

A consumer centred approach to improving diabetes control

Whakakotahi project
2019/20

Our Team



Sue Tutty
Project lead/GP

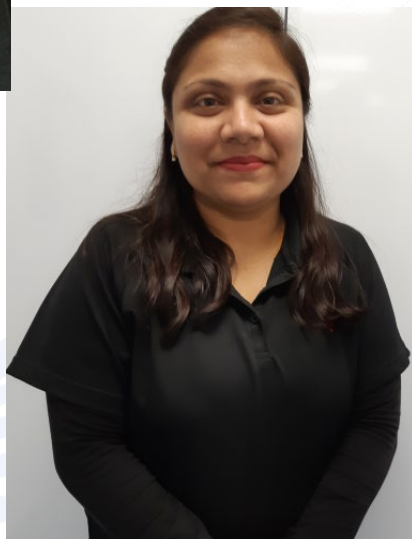


Care Coordinator
Anjini Ram Kumar



Bhupinder Kaur
Diabetes nurse

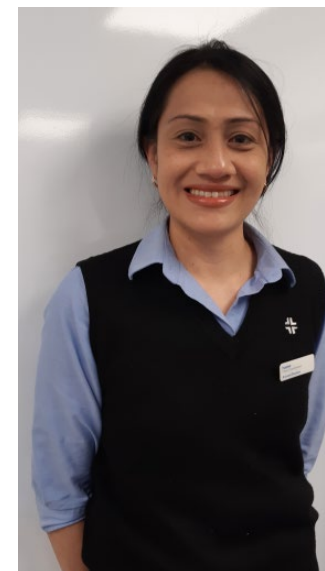
Absent
Diabetes nurse
specialists: Harpreet
Kaur/ Kate Smallman
Clinical Family
Navigator: Priya
Francis
Sponsor: Andrew
Warner



Sheetal Patel
Health Coach



Rachna Kumari
Receptionist



Ivona Savali
Centre Manager



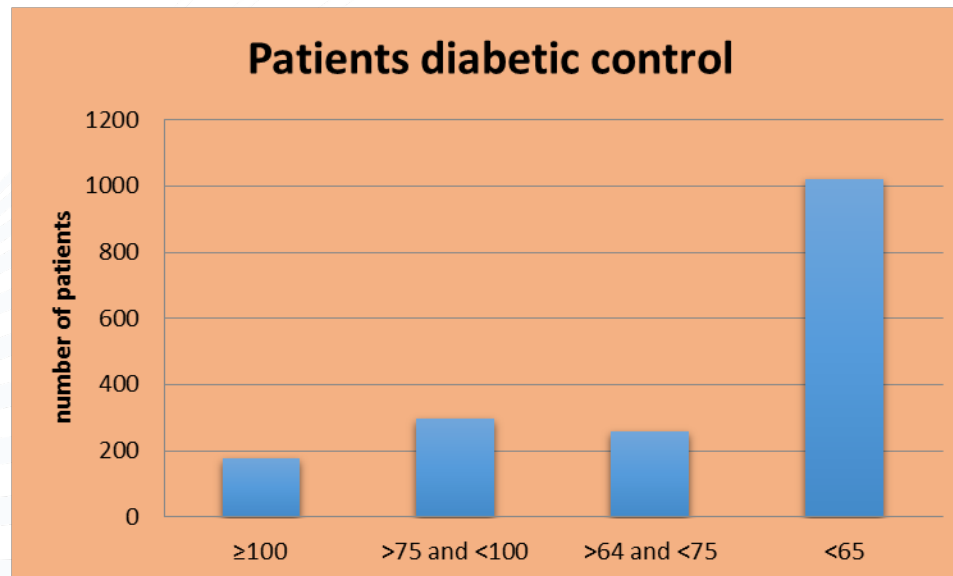
In April 2019 Bairds road surgery moved across the road to it's new premises and was renamed Local Doctors - Otara

The Problem

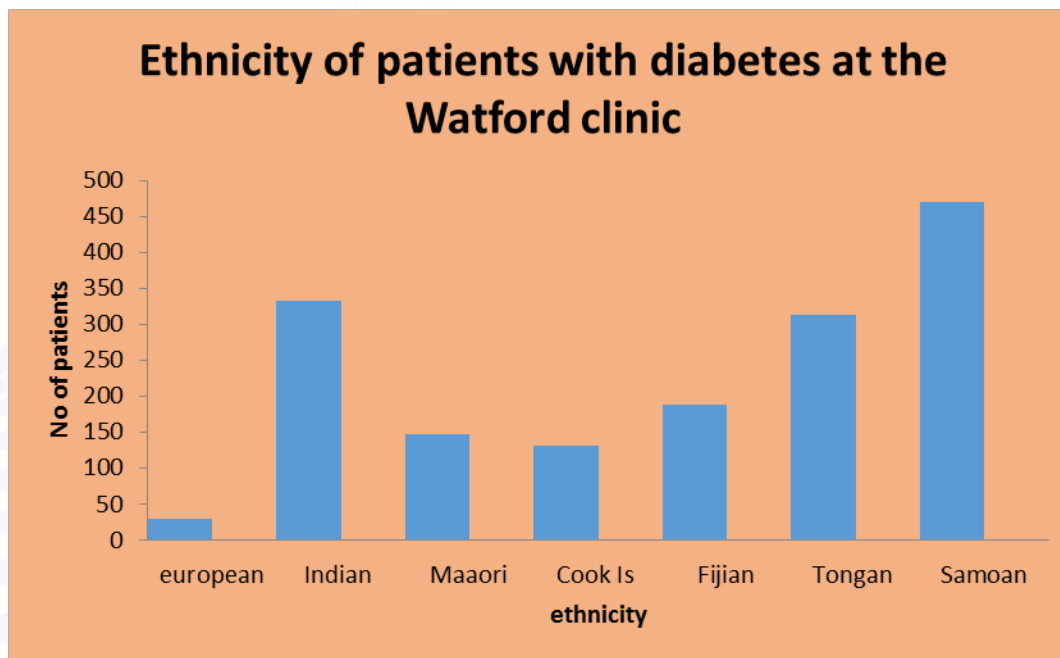
- 41,174 people are diagnosed with diabetes in Counties Manukau DHB region
- 8,844 have been identified as having poor control with an $HbA1c \geq 75\text{mmol/mol}$
- Poor control is associated with the later development of disabling and life threatening complications
- Complications include increased cardiovascular risk such as heart attacks and strokes, kidney damage, visual loss and loss of feeling to legs that can lead to amputations

Diagnosing the problem

- At Local Doctors –Otara 1,746 people have been diagnosed with diabetes
- Good control is a HbA1c <65. 42% of the people with diabetes at this clinic do not have good control

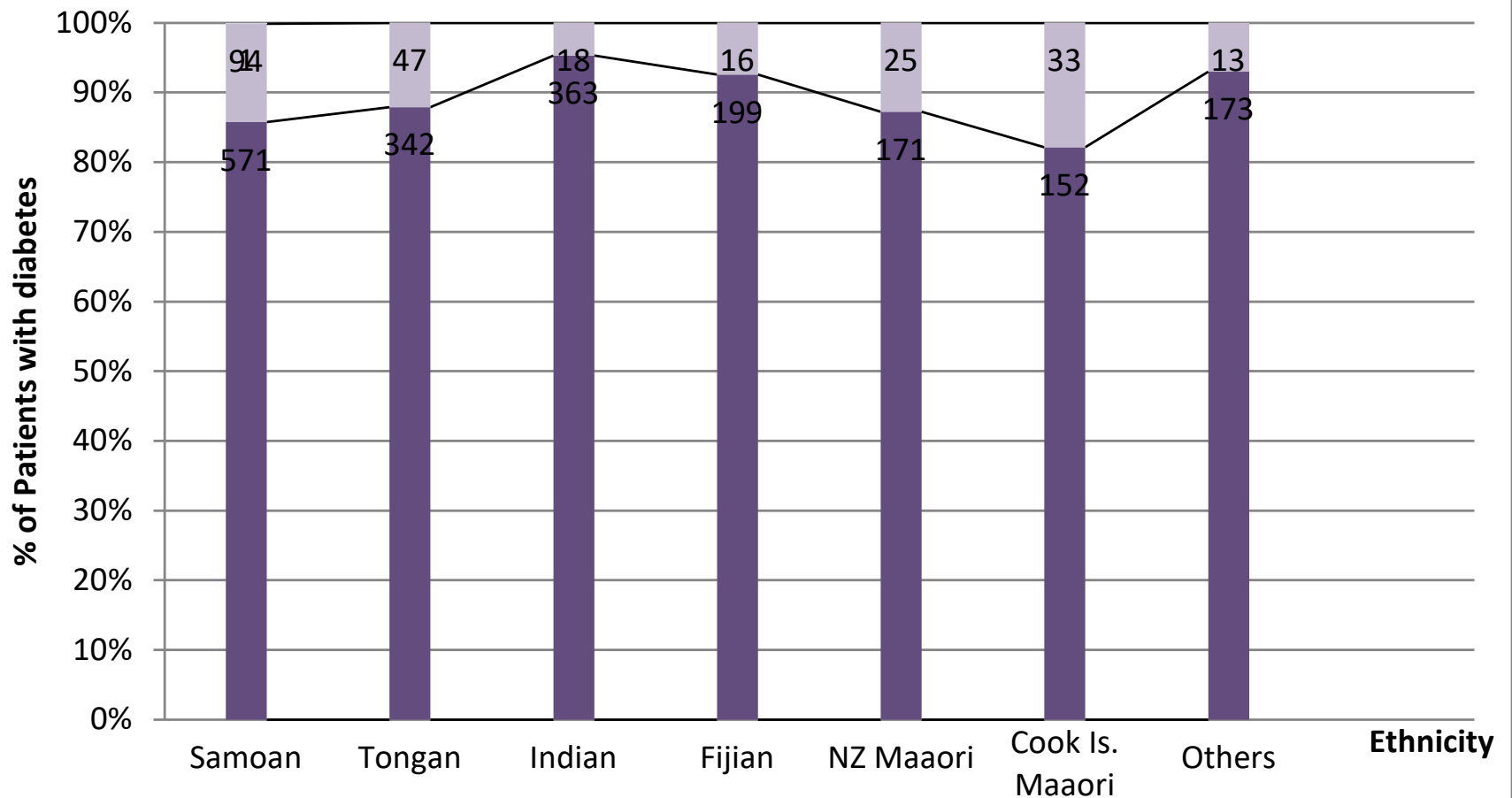


The prevalence of Diabetes in the Auckland metro region is 4.9% European, 8.6% NZ Māori, 12% Indian and 15.1% people from the Pacific Islands



Ethnicity data

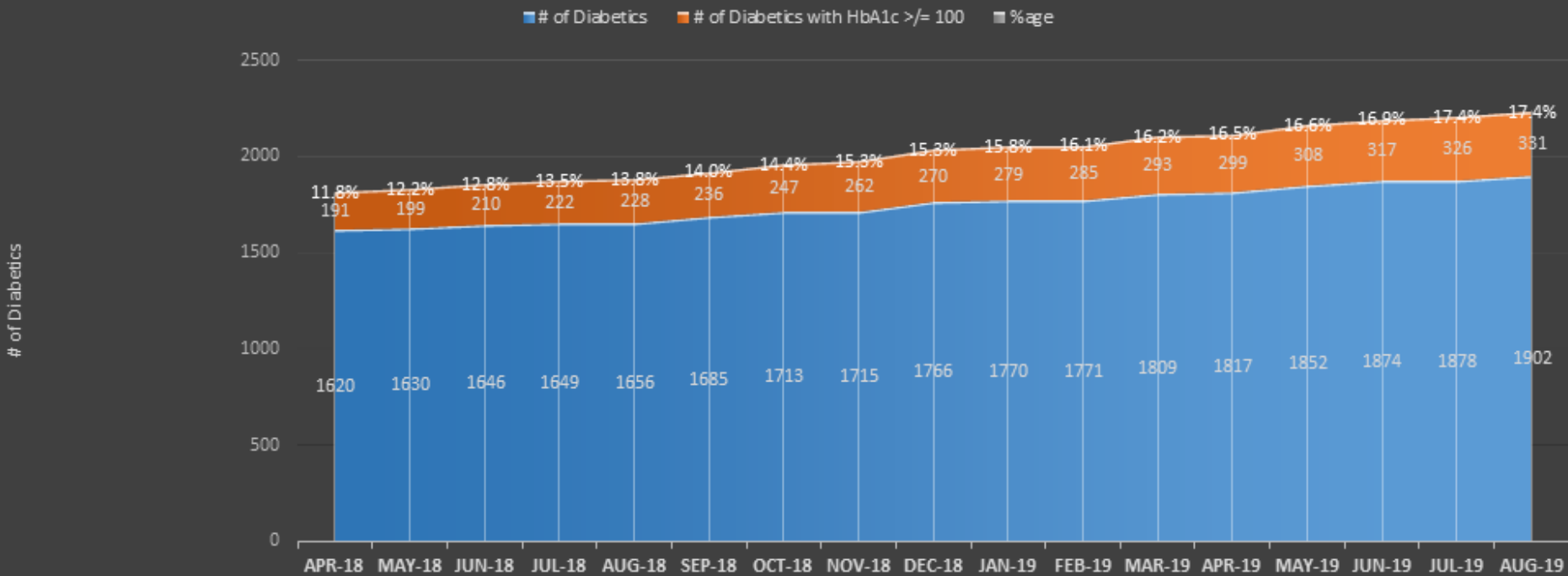
No. of Pts with HbA1c > 100 by Ethnicity



The Challenge



ETHC - Bairds Road



	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19
%age	11.8%	12.2%	12.8%	13.5%	13.8%	14.0%	14.4%	15.3%	15.3%	15.8%	16.1%	16.2%	16.5%	16.6%	16.9%	17.4%	17.4%
# of Diabetics with HbA1c >= 100	191	199	210	222	228	236	247	262	270	279	285	293	299	308	317	326	331
# of Diabetics	1620	1630	1646	1649	1656	1685	1713	1715	1766	1770	1771	1809	1817	1852	1874	1878	1902

MONTH/YEAR

The Challenge

- The number of people diagnosed with diabetes is increasing
- The number of people with an HbA1c over 100mmol/L is increasing more than the number of people being diagnosed with diabetes
- Local Doctors- Otara is a busy clinic covering both family medicine and acute care and see a large number of people diagnosed with diabetes
- Many of the people diagnosed with diabetes are not well engaged in their diabetes management

Capturing the experience

The challenges.....

“I don’t check my blood sugar as it is always high”

“Don’t cut the fat off the food. It is wasting food”

“Working 12-20 hours a day”

“Do I need to take all these tablets?”

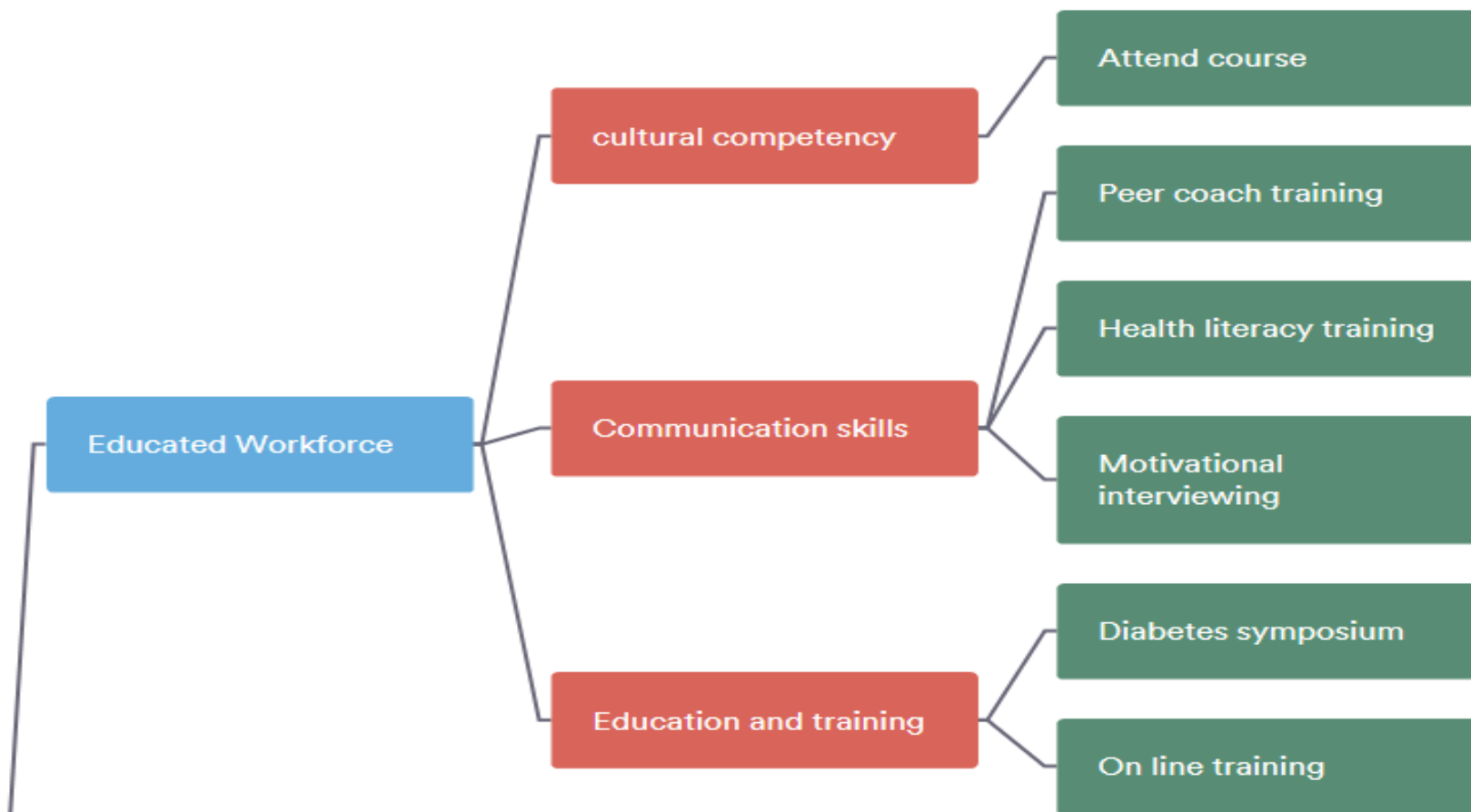
To reduce the number of patients who are
enrolled at Local doctors- Otara
with an Hba1c >100mmol/L
by 50% (from 240 patients to 120 patients)
by March 2020

Driver diagram

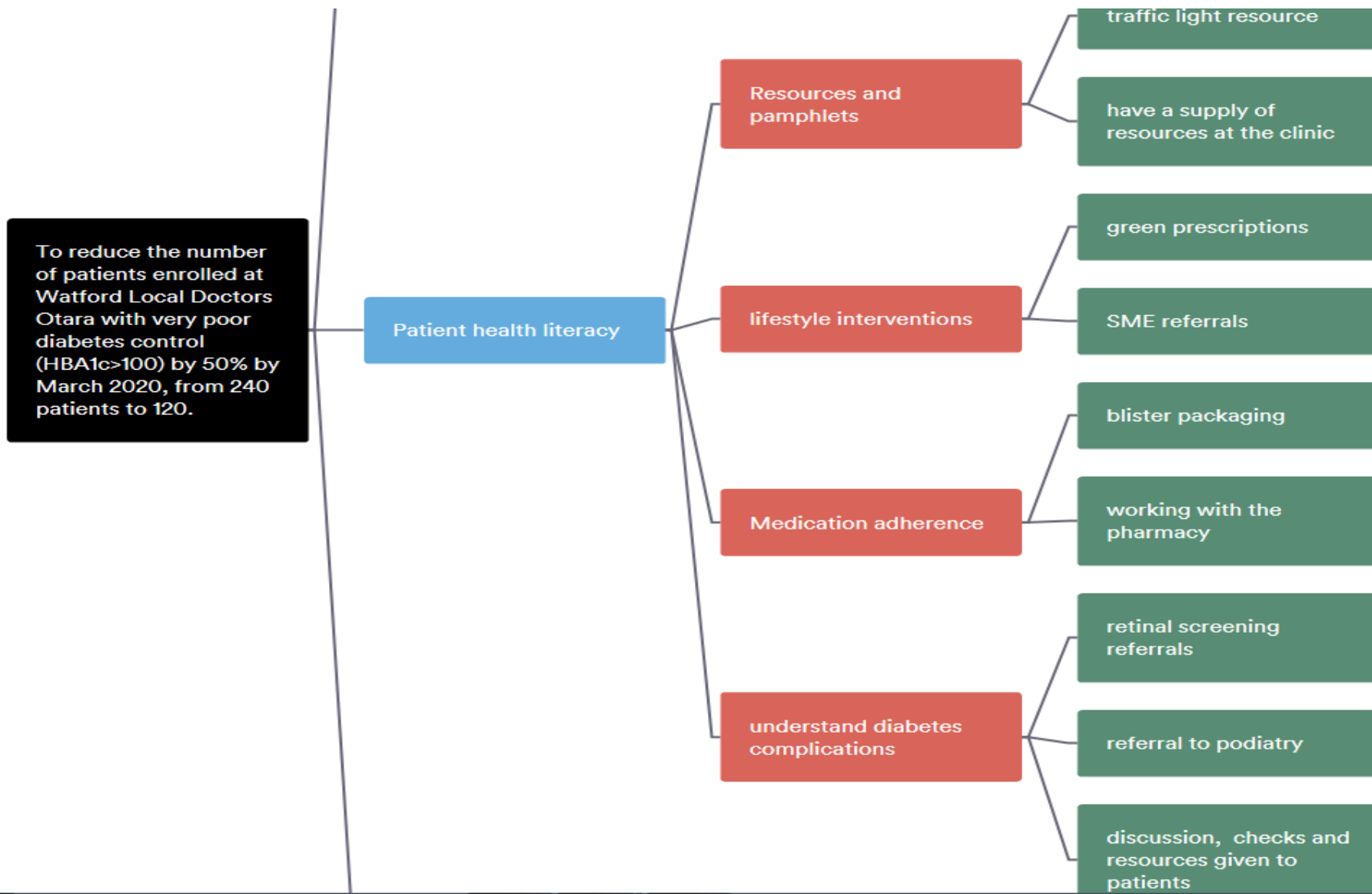
PRIMARY DRIVERS

SECONDARY DRIVERS

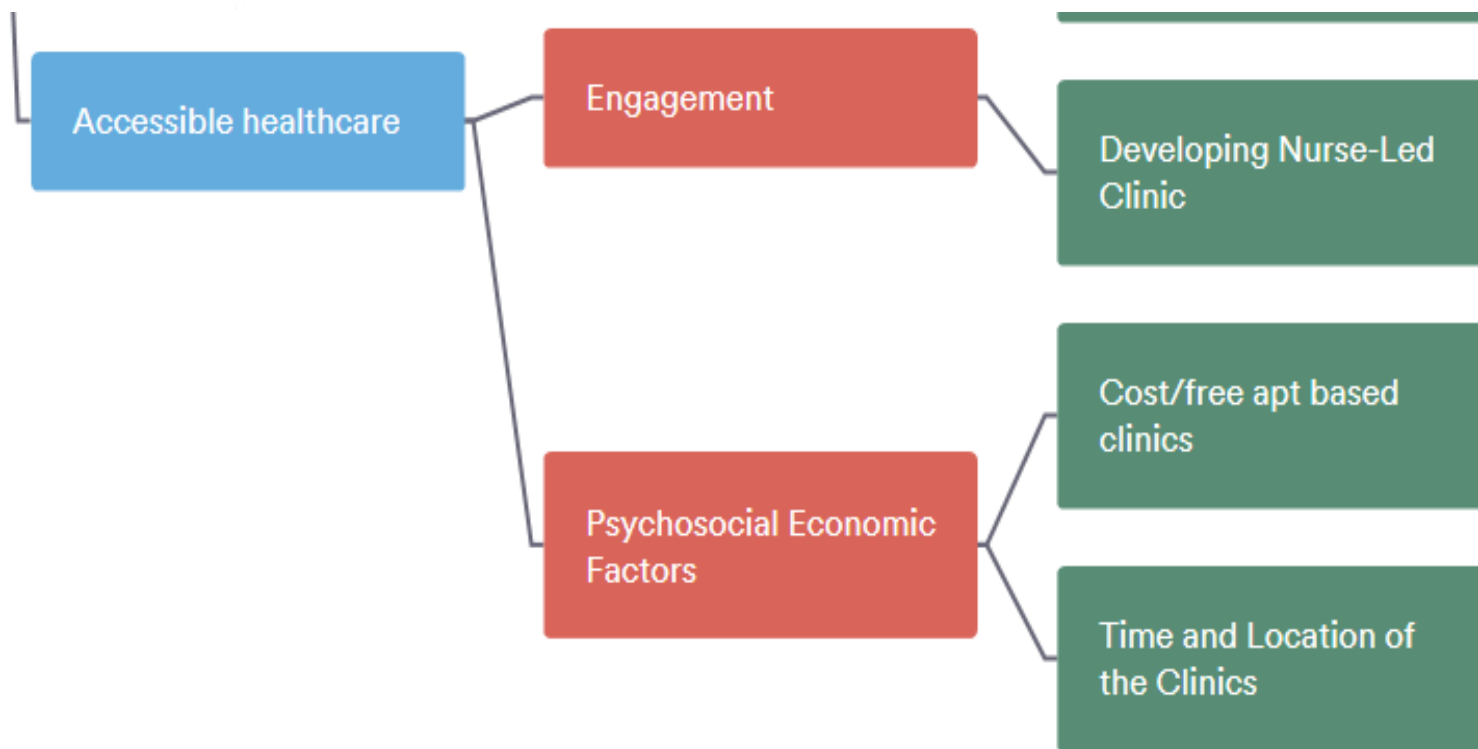
CHANGE IDEAS



Driver diagram



Driver diagram



Outcome Measure

A reduction in the number of patients at the Watford clinic with a HbA1c >100mmol/L

Process Measures

- Attendance at the clinic –turning up and coming back
- Referrals and attendance at SME
- Traffic light resource

Balancing Measures

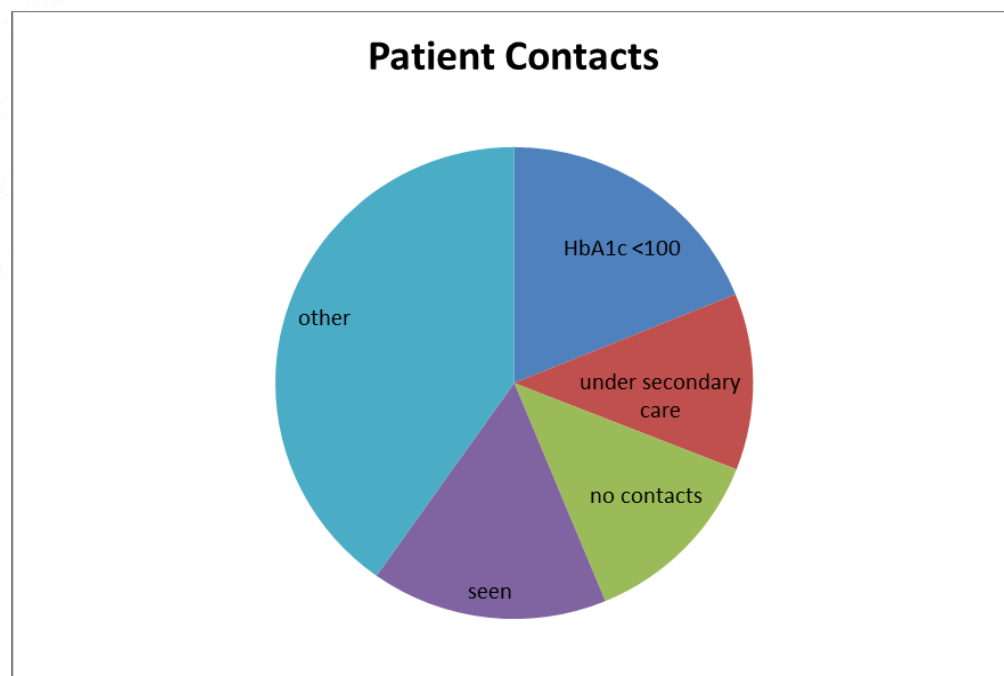
An increase of people with diabetes in the poorly controlled range HbA1c >65mmol/L

What we did

- Codesign
- Invite patients to attend the clinic
- Work with the patients
- Record all the encounters - Data sheets

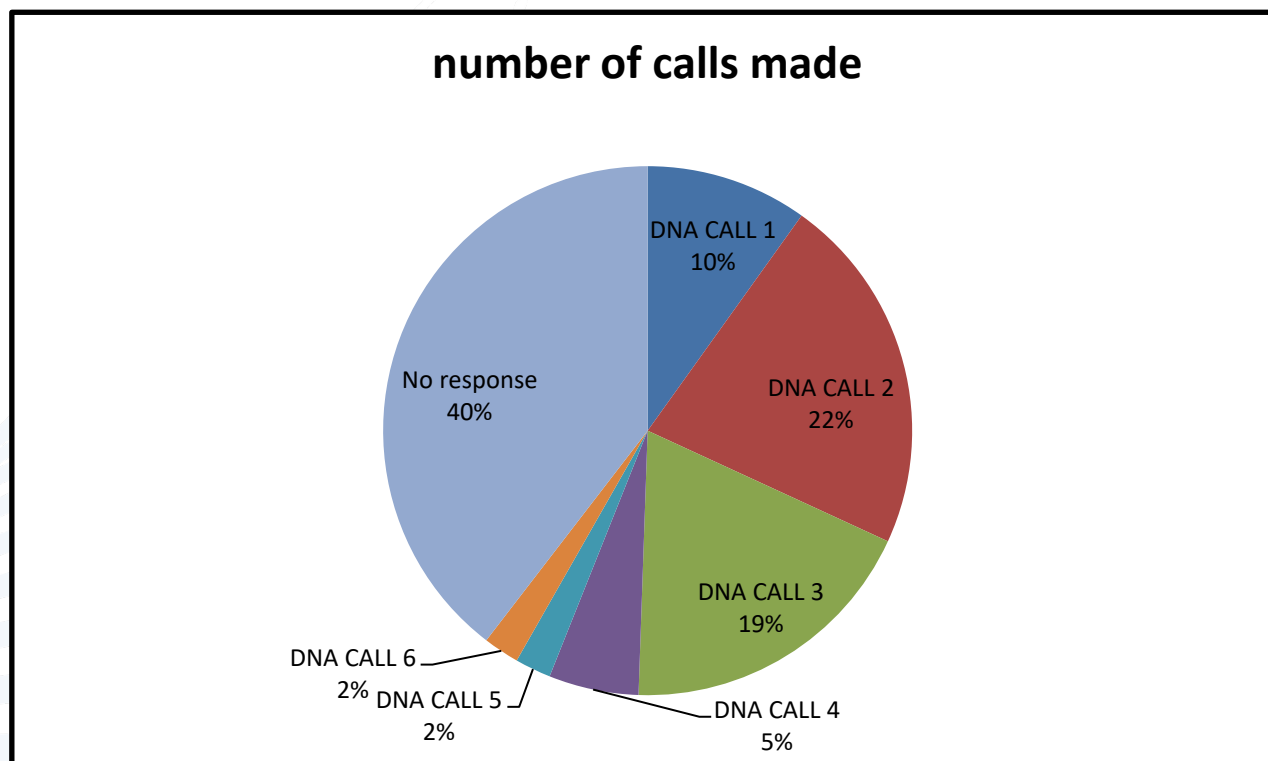
Who were we working with?

- Started with 245 pts with HbA1c > 100 in last 15 months
- Excluded 53 as HbA1c now < 100 = 192
- 34 under secondary care (including DNS) = 158
- 36 had no contacts = 122
- Seen at clinic = 45



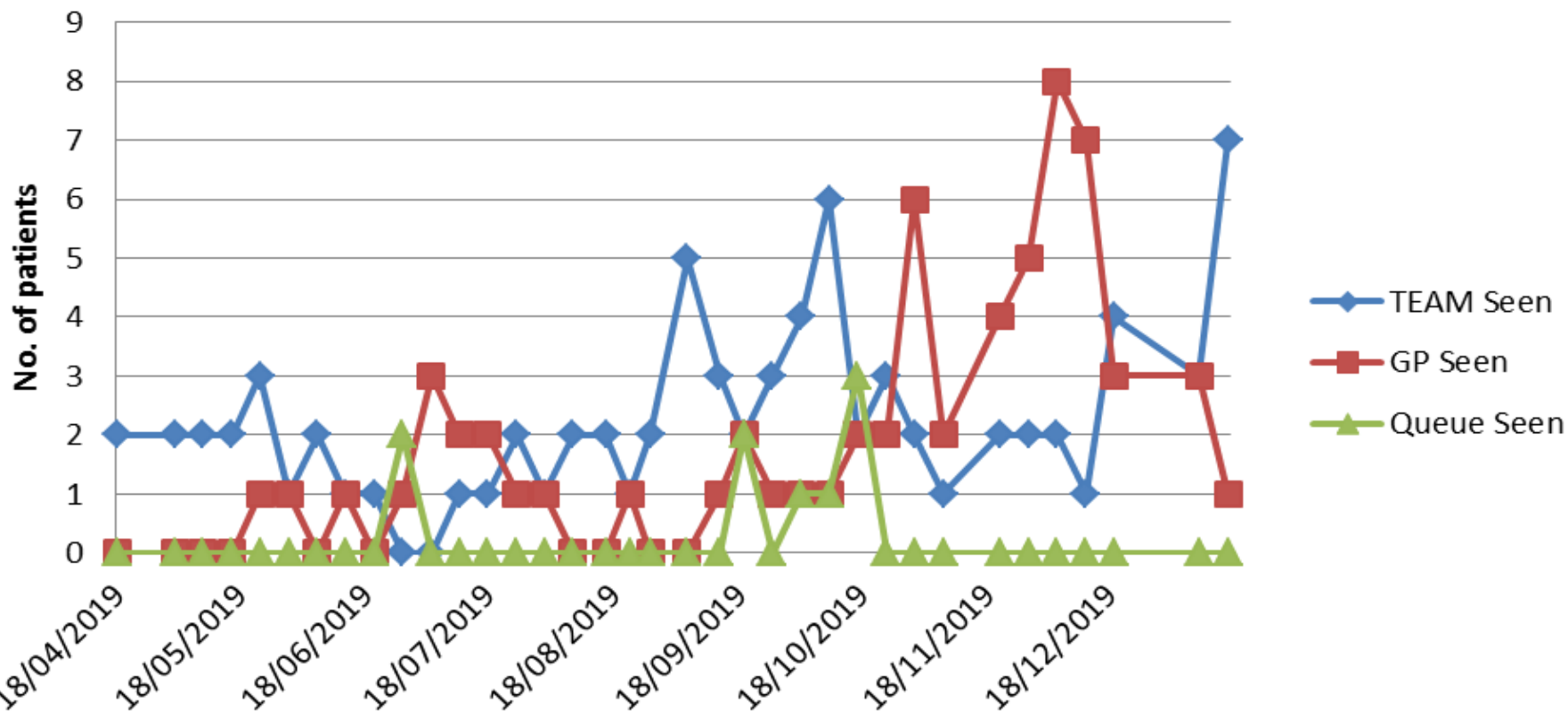
What did we need to do to get the patient to the clinic?

- 36 patients had no valid number
- 143 phone calls were made to the remaining 55 patients



Team patients and GP patients

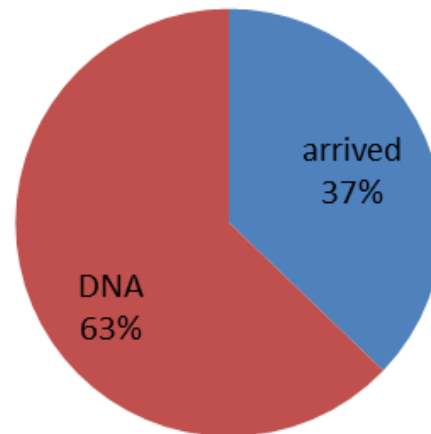
Total 'Seen' within the booking system (Clinic 36)



How many project patients were seen?

- 42 Whakakotahi patients were seen in the clinic
- 71 patients DNA's their first clinic appointment

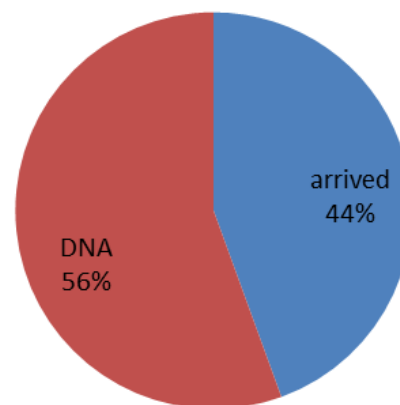
Project patients clinic attendance for a new appointment



Would patients referred from their GP be more likely to arrive?

- Already had a contact
- Partially engaged
- 113 of the new patient appointments were patients referred from their GP
 - 52 arrived
 - 65 DNA

Patients referred by their GP



If they miss their first appointment should we keep trying to recall them?

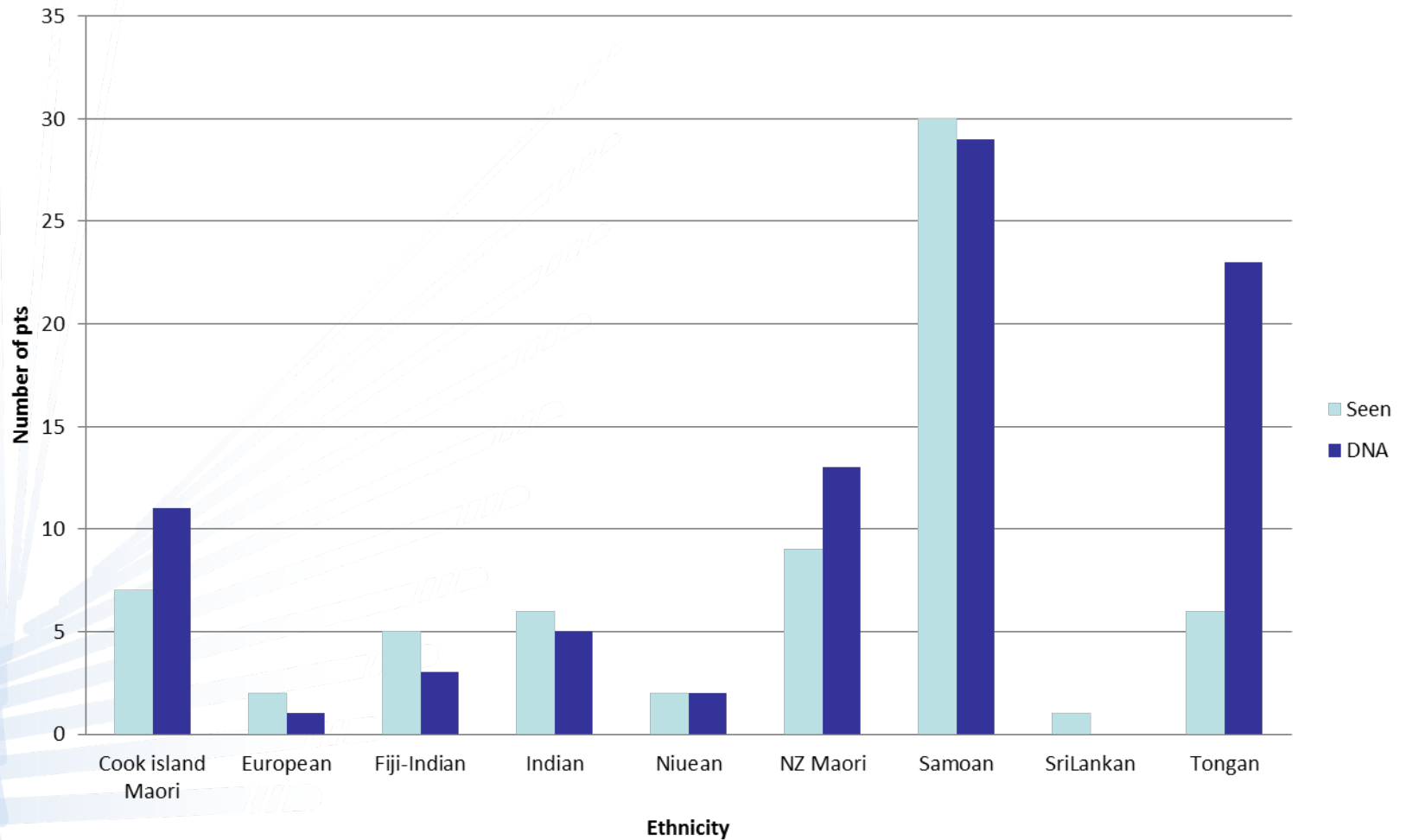
- Patients who DNA their first clinic attendance are more likely to continue to DNA their second and third appointments
- They are more likely to be unable to be reached
- After 4 DNAs no-one turned up at the clinic
- 88% of Tongan ethnicity patients DNA'd their first clinical appointment
- 20% of Cook Island ethnicity patients DNA'd their first clinical appointment.

Tāmaki Health Who wasn't seen?

Supporting White Cross Local Doctors

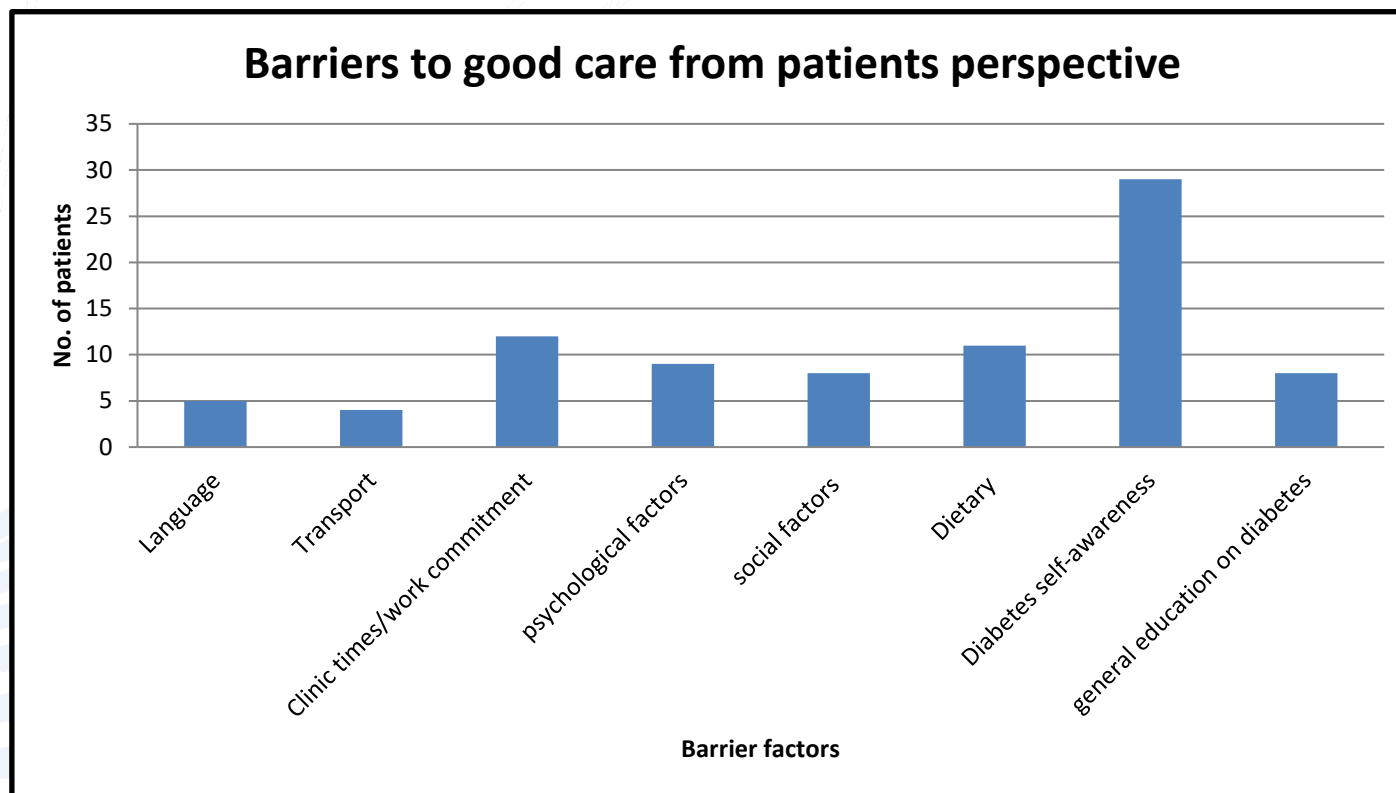


Attendance rate by Ethnicity for first clinical appointment



What were the barriers to care?

Diabetes self-awareness was judged the major barrier to care: patients don't know their HbA1c or how serious their diabetes status is



- We ran a full day diabetes teaching course
- Attended evening sessions
- Working with health coaches
- Cultural competency – learning from our patients in codesign

1. Use of resources

- Traffic light resource
- Other pamphlets
- Resources for testing blood glucose

2. Referral to additional supports

- Green prescriptions
- SME

- Wellness team

3. Understanding complications of diabetes

- Podiatry
- Retinal screening
- Secondary care appointments

The traffic light tool



- We tested this resource with our consumers. 10/10 judged this resource as very useful.
- We redesigned the resource to make the red area less dramatic/ threatening and tested our new designs with the consumers. The preference was for the existing design.
- Patients have appreciated using this design with comments like
“I want to get to the green”

The traffic light



HbA1c (mmol/mol)	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
=>120								
115-119								
110-114								
105-109								
100-104								
95-99								
90-94								
85-89								
80-84								
75-79								
70-74								
65-69								
60-64								
55-59								
50-54								
45-49								
40-44								

	<=39 mmol/mol	40-49 mmol/mol	50-59 mmol/mol	60-69 mmol/mol	70-79 mmol/mol	80-89 mmol/mol	90-99 mmol/mol	100-109 mmol/mol	110-119 mmol/mol	=>120 mmol/mol
Date:										
Date:										
Date:										
Date:										

GO GREEN

LIVE LONGER and HEALTHIER

HbA1c indicator of services users 3-month average blood sugars level.

Control level	Diabetic status	HbA1c (mmol/mol)	Date:	Date:	Date:	Date:	Date:	Date:	Date:
STOP Caution	Severe risk caution Diabetes	=>120							
		115-119							
		110-114							
		105-109							
	100-104								
	High risk caution Diabetes	95-99							
		90-94							
85-89									
80-84									
75-79									
SLOW Down	Proceed with caution Diabetes	70-74							
		65-69							
		60-64							
		55-59							
Go Keep it up	Impaired	50-54							
		45-49							
	40-44								
	Non-Diabetic	<= 39.9							

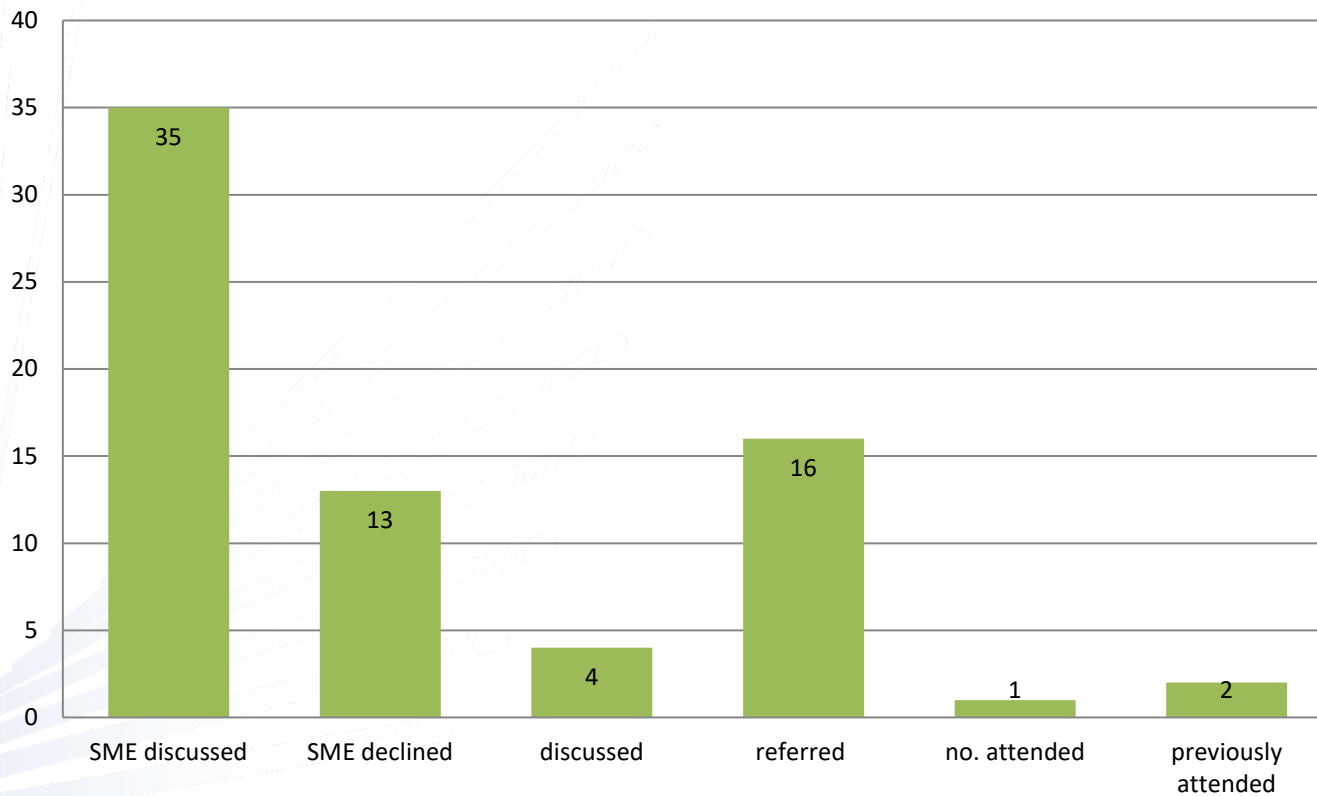
STOP Caution

SLOW Down

GO Keep it up

SME attendance

SME attendance



Would patients be more likely to attend a group appointments?

group appointment = education session plus some individual time with a clinician

1st session: 15 invited 6 attended

2nd session: 3 attended

Encouraged by the enthusiastic response from the session we tried again using warm calling techniques

1st session: 12 patients invited – 2 attended

2nd session: 9 patients invited – 3 attended

- I have been really naughty. If I don't look after myself I can't look after my husband
- Had a long chat-feeling much more confident about my diabetes now
- I knew everything previously but was not confident and not too sure
- I've not been taking my medications regularly- I didn't think it mattered too much

Did we make a difference?

- Out of the 44 TEAM patients that we have seen, 27 patients showed improvement in their HbA1c
- Adding up all 44 TEAM patients HbA1c differences there is an improvement of 851 percentage points of HbA1c

Why are Tongan, Cook Island and NZ Māori patients not coming to the appointments?

Two patients had been champions on the SME course in the past but lost their way again. What happened?

Contacting patients by phone is not adequate. This project needed community worker support.

- Appropriate structures and culture within the practice to support the work
- The role of quality improvement, data and audit within primary care
- Developing strategies to use resources including staff in a more cost effective and efficient manner
- Socioeconomic factors that are outside our control

Highlights

The enthusiasm of the patients to make a change when they understand more about their diabetes

The opportunity to make a difference in the lives of our patients and their whanau

Working together as a team

There is huge need in our community

Equity is not been addressed

Quality improvement needs a committed team and management support

There is a lot more that needs to be done

The patient remains central to our work

Every patient that as a result of this intervention will no longer progress to dialysis, blindness or amputation is a success. Every whanau who will not lose a loved one at an early age is a success.

Future projects

- Warm handovers
- Opportunistic screening
- ?Group appointments
- Know your number campaign - to trial a traffic light tool probably in an opportunistic consultation

DECISION CYCLE FOR PATIENT-CENTERED GLYCEMIC MANAGEMENT IN TYPE 2 DIABETES

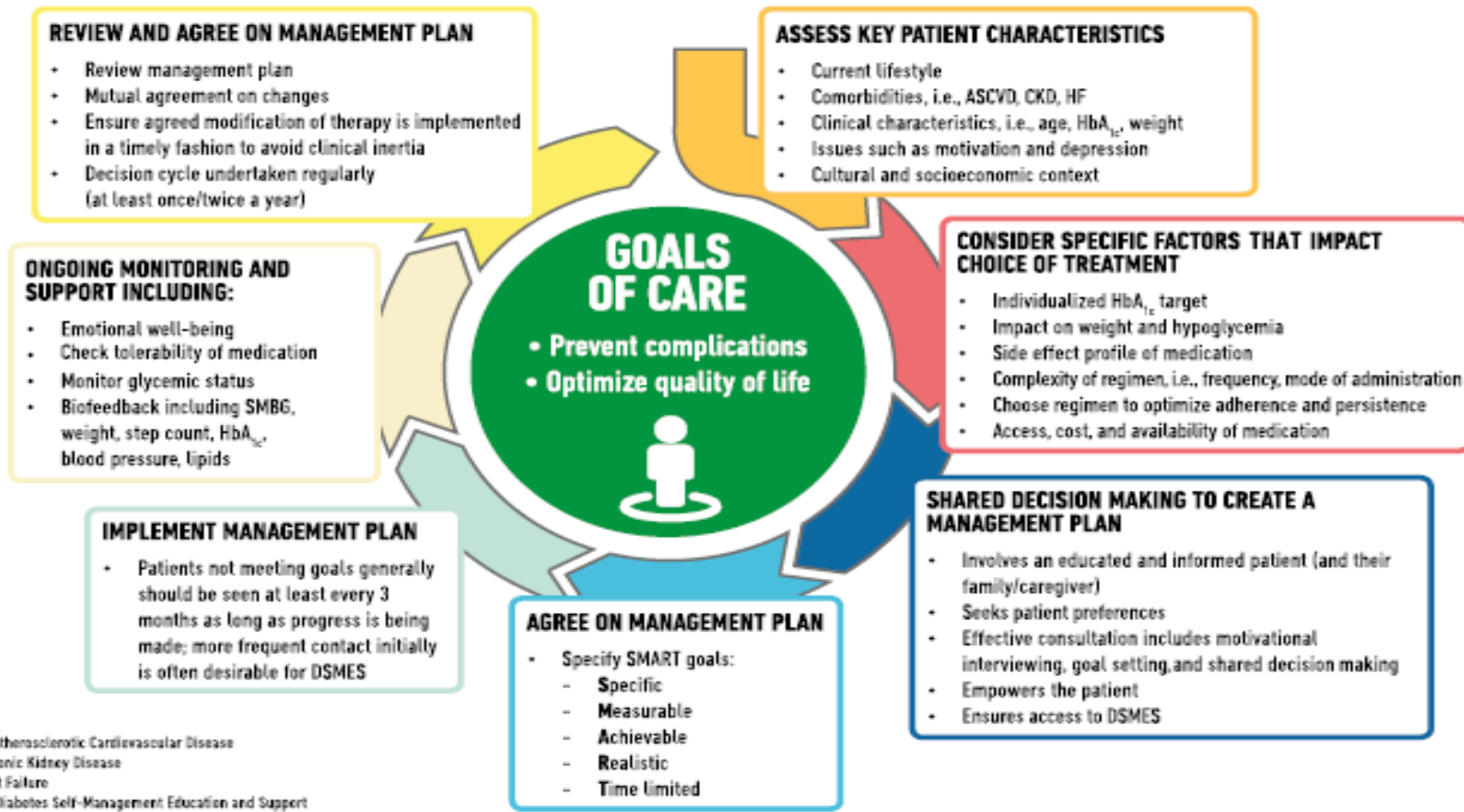


Figure 1—Decision cycle for patient-centered glycaemic management in type 2 diabetes.