Life Goals Collaborative Care

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COMPASS Program

- Prevent Mortality
- Implement innovation
- Achieve Parity

Groundbreaking Implementation Strategies

- Measurement-based care
- Emerging therapies

- Active practice-research partnerships
- Mentoring and leadership
- Consumer outreach
Background to Life Goals
Collaborative Care and Overview of the Evidence
Mental Disorders & Poor Outcomes

- 15-25 years potential life lost
- Top 10 - WHO global burden of disease
- Homelessness, incarceration
- Co-occurring conditions common
  - Medical: 33% >=3 medical conditions
  - Cardiovascular disease (CVD) leading cause of death
Manic-Depressive Disorder: Co-Occurring Conditions

- **Psychiatric**
  - Substance disorder: 35-40%
  - Anxiety disorder: 35-45%
  - Any current: 55-60% (2+: 20-30%)

- **Medical**
  - Metabolic syndrome: 20-47%
  - Hypertension: 33%
  - Hepatitis C: 16%
  - Any current: 80%
Mental Disorders and Cardiovascular Disease

- **Most common cause of mortality**
- The risk factors are multi-factorial:
  - **Behavioral** (diet, exercise)
  - **Systemic** (access to care, coordination, continuity of care)
  - **Treatment** (atypical antipsychotics)
- **Obesity** and **insulin insensitivity** drive CVD risk
  - Hypertension, hyperlipidemia, diabetes
  - “Metabolic syndrome”
Focus on Bipolar Disorder: Unique Risk Factors

<table>
<thead>
<tr>
<th>Episode</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manic/pre-manic</td>
<td>Binge eating</td>
</tr>
<tr>
<td></td>
<td>Unstable social behavior, risky behaviors</td>
</tr>
<tr>
<td></td>
<td>Substance use</td>
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<tr>
<td></td>
<td>Injury</td>
</tr>
<tr>
<td>Depressive</td>
<td>Sedentary lifestyle, overeating</td>
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<tr>
<td></td>
<td>Suicidal ideation</td>
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<td></td>
<td>Anxiety</td>
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<tr>
<td>Psychoses</td>
<td>Hallucinations, violence/injury</td>
</tr>
<tr>
<td></td>
<td>Tobacco use</td>
</tr>
<tr>
<td>Euthymic</td>
<td>Non-adherence</td>
</tr>
</tbody>
</table>
Mental Disorders Outcome: Over-Simplified
Some Ugly Statistics on Adherence

- **Antipsychotics:**
  - 20-89% (Dolder 2002)
  - SGA = FGA (Cabeza 2000)
  - 73% d/c within 2 years, half in 4 months (Lieberman 2006)

- **Mood Stabilizers:**
  - 46% partial, 21% fully non-adherent
  - Lithium ~ Anticonvulsants (Sajatovic 2007)
Some More Ugly Statistics on Adherence

- **Antidepressants:**
  - 7-44% drop-out (Riolo & Weston, 2008)
  - SRIs ~ TCAs (Cochrane Collaboration, #)

- **Anti-Anxiety Agents:**
  - 25-37% d/c (Keane 2005; Goethe 2007)
  - 31% adequate treatment (Fernandez 2006)

- **Medical:**
  - 62% adherence to short-term Rx
  - 54-57% adherence to long-term Rx (Sackett, 1979)
Mental Disorders: The Real World

* "...the ability of a person to:
  • cope with his or her illness and
  • participate actively in treatment."

Why a *Psychosocial* Component for Mental Disorders?

*To supplement (not replace) medical-model treatment:*

- Compliance is low—about 50% adequate
- Address independent determinants of disease outcome (stressors, comorbidities)
- Poor social role function and quality of life
  - Only 1/3 return to pre-morbid function & 1/3 rated poor
  - Depression $\leftrightarrow$ Functional status
  - No change with the Modern (Psychopharm) Era
Care Models: The Conceptual Thicket

- Chronic Care Model
- Collaborative Care
- Colocated Care
- Disease Management
- Case Management
- Implicit Multi-Component Models
- Wellness & Recovery Movement

Provider-Patient Dyad
Defining Collaborative/Chronic Care Models

- **Goal**: Evidence-based, anticipatory, continuous, collaborative care
- **CCM Elements**:
  - Practice redesign
  - Patient self-management support
  - Expert systems (on-site consult, guidelines)
  - Information systems
  - Community linkages
Chronic Care Models: Evidence

• RCTs show benefit in:
  ▫ Multiple chronic medical illnesses
  ▫ Frail elderly
  ▫ Depression treated in primary care

• But for serious, chronic *mental* illness?
Roots of Chronic Care Models for Serious Mental Illness

• **Lithium Clinics**
  ▫ Finerty 1973, Runyan 1973
  ▫ Fieve 1975
  → Expert care plus: continuity, education

• **Primary care**
  ▫ Starfield 1973
  → Coordination & longitudinal care

• **Chronic Care Models (CCMs)**
  ▫ Wagner & Von Korff 1996
  ▫ Life Goals Collaborative Care
Roots of Life Goals Collaborative Care

- Expert consultation with patients, providers & academic experts
- Lorig Chronic Disease Self-Mgt. Groups
- Motivational Interviewing
  - Spirit
  - Techniques (e.g., decisional balance)
- Psychoeducation
- CBT (CBT)
In three randomized controlled trials, Life Goals:

- Reduced overall affective, manic symptoms
- Improved overall social role function
- Improved mental, physical HRQOL
- Improved participant satisfaction
- Was shown to have minimal to zero net cost
LGCC Development

1992-96: Expert/consumer consults & program development

1997-2004: VA Cooperative Study #430 (11-site, 3-yr RCT, PI: Bauer)


2006: 2nd Generation RCT (CIVIC-2→CVD risk; PI: Kilbourne)

2008-present: Implementation / Adaptation / Dissemination Studies:

SMAHRT, Achieving Wellness, ROCC

Emphasis on CVD risk, depressive episodes

2008: Consumer Workbook published- expanded, multi-functional workbook for providers & consumers

2009: LGCC Training Programs and ongoing implementation

2010-present: Expanded LGCC: web-based, cross-diagnosis, telehealth, health home models (e.g., Aetna, GCCMH, WCHO, VA)
Life Goals Collaborative Care

- Provider Support
- Patient Education
- Access/Continuity
- Simplified Practice Guidelines
- Health Specialist
- Life Goals Program
LGCC Proposed Population

Individual Level of Functioning

Low | Individual Population |
--- | --- |

LGCC

Illness Management & Recovery (IMR)

Outpatient Psychotherapy

CBT

Social Skills

ACT

Brief Therapies e.g., IMPACT

Illness Management Psychotherapy/e.g., IPSRT
VA CSP #430: Syndromal Outcome:
% Weeks in Any Episode

Net Episode Reduction: 2 weeks / year

p=0.041
VA CSP #430: Changes in Dysfunction

$p=0.003$

OVERALL SOCIAL DYSFUNCTION

- Usual Care
- BDP
## LGCC: 6-Month Physical Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Beta (95% CI)</th>
<th>F</th>
<th>P-value</th>
<th>d</th>
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</thead>
<tbody>
<tr>
<td>SF-12 PCS</td>
<td>2.5 (0.5, 4.9)</td>
<td>2.01</td>
<td>0.04</td>
<td>0.32</td>
</tr>
<tr>
<td>SF-12 MCS</td>
<td>1.6 (-0.7, 3.8)</td>
<td>1.36</td>
<td>0.17</td>
<td>0.20</td>
</tr>
</tbody>
</table>
PATERNALISTIC MEDICINE

“Thus I say…”

COLLABORATIVE PRACTICE

“Load ‘em on.”

MATERNALISTIC MEDICINE

“Yes I shall!”

Technical Expert

Values Expert

[ COACH/ATHLETE ]
Evidence:
- Experiential
- Vicarious
- Social
- Physiological

Perceived Self-Efficacy

Impact:
- Motivational
- Cognitive
- Affective

Social Cognitive Theory

Values Clarification

Ambivalence:
- Development
- Identification
- Reduction

Life Goals Change Model

Action

Skills Acquisition

Task Mastery

Current Life Status Review
Life Goals in the Mitten
Achieving Wellness through Effective and Sustainable Organizations for Mental Health (AWESOME)

- Pilot RCT of Life Goals Collaborative Care compared to usual care in Towner, Ellsworth Clinics (2008-2010)
- Outcomes: CVD risk factors, mood symptoms, disability
- PI: Amy Kilbourne, PhD (R34 MH 74509); Health Specialist: Julia Clogston, MSW; Program Coordinator: Kristina Nord, MSW
Life Goals Collaborative Care:  
AWESOME: Enhanced to address medical (CVD) risk factors

- Provider Support
- Self-management
- Access/Continuity

Practice Guidelines:  
CVD & metabolic syndrome for mental disorders

Care management (Health Specialist):  
Registry tracking (Symptoms, QOL, functioning)
General Medical Provider Liaison

Life Goals:  
CVD Risk, Symptoms
Healthy Behaviors
Provider Engagement

Kilbourne AM et al. Psych Serv 2008;59:760-8
LGCC Self-Management

Four Life Goals sessions- led by Health Specialist:
- Mood disorder facts; handling stigma
- Personal goals- behavioral change
- Active discussions re: symptom management
  - Personal Symptom Profile
  - Early warning signs; triggers
  - Coping responses
- Collaborative care
  - Provider engagement, communication tips
LGCC Group Sessions

• Four 2-hour sessions
  ▫ Depends on the population and agency limitations (time, space issues, symptom severity)
  ▫ 2-12 participants (5-8 is ideal)

• Group is semi-directive
  ▫ Well “guided”
  ▫ Not a process group

• Manual, evidenced-based approach
  ▫ Use abbreviated workbook adapted from *OBD* for most group exercises
**Spirit: Motivational Interviewing for Health Behavior Change**

- **Brief Motivational Interviewing (MI)**
  - Collaborative and individual driven
  - Avoids confrontation
  - Empowers by helping people recognize problems and identify their own solutions for change
  - Aims to increase self-efficacy, value-driven decisions, enhance group/individual discussions, and develop action plans that are mindful to contextual barriers
Life Goals Collaborative Care: The Individual’s Experience

**Session 1**
- Self management & Collaborative Care
- Understanding Bipolar Disorder
- Identifying Core Values
- Bipolar Disorder & Wellness

**Session 2**
- Mania overview & symptoms
- Triggers to manic episodes
- “What’s Your Experience”?
- Action plan for mania

**Session 3**
- Depression overview and symptoms
- Triggers to depressive episodes
- “What’s Your Experience”? 
- Action plan for depression

**Session 4**
- Your Wellness Plan
- Building and Strengthening Collaboration of Care
- Relapse Prevention

**WEEK ONE**

**WEEK TWO**

**WEEK THREE**

**WEEK FOUR**

**SIX MONTH FOLLOW UP WITH HEALTH SPECIALIST**

Following the session work, the Health Specialist will initiate contact with the individual at agreed upon monthly scheduled times, for 10-15 minute intervals for the following:
- Assist with wellness goals
- Review medications
- Collaborate on care
- Assist with mood monitoring
- Review of lessons learned
Care Management

- Health Specialist (HS) relays concerns/progress to providers
  - Refills
  - Symptoms and side effects (e.g., weight gain, CVD risk)
  - Medical record documentation
- Cue providers if no improvement
- Crisis intervention
- Tracking progress
- Supplement, not replace providers
Decision Support

- Health Specialist provides information on BD and co-occurring conditions to providers where appropriate
- Serves as information resource for special topics (e.g., cardiometabolic management, comorbidities)
- Community resources
EaseOME: Participant Characteristics

- **Demographics** (N=65)
  - Mean age = 45 (SD=13)
  - 61% female
  - 19% minority
  - 54% smoke
  - 27% substance use disorder

- **CVD risk**
  - 53% Hypertension
  - 68% hyperlipidemia
  - 19% diabetes diagnosis
## AWESOME: Baseline CVD Risk Factors

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td><strong>N=65</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systolic BP, mmHg</td>
<td>133.9</td>
<td>19.7</td>
</tr>
<tr>
<td>Diastolic BP, mmHg</td>
<td>85.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Total cholesterol, mg/dL</td>
<td>216</td>
<td>37</td>
</tr>
<tr>
<td>BMI, kg/m²</td>
<td>35.2</td>
<td>7.3</td>
</tr>
<tr>
<td>Waist circumference, inches</td>
<td>45.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Framingham Score (10-Yr CVD risk)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;10 %</td>
<td>48.4%</td>
<td></td>
</tr>
<tr>
<td>10-20%</td>
<td>42.2%</td>
<td></td>
</tr>
<tr>
<td>&gt;20%</td>
<td>9.4%</td>
<td></td>
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</table>
### AWESOME 12-Month Outcomes
Repeated Measures Analysis

<table>
<thead>
<tr>
<th>LGCC vs. Usual Care</th>
<th>Beta</th>
<th>95% CI</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td>-4.1</td>
<td>-7.7 to -.5</td>
<td>2.3</td>
<td>.03</td>
</tr>
<tr>
<td>Waist circumference</td>
<td>-4.9</td>
<td>-7.7 to -2.0</td>
<td>3.5</td>
<td>.005</td>
</tr>
<tr>
<td>Disability (WHO-DAS)</td>
<td>-4.7</td>
<td>-8.1 to -1.4</td>
<td>-2.8</td>
<td>.002</td>
</tr>
<tr>
<td>Well-being</td>
<td>4.3</td>
<td>1.5 to 7.2</td>
<td>3.1</td>
<td>.005</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>-2.7</td>
<td>-4.9 to -.5</td>
<td>-2.5</td>
<td>.02</td>
</tr>
</tbody>
</table>
Summary

- Substantial CVD risk
- LGCC may reduce CVD risk in bipolar disorder
- *Cross-diagnosis* LGCC developed for mood disorders, SMI
- How to implement/sustain?
Life Goals Collaborative Care
Some Implementation Issues

<table>
<thead>
<tr>
<th>Domain</th>
<th>CCM Component</th>
<th>And now to implement in the real world…</th>
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</thead>
<tbody>
<tr>
<td>Consumer</td>
<td>Self-Management Skills</td>
<td>What are population needs?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How to deliver?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Who delivers?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How reimbursed?</td>
</tr>
<tr>
<td>Provider</td>
<td>Decision Support</td>
<td>Whose guidelines?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How provided?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How incentivized?</td>
</tr>
<tr>
<td>System</td>
<td>Delivery System Redesign</td>
<td>What type of Care Manager?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where do they work?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How do they interface?</td>
</tr>
<tr>
<td>System</td>
<td>Clinical Information System</td>
<td>Level of IT support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opportunities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Limitations</td>
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<tr>
<td></td>
<td></td>
<td>Barriers</td>
</tr>
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</table>
Implementing LGCC: Training Providers (Insel, 2009)

Figure 4. Much of the psychotherapy workforce is not trained to provide evidence-based treatments. A, The number of practitioners within mental health–related clinical disciplines in the United States.42 B, The percentage of mental health–related clinical training programs that do not require gold standard training (both didactic and clinical supervision) in any evidence-based psychotherapies. More than 50% of psychology and social work programs do not require gold standard training in any evidence-based psychotherapies. Psychology data include both PhD and PsyD training programs.43 EBT indicates evidence-based therapy.
Recovery Oriented Collaborative Care (ROCC) (R01MH79994)

- Goal: implement and evaluate dissemination of LGCC in community practice
- Close the research-to-practice gap in mental health services
- Effective, practical behavioral interventions exist
- Programs not disseminated in real world
  - Many toolkits not specific enough
  - Trainings are expensive
  - Technical assistance (TA) unspecified
- Technology transfer strategies needed
  - User-friendly with technical support
ROCC Goals

- Apply CDC’s Replicating Effective Programs (REP) framework to implement LGCC
- Implement LGCC using REP test effects of “REP Plus” (customized facilitated implementation) or standard REP process
- Return-on-investment (fidelity, outcomes, acceptance, cost-effectiveness)
- Future dissemination model for psychosocial interventions
REP was developed by Centers for Disease Control in 1996 to rapidly translate HIV prevention programs to community-based settings. Over 14 HIV prevention and treatment interventions have been packaged and disseminated (Neumann et al. 2000)
# ROCC Collaborators

**University of Michigan:**
- Amy M. Kilbourne, PhD (PI)
- Daniel Eisenberg, PhD
- Celeste VanPoppelen, MSW
- Kristina Nord, MSW
- Deborah Welsh, MS
- Peggy Bramlet, MEd
- Zongshan Lai, MS
- Myra Kim, PhD
- Brian Perron, PhD
- Julia Clogston, LMSW
- David Goodrich, EdD
- Karen Austin, MS
- Karen Schumacher, RN

**University of Colorado-Denver:**
- Marshall Thomas, MD
- Jeanette Waxmonsky, PhD
- Christina Laird, PhD, LCSW
- Robert Bremer, PhD
- Virginia Brown, MSW
- Jenny Han, MA

**Univ. of Pittsburgh:**
- Mario Cruz, MD
- Ronald Stall, PhD

**Harvard/VA Brockton:**
- Mark Bauer, MD

**Columbia University:**
- Harold Pincus, MD

**CDC:**
- Mary Neumann, PhD
ROCC Sites

Washtenaw County Health Organization/Continuous Support Treatment Services-Ellsworth  Ann Arbor, MI

Packard Health  Ann Arbor, MI

Genesee County Community Mental Health  Flint, MI

Mental Health Center of Denver  Denver, CO

Community Reach  Thornton, CO
## LGCC Core Elements

<table>
<thead>
<tr>
<th>CCM Domain</th>
<th>Core Elements</th>
<th>Menu Option Examples</th>
</tr>
</thead>
</table>
| **Self Management** | -- 4 Group Sessions  
--Mental disorder facts  
--Setting personal goals  
--Active discussions of symptom coping strategies  
--Provider engagement and communication tips  | Make-up sessions – phone or in-person  
Family involvement                                                                |
| **Care Management** | --Ongoing contacts to reinforce lessons from self-management (1 per month)  
--Provider contacts (cues)  
--Crisis management  
--Ongoing wellness monitoring  
--Community resources  | Crisis intervention protocols  
Provider communication preferences  
Link to existing services                                                        |
| **Decision Support**| Summary information, treatment and health issues (e.g. cardiometabolic risk monitoring)                                                                                            | Mode of delivery                                                                      |
Technical Assistance

• Post implementation technical assistance to problem solve barriers to:
  ▫ Logistics (space, time, access)
  ▫ Recruitment
  ▫ Staff uptake
  ▫ Participant issues
  ▫ Clinic integration

• *Organizational and financial barriers also discussed*
ROCC: Expanded REP (REP+)

Phase I Activities: Customization of Life Goals Collaborative Care

- Feedback panel of persons receiving services (CSTS)
- Organizational needs assessment by CSTS/Packard administration
- Staff interviews (case managers, prescribers, supervisors, administration)
- Customized workbooks for people enrolled
- Consideration for logistical barriers (phone follow-ups, meeting people in the community)
- Creation of a packaged, user friendly guide to implementing LGCC at CSTS and Packard
Expanded REP+ Implementation Model

1. Customization of the evidence-based practice
2. Training
3. Orientation
4. Implementation
5. Identifying stakeholder champions
6. Re-evaluation of the intervention
7. Making a business case – and wrap-up
ROCC Preliminary Data

- 73 participants enrolled at CSTS
- 55 participants enrolled at Packard
- TOTAL across all sites: 367
## ROCC Preliminary Data

<table>
<thead>
<tr>
<th></th>
<th>Packard (N=49)</th>
<th>CSTS (N=62)</th>
<th>Genesee (N=68)</th>
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</thead>
<tbody>
<tr>
<td>Visited ER in the last 6 months</td>
<td>32%</td>
<td>25%</td>
<td>44%</td>
</tr>
<tr>
<td>Hospitalized in last 6 months</td>
<td>16%</td>
<td>34%</td>
<td>30%</td>
</tr>
<tr>
<td>Current smoker</td>
<td>64%</td>
<td>37%</td>
<td>78%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>30%</td>
<td>30%</td>
<td>38%</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>46%</td>
<td>45%</td>
<td>50%</td>
</tr>
<tr>
<td>Arthritis or chronic pain</td>
<td>39%</td>
<td>58%</td>
<td>63%</td>
</tr>
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## ROCC Preliminary Data

<table>
<thead>
<tr>
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<th>CSTS (N=62)</th>
<th>Geneseee (N=68)</th>
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<tbody>
<tr>
<td>PHQ 9 ≥ 10</td>
<td>70%</td>
<td>65%</td>
<td>60%</td>
</tr>
<tr>
<td>ISS Depression</td>
<td>8.6±6.7</td>
<td>7.0±5.1</td>
<td>7.9±6.5</td>
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<tr>
<td>ISS Activation</td>
<td>19.8±13.4</td>
<td>18.4±12.7</td>
<td>23.0±12.7</td>
</tr>
<tr>
<td>PTSD</td>
<td>41%</td>
<td>33%</td>
<td>48%</td>
</tr>
<tr>
<td>SF-12 MCS</td>
<td>31.9±9.3</td>
<td>33.4±7.1</td>
<td>32.8±8.4</td>
</tr>
<tr>
<td>SF-12 PCS</td>
<td>37.2±8.1</td>
<td>36.6±6.9</td>
<td>36.0±7.9</td>
</tr>
<tr>
<td>Substance use in last 6 months</td>
<td>28%</td>
<td>18%</td>
<td>32%</td>
</tr>
<tr>
<td>Hazardous drinking</td>
<td>26%</td>
<td>6%</td>
<td>14%</td>
</tr>
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Future Directions

• Life Goals Collaborative Care: Primary Care (FQHCS in Colorado, Michigan sites)
• Life Goals SMI, Collaboration with Genesee County, VA
• REP+ Toolkit for Evidence-based Integrated Care Practices
Contact Information

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