

INTRODUCTION

- There are approximately 49 million Americans aged 65 and older, with projections estimating that the population of older adults will grow to 98 million in 2060.¹
- Chronic diseases are a leading cause of disability and mortality in the US adult population.²
- In all US adults, 6 in 10 have a chronic disease and 4 in 10 adults have 2 or more chronic diseases.²
- Among US older adults, 80% have at least one chronic disease and 77% have at least two chronic diseases.³
- Diabetes affect 23% of US older adults and 1 in 4 US older adults experience some mental disorder, including depression and dementia.³
- Chronic diseases account for 75% of the US national spending on health care.³
- Previous research has suggested that behavioral interventions may play a role in effective treatment of chronic diseases.⁴⁻⁵

OBJECTIVE

- To describe our experience in using utility measures in three randomized trials of behavioral interventions (BI) in older adults; the three diseases were depression, diabetes, and dementia

METHODS

- The diabetes trial was designed to test efficacy of behavioral activation (BA), which incorporated active participation and goal-setting over 6 months to improve eye exam adherence among older diabetic African Americans, or supportive therapy (ST) attention-control.
- In the depression trial, patients were randomized to Beat the Blues (BTB), which incorporated 10 social worker sessions over 4 months for depression education and stress management, or usual care control.
- In the dementia trial, patients were randomized to the Tailored Activity Program (TAP), which included up to 8 occupational therapy sessions over 6 months to improve caregivers' management of dementia behaviors, or health education control.
- Utility was measured in the studies as follows:
 - Diabetes study: National Eye Institute Visual Function Questionnaire (NEI-VFQ)
 - Depression study: EuroQoL 5-Dimension, 3-Level (EQ-5D-3L) and Health Utilities Instrument Mark 3 (HUI-3)
 - Dementia study: EuroQoL 5-Dimension, 5-Level (EQ-5D-5L) and Health Utilities Instrument Mark 2 (HUI-2)
- Change in utility was calculated for each study.

RESULTS

Table 1. Baseline Age and Gender

Characteristic	Intervention	Control
Diabetes Study		
n	103	103
Age (mean (SD))	73 (6.8)	73 (6.6)
Female (n (%))	68 (66.0%)	66 (64.1%)
Depression Study		
n	68	61
Age (mean (SD))	68.0 (8.4)	69.5 (8.4)
Female (n (%))	56 (82.4%)	46 (75.4%)
Dementia Study		
n	93	83
Age (mean (SD))	65.5 (12.5)	66.3 (11.8)
Female (n (%))	55 (59.1%)	52 (62.7%)

RESULTS (continued)

Table 2. Diabetes Study Utility Results

Outcome	Baseline (Mean)	6 Months (Mean)	Mean Difference
Behavioral Activation			
NEI-VFQ	0.669	0.671	0.0002
Supportive Therapy			
NEI-VFQ	0.658	0.656	-0.0002

Table 3. Depression Study Utility Results

Outcome	Baseline (Mean)	4 Months (Mean)	Mean Difference
Beat the Blues			
EQ-5D-3L	0.566	0.665	0.099
HUI-3	0.335	0.479	0.144
Usual Care Control			
EQ-5D-3L	0.582	0.635	0.053
HUI-3	0.432	0.496	0.064

Table 4. Dementia Study Utility Results

Outcome	Baseline (Mean)	3 Months (Mean)	6 Months (Mean)	Mean Difference
Tailored Activity Program				
EQ-5D-5L	0.7719	0.7714	0.7513	0.0206
HUI-2	0.4606	0.4719	0.4312	0.0294
Health Educator Control				
EQ-5D-5L	0.7831	0.7395	0.7619	0.0212
HUI-2	0.4655	0.4591	0.4462	0.0193

- In the diabetes study (Table 2), NEI-VFQ utility increased 0.002 (from 0.669 to 0.671) in BA and decreased 0.002 (from 0.658 to 0.656) in ST.
- In the depression study (Table 3), EQ-5D-3L utility increased by 0.099 (from 0.566 to 0.665) for BTB and by 0.053 (from 0.582 to 0.635) for control; HUI-3 increased 0.144 (from 0.335 to 0.479) for BTB and 0.74 (from 0.432 to 0.496) for control.
- In the dementia study (Table 4), TAP decreased in EQ-5D-5L utility by 0.0206 (from 0.7719 to 0.7513), while control decreased by 0.0212 (from 0.7831 to 0.7619); HUI-2 decreased by 0.0294 (from 0.4606 to 0.4317) for TAP and by 0.01925 (from 0.4655 to 0.4462) for control.

LIMITATIONS

- Our results represent observations based on experience with just three trials.
- There are differences between the BI and populations in these studies which preclude formal assessment of utility measures.

CONCLUSION

- Utility measures were modestly impacted in these trials.
- BI researchers of chronic diseases in older adults should carefully weigh the benefits of including utility instruments versus other factors such as the potential for limited impact and time and cost burdens of the utility measures.

REFERENCES

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