A Performance Improvement Initiative Enhancing the Care of Patients with Depression

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Introduction

- In the US, approximately one in three adults will experience a major depressive episode within their lifetime, and recent data show that one in twelve experienced a major depressive episode within the past year. Depression results in significant morbidity and mortality; yet, 25% of patients are undiagnosed, and fewer than one-half of those diagnosed receive treatment. For patients who receive treatment, medications are often under-dosed, and follow-up care often lacks proper symptom assessment, making it difficult to discern whether remission has occurred.

- Unfortunately, disparities exist between evidence-based medicine and clinical practice. The US Preventive Services Task Force (USPSTF) has defined goals for depression screening, a necessary task to ensure accurate diagnosis. Additionally, the American Medical Association (AMA) and Physician Consortium for Performance Improvement (PCPI) have outlined clinical performance measures for the management of patients with major depressive disorder (MDD). Furthermore, the Centers for Medicare and Medicare Services and National Committee for Quality Assurance (NCQA) periodically report on the use of standardized tools for depression screening and antidepressant medication management for the acute-phase treatment of MDD as quality measures of care.

- Recognizing the challenges surrounding the care of patients with MDD and the necessity for improved outcomes, the National Committee for Quality Assurance NCQA developed a PI CME initiative in collaboration with an Accreditation Council for Continuing Medical Education (ACCME)-accredited provider (Med-IQ). The initiative focused on the promotion and assessment of national performance measures for clinicians who treat patients with MDD and was approved for Maintenance of Certification by the American Board of Psychiatry and Neurology (ABPN). The results are reported here as an example of potential practice changes that may be achieved and the lessons learned from PI participation.

Methods

Based on the AMA PI CME model, we designed a PI initiative focused on the screening, treatment and management of patients with MDD:

1. Target audience
- US-based psychiatrists, general and internal medicine physicians, and family practice physicians

2. Baseline data abstraction (AMA Stage A)
- Retrospective patient chart review assessing execution of predetermined performance measures from a total of 25 patients with diagnosis of MDD

3. Participant review of baseline data; commitment to improve (AMA Stage B)
- Each participant received a summarized report of their performance of the selected evidence-based standards and their results compared to their peers
- Using this data, participants were asked to develop and submit a personal plan for improvement then implement that plan for a minimum period of 3 months

4. Educational reinforcement
- To support participants' efforts in sustaining their improvement plans, two community of practice audioconferences and a CME-certified online publication were made available

5. Reassessment (AMA Stage C)
- Participants conducted a second retrospective chart review of 25 patients starting with patients seen after the date of the improvement plan

6. Statistical Analysis
- Pearson's chi-square tests and t tests were used to compare patient care across Stages A and C. These analyses used patient charts as the unit of analysis.
- Pearson's chi-square tests and Fisher's two-tailed exact tests compared the profile of participants who completed all three stages of the activity (ie, completers) with participants who did not (ie, non-completers). Results were considered statistically significant if the resulting probability values were less than 0.05.

Results

Participation
- Registrants – 492
- Stage A – 227 completers
- Stage B – 196 completers
- Stage C – 86 completers (at time of analysis)
  - Final number of completers totaled 218 from total pool of 380 Stage A completers

Participant Characteristics (Table 1)
- Practice sites: most common practice type was hospital or clinic
- Years in practice: highest participation seen among physicians between 6 and 20 years in practice
- Number of unique patients seen with depression per month (mean): 56
- Patient screened for depression per week: highly variable

Table 1. Participant Characteristics

	Completers (n = 86)	Non-completers (n = 406)	P Value
Primary practice type			
Hospital or clinic	49%	39%	
Solo practice	26%	30%	
Group practice < 5	13%	11%	
Group practice > 5	7%	9%	0.383[†,†]
Other	5%	8%	
HMO, managed care, or insurance company	1%	3%	
Years in practice			
< 1	0%	2%	
1 to 5	21%	16%	
6 to 10	34%	22%	0.042[†]
11 to 20	30%	36%	
> 20	15%	25%	
Monthly number of patients with depression seen (mean)			
	56	53	0.373
Patients screened for depression each week			
< 10%	1%	7%	
10% to 25%	12%	9%	
25% to 50%	6%	11%	
51% to 75%	16%	11%	0.034
76% to 90%	17%	10%	
> 90%	47%	50%	
Unknown	1%	3%	

*P value applies to change within the group of data analyzed.
[†]Results from Fisher's exact test

Patient Characteristics (Table 2)
- 2,122 patient charts analyzed in Stage A vs. 2,130 analyzed in Stage C
- No major differences between the Stage A patient population and that of Stage C were observed

Table 2. Patient Characteristics

	Stage A (n = 2122)	Stage C (n = 2130)	P Value
Mean Patient Age (Years)			
	45	43	0.002
Gender			
Female	61%	60%	0.876*
Male	39%	40%	
Results of Most Recent Screening	N = 1269	N = 1648	
Normal	20%	18%	
Risk of mild depression	32%	33%	
Risk of moderate depression	33%	32%	0.352*
Risk of moderately severe depression	11%	12%	
Risk of severe depression	3%	4%	

* P value applies to change within the group of data analyzed.

Results – Cont'd.

Patient Assessment for Depression (Table 3)
- Participants significantly more likely to use standardized depression screening criteria in Stage C compared to Stage A
- Reassessment of depression 30% more likely in Stage C vs. Stage A
- Significant improvements also seen in documentation of screening results and suicide risk assessment at each visit

Table 3. Patient Assessment for Depression

	Stage A	Stage C	P Value
Initial Screening Using Standardized Criteria	N = 1425	N = 1810	
PHQ-2	3%	7%	
PHQ-9	14%	35%	<0.001*
DSM-IV	74%	49%	
Others	10%	11%	
Use of PHQ-2 or PHQ-9 screening	N = 1378	N = 1711	
	26%	68%	<0.001*
Reassessment of depression using standardized tool[†]	N = 1961	N = 2028	
Normal	48%	76%	<0.001*
Reassessment of depression using standardized tool[†]	N = 2122	N = 2130	
Normal	90%	96%	<0.001*

*P value applies to change within the group of data analyzed.
[†]Within 4 to 8 weeks of initial screening.

Treatment, Follow-up, and Adherence (Table 4)
- Participants more likely to help patients identify self-management goals at Stage C
- Patients more likely to attend follow-up visits in Stage C compared to Stage A
- Higher rates of adherence assessment via standardized tools and using refill records in Stage C versus Stage A

Table 4. Treatment, Follow-up, Adherence

	Stage A	Stage C	P Value
Types of therapy recommended	N = 2122	N = 2130	
Antidepressant therapy and psychotherapy	73%	69%	
Antidepressant only	20%	21%	0.007*
Psychotherapy only	5%	8%	
Patients counseled on adverse effects of treatment	N = 2021	N = 2087	
	96%	96%	0.860*
Attended follow-up visits (patients receiving medication therapy)[†]	N = 1887	N = 1764	
0 visits	3%	2%	
1 to 2 visits	19%	19%	
2 to 3 visits	50%	50%	0.005*
4 to 5 visits	16%	20%	
> 5 visits	12%	10%	
Patient identified self-management goals	N = 2122	N = 2130	
	90%	96%	<0.001*
Adherence assessed to antidepressant therapy	N = 1889	N = 1748	
	88%	97%	<0.001*
Method used to assess adherence to therapy	N = 1662	N = 1677	
Patient questioned directly	84%	80%	
Refills verified	10%	14%	0.002*
Other	6%	6%	
Use of standardized tool to assess adherence	N = 1909	N = 1740	
	10%	45%	<0.001*
Standardized tools used (all that apply)	N = 178	N = 790	
Medication adherence scale (MAS)	35%	16%	<0.001
Medication adherence rating scale (MARS)	26%	48%	<0.001
Antidepressant adherence scale (AAS)	27%	36%	0.022
Other	29%	11%	<0.001

*P value applies to change within the group of data analyzed.
[†]Within the first 12 weeks of antidepressant therapy.

Discussion and Conclusions

Discussion:
- Participants more than doubled their use of the PHQ-2 (brief form useful in identifying patients in need of intervention) and PHQ-9 (longer form useful for high-risk patients; mirrors DSM-IV criteria) screening questionnaires during initial patient assessments.

- 28% more patients were reassessed using standardized criteria in Stage C, which is more sensitive to detecting changes in mental health status than patient-reported impressions.

- 35% more patients receiving antidepressant therapy were assessed for adherence using standardized tools and refill counts.
  - Adherence is a challenge as 42% discontinue therapy within first 30 days, 70% within first 90 days

- Significantly more patients were aided in identifying self-management goals
  - Patient management can be aided through collaborative care models that promote ongoing communication and employs multiple strategies.
  - Collaborative care models also emphasize role of patient self-management. Patients who are supported in achieving their self-care goals have higher ability to alleviate and manage the severity of their depression

Conclusions:
- Participation in a PI activity focused on depression led to improvements in the use of standardized screening and adherence assessment criteria, as well as gains in patient self-management practices

- Improvements in patient care through the use of clinician self-assessment, goal setting, and reassessment suggest clinicians achieved greater awareness and knowledge of evidence-based measures

- Self-assessment practices revealed a gap between self-reported clinician behavior and actual execution in practice

- It is evident that after participation in a PI initiative, these clinicians are better equipped to manage patients and help lessen their burden of disease