Frailty is a complex geriatric syndrome resulting in decreased physiological reserves in older people. It is very prevalent in nursing homes, as well as it is underprescription of recommended medications in this population. However, little is known about the relationship or interaction between these two entities. The aim of this study is to examine the prevalence of underprescription in a nursing home population according to their frailty status.

**METHODS**

This is a cross-sectional analysis of baseline data of a concurrent cohort study Subjects older than 65 years, randomly selected from two nursing homes. Three Frailty measures were used:

- The Fried frailty criteria
- Frailty Index (FI) of Rockwood
- FRAIL-NH.

Underprescription was assessed with the Screening Tool to Alert to Right Treatments (START) criteria.

**RESULTS**

110 Participants
Mean age: 86.3 ± 7.3 years
71.8% women

Prevalence of frailty:
- Fried: 36.4%
- FRAIL-NH: 42.7%
- Rockwood FI: 71.8%

<table>
<thead>
<tr>
<th>Prevalence of underprescription</th>
<th>Fried</th>
<th>FRAIL-NH</th>
<th>Rockwood's FI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-frail</td>
<td>50.0%</td>
<td>60.3%</td>
<td>48.4%</td>
</tr>
<tr>
<td>Frail</td>
<td>87.5%</td>
<td>61.7%</td>
<td>65.8%</td>
</tr>
</tbody>
</table>

p=0.013  p=0.883  p=0.092

Most prevalent START criteria

- Anabolic or antiresorptive skeletal agents in osteoporosis and/or fragility fractures
- Calcium and vitamin D supplements with osteoporosis and/or fragility fractures
- ACE inhibitors with chronic heart failure/ischemic heart disease
- β-blocker with stable systolic heart failure
- Others

39.1  23.6  19.1  9.1  9.1

There is a significant heterogeneity in the prevalence of underprescription in frail and robust older adults in nursing homes depending on the definition of frailty used, and a statistically significant difference have only been observed with Fried criteria, with higher rates of underprescription in frail participants. The underlying concepts of the different definitions of frailty could have implications for the assessment of underprescription in frail older adults, and for what should be considered inappropriate prescription and prescribing omissions in this population.

**CONCLUSIONS**