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-education[1])
  - 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 status[6]
  - 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 phone[7]
  - 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.

References

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