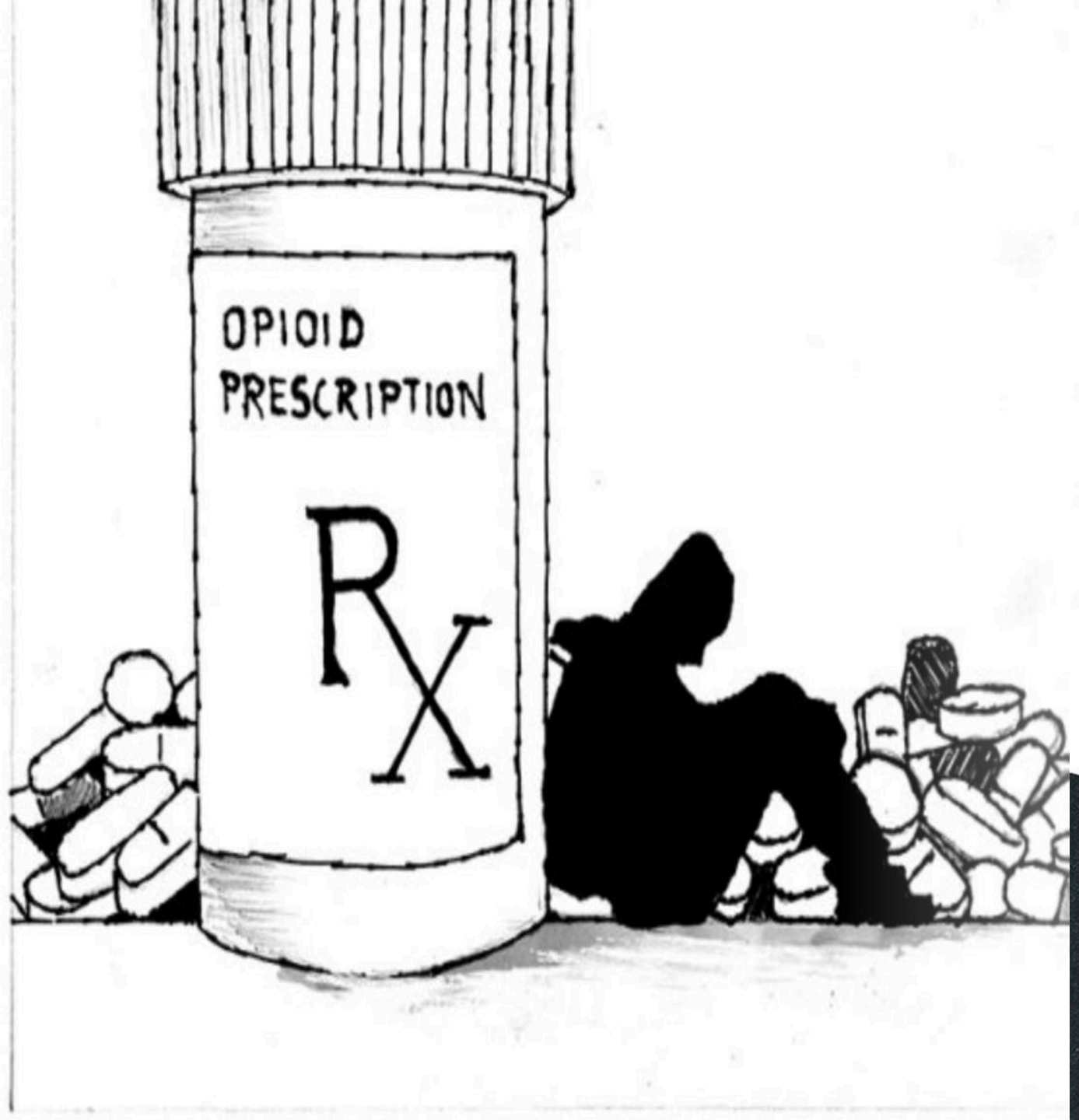
Evaluation of a Pharmacist-Led Interprofessional Chronic Pain Clinic in Canada

Professor Derek Jorgenson
College of Pharmacy and Nutrition
University of Saskatchewan, Canada

Declaration of interest:

I herewith declare that I have:

no conflict of interests



Kristen Black Rider-Papequash

Myanna Dreaver

Every 49 minutes

That's how frequently peo
poisoning in Canada du
week last summer. I
fathers, brothers a
the opioid crisis to

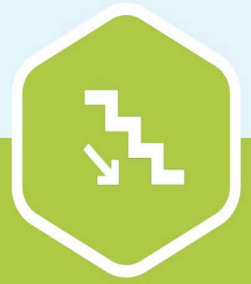
By **Michael Friscolanti**

Fairlie Johnny

Marcus Gould

Guidelines recommend...

For patients with CNCP, **optimize non-opioid pharmacotherapy** and nonpharmacologic therapy **rather than a trial of opioids**

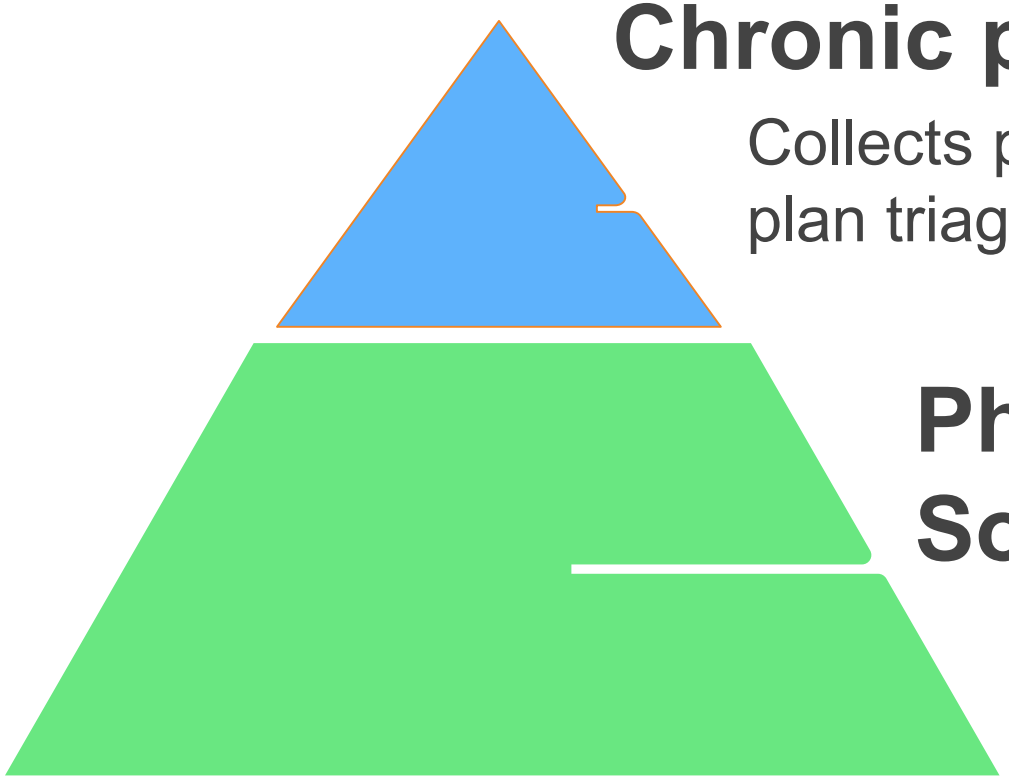


For patients with CNCP using 90 mg morphine equivalents of opioids per day or more, **suggest tapering to the lowest effective dose** rather than making no change in opioid therapy

For patients currently on opioids who have persistent problematic pain and/or problematic adverse effects, **suggest rotation to other opioids** rather than making no change in opioid therapy

For patients with CNCP who are using opioids and experiencing serious challenges tapering, recommend a **formal multidisciplinary program**

Typical Chronic Pain Clinic



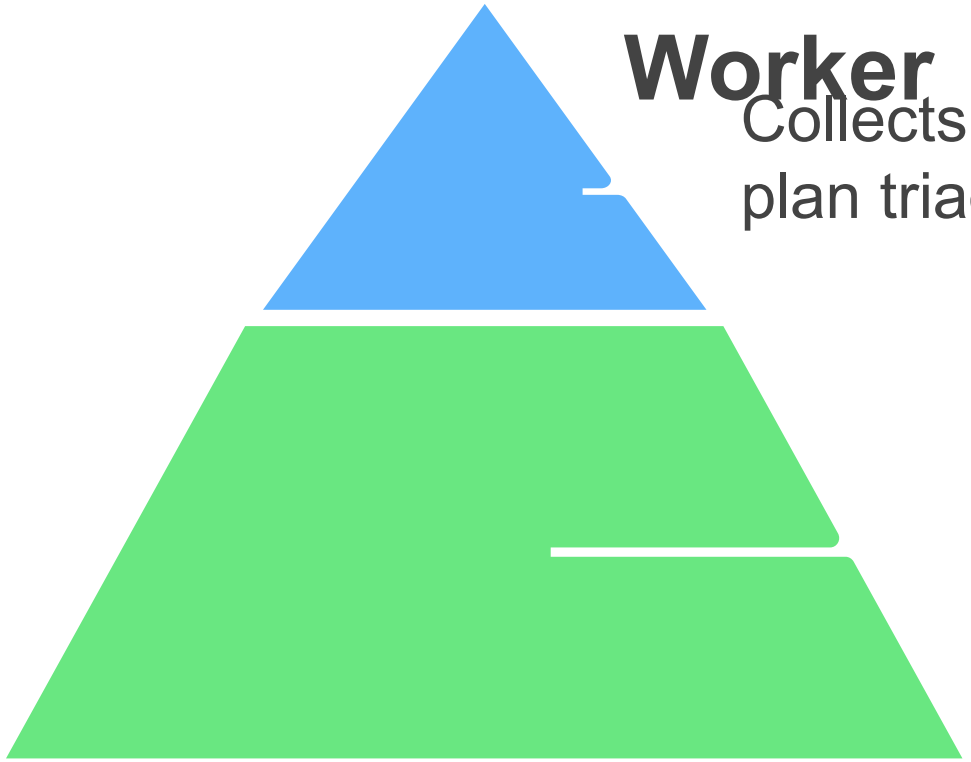
Chronic pain physician

Collects pain history, physical exam, implements care plan triages care with other team members

Pharmacist, Physiotherapist, Social Worker

Consulted as needed, based on physician triage

Our idea…



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Launched in March 2020 – funded by Health Canada grant

UNIVERSITY OF SASKATCHEWAN

Chronic Pain Clinic

COLLEGE OF PHARMACY AND NUTRITION

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The clinical team

- 2.2 pharmacists
- 2.1 social workers
- 2.0 physical therapists
- 0.4 chronic pain physician

~16:1 pharmacist/SW/PT: chronic pain MD ratio

fip ADVANCING PHARMACY WORLDWIDE

UNIVERSITY OF APPLIED SCIENCES UTRECHT

Utrecht University

Patient care process

1. First appointment is a GROUP appointment with pharm, PT + SW
2. Individual pharm/SW/PT appointments follow based on team plan
3. MD consulted PRN (by Zoom) to discuss complex cases with the team
4. Our MD also meets with referring MDs PRN for prescribing support
5. Pharm takes lead on coordinating care and communicating with referring MD (who must continue to prescribe)
6. All patients offered access to variety social work group sessions

Program evaluation framework

1. Team focus groups**
2. Patient chart audit
3. Patient surveys
4. Patient semi-structured interviews**
5. Physician surveys
6. Linked administrative health databases**

**in progress

Physician and patient surveys - Method

- Postal survey mailed ~3 months after initial appointment
- 20 questions (physician) and 25 questions (patient)
- Combination Likert scale and free text (5-7 minutes to complete)

Physician survey – Key results

- Response rate = 30.6% (30/98)
- “I am more confident in prescribing opioids after referring a patient”
  - 53.3% (16/30) agree / strongly agree
- “I am more confident managing chronic pain after referring a patient”
  - 70.0% (21/30) agree / strongly agree
- “Consultation letters are helpful”
  - 93.3% (28/30) agree / strongly agree
- Would you recommend this service to your colleagues?
  - 90.0% (27/30) = yes

Patient survey – Key results

- Response rate = 34.1% (47/138)
- “My overall health status is”
  - 66.0% (31/47) improved / much improved
- “My ability to complete my daily activities has improved”
  - 43.5% (20/46) agree / strongly agree
- “My overall mood has improved”
  - 40.0% (18/45) agree / strongly agree
- “My overall day-to-day pain severity has improved”
  - 35.6% (16/45) agree / strongly agree

Chart Audit - Method

- Data extracted 3 and 6 months after initial appointment
- Entered into Excel spreadsheet
- Descriptive statistics for most data points, inferential statistics for pre- vs post mean daily morphine equivalent doses

Chart Audit – Patient descriptors (n = 138)

- Mean age – 55 (range 21 – 87)
- Gender – 71% female
- Referral source: 61% MD, 22% self, 7% NP, 4% pharmacist
- Most patients attended 4-5 appointments (range 1 – 30)
- 46% had a mental health co-morbidity
- Mean Brief Pain Inventory (BPI) at baseline: 6.7
- Mean Pain Catastrophizing Score (PCS) at baseline: 25.0

Chart audit – Key results

Proportion of patients taking opioids at initial referral

- 68.8% (*n* = 95/138) on any opioid

Proportion switched to buprenorphine/naloxone by our team:

- 22.5% (*n* = 18/80)

Chart audit - Results

Mean daily morphine equivalent change*

- At initial visit = 230.7 mg/day
- At most recent visit = 189.0 mg/day
- Mean difference – 41.7 mg/day, *p* = .011

*people not switched to bup/nal

Chart audit - Results

CGI-i: clinician global impression of change score

Mean = 3.0

CGI-I = 1 (very much improved) n = 8
CGI-I = 2 (much improved) n = 19
CGI-I = 3 (minimally improved) n = 13
CGI-I = 4 (no change) n = 11
CGI-I = 5 (minimally worse) n = 7
CGI-I = 6 (much worse) n = 3
CGI-I = 7 (very much worse) n = 2

What does this mean?

Preliminary data suggests our new model is having a positive impact

- Patients on safer medications (change to bup/nal, lower MME doses)
- Improved patient self-reported pain severity, function, and mood
- Improved clinician assessed overall health status
- Referring physician improved confidence in prescribing opioids
- Well received by patients and referring providers

Results support the need for ongoing evaluation of this new model

- Economic evaluation
- Non-observational methods