

BREATH-TAKING ASTHMA MANAGEMENT FOR MEN AT MECF

Primary Care Improvement
Facilitators Programme 2019

Samantha Huntley



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IMPROVEMENT FACILITATOR



- Clinical Pharmacist for Mt Eden Pharmacy (MEP), Auckland
- Background: public hospitals UK & NZ
- Role involves providing and expanding clinical services:
 - Local private hospitals
 - Managing supply demands
 - Providing Clinical pharmacy services e.g. chart checks
 - Education and quality work
 - Project work with local GPs
 - New initiatives based on need



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BACKGROUND / CONTEXT

- Mt Eden Corrections Facility (MECP)
 - Auckland
 - Male prisoners
 - Predominantly remanded
- Health centre staff arrange for supply and delivery of medications from Mt Eden Pharmacy (MEP).
- Almost 50% of sentenced male prisoners are Māori.
- Asthma is the most common chronic disease in Māori male prisoners with a prevalence of 21%



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IMPROVEMENT TEAM

Our project team are:

- Samantha Huntley (Clinical Pharmacist Advisor MEP)
- Melanie Salt (Enrolled Nurse, MECF),
- Lorraine Fletcher (Pharmacist & Owner, MEP),
- Jill Herridge (Health Centre Manager, MECF)



PROBLEM STATEMENT

The disproportionate supply from & return to MEP of “preventer” & “reliever” inhalers for asthma at MECF indicates poor management of asthma in a vulnerable population.



- Most inhalers supplied are “relievers” (61%)
- Most inhalers returned are “preventers” (74%)
- Relievers should be reserved for acute symptoms
- Patients requiring relievers on a frequent basis should be Rxd a regular ICS preventer

HIGH LEVEL AIM



All patients with asthma at MECF have the appropriate inhaler(s) available and know how to use it (them) by March 2020

All patients with asthma at Mt Eden prison have the appropriate inhaler available and know how to use it by March 2020
 1 linked measure

- Asthma Reviews
- Self Management
- Supply

- Specified time-frames
- Recognition of asthma signs and symptoms
- Clear pathways / guidelines for asthma management
- Pt understands medicines
- Empower pts
- Inhaler technique
- Appropriate inhaler use
- Proportional use of preventer Vs reliever
- Appropriate medicines always available

- Set review if documented asthma when taken into custody
- Nurse R/F to medical officer for medication R/V according to criteria
- Pharmacist in-service teaching sessions for health center staff and updates
- Establish and circulate asthma management guidelines for medical officers
- Pharmacist & medical officer virtual clinics for pts diagnosed with asthma
- Inhaler technique assessment/demonstration by nurses
- Set expectations for education by GP/p'cist/nurse
- Every Pt to have individualised asthma management plan
- R/V inhaler technique & demonstrate correct
- Change type of inhaler device to reduce likelihood of misuse/theft e.g. switch from MDIs to turbohalers
- Encourage medical officers to prescribe preventers with dose counters to allow easy monitoring of use
- Monitor preventer use on medication rounds using dose counters
- Simplify process for inhalers to always go with pts at transfer and release
- New/update stock rotation process

DIAGNOSE THE PROBLEM – DATA

- Baseline data:

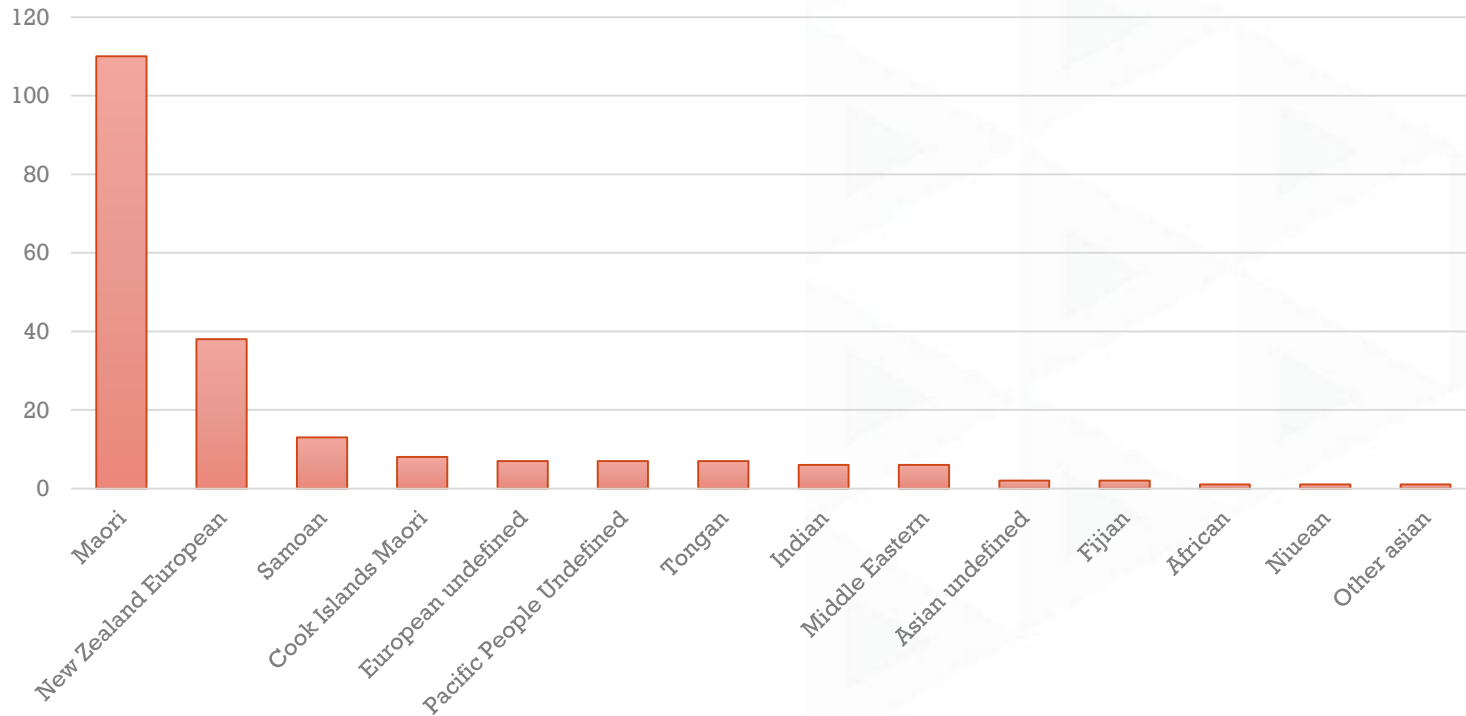
	Snapshot of Dispensing	Snapshot Returns
“Relievers”	61% (N = 50)	26% (N = 12)
“Preventers”	39% (N = 32)	74% (N = 35)

- Dispensing and returns don't correspond to same patients
- More information required...

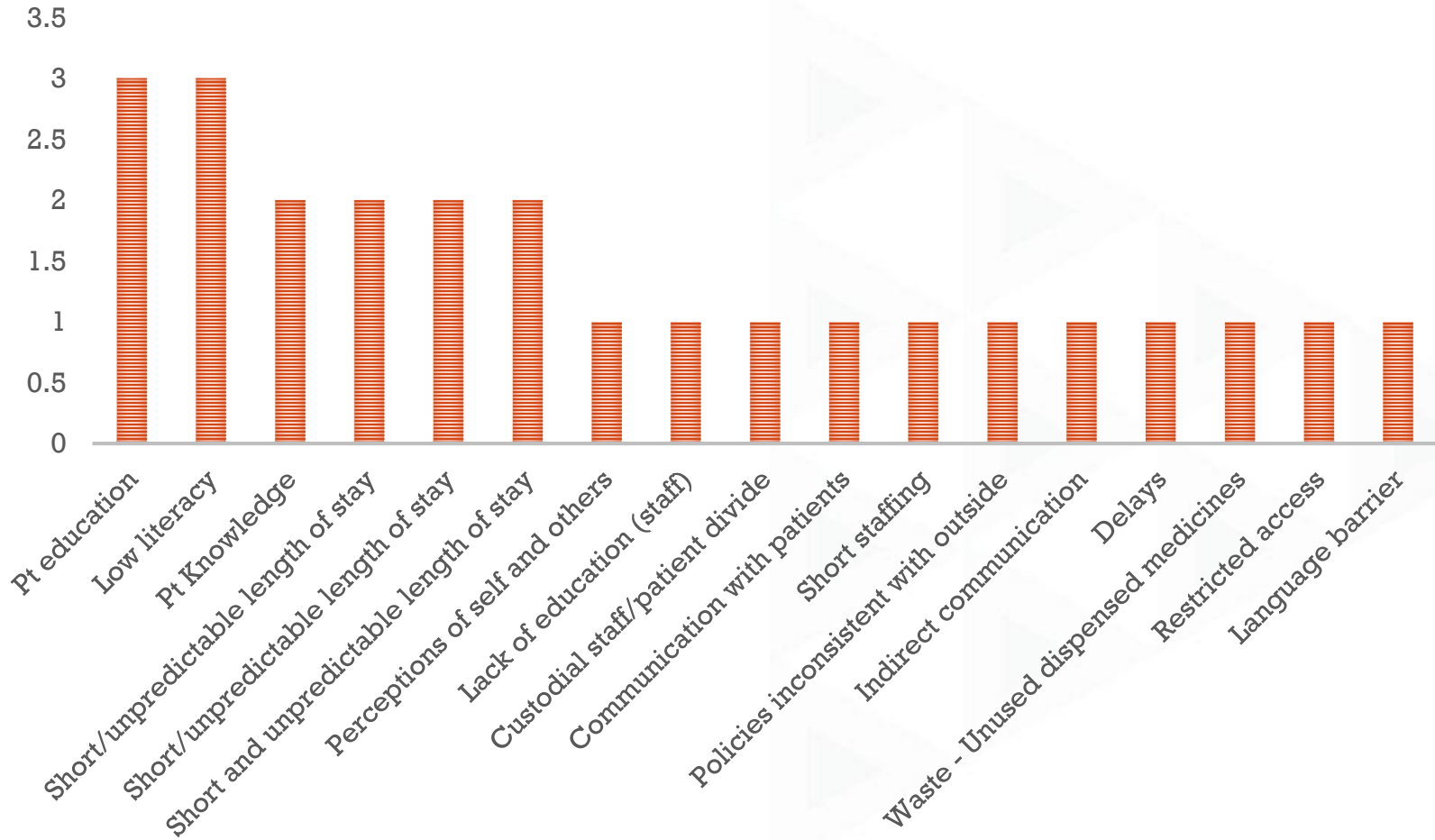
DIAGNOSE THE PROBLEM – DATA

- 19/8/19: Asthma in 209 out of approx. 960 (22%)

Asthma by ethnicity



ISHIKAWA VOTES – TOP CONTRIBUTORS



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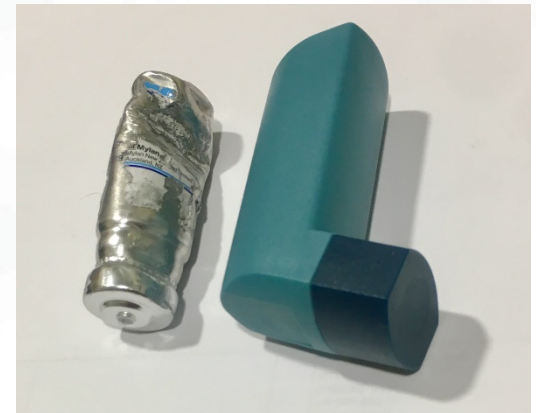


PATIENT EXPERIENCE



Points for consideration...

- Asthma management
Baseline vs environmental change e.g. exercise
- Supply versus demand
(due to length of stay)
- Misuse?
See picture
- Targeted by others
Vulnerability,
Uses for inhaler



CAPTURING THE PATIENT EXPERIENCE

- Questionnaire in development
- Unique environment – some challenges
- Hoping to get health staff to ask the questions
- Liaise with partners in care team HQSC



STAKEHOLDERS ANALYSIS

28/4/19

Stakeholder	No commitment	Let it happen	Help it happen	Make it happen
Health Centre Manager, MECF			X	X
	Concerns: limited own time & staff. Actions: No unnecessary meetings, ensure meetings are productive. Seek input for shaping project then delegate tasks to reduce required time commitment on weekly basis.			
Owner MEP				X X
	Action: Help secure and maintain resource commitment from MECF management			
Dispensary Manager, MEP		X	X	
	Action: Keep informed and involve in key tasks, invite to project meetings when relevant e.g. process mapping			
Health Centre Nurses, MECF	X		X	
	Action: Devise communication & feedback strategy			
Medical Officers, MECF	X		X	
	Concerns: Limited time, unsure if aware of project. Actions: Open channel for communication. Seek expertise on clinical aspects of project.			
Patients in custody, MECF	X	X		
	Action: Communicate reasons for change & involve representative in design where possible.			
Nurse Representative, MECF			X	X
	Action: Keep informed and positive. Keep an eye on project workload versus available time.			

X = Current State

X = Desired State



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OUTCOME MEASURES

1. Number of pts with the appropriate inhaler, measured by:
 - No. men in MECF with a recorded diagnosis of asthma each month
 - No. men with asthma that is not well controlled as per Asthma Control Test (ACT)
2. Number of pts with the appropriate inhaler available to them
 - MEP dispensing records (institution report per inhaler)
 - Decrease in the number of returns?**
3. Number of pts that know how to use their inhalers
 - Sample questionnaires



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PDSA - QUESTIONNAIRE

Objective

Gather data that can be used in project measures

Change Idea

Questionnaire for men in prison to establish:

- Their understanding of how to use
- Their level of asthma control (ACT)

Give to 1 patient, overseen by Health Centre team



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PDSA - QUESTIONNAIRE

Draft ✓

Finalise ✓

Approval ✓

... Trial

1. In the past 4 weeks, how much of the time did your asthma keep you from getting as much done at work, school or at home?

All of the time	1	Most of the time	2	Some of the time	3	A little of the time	4	None of the time	5
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2. During the past 4 weeks, how often have you had shortness of breath?

More than once a day	1	Once a day	2	3 to 6 times a week	3	Once or twice a week	4	Not at all	5
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3. During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night or earlier than usual in the morning?

4 or more nights a week	1	2 or 3 nights a week	2	Once a week	3	Once or twice	4	Not at all	5
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4. During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as albuterol)?

3 or more times per day	1	1 or 2 times per day	2	2 or 3 times per week	3	Once a week or less	4	Not at all	5
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5. How would you rate your asthma control during the past 4 weeks?

Not controlled at all	1	Poorly controlled	2	Somewhat controlled	3	Well controlled	4	Completely controlled	5
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SCORE

