

The Challenges of Providing Health Care for Individuals with Multiple Chronic Conditions

By Christina Miles Krause, PhD
Director of Research
[Benefit Performance Associates, LLC](#)



January, 2016

Individuals from rural areas and urban areas, who had four or more chronic conditions across four or more organ systems, were invited to participate in an effective disease management intervention program. During the assessment process, which was performed by a multidisciplinary healthcare team (physician, nurse and psychosocial professional), the individuals were examined for chronic conditions that would be part of their unique care plan that would enable them to deal with their multiple chronic conditions.

The number of individuals who participated in this study was 128; the entire sample of these individuals lived in the Midwest region. The question that was addressed in this study was “Are there differences in the characteristics and conditions between individuals in rural and urban locations?”

The mean age of the participants in the urban areas was 51 years, while the mean age for participants in the rural areas was 58 years. The total number of prior hospitalizations (before joining the intervention program) reported by those in the urban areas was 3.5 and the prior hospitalizations reported by individuals in the rural areas was 5.5. During the assessment process the number of chronic conditions was evaluated by the multidisciplinary team. The mean number of chronic conditions found in the individuals from urban areas was 19.2 and the mean number of conditions found in the individuals from rural areas was 17.9.

The chart identifies the frequency of the top 10 multiple chronic conditions of the participants; these conditions frequently place individuals at a higher risk of co-morbidities that often result in high healthcare utilization and disability.

The results indicate that the rural participants have higher rates of depression, obesity, nervous system and substance abuse conditions, as compared to urban participants.

However, urban participants have higher rates of anxiety, hyperlipidemia, allergies, sleep, and osteoporosis issues, as compared to rural participants. The number of chronic conditions that these individuals are dealing with can overwhelm primary care physicians, whether in a rural or urban setting.

The solution is to have an effective chronic disease management program that can address each individual’s multiple psychological and physical issues.

