Implementation of the Ottawa Hospital Pain Clinic Stepped Care Program: A Preliminary Report

Louise Bell
Overview

- Background
  - Prevalence of chronic pain
  - Best practices and accessibility
  - Stepped care in a mental health setting
  - Stepped care in multidisciplinary chronic pain settings

- Stepped Care in the Ottawa Hospital Pain Clinic
  - Transition
  - Stepped care options

- Preliminary Impact

- Future Considerations
What is Chronic Pain?

- “An aversive sensory and emotional experience typically caused by, or resembling that caused by, actual or potential tissue injury”
- Pain that persists longer than 3 months
- Considered a chronic disease in the International Classification of Diseases by the World Health Organization

Merksey (1979); IASP’s Proposed New Definition of Pain (2019); Canadian Pain Task Force (2019); Raminani (2015)
Prevalence of Chronic Pain

- 1/5 Canadians
- 50% of individuals have had pain for more than 10 years
- Increases with age
- Women are more likely to experience pain than men
  - Potential reasons: Social acceptability, biological, and psychological factors

Schopflocher et al. (2011); Meana et al. (2004); Millar (1996)
Functional Limitations

Physical limitations
- Leisure activities
- Household chores
- Work

Psychological well-being
- Depression
- Sleep disturbances
- Psychological distress

Social Life
- Social support
- Social isolation

Meana et al., (2004); Croft, (1997); Gatchel (2007); Millar (1996); Van Korff et al., (1992)
Financial Burden

Annual cost per person for healthcare: $5177
Monthly out-of-pocket expenses: $1462
Annual burden in the Canadian healthcare system: $7.2 billion

Hogan et al., (2016); Guirrere (2010)
Best Practice to Manage Chronic Pain

The biopsychosocial approach:

- Biology
- Psychology
- Social

Gatchel et al. (2007); Katz (2019); Anamkath (2018)
Multidisciplinary Pain Management Programs

- At least two different health care specialties
- Located within the same clinic with frequent contact through team meetings
- Both treatment- and cost-effective

Clark et al. (2016); Gatchel et al. (2014); Gauthier et al. (2019); Guerriere et al. (2010); Kamper et al. (2014); Katz et al. (2019)
Accessibility for Pain Clinics

- Multidisciplinary pain centers have accumulated wait lists greater than 1 year
- Wait times longer than 6 months can lead to a significant deterioration in quality of life and are deemed medically unacceptable

Choinière (2019); Lynch et al. (2007); Lynch et al. (2008)
Solution?

Implement a stepped care framework
What is Stepped Care?

Originated from the United Kingdom for the delivery of rapid access to mental health care. The lowest level of intervention intensity is warranted by the initial assessment and a stepping up or down of therapy occurs. Ongoing monitoring is needed to inform treatment decisions. Provides psychological empowerment.

Christens et al. (2014); Cornish et al. (2017); Cornish et al. (2019); Marks et al. (2006); Palylyk-Colwell & Wright (2019); Davison (2000)
Stepped Care for Depression

Step 1: Assessment and Monitoring

Step 2: Interventions Requiring Minimal Practitioner Involvement

Step 3: Interventions Requiring More Intensive Care and Specialized Training

Step 4: Most Restrictive and Intensive Forms of Care

O’Donohue et al. (2011)
Stepped Care in Mental Health Settings in Canada

Individuals with mental health care needs experience difficulties in accessing appropriate and timely care. Canada is lacking a system of mental health care that is accessible, organized and effective.

MHCC recommended the establishment of an efficient system with early and rapid assessment.

Cornish et al. (2017); Mental Health Commission of Canada (2012)
Stepped Care 2.0

Rapid access through Stepped Care 2.0

**Multi-modal Open Access Care Options:**
- Web portal
- Phone / Text
- In-Person Drop-In

Service users have same-day, multi-modal access for care aimed at identifying & addressing a targeted need. The outcome could be no further service, a return visit initiated by the service user, or suggestion / recommendation of services within stepped care system. The expectation is for a mutually agreed upon outcome.

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**Stakeholder Investment**

- **Step 1** – Watchful waiting; informational self-directed
- **Step 2** – Interactional self-directed
- **Step 3** – Real-time peer support
- **Step 4** – Real-time psycho-educational Workshops
- **Step 5** – Expert-assisted e-support
- **Step 6** – Intensive group programming
- **Step 7** – Intensive flexible individual programming
- **Step 8** – Specialist consultation / chronic care
- **Step 9** – Acute care, system navigation & Advocacy

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**Open Access Care** (with single-session principles)

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**Program Intensity**
- **Strengthen**
- **Autonomy**

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Peter Cornish (2019)
www.steppedcaretwooint0.ca

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Stepped Care 2.0 is a multi-modal access system for mental health care, offering various options such as web portal, phone/text, and in-person drop-in. Service users have same-day access aimed at addressing targeted needs. The outcome could range from no further service to recommendations for other services based on user preference or suggestion.

The framework includes steps from watchful waiting to intensive group programming, each tailored to different levels of program intensity and autonomy. This approach allows for flexible and adaptive care, ensuring that the outcome is mutually agreed upon between the service user and the provider.
Step 1 – Watchful waiting; informational self-directed

Step 2 – Interactive self-directed

Step 3 – Real-time peer support

Step 4 – Real-time psycho-educational Workshops

Step 5 – Expert-assisted e-support

Step 6 – Intensive group programming

Step 7 – Intensive flexible individual programming

Step 8 – Specialist consultation / chronic care

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Open Access Care (with single-session principles)

Strengths / Solution-Focused Principles applied at all steps

- Program Intensity
- Autonomy
Stepped Care in Multidisciplinary Chronic Pain Settings

- Given the similar needs among individuals with mental health difficulties and people living with chronic pain, a stepped care approach may be part of the solution
  - This may help to reduce wait times to access care
Stepped Care in Multidisciplinary Chronic Pain Settings

- Canadian Agencies for Drugs and Technologies in Health (CADTH) completed a systematic review evaluating clinical effectiveness of stepped care programs in multidisciplinary pain clinics.
- 9 articles evaluated the efficacy of stepped care in multidisciplinary pain clinic settings:
  - Two systematic reviews
  - 6 non-randomized controlled trials
  - 1 randomized controlled trial

Palylyk-Colwell & Wright (2019)
CADTH: Systematic Review (2019)

<table>
<thead>
<tr>
<th>Peterson et al. (2018)</th>
<th>Cochrane et al. (2017)</th>
<th>1 RCT and 6NRCTs</th>
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<tbody>
<tr>
<td>• 4 RCTs</td>
<td>• 4 RCTs</td>
<td>• Smink (2014): N=280</td>
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<tr>
<td>• Results: Improvement in pain and function</td>
<td>• Results: Stepped care is more effective at improving return to work</td>
<td>• Chambers (2015): N=77</td>
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<td></td>
<td>• Strength of evidence: Low</td>
<td>• Comer (2016): N=484</td>
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<td>• Anderson (2016): N=4385</td>
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<td>• Rhon (2018): N=1876</td>
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<td>• Edmond (2018): N=31,286</td>
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<td></td>
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<td>• Karp (2018): N=227</td>
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<td></td>
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<td>• Risk of bias: High</td>
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<td></td>
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<td>• Stepped care models were inconsistent</td>
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CADTH Systematic Review

- Overall: Some, but not all reporting positive effects on pain management
- What does this mean?
  - Data is limited
  - Additional trials are required that more clearly outline the model of stepped care being delivered
Stepped Care in a Tertiary Pain Clinic Setting

- Ottawa Hospital, Ontario, Canada
- 1 of 17 clinics who received funding from the Ontario Ministry of Health and Long-Term Care
- Multidisciplinary pain clinic consisting of: Anesthesiologists, psychiatrist, pain medicine specialist, nurses, and an interprofessional team (two psychologists, social worker, physiotherapist, and an occupational therapist)
Stepped Care in a Tertiary Pain Clinic Setting

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Old Multidisciplinary Pain Clinic Referral Pathway

Medical Visit
Occupational Therapy
Physiotherapy
Social Work
Psychology
Referral to Pain Clinic

6 month wait

6 month wait
New Multidisciplinary Pain Clinic Referral Pathway

Medical Visit
Occupational Therapy
Physiotherapy
Social Work
Psychology
Orientation Session
Interprofessional Team
Referral to Pain Clinic
<table>
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<th>The Ottawa Hospital Pain Clinic Orientation Session</th>
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<td>Why a group session?</td>
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<td>Definition of pain and difference between acute and chronic pain</td>
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<td>Hurt vs Harm in chronic pain</td>
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<td>Impact of chronic pain</td>
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<tr>
<td>Biopsychosocial approach to address multiple dimensions of chronic pain</td>
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<tr>
<td>Building your toolkit – what to do above and beyond medical management and setting realistic expectations</td>
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<tr>
<td>Risk/Benefit of opioid use in the management of chronic pain</td>
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<tr>
<td>Research vignettes on the impact of “Understanding Pain” and non-pharmacological management</td>
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<tr>
<td>Next steps: what to expect at your first visit with pain specialist</td>
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<tr>
<td>Programs offered by the interprofessional team</td>
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<tr>
<td>Community resources (psychosocial, legal, financial, medical)</td>
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New Pain Clinic Referral Pathway

- Medical Visit
- Occupational Therapy
- Physiotherapy
- Social Work
- Psychology
- Orientation Session
- Interprofessional Team
- Referral to Pain Clinic

New Pain Clinic Referral Pathway
Medical Visit

Discussion of Medical Options

- Change in pharmacotherapy prescription
- Interventional approach options
  - Epidural steroid injections, radio-frequency ablation, spinal cord stimulation

Questionnaire to Complete

- Brief Pain Inventory (BPI)
- Referral sent if necessary
Medical Visit
Occupational Therapy Physiotherapy Social Work Psychology
Orientation Session
Interprofessional Team 
Referral to Pain Clinic

New Pain Clinic Referral Pathway
Interprofessional Intake Process

- Patients are referred
- Battery of Questionnaires
- Interprofessional Group Intake Session
- Schedule and meet with a member of interprofessional team
Battery of Questionnaires

- Patient Health Questionnaire-9
- Generalized Anxiety Disorder Scale – 7
- Insomnia Severity Index
- Pain Catastrophizing Scale
- Tampa Scale of Kinesiophobia
- Limitations in Daily Activities Scale
- Stages of Change question
- Goals
- Social determinants of health-related questions
- Demographics
Interprofessional Intake Process

- Patients are referred
- Battery of Questionnaires
- Interprofessional Group Intake Session
- Schedule and meet with member of interprofessional team
Interprofessional Group Intake Session

- Completed by one member of the team on a rotation basis
- 90-minute session including:
  - Education on chronic pain
  - Approaches to chronic pain management
  - Information about programs available at the clinic
Interprofessional Intake Process

1. Patients are referred
2. Battery of Questionnaires
3. Interprofessional Group Intake Session
4. Schedule and meet with member of interprofessional team
Scheduled Meeting with Interprofessional Member

- Schedule meeting via phone/in person/Zoom
- Develop personalized care plan
  - Plan is revisited if/when necessary
  - Stepped Care approach
Medical Visit

Interprofessional Intake

1:1 Brief Assess & Personal Tx Plan

Referral to Pain Clinic

Orientation

Multidisciplinary Pain Clinic Referral Pathway

Stepped Care Model

1:1 Session Personal Plan

Case Management

1:1 Treatment

Interprofessional CP Program

Online or in-person group therapy

Online Therapist-Assisted Self-Directed Therapy

Interactive Online Workshops

Peer-Led Self-Management Programs

Online Self-Directed Educational Modules

Leverage external resources
The Ottawa Hospital Pain Clinic Stepped Care Model

The Ottawa Hospital Pain Clinic Stepped Care Model

- Educational Modules
- Peer-Led Self-Management Programs
- Interactive Workshops by Health Care Professional
- Online Therapist-Assisted Self-Directed Therapy
- Interprofessional CP Program
- 1:1 Treatment
- Case Management
- 1:1 Session Personal Plan

Time Commitment

Resources Required

Leverage external resources
Stepped Care Model for Chronic Pain Management

- Not a consecutive pathway model
- Therapy intensity is stepped up or down as needed, considering clinical outcomes and client factors
  - Preference and readiness to engage in behaviour change
- Multiple interventions of different intensity may be combined to address patients’ needs
  - Group CBT for Anxiety & Depression combined with a 1:1 physiotherapy assessment
Step 1: Educational Modules

- Online readings and modules
  - Pain BC
  - Education on managing mood/ anxiety/ insomnia
- Patient stories of recovery
- Provided to patients as needed
Step 2: Peer-Led Self-Management Programs

- Patients are provided programs that are offered throughout Ottawa
  - E.g., Living Healthy with Chronic Pain program

![Diagram of Ottawa Hospital Pain Clinic 8-tiered interprofessional chronic pain management stepped care framework]
Step 3: Interactive Workshops by Health Care Professionals

- In-clinic group workshops
- **Social Work:** Disability Tax Credit
- **Physiotherapist:** How to Exercise with Chronic Pain
- **Occupational Therapist:** Ergonomics and Body Mechanics for Every Day Life
- **Psychologist:** Managing Stress and Anxiety
Step 3: Interactive Workshops by Health Care Professionals

- Available online in addition to in-clinic
- Patients sign up for any workshop they feel may best suit their needs
- Allows patients to take ownership of their treatment
- Provides the opportunity to become familiarized with group-based activities
Step 4: Online Therapist-Assisted Self-Directed Therapy

- In clinic: Exploration of mindfulness
- Online resources including:
  - Bounce Back
    - Reduce symptoms of depression and anxiety
  - Big White Wall
    - Offers various self-help programs
Step 5: Online or In-Person Group Therapy

- **Psychology**: Pelvic pain, cognitive behavioural therapy for insomnia
- **Physiotherapy**: Aquatherapy for widespread pain, exercise for pelvic pain, and yoga
- **Occupational Therapy**: Mindfulness-based pain management group
- **Social Work**: Parenting with chronic pain, social work discussion group, young adults with chronic pain

![Diagram showing the 8-tiered interprofessional chronic pain management stepped care framework](image-url)
Step 6: Interprofessional Chronic Pain Rehabilitation Program

- Low Intensity Treatment and Education (LITE) Program
- 3.5 hour long sessions for 8 consecutive weeks
  - 1 hour each of: Occupational Therapy, physiotherapy, psychology
  - Social Worker provides information on: Community resources, assertive communication, and communicating with health care professionals about chronic pain
Step 7: 1:1 Treatment

- Each discipline has specific one-on-one therapy referral criteria
- **Physiotherapy**: Complex regional pain syndrome (CRPS) and failed back surgery syndrome
- **Psychology**: Suicide risk assessment or psychodiagnosics assessment
- **Occupational Therapy**: Moderate to severe impairment to activities of daily living
- **Social Work**: Significant concerns relative to social determinants of health
Step 7: 1:1 Treatment

- When is 1:1 therapy is deemed appropriate?
  - When they require intensive therapy that cannot otherwise be provided by lower intensity steps
  - If programs available for them at the clinic do not suit their specific needs
Step 8: Case Management

- Patients who have complex medical and psychosocial problems
- Patients can be referred to Health Links or Primary Care Outreach for further support
Preliminary Impact

1) Improvement of access to the interprofessional team:

- 6 month wait of access to specific programs has been eliminated
- Patients referred to the interprofessional team are contacted within 2 days of referral
  - 90% of patients complete the assessment process within one month of referral
Preliminary Impact

2) Improvement in interprofessional collaborations and care for patients

- Weekly meetings to discuss specific cases and/or plans of improvement for patient care

3) The adoption of group treatment has increased efficiencies

- Patients can be seen longer by each profession
- Group treatments help to foster connections between patients who may often feel isolated by their pain condition
Preliminary Impact

4) Routine evaluations of programs

- Collecting pre/post data for all groups
- Completing formal evaluations
  - Orientation, 8-week LITE program, Pelvic pain program, transdiagnostic CBT for Anxiety and Depression program
- Examining whether expressed/identified needs (e.g., improvement of sleep) of the patients are matched with the delivery of care (e.g., CBT for insomnia)
Future Considerations

The implementation of stepped care is relatively novel, therefore allows room for growth:

1) Provide a larger variety of online groups

2) Leverage other health professionals to refer patients to specific steps
   ▪ Utilize nurses and physicians to refer patients to lower intensity of programming

3) Continuous outcome monitoring
Conclusion

- Adoption of stepped care in chronic pain settings is promising, but initial results have been equivocal based on limited evidence and implementing heterogeneous models.

- The Pain Clinic has implemented a reimagined version of Stepped Care 2.0 in efforts to improve chronic pain management:
  - Reduced wait list times
  - Large variety of available resources to improve patient care

- More studies are needed to evaluate the efficacy and validity of stepped care for chronic pain.
Thank you

- Dr. Patricia Poulin, C. Psych
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- Kristen Cargus, PT
- Renee Gauthier, OT
- Dr. Joshua Rash, R. Psych
- Dr. Peter Cornish, R. Psych
Thank you

Any questions
References

References