Integrated Treatment of Behavioral Health Problems in Pediatric Primary Care: Services, Science, and Suggestions

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Integrated Behavioral Health Care

• Definition
  • Partnership between PCP & BHP to prevent, identify early, and manage BH problems in primary care setting.

• Approaches
  • Coordination, consultation, training, co-location, collaboration

• “Collaborative care”
  • Access to consultation
  • Direct clinical service
  • Care coordination/communication
  • PCP education
  • Continuity (Kolko & Perrin, 2014)
Chronic Care Model Principles: Adapted for Pediatric Behavior Problems

1. Leadership team
   - practice-based network
   - shared governance/meetings

2. Decision support
   - expanded EBPs for DBDs & comorbidities
   - consulting psychiatrist for CM and PCP
   - formal training

3. Delivery system
   - CM delivers and coordinates w/PCP
   - continuum of care
4. **Clinical info. system**
   automated intake report w/brief assessment
   DX by CM with report to PCP
data collection using tablet PC
5. **Self-management**
   psychoeducational materials/handouts/website
calls to home/sessions
routine monitoring of treatment course
6. **Community resources**
   outside referral procedures
   local MH resource directory

Kolko et al., 2011, 2014
Doctor-Office Collaborative Care (DOCC)

Primary Care Provider (PCP)
1. Case Identification/Referral
2. DX feedback & medical evaluation
3. Treatment participation and support
4. Consultation with CM

Clinical Care Manager (CM)
1. Initial assessment and triage
2. Psychoeducation
3. Liaison among all participants/programs
4. Delivery and coordination of services
5. Follow-up, outreach, and case management
6. Monitoring of treatment or medication adherence, side-effects, and outcomes
7. Support for self-management strategies
8. School liaison and support

Back-up Child Psychiatrist
1. Team Leadership
2. CM Supervision (DX, triage, case monitoring)
3. Consultation on psychopharmacology
4. Practice operations or physician relationships

Study Team
1. Triage meeting decisions
2. Case monitoring feedback
3. Treatment support
4. Resource recommendations

Family
1. Treatment participation
2. Feedback and ratings
3. Contact with PCP
4. Follow-up with provider
Treatment Content

PHASE I: Engagement
- Screening; assessment & DX report, orientation, Psychoeducation
- Child orientation, session rules/management

PHASE II: Self Management -- Positive Thinking
- Parent CBT (stress, emotion regulation; cognitive restructuring)
- Child CBT (same)

PHASE III: Behavior Change (Parent & Child)
- Parenting (positive parenting, behavior management, programs)
- Child social skills and social support plans

PHASE IV: Maintenance (Parent & Child)
- Family problem-solving & communication
ADHD Medication Care Management Manual

- **Assessment & Triage**
  - Psychoeducation (AAP, AACAP)

- **Collaboration**
  - Shared Decision Making
    - Medication review, titration, monitoring, follow-up visits
    - Vanderbilt and IGAR goals (outcomes, adherence, safety)
  - Treatment Support
    - ADHD skills training
    - ADHD liaison (school-care team-specialty)
Care Manager Follow-up Call
Empirical Support

- Few pediatric outcome studies (RCTs)
  - modest results; little direction

- Need for evidence
  - Will they come?  Feasibility
  - Will they benefit? Effectiveness
  - Will they like it? Satisfaction/acceptability
  - Will it continue? Sustainability
Referral/Recruitment Process

Sources
    PCP, Parent, Waiting room
Screening
    Age (5-12); Behavior problems → PSC-17 EXT scale (≥6)
Intake/Diagnostic Assessment
Triage Team Meeting
Case assignment & Follow-up call
Written Report (Targets/Rec’s)
# RCT Conditions & Disorders

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Experimental:</strong></td>
<td>Protocol for On-site Nurse administered Intervention PONI)</td>
<td>Doctor-Office Collaborative Care (DOCC)</td>
<td>Doctor-Office Collaborative Care (DOCC)</td>
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<tr>
<td>On-site Services by Study Staff</td>
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<tr>
<td><strong>Comparison:</strong></td>
<td>Enhanced Usual Care (EUC)</td>
<td>Enhanced Usual Care (EUC)</td>
<td>Enhanced Usual Care (EUC)</td>
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<tr>
<td>Psychoeducation &amp; Facilitated Referral</td>
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<tr>
<td><strong>Disorders</strong></td>
<td>Behavior</td>
<td>Behavior ADHD Anxiety</td>
<td>Behavior ADHD Anxiety</td>
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# Intervention Elements per Condition

<table>
<thead>
<tr>
<th>Intervention Element</th>
<th>SKIP-1</th>
<th>SKIP-2</th>
<th>SKIP-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening/evaluation &amp; review of recommendations</td>
<td>BOTH</td>
<td>BOTH</td>
<td>BOTH</td>
</tr>
<tr>
<td>Psychoeducation/materials (website)</td>
<td>BOTH</td>
<td>BOTH</td>
<td>BOTH</td>
</tr>
<tr>
<td>Facilitated referral to local provider &amp; follow-up call</td>
<td>BOTH</td>
<td>BOTH</td>
<td>BOTH</td>
</tr>
<tr>
<td>Assessment summary to PCP &amp; note in record</td>
<td>BOTH</td>
<td>BOTH</td>
<td>BOTH</td>
</tr>
<tr>
<td>Delivery of on-site services w/back-up MD support</td>
<td>PONI</td>
<td>DOCC</td>
<td>DOCC</td>
</tr>
<tr>
<td>Treatment of comorbid ADHD and Anxiety</td>
<td>--</td>
<td>DOCC</td>
<td>DOCC</td>
</tr>
<tr>
<td>Coordination of care and collaboration w/PCP</td>
<td>--</td>
<td>DOCC</td>
<td>DOCC</td>
</tr>
<tr>
<td>PCP training in ADHD care management</td>
<td>--</td>
<td>DOCC</td>
<td>DOCC</td>
</tr>
<tr>
<td>Use of technology for evaluation &amp; case monitoring</td>
<td>--</td>
<td>DOCC</td>
<td>DOCC</td>
</tr>
<tr>
<td>Phone calls for sessions or case management</td>
<td>--</td>
<td>DOCC</td>
<td>DOCC</td>
</tr>
</tbody>
</table>
# Outcomes

<table>
<thead>
<tr>
<th>Service Use</th>
<th>SKIP-1 PONI</th>
<th>SKIP-2 DOCC</th>
<th>SKIP-3 DOCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Treatment (scale, interview)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>TX Completion (form, interview)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>ADHD Medication Use (form, EMR)</td>
<td>=</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

## Outcomes: Primary Problems

| Individualized Behavior Problems                | +           | +           | +           |
| Behavior Problems (Vanderbilt)                  | +/=         | +           | +           |
| ADHD symptoms (Vanderbilt)                      | =           | +           | +           |
Outcomes: Secondary Problems

<table>
<thead>
<tr>
<th></th>
<th>SKIP-1 PONI</th>
<th>SKIP-2 DOCC</th>
<th>SKIP-3 DOCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety/Depression symptoms</td>
<td>=</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Parenting Stress/difficult child</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Treatment Response</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Satisfaction/efficacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family satisfaction (CSQ-8)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Pediatrician efficacy/practice change</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Safety/Tolerance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADHD medication side effects</td>
<td>?</td>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td>Safety risks or adverse events</td>
<td>=</td>
<td>=</td>
<td>=</td>
</tr>
</tbody>
</table>
Individualized Goal Attainment Ratings (IGAR)

- It’s important to know the specific problems or situations that you think contributed to your child’s need for services. Think of UP TO four problems that you would like to change. Please tell me the main or most important problem we should target, and then we’ll discuss what your goals are for treatment and how we’ll measure progress towards that goal.

<table>
<thead>
<tr>
<th>Problem Area #1:</th>
<th>aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Problem #1:</td>
<td>daily fighting with sister</td>
</tr>
<tr>
<td>Goal #1:</td>
<td>no fights with sister</td>
</tr>
</tbody>
</table>

1. **No change in goal – no improvement**: daily fighting and more than once
2. Less than expected improvement: fighting 5x/week
3. **Expected level of improvement** (acceptable, good enough, or adequate progress?): fighting 3x/week
4. More than expected level of improvement: fighting 1x/week
5. **Exceeded level of improvement** (terrific, exceptional, or unbelievable progress?): no fighting/week
Individualized Goal Attainment Ratings (IGAR)

(Kolko et al., 2011)
Clinical Global Improvement (CGI) Ratings
(Kolko et al., 2011)

Level of Improvement on the CGI
## Services Implemented in DOCC

<table>
<thead>
<tr>
<th>Service</th>
<th>$n$</th>
<th>%</th>
<th>Hrs-M</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intake/Diagnostic Evaluation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Screening, diagnostic assessment, and review</td>
<td>55</td>
<td>100.0%</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Direct Treatment/Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Psychoeducation/engagement</td>
<td>38</td>
<td>69.1%</td>
<td>0.5</td>
</tr>
<tr>
<td>• Parent skills training</td>
<td>54</td>
<td>98.2%</td>
<td>7.8</td>
</tr>
<tr>
<td>• Child skills training</td>
<td>44</td>
<td>80.0%</td>
<td>2.9</td>
</tr>
<tr>
<td>• Parent-child skills training/family work</td>
<td>23</td>
<td>41.8%</td>
<td>1.0</td>
</tr>
<tr>
<td>• ADHD med discussion with CM and family</td>
<td>13</td>
<td>50.0%</td>
<td>0.5</td>
</tr>
<tr>
<td>• School-based consultation/programming</td>
<td>17</td>
<td>30.9%</td>
<td>0.4</td>
</tr>
<tr>
<td>• Referral or aftercare RECS at discharge</td>
<td>91</td>
<td>6.4%</td>
<td>0.3</td>
</tr>
<tr>
<td>• ADHD medication prescription by PCP w/CM</td>
<td>20</td>
<td>76.9%</td>
<td>0.7</td>
</tr>
<tr>
<td>• Consultation by PCP and CM w/family</td>
<td>91</td>
<td>6.4%</td>
<td>0.3</td>
</tr>
</tbody>
</table>

CM (M = 12.9 hrs/case)  PCP (M = 1 hr/case)
### (Cont’d)

<table>
<thead>
<tr>
<th>Service</th>
<th>n</th>
<th>%</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indirect Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaborative care meeting w/PCP &amp; CM</td>
<td>25</td>
<td>45.5%</td>
<td>0.3</td>
</tr>
<tr>
<td>Case management</td>
<td>20</td>
<td>35.4%</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Quality Control Procedures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical supervision</td>
<td>55</td>
<td>100.0%</td>
<td>0.5</td>
</tr>
<tr>
<td>Paperwork</td>
<td>55</td>
<td>100.0%</td>
<td>1.1</td>
</tr>
</tbody>
</table>
Benefits

- Access
- Acceptability
- Clinical gains
- Holistic/comprehensive (chronic MH problems)
- Continuity
- Division of labor (specialties)
- Cost-effective (“stepped care”)
- Long-term public health impact
  - ? reduce downstream costs
Challenges

- Finding a provider who fits the collaborative practice
- Funding a provider
- Added burden to routine care
- Compatibility of MH and MED models
- Maintaining quality
Directions

- Expanded scope
- Financial resources/incentives
- Personalization & optimization
- Training to prepare “care team”
- Assessment & QI monitoring tools
- Costs & reimbursement
- Implementation models (transport)
Thanks for your participation...

- Contact info:
  - kolkodj@upmc.edu
  - www.pitt.edu/~kolko/
  - www.Skipproject.org

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