



Adapted Collaborative Care for Geriatric Depression Severity Reduction and Life Quality Improvement

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Background and Purpose

- Depression affects approximately 10% of the older adult primary care population, is often accompanied by functional impairment, and may be effectively managed through collaborative care (CC) ^{8,9,10}.
- CC encompasses 5 key components:
 - Regular individual provider-participant encounters
 - Administration of validated instruments (post-education¹)
 - Interprofessional provider collaboration
 - Assessment of participant goals
 - Cognitive-Behavioral Activation Techniques
 - Problem Solving Therapy (PST) influences
 - Case Management Service (CM) influences
- PubMed review confirmed CC efficacy in reducing depression severity and improving life quality (QOL) among depressed older adults.
- Purpose of this non-funded clinical quality improvement initiative (implemented 2016-2017) was to reduce participant depression severity and improve QOL through use of an adapted CC model at the project setting (one location of a Program of All-Inclusive Care for the Elderly provider in the Eastern United States).

Instruments

- Montreal Cognitive Assessment (MoCA)
 - Validated to assess functional cognitive status⁶
 - Administered in-person (per existing facility standards of care)
 - Evidence-based cutoff scores utilized
- Patient Health Questionnaire 9 item (PHQ-9)
 - Validated depression severity assessment tool^{2, 3, 5}
 - Validated for administration over the phone⁷
 - 9 questions summated on 0-27 scale (0 = lowest symptom severity, 27 = highest symptom severity)
- Quality of Life Assessment (QOLA)
 - One-question item inspired by the Linear Analogue Scale Assessment (LASA)
 - LASA validated assess quality of life (QOL)⁴
 - Measured on 0-10 scale (0 = lowest QOL, 10 = highest QOL)

Preparation and Implementation

- One group, pre-post comparison, quasi-experimental design
- **Phase 0:** providers educated about older adult depression and implementation of collaborative care by a licensed psychiatrist
- **Phase 1:** individual in-person screening of potential, consenting participants
- **Phase 2:** data collection during intervention implementation and evaluation
 - Social worker or behavioral health specialist initiated encounters every other week.
 - Providers followed one participant group throughout the intervention.
 - Encounters could be refused (not discontinued).
- Data collected with each participant CC encounter included:
 - Date and duration of encounter
 - Individual goal assessment and evaluation
 - PHQ-9 and QOLA scores
 - Adverse responses to any current therapies
 - Response to PST-CM (and other notes)

Sample and Demographics

- Inclusion criteria:
 - Verbal consent to participate, active program participant
 - MoCA score of at least 20/30 or 15/22 (blind)
- Exclusion criteria:
 - Participants with severe debilitations and impairments from psychiatric conditions other than depression
 - MoCA score below minimum requirements
- 37 eligible for screening, 34 consented to participate, 21 met inclusion criteria (2 lost to natural attrition)

Characteristic	Sample Representation (n = 19)
Male (biological)	5
Female (biological)	14
Caucasian	13
African-American	6
Age in years (mean / range)	73 / 56 - 88

Results

Outcome	Mean (Pre)	Mean (Post)	Analysis*
PHQ-9 (mean / range)	14 (5 – 23)	8.3 (1 – 20)	$p < 0.001$ $\sigma = 6.202$ 95% CI (3.168 – 8.096)
QOLA (mean / range)	5.7 (0 – 10)	6.5 (0 – 10)	$p = 0.324$ $\sigma = 2.43$ 95% CI (-1.9 – 0.675)

* p significance set at <0.05 ; σ = standard deviation

Measure	Range	Average
Duration (in minutes)**	2 - 35	15

**rounded to the nearest whole minute

Project Discussion

- Reduction in depression severity was statistically and clinically significant.
- Improvement in QOL was clinically significant.
- Providers reported overall satisfaction and minimal increased work burden with collaborative care implementation.
- Project limitations
 - Convenience sampling employed
 - Small sample size used
 - No randomization nor independent control group
 - Numerous potential confounders
- Areas for future consideration
 - CC for younger depressed adult populations
 - Optimal frequency of CC encounters
 - Longer-term CC implementation and follow-up

DNP Considerations

- Determine available project resources and facility goals prior to formulating plans or interventions.
- Consider broader participant population and generalizability of potential findings.
- Align project with program of training and with overarching professional intentions.
- Catalyze clinical advancement with known, proven methodologies.

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