



# Effect of Primary Care Provider Stigma on Appropriate Follow Up PHQ-9 Administration

Andrew Kluemper, PharmD<sup>1</sup>; Lauren Heath, PharmD<sup>2</sup>; Danielle Loeb, MD, MPH<sup>3</sup>; Miranda Kroehl, MS, PhD<sup>4</sup>  
Leah Behrmann, PharmD Candidate<sup>2</sup>; Katy Trinkley, PharmD<sup>2</sup>

<sup>1</sup>University of Colorado Hospital; <sup>2</sup>University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences; <sup>3</sup>University of Colorado School of Medicine; <sup>4</sup>Colorado School of Public Health



## Background

- Depression: number one disease burden in first world countries
  - Usually managed in primary care
- **Stigma**: “co-occurrence of labeling, stereotyping, separation, status loss, and discrimination where power is exercised”
- Non-US studies: primary care providers (PCPs) have higher stigma than mental health specialists
- Relationship between provider stigma and management of depression unknown

## Aims

1. Describe provider stigma in two academic, internal medicine clinics
2. Evaluate current depression management practices using PHQ-9 data
3. Determine if a correlation exists between stigma and appropriate PHQ-9 administration

## Methods

### Provider survey

- Validated Opening Minds Scale for Health Care Providers (OMS-HC) survey to measure stigma related to depression
  - 15, five point Likert scale questions
  - Scores range from 15 (low stigma) to 75 (high stigma)
  - Incentivized with \$10 gift cards
  - Distributed electronically
- Baseline demographics also collected

### Depression management practices

- Retrospective chart review from July 1, 2015 through September 30, 2016
- Inclusion criteria
  - PHQ-9 ≥10 by internal medicine provider
  - Patient alive for entire study duration
- **Appropriate PHQ-9 administration** – follow up PHQ-9 within 6 months of a PHQ-9 ≥10 (i.e. index PHQ-9)
  - Data collection variables
    - First PHQ-9 ≥10 date and score
    - Follow up visit dates and PHQ-9 scores

## Methods (continued)

- Appropriate administration ratio calculated for each provider and plotted with stigma score
- **Primary outcome**: correlation between stigma and appropriate PHQ-9 administration
- **Secondary outcomes**: correlation between appropriate PHQ-9 administration and age, gender, provider type, and personal mental illness exposure; description of PCP stigma

## Results to Date

- Currently ongoing (March 28, 2017 to present)
- 44 of 107 completed survey thus far (41% response rate)

### Baseline Characteristics and Preliminary Stigma Scores

Characteristic	Number (%) (n=44)	Mean stigma score (15 to 75)
Gender		
Male	24 (54.5)	30.6
Female	20 (45.5)	28.6
Provider type		
Attending physician	21 (47.7)	27.6
Resident physician	21 (47.7)	31.8
Midlevel provider	2 (4.6)	n/a
Age		
25 to 29	15 (34)	31.2
30 to 39	11 (25)	31.2
40 to 49	8 (18.2)	27.5
50 to 59	9 (20.5)	26.7
60 and older	1 (2.3)	n/a
Do you or someone you know have a mental illness?		
Yes	36 (81.8)	29.5
No	7 (15.9)	32.0
Prefer not to answer	1 (2.3)	n/a
Are you or someone you know in treatment for a mental illness?		
Yes	30 (68.2)	29.3
No	13 (29.5)	31.5
Prefer not to answer	1 (2.3)	n/a
PHQ-9 Assessment Confidence		
Below average	4 (9.1)	34.3
Above average	24 (54.5)	29.4
Excellent	16 (36.4)	29.1
Frequency of diagnosing depression		
Rarely	2 (4.6)	37.5
Occasionally	14 (31.8)	32.4
Frequently	28 (63.6)	27.8
Frequency of treating depression		
Rarely	1 (2.3)	n/a
Occasionally	13 (29.5)	33.7
Frequently	30 (68.2)	27.8

## Stigma Questions

### Domain 1: Attitudes of Health Care Providers Towards People with Mental Illness

I am more comfortable helping a person who has a physical illness than I am helping a person who has depression.  
Despite my professional beliefs, I have negative reactions towards people who have depression.  
There is little I can do to help people with depression.  
More than half of people with depression don't try hard enough to get better.  
Healthcare providers do not need to be advocates for people with depression.  
I struggle to feel compassion for a person with depression.

### Domain 2: Disclosure/help-seeking

If I were under treatment for depression I would not disclose this to any of my colleagues.  
I would see myself as weak if I had depression and could not fix it myself.  
I would be reluctant to seek help if I had depression.  
If I had depression, I would tell my friends.

### Domain 3: Social Distance

If a colleague with whom I work told me they had depression that was managed, I would be just as willing to work with him/her.  
Employers should hire a person with managed depression if he/she is the best person for the job.  
I would still go to a physician if I knew that the physician had been treated for depression.  
I would not want a person with depression, even if it were appropriately managed, to work with children.  
I would not mind if a person with depression lived next door to me.

## Conclusion and Future Directions

- Range of stigma among primary care providers
- More survey responses needed for comparisons
- Correlation of stigma with PHQ-9 administration

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## References

1. Kessler, RC, Berglund P, Demler O, et al. The epidemiology of major depressive disorder: results from the National Comorbidity Survey Replication. *JAMA* 2003;289:3095-3105.
2. Substance Abuse and Mental Health Services Administration. Results from the 2013 National Survey on Drug Use and Health: Mental Health Findings. Rockville, MD: Department of Health and Human Services.
3. World Health Organization. The Global Burden of Disease: 2004 Update. Geneva, Switzerland: WHO Press, 2008.
4. Chizobam A, Bazargan M, Hindman D, et al. Depression symptomatology and diagnosis: discordance between patients and physicians in primary care settings. *BMC Family Practice* 2008;9:1.
5. Kassam A, Pappas A, Modgill G, Patten S. The development and psychometric properties of a new scale to measure mental illness related stigma by health care providers: the Opening Minds Scale for Health Care Providers (OMS-HC). *BMC Psychiatry* 2012;12:62.
6. Modgill G, Patten SB, Knaak S, et al. Opening minds stigma scale for health care providers (OMS-HC): examination of psychometric properties and responsiveness. *BMC Psychiatry* 2014;14:120.
7. Reavley NJ, Mackinnon AJ, Morgan AJ, Jorm AF. Stigmatising attitudes towards people with mental disorders: a comparison of Australian health professionals with the general community. *Aust N Z Psychiatry* 2014;48:433-41.
8. Lam TP, Lam KF, Lam EW, Ku YS. Attitudes of primary care physicians towards patients with mental illness in Hong Kong. *Asia Pac Psychiatry* 2013;5:19-28.
9. van Boekel LC, Brouwers EP, van Weeghel J, Garretsen HF. Comparing stigmatising attitudes towards people with substance use disorders between the general public, GPs, mental health and addiction specialists and clients. *Int J Soc Psychiatry* 2015;61:539-49.
10. Schulze B. Stigma and mental health professionals: a review of the evidence on an intricate relationship. *Int Rev Psychiatry* 2007;19:137-55.
11. Jorm AF, Oh E. Desire for social distance from people with mental disorders. *Aust N Z J Psychiatry* 2009;43:183-200.
12. Nordt C, Rössler W, Lauber C. Attitudes of mental health professionals toward people with schizophrenia and major depression. *Schizophr Bull* 2006;32:709-14.
13. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med*. Sep 2001;16:606-613.
14. Lowe B, Kroenke K, Herzog W, Grafe K. Measuring depression outcome with a brief self-report instrument: sensitivity to change of the Patient Health Questionnaire (PHQ-9). *Journal of affective disorders*. Jul 2004;81:61-66.
15. Lowe B, Unutzer J, Callahan CM, Perkins AJ, Kroenke K. Monitoring depression treatment outcomes with the patient health questionnaire-9. *Med Care*. Dec 2004;42:1194-1201.