Creating a Foundation for Measurement-Based Care in Integrated Primary Care

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Faculty Disclosure

The presenters of this session have NOT had any relevant financial relationships during the past 12 months.
Conference Resources

Slides and handouts shared in advance by our Conference Presenters are available on the CFHA website at http://www.cfha.net/?page=Resources_2017

Slides and handouts are also available on the mobile app.
Learning Objectives

At the conclusion of this session, the participant will be able to:

• Define measurement-based care (MBC)
• Describe the importance and key benefits of implementing MBC in integrated primary care (IPC)
• Apply step-by-step guidance for developing and implementing screening and MBC processes in IPC


A learning assessment is required for CE credit. A question and answer period will be conducted at the end of this presentation.
Session Evaluation

Use the CFHA mobile app to complete the evaluation for this session.

Thank you!
What is Measurement-Based Care (MBC)?

- MBC is the process of using data to guide treatment decisions and evaluate treatment outcomes.
  - In mental health, ‘data’ are often from reliable, valid, standardized self-report measures
  - Other data sources in MH care may include:
    - Labs
    - Imaging
    - Pharmacogenomics
    - Idiographic measures (e.g., subjective mood/ units of distress ratings)
What is MBC?

In VHA, we define MBC as:

**Collect**
- Veterans complete reliable, validated, clinically-appropriate measures at intake and at regular intervals as part of routine care.

**Share**
- Results from the measures are immediately shared and discussed with the Veteran and other providers involved in the Veteran’s care.

**Act**
- Together, providers and Veterans use outcome measures to develop treatment plans, assess progress over time, and inform shared decisions about changes to the treatment plan over time.
Well-developed MBC system should provide feedback at:

**Patient level:**
- To patients and providers

**Panel level:**
- To support coordinated, quality care by teams

**Population Level:**
- To inform high-level administrative review and decision-making
Why MBC?

From initial screening to completion of care, the **benefits** of MBC are well documented.

**Identification**
- Use of patient reported outcome measures (PROM) improves identification of common MH conditions in PC (e.g., Auxier, Farley, Seifert, 2011)

**Early intervention**
- Routine screening can open conversations about MH conditions between patients and providers that might not otherwise occur (e.g., Greenhalgh, 2009)
- Decreases inappropriate referrals
- Increases engagement in care (e.g., Greenhalgh, 2009)

**On-going care**
- MBC facilitates shared decision-making (e.g., Dowrick et al., 2009)
MBC Implementation Gap

A large portion of MBC literature is based in collaborative care interventions, but few IPC programs have adopted MBC as a standard practice for mental and behavioral health care.

- Care management program implementation tends to lag behind collocated, collaborative care (i.e., embedded licenced providers; Wray et al., 2012)
- Evidence suggests that when IPC providers use PROM, they are typically administered at the first visit. Use of repeated measures is more limited (Beehler et al., 2016)
- Some MH providers may prioritize clinical interview above PROM
- PROM collection may be implemented but either not discussed with patients or not entered into electronic medical record in a way that allows for use at the panel and population level
- Technology to support MBC can be difficult to access (Wagel, 2016)

Currently there is a need for standardized, wide spread implementation
Next Steps

This standardization and wide spread implementation of MBC is a crucial next step for IPC to:

▪ More efficiently monitor progress and outcomes, general functioning, and quality of life for patients; and

▪ Provide key clinical and administrative stakeholders with valuable process and outcome data on panel needs, treatment effectiveness, and referral management.
Patient-Level: How MBC can be used in IPC

**Screening:**
- Identify Risk for an Undiagnosed Condition  (improves initial identification)
- Population-based vs. Selective Screening

**Use Measures to Appraise Change Over Time**  (Routine Outcome Monitoring)
- Longitudinal Assessment (Initial vs. Follow-up)
  - Affirm patient progress over time
  - Reviewing unimproved or worsening scores  provides natural transition for conversation about the process of care
- Patients who reflect on their outcomes with therapists have been shown to improve at greater rates (Lambert et al., 2005)
Adaptive Decision-Making for a Specific Patient

- Detect Signs/ Symptoms as Early as Possible
- Focus on Changes in Symptom Severity and Functional Status to Inform Decision-Making...for Patients and Providers

Is further evaluation warranted?

Might patient benefit from watchful waiting, self-management, or active treatment?

Is the active intervention working, or is an alternative approach warranted?

Is it time to step-up, step-down, or discontinue active care?

For each of the above: Why or why not?
Panel-Level: How MBC can be used in IPC

Identification
- Identification of common concerns and needs of the panel of patients
- Example: Higher level of depressive symptoms in diabetes patients

Intervention
- Identify patients across the panel who are not benefiting from current treatment plan (e.g., weekly review of database)
- Identify and align resources for patients with higher needs

Quality Improvement
- Promotes high-quality, team-based care
- Identify and align resources for clinics
- Local Quality improvement (QI) efforts
Adaptive Decision Making for a Panel of Patients

- Blend Patient and Clinic Data to Inform Decision-Making...for Providers and Administrators
  
  What is the base rate of depression in our clinic?
  
  How efficient are our providers in responding to positive depression screens?
  
  How many of our patients with moderate to severe depression receive medication, or referral?
  
  Is there a gap in the services that we offer?
  
  What can we do better?
  
  Continuous monitoring may guide development or alteration of local operating procedures
Population-Level: How MBC can be used in IPC

**Develop Decision-Support Tools**
- Development of local treatment pathways (care algorithms) and decision-support tools

**Monitor Population Status**
- Aggregation of data allows for monitoring approach to treatment within the population

**Assess Program Level Outcomes**
- Develop systematic QI initiatives
- Guide QI efforts
Adaptive Decision-Making for a Clinical Population

- Focus on the Big Picture to Evaluate Program Processes and Outcomes

- Often requires aggregate data over an expanse of time and locations (e.g., multiple clinics within a facility, multiple facilities within a system of care)

- Decision-support systems can be generated to address needs that vary by site, or clinical population

- Specific decisions will vary based on the types of resources available at a given site
MBC Can Facilitate QI

- MBC is a Natural Fit with the QI Process at the Individual, Group, and System-Level
  
  Change Individual Provider Behaviors
  - “Improve My Practice”

  Change Clinic Practices and Outcomes
  - “Improve Our Clinic”

  Change System-Level Practices and Perceptions
  - Create a “Culture of Quality”
Creating a Foundation for MBC: Practical Guidance

Step 1: Identify Target Conditions with Stakeholder Input
Step 2: Identify Best Measures Validated for Use in Your Setting
Step 3: Create Methods to Improve Administration and Data Extraction
Step 4: Establish and Implement Standard Operating Procedures (SOPs)
Step 5: Engage in Continuous QI Process to Evaluate Program Implementation
Step 1: Identify Target Conditions with Stakeholder Input

Consider input from all relevant stakeholders
- Who might this include? (Identify stakeholders)

Identify specific conditions
- Needs Assessment
- Simple Survey
- Conversations

- Some performance measures or monitors may already be in place
- Building a program of outcomes measurement focused on stakeholders input is critical to buy-in across all levels
- Strong Foundation
Step 1: Identify Target Conditions with Stakeholder Input

Questions for Application:

Who needs to be included from my clinic?
- Who am I forgetting?

How should we gather input from all stakeholders about target conditions?
- Consider multiple options
- Are there performance metrics already in place that we should consider?

Are there any highly-prevalent conditions within our population?

Are there high-priority initiatives for our organization?
Step 2: Identify Best Measures Validated for Your Setting

- Is your need to identify a screener or to measure progress over time on an identified problem?
- Is there a screener or outcome measure appropriate for use in primary care settings (e.g., brief, normed in the population, etc)?
- Review the literature for suggested instruments
- Note: full listing available from a table in the following chapter:

## Selected Validated Measures by Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Potential Measures</th>
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</table>
| Alcohol Misuse         | Alcohol Use Disorder Identification Test (AUDIT; Saunders et al., 1993)  
|                        | Alcohol Use Disorder Identification Test- Consumption questions (AUDIT-C; Bradley et al., 2007)  
|                        | Cut-down, Annoyed, Guilty, Eye-opener (CAGE; Ewing, 1984)                                                                                           |
| Cognitive Impairment   | Blessed Orientation Memory Concentration test (BOMC; Katzman et al., 1983)  
|                        | General Practitioner assessment of Cognition (GPCOG; Brodaty et al., 2002)                                                                          |
|                        | Mini-Cog (Borson et al., 2000)                                                                                                                     |
|                        | Montreal Cognitive Assessment (MoCA; Nasreddine et al., 2005)                                                                                       |
|                        | Short Test of Mental Status (STMS; Kokmen et al., 1987)                                                                                             |
|                        | St. Louis University Mental Status (SLUMS; Banks & Morley, 2003)                                                                                     |
|                        | Adult ADHD Self-Report Scale, 6-item (ASRS-6; Kessler et al., 2005)                                                                               |
|                        | Adult ADHD Self-Report Scale, 18-item (ASRS-18; Kessler et al., 2005)                                                                             |
|                        | Wender Utah Rating Scale (WURS; Ward, Wender, & Reimherr, 1993)                                                                                    |
| Depression             | Patient Health Questionnaire- 9 Item (PHQ-9; Kroenke, Spitzer, & Williams, 2001)                                                                    |
| Intimate Partner Violence | HARK (Humiliation-Afraid-Rape-Kick) scale (Sohal, Eldridge, and Feder, 2007)                                                                 |
|                        | HITS (Hurt-Insult-Threaten-Scream) scale (Sherin, Sinacore, Li, Zitter, & Shakil, 1998)                                                           |
|                        | Partner Violence Screen (PVS; Feldhaus et al., 1997)                                                                                               |
# Selected Validated Measures by Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Potential Measures</th>
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<tbody>
<tr>
<td><strong>Pain</strong></td>
<td>Brief Pain Inventory (BPI; Cleeland, 2009)</td>
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<td></td>
<td>Short Form McGill Pain Questionnaire (SF-MPQ; Melzak, 1987)</td>
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<tr>
<td></td>
<td>Pain Outcome Questionnaire-Short Form (Clark, Gironda, &amp; Young, 2003)</td>
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<tr>
<td><strong>PTSD</strong></td>
<td>Primary Care-PTSD Screen (PC-PTSD; Prins et al., 2004)</td>
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<td></td>
<td>PTSD Checklist for DSM5 (PCL5; Weathers et al., 2013)</td>
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<tr>
<td><strong>Sleep</strong></td>
<td>Epworth Sleepiness Scale (ESS; Johns, 1991)</td>
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<td></td>
<td>Insomnia Severity Index (ISI; Morin, 1993)</td>
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<tr>
<td></td>
<td>Pittsburgh Sleep Quality Index (PSQI; Buysse, Reynolds, Monk, Berman, &amp; Kupfer, 1989)</td>
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<tr>
<td><strong>Substance Use</strong></td>
<td>Drug Abuse Screening Tool (DAST-10; Skinner, 1982)</td>
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<tr>
<td>Disorders</td>
<td>Mini-International Neuropsychiatric Interview (MINI; Sheehan et al., 1998)</td>
</tr>
<tr>
<td><strong>Suicidal Ideation</strong></td>
<td>Columbia-Suicide Severity Rating Scale (C-SSRS; Posner et al., 2011)</td>
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<td>Paykel questionnaire (Paykel et al., 1974)</td>
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<tr>
<td><strong>Tobacco Use</strong></td>
<td>Fagerstro¨m Test for Nicotine Dependence (FTND; Heatherton, Kozlowski, Frecker, &amp; Fagerstrom, 1991)</td>
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<tr>
<td></td>
<td>Hooked on Nicotine Checklist (HONC; DiFranza et al., 2002)</td>
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</tbody>
</table>
Step 2: Identify Best Measures Validated for Your Setting

Questions for Application:

- For the targeted condition(s) you have identified, do you wish to identify a screener, measure to assess progress over time, or both?

- Looking at the sheet of potential instruments in your packet, are there any particular ones you wish to consider for exploration?
Step 3: Create Methods to Improve Administration and Data Extraction

- Goal: Ease administrative burden
- Provide proper training in administration, use of instruments, data entry, and extraction
  - Fidelity is important
- Electronic versions can decrease time and admin burden
- If not well-done, can actually increase burden
- Templates and electronic reminders are helpful
- Collaboration with IT and health records experts is critical
Step 3: Create Methods to Improve Administration and Data Extraction

Questions for Application:

- How does our current medical record support administration and extraction?
- Are there templates available or do we need to create them?
- What additional IT resources or collaborations need to be considered to support input and retrieval?
Step 4: Establish and Implement Standard Operating Procedures (SOPs)

- Need to clearly outline clinical decision points based on clinical practice guidelines for further treatment (e.g., Oslin et al., 2006; Trivedi et al., 2007)
- Elicit stakeholder input in the development of your SOPs (your people involved in the process know the potential hiccups!!)
- Critical to have stakeholder buy-in and input in the SOPs to avoid disruption of normal workflow (Auxier et al., 2011)
Step 4: Building Blocks for SOPs

- Training requirements for those administering the measures
- Timelines for initial screening and repeated measures administration,
- Process for administration within the normal workflow (e.g., when in the clinic appointment it will occur, what parties will be involved, and where paper instruments will be stored or required equipment will be located
- Reference evidence-based guidelines for all critical decision-making points of care
Step 4: Building Blocks for SOPs

- Process for scoring of instrument and data entry
- Requirements for managing positive screening results
- Utilization of results with the patient both for initial scores & tracking outcomes over time to guide evidence-based decision making related to treatment plans
- Timelines and reporting requirements for panel outcomes for stakeholders
- Methods for monitoring provider/staff compliance with guidelines of the SOP (e.g., chart reviews, daily monitors of screening completion, etc.).
Step 4: Establish and Implement Standard Operating Procedures (SOPs)

Questions for Application:

1. Are the individuals who you wish to administer the instruments already trained in administration? If not, how will you train them and when?

2. If using an initial screening measure, when in your process of care will you administer the screen? If a repeated measures instrument, when will you require repeat administrations?

3. Where in the regular patient flow of care will you administer the screen or follow-up measure? At check in? With a RN appointment?

4. What equipment is needed (clipboards, tablets, etc)? Where will you store these?

5. How will the data be entered and then stored for follow-up?
Step 4: Establish and Implement Standard Operating Procedures (SOPs)

Questions for Application (Cont):

6. How will you provide feedback to your patients on the progress? How will you incorporate clinical practice guidelines into treatment planning which incorporates test results?

7. If you are choosing to use a screening instrument, what will be the process for managing positive screens?

8. What timelines do you wish to implement to provide feedback to stakeholders on data outcomes? Who will analyze the data and create summaries for use with stakeholders?

9. How will you ensure compliance with implementation of the SOP (e.g., chart review, monitors of screening completion)?
Step 5: Engage in Continuous Quality Improvement Process to Evaluate Program Implementation

Now that you have MBC you have the ability to:

1. Aggregate program evaluation data to assess outcomes at the individual, panel, and population levels
2. Evaluate effectiveness of interventions on a larger scale
3. Within a specific timeframe
4. For key patient variables (e.g., sex, age, race)
5. Create summaries (e.g., % of positive screens)
6. Better understand your population and needs
7. Determine previously unidentified needs
Step 5: Engage in Continuous Quality Improvement Process to Evaluate Program Implementation

Questions for Application:

1. How can my clinic use MBC to engage in an on-going quality improvement process?
2. What specific interventions or services are we interested in better understanding?
3. When creating aggregate data summaries for program evaluation are there key patient variables of interest that we should include?
4. Should my team consider a process such as PDSA?
Lessons Learned and Conclusions

1. MBC is a culture shift for most clinics/providers.

2. Simply mandating or funding a large scale initiative will be insufficient to see the transformation realized (Nutting et al., 2009).

3. Don’t underestimate involving stakeholders at all levels of the organization – key to success (Ritchie et al., 2014).

4. With implementation of MBC, IPC providers and administrators will not only be moving towards improved outcomes for patients, but will be placed at the table to speak the language of primary care by assessing panel change related to quantitative outcomes.
Question and Answer Time
CIH Postdoctoral Fellowship

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◦ Research training is individualized; Fellows work with mentorship team on grants, manuscripts, and building a program of research
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For more information, contact Paul.King2@va.gov, or visit our website at http://www.mirecc.va.gov/cih-visn2/fellowship2.asp
References


References


References


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Session Evaluation

Use the CFHA mobile app to complete the evaluation for this session.

Thank you!