Redesigning Clinic Operations to Improve Depression Care in Public Primary Care Settings

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Introduction

Mental health is now recognized as a fundamental aspect of overall health, with increasing focus being placed on improving the quality of care in patients with depression and other psychiatric illnesses. Highly effective treatments for depression exist but only 30-50% of depressed patients receive treatment. New interventions have demonstrated improved outcomes in identifying and treating depressed individuals. These interventions, however, require significant resources to implement and are not feasible within community primary care clinics which primarily serve minority populations. We propose a new depression site intervention which focuses on easy to implement strategies in hopes of finding an effective way to improve the quality of psychiatric care within community primary care clinics and minority populations.

Methods

Subjects:

Patients within the Mid-Valley Community Clinic (MVCC) adult and family departments. All patients who tested positive on the PHQ-2 depression screen were included in the study. The family medicine department was designated as the intervention site, the adult clinic was designated as the control site (total n = 229).

Site Differences:

Treatment site received:

- Staff education (post counseling training, patient self management instructions)
- Electronic registry for tracking depressed patients

Control site:

- Provided standard of care

Data Collection:

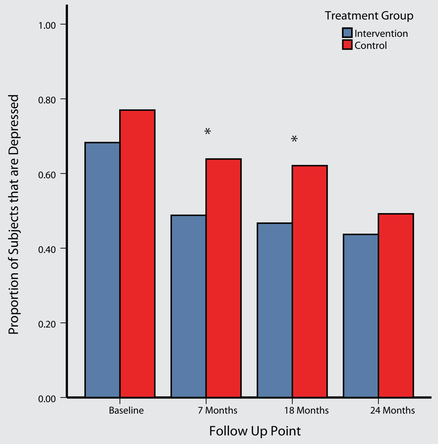
- Surveys were administered to both patient groups at baseline, 7 months, 18 months, and 24 months. Surveys included the PHQ-9, a more robust measure of depressive symptoms.

Analysis:

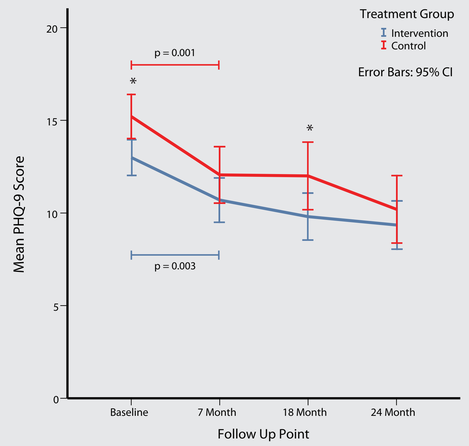
- Treatment effectiveness: ANOVA, χ^2 of incidence of depression at all time points, pairwise T-test for all time points across and within treatment groups
- Quality of care: χ^2 test on proportion of patients reporting quality of care by treatment group
- Race Effects: T-test comparing ΔPHQ-9 (24 months - Baseline) scores for each treatment group, by race

Results

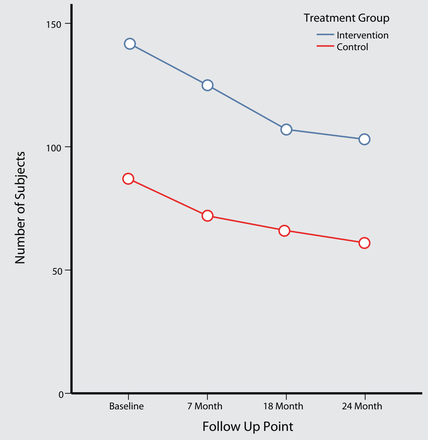
Intervention Effectiveness



Comparison of the prevalence of depression between control and treatment sites



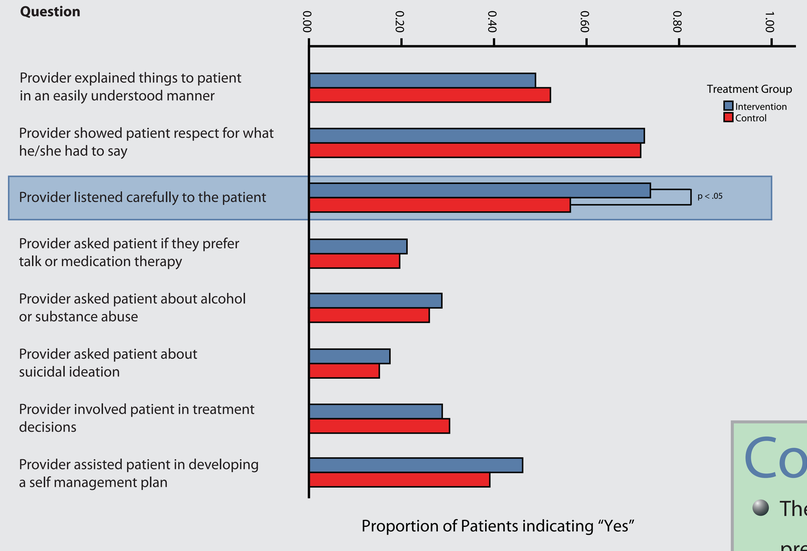
Mean PHQ-9 score over time for control and treatment sites



Number of subjects within each site for each follow up point

* Significant results, p < .05

Impact of Intervention on Quality of Care



Summary of Results

Intervention Effectiveness:

- In evaluating prevalence of depression, sites do not differ at baseline (p = .16), at 7 and 18 months the groups are different (p = .04 and .05). At 24 months no difference is observed (p = .50)
- However, evaluating the PHQ-9 scores in an ANOVA indicates only significant main effects for treatment site (p = .001) and time (p < .001), but not for the interaction of treatment x time (p = .72)
- Comparing mean PHQ-9 scores at baseline revealed significant differences (p < .05), as well as at 18 months (p < .05). Both sites improved their PHQ-9 score significantly from baseline by 7 months.
- Subject attrition was not impacted by intervention.

Impact on Quality of Care:

- Patients only report that a physicians ability to listen was improved at the intervention site.

Race Specific Effects:

- No significant effects were found.

Limitations

- Only patient perception of quality of care was evaluated. We would like to conduct a chart review and determine if the intervention had any impact on provider quality of care.
- We would like to evaluate the impact of the intervention on patient follow up visits. Results may be explained due to more frequent interaction with medical staff.
- A multivariate analysis is required to account for any possible baseline differences in site.

Conclusions

- The intervention site may have been effective at lowering the incidence of depression *faster* than the control.
- Intervention may have improved physician attentiveness.
- Both sites benefited significantly from treatment.
- Race had no effect on the effectiveness of the intervention.

References

1. Katon WJ, Von Korff M, Lin EH, et al. The Pathways Study: a randomized trial of collaborative care in patients with diabetes and depression. Arch Gen Psychiatry 2004;61:1042-9.
2. Dobscha SK, Corson K, Hickam DH, Perrin NA, Kraemer DF, Gerrity MS. Depression decision support in primary care: a cluster randomized trial. Ann Intern Med 2006;145:477-87.