

# Exploring the Association between Shared Decision Making and Health Care Resource Utilization Among US Adults with Multimorbidity

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## Introduction

- Multimorbidity, defined as the co-occurrence of at least two or more chronic conditions in the same individual<sup>1</sup>, is a significant public health issue.
- Patients with multiple chronic conditions experience functional limitations and increased healthcare utilization<sup>2</sup>.
- The implementation of shared-decision making (SDM) has the potential benefit of improving patient satisfaction and health outcomes through the more active involvement of patients<sup>3</sup>.

## Objective

- To assess the association of SDM on healthcare resource utilization among United States adults with multimorbidity.

## Methods

- Retrospective cross-sectional study using 2020 Medical Expenditures Panel Survey (MEPS) data.
- Eligibility: aged ≥18 years with multimorbidity.
- An algorithm utilizing three SDM-related MEPS items was used to determine SDM.
- Chi-square tests compared differences across SDM groups.
- Associations between SDM and healthcare resource utilization were analyzed using multivariable logistic regression.
- Analyses accounted for the MEPS complex survey design and were weighted to produce nationally representative estimates.

**Table 1. Participant Characteristics and Shared Decision Making among United States Adults with Multimorbidity**

Variables	Shared-Decision Making		
	Optimal	Not optimal	p-value
Age			
18-64	53.2 (50.3, 56.1)	47.6 (43.5, 51.6)	0.01
≥65	46.8 (43.9 ,49.7)	52.4 (48.4, 56.5)	
Sex			
Male	46.3 (44.3, 48.3)	45.8 (41.9, 49.6)	0.75
Female	53.7 51.7, 55.7)	54.2 (50.3, 58.0)	
Race			
White	84.2 (82.1, 86.3)	78.5 (74.2, 82.7)	0.007
Other	15.8 (13.7, 17.9)	21.5 (17.3 ,25.8)	
Ethnicity			
Hispanic	8.7 (6.8,10.6)	7.4 (5.3, 9.5)	0.29
Non-Hispanic	91.3 (89.4, 93.2)	92.6 (90.5, 94.7)	
Marital status			
Married	60.2 (57.8, 62.7)	51.6 (47.5, 55.6)	0.0004
Other	39.76 (37.3, 42.2)	48.60 (44.4, 52.5)	
Education status			
High school or less	37.2 (34.8, 39.7)	48.5 (44.2, 52.7)	<0.0001
More than high school	62.8 (60.3, 65.2)	51.5 (47.3, 55.8)	
Any limitation			
Yes	39.4 (36.9, 41.8)	45.8 (41.9, 49.5)	0.001
No	60.6 (58.2, 63.1)	54.2 (50.5, 57.9)	
Employment status			
Employed	47.6 (45.1 , 50.1)	40.26 (36.4, 44.7)	0.002
Unemployed	52.4 (49.9, 54.9)	59.7 (55.6, 63.9)	
Income/poverty status			
Poor/near poor/low	24.4 (21.9 , 26.8)	29.0 (24.9, 33.2)	0.03
Moderate/high	75.6 (73.2, 78.0)	70.6 (66.8, 75.1)	

**Table 2. Association of Shared-Decision Making and Health Care Resource Utilization Among United States Adults with Multimorbidity Adjusted For Covariates**

Healthcare Variables	Odds Ratio (95% CI)	
Office visits	1.348	(0.929, 1.956)
Outpatient visit	1.227	(1.027, 1.467)
Emergency room visits	1.553	(1.170, 2.063)
Inpatient discharges	1.437	(1.052, 1.963)

## Limitations

- Retrospective study using secondary data that can only determine a statistical rather than temporal association.
- Self-reported patient outcomes and thus chances of recall bias.

## Conclusions

- The current study's findings showed optimal SDM was associated with an increased number of outpatient visits, emergency room visits, and inpatient discharges.

## References

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