VISN 5 MIRECC Research Abstract

Computer-Assisted Cognitive Remediation for Schizophrenia
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Schizophrenia leads to a striking array of negative outcomes, including profound deficits in the ability to fulfill desired and expected community roles. Chronic under employment and unemployment are among the most serious of these consequences. VA treats over 100,000 veterans with schizophrenia spectrum disorders, the majority of whom are unable to work competitively and do not participate in VA vocational rehabilitation programs despite the fact that VA is committed to enhancing the ability of these veterans to work. Within VA, a major vehicle for helping veterans to become employed is the Compensated Work Therapy (CWT) program, yet in FY2001 only 800 of the roughly 14000 veterans treated in CWT had SMI diagnoses, and only a subset of those 800 had schizophrenia. A number of factors contribute to low participation in vocational rehabilitation and poor work outcomes, but recent data suggest that one of the most important is cognitive impairment. People with schizophrenia have significant deficits in multiple areas of neurocognition, including secondary and working memory, attention, and executive functioning. These impairments have been shown to play a major role in functional outcome, including the ability to benefit from rehabilitation and to work. As a result, there has been increasing interest in the potential for improving neurocognitive functioning via cognitive rehabilitation. While several programs have yielded promising data, currently there is no empirically validated approach.

The purpose of this project is to evaluate the efficacy of an innovative, computer driven cognitive rehabilitation program we have developed: Computer Assisted Cognitive Remediation (CACR). Veterans with schizophrenia who are unemployed and not participating in vocational rehabilitation will be recruited and randomly assigned to one of two conditions: a) 24 biweekly sessions of CACR; or b) 24 biweekly sessions of a manualized computer control condition (RC). The efficacy of CACR will be assessed on a range of outcome domains, including neuropsychological tests, measures of every day and social problem solving, self-reported cognitive functioning and self-efficacy, and work readiness. All subjects will be referred to CWT at the conclusion of treatment and we will assess how many receive work assignments, and work performance (over 3-months) of those who begin work. We hypothesize that CACR will be more effective than the control treatment in each domain.

The results of this project could have important implications for treatment of veterans with schizophrenia. CACR is a manualized program that can be administered by BA level staff. If demonstrated to be efficacious, it could be disseminated throughout VA and have a beneficial impact on vocational outcomes and the quality of life of veterans with schizophrenia.