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#### Clinical Depression Pathway Implementation: Outcomes From Pilot Practices

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# Clinical Depression Pathway Implementation - A Single Institution's Experience at Three Pilot Practices

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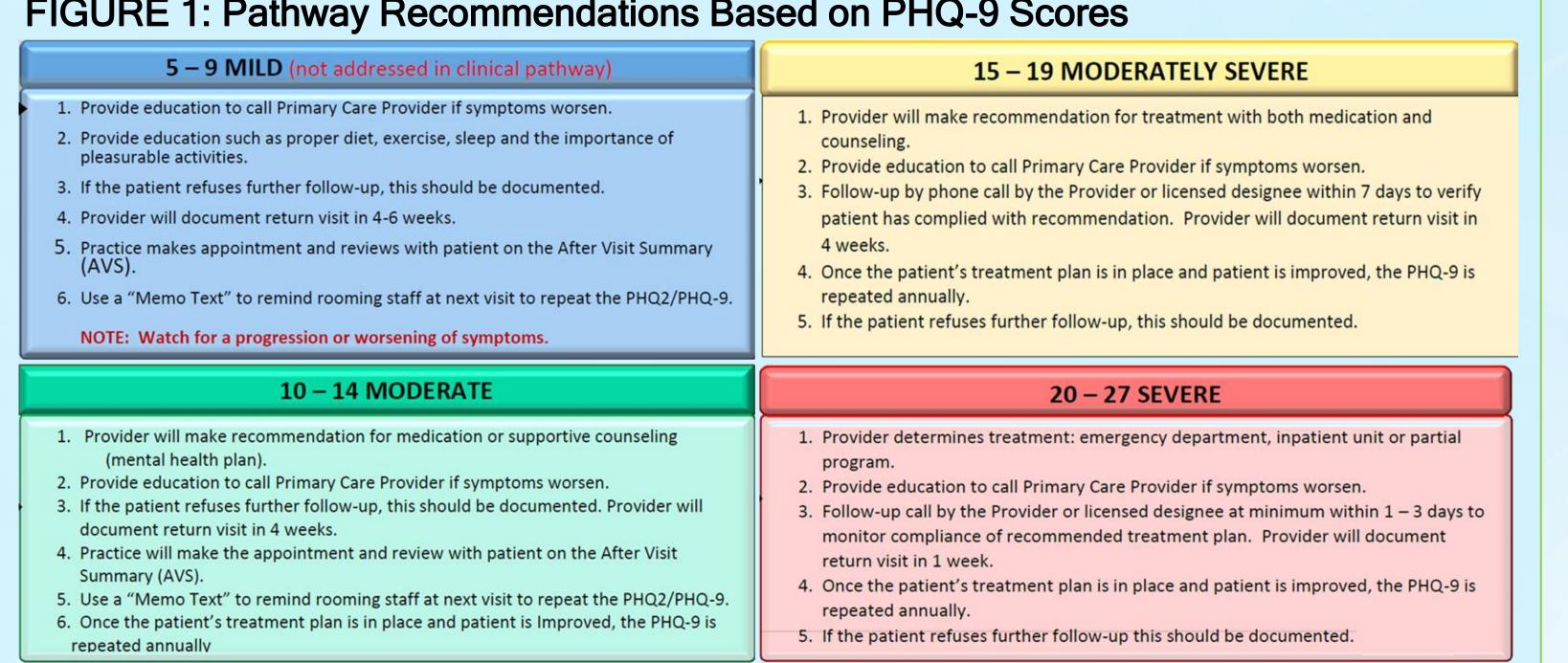
# Background

- In 2017, an estimated 17.3 million adults (7.1%) in the United States had at least one major depressive episode.<sup>1</sup>
- Although there are known, effective treatments for depression, fewer than half of those affected receive such treatments.1
- PHQ-9 (Patient Health Questionnaire) is a selfadministered screening tool for depression in which patients score from 0 (not at all) to 3 (nearly every day) on 9 DSM-IV criteria.<sup>2</sup>
- The PHQ-9 survey has also proven reliable in measuring the severity of depression and response to antidepressive treatment.3
- Only 72% of patients within the Lehigh Valley Physician Group (LVPG) were screened for depression in 2018.

## Methods

- LVPG implemented a depression pathway using the PHQ-9 questionnaire at three pilot sites to improve depression screening, symptom management, remission documentation, and patient quality of life.
- The pathway included guidelines for follow up, patient education, and medical management (Figure 1).
- Pathway adherence and patient response was measured via a retrospective chart review six months after the pathway had been implemented.

FIGURE 1: Pathway Recommendations Based on PHQ-9 Scores



### Results

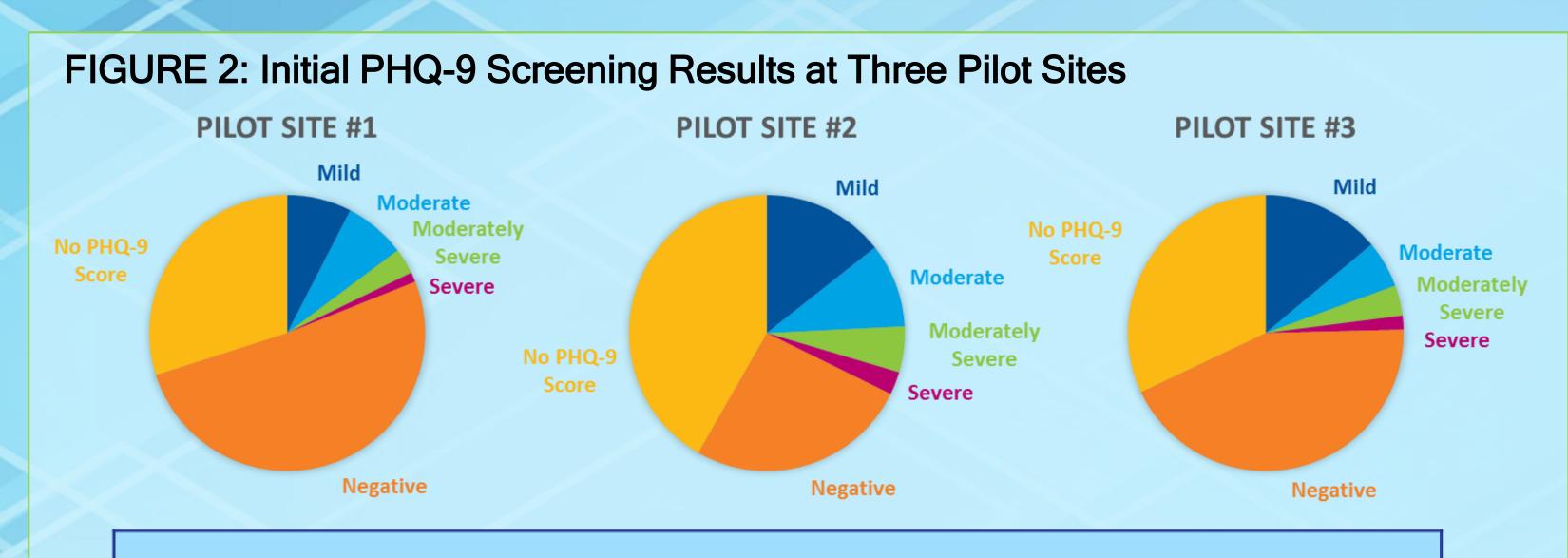
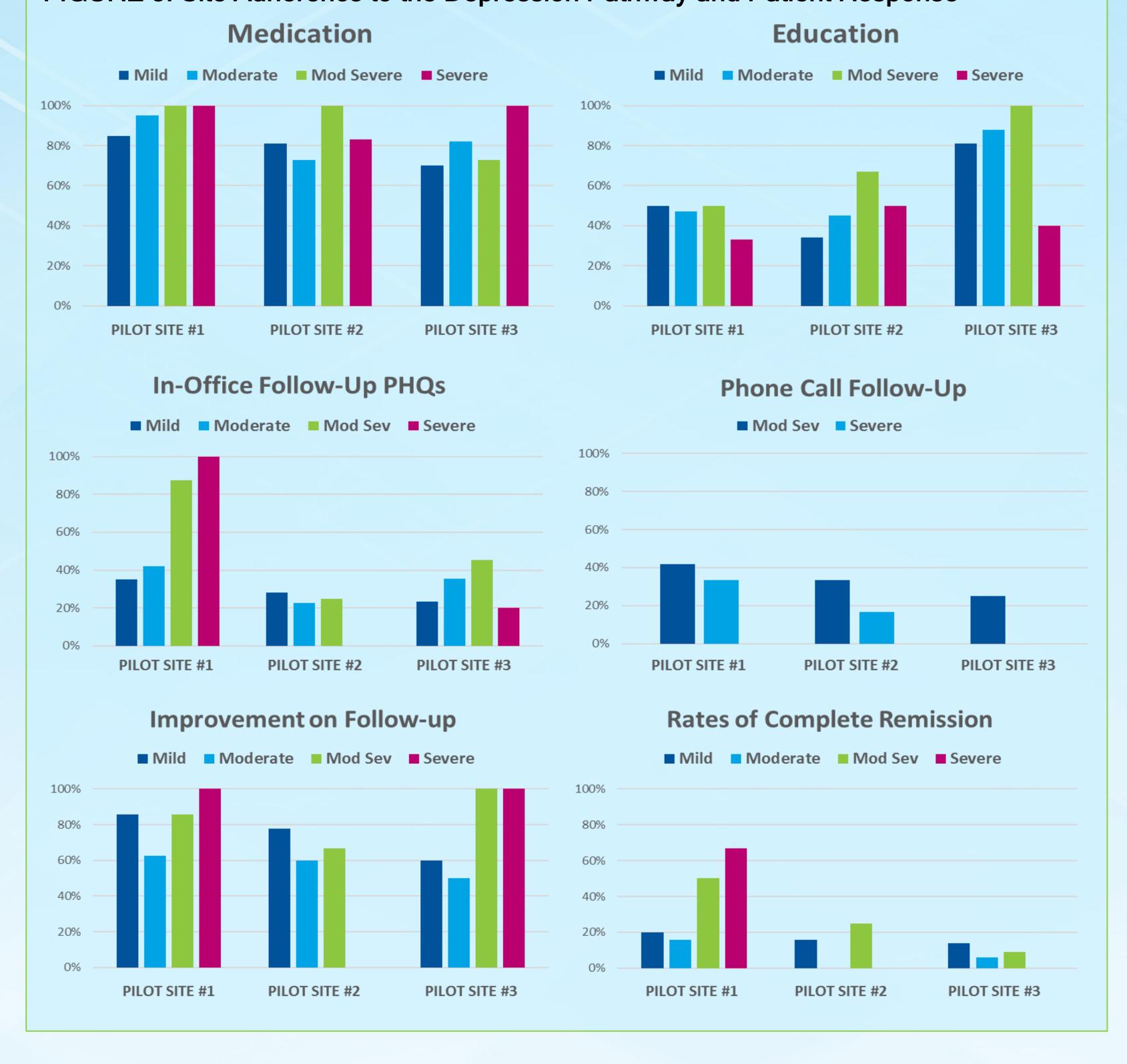


TABLE 1: Initial PHQ-9 Screening Results at Three Pilot Sites				
Severity of Depression	PHQ-9 Score	PILOT SITE #1	PILOT SITE #2	PILOT SITE #3
Mild	5-9	8% (20)	14% (32)	14% (43)
Moderate	10-14	7% (19)	10% (22)	6% (17)
Moderately Severe	15-20	3% (8)	5% (12)	4% (11)
Severe	20+	1% (3)	3% (6)	2% (5)
Negative	0	51% (135)	26% (58)	43% (134)
No PHQ Score	-	30% (79)	42% (93)	32% (99)
Total		264	223	309

FIGURE 3: Site Adherence to the Depression Pathway and Patient Response



### Conclusion

- 525 individuals were screened during the 6-month pilot study; 38% were diagnosed with depression (PHQ Score ≥5). Of those, 82% were prescribed antidepressant medications and 60% received education.
- Follow up via phone for moderately-severe to severe patients occurred in 28% of encounters, while in-office follow up was completed within 6 months for 32% of depressed patients.
- 73% of patients who followed up showed improvement in depression with a 15% rate of complete remission.
- One site's decreased adherence (58% screened, 24% inoffice follow up) resulted in less response in more severe depression.

### **Future Directions**

- Study results were presented at the LVHN Depression Pathway Rapid Improvement Event in October, 2018 to identify barriers in care and create solutions.
- Short term goals: Create an effective practice workflow to improve depression screening rates. Create web links to treatment algorithms, medication guides, and crisis management steps. Add a weblink on Epic to outpatient resource SharePoint site.
- Long term goals: Connect PHQ-9 scores to the Epic problem list, and add online training for staff. Create an atrisk depression registry for better identification and follow up of patients that no-show or cancel appointments.

#### References:

- 1. "Major Depression." National Institute of Mental Health, U.S. Department of Health and Human Services, Feb. 2019, www.nimh.nih.gov/health/statistics/major-depression.shtml.
- 2. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001 Sep;16(9):606-13. doi: 10.1046/j.1525-1497.2001.016009606.x. PubMed PMID: 11556941; PubMed Central PMCID: PMC1495268.
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