Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting

Final Outcome Report from Eight Cities

Emerging Challenges In Primary Care: 2015

Report Date: 1/12/2016
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Course Accreditation

The National Association for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The National Association for Continuing Education designates this live activity for a maximum of 4.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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* This applies to the full day CME activity entitled Emerging Challenges in Primary Care.
Commercial Support

The Emerging Challenges in Primary Care: Update 2015 series of CME activities were supported through educational grants or donations from the following companies:

- Abbott
- AbbVie
- Arbor Pharmaceuticals
- Baxter
- Forest Research Institute
- Gilead Sciences
- Grifols
- Janssen
- Lilly
- Promethius
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- Regeneron Pharmaceuticals
- United Therapeutics
- VITAS Innovative Hospice Care

Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting is supported by an educational grant from Forest Research Institute, Inc.
# Cities and Dates

**Emerging Challenges in Primary Care: Update 2015**

**Conference Schedule**

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2, 2015</td>
<td>Miami, FL</td>
</tr>
<tr>
<td>May 9, 2015</td>
<td>Baltimore, MD</td>
</tr>
<tr>
<td>May 16, 2015</td>
<td>Tampa, FL</td>
</tr>
<tr>
<td>May 30, 2015</td>
<td>Atlanta, GA</td>
</tr>
<tr>
<td>June 6, 2015</td>
<td>Birmingham, AL</td>
</tr>
<tr>
<td>June 13, 2015</td>
<td>Raleigh, NC</td>
</tr>
<tr>
<td>June 20, 2015</td>
<td>Columbus, OH</td>
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<tr>
<td>June 27, 2015</td>
<td>Troy, MI</td>
</tr>
<tr>
<td>August 15, 2015</td>
<td>Denver, CO</td>
</tr>
<tr>
<td>August 22, 2015</td>
<td>St. Louis, MO</td>
</tr>
<tr>
<td>August 29, 2015</td>
<td>Houston, TX</td>
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<tr>
<td>September 19, 2015</td>
<td>Sacramento, CA</td>
</tr>
<tr>
<td>September 26, 2015</td>
<td>Ft. Lauderdale, FL</td>
</tr>
<tr>
<td>October 3, 2015</td>
<td>San Antonio, TX</td>
</tr>
<tr>
<td>October 10, 2015</td>
<td>Uniondale, NY</td>
</tr>
<tr>
<td>October 17, 2015</td>
<td>San Diego, CA</td>
</tr>
<tr>
<td>October 24, 2015</td>
<td>Nashville, TN</td>
</tr>
</tbody>
</table>
Preventing Stroke in Patients with Atrial Fibrillation: New Concepts and Controversies
Elizabeth A. Jackson MD, MPH

Transition to Insulin Therapy: Breaking the Barriers to Better Glycemic Control
Richard S. Beaser, MD or Robert S. Busch, MD, FACE, Mark Stolar, MD or Jeff Unger, MD, ABFM, FACE

Translating the Advances in Evidence Based Medicine into Better Health Outcomes for People with Heart Failure
Ola Akinboboye, MD, MPH, MBA, FACP, FACC, FASNC, FSCCT, FAHA, DABSM; Jan Basile, MD; Phillip B. Duncan, MD; Icilma V. Fergus, MD, FACC; Elizabeth Ofili, MD, MPH, FACC; Anekwe Onwuanyi, MD; Laurence O. Watkins, MD, MPH, FACC; or Karol E. Watson, MD, PhD

Lipid Management and Cardiovascular Risk Reduction: The Evolving Treatment Paradigm
Ola Akinboboye, MD, MPH, MBA, FACP, FACC, FASNC, FSCCT, FAHA, DABSM; Jan Basile, MD; Phillip B. Duncan, MD; Icilma V. Fergus, MD, FACC; Elizabeth Ofili, MD, MPH, FACC; Anekwe Onwuanyi, MD; Laurence O. Watkins, MD, MPH, FACC; or Karol E. Watson, MD, PhD

Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting
Gregg Mattingly, MD or Gustavo Alva, MD, DFAPA or C. Brendan Montano, MD or or Alejandro Alva, MD

Overcoming Pitfalls in the Diagnosis of Bipolar Disorder
Gregg Mattingly, MD or Gustavo Alva, MD, DFAPA or C. Brendan Montano, MD
Levels of Evaluation

Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on Moore’s model. This outcome study reaches Level 5.

- Level 1: Participation
- Level 2: Satisfaction
- Level 3: Declarative and Procedural Knowledge
- Level 4: Competence
- Level 5: Performance
- Level 6: Patient Health
- Level 7: Community Health

Level 1: Participation

- 1358 attendees in 8 cities
- 50% Physicians; 40% NPs or PAs; 3% RNs; 7% Other
- 56% in community-based practice
- 75% PCPs, 5% Cardiologist; 1% Endocrinologist; 20% Other or did not respond
- 93% provide direct patient care

Did we reach the right audience? Yes!
Level 2: Satisfaction

- 99% rated the activity as excellent
- 99% indicated the activity improved their knowledge
- 98% stated that they learned new and useful strategies for patient care
- 88% said they would implement new strategies that they learned in their practice
- 100% said the program was fair-balanced and unbiased

Sample Size: N = approximately 1358

Were our learners satisfied? Yes! Data was collected across eight cities for the Emerging Challenges in Primary Care program.
Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting

Patients seen each week in a clinical setting with Depression:

- None: 16%
- 1-5: 32%
- 6-10: 21%
- 11-15: 12%
- 16-20: 8%
- 21-25: 5%
- >25: 6%

Sample Size: N = approximately 1358
Did Learners Say They Achieved Learning Objective?

Upon completion of this activity, I can now – Recognize the overlap of emotional, physical and cognitive challenges in patients with major depressive disorder (MDD); explore the impact of residual symptoms and cognitive dysfunction upon optimal patient outcomes; and develop strategies in the primary care setting on how to minimize long term side effect burden in an effort to increase adherence to MDD treatment.

Yes! 100% believed they did. Data was collected in 8 cities.

Sample Size: N = approximately 1358
Goal
To determine the effect this CME activity had on learners with respect to competence to apply critical knowledge, confidence in treating patients with diseases or conditions discussed, and change in practice behavior.

Dependent Variables

1. Level 3-5: Knowledge, Competence, and Performance
   Case-based vignettes and pre- and post-test knowledge questions were asked with each session in the CME activity. Identical questions were also asked to a sample of attendees 4 weeks after the program to assess retention of knowledge. Responses can demonstrate learning and competence in applying critical knowledge. The use of case vignettes for this purpose has considerable predictive value. Vignettes, or written case simulations, have been widely used as indicators of actual practice behavior. ¹

2. Practitioner Confidence
   Confidence with the information relates directly to the likeliness of actively using knowledge. Practitioner confidence in his/her ability to diagnose and treat a disease or condition can affect practice behavior patterns.

3. Level 5: Self-Reported Change in Practice Behavior
   Four weeks after CME activity, practitioners are asked if they changed practice behavior.

4. Readiness to Change Behavior (Prochaska and DeClemente Model)

CME activities can motivate providers to move through different stages of change which can ultimately lead them to take action and modify their practice behavior in accordance with the objectives of the education. Movement through these stages of change is an important dependent variable to consider in evaluating the impact of CME. Participants were asked to evaluate their stage of change with respect to specific topics being presented.

- **Pre-contemplation stage**: I do not manage (XXX illness), nor do I plan to this year.
- **Contemplation stage**: I did not manage (XXX illness) before this course, but as a result of attending this course I'm thinking of managing it now.
- **Pre-contemplation/confirmation stage**: I do manage patients with (XXX Illness) and this course confirmed that I do not need to change my treatment methods.
- **Preparation for action stage**: I do manage patients with (XXX illness) and this course helped me change my treatment methods.

Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting

Faculty
Gregg Mattingly, MD
Gustavo Alva, MD, DFAPA
C. Brendan Montano, MD

Learning Objectives

1. Recognize the overlap of emotional, physical and cognitive challenges in patients with major depressive disorder (MDD)
2. Explore the impact of residual symptoms and cognitive dysfunction on optimal patient outcomes
3. Develop strategies in the primary care setting to minimize long term side effect burden in an effort to increase adherence to MDD treatment
4. Discuss newly approved treatment options for MDD while exploring their role in residual cognitive symptoms, selective side effect profile and remission of depressive symptoms
## Key Findings

**Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge/Competence</strong></td>
<td>Learners demonstrated improvement from pre to post-testing in their answers to six out of six of the case-based questions regarding diagnosis and management of a patient with Major Depression Disorder.</td>
</tr>
<tr>
<td><strong>Confidence</strong></td>
<td>Whereas the majority of learners rated themselves as having low confidence in their understanding of the diagnosis and management of a patient with Major Depression Disorder before the education, most of the learners showed high gains in confidence after the program.</td>
</tr>
<tr>
<td><strong>Intent to Perform</strong></td>
<td>As a result of this program, 15% of learners who did not participate in the diagnosis and treatment of Major Depression Disorder before are considering doing so, while 64% who do, indicated that they will change their treatment methods.</td>
</tr>
<tr>
<td><strong>Change of Practice Behavior</strong></td>
<td>79% of learners who responded to our four week survey indicated that they had changed their practice behavior to implement the learning objectives of this program within four weeks after they attended the activity.</td>
</tr>
</tbody>
</table>
Mary – 35 year old mother
• Wakes in the morning struggling with depression
• Makes breakfast for her son and daughter
• Heads to work with her head in a fog
• Makes dinner for her family
• Then tries to force a smile on her face as she puts her kids to sleep
• Lays in bed tossing and turning wondering what she’s done wrong to feel this way

As you evaluate Mary, you must realize that the 3 most common symptoms in individuals with MDD are?
(Learning Objective 1)

Pre N= 813  Post N= 811

Green highlight indicates significant difference between pre and post testing.
In treating Mary's depression, the most common residual symptoms will include?

(Learning Objective 2)

Case Vignette Knowledge and Competence Assessment Questions
(presented before and after lecture—boxed answer is correct)

Green highlight indicates significant difference between pre and post testing.

P Value<: 0.001 - Significant

<table>
<thead>
<tr>
<th>Sleep difficulties</th>
<th>Suicidal thoughts</th>
<th>Cognitive difficulties</th>
<th>Sleep difficulties and suicidal thoughts</th>
<th>Sleep and cognitive difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre %</td>
<td>Post %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16%</td>
<td>3%</td>
<td>9%</td>
<td>9%</td>
<td>90%</td>
</tr>
<tr>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pre N= 813 Post N= 802

Green highlight indicates significant difference between pre and post testing.
You consider offering Mary an SSRI for which of the following reasons? (Learning Objective 3)

- They have high remission rates
- They help depression and anxiety
- They have low sexual side effect rates
- They improve functional outcomes

P Value: <0.001 - Significant

Green highlight indicates significant difference between pre and post testing.

Pre N = 823  Post N = 800
Which antidepressant has shown improvement in overall functional outcomes? (Learning Objective 4)

- Vilazodone: Pre % 5%, Post % 27%
- Duloxetine: Pre % 34%, Post % 4%
- Levomilnacipran: Pre % 5%, Post % 63%
- Escitalopram: Pre % 56%, Post % 7%

P Value: <0.001 - Significant

Green highlight indicates significant difference between pre and post testing.
Mary would like to be sexually active and is concerned about medications that might impact her libido. To minimize sexual side effects, you want to avoid which serotonin receptor?

(Learning Objective 3,4)

P Value: <0.001 - Significant

Green highlight indicates significant difference between pre and post testing.
Case Vignette Knowledge and Competence Assessment Questions
(presented before and after lecture—boxed answer is correct)

Which antidepressant minimizes 5HT-2 stimulation?
(Learning Objective 4)

P Value: <0.001 - Significant

Green highlight indicates significant difference between pre and post testing.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Pre %</th>
<th>Post %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citalopram</td>
<td>14%</td>
<td>2%</td>
</tr>
<tr>
<td>Vilazodone</td>
<td>18%</td>
<td>66%</td>
</tr>
<tr>
<td>Desvenlafaxine</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Paroxetine</td>
<td>5%</td>
<td>22%</td>
</tr>
<tr>
<td>Citalopram and Desvenlafaxine</td>
<td>31%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Pre N= 744  Post N= 683
Which of the statements below describes your approach to participating in diagnosing and treating Major Depression Disorder (MDD)?

- Pre-Contemplation Stage
- Contemplation Stage
- Preparation for Action Stage
- Pre-Contemplation/Confirmation Stage

N= 723

- 16% I do not participate in the diagnosis and treatment of MDD, nor do I plan to this year.
- 15% I did not participate in the diagnosis and treatment of MDD before this course, but as a result of attending this course I'm thinking of doing this now.
- 64% I do participate in the diagnosis and treatment of MDD and I now plan to change my treatment methods based on completing this course.
- 5% I do participate in the diagnosis and treatment of MDD and this course confirmed that I don't need to change my methods.
Mary – 35 year old mother
• Wakes in the morning struggling with depression
• Makes breakfast for her son and daughter
• Heads to work with her head in a fog
• Makes dinner for her family
• Then tries to force a smile on her face as she puts her kids to sleep
• Lays in bed tossing and turning wondering what she’s done wrong to feel this way

As you evaluate Mary, you must realize that the 3 most common symptoms in individuals with MDD are? (Learning Objective 1)

Green highlight indicates significant difference between pre and post testing.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Pre %</th>
<th>Post %</th>
<th>4 Weeks Post %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep, mood and energy</td>
<td>41%</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>Sleep, mood and suicidal thoughts</td>
<td>9%</td>
<td>6%</td>
<td>20%</td>
</tr>
<tr>
<td>Mood, appetite and concentration</td>
<td>5%</td>
<td>2%</td>
<td>10%</td>
</tr>
<tr>
<td>Mood, sleep and concentration</td>
<td>45%</td>
<td>78%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Pre N= 813  Post N= 811  4 Weeks Post N= 20

Boxed answer is correct
In treating Mary’s depression, the most common residual symptoms will include?

(Learning Objective 2)

Four Week Case Study Questions

Key Findings

Boxed answer is correct

In treating Mary’s depression, the most common residual symptoms will include?

(Learning Objective 2)

![Graph showing percentage changes in symptoms pre and post treatment.]

- Sleep difficulties: Pre 16%, Post 3%, 4 Weeks Post 5%
- Suicidal thoughts: Pre 2%, Post 1%, 4 Weeks Post 5%
- Cognitive difficulties: Pre 9%, Post 3%, 4 Weeks Post 15%
- Sleep difficulties and suicidal thoughts: Pre 9%, Post 3%, 4 Weeks Post 15%
- Sleep and cognitive difficulties: Pre 16%, Post 3%, 4 Weeks Post 90%

Green highlight indicates significant difference between pre and post testing.

Pre N= 813  Post N= 802  4 Weeks Post N= 20

Green highlight indicates significant difference between pre and post testing.
You consider offering Mary an SSRI for which of the following reasons?

(Learning Objective 3)

Four Week Case Study Questions

Key Findings

Boxed answer is correct

You consider offering Mary an SSRI for which of the following reasons?

(Learning Objective 3)

Pre %    | Post %    | 4 Weeks Post %
---------|-----------|---------------
4%        | 9%        | 0%            
50%       | 61%       | 55%           
1%        | 2%        | 5%            
45%       | 29%       | 40%           
4%        | 9%        | 0%            
50%       | 61%       | 55%           
1%        | 2%        | 5%            
45%       | 29%       | 40%           

They have high remission rates
They help depression and anxiety
They have low sexual side effect rates
They improve functional outcomes

Green highlight indicates significant difference between pre and post testing.
Which antidepressant has shown improvement in overall functional outcomes? (Learning Objective 4)

<table>
<thead>
<tr>
<th>Antidepressant</th>
<th>Pre %</th>
<th>Post %</th>
<th>4 Weeks Post %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vilazodone</td>
<td>5%</td>
<td>27%</td>
<td>30%</td>
</tr>
<tr>
<td>Duloxetine</td>
<td>4%</td>
<td>34%</td>
<td>30%</td>
</tr>
<tr>
<td>Levomilnacipran</td>
<td>5%</td>
<td>63%</td>
<td>25%</td>
</tr>
<tr>
<td>Escitalopram</td>
<td>7%</td>
<td>56%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Green highlight indicates significant difference between pre and post testing.
Mary would like to be sexually active and is concerned about medications that might impact her libido. To minimize sexual side effects, you want to avoid which serotonin receptor? (Learning Objective 3,4)

### Key Findings

<table>
<thead>
<tr>
<th>5HT-1</th>
<th>5HT-2</th>
<th>5HT-3</th>
<th>5HT-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre %</td>
<td>Post %</td>
<td>4 Weeks Post %</td>
<td></td>
</tr>
<tr>
<td>21%</td>
<td>73%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>14%</td>
<td>28%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Green highlight indicates significant difference between pre and post testing.
Four Week Case Study Questions

Key Findings

Boxed answer is correct

Which antidepressant minimizes 5HT-2 stimulation?
(Learning Objective 4)

Green highlight indicates significant difference between pre and post testing.

Pre N= 744  Post N= 683  4 Weeks Post N= 20

Citalopram  Vilazodone  Desvenlafaxine  Paroxetine  Citalopram and Desvenlafaxine

Pre %  Post %  4 Weeks Post %

Citalopram  14%  15%  2%

Vilazodone  18%  66%  45%

Desvenlafaxine  15%  15%  15%

Paroxetine  22%  5%  15%

Citalopram and Desvenlafaxine  31%  14%  10%
Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting

On a scale of 1 to 5, please rate how confident you would be in the diagnosis and management of a patient with Major Depression Disorder:

![Bar chart showing confidence levels before and after intervention.](chart.png)

- **Before (Pre)**: N = 814
  - Not at all confident: 17%
  - Slightly confident: 32%
  - Moderately confident: 33%
  - Pretty much confident: 14%
  - Very confident: 5%

- **After (Post)**: N = 797
  - Not at all confident: 19%
  - Slightly confident: 36%
  - Moderately confident: 31%
  - Pretty much confident: 14%
  - Very confident: 10%
Describe/list any other educational activities that you attended in the last month concerning the treatment of Depressions?

- None: 60%
- Live Conferences: 15%
- Enduring webcasts or monographs: 0%
- Journal activities: 25%

4 Weeks Post  N= 20
What specific skills or practice behaviors have you implemented for patients in the diagnosis and management of a patient with Major Depression Disorder since this CME activity?
(Comments received from attendees at 4 week follow up)

- More Careful Evaluation
- Use screening tools
- Rule out Bi-Polar disease more often
- Screening more for Bipolar
- Feel like I am asking the right questions
- Considering newer medications in non-responders
- "Hit hard and hit early" to achieve better remission
- Better diagnosis and management
- Depression Screening
- Feel like I have a better understanding of the treatment of Depression
Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting

What specific barriers have you encountered that may have prevented you from successfully implementing strategies for patients in the diagnosis and management of a patient with Major Depression Disorder since this CME activity? (Comments received from attendees at 4 week follow up)

- Difficulty prescribing new drugs
- Trouble getting approval of newer antidepressant medications through insurance
- Patients do not volunteer to report their symptoms
- Clinical Inertia
- Time constraints
- Insurance coverage for newer medications
- Vague symptoms make diagnosis more difficult, though better with screening tools
- I don't think I am confident to treat a teenager with depression without first consulting a psychiatrist
Discussion and Implications
Overcoming Cognitive and Residual Symptoms in Major Depression: Enhancing Patient Outcomes in the Primary Care Setting

The need for continued education Major Depression was demonstrated based on literature reviews and surveys completed prior to the conference series. Attendee knowledge was assessed at 3 points for this program: prior to the lecture, immediately following the lecture and again at 4 weeks after the conference. Data collected from 1358 clinicians over 8 meetings indicates statistically significant improvement in knowledge in all areas tested. Specifically, as a result of this lecture, participants: understand that disturbances in mood, sleep and concentration are the most common symptoms of MDD; are aware that sleep and cognitive difficulties are the most common residual symptoms, recognize strategies to minimize side effects like avoiding 5HT-2 receptors which causes sexual dysfunction; are aware that levomilnacipran has been shown to improve functional outcomes; and know that vilazodone minimizes 5HT-2 stimulation.

Data obtained from participants 4 weeks after the program demonstrated some decline in learning from the post-test scores in all areas, but continued improvement from pre-test scores in all but one area addressing residual symptoms of depression. These results suggest that all of the learning objectives for this activity have been effectively addressed with attendees. At 4 weeks, 79% of responders indicated that they already had changed their practice behaviors in the management of patients with Major Depression.

Persistent gaps in knowledge were evident with additional education needed in the following areas: most common presenting and residual symptoms of depression; strategies to reduce/minimize side effects; ways to improve functional outcomes; avoiding the 5HT-2 receptor to minimize sexual dysfunction; and understanding what receptors are targeted by specific antidepressants to maximize benefit while minimizing side effects.
Discussion and Implications
Overcoming Cognitive and Residual Symptoms in Major Depression:
Enhancing Patient Outcomes in the Primary Care Setting

Moderate to very confident levels in the treatment of a patient with Major Depression rose from 52 to 77%. In addition, 15% of learners that were not involved with the management of patients with Major Depression are now thinking of it and 64% are planning on changing what they do as a result of this course which suggests a robust impact on behavior. 88% of participants are likely to utilize information learned from this presentation in their practice. 52% of attendees report seeing 6 or more patients with Major Depression on a weekly basis and 84% are seeing at least 1 patient weekly, suggesting a significant number of patients will be impacted by this program.

Attendees indicated multiple new, specific, practice behaviors they implemented as a result of this program that included: evaluating patients more carefully, screening for Bi-Polar disease, treating more aggressively and earlier to promote remission; using screening tools and considering newer medications where they had not previously for patients. Attendees commented that they feel as if they are now asking the right questions and feel like they have a better understanding of depression.

Barriers to care surrounded time to discuss these issues with patients, medication costs, formulary issues, clinical inertia, comfort with certain populations like teenagers, and vague symptoms reported by patients that make an accurate diagnosis more challenging.

The notable changes in post test scores, and intent to change practice patterns regarding the care of patients with Major Depression, signifies a clear gap in knowledge and an unmet need among primary care clinicians. It continues to be an important area for future educational programs.