



## ORIGINAL RESEARCH

# Serving Individuals with Comorbidities in Rural Areas

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## BACKGROUND

Individuals who suffer from multiple chronic conditions (MCCs) have health care issues that are complex, making these individuals vulnerable to inadequate care (Cabrera et al., 2010); furthermore, these individuals account for approximately 80% of health care expenditures (Vogeli, et al., 2007). The issue of how to effectively provide care for individuals with MCC is one of the imperative issues in our health care system today (Koh & Parekh, 2013; Caberera et al., 2010). Individuals with mental disorders and behavioral issues often have medical conditions, such as diabetes, pulmonary diseases, elevated blood pressure and cardiovascular disease (Park, Svendsen, Singer & Foti, 2007; Untzer, Harbin, Schoenbaum, & Druss, 2013). Researchers have found that collaborative care is more cost-effective than usual care, and is associated with cost savings (Unutzer, Katon, Fan, et al., (2008). Therefore, a pertinent question lingers: “Is there an effective health care intervention that provides comprehensive collaborative care that supports, and improves, both the physical and psychological health of individuals with MCCs?”

**Purpose:** The goal of this research project was to determine if an intervention program developed for individuals with MCC (n = 660) is effective in improving both physical health and psychological wellbeing.

## STUDY

**Study Design:** The design of this study was a 2 (Time: Start of program, One year later) x 7 (Measures: Self-efficacy, Personal Control, Physical Health, Psychological Wellbeing, Social Functioning, Pain Level, and Evaluation of Services) within-participants design.

**Methods:** Individuals from predominantly rural areas, who had four or more chronic conditions across four or more organ systems, were invited to participate in this intervention. All participants in this program developed unique health-related goals, in collaboration with their Multidisciplinary Team (Medical, Psychosocial, Nurse advocates). As individuals participated in the intervention, the Team provided education and encouragement, as well as active treatment adherence, as the individuals completed the goals of their unique health plan. Each participant completed a series of evaluation questionnaires across time during the intervention process.

**Results:** All results (t-tests and ANOVAs) are significant at  $p < .05$  level. After participants were in the program for approximately one year, their evaluation reports were examined, as compared to their evaluation reports when they joined the program. The results indicated: an increase in participants' physical functioning; a decrease in their level of emotional distress; and an increase in their confidence in being able to decrease their use of emergency care; an increase in their level of confidence in being able to manage their health conditions; and an improvement in social functioning. Additionally, participants reported a decrease in the impact that their pain level has upon their lifestyle, reported an increase in self-efficacy, and reported that their services while in

the intervention program were more effective than previous healthcare services.

## CONCLUSIONS

During this intervention process, a Multidisciplinary Team of professionals in collaboration with each individual, created a unique health plan; the professionals encouraged and educated the individuals with MCC and the intervention process was beneficial to participants' physical health and psychological well-being.

## REFERENCES

Cabrera, A., Jadad, A.R., Isac, B., Gosalvez, D., Lopez, A., & Contreras, A.J. (Main contributors), 2010. **Dealing with the challenges of polypathology together: What's next?** In Kadad, A. R., Cabrera, A., Martos, F., Smith, R., Lyons, R.F. *When people live with multiple chronic diseases: A collaborative approach to an emerging global challenge*. Available at <http://www.opimec.org/equipos/when-people-live-with-multiple-chronic-diseases/>

Koh, H. & Parekh, A., (2013). **Supporting People with Multiple Chronic Conditions: A Health Priority**. Available at: [www.huffingtonpost.com](http://www.huffingtonpost.com).

Parks, J., Svendsen D., Singer, P. & Foti, M.E. (2006). **Morbidity and Mortality in People with Serious Mental Illness**. National Association of State Mental Health Program Directors. [www.nasmhpd.org](http://www.nasmhpd.org).

Unutzer, J., Harbin, H., Schoenbaum, M., & Druss, B. (2013). **The Collaborative Care Model: An Approach for Integration Physical and Mental Health Care in Medicaid Health Homes, Centers for Medicare & Medicaid Services**. <http://www.medicaid.gov>.

Unutzer, J., Katon, W.J., Fan, M.Y. et al. (2008). **Long-term Cost Effects of Collaborative Care for Late-life Depression**, *The American Journal of Managed Care*, 14(2), 95-100.

Vogeli, C., Shields, A.E., Lee, T.A., Gibson, T.B., Marder, W.D., Weiss, K.B., & Blumenthal, D. (2007). **Multiple chronic conditions: Prevalence, health consequences, and implications for quality, care management, and costs**. *Journal of General Internal Medicine*, 22(3), 391-395.