Effective Design and Implementation Of Integrated Care Programs

Lori Raney, MD
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Denver, CO
Recipe for Success

**Ingredients TEMP**
- Team that consists at a minimum of a PCP, BHP and psychiatric consultant
- Evidence-based behavioral and pharmacologic interventions
- Measuring care continuously to reach defined targets
- Population is tracked in registry, reviewed, used for quality improvement
- Accountability for outcomes on individual and population level

**Process of Care Tasks**
- 2 or more contacts per month by BHP
- Track with registry
- Measure response to treatment and adjust
- Caseload review with psychiatric consultant

**Secret Sauce Whitebird Brand**
- Strong leadership support
- A strong PCP champion and PCP buy-in
- Well-defined and implemented BHP/Care manager role
- An engaged psychiatric provider
- Operating costs are not a barrier
Go Upstream: “Sweet” Spot in Primary Care

- Issues with depression and substance abuse can be pre-empted, rather than progressing to diagnosis
- Goal is to detect early and apply early interventions to prevent from getting more severe
Collaborative Care

• Collaborative Care is a specific type of integrated care that operationalizes the principles of the chronic care model to improve access to evidence based mental health treatments for primary care patients.

• Collaborative Care is:
  – Team-based effective collaboration and Patient-centered
  – Evidence-based and practice-tested care
  – Measurement-based care, treat to target
  – Population-based care – registry, systematic screen
  – Accountable care
A Tipping Point for Measurement-Based Care

John C. Fortney, Ph.D., Jürgen Unützer, M.D., M.P.H., Glenda Wrenn, M.D., M.S.H.P., Jeffrey M. Pyne, M.D., G. Richard Smith, M.D., Michael Schoenbaum, Ph.D., Henry T. Harbin, M.D.

Objective: Measurement-based care involves the systematic administration of symptom rating scales and use of the results to drive clinical decision making at the level of the individual patient. This literature review examined the theoretical and empirical support for measurement-based care.

Methods: Articles were identified through search strategies in PubMed and Google Scholar. Additional citations in the references of retrieved articles were identified, and experts assembled for a focus group conducted by the Kennedy Forum were consulted.

Results: Fifty-one relevant articles were reviewed. There are numerous brief structured symptom rating scales that have strong psychometric properties. Virtually all randomized controlled trials with frequent and timely feedback of patient-reported symptoms to the provider during the medication management and psychotherapy encounters significantly improved outcomes. Ineffective approaches included one-time screening, assessing symptoms infrequently, and feeding back outcomes to providers outside the context of the clinical encounter. In addition to the empirical evidence about efficacy, there is mounting evidence from large-scale pragmatic trials and clinical demonstration projects that measurement-based care is feasible to implement on a large scale and is highly acceptable to patients and providers.

Conclusions: In addition to the primary gains of measurement-based care for individual patients, there are also potential secondary and tertiary gains to be made when individual patient data are aggregated. Specifically, aggregated symptom rating scale data can be used for professional development at the provider level and for quality improvement at the clinic level and to inform payers about the value of mental health services delivered at the health care system level.

Psychiatric Services 2016; 00:1–10; doi: 10.1176/appi.ps.201500439
Care That Is Measured Gets Better

- HAM-D 50% or <8
- Paroxetine and mirtazapine
- Greater response
- Shorter time to response
- More treatment adjustments (44 vs 23)
- Higher doses antidepressants
- Similar drop out, side effects

MBC Concepts

Process:
• Systematic administration of symptom rating scales – use huddle or registry
• NOT a substitute for clinical judgement
• Use of the results to drive clinical decision making at the patient level – overcome clinical inertia
• Patient rated scales are equivalent to clinician rated scales
• Aggregate data for
  – Professional development at the provider level – MACRA
  – Quality improvement at the clinic level
  – Inform reimbursement at the payer level

Ineffective Approaches:
• One-time screening
• Assessing symptoms infrequently
• Feeding back outcomes outside the context of the clinical encounter

Fortney et al Psych Serv Sept 2016
Collaborative Care

Informed, Activated Patient

Effective Collaboration

PCP supported by Behavioral Health Care Manager

PRACTICE SUPPORT

Measurement-based Treat to Target

Psychiatric Consultation

Caseload-focused Registry review

Training
• Uses limited resources to their greatest effect on a population basis
• Different people require different levels of care
• Finding the right level of care often depends on monitoring outcomes
• Increases effectiveness and lowers costs overall

Stepped Care Approach

1° Care

Self-Management

1° Care + BHP

Psychiatric consult (Face-to-face)

BH specialty short term tx

BH specialty long term tx

Psychiatric Inpatient tx

Van Korff et al 2000
Validated Tools

**Mood Disorders**
- PHQ-2, PHQ-9: Depression
- CIDI 3.0: Bipolar disorder
- MDQ: Bipolar disorder

**Anxiety and Trauma Disorders**
- GAD-7: Anxiety, GAD
- PCL-C: PTSD

**Substance Use Disorders**
- AUDIT-C
- DAST

**Cognitive Disorders**
- Mini-Cog
- Montreal Cognitive Assessment
PHQ - 2

<table>
<thead>
<tr>
<th>Over the last 2 weeks, how many days have you been bothered by any of the following problems?</th>
<th>Not at All</th>
<th>Several Days</th>
<th>More than Half the Days</th>
<th>Nearly Every Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

- Ultra brief screening
- Commonly used in primary care
- Scoring:
  - 0-2: Negative
  - 3 or Higher: Positive and patient needs further assessment
### Validated Screening and Measurement Tools

#### PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
<th>Score</th>
<th>Score</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>✓</td>
<td>2</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>✓</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>0</td>
<td>1</td>
<td>✓</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>✓</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
<td>✓</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling sad about yourself—or that you are a failure</td>
<td>0</td>
<td>1</td>
<td>✓</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper</td>
<td>0</td>
<td>1</td>
<td>✓</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed</td>
<td>0</td>
<td>1</td>
<td>✓</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead, or of hurting yourself</td>
<td>✓</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**add columns:** 2 + 10 = 12

**TOTAL:** 15

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all
- Somewhat difficult
- Very difficult
- Extremely difficult

Copyright © 1999 Pfizer Inc. All rights reserved. Reproduced with permission. PRIME-MD is a trademark of Pfizer Inc.
### Generalized Anxiety Disorder 7-item (GAD-7) scale

<table>
<thead>
<tr>
<th>Over the last 2 weeks, how often have you been bothered by the following problems?</th>
<th>Not at all sure</th>
<th>Several days</th>
<th>Over half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feeling nervous, anxious, or on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Not being able to stop or control worrying</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Worrying too much about different things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Trouble relaxing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Being so restless that it's hard to sit still</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Becoming easily annoyed or irritable</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Feeling afraid as if something awful might happen</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Add the score for each column

| + | + | + |

**Total Score (add your column scores) =**

Score $\geq 10$ indicates possible diagnosis
## Caseload Overview

<table>
<thead>
<tr>
<th>View</th>
<th>Treatment Status</th>
<th>Name</th>
<th>Date of Initial Assessment</th>
<th>Date of Most Recent Contact</th>
<th>Number of Follow-up Contacts</th>
<th>Weeks in Treatment</th>
<th>Initial PHQ-9 Score</th>
<th>Last Available PHQ-9 Score</th>
<th>% Change in PHQ-9 Score</th>
<th>Date of Last PHQ-9 Score</th>
<th>Initial GAD-7 Score</th>
<th>Last Available GAD-7 Score</th>
<th>% Change in GAD-7 Score</th>
<th>Date of Last GAD-7 Score</th>
<th>Flag</th>
<th>Most Recent Psychiatric Consultant Note</th>
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</thead>
<tbody>
<tr>
<td>View</td>
<td>Active</td>
<td>Albert Smith</td>
<td>8/13/2015</td>
<td>12/2/2015</td>
<td>7</td>
<td>29</td>
<td>18</td>
<td>17</td>
<td>-6%</td>
<td>12/2/2015</td>
<td>14</td>
<td>10</td>
<td>-29%</td>
<td>12/2/2015</td>
<td>Flag for discussion</td>
<td>2/26/2016</td>
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</tbody>
</table>

**FREE UW AIMS Excel® Registry** (https://aims.uw.edu/resource-library/patient-tracking-spreadsheet-example-data)
Measurement Based Treatment To Target
Behavioral Care Manager Interventions

Evidence-based Brief Interventions

- Motivational Interviewing
- Distress Tolerance Skills
- Behavioral Activation
- Problem Solving Therapy

Frequent, Persistent Follow-up

Bao et al: Psych Serv 2015
Task Sharing - Behavioral Health Provider

- **BHP 1.** Paraprofessional Staff
  - BH Screening
  - Registry Tracking
  - Health Promotion

- **BHP 2.** Paraprofessional Staff with Advance Training
  - Brief Intervention for Situational Stress and Education on Health Changes

- **BHP 3.** Licensed Behavioral Health Provider
  - Diagnostic Clarification
  - Brief Intervention
  - Complex BH Needs

- Specialty Behavioral Health
Registries to Track Progress, Change Treatment

<table>
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<tr>
<th>Patient ID</th>
<th>Caseload</th>
<th>Program</th>
<th>Tools</th>
<th>Logout</th>
<th>Continued Care Plan</th>
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</tbody>
</table>

AIMS Center: [http://aims.uw.edu](http://aims.uw.edu)
Psychiatric Consultant

Availability to Consult Promptly
- Diagnostic dilemmas
- Education about diagnosis or medications
- Complex patients, such as pregnant or medical complicated
  - Pattern recognition**
  - Education**
  - Build confidence and competence**

Caseload Reviews
- Scheduled (ideally weekly)
- Prioritize patients that are not improving – extends psychiatric expertise to more people in need
- Make recommendations – PCP may or may not implement
- NO RX
Psychiatric Consultation

FIGURE 2. Time to first clinically significant improvement in depression among patients in a collaborative care model, by psychiatric consultation between weeks 8 and 12.

*Among patients not achieving improvement by week 8

Bao et al: Psych Serv 2015
Psychiatric Providers Supporting Teams

Care Manager/BHP 4

Care Manager/BHP 3

Care Manager/BHP 2

Care Manager/BHP 1

50-80 patients/caseload
2-4 hrs psych/week/ care coordinator
= a lot of patients getting care
The Inspiration
Effective Implementation: 9 Factors

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Implementation Factor</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operating costs of DIAMOND not seen as a barrier</td>
<td>The clinic has adequate coverage or other financial resources for most patients to be able to afford the extra operational costs.</td>
</tr>
<tr>
<td>2</td>
<td>Engaged psychiatrist</td>
<td>The consulting psychiatrist is responsive to the care manager and to all patients, especially those not improving.</td>
</tr>
<tr>
<td>3</td>
<td>Primary care provider (PCP) “buy-in”</td>
<td>Most clinicians in the clinic support the program and refer patients to it.</td>
</tr>
<tr>
<td>4</td>
<td>Strong care manager</td>
<td>The care manager is seen as the right person for this job and works well in the clinic setting.</td>
</tr>
<tr>
<td>5</td>
<td>Warm handoff</td>
<td>Referrals from clinicians to the care manager are usually conducted face-to-face rather than through indirect means.</td>
</tr>
<tr>
<td>6</td>
<td>Strong top leadership support</td>
<td>Clinic and medical group leaders are committed and support the care model.</td>
</tr>
<tr>
<td>7</td>
<td>Strong PCP champion</td>
<td>There is a PCP in the clinic who actively promotes and supports the project.</td>
</tr>
<tr>
<td>8</td>
<td>Care manager role well defined and implemented</td>
<td>The care manager job description is well defined, with appropriate time, support, and a dedicated space.</td>
</tr>
<tr>
<td>9</td>
<td>Care manager on-site and accessible</td>
<td>The care manager is present and visible in the clinic and is available for referrals and patient care problems.</td>
</tr>
</tbody>
</table>

DIAMOND indicates Depression Improvement Across Minnesota—Offering a New Direction.

Roles of Primary Care Provider

• **IDENTIFY** individuals who need BH support and
• **ENGAGE** them in the treatment model
• Utilize screening tools to track progress (e.g., PHQ-9)
• Sufficient knowledge of psychopharmacology
PCP “Buy-In”

**Before Implementation**

- This is going to slow me down
- I don’t have time to address one more problem
- I have liability concerns
- I already do a good job of treating mental illness

**After Implementation**

- This takes a load off my plate
- This speeds me up
- I always want to practice like this
- I am giving better care to my patients
- This gives me time to finish my note

“If you aren’t uncomfortable with your practice you aren’t practicing integrated care.”

PCP - Colorado
CPT Codes for CoCM

G0502 - $143
G0503 - $126  Billed once a month by the PCP
G0504 - $66
G0507 - 48

• Outreach and engagement by BHP
• Initial assessment of the patient, including administration of validated rating scales
• Entering patient data in a registry and tracking patient follow-up and progress
• Participation in weekly caseload review with the psychiatric consultant
• Provision of brief interventions using evidence-based techniques such as behavioral activation, motivational interviewing, and other focused treatment strategies.
Performance Measures: Accountability

- **Process Metrics:**
  - Percent of patients screened for depression
  - Percent with follow-up with care manager within 2 weeks
  - Percent not improving that received case review and psychiatric recommendations
  - Percent treatment plan changed based on advice
  - Percent not improving referred to specialty BH

- **Outcome Metrics**
  - Percent with 50% reduction PHQ-9 – Clinical Response
  - Percent reaching remission (PHQ-9 < 5) NQF 710 and 711

- **Satisfaction** – patient and provider

- **Functional** – work, school, homelessness

- **Utilization/Cost**
  - ED visits, 30 day readmits, med/surg/ICU, overall cost
TECHNOLOGY ENABLED BEHAVIORAL HEALTH IN PRIMARY CARE

Patient Facing Technology

- Apps and Web Services
- Text Messaging and Apps
- Digital Therapeutics

Build PCP Capacity to Treat Mild to Moderate Behavioral Conditions

- Decision Supports
- e-Consult
- Project ECHO
- Remote Tele-Hub
- Telepsychiatry

Virtual Visit

Self Management
- self-help, fitness, affirmative prompts, relaxation, steps, personal exploration

Practice Extenders
- remote monitoring, reminders, follow up assessments, reduce phone tag
- variety of approaches including online therapies (like CBT) and coaching modules

Embedded In EHR
- treatment pathways, clinical formulation, prescribing and treatment algorithms

Consultation Platform
- primary care to specialist, all cases with consultation input, education

Telementoring and Education
- didactics and case presentations, “hub” and “spokes”, collaborative learning

Collaborative Care
- curbsides, outreach and treatment, registry review, Child Access Projects

Direct Evaluation
- evaluation by specialist, documentation, asynchronous model, teletherapy

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Social Determinants of Health
Primary Care and Specialty Behavioral Health

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Episodic Specialty Care as Needed
Medical Home for SMI
LTSS, Corrections, etc
Behavioral Health Telehubs
Recipe for Success

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