



Preventing RF through sore throat management

Pip Anderson







Overview

Who is the population we serve?

What is the problem we are trying to fix?

What are the things that we know?

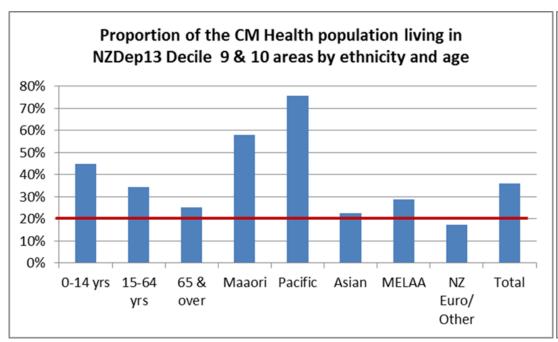
What are the things we think we know?

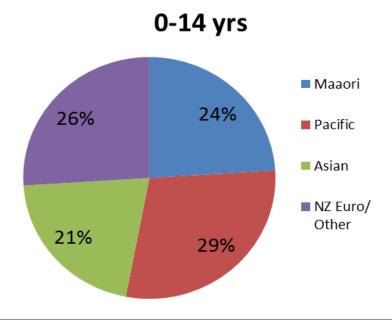
What are the things we don't know?

What next?

Population

DHB	Total ER Pop 2014	% pop living in NZDep 9 & 10 (2013)	Est pop living in NZDep 9 & 10 in 2014	ER Pop 0-14 yrs 2014	% children living in NZDep 9 & 10 (2013)	Est children living in NZDep 9 & 10 in 2014	
Auckland	469,580	18%	86,710	83,020	21%	17,330)
Counties Manukau	509,060	36%	183,270	120,350	45%	53,850)
Lakes	103,410	34%	35,270	23,020	39%	8,920	
Northland	166,250	37%	61,450	36,190	42%	15,100	
Tairawhiti	47.190	47%	22,070	11,595	53%	6.140	
Waitemata	562,680	8%	46,130	113,900	10%	11,700	>
Total	4,508,655			909,415			

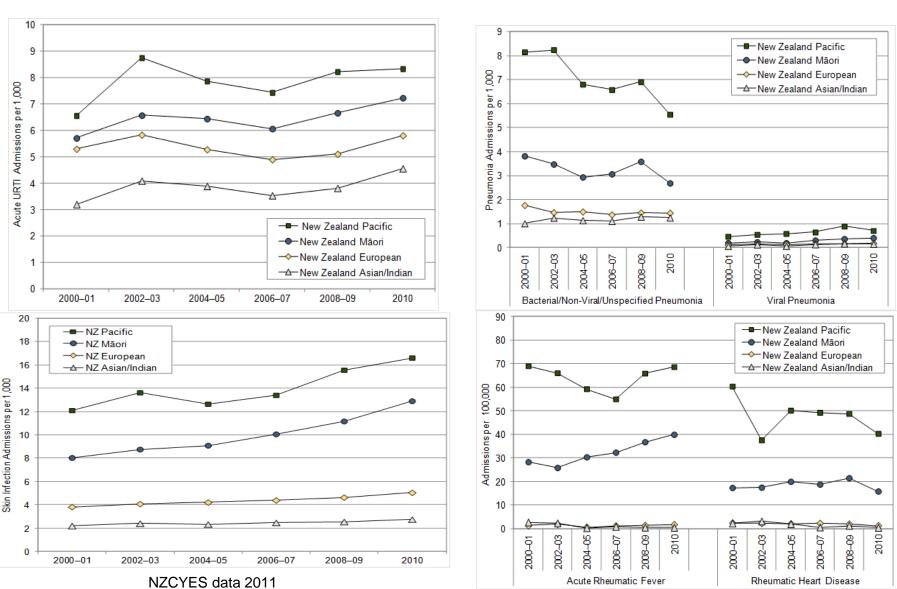




Ethnicity from ER Pop Projections , based on 2013 Census, prioritised ethnicity

NZDep based on Usually Resident population, SNZ 2013 Census, prioritised ethnicity What is the problem we are trying to fix?

Inequities in health outcomes nationally



Issues with access to primary care

Barriers to accessing primary care







NO VACANCY

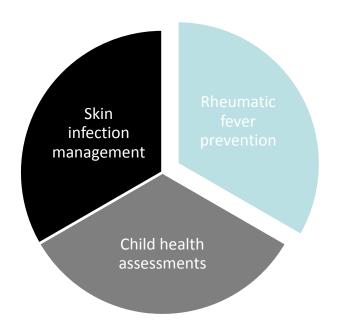
What did the programme set out to do?

Provide selected primary care services, in a school setting, to children with unmet need

GAS treatment and skin infection management prioritised

Model





Comprehensive school-based service with health teams at school every day



Health team = Registered nurse and whānau support worker

Daily checks for sore throats (self-identified)

Twice per term case finding

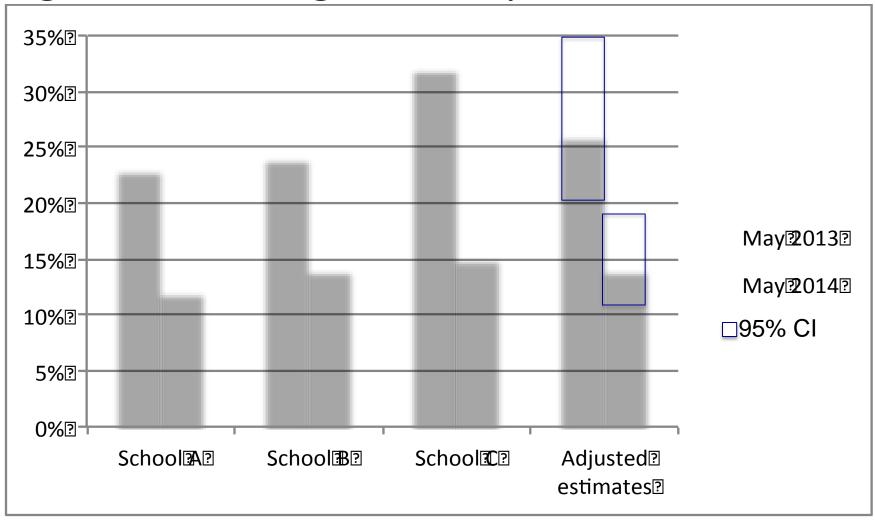
- Free assessment and treatment
- Household swabbing of siblings
- Health education and promotion

What would success look like?

- High consent rates
- Reduction of ARF
- Reduction of skin infections and skin infection hospitalisations
- Improvement health literacy
- Increased whanau awareness of primary care and social service agencies with whānau being linked to those services

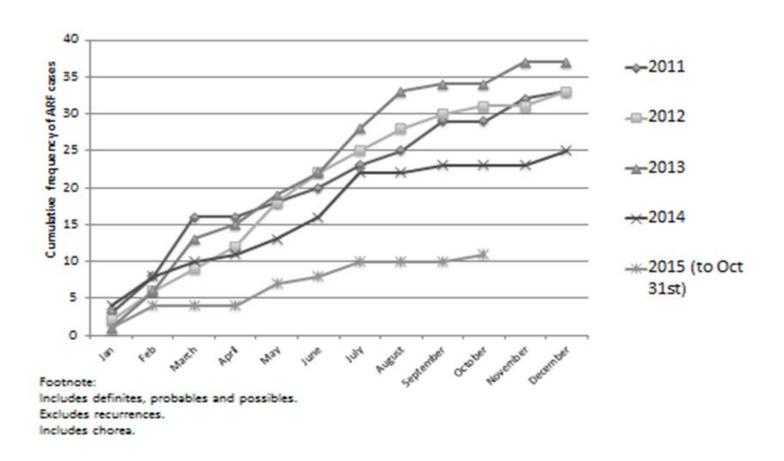
What are the things we know?

CS study shows marked statistically significant change in GAS prevalence



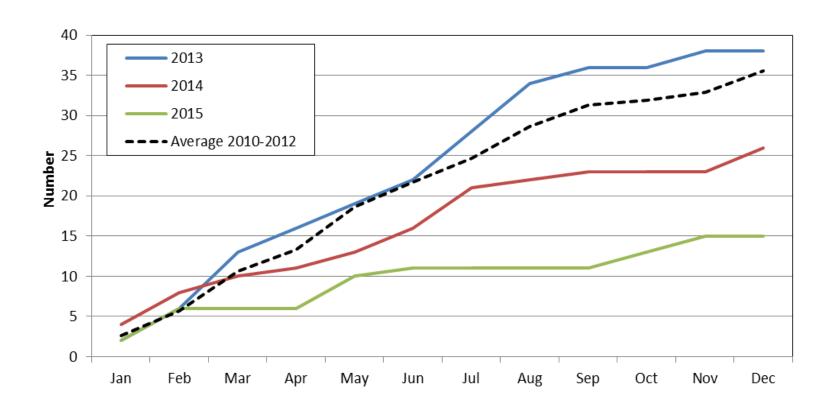
Lennon D & Stewart J (HRC study in progress)

ARF in CMDHB 5-12 year olds appears to be decreasing

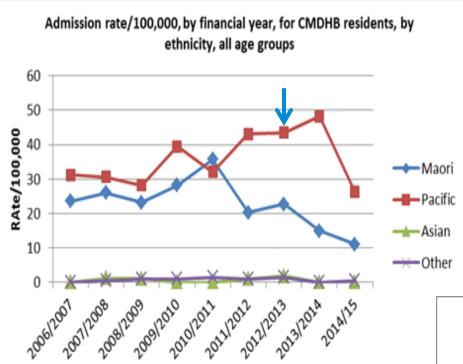


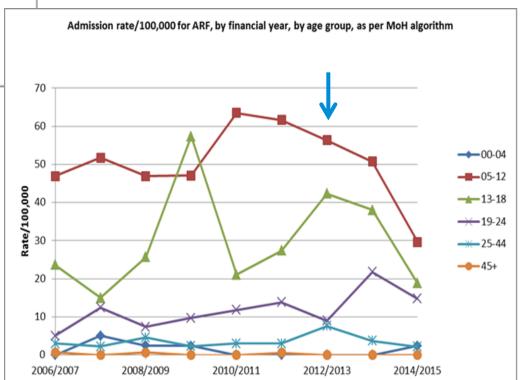
Source: D Lennon, J Stewart, P Anderson. In Press July 2016 PIDJ

ARF Notifications to Auckland Regional Public Health Service CMDHB 5-12 year olds



Source: Catherine Jackson ARPHS

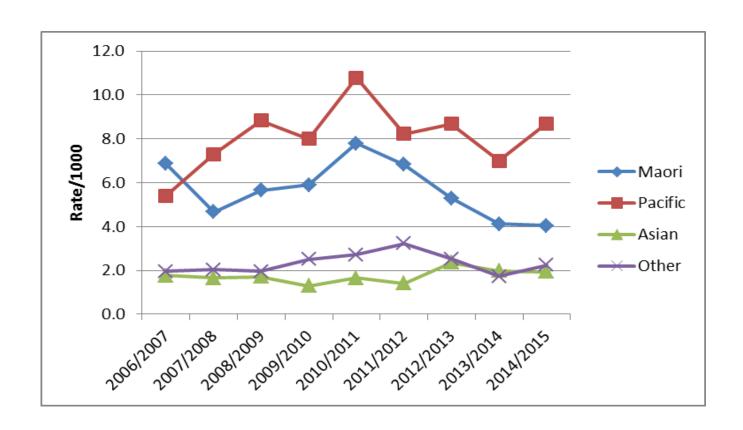




Skin infections

- Identified and managed 16,279 skin conditions (Feb- Dec 2015) ~4% treated with antibiotics (~650)
- Cross sectional prevalence study

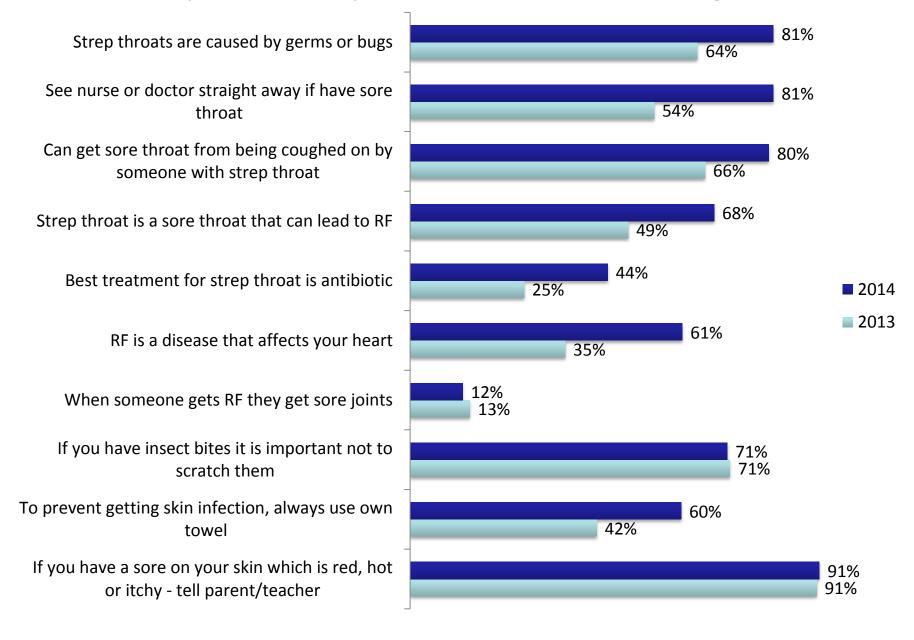
Hospitalisationrate for skin infection 5-12 years CM residents, by ethnicity



Health literacy of children and families is improving in Mana Kidz schools

- Increased knowledge regarding;
 - sore throats
 - RF prevention
 - importance of adhering to medication
 - skin infections and their treatment

Child survey shows improvements in knowledge



School based clinics



98% consent



294,414 throat swabs taken (total)



8,781
household swabs
(total)



31,862 sore throats treated (total)

AWHI interventions

- 1780 referrals from CM Health of these;
 - 94 home insulated
 - 118 moved house
 - 72 financial assistance
 - 93 curtains installed
 - 31 heat sources
 - 93 curtains

Number of swabs by service Feb1 – 31st December 2015

Service	Number of swabs taken
Rapid response (Total) General practice Secondary schools	10,969 6,512 4,457
Mana Kidz (Total) School children Household contacts	159,372 154,212 5160

What are the things we know?

- Consent rates increased over time >97%
- Reduction in Group A Strep Prevalence
- Downward trend in incidence of ARF in CM population
- Improvements in health literacy
- Programme addresses cost and practical barriers to accessing primary care
- Programme refers and links families to primary care
- Provides children with positive introduction to primary care
- Principals highly value the programme

What are the things we think we know?

- Skin infections are less common now in schools with Mana Kidz programme than they were prior to the programme
- Attendance has reportedly improved

What are things that we don't know?

- How much the school based programme has contributed to the observed reduction of RF
 - What other impacts the school based programme may have had
- What impact treating skin infections has had on ARF rates
- What impact the winter wellness campaign has had on ARF rates
- What impact the housing initiative has had on ARF rates
- Whether there has been in the change in the way primary care manages sore throat presentations

Where to from here

 Will we will be able to tease out which bit of the package delivered has made the largest contribution to the apparent reduction of ARF being observed in Counties?

 How would we understand the impact that treating skin infections has had? "Sometimes we overlook that children can't access primary care... it has to be with an adult. This way we are accessing the children that aren't accessing healthcare".

