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Background and Methodology

Chronic pain incidence in community is approximately 20% and increasing with age
 • Conducted a survey of 93 consented patients from SGH Pain Centre over 2 months and an ESTHER café with 3 patients.

Results of survey:

- 50% of patients had 3 or more comorbidities and 70% had mobility difficulties
- 78.5% had spine or joint related pain but only 40 % received physiotherapy

Preceding year:

- **Visits to healthcare facilities:** 55% (≥ 4 visits), 17.2% (≥ 10 visits)
- **Visits to emergency department (ED):** 32.3% (≥ 1 visit), 9.7% (≥ 2 visits)
- **Hospital admission:** 32.3% (≥ 1 admission), 2.2% (≥ 3 admissions)

Results of ESTHER Café:

- Esthers with chronic pain face mobility & transport difficulties when accessing treatment
- Esthers want more time and clearer communication in familiar language regarding health issues.

Conclusion:

Esthers with chronic pain and mobility impairment had multiple healthcare visits and admissions for pain, resulting in poor satisfaction

- Cause and effect analysis done ascertained main causes for dissatisfaction as:
 - Multiple healthcare visits
 - Transport difficulties
 - Inadequate contact time with healthcare professionals
 - Poor treatment compliance

Mission Statement

Enhance access to care and quality of pain management for mobility impaired patients with chronic pain in the community over 3 months

Goals

- Reduce number of healthcare visits for pain to less than 2 and admissions to zero
- Improve treatment compliance to medication and exercises
- Improve patient satisfaction by at least 30 %

Intervention

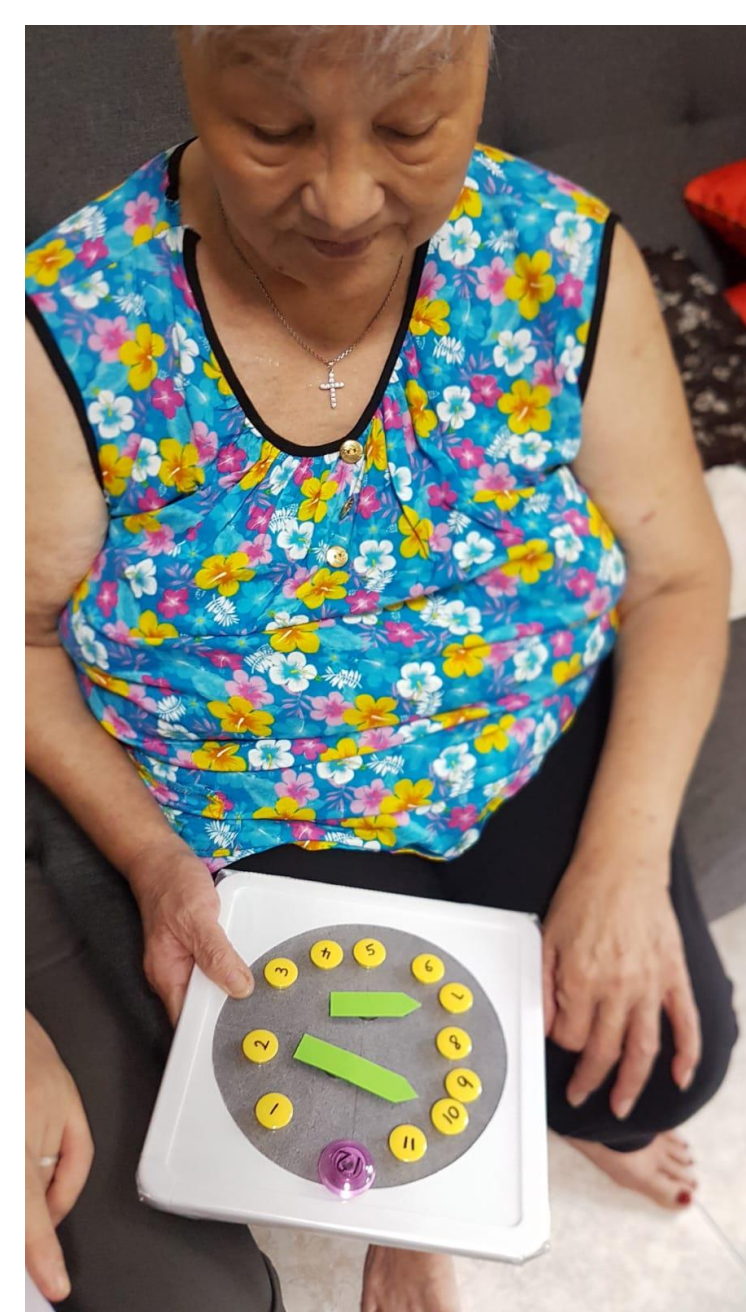
- **Introduced Collaborative Virtual Pain Clinic in Community for mobility impaired patients**
- Established collaboration among Pain Specialists, Pharmacists, Physiotherapists in hospital for virtual pain clinics in the community
- Conducted **clinical assessment of patients in their home** by doctor & nurse with medication stock evaluation and education
- **Reconciled medications** with changes as required by Pain Specialist
- **Educated patients on 5 basic home exercises** using chart formulated by Physiotherapists. This was evaluated by Physiotherapists via video conferencing.
- Prescriptions filled out by Pain Physicians after community review
- Pharmacists arranged for **home delivery of medication** with written and verbal (phone) instructions in language best understood by patients
- Set up VPN access for community visits with mobile hot spots for comprehensive assessment and documentation in the hospital's Electronic Medical Records system



Teaching caregiver to help with exercises



Our Team
Multidisciplinary team of Pain Specialists, Nurses, Physiotherapist and Pharmacist with Patient



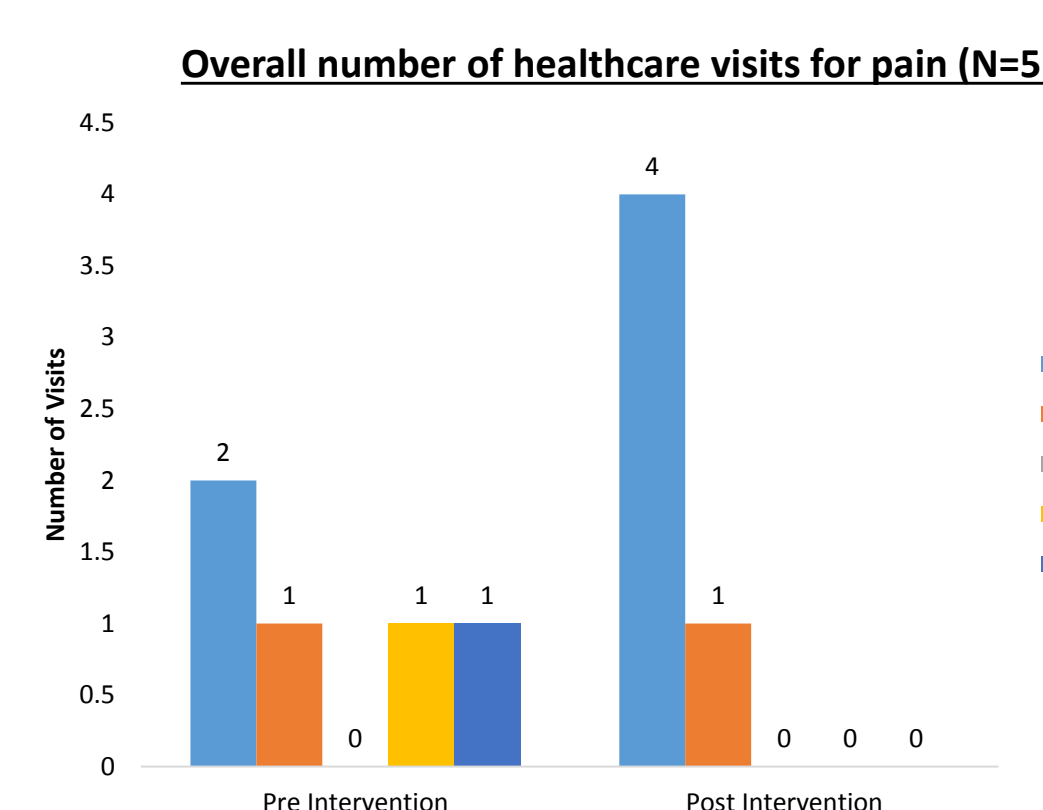
Testing cognition

Results & Outcomes

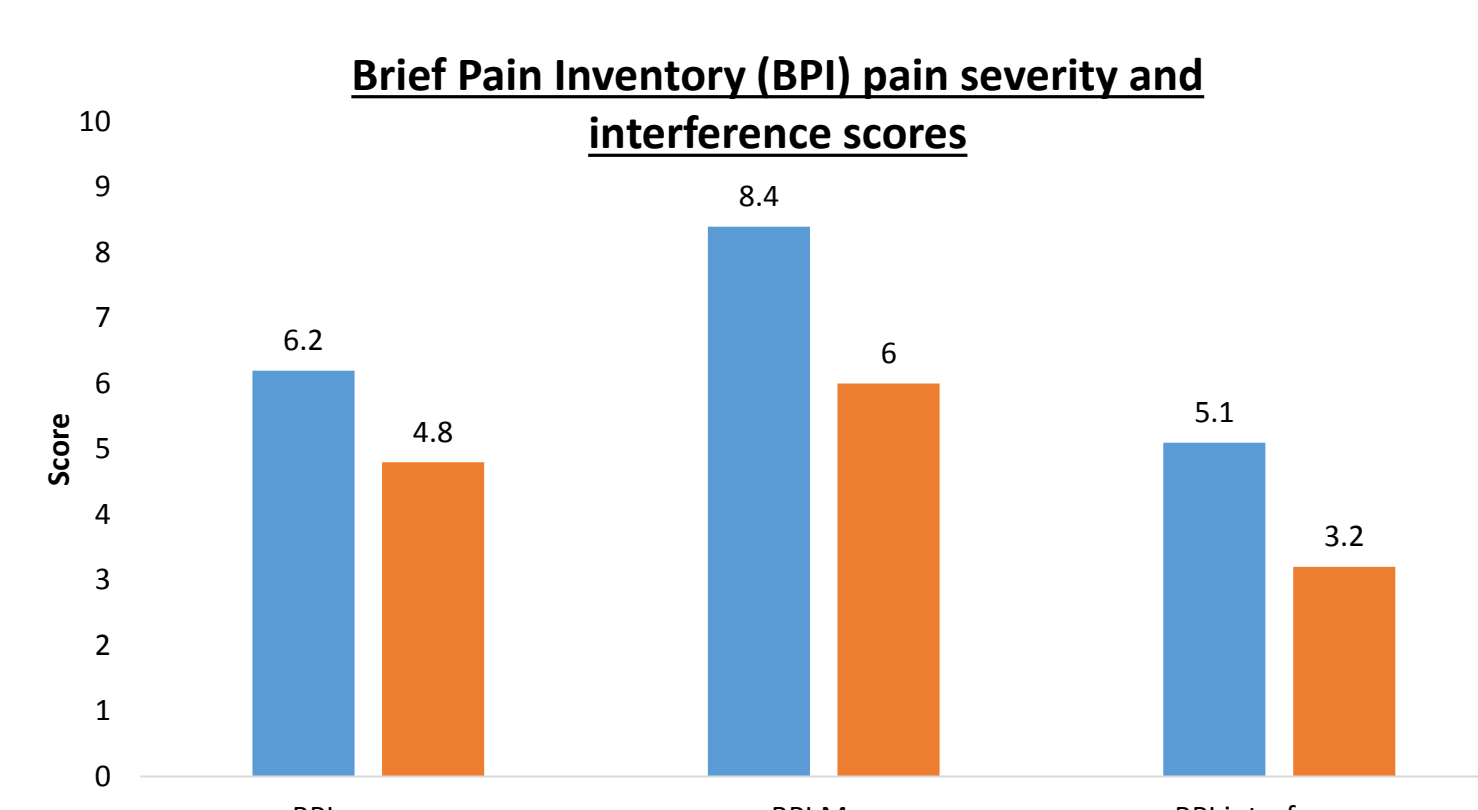
Summary

- **Reduced healthcare visits for pain and no admission**
- BPI scores indicated **reduced pain and improved function**
- EQ5D indicated **improvement in impression of health**
- **Edmonton Frailty Score (Mean) improved by 46.6%** with 2 patients reporting improved mood and 2 improved impression of health
- 3 of 5 Patients **increased exercise duration (minimum 30 min/day)** to improve function
- **Improved medication compliance, reduced waste** and discarded expired drugs
- **Satisfaction score improved for all** with 1 improved by 233%
- Referrals made to existing community teams for continuity of care

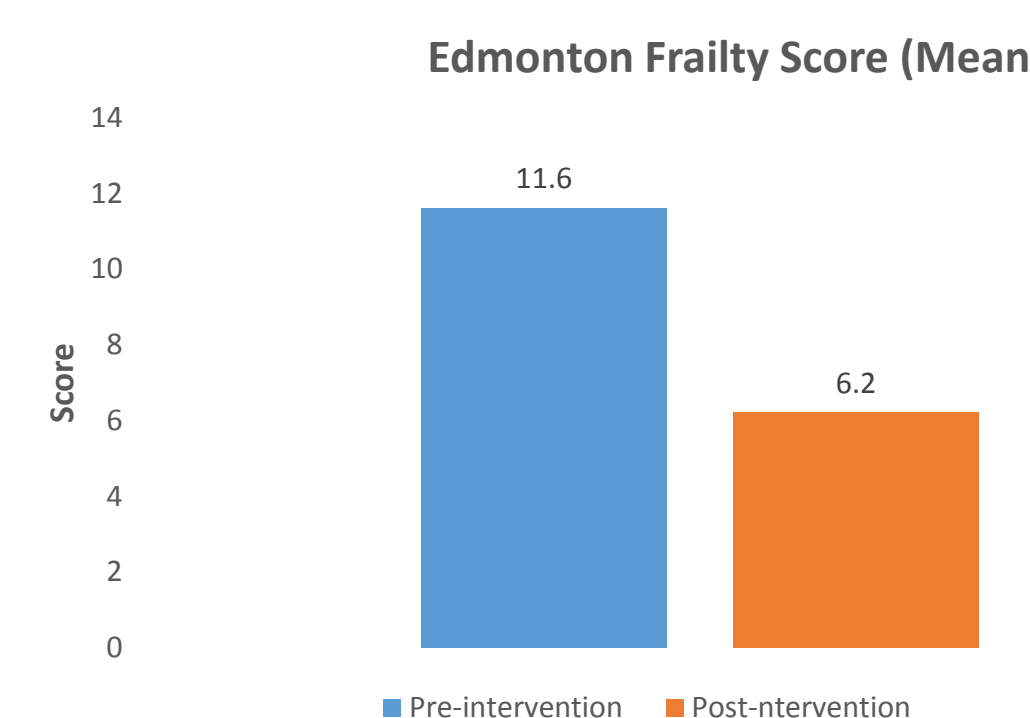
Healthcare Visits & Health Assessment



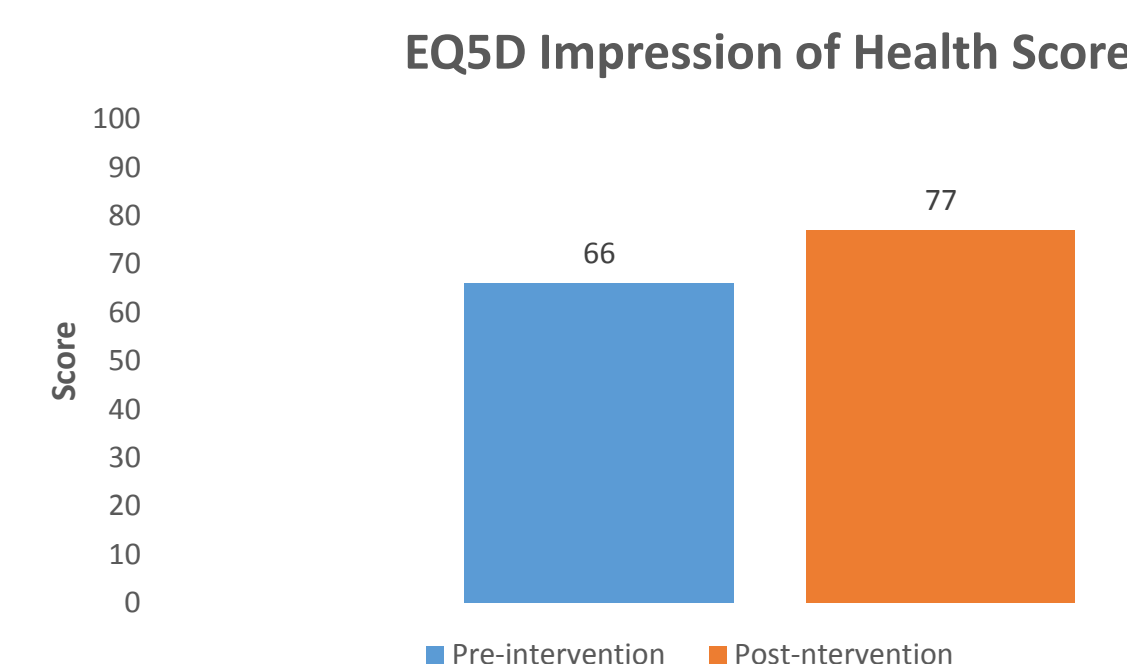
Overall number of healthcare visits by Esthers reduced



BPI scores indicated reduced pain and improved function



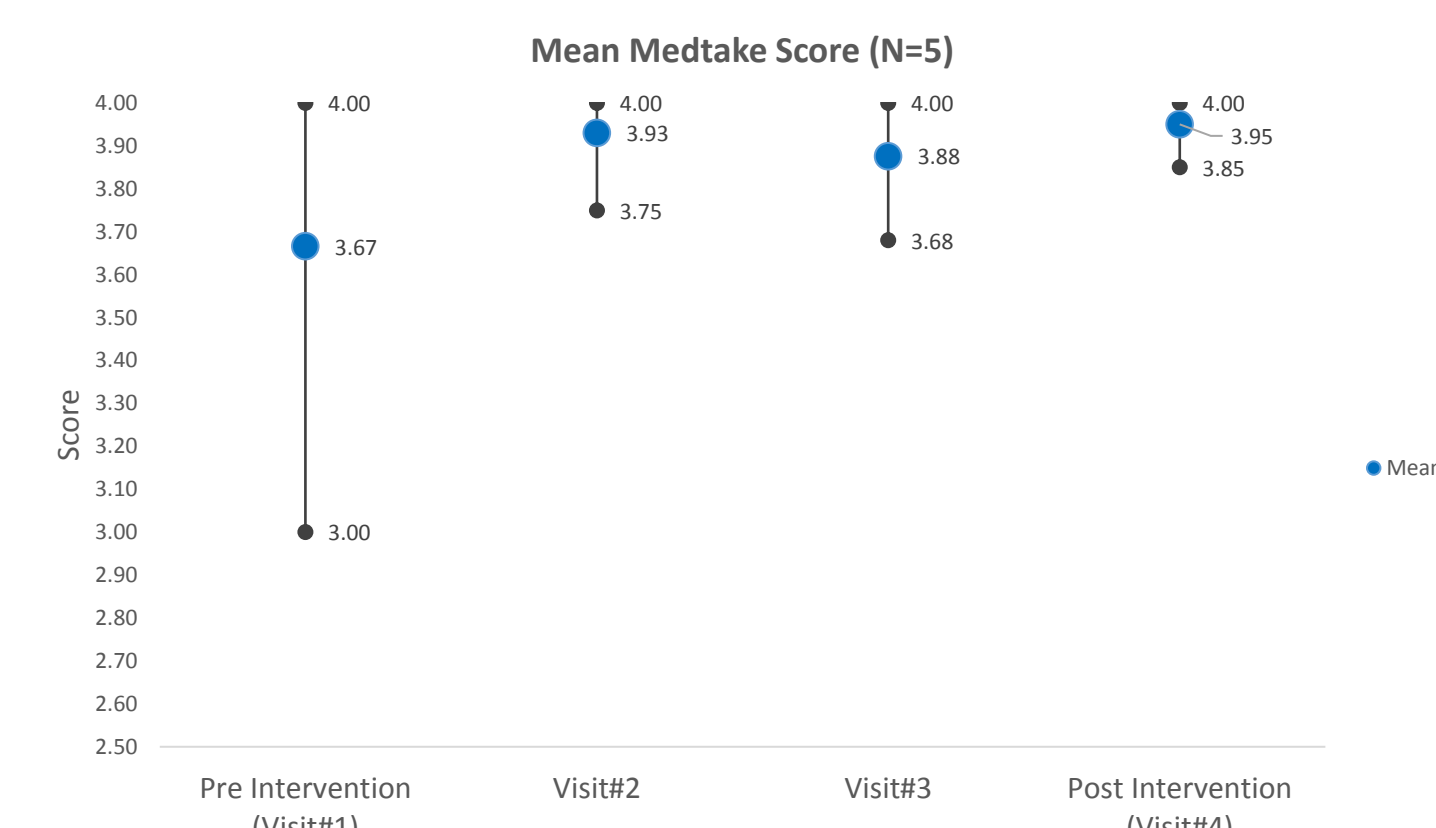
Edmonton Frailty Score (Mean) improved by 46.6%



Impression of Health Score (Mean) improved by 16.7%

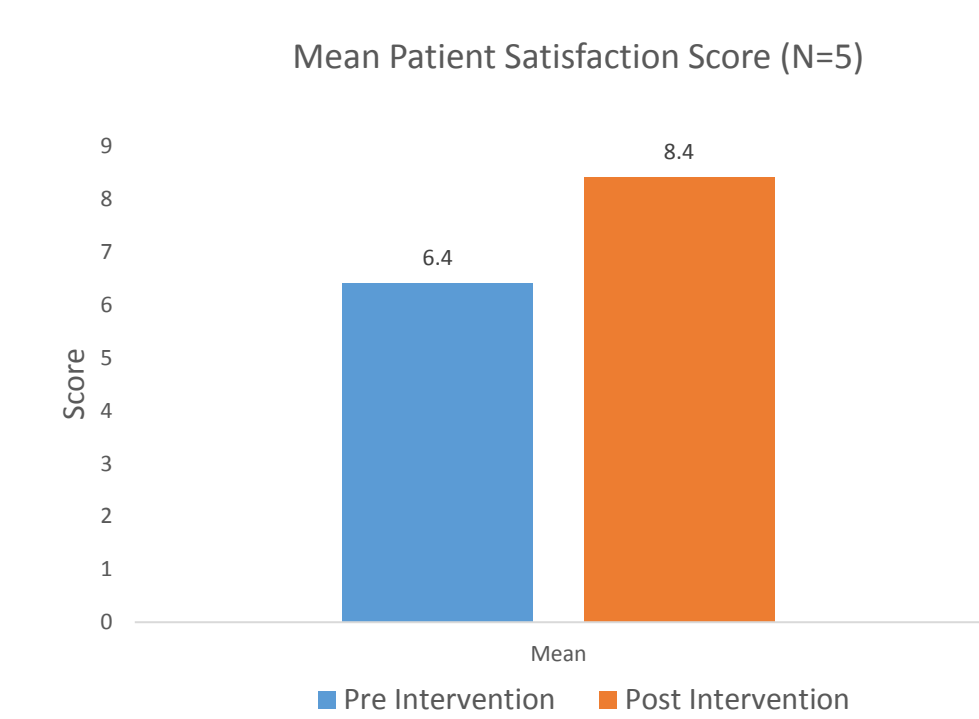
Medication Reconciliation

Medication reconciliation	Patients (No.)
Overstocked drugs not supplied to reduce waste	5
Detected opioid overstocking	2
Cleared expired drugs	2
Corrected serious dosage flaws	2
Reduced side effects	2
Introduced helpful drugs	3

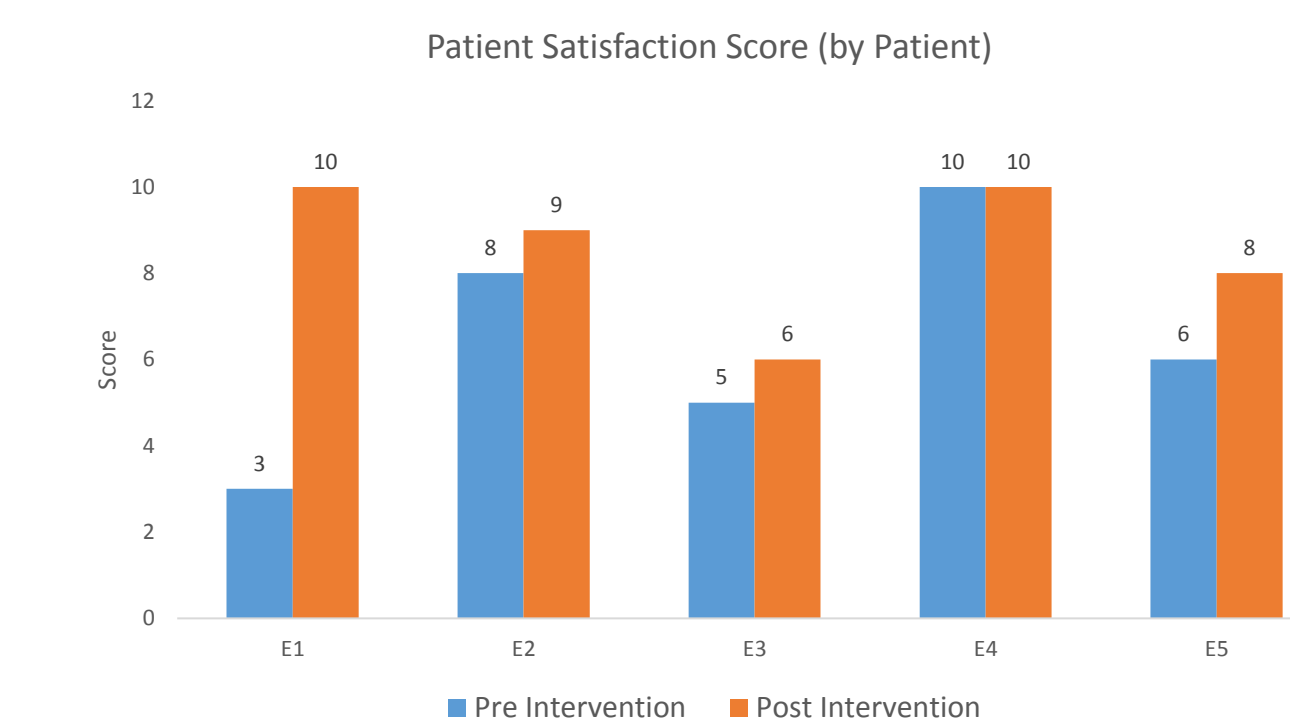


Mean Medtake scores improved with education, correction of dosage flaws and adjustments to reduce side effects

Patient Satisfaction



Patient Satisfaction Score (Mean) improved by 31.3%



All Esthers showed an improvement in their satisfaction score with E1 showing an improvement of 233%

Conclusion and future plan

A multi-disciplinary approach with collaboration among Pain Physicians, Pharmacists and Physiotherapists through a Virtual Pain Clinic in the community reduces healthcare visits, admissions and improves treatment outcomes.

Future Plan

- Referral of mobility impaired chronic pain patients to existing community nurses
- Periodic review in the community by Pain Team from hospital
- Home delivery of medications prescribed by Pain Physicians under Pharmacists' supervision through phone
- Training of existing community teams to supervise chronic pain patients to perform exercises initiated by Physiotherapist. Videos sent to Physiotherapist for feedback.
- Monitor frequency of Emergency Dept visits and Hospital admissions