Non-pharmacologic Pain Relief via Group Medical Visits

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Session Objectives

In this session, we will…

• Describe the group medical visit (GMV) model
• Explain advantages of GMVs in supporting healthy behavior change
• Discuss the Centering GMV program at UC Health
• Present improvements in patient outcomes from GMV participation
Centering Group Visits
Centering Group Visits at UC Health

Our Vision: “Centering group visits create a synergy of patient and care team expertise that improves health in individuals and communities”

Visit Types:
- Centering Pregnancy
- Centering Parenting
- Centering Chronic Pain
- Centering Healthy Lifestyles
- Centering Diabetes
- Centering Care and Recovery
Why choose Centering?

- **Better patient outcomes**
  - Local and national evidence, including racial equity
  - Time for self-care skill development
  - Peer learning and support

- **Valued by patients**
  - “Feel more like a partner in my care”
  - CenteringPregnancy prioritized by our local community

- **Aligns with system goals**
  - Value-based care, patient experience, D&I, integrative health

![Graph showing preterm birth rates by race with and without CenteringPregnancy](graph.png)
Heart Disease

- 600,000 die year
- #1 cause of death in U.S.
- Reversible with diet

Cancer

- 1 in 3 cancer cases are preventable with Lifestyle changes

Obesity

- 7 in 10 overweight
- 33% obese in Cincinnati
- Lifestyle changes
Impact of Different Factors on Premature Death

- Individual Behavior: 40%
- Genetics: 30%
- Social & Environmental Factors: 20%
- Healthcare: 10%

Integrative Approach: Model

- Healing space
- Longitudinal relationships
- Longer contact time
- Peer learning
- Mind-body practice and goal setting in every visit
- Integrative practitioners as guest experts

“I decided to try what worked for other people so I tried the yoga we learned and sleeping with the body pillows. I have gone from taking one pain pill every day to only taking two pills since last [month’s] visit.”
### Chronic Conditions Basic Curriculum

#### Pillars of Health

| Anti-Inflammatory Diet | Movement | Rest & Sleep | Mind-Body Practices |
|------------------------|----------|--------------|---------------------|---------------------|


Integrative Approach – Anti-inflammatory Diet

Show and Tell
Guess the Carb
Food Models: Create your Plate

(https://oldwayspt.org/, 2011)
Chronic Conditions Advanced Curriculum

Nov-Feb
- Stress Management
- Intro to Yoga
- Teaching Kitchen in Group
- Group Choice - Sleep & Rest

Mar-Jun
- Purpose/meaning
- Social Support
- Outdoor Activity - Park
- Group Choice
- La Soupe TK option

Jul-Oct
- Healthy Homes
- Community Connections
- Sharing our Talents
- Group Choice
- La Soupe TK option

Group Choice - Sleep & Rest
- La Soupe TK option
Teaching Kitchen Collaboration

• Community partnership with La Soupe
• Brainchild of Diva Jonatan, Endocrine NP and new Centering facilitator
• Started virtual, moving to in-person
Mini-Mock Group Visit

It’s time to experience some group activities!
Table Circle Instructions

• 3 Centering Breaths
• Opener – Going around your table circle, share your name and something you are grateful for this week
• Drawing activity - Draw a picture of what health looks like to you and then discuss your drawing with person next to you
• Goal Setting – Think of something you learned during the conference that you want to try, complete the goal sheet and discuss with person on your other side
• Closing Quote
Group Medical Visit Outcomes
Listed below are some evidence-based, non-opioid treatment options to consider for treating pain.

- **Behavioral/Cognitive Interventions/Psychological**
  - *Meditation techniques* utilized with mindfulness-based stress reduction (MBSR) have been shown to be effective for pain reduction and strong continued patient compliance.\(^3\)
  - *Progressive muscle relaxation* can assist in regulating neurosystems found in muscle tension and situational stress commonly seen with pain.

- **Environmental-based Interventions**
  - *Lighting alterations* can create an environment that supports muscle relaxation.
  - *Music therapy* has been associated with statistically significant reduction in opioid and non-opioid analgesic use.\(^4\)

- **Physical Interventions**
  - *Acupuncture* was recommended as a first-line treatment in lower back pain by the American College of Physicians.\(^5\)
  - *Massage therapy* has shown to be effective in adult and pediatric populations with minimal risk of side effects.
  - *Spinal manipulation* has shown improvement in pain for patients experiencing chronic lower back pain, shoulder pain and migraines.\(^6,7\)

- **Non-opioid pharmacologic interventions**
INTEGRATIVE MEDICINE SECTION

“Living Well with Chronic Pain”: Integrative Pain Management via Shared Medical Appointments

Josie Znidarsic, DO, Kellie N. Kirksey, PhD, Stephen M. Dombrowski, PhD, Anne Tang, MS, Rocio Lopez, MS, Heather Blonsky, MAS, Irina Todorov, MD, Dana Schneeberger, PhD, Jonathan Doyle, MCS, Linda Libertini, Starkey Jamie, LAC, Tracy Segall, LMT, Andrew Bang, DC, Kathy Barringer, LISW, Bar Judi, CYTERYT 500, Jane Pernotto Ehrman, MEd, RCHES, Michael F. Roizen, MD and Mladen Golubić, MD, PhD

- Each weekly SMA includes:
  - Vitals/physical
  - Check-in
  - Lecture
  - Self-massage skills
  - Gentle chair yoga
  - Acupuncture
  - Hypnotherapy/Meditation

- Weekly focused topics:
  - Week 1: Acupressure for pain reduction
  - Week 2: Massage
  - Week 3: Reducing Pain (Inflammation) through Nutrition and Supplements
  - Week 4: Chiropractic Care for Pain Control
  - Week 5: Mechanism of Action of Pain
  - Week 6: Art Therapy/Guided Imagery for Emotional Wellness
  - Week 7: Goal setting and Healthy Community
  - Week 8: Chinese Herbal Medicine for Pain Control

- Follow-up (group or individual) appointments are offered monthly for current and former participants to promote healthy community.
Table 3. Comparison of changes in PROMIS-57 scores before and after SMAs among all patients, those without use of opioid medications, and those with use of opioid medications

<table>
<thead>
<tr>
<th>PROMIS-57 Domain</th>
<th>Unadjusted</th>
<th></th>
<th>Adjusted</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No Opioids</td>
<td>Opioids</td>
<td>P Value</td>
</tr>
<tr>
<td>Subscore (Post – Pre), All</td>
<td>N = 178</td>
<td>N = 99</td>
<td>N = 79</td>
<td></td>
</tr>
<tr>
<td>Mean (95% CI)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Function</td>
<td>1.3 (0.79 to 1.9)</td>
<td>1.5 (0.74 to 2.2)</td>
<td>1.2 (0.35 to 2.0)</td>
<td>0.6</td>
</tr>
<tr>
<td>Anxiety</td>
<td>-2.5 (-3.5 to -1.4)</td>
<td>-2.8 (-4.2 to -1.4)</td>
<td>-2.0 (-3.6 to -0.40)</td>
<td>0.45</td>
</tr>
<tr>
<td>Depression</td>
<td>-2.1 (-3.01 to -1.3)</td>
<td>-2.1 (-3.3 to -0.91)</td>
<td>-2.2 (-3.5 to -0.88)</td>
<td>0.9</td>
</tr>
<tr>
<td>Fatigue</td>
<td>-3.1 (-4.2 to -2.01)</td>
<td>-4.0 (-5.5 to -2.6)</td>
<td>-2.0 (-3.6 to -0.32)</td>
<td>0.065</td>
</tr>
<tr>
<td>Sleep Disturbance</td>
<td>-2.2 (-3.4 to -0.94)</td>
<td>-2.6 (-4.3 to -0.95)</td>
<td>-1.6 (-3.5 to -0.24)</td>
<td>0.43</td>
</tr>
<tr>
<td>Ability to Participate in Social Roles</td>
<td>2.9 (2.05 to 3.8)</td>
<td>3.6 (2.4 to 4.7)</td>
<td>2.1 (0.84 to 3.4)</td>
<td>0.11</td>
</tr>
<tr>
<td>and Activities†</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain Interference†</td>
<td>-3.5 (-4.4 to -2.5)</td>
<td>-3.8 (-5.1 to -2.6)</td>
<td>-3.0 (-4.4 to -1.5)</td>
<td>0.36</td>
</tr>
<tr>
<td>Pain Intensity†</td>
<td>-1.0 (-1.3 to -0.73)</td>
<td>-0.94 (-1.3 to -0.57)</td>
<td>-1.08 (-1.5 to -0.66)</td>
<td>0.62</td>
</tr>
</tbody>
</table>

*All raw domain scores except Pain Intensity are standardized to a mean of 50 and an SD of 10.
†Data not available for all subjects.
‡Paired t test P < 0.001.
§Unadjusted-analysis P values correspond to ANOVA.
¶Adjusted-analysis P values correspond to ANCOVA and adjust for pre-SMA PROMIS-57 domain subscore.
Patients suffering from chronic pain who participated in a multidisciplinary, nonpharmacological treatment approach delivered via group medical visits experienced **reduced pain and improved measures of physical, mental, and social health** without increased use of opioid pain medications.
Centering Chronic Pain

Hoxworth Patient Outcomes (2013-15)

• Decreased pain interference with enjoyment of life and self-care
• Increased patient activation
• Decreased depression and anxiety
• Feel more like “partners in care”
• Incorporated 5 of 6 IH modalities
Hoxworth Patient Outcomes (2018-20)

**Improvements in Cardiovascular (CV) Risk Factors**

**BASIC VISIT GROUP**
- 74% in ≥ 2 risk factors and 20% in ≥ 4
- Significant changes in:
  - weight (mean -4.6 lbs, p<0.002)
  - waist (mean -0.6 in, p<0.001)
  - neck circumference (mean -0.1 in, p<0.01)

**BASIC + ADVANCED VISIT GROUP**
- 92% improved in ≥2 risk factors and 46% in ≥4
- Significant changes in:
  - weight (mean -9.9 lbs, p<0.02)
  - waist circumference (mean -1.9, p<0.004)
  - SBP (mean -11.6, p<0.04)
Lessons Learned

- GMV are an excellent model for incorporating integrative practices.
- Patients benefit from:
  - experiential learning
  - peer learning and support
  - increased contact time with providers
- Facilitation skill and model fidelity drive Centering outcomes.
- Value-based care initiatives tying outcomes to reimbursement help sustainability.
- Patients are amazing program partners!
Thank you!