Ms Karen Evison

Ministry of Health

Wellington

Friday, June 9, 2017 (Room 4)

11:00 - 11:55 WS #33: Patient Self Management in a Technological Era

12:05 - 13:00 WS #41: Patient Self Management in a Technological Era (Repeated)

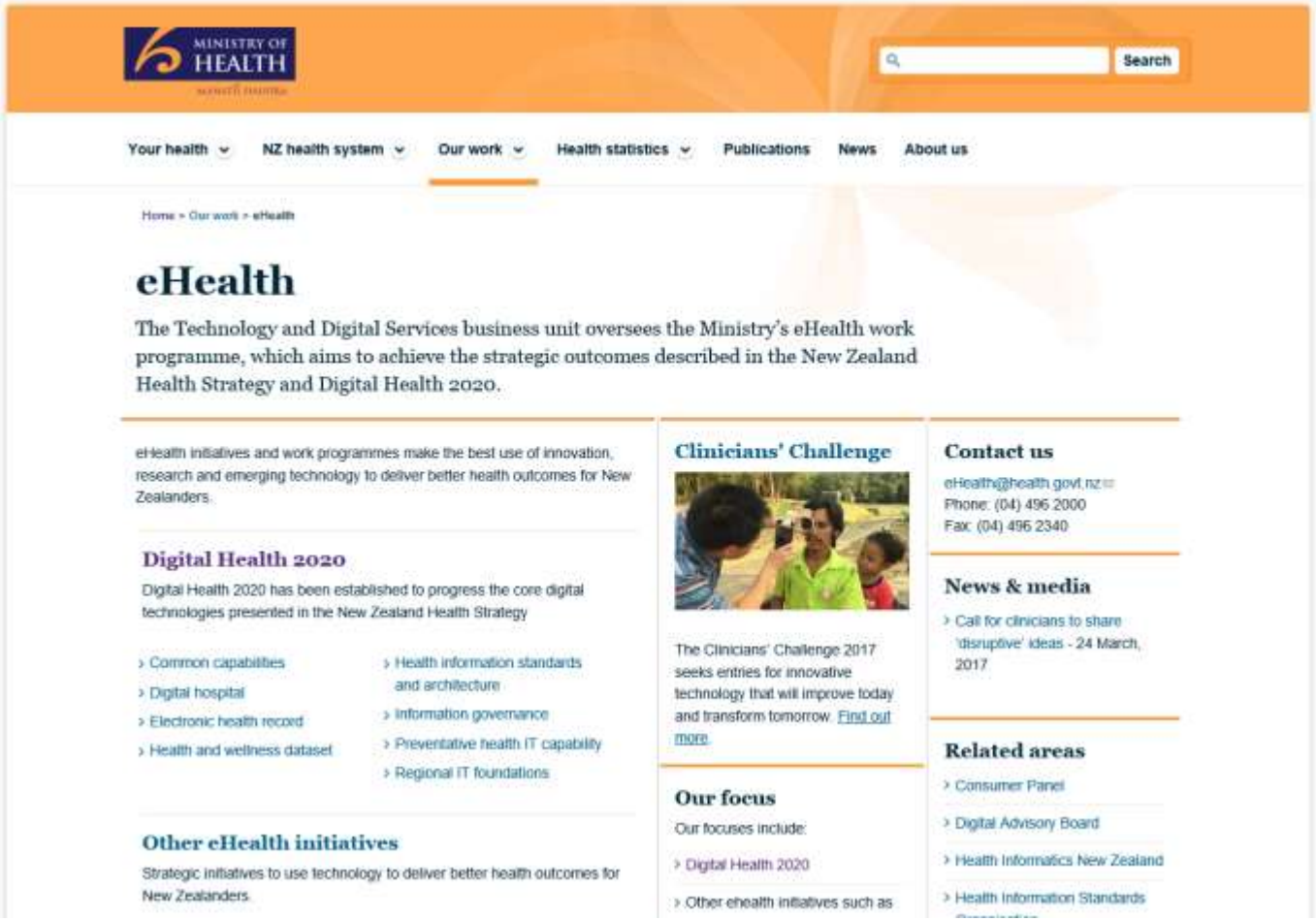
Patient self management in a technological era

where do you start?

Karen Evison
Ministry of Health, New Zealand

Overview

- Technology enabling good health
- Self Management and how it is evolving
- Technology – consequences and how to help (Obesity)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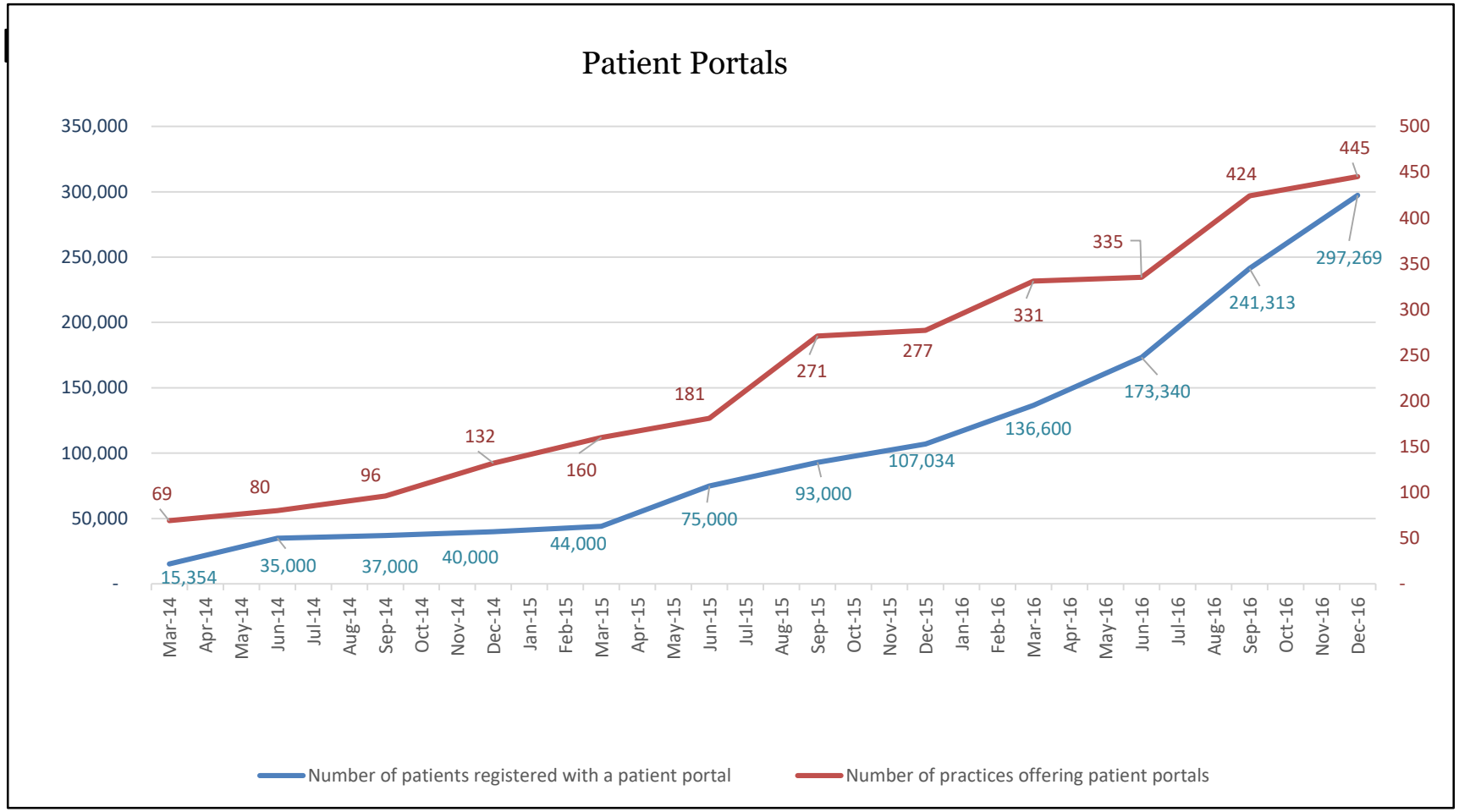
eHealth
The Technology and Digital Services business unit oversees the Ministry's eHealth work programme, which aims to achieve the strategic outcomes described in the New Zealand Health Strategy and Digital Health 2020.
eHealth initiatives and work programmes make the best use of innovation, research and emerging technology to deliver better health outcomes for New Zealanders.
Digital Health 2020
Digital Health 2020 has been established to progress the core digital technologies presented in the New Zealand Health Strategy
Common capabilities
Digital hospital
Electronic health record
Health and wellness dataset
Health information standards and architecture
Information governance
Preventative health IT capability
Regional IT foundations
Other eHealth initiatives
Strategic initiatives to use technology to deliver better health outcomes for New Zealanders
Clinicians' Challenge
The Clinicians' Challenge 2017 seeks entries for innovative technology that will improve today and transform tomorrow. Find out more
Our focus
Our focuses include:
Digital Health 2020
Other ehealth initiatives such as
Contact us
eHealth@health.govt.nz
Phone: (04) 496 2000
Fax: (04) 496 2340
News & media
Call for clinicians to share 'disruptive' ideas - 24 March, 2017
Related areas
Consumer Panel
Digital Advisory Board
Health Informatics New Zealand
Health Information Standards

Patient Portal – rate of uptake - December 2016

- Natio



Portals where to from here

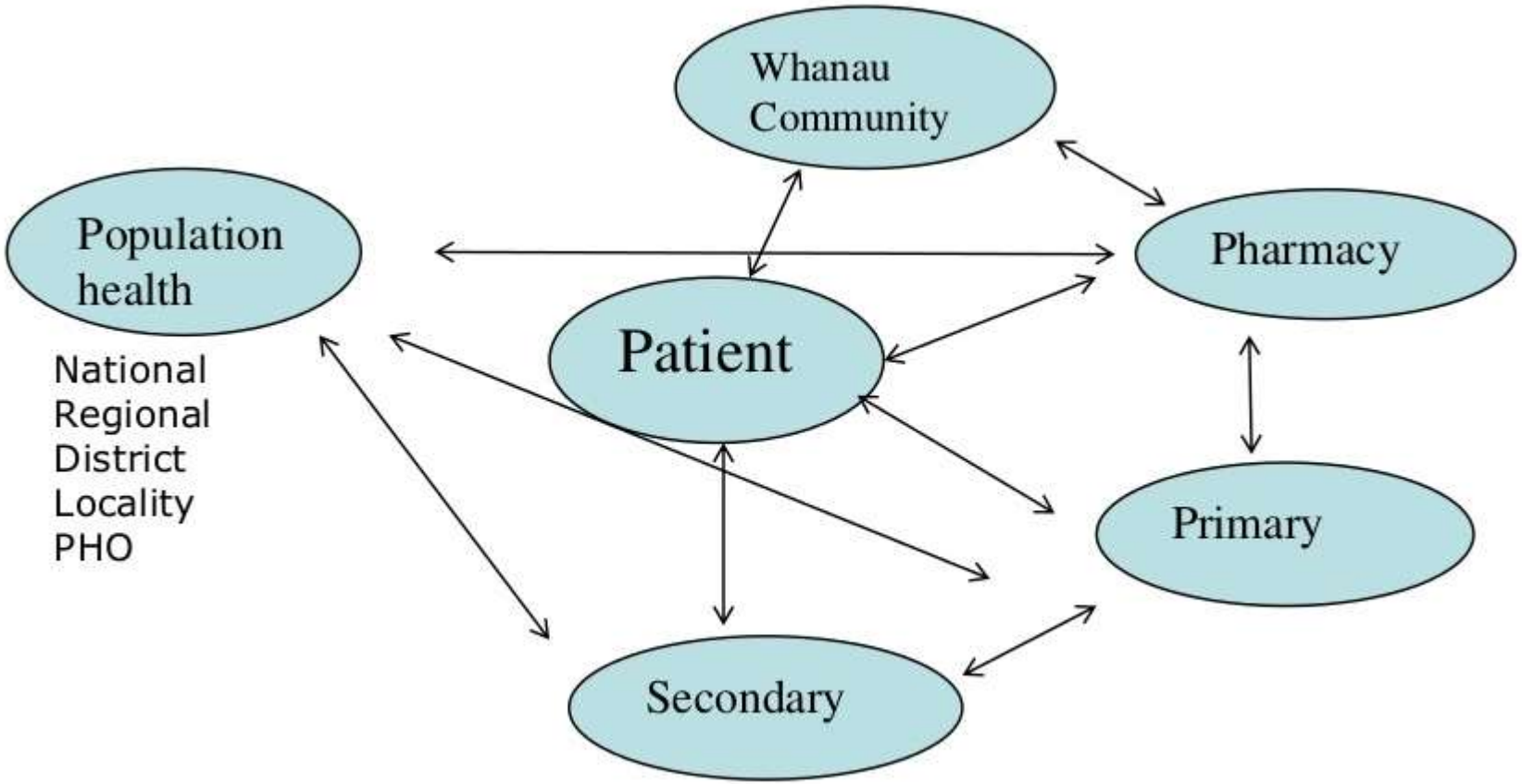
- Good uptake by practices- 45 % offer portals
- RNZCGPs survey –portals improve service
- Concerns re safety and privacy
- Guidelines- access to child/youth information
- Increase patient enrolments, functionalities
- Secure messaging and sharing clinical notes
- Primary care integration – DHB DAPs
- Website: https://patientportals.co.nz/

Self Management

- "..greater control in looking after themselves, …, and in partnership with health professionals and community resources."
- Key features:
  - Literacy
  - Coaching
  - Navigation
  - Patient centred
  - Empowering

National Health Committee2005

Self management currently



- Evidence:
  - Increases sense of wellbeing
  - Improved health outcomes
  - Decreased secondary care use
- Examples:
  - Activated patients
  - Expert patient
  - Flinders
  - Stanford
- Average NZer's has 40 mins with GP per year

How it evolves in practice

Phase 1

- Dr and Nse roles defined
- Care plans for some
- Some staff training
- Referral to self management courses for some patients

Phase 2

- LTC team approach
- Care plans for all
- Navigation activity
- self management courses for all
- Business model allows for aspects to support this activity

Phase 3

- MDT within and beyond general practice
- All staff trained
- Social model of care
- Business model fully supports SM
- Kaiawhina act as connectors

Supporting self management project

- Health Literacy New Zealand and Health Navigator New Zealand working with 8 practices to develop tools, resources and training to enable people with LTC to self manage
- Training modules being developed, practice teams supported to test modules
- Modules include care planning and health literacy

SMS4BG

- NIHI and Waitemata DHB
- Text message based self management program

- RCT 366 patients with poor diabetes control
- Targeting Maori, Pacific and rural NZers

Findings to date

- 96% messages useful
- 95% good way to deliver program
- 96% culturally appropriate
- 98% age appropriate
- 81% impacted on their management
- 76% improved glycaemic control
- 2% choose to end messages early

HRC partnership - BetaMe

- Professor Diana Sarfati (Uni of Otago)
- Melon Health
- Midlands and Wellington
- RCT pre/diabetes (usual care or care + tech)
- Adding app for coaching, goal setting, private social networks, health hacks, data integration, resource library, modular education programs and video appointments

Mental Health Diabetes projects

- Improving mental health and wellbeing has the potential to improve both quality of life and glycaemic control
- The projects aim to improve access to primary mental health services for people with poorly controlled diabetes
- Situated in Northland and Tairāwhiti DHBs
- Malatest evaluating the project

Tairawhiti approach - Targeted

- **Māori or Pacific** person with **poorly controlled Diabetes** (HbA1c level of 64mmol/mol or more) and an **indication** of potential mild to moderate mental health issues:
  - poorly controlled diabetes
  - low/non-attendance
  - low/non-adherence with medication regimes
  - living in socially isolated situations
  - pressing issues (wider than health)

Tairāwhiti – a case study

– Mark (in kaiāwhina programme):

Before	Now – six weeks later
No interest in preparing meals	Engaged in sandwich club
Difficulty shopping budget	Kaiāwhina supermarket tours, gaining confidence in buying right food within his
Little contact with whānau	Joined lunchtime walking group
Overweight (127kg), no exercise	Losing weight (125kg)
Uncontrolled diabetes (HbA1c 86)	Reducing HbA1c (now 82)
Wanted to lose weight and sort out his lounge. Felt hopeless.	***Feeling happier and has a plan towards new lounge suite.***

Northland DHB

Tamariki programme

- Whānau with child newly diagnosed with T1 DM in previous year
- Whānau with Child with poorly controlled T1 DM high HbA1c
- Kaiawhina co-ordinates and supports tamariki and their whanau

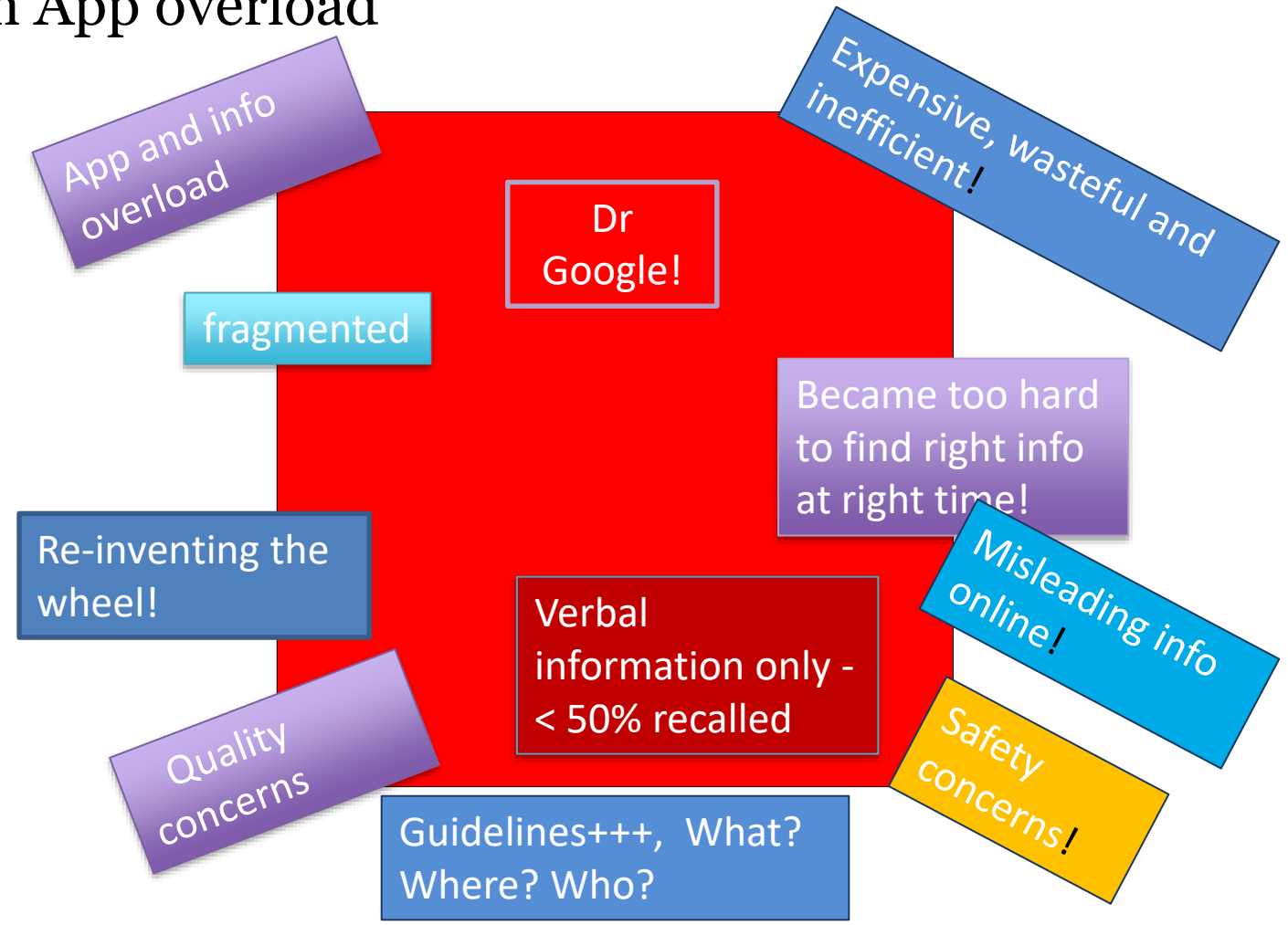
Rangatahi programme

- A series of workshops delivered by the Company of Giants theatre group
- Bring together clinicians and patients in a new model of care that removed barriers of access, and where the clinicians were naïve participants – engaging in full and level playing field
- Three cohorts of young people

Adult programme

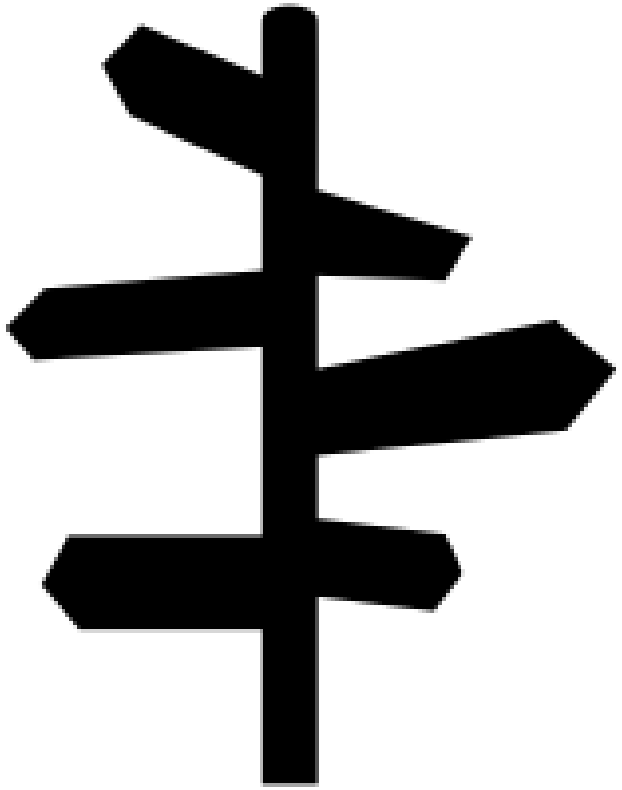
- Mixed model including workforce development, group sessions, e therapy and specialist support in primary care

Health App overload



We know

- Over 165,000 health apps!
- Around two-thirds of Kiwis aged 15 and over now own a smartphone
- Despite digital divide – 2.5 million smart phone users in NZ
- Important opportunity, but very little guidance available and
- very few clinicians recommending apps



NZ Health App Library – consumer facing

Improving health literacy

Strong focus. Working on improving layout and design to simplify further.

Easy to read

Aim to use plain language, white space, bullet points, sub headings and short sentences so easier to read and to read online.

Enhanced user experience

Responsive website so viewable on all devices. Nearly 50% views are on mobiles now.

Peer review & Consumer Input

Co-design process. Ongoing work to find better process for multiple user reviews

Self care focus

Looking for apps that help people take positive steps to prevent or minimise health impact.

Relevant to New Zealanders

Many apps not useful in NZ if services focused or databases not local.

www.hn.org.nz

App quality assessment

Formal review

Based on the Mobile App Rating Scale (MARS) developed by Queensland University of Technology, Australia.

Scores apps on 4 main dimensions:

1. engagement,
2. functionality,
3. aesthetics, and
4. information quality

Clinical review

Undertaken by a health professional working in the area of interest.

Intended to gauge the clinical value, relevance and safety of the app to its target audience

User review

To get the users opinion of the app – did the app do what they expected, what they liked about the app, and their dislikes

Technical review

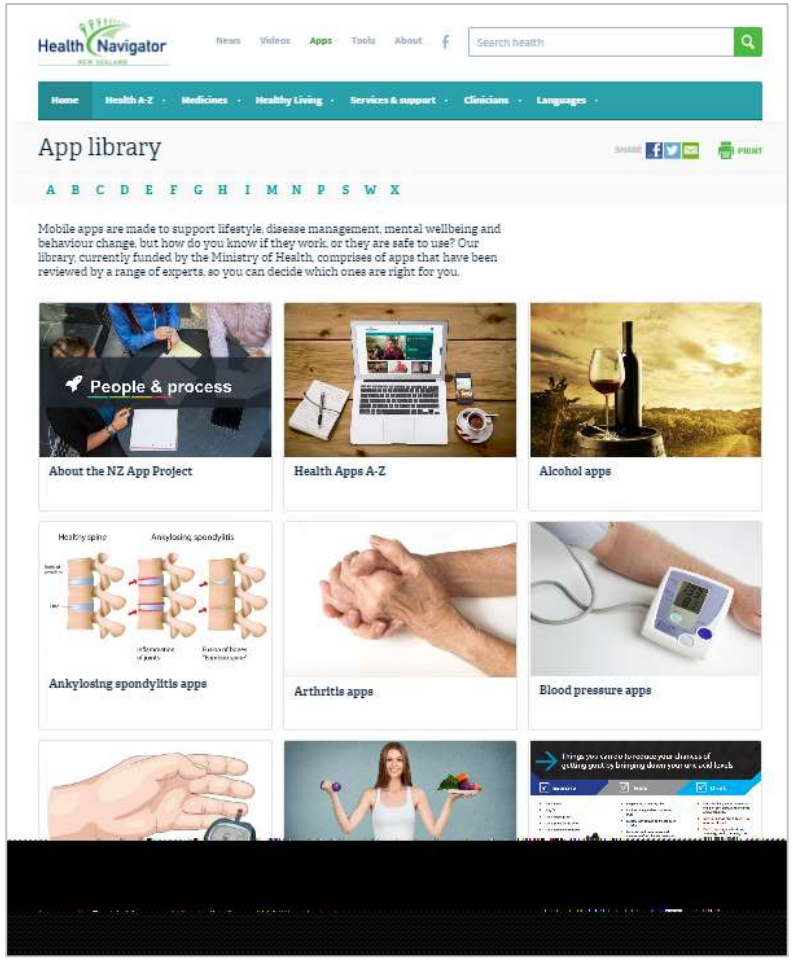
To highlight the technical aspects of an app that may be of importance to users such as security, privacy, and performance.

NZ relevance

To highlight aspects of an app that may not be relevant to NZ users such as units of measure requiring complex conversions, food database that includes products not available in NZ, etc

Publication

View online at:
www.healthnavigator.org.nz/apps/



Example

ArthritisID app

Overview | User review | Clinical review | Tech review | Formal review

An app aimed at people who think they may have arthritis.

ArthritisID	Basic Features	Rating
	• No in-app advertising • Requires the internet to function • Data can be exported • Social networking options • Support - online community	*pending* User score ★★☆☆☆ Clinical score ★★★☆☆ NZ relevance ★★☆☆☆ Technical score Formal review (MARS) • 4.1 out of 5

What does the app do?

This app has a screening tool and a series of questions for the 'detection' of arthritis. It provides a description of the different types of arthritis (such as gout, osteoarthritis, rheumatoid arthritis) and the treatment options for each such medication, exercise, diet and nutrition.

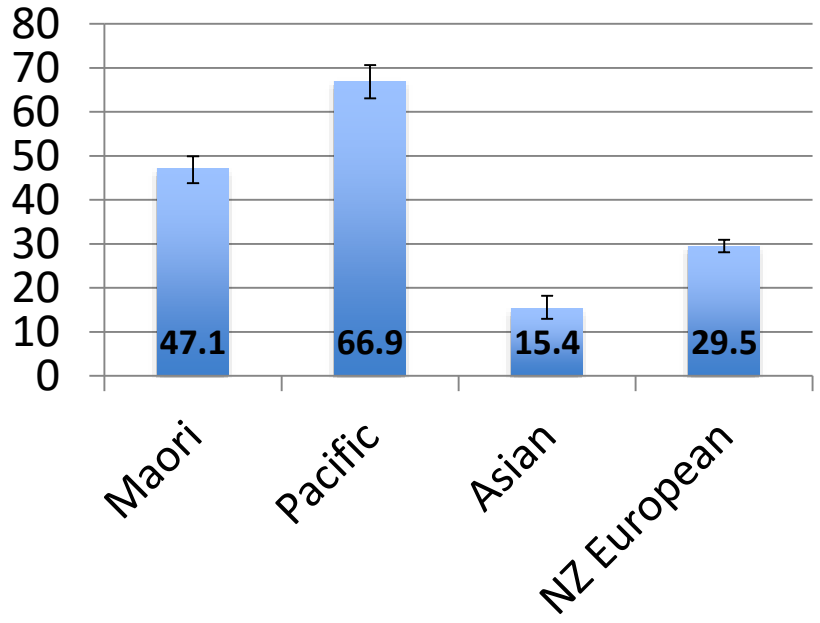
For the complete app description, go to iTunes (apple)

PROS ✓	CONS ✗
• Simple design, concise easy to understand information. • Information includes self-care advice, gives "red flag" symptoms or features for each type of arthritis to suggest urgent review by a doctor. • Helps user to analyse their symptoms and could lead to seeing their doctor for assessment.	• Dangerous to rely on an app for diagnosis. • Not all medications are available in New Zealand. • Information is very brief — an introduction only.
Date of this review: July 2016	

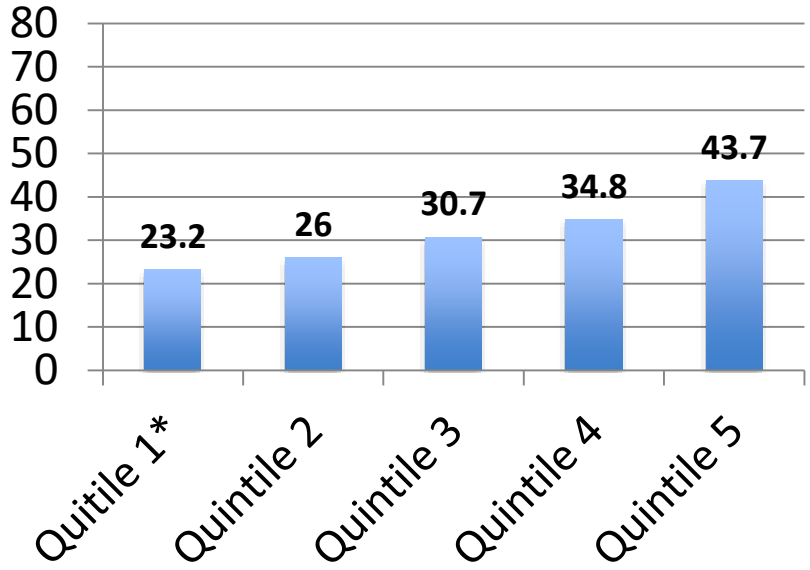
Adult obesity in New Zealand

NZ Health Survey 2015/16

% adults (15+) who are obese by ethnicity



% adults (15+) who are obese by deprivation

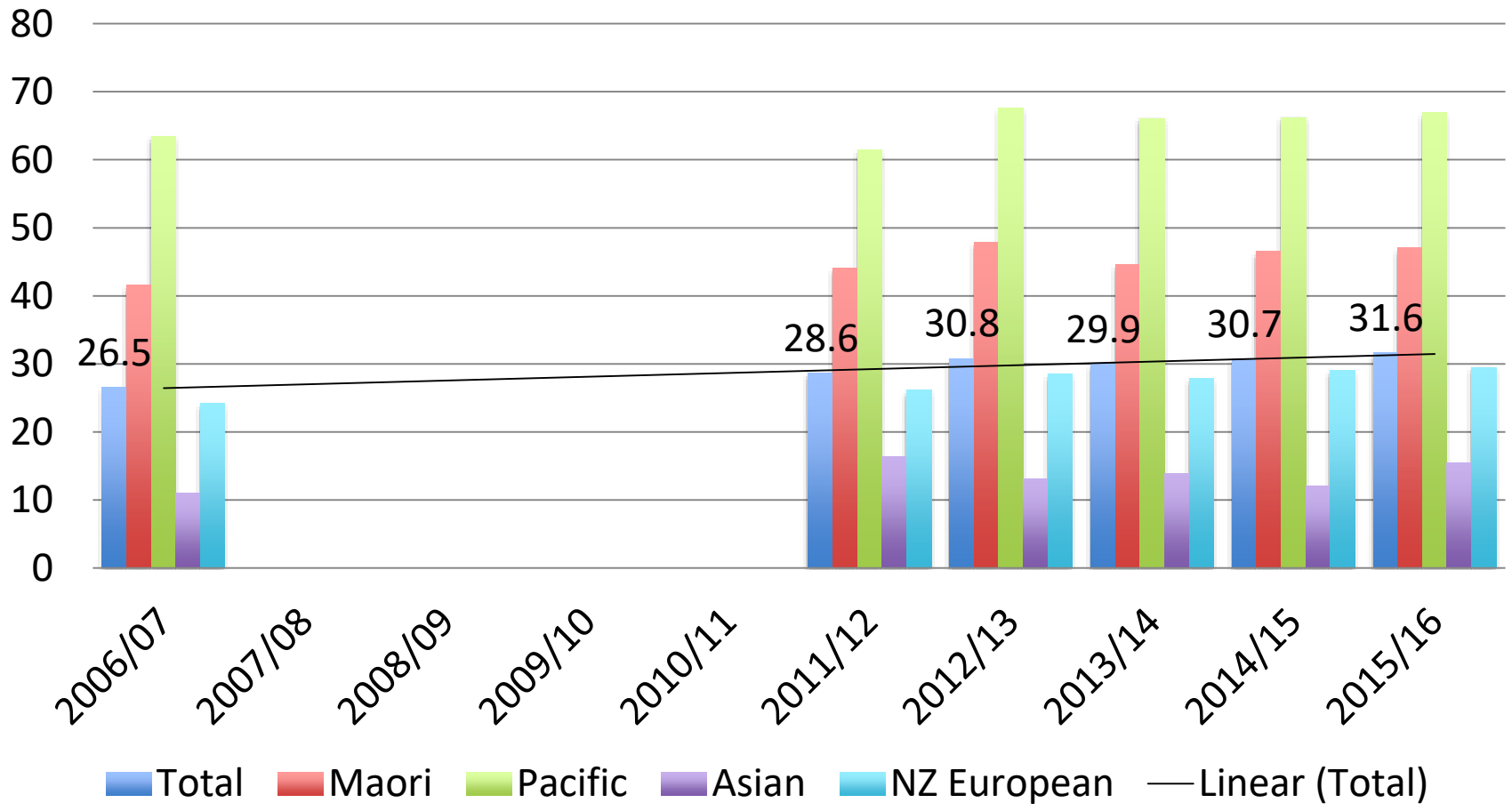


Maori vs. non-Maori: aRR=1.69 (1.58-1.82)
Pacific vs. non-Pacific: aRR=2.38 (2.21-2.56)
Most deprived vs. least deprived: aRR=1.70 (1.50-1.94)

*least deprived
aRR= adjusted rate ratio

NZ Health Survey 2015/16

Adult Obesity Over Time



NZ Health Survey 2015/16

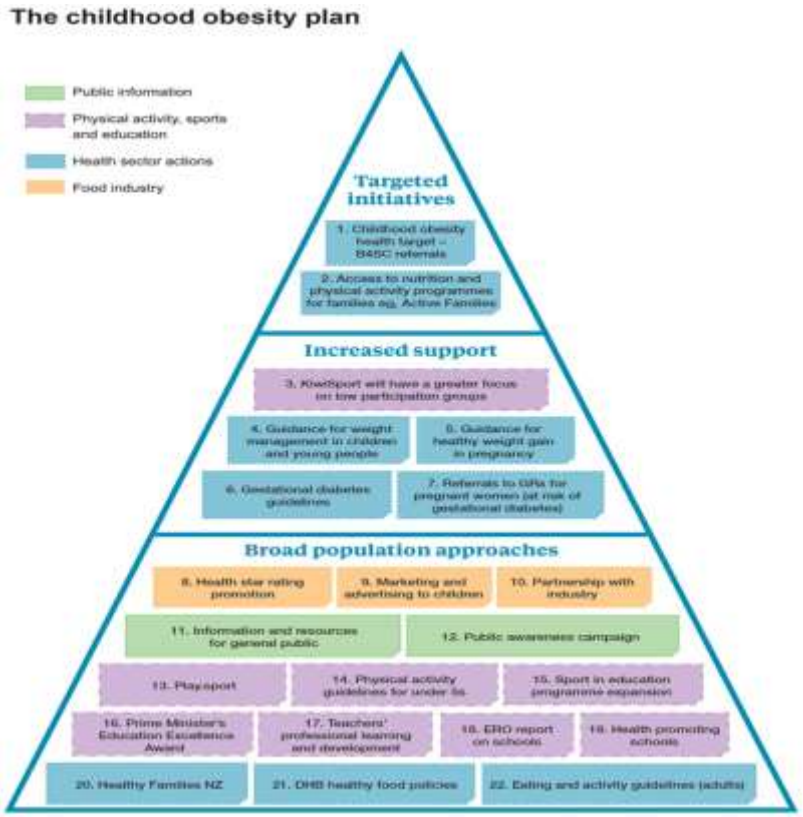
Tackling Obesity

- No single intervention – need to address the obesogenic environment as well as a life-course approach.
- Three critical time periods in the life-course:
  - preconception and pregnancy
  - infancy and early childhood
  - older childhood and adolescence.

WHO: Report of the Commission on Ending Childhood Obesity

NZ Childhood obesity plan overview

- 22 initiatives
  - **Targeted interventions** for those who are obese, increasing over time
  - **Increased support** for those at risk of becoming obese
  - **Broad approaches** to make healthier choices easier for all New Zealanders.
- Brings together initiatives across government agencies, the private sector, communities, schools, families and whanau.



•http://www.health.govt.nz/

Childhood obesity health target – Raising Healthy Kids

- A new health target has been implemented from 1 July 2016:
  - *By December 2017, 95% of obese children identified in the Before School Check (B4SC) programme will be offered a referral to a health professional for clinical assessment and family based nutrition, activity and lifestyle interventions.*
- The target was selected as the B4SC focuses on early intervention to ensure positive, sustained effects on health.
- The target defines obesity as a BMI above the 98th centile on the NZ-WHO growth chart.

Weight management
IN 2–5 YEAR OLDS

MINISTRY OF HEALTH
MANATŪ HAUORA

1 MONITOR

Monitor growth.

Regularly measure height and weight to calculate Body Mass Index (BMI). Use New Zealand – World Health Organization age- and sex-specific growth charts.

Overweight: above 91st centile

Obese: above 98th centile

If trending towards overweight, provide the family or whānau with brief nutrition and physical activity advice.

If overweight or obese discuss long-term health risks with the family or whānau.

Proceed to stage 2: Assess

2 ASSESS

Take a full history for BMI above 91st centile.

Consider:

- co-morbidities
- family history of obesity, early cardiovascular disease, or dyslipidaemia
- precipitating events and actions already taken
- usual diet and levels of physical activity and sleep patterns
- current physical and social consequences of overweight
- signs of endocrine, genetic or psychological causes
- medications that may contribute to weight gain.

Include in a clinical examination:

- blood pressure with appropriate cuff size
- skin: intertrigo, cellulitis, carbuncles
- hepatomegaly
- enlarged tonsils
- assessment of short stature/poor linear growth
- abnormal gait, flat feet, lower leg bowing or problems with hips or knees
- dysmorphic features
- undescended testicle (boys).

Consider further investigations for BMI above 98th centile:

- lipid profile
- HbA1c
- overnight sleep study, using pulse oximetry if history suggests sleep apnoea.

3 MANAGE

Aim to slow weight gain so the child can grow into their weight.

Use the Food, Activity (including sleep) and Behaviour (FAB) change approach to address lifestyle interventions.

- Food/nutritionally balanced diet
- Physical activity and reduce sedentary time
- Sufficient sleep
- Behaviour strategies.

To support meaningful engagement and improved health outcomes, it is important that a mutually agreed weight management plan takes into account the broader social, environmental and cultural contexts of the child, family and whānau.

Refer to paediatric services if significant co-morbidities are identified or if an endocrine or genetic cause for obesity is suspected.

Agree a plan for review and monitoring.

4 MAINTAIN

Maintain contact and support and continue to monitor the child's height and weight to ensure they are adequately supported.

Reinforce healthy eating, physical activity, behaviour strategies and sleep advice.

Identify and promote local support services. Develop collaborative partnerships with Māori health providers, Pacific health providers, Whānau Ora providers and other community-based organisations as appropriate.

Reassess if progress is not sustained.

http://www.health.govt.nz/system/files/documents/publications/weight-management-2-5-year-oldsv2.pdf

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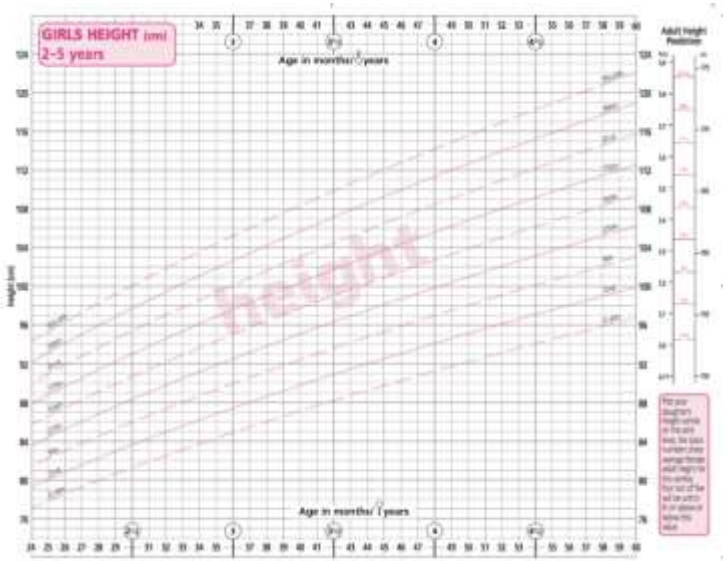
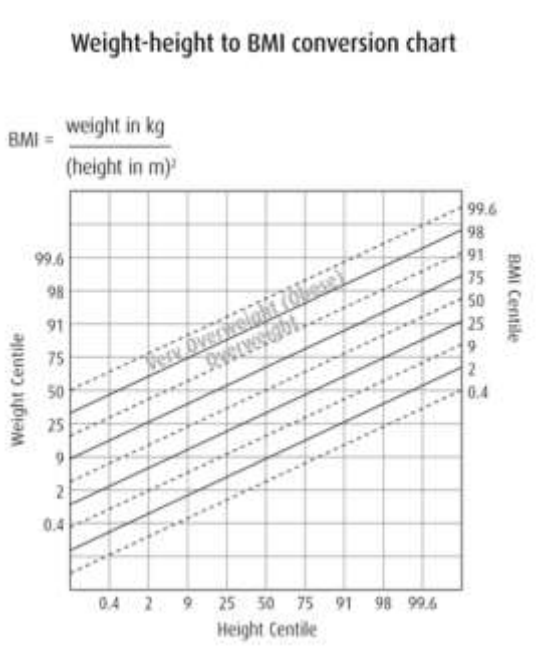
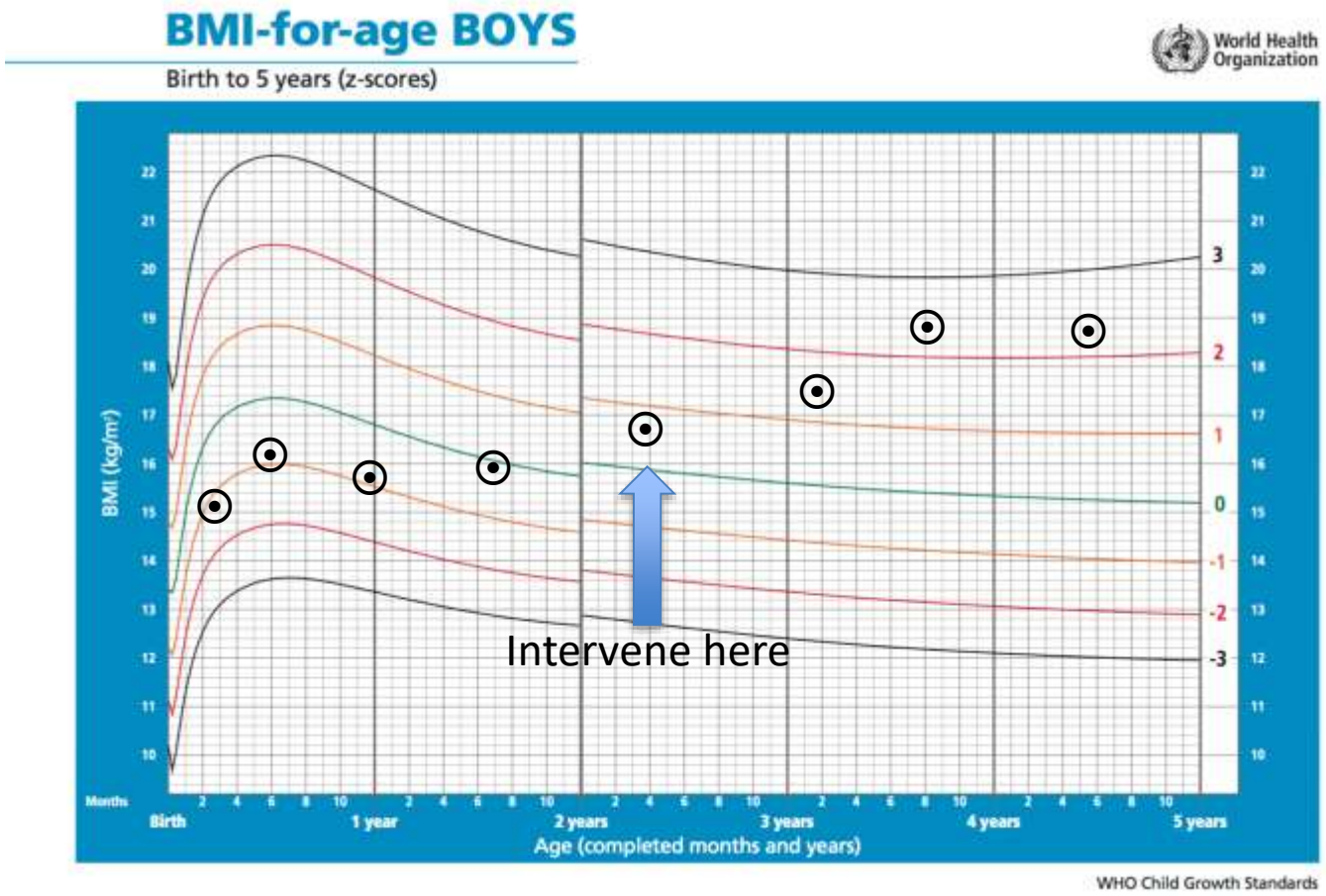
NZ-WHO Growth Charts





Intervene Early



- A change of centile channel is an indicator that the child's growth trajectory needs to be watched and an early intervention is likely to be more straightforward and effective

Z score (SD): +1.3 91st Centile
+2.0 98th Centile

Acknowledgement: Dr Pat Tuohy

Having the conversation….

‘My child exercises every day of the week with horse riding and running and as you should know muscle weighs heavier than fat.’

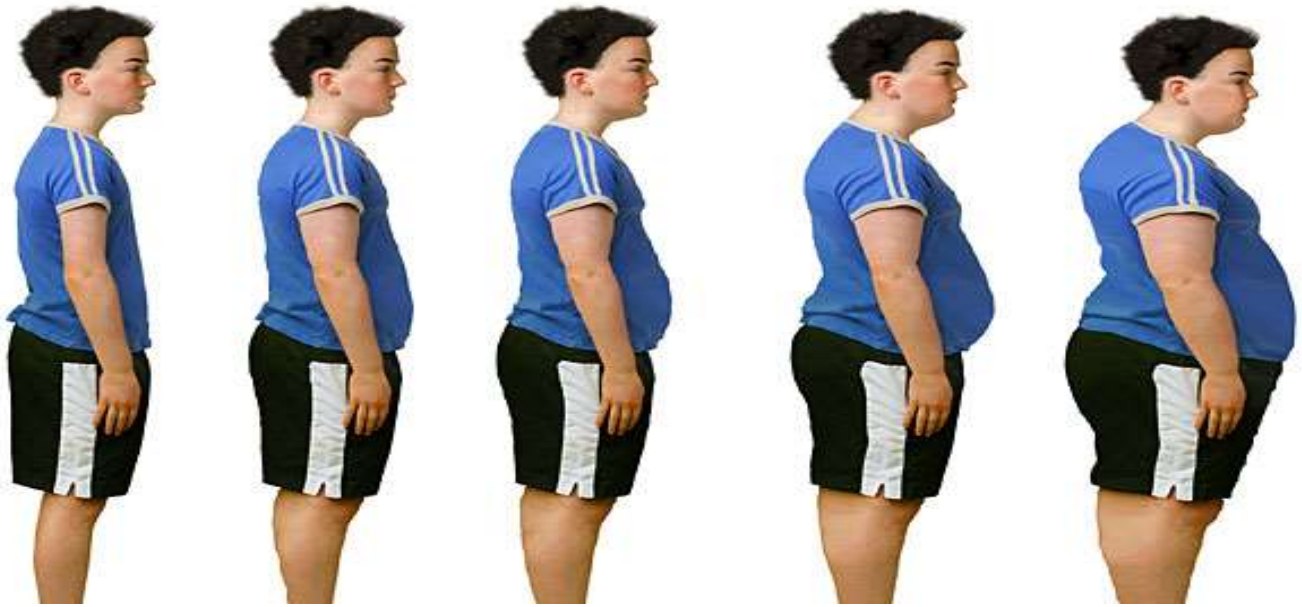
‘There are much fatter children out there and my son isn’t that bad!’

‘If you look at the rest of his activities and family members then his natural weight and body size is large.’

‘He is very short for his age and I feel he will even out as he grows.’

Gillison et al Public Health Nutrition 2013: 17(5), 987–997

What's 'normal'?



1970 2009

*"Our findings highlight a **mismatch** between health professionals perceptions of how difficult these discussions are and reality, in that **most parents are receptive** to the information if delivered well."*

Dawson et al. Pediatr Obesity, 2016

Having the conversation….

- Show concern, rather than professional detachment
- Be confident and caring
- Allow time for questions
- Provide written information to parents
- Value the child and respect the parents

Mikhailovich & Morrison, Journal Of Child Health Care 2007 11(4)

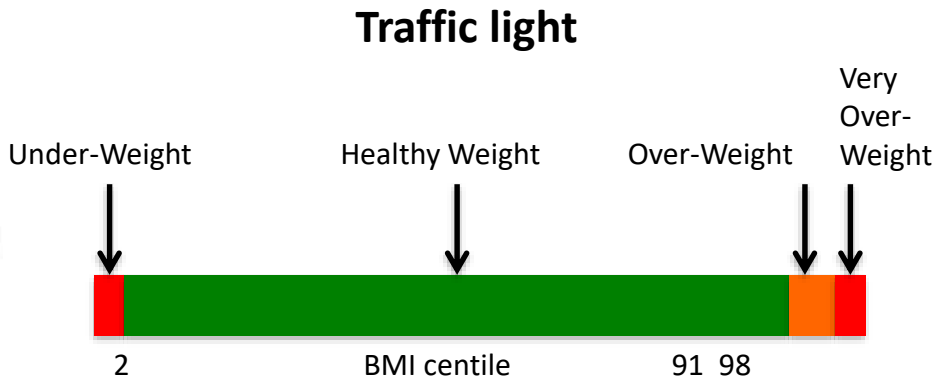
The most important aspect of these conversations is to make the experience **positive** and **non-judgmental**

The style in which this feedback is provided appears to be less important.

Dawson et al. Pediatr Obesity, 2016

Tools


Change
Talk
Change Talk: Childhood Obesity
Kognito Health & Fitness
You don't have any devices
Add to Wishlist
Install


Traffic light
Under-Weight
Healthy Weight
Over-Weight
Very
Over-
Weight
2
BMI centile
91 98

Manage

Food

- Nutritionally balanced diet
- Appropriate portion sizes
- Family meals
- Slower eating
- Avoid snacking

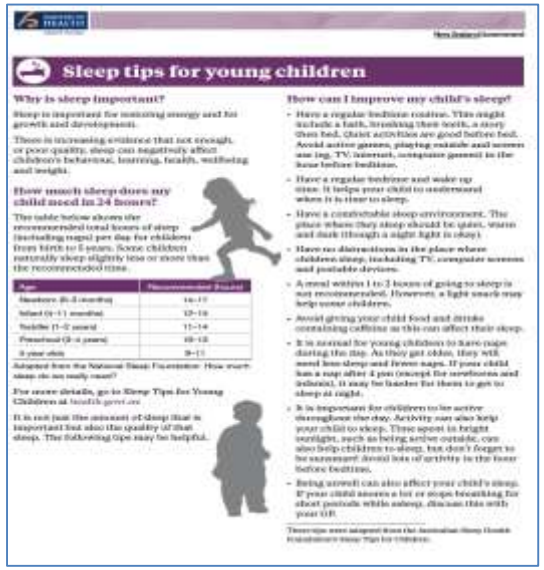
Activity

- Play and physical activity
- Reduce screen time (esp TV)
- Sleep time
  - Infants: 12-15
  - Toddlers: 11-14
  - Preschoolers: 10-13

Behavioural Strategies

- Change what is available at home
- Keep ‘treats’ out of site
- Increase easy accessibility to healthy options

Tips



http://www.health.govt.nz/your-health/healthy-living/food-and-physical-activity/obesity

Maintain

- Review opportunistically
- Accept setbacks – maintain positivity
- Encourage family activities and sport
  - Link with local Regional Sports trust
- Encourage cultural initiatives
  - e.g. Kapa-Haka
- Support communities
  - Healthy Families NZ
  - Iron Maori
  - Community gardens/Kai Atua

Adult Obesity

- **Motivate a weight loss attempt**
- Healthcare professional advice to lose weight was associated with increased odds of
  - Wanting to weigh less (OR=3.71; 95% CI: 2.10-6.55)
  - Attempting to lose weight (OR=3.53; 95% CI: 2.44-5.10)

Jackson et al BMJ Open 2013, 3: e003693

Making an offer of support

Intervention (n=940)

- Physician offered referral to a weight management group

- 772 (72%) agreed to attend
- 379 (40%) attended
- Mean weight change at 12 months: **2·43 kg**

Control (n=942)

- Physician advised the patient that their health would benefit from weight loss.

- 82 (9%) attended weight management group
- Mean weight change at 12 months: **1.04 kg**

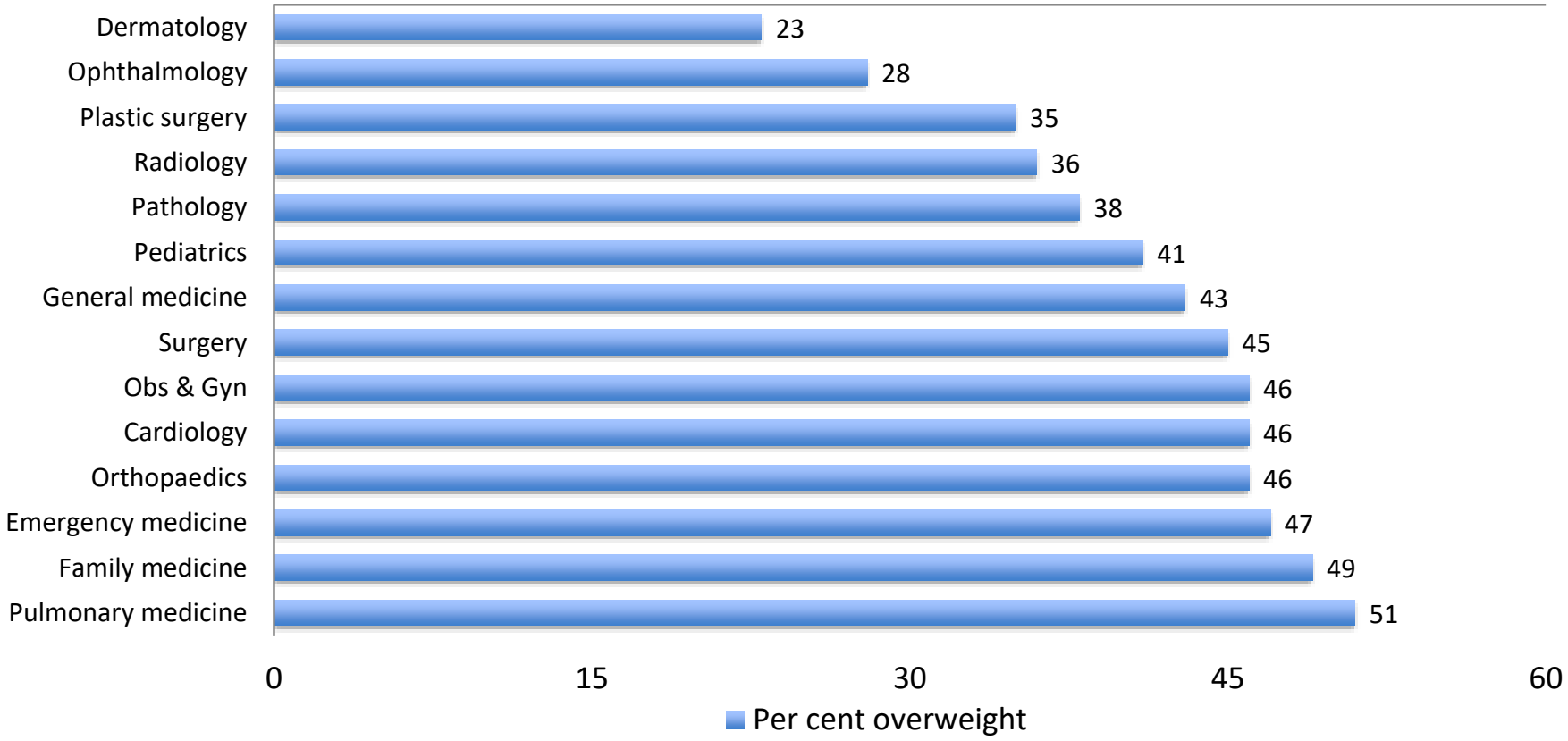
adjusted difference = 1·43 kg (95% CI 0·89-1·97)

Aveyard et al. Lancet. 2016 Nov 19;388(10059):2492-2500.

An example of a conversation

- **HCP: While you are here, I'd like to have a brief discussion about your weight. From the measurements we have taken, your BMI is >30 which puts you into the very overweight category and increases your health risk.**
- **Patient: Oh?**
- **HCP: I know weight management can be challenging but I've got some information here which I think you might find helpful. Are you willing to have a look at them?**
- **HCP: Okay**
- **Doctor: Great, I'd really like to encourage you to give these things a go. Would it be OK if I followed up with how you're getting on when I next see you?**
- **Patient: Sure, I guess**
- **HCP: Don't worry, I'm not going to lecture you. I know how difficult making changes can be. I'd just like to support you as much as I can to get to a healthy weight, however long that takes.**
- **Patient: Thanks**

Overweight healthcare professionals?



Medscape Physician Lifestyle Report, 2016

What do patients think?

- Survey of 600 overweight or obese adults

Patients estimation of doctors weight	Normal (n=118)	Overweight (n=312)	Obese (n=170)
Trust* advice on weight control	76%	85%	85%
Trust advice on diet	77%	87%**	82%
Trust advice on physical activity	79%	86%	80%

* Rated ‘a great deal’ or ‘a good amount’ of trust
**Significantly greater than normal weight (p=0.04)

Bleich et al (2013) Preventive Medicine 57: 120-124