Expanding Options for Chronic Pain Treatment:  
The Integrative Pain Management Program

PAIN DAY  
20 SEPTEMBER 2017  
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SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH
• We have no significant relevant financial interests or other relationships with manufacturers of any pharmaceutical product or medical device.
Objectives

- Describe Integrative Pain Management Program (IPMP)
- Share tools for chronic pain management for use in primary care (PC)
- Discuss results, lessons learned, & keys to success
Integrative Pain Management Program

• Problem
  ○ PC clinics have limited access to multimodal pain treatments to improve patients’ pain/function & minimize reliance on opioid analgesics

• Vision
  ○ Every PC patient in the San Francisco Department of Public Health (SFDPH) has access to non-medication treatments for chronic pain; there is a community of patients with chronic pain who support one another
Integrative Pain Management Program

Program

- Non-medication treatments (physical, behavioral, & integrative services) & education for patients living with chronic pain offered in PC setting (Tom Waddell Urban Health Clinic)
- PC provider/team continues chronic pain medication management & referrals for specialty care
These are the different ways we treat chronic pain...

<table>
<thead>
<tr>
<th>Medicines</th>
<th>Physical treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-the-counter meds (e.g. Ibuprofen, Tylenol)</td>
<td>Exercise</td>
</tr>
<tr>
<td>Nerve pain medicines (e.g. gabapentin)</td>
<td>Stretching</td>
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<tr>
<td>Anesthetics/numbing medicine (e.g. lidocaine patch)</td>
<td>Pacing</td>
</tr>
<tr>
<td>Muscle relaxants</td>
<td>Heat or Ice</td>
</tr>
<tr>
<td>Topicals (e.g. Capsacin)</td>
<td>Physical therapy/physiatry</td>
</tr>
<tr>
<td>Opioids (e.g. morphine)</td>
<td>Trigger point injections</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>Joint injections and/or spine injections</td>
</tr>
<tr>
<td>Naloxone</td>
<td>Surgery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Integrative Treatments</th>
<th>Thoughts, feelings, and activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acupuncture</td>
<td>Pain group</td>
</tr>
<tr>
<td>Mindfulness &amp; meditation</td>
<td>Counseling/therapy</td>
</tr>
<tr>
<td>Yoga</td>
<td>Deep Breathing</td>
</tr>
<tr>
<td>Tai chi</td>
<td>Visualization &amp; meditation</td>
</tr>
<tr>
<td>Qi Gong</td>
<td>Good sleep habits</td>
</tr>
<tr>
<td>Massage</td>
<td>Gardening, being outdoors, doing things you enjoy etc.</td>
</tr>
<tr>
<td>Manual Medicine</td>
<td>Community events, spending time with friends/family etc.</td>
</tr>
<tr>
<td>Anti-inflammatory diets &amp; herbs</td>
<td>Other: Anything else not mentioned?</td>
</tr>
<tr>
<td>Supplements</td>
<td></td>
</tr>
<tr>
<td>Guided imagery</td>
<td></td>
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</tbody>
</table>

Which of these are you doing? Which can you try?
Integrative Pain Management Program

Goals
- Improve patients’ functional status & quality of life
- Reduce risks of chronic opioid therapy
- Improve staff & patient experience with pain management
IPMP Description

- **Group-based services - 16-week “home group”**
  - Mindfulness
  - Cognitive Behavior Therapy (CBT)
  - Education about neurobiology of pain & medication safety
  - Physical Movement
  - Support & Community

- **Individual sessions**
  - Acupuncture (group/individual)
  - Massage Therapy
  - Pharmacy Education
  - Health Coaching
IPMP Description

Team

• DPH
  • Program coordinator
  • In kind:
    • Lead physician
    • Health educator
    • Medical Assistant
    • Physician acupuncturist
    • Pharmacist
• Contract
  • Acupuncturists
  • Massage therapists
  • Movement instructor
  • Mindfulness instructor
• Students/volunteers
  • Health coaches
  • Assistants

Funding

• DPH general fund
• SF Health Plan quality improvement incentives
• Community Partnership Award with UCSF Osher Center
2015
Preparation & Input

2016
Pilot:
Cohorts 1-3

2017
Expansion:
Cohorts 4-6

Graduate’s Group
Patients not on opioids, 2nd Clinic, & CBT
Gentle Movement Poses to do at Home

Only do poses that feel safe for you. In all poses, remember to sit up tall, engage belly muscles, and reach head up and tail down! And breathe.

Reach arms up above, be gentle with the shoulders, imagine you are picking fruit, you can do this sitting or standing:

Press hands firmly against each other in front of the heart, fingertips pointing up:

Spinal twist - Bring hand to opposite knee, sit up tall, pull against knee to twist to the side, then do other side:

Reach leg out in front, pull toes toward you, then point toes away, then do slow ankle circles:

Neck stretch - Reach ear to shoulder, stretch neck, can add in hands for extra stretch, then do other side:

Reach leg out in front, pull toes toward you, then point toes away, then do slow ankle circles:

Neck stretch: Reach chin down toward chest, then reach chin to ceiling:

Hip circles - Stand tall, bend knees a little, reach hips forward, right, back, left in a circle, then go the other way:

Shoulder circles - stretch shoulders forward, up, back, down:

Forward fold - Stand in front of chair seat, knees can be bent or straight, rest hands on chair seat, reach tail to the ceiling, keep belly strong:

Lower back stretch - Reach chest forward, shoulders back, then pull belly button back, head and shoulders forward:

Tree balance pose - Stand next to chair for support, put weight in one leg, rest heel of other leg on standing leg ankle (kickstand), engage belly, try to stand tall:
IPMP Referrals in 2016 (C1-3)

Patient referrals to IPMP (n=145)
(all primary care providers referred at least 1 patient)

- Ineligible (not a TWUHC pt or not on opioids) (19)
- Not reachable (27)
- Declined after 1st contact (8)
- Ultimately declined or subsequently could not be reached (32)
- Participants (59)

C1-3=Cohorts 1-3
IPMP Attendance in 2016 (C1-3)

- 65% of patients attended > 75% of Home Group sessions

- Weekly Home Group participation (average attendance per wk)
  - Cohort 1: 13
  - Cohort 2: 9-10
  - Cohort 3: 7-8

- Majority of participants attended at least one of each type of other session
Satisfaction Rates on Survey: Scale of 1 (completely unsatisfied) to 4 (completely satisfied).

<table>
<thead>
<tr>
<th>Program element</th>
<th>Cohort 1</th>
<th>Cohort 2</th>
<th>Cohort 3</th>
<th>Average</th>
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</thead>
<tbody>
<tr>
<td>Home group</td>
<td>3.7</td>
<td>4.0</td>
<td>4.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Massage</td>
<td>3.3</td>
<td>4.0</td>
<td>3.8</td>
<td>3.7</td>
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<tr>
<td>Acupuncture 1 on 1</td>
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<td>3.7</td>
<td>4.0</td>
<td>3.8</td>
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<tr>
<td>Acupuncture group</td>
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<td>3.3</td>
<td>4.0</td>
<td>3.7</td>
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<tr>
<td>Phys movement</td>
<td>3.9</td>
<td>3.8</td>
<td>3.7</td>
<td>3.8</td>
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<tr>
<td>Mindfulness and meditation</td>
<td>3.7</td>
<td>4.0</td>
<td>4.0</td>
<td>3.9</td>
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<tr>
<td>Nutrition and gardening</td>
<td>3.8</td>
<td></td>
<td></td>
<td>3.8</td>
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<tr>
<td>Nutrition ed home group</td>
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<td>4.0</td>
<td>3.8</td>
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<tr>
<td>Med ed pain medications</td>
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<td>3.6</td>
<td>4.0</td>
<td>3.8</td>
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<tr>
<td>Med ed Naloxone</td>
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<td>3.7</td>
<td>4.0</td>
<td>3.9</td>
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<tr>
<td>Med ed Substance use disorders</td>
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<td></td>
<td>4.0</td>
<td>3.9</td>
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<tr>
<td>Pharmacist meeting 1 on 1</td>
<td>4.0</td>
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<tr>
<td>Spirituality talk: home grp</td>
<td>3.5</td>
<td></td>
<td></td>
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<tr>
<td>Improving mood: Home grp</td>
<td>3.6</td>
<td>3.9</td>
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<td>3.7</td>
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<tr>
<td>Interactions w/ health coaches</td>
<td>3.8</td>
<td>3.8</td>
<td>3.9</td>
<td>3.8</td>
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<tr>
<td>Completing surveys, interviews</td>
<td>3.5</td>
<td>3.7</td>
<td>3.9</td>
<td>3.7</td>
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<tr>
<td>Scheduling pain program services</td>
<td>3.7</td>
<td>3.8</td>
<td>3.8</td>
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<tr>
<td>Interactions w/ providers, clinicians in IPMP</td>
<td>3.9</td>
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<td>4.0</td>
<td>3.9</td>
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<tr>
<td>Reminder calls</td>
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<td>4.0</td>
<td>3.9</td>
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<tr>
<td>Overall experience with IPMP</td>
<td>3.9</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
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<tr>
<td>Average rating for all program aspects</td>
<td>3.7</td>
<td>3.8</td>
<td>3.9</td>
<td>3.8</td>
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Meditation / Mindfulness Practices

“I practice the deep breathing every evening when I get home from a busy, sometimes frustrating day. The calming effect is so complete. The abdominal/core muscular focus while inhaling I use for low impact exercise to strengthen my core muscles to help my back.”
BREATHE

Breathing will help relax your nervous system and can help with stress and pain.

1. Close your eyes
2. Exhale: let all the air out
3. Pause
4. Inhale Deeply
5. Repeat
(Front)

BREATHE.

Breathe out.

Pause.

Breathe in deeply.

Repeat.

*Use this to help with times of stress or increased pain. This can help you relax.*

(Back)

PAUSE.

Close your eyes and breathe deeply.

Notice your thoughts and feelings.

Pause.

As you breathe out, think: "let go" of all your thoughts and worries.

_Say to yourself: "I am ______________________”_

_(Write your own affirmation)_
Preliminary research findings are available on request.
An Integrative Pain management program delivered within a safety-net PC clinic:

- Is feasible & acceptable to patients & providers
- Produced high rates of participation & satisfaction
- Achieved improvements in pain & psychosocial outcomes
Remaining Areas of Evaluation

Explore whether level of program participation correlates with outcomes

Qualitative Interviews
• Code & review transcripts for themes

Chart Review
• Trends in Opioid Dose

Possible Additional Areas
• Survey patients who declined to participate or dropped out, explore barriers to participation
Keys to Success

- Build a sense of urgency
- Identify clear goals
- Get leadership buy in
- Identify program leads
- Lean on local/national expertise
- Ask people what they want/need
- Be creative with/leverage money/staff
- Create a buzz
- Start with pilot, continue PDSA cycles
- Don’t give up!
Scale Up/Sustainability Plans

- Ongoing addition of clinics to current program
- Expansion to 2nd hub
- Development of simplified ongoing evaluation measures
- Ongoing funding
Thank you!

- To Emily Hurstak MD MPH & Maria Chao DrPH MPA for work on analysis & slide deck
Questions?

- Barbara Wismer
  - barbara.wismer@sfdph.org
- Kristina Leonoudakis-Watts
  - kristina.m.leonoudakis@sfdph.org
IPMP Evaluation: Validated Pain & Function Scales

- **PROMIS scales**
  - PROMIS=Patient Reported Outcomes Measurement Information System
  - NIH-validated scales
  - Adjusted to US population (mean=50)
  - Pain intensity & interference
  - Anxiety, depression, fatigue, physical functioning, sleep, social satisfaction, & global health

- **Other validated scales:**
  - Pain catastrophizing scale
  - Fear avoidance beliefs questionnaire
  - Chronic pain self efficacy scale
Explanation of Other Scales

- **Pain Catastrophizing Scale:**
  - Measures pain experience (thoughts & feelings)
  - Subscales: rumination, magnification, & helplessness
  - Higher scores = more severe pain experience

- **Fear Avoidance Scale:**
  - Measures fear of pain & avoidance of physical activity
  - Higher score = greater fear & avoidant behavior

- **Pain Self Efficacy Scale:**
  - Assesses confidence in performing various daily activities while in pain
  - Higher scores = greater perceived confidence