Development of an innovative nursing led chronic non-cancer pain program in primary care: lessons learned and initial outcomes

I. Leclerc RN, A. Lienhard RN, E Muggah, MD, D. McGregor, MHA, H. Finestone, MD
Bruyere Academic Family Health Team, Ottawa

Introduction:

Persistent non-cancer pain is a very common problem in primary care. It carries a high burden of illness to the patient and high demand on the primary care system.[1] Self-management programs have been found to benefit chronic pain patients and these programs are well suited to be run in an interdisciplinary FHT setting. [2]

Over the last 3 years our FHT has developed expertise in RN-led self-management programs for other diseases including hypertension and congestive heart failure. We have now used this experience to build an innovative RN led program for persistent non-cancer pain.

Goals of the Chronic Pain Program:

Primary goal: to assist identified patients in the self-management of chronic non-cancer pain, to optimize their symptoms and live as full a life as possible.

Secondary goals:

- Decrease pain intensity
- Decrease physician office visits
- Decrease medication burden and/or improve proper use of medications
- Improve physical functioning
- Improve sleep
- Help manage the pain (vs controlling pain)
- Identify comorbid mental health disorders

Methodology:

1. **Increasing RN and FHT Capacity through increasing knowledge** (see separate box)
2. **Development of evidence based tools and interventions** to be used by the RN for education in self-management of chronic pain, and creation of a chart audit tool (see separate box)
3. **Identification of possible patients** through registries and chart audit, and review with the Primary Care provider, (see separate box)
4. **Assessment and identification of possible supports** available to our patients
5. **Intervention**: Meeting with the patients to assess and provide self-management education, introduction of the pain explanation and treatment diagram (PETD), and linkages to supports such as a Stanford Workshop or counseling to physical exercise programs (see separate box)
6. Hosting Stanford Self-management on-site **peer led chronic pain groups.**
8. **CME** for our physicians and nurse practitioners to build capacity in chronic pain self-

The search (PSS EMR)

Over 18 years old **and** at least one of the following Fibromyalgia or FM in Cumulative Patient Profile (CPP)
OR
The words chronic and pain in the Cumulative Patient Profile CPP (i.e.: "chronic pain" but also "chronic neck pain" "chronic pelvic pain" etc... neck, back, pelvic, lumbar
OR
On a long acting narcotic

1. Lalonde L, Choinière M, Martin É, Berbiche D, Perreault S, Lussier D. Costs of moderate to severe chronic pain in primary care patients – a study of the ACCORD Program. *Journal of Pain Research*. 2014;7:389-403. doi:10.2147/JPR.S55388.

2. LeFort, S., Gray-Donald, K., Rowat, K.M. & Jeans, M.E. Randomized controlled trial of a community-based psycho-education program for the self-management of chronic pain. *Pain*, 74, 297-306, 1998.

Increasing RN and FHT capacity

- Reading journal articles
- Conferences/workshop regarding pain
- Training in Motivational Interviewing and Brief Action Planning
- Participation in project ECHO http://www.echoontario.ca/
- Visit to TOH pain clinic (use of the Brief Pain Inventory Self Report from the Ottawa Hospital)
- Collaboration with Bruyere Continuing Care Physiatrist, Dr. Hillel Finestone (Use of Dr. Finestone's pain assessment tool)

Tools

Self-management tools

- Pain explanation and treatment diagram (PETD)
- GAD and PHQ9 for measurement of mood
- CAGE questionnaire regarding alcohol use (cut-annoyed-guilty-eye) © American Psychiatric Association
- Brief pain inventory self report
- The Functional Pain Scale
- Pain visual analogue scale
- Opioid risk tool

Chart audit tool

We have developed a persistent pain chart audit stamp using data from external partners and a review of the literature on best practice. This stamp is used by the Chronic Disease Management RN to review the patient's chart and identify patients who might benefit from further intervention. Areas for review would include: evidence of need for preventive care or chronic disease self- management care, possibly untreated co-morbid mental health issues or social risk factors.

The intervention

Patient recruitment:

- EMR search and reviewed by primary provider,
- Posters within the clinic for self identification
- Direct referral
- Telephone call to patient inviting them for a visit with the RN. The appointment is arranged.

RN visit:

- An **assessment** of the level of pain and the patient's coping with the pain is conducted using Tools as BPI-Brief Pain Inventory, PETD-Patient Explanation and Treatment Diagram, The Functional Pain Scale.
- **Discussion:** The PETD focuses the discussion on understanding pain self-management strategies. Discussion includes topics such as: education about persistent pain, smoking, alcohol consumption, nutrition including caffeine intake, sleep, physical activity, pacing activity and rest, ergonomics, medication management, mental health, past history of physical, emotional, or sexual abuse, financial problems and substance use.
- An **opioid risk tool** is used.
- An **Action Plan** is discussed at the end of each visit, with the patient setting a goal for change and indicating the level of confidence to change. The 6 week on-site Stanford workshop "Living with Chronic Pain" is offered during the first visit and phone follow-ups are scheduled once per month if desired.
- **Follow up:** During the interview, if need arises, the CDMN may set up another appointment, and will do questionnaires such as: CAGE (Cut down, Annoyed, Guilt, Eye-Opener), PHQ9, GAD, or MOCA. Additional visit are planned as necessary.

Results (6 months)

Through an EMR registry search the search found **201** patients with persistent non-cancer pain at the Bruyère site. (from a patient population of 10,900). **28** other patients were referred that did not appear on the EMR search. **14** Patients seen by CDMN for hypertension or congestive heart failure, who also suffer from persistent non-cancer pain were offered a visit for persistent pain self-management education, as well registering for the Living Healthy six weeks workshop. **243** total patients identified to date **67** of these patients were not eligible because of underlying health diagnosis or too complex to manage (major depression, palliative patients, out of country)

28 referrals seen to date for a first visit by the Nurse

Second visit assessment results: (n= 19)

Goals some success 14 (74%)
Goals not yet successful: 1 (5%)
Pain improved: 5 (26%)
Pain stayed the same: 3 (16%)
Pain increased: 10 (53%)
Function improved: 4 (21%)
Function same: 13 (68%)
Function decreased: 2 (11%)
Confidence improved: 3 (16%)
Confidence the same: 5 (26%)
Confidence decreased : 5 (26%)

For further analysis: Frequency of physician visits.

For further analysis: Medication changes

Satisfaction with intervention survey: (n= 10)

Were you satisfied with the nurse contact regarding your chronic pain ?

Very satisfied: 4
Satisfied: 6
Neither: 0
Unsatisfied: 0
Very unsatisfied: 0

How much did it help you with managing your chronic pain?
Helped a lot: 0
Medium help: 3
Small help: 5
Did not help at all: 2

111 referred to Champlain Stanford chronic pain self-management 6 week workshop. **14** have completed the workshop to date

Lessons Learned

Patient motivation: Patients really want to have tips on how to manage their pain, as they want to be able to do SOMETHING at home that will help them, ex. Increase physical activity, or increase anti-inflammatory foods, decrease their stress, etc.

Provider uptake: once the provider has sent one patient to the program for persistent pain, and reviews the chart notes, more referrals are made. Communication and debriefing with the provider has been important in developing trust.

Relationship with patient: the relationship with the patient develops. As the RN does a monthly phone call/ or in clinic visit for the first three months, the patients open up more and some patient will ask the RN to be an advocate for them with their providers. This continuing relationship with the patient has been helpful as the RN is able to communicate with the provider and also with the social worker about things the patient had not been willing or able to divulge to the provider.

Information transfer: The Pain Explanation and Treatment Diagram (PETD) can be brought to patients' other therapies and/or medical consultations, helping with information transfer.