PPO 18-111: Pilot Study of Technology Assisted Depression Treatment Adherence

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Background:
This pilot study aims to improve depression medication adherence and depression outcomes in Veterans initiating antidepressant treatment or starting a new antidepressant. Challenges to the initiation of antidepressant medication include patient self-discontinuation, side effect burden, and difficulty objectively assessing the impact of the medication between visits. The proposed intervention is designed specifically to address these challenges by combining support for patient activation and monitoring, patient and provider feedback, and My HealtheVet training to improve Veteran communication with providers. This intervention will be referred to as the AIMS intervention.

Specific Aims and Methods:
Aim 1: Conduct a two-arm pilot randomized controlled trial of the AIMS intervention to assess its acceptability, feasibility, and effectiveness in improving antidepressant adherence in 50 Veterans starting or changing antidepressant therapy. **Aim 2**: Conduct a qualitative evaluation of patient and provider experience of the AIMS intervention as well as barriers to antidepressant treatment and adherence. **Aim 3**: Refine and finalize the AIMS intervention protocol to inform the design of a larger test of AIMS effectiveness in improving depression outcomes in Veterans. Veterans randomized to the AIMS intervention will be engaged in the Annie text messaging protocol to assess their mood, functioning, side effect burden, medication adherence, and perceived effectiveness of the antidepressant. In addition, visual representations of Annie responses between medical visits will be provided to both patients and providers to inform the medical visit. All participants will be assessed at enrollment, 6 weeks, and 12 weeks post enrollment. The main study hypothesis is that Veterans receiving the AIMS intervention will have better medication adherence and greater reduction in depressive symptoms as compared with Veterans in the attention control condition.

Significance and Innovation:
Both patients and providers need effective tools to address reasons for patient's self-discontinuation and taking their antidepressant medications differently than as prescribed. Moreover, more than one trial of an antidepressant may be required to achieve a therapeutic response. Information to inform the effectiveness of an antidepressant and timely communication is critical between patients and their providers to inform antidepressant medication decisions. The AIMS intervention is significant as it is designed to address these challenges and is also relevant to VA' priority goal of using information systems to enhance access and timeliness of care. Moreover, this combines multiple strategies to enhance patient engagement and care in the context of a specific clinical use case.

Contribution to VA Care:
The prevalence and burden of depressive symptoms among Veterans is significant. While there are number of effective pharmacologic and behavioral treatments for depression, effective treatment for depression remains elusive for many Veterans. If effective, this study will contribute to understanding of how to help engage patients in the management of medications for their depression based on self-report information tracked during the initiation of the medication and by promoting communication with their care team about any issues experienced so they can be addressed in a timely manner.

Next Steps:
If the AIMS intervention proves effective in promoting adherence and improved depression outcomes, data from this pilot study will inform the design of a larger randomized controlled effectiveness trial. Qualitative data from the study will also provide insight into antidepressant adherence challenges and the use of patient reported outcomes to inform treatment decisions.