

## NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

**Submission Id:** 6779

### **Title**

*Combinations of Conditions Constituting Complex Multimorbidity Among Midlife and Older Adults with Diabetes in the Health and*

### **Priority 1 (Research Category)**

Multimorbidity

### **Presenters**

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### **Abstract**

Context: Individuals with diabetes often present with co-occurring chronic conditions (CC), or multimorbidity. We adopted a more expanded definition of multimorbidity that describes Complex multimorbidity (C-MM) as the occurrence/co-occurrence of CC, functional limitations (FL), and geriatric syndromes (GS).

Objective: We aimed to describe C-MM in midlife and older adults with self-reported diabetes and identify the combinations of conditions constituting C-MM.

Study Design and Analysis: Cross-sectional study. We conducted Association Rule Mining to identify the most common combinations of conditions constituting C-MM among respondents with diabetes and by age and race.

Setting or Dataset: Respondents from the 2018 Health and Retirement Study (HRS).

Population studied: Respondents with self-reported diabetes 50 years or older.

Intervention/Instrument: Observational study.

Outcome measures: Conditions constituting C-MM were defined using self-reported CC (7 conditions), FL (21 tasks), and GS (8 conditions).

Results: Of the 15,636 respondents, 28.7% reported having diabetes. Compared to respondents without diabetes, those with diabetes were older, non-White, had lower educational attainment and lower income, were obese, did not engage in vigorous exercise, and had worse self-reported health status. When examining C-MM, 61.6% of respondents with diabetes presented with CC, FL, and GS, whereas only 1.8% had none of these conditions, 10.5% had one condition constituting C-MM, and 26.1% had 2

conditions constituting C-MM. Regarding conditions constituting C-MM count, 53.9% presented with at least 6 conditions, including 18.4% with 10 or more conditions. Higher counts were observed among adults 65 and older, women, and lower income and educational attainment. The ARM results showed that the most common conditions and combinations of conditions included at least one CC, FL, and GS, regardless of stratification by age or race. However, there were no predominant combinations when stratifying by count of conditions constituting C-MM.

Conclusions: Our findings indicate that FL and GS are highly prevalent in midlife and older adults with diabetes. This study highlighted the importance of characterizing MM in broader terms rather than limiting its definition to the co-occurrence of CC alone. It also highlighted the heterogeneity of conditions for older adults with diabetes.

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