Improving quality of life in Maori patients with poorly managed Gout registered at Hora te Pai Health centre in the Kāpiti Coast.

Primary Care Improvement Facilitators Programme 2019
James Westbury
Reuben Teo
Dr Chris Fawcett
Improvement Facilitator

• Reuben Teo
  • Pharmacist at Westbury Pharmacy.

• James Westbury
  • Pharmacist Owner at Westbury Pharmacy.
Background/Context

• The Practice
  • Hora te Pai is a low-cost access GP practice located in the Kāpiti Coast, Wellington.
  • They are the provider of choice to the Maori and Pacifica population of the Kāpiti Coast.
  • The burden of disease is significantly high for patients in the area with gout.

• The Pharmacy
  • Westbury Pharmacy is a large community pharmacy supporting both community and aged residential care and is exploring new models of care to improve existing framework for gout management.

• The Issues:
  • Gout prevalence of 8.9%.
  • Ethnicity breakdown: Maori 48%, European 45%, Pacific 4%, Asian 2%.
  • Expected Gout prevalence would be higher

Add in absolute patient number for uncontrolled gout
Improvement Team

• Our project team is (will be) made up of:
  • James Westbury – Pharmacist
  • Reuben Teo – Pharmacist
  • Cherie Seamark – Practice Manager
  • Dr Chris Fawcett – General Practitioner
  • Wendy Smith – Maori Health Worker
  • Snooks Forster – Maori Health Worker
Problem Statement

• There is X number of patients with uncontrolled gout identified by the staff at Hora te Pai that have a history of poorly controlled gout despite receiving medication leading to an increase in disease burden and more frequent urgent care appointments.
• Many of the members share medication and they have a very low prescription pick up rate.
• How to change the service to engage patients to facilitate their management of gout.
Aim Statement

- Improve the quality of life by 20% of 10 patients with gout registered at Hora te Pai Health Centre by November 2019.
- Potential Benefits:
  - Improved health literacy
  - Reduced disease burden
  - Reduced urgent care appointments
  - Improved medicine adherence
  - Improving health literacy
  - Increased engagement with Hora te Pai Health services
Driver Diagram

• Based on the Te Whare Tapa Whā model of healthcare
AIM: Improve the quality of life by 20% of 10 patients with gout registered at Hora te Pai Health Centre by November 2019.

**PRIMARY DRIVERS**
- Medication Adherence
- Increasing Quality of Life
- Communication within whole project team and between project team and participants
- Increase in awareness amongst Hora Te Pai and Westbury pharmacy

**SECONDARY DRIVERS**
- Synchronisation of Multiple Medications to Reduce Visits to Pharmacy/GP Practice
- Compliance Packaging
- Care workers from GP practice pick up patients from their home to take them to their appointments.
- Incentivising participation to appointments e.g. koha for attendance.
- Setting up Group sessions to: Improve specific medication patient knowledge, Perform regular serum urate testing, Medication review from GP and/or Pharmacist to optimise treatment plan, Pharmacy or GP clinic to fund medications and give them their

**CHANGE IDEAS**
- Home visits
- Identifying whanau and whanau leadership
- Attendance of regular MDT meetings
- Arrange project team meetings to strengthen bonds
Diagnosing the problem – data

- 8.9% of enrolled patients have a diagnosis of Gout.
- Concerns from staff that medications are commonly shared between patients.
- High degree in shame about having gout.
- Treating gout as a episodic condition not as a chronic condition.
- Demographics of the Whanau:
  - 10 (100%) identify as Maori.
  - 2 patients (20%) had a current diagnosis of gout.
  - All patients experience the symptoms of gout.
Diagnose the problem- tools

• Driver diagram used to assist process mapping and align project plan
Ishikawa Diagram

**Method:**
- Limited follow up with patients
- Only patients diagnosed with gout receive treatment and care
- Patients do not receive immediate test results
- Cost of medications
- Inconsistent patient education
- First come first served basis
- Blood testing must occur at lab

**Materials**
- Lack of resources about gout

**Patients:**
- Lack of motivation
- Limited health literacy
- Physical impairment affecting mobility
- Lack of knowledge about other health services
- Judgement from others about gout diagnosis
- Medication side effects
- Patient has not been diagnosed
- Limited reading comprehension

**Staff**
- Not enough staff to manage
- Lack of time
- Lack of organisation

**Environment**
- Location of health services
- Location of pharmacy

**Patients with uncontrolled gout are not engaging with health services therefore impacting their quality of life.**
Capturing the Patient Experience

• We plan to use a 5 point flinders type assessment to assess patient experience and value.
• Qualitative comments from patients about Gout experience
What Does Life Without Gout Look Like?
Our Plan

• We plan to hold three one-hour group sessions every month that will provide the medium to answer questions about their gout in a group setting.

• There will be a questionnaire asking questions about how the participants feel the course has helped and what they expect from the programme and other general feedback about the project.

• At the group meetings we intend to carry out the serum urate tests and questionnaires about how the participants feel about their gout.

• Follow-up GP consultations can be arranged throughout the project for a more private consultation.

• Community team follow up with patients every week to check their gout management.
Our Plan

• The group session will cover:
  • Gout is a chronic condition.
  • Gout is a genetic condition.
  • Gout can be managed not cured.
  • Allopurinol needs to be taken long term.
  • NSAIDs are used to treat the acute symptoms.
## Stakeholders Analysis

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>No commitment</th>
<th>Let it happen</th>
<th>Help it happen</th>
<th>Make it happen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Engagement from the community team to encourage more engagement into the project.</td>
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<tr>
<td>Dr Chris Fawcett</td>
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<td>Cherie Seamark</td>
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<td>James Westbury</td>
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<tr>
<td>Wendy Smith</td>
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<td>X</td>
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</tbody>
</table>

X = Past State (Feb 2019)  
X = Current State (Nov 2019)
Stakeholders Analysis: NHS Sustainability Model Radar Chart

- Benefits beyond helping patients
- Infrastructure for sustainability
- Fit with the organisation's strategic aims and culture
- Clinical leadership engagement
- Senior leadership engagement
- Staff behaviours toward sustaining the change
- Staff involvement and training to sustain the process
- Effectiveness of the system to monitor progress
- Adaptability of improved process
- Credibility of evidence
- Max score
- Median
# Family of Measures

<table>
<thead>
<tr>
<th>Measurement Type</th>
<th>Measurement Name</th>
<th>Measurement definition</th>
<th>Data Collection How and Who</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Outcome</td>
<td>Self management</td>
<td>Flinder’s style questionnaire</td>
<td>Nurses, and existing data from</td>
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<tr>
<td>Process</td>
<td>Group session attendance</td>
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<td>Care workers, Nurses, Pharmacists, GPs</td>
<td>Comparison from the first session</td>
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<tr>
<td>Process</td>
<td>Serum Uric Acid</td>
<td>mol/L</td>
<td>Nurses, Pharmacists, GPs</td>
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<tr>
<td>Process</td>
<td>Number of Acute Gout Appointments</td>
<td>Comparison to previous year</td>
<td>Nurses, and existing data from PMS</td>
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<tr>
<td>Balance</td>
<td>Number of visits to Hora te Pai</td>
<td>Comparison to previous year</td>
<td>Nurses, and existing data from PMS</td>
<td></td>
</tr>
</tbody>
</table>
Measures

- Outcome Measures:
  - Self management measure.
- Process measure
  - Group session attendance
  - Serum urate levels.
  - Medicine Adherence measures.
- Balance measure
  - Potential increase in patient visits to Hora te Pai.
PDSA 1: Patient Questionnaire

- **Objective:** To provide an easy to understand patient questionnaire to be filled out at each group session.
- **Change idea:** Co-designed patient questionnaire that is easy to understand.
- **Question:** What would a co-designed patient questionnaire look like?
- **Prediction:** A modified Flinder’s style questionnaire.
- **Measures:** Direct patient feedback about questionnaire.
- **Do:** Received patient feedback after first group session.
- **Study:**
- **Act:**
PDSA 2: Group Sessions

- **Objective:** Increase patient knowledge of gout
- **Change idea:** Organised patient led group sessions
- **Question:** How long does the session need to be to cover the content?
- **Prediction:** One hour sessions.
- **Measures:** Time limit of group sessions
- **Do:** Completed first group session 8/7/19, more conversation was needed. Because the first group were all whanau the discussion was richer and took longer than predicted.
- **Study:** One hour initial session was not enough for discussion, it actually took two hours.
- **Act:** First session duration would be changed to 2 hours but subsequent sessions remain at one hour.
PDSA 3: Provision of Pharmaceuticals

- Objective: Increase patient medicine compliance.
- Change idea: Provide medication to the patients at the group session at no charge to the patient.
- Question:
- Prediction:
- Measures:
- Do:
- Study:
- Act:
PDSA 4: Portable Serum Uric Acid Meter

- Objective:
- Change idea:
- Question:
- Prediction:
- Measures:
- Do:
- Study:
- Act:
Data Analysis and Tracking

Serum Uric Acid

- Uric acid level 8/7/19
- Uric Acid Level 5/8/19
- Target
Outcome Measure:

Quality of Life Measure

Average Quality of Life Score 8/7/19
Average Quality of Life Score 5/8/19
Process Measure:

Gout Knowledge Measure

Average Gout Knowledge Score 8/7/19 - Average Gout Knowledge Score 5/8/19
Process Measure:

Medicine Adherence

Average Medicine Adherence Score 8/7/19
Average Medicine Adherence Score 5/8/19
Process Measure:

Meeting Attendance

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Balancing Measure

• Potential increase in patient visits to Hora te Pai
Equity Gap

- 2 patients had been diagnosed with gout and treated prior to project -> all 10 patients have been diagnosed and treated.
- Increased the accessibility of health care to the “unmet need”.
- Increased the health literacy and gout knowledge.
Key Success/barriers

• Key Successes:
  • Extremely positive response to group.
  • Community team’s engagement to the patients was vital to the project's success.
  • Changed the model of healthcare structurally to gain more engagement from patients and better health outcomes.
  • Continuous input from consumers throughout the project.

• Barriers:
  • Our greatest challenge has been the limited data availability.
  • Investment of time and thought required to change the model of care in the developmental stages.
Lessons Learned

• Early planning.
• Whole team (integrated approach) to project planning including buy in.
• Patient involvement.
• Communication.
• Ensuring the project manageable and defined.
• Co-operation.