Lessons Learned about Embedding Complex Pragmatic Trials in Delivery Systems: Collaborative Care for Chronic Pain

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Supported by NIH Common Fund and by NINDS through cooperative agreement (with NIDA scientific advisory support) (UH3NW0088731)
The “ask” from clinical and health plan leadership…

How do we keep our primary care providers from burning out and leaving the health care system?

What do we do with the patients with complex pain who “belong to everyone and no one?”
Policies/guidelines
- NCQA, State Medical Boards, DEA opioid prescription mandates
- Changes in expectations
- Shifting marijuana laws & policies

Brief visits
- Complicated patients
- Gaps in coordination with specialty care
- Measurement and alert fatigue
- Limited pain treatment options
Are We Using an Acute Care Model for A Chronic Condition?

- **Spine fusion surgeries**: +660%
- **Lumbar spine MRI imaging**: +307%
- **Epidural + Facet injections**: +249%
- **Back pain-related medical expenditures**: +65%
- **Self-reported functioning**: -19%
- **Multidisciplinary pain treatment centers**: -72%
Pain Management in Usual Care

- Addiction Medicine
- Behavioral Health
- Social Work
- Primary Care
- Pain Clinic
- Hospital
- Membership Services
- Rheumatology
- Neurology / Neurosurgery
- Emergency Department
- Chiropractic Services
- Acupuncture
- Sleep Clinic
- Case Management
- PT / OT
- Occupational Medicine
- Pharmacy
- Physiatry

Interdisciplinary Pain Management Embedded in Primary Care

- Behavioral Health Coach: Goal setting & Lifestyle Changes
- Nurse: Care Coordination
- Physical Therapist: Improved Movement
- Pharmacist: Medication Review

Primary Care
PPACT Overview

**AIM:** Integrate interdisciplinary services into primary care to help patients adopt self-management skills to:

- Manage chronic pain (decrease pain severity / improve functioning)
- Limit use of opioid medication
- Identify exacerbating factors amenable to treatment

*Focus on feasibility and sustainability*

**DESIGN:** Cluster (PCP)-randomized PCT (106 clusters, 273 PCPs, 851 patients)

**ELIGIBILITY:** Chronic pain, long-term opioid tx (prioritizing ≥ 120 MED, benzodiazepine co-use, high utilizers [≥ 12 visits in 3 months])

**INTERVENTION:** Behavioral specialist, nurse case manager, PT, and pharmacist team; 12 week core CBT + adapted movement groups

**OUTCOMES:** Pain (3-item PEG), opioid MED, pain-related health services, and cost
Use of PRECIS ratings in the National Institutes of Health (NIH) Health Care Systems Research Collaboratory

Karin E. Johnson, Gila Neta, Laura M. Dember, Gloria D. Coronado, Jerry Sulz, David A. Chambers, Sean Rundell, David H. Smith, Bermei Liu, Stephen Taplin, Catherine M. Stoney, Margaret M. Farrell, and Russell E. Glasgow

Figure 3. PPACT PRECIS-2 Scoring

Fig. 1 PRECIS wheels as assessed by raters for each of the five trials at two time points. Ratings on a 1–5 scale include pragmatic ratings. The dashed line indicates the planning phase. The solid line indicates the implementation phase.

Johnson et al. Trials (2016) 17:32
## Barriers Scorecard

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Level of Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment and engagement of patients/subjects</td>
<td>X</td>
</tr>
<tr>
<td>Engagement of clinicians and Health Systems</td>
<td>X</td>
</tr>
<tr>
<td>Data collection and merging datasets</td>
<td></td>
</tr>
<tr>
<td>Regulatory issues (IRBs and consent)</td>
<td>X</td>
</tr>
<tr>
<td>Stability of control intervention</td>
<td></td>
</tr>
<tr>
<td>Implementing/Delivering Intervention Across Healthcare Organizations</td>
<td></td>
</tr>
</tbody>
</table>

1 = little difficulty  
5 = extreme difficulty
“Opioids are what I would consider an adjunctive treatment. Everything we know about pain is that this is a complex biopsychosocial phenomenon, and that we need to address the psychosocial contributors to pain.”

- Roger Chou (interviewed for Medscape, 5/1/2017)
#1 Barrier…. Tackling the Mind-Body Divide

PSYCHOSOCIAL

BIO  MEDICAL
The plan, the reality, & generalizable lesson learned

<table>
<thead>
<tr>
<th>KPNW Clusters</th>
<th>2014 - Year 2</th>
<th>2015 - Year 3</th>
<th>2016 - Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>1a/b, 4a/b</td>
<td>7a/b, 10a/b</td>
<td>13a/b</td>
</tr>
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<td></td>
<td>2a/b, 5a/b</td>
<td>8a/b, 11a/b</td>
<td>14a/b</td>
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<tr>
<td></td>
<td>3a/b, 6a/b</td>
<td>9a/b, 12a/b</td>
<td>15a/b</td>
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<tr>
<td></td>
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</tr>
</tbody>
</table>

**PPACT UH3 Intervention Timeline**

- **2014 - Year 2**
- **2015 - Year 3**
- **2016 - Year 4**

**KPNW Clusters**

- **Training**
- **Intervention Periods** (Intake visits, Group sessions, Post-program visits)
If we knew then what we know now…the one predictable constant is change

• A sense of clinical urgency can lead to quick and sometimes unstable program shifts to which you may need to adapt

• Difference between “good” and “bad” contextual features can be a matter of timing (e.g., PCMH, behavioral health integration)

• Stakeholder engagement is a continuous and intensive activity, requires two-way communication, and needs to be both top down and bottom up
Advice?… know what you are stepping into

- Local champions / surveillance invaluable
- Challenging the status quo requires persistent and **vertical** health care system partnership
- Rethink your process evaluation toolkit
Unique Benefits of the Collaboratory

• Very supportive group of investigators, CoC, and NIH personnel candid about challenges

• Great sounding board for helping one to construct most rigorous and interpretable trial possible

• Unique learnings from building partnerships with those in very different science domains