

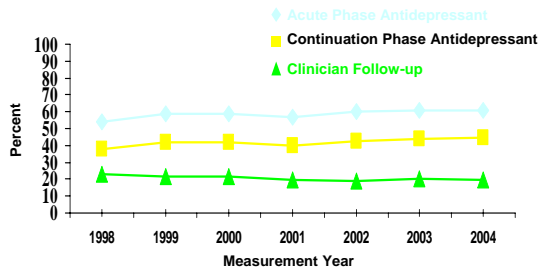
Measurement Based Care for Depression

David Katzelnick
May 1st, 2008

How well are we doing treating people with major depression in the US?

- Initiating treatment
- Adequacy of treatment
- Remission

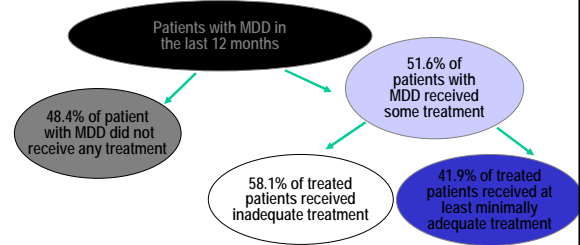
NCQA HEDIS Measures Commercial Plans



The State of Health Care Quality 2005. National Committee for Quality Assurance, Washington, DC. (*Antidepressant Medication Management* p 24). Available at: www.ncqa.org/communications/Publications/additionalpubs.htm

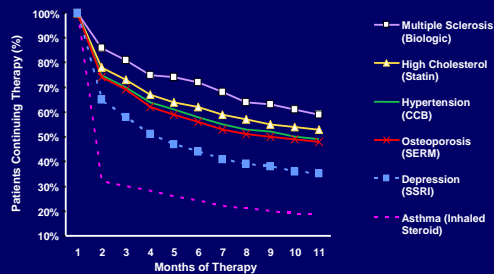
Major Depressive Disorder (MDD) Is Still Largely Untreated

- Only 21.6% of all patients with MDD in this study received adequate treatment



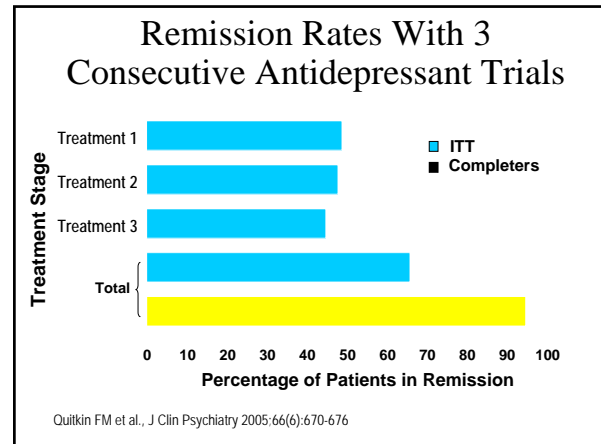
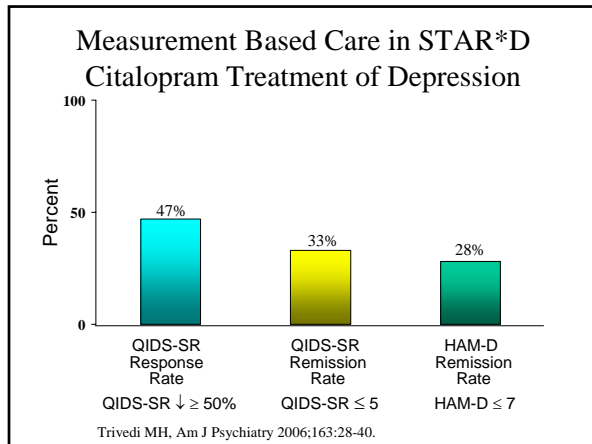
Kessler RC, et al. *JAMA*. 2003;289(23):3095-3105.

Patient Persistence on Medication in Chronic Diseases



CCB - calcium channel blocker; SERM - selective estrogen receptor modulator; SSRI - selective serotonin reuptake inhibitor. Vanelli MR et al. Moving beyond market share. In: *In Vivo: The Business and Medicine Report* 2002:1-6.

Remission is the Exception



How can depression care be improved?

“Trying harder will not work, changing systems of care will.”
Don Berwick



- ### Core Elements of Effective Treatment
- Screening
 - Patient Self-Management
 - Clinician education
 - Simple treatment algorithm
 - Treatment coordinator
 - Mental Health Clinician availability

Effectiveness Studies of Depression in Primary Care

	Tx Guidelines	Case ID/ Screening	Patient Ed.	Physician Ed.	Tracking Systems	Tx Coord.	MH Spec.	Effective
Schulberg	+	+	+	+	+	+	++++	Yes
Mynors-Wallis	+	+	+	+	+	+	+++	Yes
Katon	+	+	+	+	+	+	++	Yes
Wells	+	+	+	+	+	+	++	Yes
Katzelnick	+	+	+	+	+	+	++	Yes
Rost	+	+	+	+	+	+	+/-	Yes
Hunkeler	+	+	+	+	+	+	+/-	Yes
Dietrich	+	+	+	+	+	+	+	Yes
Unutzer	+	+	+	+	+	+	+	Yes
Simon	+	+	+	+	+	+	-	Yes
Simon	+	+	+	+	+	-	-	No
Callahan	+	+	+	+	-	-	-	No
Goldberg	+	+	+	-	-	-	-	No

Simon GE

Gilbody Systematic Review Depression Interventions

- Collaborative care is more effective than standard care over short and long term
- Characteristics of Successful Interventions
 - Dose-response relationship between medication use and improved outcomes
 - Care managers with mental health background
 - Regular planned supervision of care managers
 - Addition psychotherapy did not increase effect size
 - Integration of primary and secondary care
 - Simple guideline implementation and education strategies generally ineffective

Gilbody Arch Intern Med 2006

DIAMOND Initiative Depression Improvement Across Minnesota Offering a New Direction

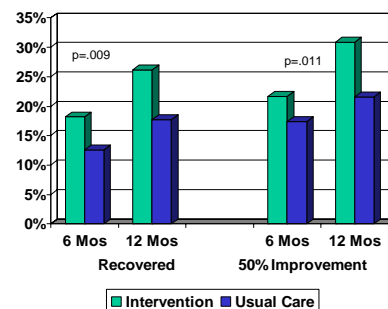
Diamond Project Care Delivery

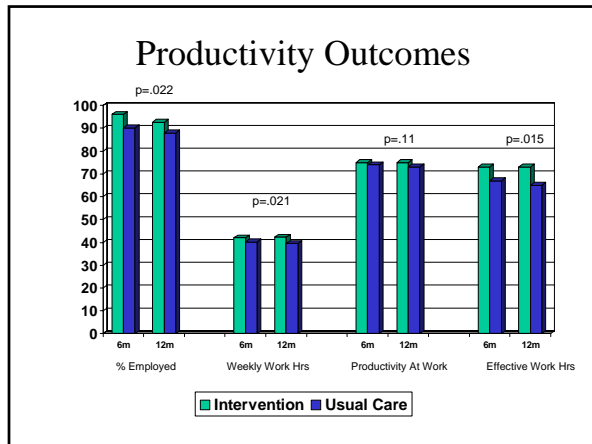
- Standard use of the PHQ-9 for assessment and ongoing depression management
- Registry and systematic follow-up
- Treatment guideline using stepped care
- Care manager
- Psychiatric consultation and supervision
- Relapse prevention

Work Productivity Study Research Questions

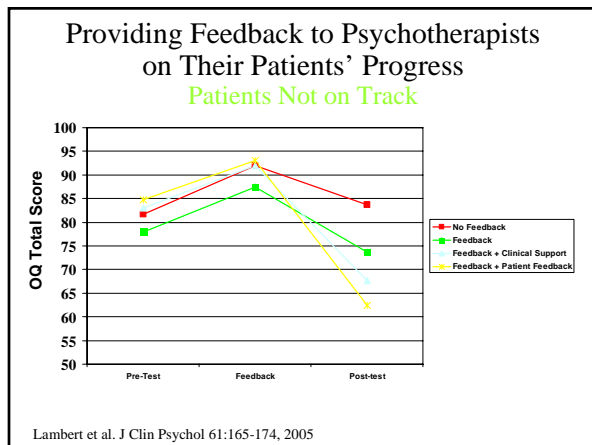
- In a sample of working adults with moderate depression, will an organized program of depression screening, outreach, and care management lead to significant improvements in:
 - Depressive symptoms
 - Time missed from work
 - Productivity at work

Clinical Outcomes - Categorical





If you went to your doctor for hypertension treatment, how would you feel if they did not check your blood pressure?



Is our clinical impression of depression severity always accurate?

- ### Best Depression Self-Report Assessments
- PHQ-9 Patient Health Questionnaire- 9
 - QIDS Quick Inventory of Depressive Symptomatology

Clinician vs Self Rating for Assessing Depression Severity in STAR*D

“These results suggest that the QIDS-IVR₁₆, as well as the QIDS-C₁₆ and QIDS-SR₁₆, are entirely adequate substitutes for the more time-consuming HamD₁₇.”

Rush et al. Biol Psychiatry 2005 Sept 28 [Epub ahead of print]



AAFP/APA/ACP Initiative to Improve Depression Care

Phase I: Selecting Instruments for Diagnosis and Assessment of Depression Severity

- Expert Meeting October 8th 2002
- Reviewed all currently available depression severity instruments

APA/AAFP/ACP Project Depression Severity Measure Selection criteria

- Public domain (free)
- Valid and reliable measure of depression severity over time
- Also screen and tentative diagnosis of depression
- Easy to administer and score

The Patient Health Questionnaire (PHQ) Primary Care Study



PHQ-9 Uptake

- **Several Hundred publications**
- **Professional organizations**
 - APA/ACP/AAFP practice networks
 - AMA depression guide
 - Foundations: MacArthur and RWJ
- **Large healthcare systems (e.g., Kaiser, VA, BPHC)**
- **Insurance Companies (AETNA, BC/BS)**
- **Federal surveys (MEPS, NHANES,..)**

PHQ-9 Symptom Checklist

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at All	Several Days	More Than Half the Days	Nearly Every Day
a. Little interest or pleasure in doing things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Feeling down, depressed, or hopeless	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Trouble falling or staying asleep, or sleeping too much	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Feeling tired or having little energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Poor appetite or overeating	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Feeling bad about yourself, or that you are a failure . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Trouble concentrating on things, such as reading . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Moving or speaking so slowly . . .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Thoughts that you would be better off dead . . .	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subtotals:	3	3	4	9
TOTAL:				16

PHQ-9 = Patient Health Questionnaire-9.
Kroenke K, et al. *J Gen Intern Med.* 2001;16:606-613.

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: John Q. Sample DATE:

(Over the last 2 weeks, how often have you been bothered by any of the following problems?)
 Circle "1" to indicate your answer.

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things				<input checked="" type="checkbox"/>
2. Feeling down, depressed, or hopeless				<input checked="" type="checkbox"/>
3. Trouble falling or staying asleep, or waking too soon				<input checked="" type="checkbox"/>
4. Feeling tired or having little energy				<input checked="" type="checkbox"/>
5. Poor appetite or overeating				<input checked="" type="checkbox"/>
6. Feeling bad about yourself—or that you are a failure or let your family down				<input checked="" type="checkbox"/>
7. Trouble concentrating on things, such as reading the newspaper or watching television				<input checked="" type="checkbox"/>
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—talking so fast or so much that you have been noticed and it annoys other people				<input checked="" type="checkbox"/>
9. Thoughts that you would be better off dead, or of hurting yourself in some way		<input checked="" type="checkbox"/>		

PHQ-9 Scoring Card for Severity Determination
 For healthcare professional use only

Scoring—add up all checked boxes on PHQ-9
 For every ✓: Not at all = 0; Several days = 1; More than half the days = 2; Nearly every day = 3

Interpretation of Total Score
 Total Score Depression Severity
 1-4 Minimal depression
 5-9 Mild depression
 10-14 Moderate depression
 15-19 Moderately severe depression
 20-27 Severe depression

Using the PHQ-9 in Early Treatment: Pharmacotherapy (6-8 Weeks)

PHQ-9	Treatment Response	Treatment Plan
Drop of ≥ 5 points from baseline	Adequate	No treatment change needed. Care manager follow-up in four weeks.
Drop of 2-4 points from baseline	Possibly Inadequate	May warrant an increase in antidepressant dose
Drop of 1 point, no change or increase	Inadequate	Increase dose; Augmentation; Informal or formal psychiatric consultation; Add psychotherapy

32

**APA/AAFP/ACP Depression Project
 Research Question**

a. Do Psychiatrists Find PHQ9 Scores Valuable In Their Practice?

b. What % of Treatment Decisions are Altered Based on PHQ-9 Score?

Helpfulness of PHQ-9 in Psychiatric Treatment Decisions

n= 6096 Patient Contacts

- PHQ-9 was helpful in Tx decisions 93%
- How did PHQ-9 influence Tx?
 - Change Tx 40%
 - Confirm Tx 60%

Type of Treatment Changes Due to PHQ-9

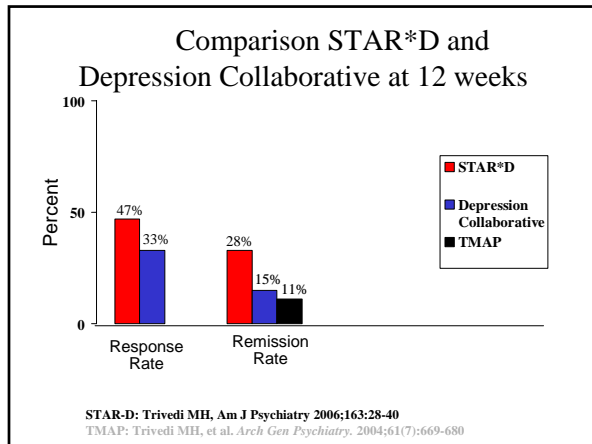
n=2185

- Change Dose of Antidepressant 45%
- Add Another Medication 26%
- Start or Increase Therapy 16%
- Switch Antidepressant 13%
- Initiate Antidepressant 10%
- Led to Additional Suicide Risk Assessment 3%
- Reassess Depression Diagnosis 1%
- Led to MH Consultation or Referral 1%

Response and Remission Rates of Depressed Patients Treated by Psychiatrists in the Program?

N=198

- Response Improvement of 50% in PHQ-9 Score at 24 weeks = 36%
 - PHQ9 Score <10 = 39%
- Remission PHQ-9 Score <5 = 17%



Predictors of Remission (i.e., PHQ9<5 by 24 wks) among Patients with Baseline PHQ9 >=10 (n=198)

Independent Var.	Odds Ratio	95 % CI	p-value
Baseline PHQ9	0.84	0.76-0.94	p<0.01
Wks to 1st FUP	0.94	0.85-1.04	n.s.
Self Management (No as Ref Category)	3.54	1.37-9.15	p< .01
# of Visits	1.03	0.81-1.30	n.s.
Any comorbidity (No as Ref Category)	0.88	0.39-2.0	n.s.
Patient Age	1	0.97-1.02	n.s.

52 years old women living with her husband, working in the WTC area, no prior psych. History. She has been in treatment for PTSD. When she was asked about her mood, she reported not bad.

Initial PHQ-9 Scores

1. Interest	2
2. Mood	1
3. Sleep	3
4. Fatigue	2
5. Appetite	2
6. Self-Esteem	3
7. Concentration	2
8. Retardation/Agitation	2
9. Suicidal Thoughts	1
Total	18

Her medication was adjusted. Her last PHQ-9 score was 5, reported more active, more motivated, PTSD symptoms are also in remission, and has been able to go back to the same area work regularly

- ### Depression Monitoring
- **Telephone (care manager)**
 - **Interactive voice recording**
 - **Web-based (internet; e-mail)**
 - **Patient self-monitoring**

Summary

- Treatment of Depression currently is suboptimal in both primary care and psychiatric settings
- Depression outcomes can be substantially improved
 - Implementation of Depression Care Management
 - Standardized depression monitoring (PHQ-9)
 - Integration of primary and secondary care
 - Alignment of reimbursement with evidence based care