



Diabetics on Maximum Oral Doses resistant to Insulin initiation need to commence Insulin uptake

Primary Care Improvement Facilitators Programme 2019

Deepika Sonia

Mele Vaka



HEALTH QUALITY & SAFETY
COMMISSION NEW ZEALAND

Kupu Taurangi Hauora o Aotearoa



AWATEA

HEALTH SYSTEM INNOVATION AND IMPROVEMENT



Improvement Facilitators:

- Deepika Sonia – Special Projects Analyst
- Mele Vaka – Clinical Services Manager





Project Background:

- Established in 1997, the Tongan Health Society (THS) is the only privately developed Tongan Integrated Family Health Centre operating outside the Kingdom of Tonga in New Zealand.
- We have 3 medical centres in Auckland (Onehunga, Panmure and Kelston), serving a population of over 6000 registered patients.
- Prevalence of Pacific People with Diabetes in the Auckland region is 21% (5,790). Langimalie Clinic are dealing with 15% of this total cohort. The majority of the patients at the clinic are Tongans (95%).
- At present we have a total of 254 patients who are on maximum orals 'needing' to go on Insulin.
- There is little information available about Pacific family barriers to Insulin initiation and intensification particularly for those on maximum oral hypoglycaemics where Insulin is now needed in their management.
- We intend to document these barriers and design a tool to overcome them, which will ultimately lead to reduced HbA1c values.





Improvement Team:

- Dr Glenn Doherty (CEO Medical Director & Project Sponsor)
- Deepika Sonia (Special Projects Analyst)
- Mele Vaka (Clinical Services Manager)
- Rachel Steed (Diabetes Nurse Specialist / Nurse Prescriber)
- Fifita McCready (Diabetes Nurse Specialist)
- Dr Glennis Mafi (Tasilisili Manager)
- Wendy Allen (Clinical Admin Manager)



Problem Statement:

254 of our Diabetic patients on the maximum oral dose are resistant to insulin initiation and intensification. This will adversely affect their health and have wider impacts on employment and family financial viability.





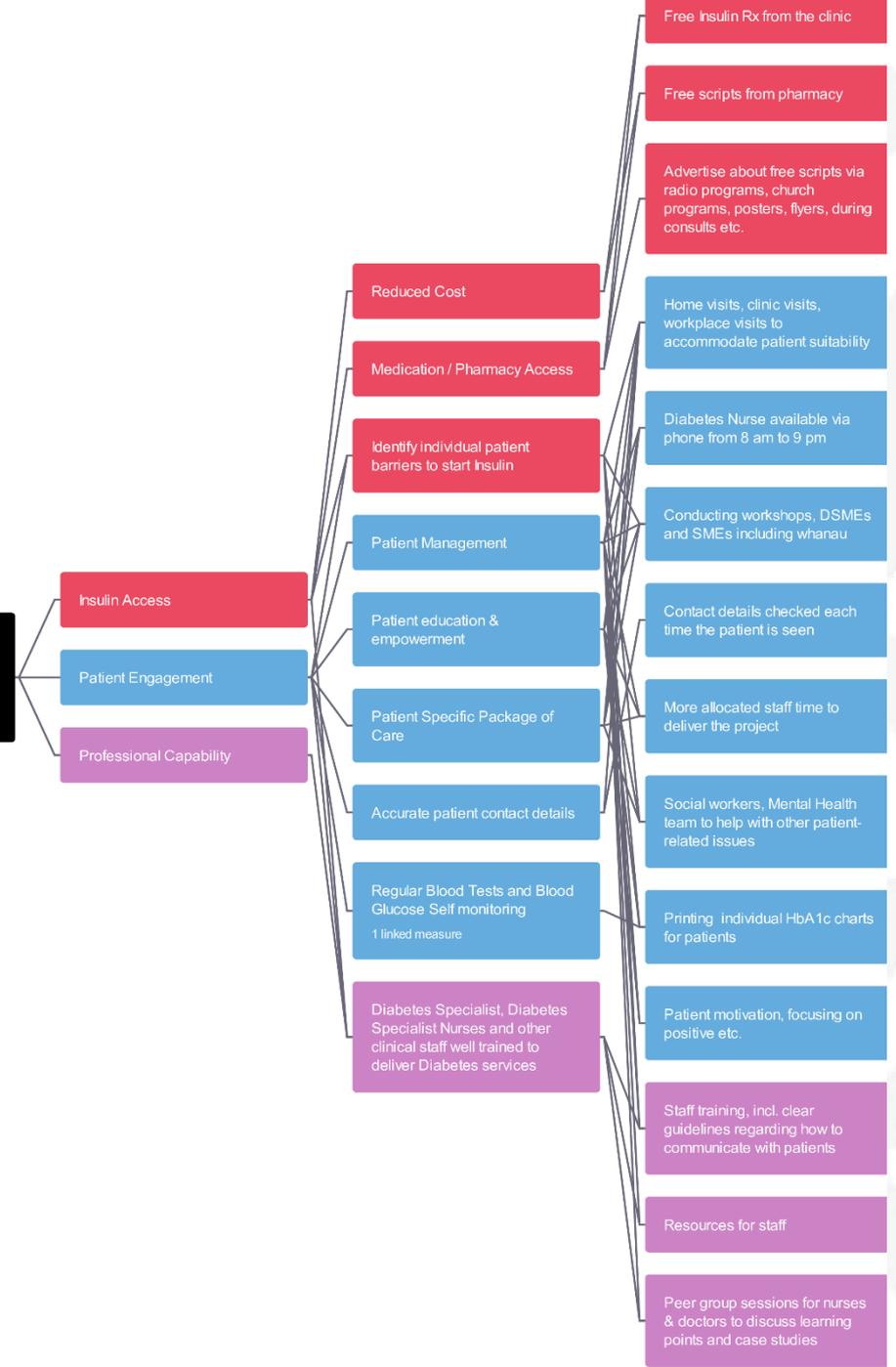
Aim Statement:

To reduce HbA1c levels from current baseline readings to 15% in Diabetics on max. oral dose who are unwilling to start Insulin, by April 2020.



Driver Diagram:

To reduce HbA1c levels from current baseline readings to 15% in Diabetics on max. oral dose who are unwilling to start Insulin by April 2020





Diagnose the problem – data:

We have a total of 254 patients who are on maximum orals needing to go on Insulin, who are spread across both the Auckland District Health Board (ADHB) and the Counties Manukau District Health Board (CMDHB) catchment areas. Most participants are Q5 and live in the most deprived areas of Auckland. ADHB and CMDHB recorded over 75% of the Pacific populations living in deprived areas of Auckland.

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Tools used to Diagnose the problem:

- Ishikawa Diagram
- 5 Whys

What surprised you about what you discovered?

- Don't know clearly why patients are resistant to start Insulin





Capturing the Patient Experience:

- Surveys
- Questionnaires





Stakeholders Analysis – 26/04/2019:

Stakeholder	No commitment	Let it happen	Help it happen	Make it happen
DEEPIKA SONIA				X X
Action/s planned to move stakeholder				
MELE VAKA				X X
Action/s planned to move stakeholder				
RACHEL STEED			X	X
Action/s planned to move stakeholder				
FIFITA MCCREADY	X			X
Action/s planned to move stakeholder				
DR GLENN DOHERTY				X X
Action/s planned to move stakeholder				
Action/s planned to move stakeholder				
Action/s planned to move stakeholder				

Mark the current state for your Stakeholders the desired state and how you plan to keep or move them to the desired state

X = Current State X = Desired State





Stakeholder communication plan:

Stakeholder	Motivation/values	Action/message	Strategy	Responsibility	Reflection
Rachel Steed	Passionate about Diabetes and well driven	NA (Already motivated)	More hours to deliver the project	Dr Glenn Doherty & Mele Vaka	Starting and completing the project
Fifita McCready	Helping people	People need your help and expertise	Working together with Rachel and conducting workshops	Mele Vaka	Starting and completing the project



Family of Measurements

Measurement Type	Measurement Name	Measurement definition	Data Collection How and Who	Comments
Outcome	HbA1c	HbA1c refers to glycated haemoglobin (A1c), which identifies average plasma glucose concentration.	<ul style="list-style-type: none"> Quarterly Blood tests for HbA1c values Diabetes Nurse 	
Process	Number of patients started on Insulin	Identification and count of the total number of Diabetics on max. Oral Doses who started on Insulin	<ul style="list-style-type: none"> Patient alerts in patient files on PMS Monthly reporting Diabetes Nurse & Recall Assistant 	
Process	Insulin uptake	Regular administration of Insulin by the patients	<ul style="list-style-type: none"> HbA1c measurements – Quarterly reporting Glucose monitoring twice weekly initially, then weekly, then fortnightly and finally monthly Monthly reporting Diabetes Nurse 	
Process	Barrier Identification	Identification of Barriers to Insulin uptake	<ul style="list-style-type: none"> Questionnaires / Interviews Surveys Workshops, DSMEs/SMEs Diabetes Nurse & Recall Assistant 	
Process	Weight Loss	Weight lost after started on the project	<ul style="list-style-type: none"> Physical Measurements Monthly reporting Diabetes Nurse 	
Process	Life Style Measurements (LSMs)	Diet & Exercise records of patients	<ul style="list-style-type: none"> Interviews Monthly reporting Diabetes Nurse 	
Process	Patient Education	Patients' education on Diabetes management	<ul style="list-style-type: none"> Monitoring of housekeeping abilities Monthly reporting Diabetes Nurse 	
Balance	Hypoglycemia	Blood sugars fall below the normal levels	<ul style="list-style-type: none"> Interviews Monthly reporting Diabetes Nurse 	



Generate Change Ideas to Test

- Change ideas currently being tested

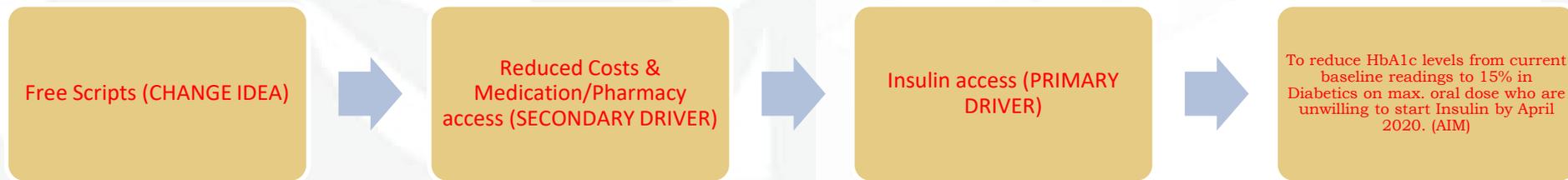
Advertise free scripts from Pharmacy

Free Insulin Rx from clinic

- What is the rationale for testing these changes?

Frontline experience, Innovation

- How/where do these ideas link to your driver diagram





What are you currently testing?

- Provide details of your one of your current PDSA's, include your measures [Advertise Free Prescriptions from Pharmacy & Clinic.](#)
- Include your questions, predictions, data and learning
- Face to face & telephonic consults by Diabetes Nurse
- What are your thoughts on your current health situation? (To ascertain patient knowledge about Diabetes)
- What do you know about Insulin treatment?
- Educate about free Insulin prescriptions
- Collect information
- LEARNING – Patients more amenable to start Insulin after learning about free prescriptions.



Data Analysis & Reporting – Runcharts etc

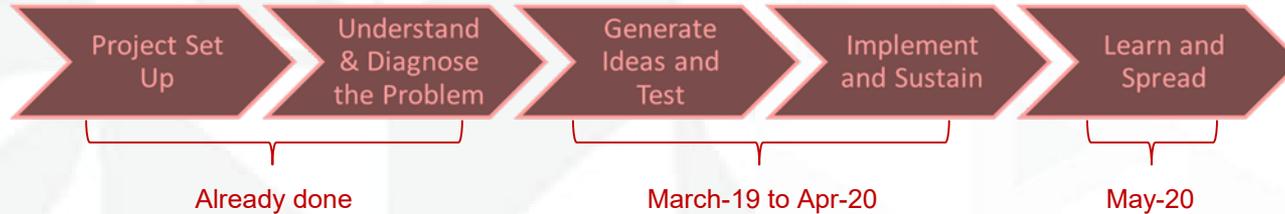
- Start tracking and sharing your family of measures
- Initially you will need to look at process measures as changes here may be seen earlier than your outcome measure
- Remember to share these with your team on a regular basis

Will be starting our first patient on the project within this week.





Key Success/barriers:



Keys to Success:

- Team work – organisation, flexibility and cooperation
- Effective Communication (clinician-patient)
- Efficient & Dynamic work plan
- Data Collection, Analysis and Reporting

Barriers:

- Hard-to-get-hold-of-patients
- Lack of communication (clinician-patient)
- Lack of allocated staff hours
- Language Barriers
- Cultural Divide



Lessons Learned:

- Importance of pre planning projects from quality perspective
- Importance of Problem Statement
- Constructing an Aim statement
- Problem diagnosing tools
- Driver Diagram
- Stakeholder Analysis
- PDSA
- Measures