Characteristics and outcomes of people with family or friend caregivers in Medicare

Background
Family/friend caregivers often provide unpaid assistance to individuals with chronic disease or disabilities who need help with activities such as feeding, grooming, transportation, finances, housework, and medications. Understanding the differences between individuals with and without a caregiver, and the variation according to whether the caregiver is a spouse, can inform efforts to support both the individuals who need caregivers and their caregivers.

Objective
To examine the characteristics and chronic disease profile of patients with a family or friend caregiver.

Methods
Study Design: Cross-sectional analysis
Data Sources:
   • Claims and enrollment data from Humana Inc., a health and well-being company with approximately 24 million individuals covered by Medicare Advantage (MA) enrollees as of June 30, 2015
   • Marketing data from an external vendor
   • Eligible Participant
   • Eligible Nonparticipant

Study Populations:
   Table 1, Figure 1

Cost Impact (Figure 2):
   - Per-Member-Per-Month (PMPM) total healthcare costs, including out-of-pocket and plan-paid costs, were compared between individuals with and without PHI Consent and with and without participation in a chronic care program, after matching according to prior 3-month admissions, prior 6-month PMPM, and an internal utilization risk predictive model.

Predictors of 6-Month Readmission (Figure 3):
   - Frequency of 6-month readmission was calculated for subgroups defined by the following predictors:
     1) Documentation of PHI Consent before discharge or 0-2 or 3-6 months following discharge
     2) Risk of readmission according to an internal predictive model (score < vs. ≥ 180)
     3) Prior recent admission (Y/N)
     4) Length of stay (LOS) (< vs. ≥ 4 days)
     5) Administration of a postdischarge survey (Y/N)
     6) Participation in care management (Y/N)

Conclusions and Further Analysis
   - Overall, people in a Medicare Advantage plan with family/friend caregivers, as indicated by PHI Consent, had greater health needs, and individuals with nonspouse caregivers were especially vulnerable.
   - However, further analysis of otherwise similar individuals showed that having a caregiver may have a positive effect on health and consequently on healthcare costs. There may be events, such as hospital admission, when identifying PHI Consent can make a difference moving forward in patient outcomes.
   - These findings can inform efforts to support patients and their caregivers.

Table 1. Profile of Main Study Population*

<table>
<thead>
<tr>
<th>Variable</th>
<th>TOTAL</th>
<th>PHI Consent</th>
<th>Spouse Only PHI Consent</th>
<th>NonSpouse Only PHI Consent</th>
<th>Spouse+ NonSpouse PHI Consent</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (% of total)</td>
<td>3,062,794</td>
<td>301,389 (9.8%)</td>
<td>157,822 (5.2%)</td>
<td>125,790 (4.1%)</td>
<td>17,777 (0.6%)</td>
</tr>
<tr>
<td>Male, (%)</td>
<td>45.0%</td>
<td>53.0%</td>
<td>67.0%</td>
<td>35.0%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Age in years, mean (SD)</td>
<td>71.1 (9.8)</td>
<td>74.6 (9.8)</td>
<td>72.5 (7.9)</td>
<td>77.1 (11.3)</td>
<td>75.3 (8.3)</td>
</tr>
<tr>
<td>Lives Alone</td>
<td>34.0%</td>
<td>28.0%</td>
<td>14.0%</td>
<td>48.0%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Dual eligibility†</td>
<td>12.7%</td>
<td>10.7%</td>
<td>4.1%</td>
<td>19.6%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Severity Score, mean (SD)</td>
<td>73.2 (36.4)</td>
<td>88.7 (39.9)</td>
<td>85.4 (38.3)</td>
<td>92.4 (41.1)</td>
<td>91.9 (43.0)</td>
</tr>
</tbody>
</table>

HCCP
   - Eligible Nonparticipant
   - Eligible Participant

Individuals with PHI Consent were more likely than the general MA population to have chronic disease. Moreover, among individuals with chronic disease, those with PHI Consent incurred greater healthcare costs (data not shown).

References

Figure 1. Comparison of Prevalence, 8 Most Prevalent Chronic Conditions in the PHI Consent Subgroup

Figure 2. Effect of Adding PHI Consent or Chronic Disease Management on 6-Month Postdischarge Claims Costs?

Figure 3. 6-Month Readmission by Timing of PHI Consent

N=103,167 individuals with recent admission. Within subgroups defined by underlying readmission risk, the likelihood of readmission generally increased with delay in identifying PHI Consent, regardless of the combination of other predictors. This suggests that having or acquiring a caregiver helps prevent readmission.

Limitations
   - The analysis is subject to limitations common to claims databases, including missing or incorrect data.
   - In the source database, only approximately 10% of individuals had given PHI Consent; thus, results may not be generalizable to all individuals with a caregiver.