



# Research Week 2023

## Age friendly health systems: better care for older adults

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### Keywords

Age Friendly Health Systems, Older adult, Hospitalization

### Abstract

#### Background

Age-Friendly Health Systems is an initiative aimed to reliably deliver 4Ms care – What Matters, Mentation, Medication, and Mobility – to all older adults. The 4Ms are evidence-based practices to minimize harm and align with the wishes and needs of older adults. OHSU Hospital has been designated an Age-Friendly Health System since 2020 but system level outcomes have yet to be assessed.

#### Methods

This was a cross-sectional analysis of retrospective data from adults 65 years and older served at OHSU Hospital from September 2020 through September 2022. Linear regression models assessed differences between patients receiving 4Ms care and those not receiving 4Ms care. Outcome measures were total hospital charges, inpatient length of stay, ICU length of stay, and 30-day readmissions. Models were adjusted for age, sex, race, ethnicity, smoking status, admission type, and Medicaid status.

#### Results

Among 13,396 admissions for patients aged 65 and older, 45.5% identified as female, 82.4% identified as White, and the average age was 74.6 years. Recipients of 4Ms care were slightly older (74.9 vs 74.3 years), more likely to have Medicaid insurance (9.4% vs 8.2%), and less likely to be a current smoker (7.5% vs 9.1%) than non-recipients. Patients receiving 4Ms care, on average, had shorter hospital stays, shorter ICU length of stays, and lower total charges than non-recipients after adjusting for covariates (see Table 1). There was no significant difference in the number of 30-day readmissions by recipient type.

**Table 1.** Linear regression model results for the four outcome measures.

<b>Outcome Measure</b>	<b>4Ms Recipients</b>	<b>Non-recipients</b>	<b>Absolute (unadjusted) difference</b>	<b>Adjusted difference</b>
<b>Average LOS</b>	7.05 days	8.21 days	-1.16 days	-0.76 days
<b>Average ICU LOS</b>	4.66 days	6.4 days	-1.74 days	-1.59 days
<b>Average charges</b>	\$595,721.46	\$915,692.04	-\$319,970.58	-\$287,592.25
<b>30-day readmissions</b>	0.32 readmits	0.30 readmits	0.02 readmits	0.00 readmits

LOS: length of stay

## Conclusions

Reliable delivery of 4Ms care through Age-Friendly Health Systems is associated with significant reductions in length of stay, ICU length of stay, and hospital charges after adjusting for covariates. Providing 4Ms care to older hospitalized adults can improve patient level care and positively impact system level outcomes.