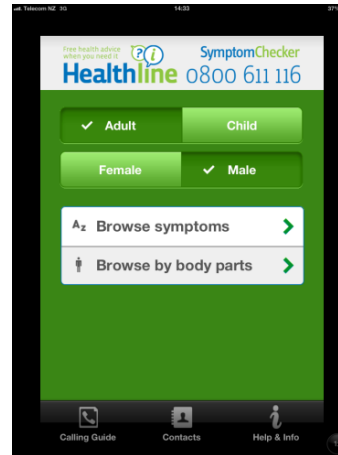
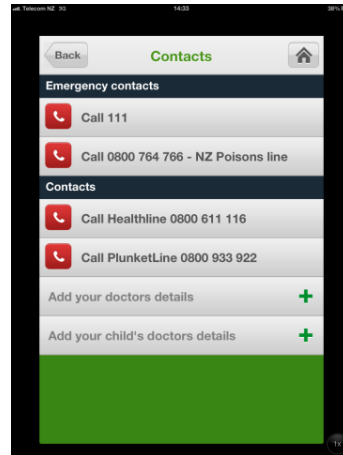
Chief Complaint	Type	System	SnoMed	ICD9	Acuity (CPI 1-5)	
Abdomen Injury	Injury - Trauma	Gastrointestinal	128069005	959.1	2	
Abdominal Distention / Mass	Symptom	Gastrointestinal	271860004	789.37	3	
Abdominal Pain	Symptom	Gastrointestinal	21522001	789.09	3	
Abnormal EKG Result	Administrative	Cardiovascular	102594003	794.31	2	
Abnormal Lab Result	Administrative	General	309158009	796.9	3	
Abnormal XRay Result	Administrative	General	129678009	796.9	3	
Abrasion	Injury - Trauma	Skin, Hair, Nails, and Br	287128008	919.0	4	
Administrative Issues and General Health Information	Administrative	General	14734007	V70.8	5	
Alcohol Use, Abuse, and Dependence	Disease or Condition	Psychiatric and Behavior	15167005	305.00	4	
Allergic Reaction	Disease or Condition	Allergic - Immunologic	212999007	995.3	2	
Altered Mental Status	Symptom	Neurological and Spine	31748000	293.0	2	
Altitude Sickness	Disease or Condition	General	87284002	993.2	3	
Angry or Violent Behavior	Symptom	Psychiatric and Behavior	248004009	312.9	2	
Animal Bite	Bites or Stings	Skin, Hair, Nails, and Br	242604003	E906.5	4	
Anorexia	Symptom	Gastrointestinal	249468005	783.0	3	
Anxiety and Panic Attack	Symptom	Psychiatric and Behavior	48694002	300.00	3	
Apnea	Symptom	Respiratory	1023001	786.03	1	
Arm Injury	Injury - Trauma	Musculoskeletal	287159005	959.2	4	
Arm Pain	Symptom	Musculoskeletal	102556003	729.5	4	
Asthma Attack	Disease or Condition	Respiratory	266364000	493.90	2	
Ataxia / Difficulty Walking	Symptom	General	20262006	781.2	3	

Key Considerations in Model Development

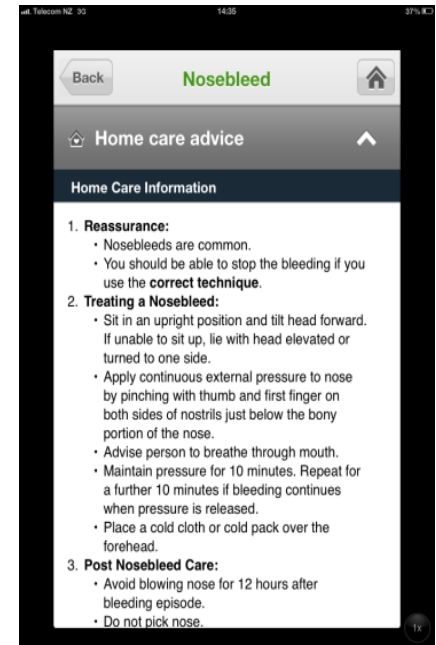
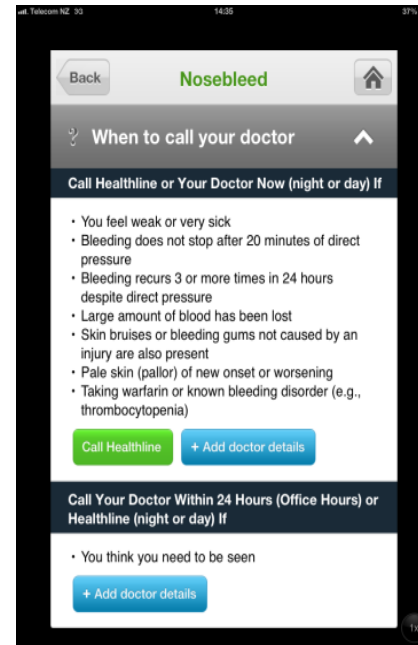
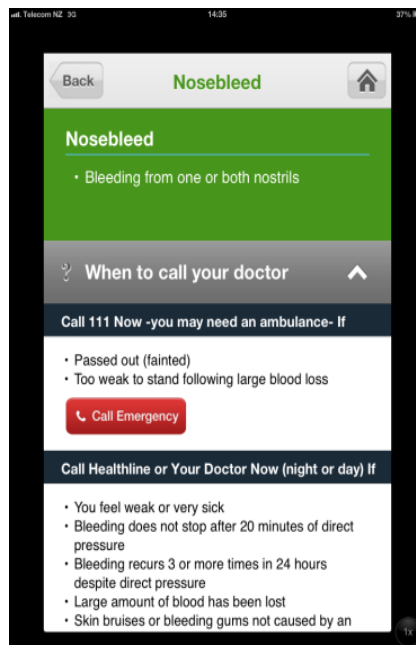
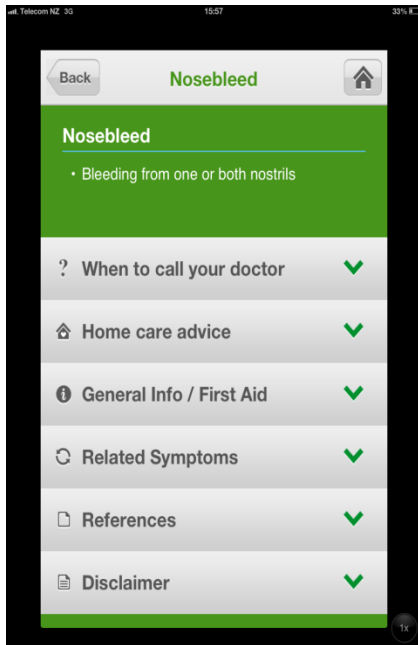


Key Considerations: Delivery Channels

- A widely adopted web and mobile symptom checker, fully integrated with phone services, will reduce the requirement for non-clinicians
 - Reduces non-symptomatic calls
 - Allows digital capture and transfer of contact data and chief complaint
 - Only requires transfer to a nurse in acute scenarios
 - Captured Q&A data can be transferred, shortening the clinical contact
 - Expands service reach substantially at very low marginal cost



Symptom Checker



Anywhere Healthcare Secure Video Platform

- Consultant to GP
- GP to GP
- GP to Patient

Model now in operation in Gladstone

MHS Team of Specialists:

- Dermatologists
- General Physician
- Paediatrician
- Psychiatrists



Questions?