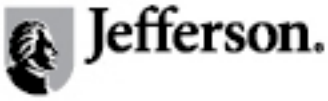

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Helping to Support CPC+ Initiative to Integrate Behavioral Health Within Primary Care: A Team-Based Approach to Improving Depression Management

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Helping to Support CPC+ Initiative to Integrate Behavioral Health Within Primary Care: A Team-Based Approach to Improving Depression Management

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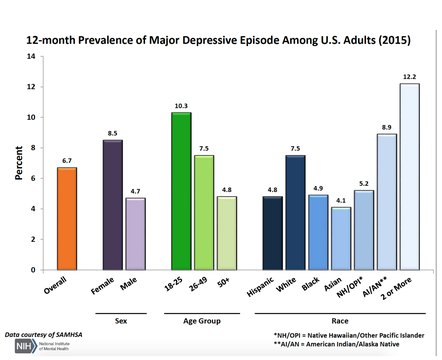
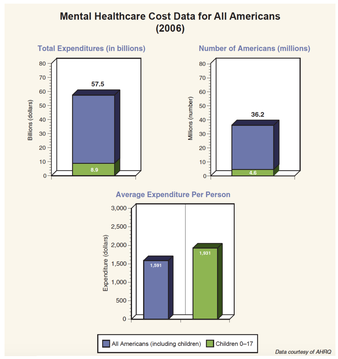
BACKGROUND

An estimated 10% of the US population currently suffers from depression. The World Health Association reports that up to 80% of those patients could be effectively treated with psychotherapy and antidepressant medications, but only 20% of depression sufferers are currently receiving treatment. In addition to higher rates of disability, divorce, and unemployment and lower educational attainment, depressed patients are statistically more likely to suffer from other chronic medical illnesses, including arthritis, asthma, cancer, cardiovascular disease, diabetes, hypertension, chronic respiratory disorders, and chronic pain, and the clinical courses of those illnesses are associated with greater morbidity and mortality. The economic burden of depression in the US—in the form of healthcare expenditure and decreased productivity—is estimated at $210 billion per year. The effects of depression, on the individual and the societal level, are far-reaching and destructive. We have to do better at managing this disease.





Successful treatment of depression, as measured by a reduction in a patient's PHQ-9 score from > 9 to < 5 at 12 months, is one of many quality metrics applied to primary care practices. It represents a central element of holistic patient care, may impact the likelihood of treating other medical problems with success, and is considered a growing piece of high-value care criteria for ambulatory practices. JIMA's documented rate of success was 29% at the outset of this intervention.

PHQ-9 depression questionnaire

Name:	Date:			
Over the last two weeks, how often have you been bothered by any of the following problems?	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3
Trouble falling or staying asleep, or sleeping too much	0	1	2	3
Feeling tired or having little energy	0	1	2	3
Poor appetite or overeating	0	1	2	3
Feeling bad about yourself, or that you are a failure, or that you have let yourself or your family down	0	1	2	3
Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
Moving or speaking so slowly that other people could have noticed? Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual.	0	1	2	3
Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3
Total ___ =		____	+ ____	+ ____
PHQ-9 score ≥10: Likely major depression				
Depression score ranges:				
5 to 9: mild				
10 to 14: moderate				
15 to 19: moderately severe				
≥20: severe				
If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all ____	Somewhat difficult ____	Very difficult ____	Extremely difficult ____

PHQ: Patient Health Questionnaire.

Developed by Drs. Robert L Spitzer, Janet BW Williams, Kurt Kroenke, and colleagues, with an educational grant from Pfizer, Inc. No permission required to reproduce, translate, display or distribute.

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AIM

The objective of this project is to increase the rate of documented successful treatment of depression for both new and established diagnoses of depression at Jefferson Internal Medicine Associates (JIMA) from 29% to 50% over 12 months.

INTERVENTION

To improve rates of adequate depression treatment, objectively assessed as a PHQ9 </= 9 at 12 months, we obtained practice-wide datasets on patients who received a PHQ2/PHQ9 during the time periods 6/1/16-7/29/16, 8/1/16-9/30/16, and 10/1/16-11/25/16. This data was collected from AllScripts, our former Electronic Medical Record(EMR). Datamining narrowed our target population to those with a PHQ9 >/= 9 who did not receive a follow-up medication or follow-up referral for a Therapist (DCPS) or Psychiatry. Chart biopsies of patients with and without a prior diagnosis of depression from each time period were performed. Chart biopsies overwhelmingly showed progress notes made no mention of an elevated PHQ9. Currently in JIMA, Medical Assistants screen for depression during the rooming process for annual wellness examinations and physicals. A PHQ2 is first administer, which reflexes to a PHQ9 when positive. After interviews with Medical Assistants(MAs) and Attending Physicians(PCPs), we theorized elevated PHQ9s were not being addressed by PCPs due to inadequate communication of the PHQ9 result from MA to PCP. To improve our rates of adequate treatment of depression, it is imperative a depressed patient's physician is aware of a positive screening. Our intervention started with a presentation of our MA-driven protocol during a practice-wide staff meeting at JIMA on 4/28/17, followed by separate provider-specific and MA-specific emails with detailed instructions. Our intervention was initiated on 5/1/17.

MEDICAL ASSISTANT-DRIVEN PROTOCOL

Targets patients with non-EAC(established acute care) appointments who:

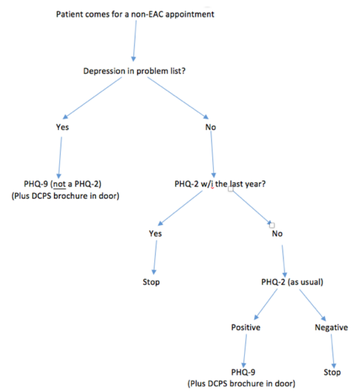
A) have a pre-existing diagnosis of depression

B) screen positive for depression by PHQ2

Consists of:

1)automatic administration of a PHQ9 to be filled out pre-appointment

2)placement of a Delaware County Professional Services(DCPS) brochure on the back of the door to cue the provider to address depression that visit.



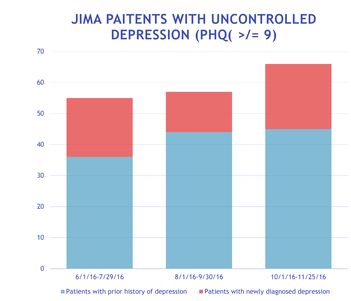
IMPACT ON PROVIDER WORKFLOW:

DCPS brochures will cue PCP to their patients' depression and *could* provide a possible intervention for patients who need further treatment.

Completed PHQ9 forms will be delivered to the MAs' designated [pink] folders for entry into EPIC.

RESULTS

Given Jefferson Health's system-wide EMR transition to Epic, we were unable to glean data from the time period 11/26/16-present. Once datamining for depression is functional within Epic, results will be placed in a run-chart (see graph below) for analysis. Data from this graphic represents patients from JIMA with a PHQ9 >/= 9 for whom no pharmacologic or therapy-based interventions were undertaken during their visit. We expect our intervention will reduce the number of depressed patients who leave JIMA without having their condition addressed in some manner. Our hope is this intervention will have a downstream effect of improving overall rates of successful depression treatment.



DISCUSSION

In order to assess the efficacy of our intervention and develop an ongoing plan for the improvement of depression management at JIMA, we will use a data mining approach in EPIC (much like that utilized to obtain our initial data) to re-evaluate the rate of PHQ-9 documentation. An improvement in the rate and consistency of documentation itself would constitute a significant step forward as it would, in turn, allow us to more clearly assess the objective efficacy of depression management at JIMA. This, then, would enable us to begin the process of identifying further interventions which may focus on the management of depression itself. Should the results reveal no improvement in the documentation and assessment of depression across the practice, we will critically assess our process, barriers which were encountered, and make corresponding modifications to the intervention of our subsequent PDSA cycle.

REFERENCES

Depression. (February 2017). Retrieved from http://www.who.int/mediacentre/factsheets/fs369/en/

Greenberg, Paul. (2015, February 25). The Growing Economic Burden of Depression in the US. Retrieved from https://blogs.scientificamerican.com/mind-guest-blog/the-growing-economic-burden-of-depression-in-the-u-s/

Kessler, R.C. (2013, March 1). The Costs of Depression. Psychiatric Clinics of North America. 35(1): 1-14. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3292769/

Major Depression Among Adults. Accessed May 1, 2017. Retrieved from https://www.nimh.nih.gov/health/statistics/prevalence/major-depression-among-adults.shtml

Mental Healthcare Cost Data for All Americans (2006). Accessed May 1, 2017. Retrieved from https://www.nimh.nih.gov/health/statistics/cost/mental-healthcare-cost-data-for-all-americans-2006.shtml

PHQ-9 depression questionnaire. Accessed May 1, 2017. Retrieved from https://www.uptodate.com/contents/image?topicKey=PC%2F83887&rank=1~53&imageKey=PC%2F59307&source=machineLearning&sectionRank=1&sp=0&search=phq%209