Session 4 Treatment Challenges
Patient Management Programs Lead to Improved Adherence for Patients with Hepatitis C using Drug Dual Therapy in both Retail and Central Pharmacies

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Disclosures

• The Authors and Presenter of this abstract are employees of Walgreens, CO., and research was self funded.

• This research was approved by Quorum IRB #28495/1.
Background

- Dual therapy standard of care: Peg-Interferon combined with Ribavirin
- Maintaining medication adherence to dual therapy is crucial for viralogical response (SVR) rates
- Walgreen’s Central and Retail Specialty Pharmacies
  - provide pharmacists, nurses, and other trained healthcare professionals supporting medication adherence to HCV dual therapy
  - patient education, counseling, and coordination with providers
Objective and Hypothesis

- **Objective** - Investigated the longitudinal effect of pharmacy management programs on adherence rates for patients using dual therapy for HCV
  - Patients in either retail or central pharmacy channels
- **Pharmacy management programs would improve patient’s adherence to dual therapies in either central or retail channels**
  - Comparable pharmacy services across channels
- **Different operational structures limits a direct comparison on the effect of managed status across channels**
Methods

• **Study population:** Patients new to HCV dual therapy from July 2010 to October 2011 in either retail or central distribution channels were included.

• **Outcome:** The adherence metric was the proportion of days covered (PDC), as endorsed by the Pharmacy Quality Alliance.

• **Intervention:** Active involvement with a patient management program for at least 90 days was examined as a predictor for adherence in propensity analysis.
Methods - continued

• **Exclusion Criteria:**
  - Younger than 18 years at first fill,
  - Used Hepatitis B (GPI code 12-35-20-xx) or antiretroviral (GPI code 12-10-xx) medications,
  - HCV utilization from both retail and central channels,
  - Had a 14-day or more gap between first interferon fill and first ribavirin fill, and
  - Had more than 365 days between first and last fill.
Methods - continued

• **Matching variables:**
  – patient age,
  – gender,
  – comorbid condition,
  – average copay for HCV medications, and
  – inferred genotype designation and viral load response (based on duration of therapy).
Results

• **Impact of pharmacy management:**
  – **Within retail:** PDC rates for managed retail patients improved significantly (16.2 percentage point difference) compared to those less managed.
  – **Within central:** Managed central patients also had significantly higher mean adherence rates (29.4 percentage point difference) compared to those not remaining managed.
  – **For both channels:** The proportion of patients who were adherent to medications (PDC ≥ 80%) indicated similar significant trends as for mean PDC.

• **Of note:** Retail adherence for patients managed at least 90 days (77.9%) was comparable to that of all central patients (76.8%).
Results - continued

Table 1. Adjusted Medication Adherence for Dual Therapy by Managed Status Within Channels

<table>
<thead>
<tr>
<th>Adherence</th>
<th>Retail 90+ days</th>
<th>Central 90+ days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Managed (n=347)</td>
<td>Opt-out (n=347)</td>
</tr>
<tr>
<td>Mean PDC</td>
<td>77.9</td>
<td>61.7</td>
</tr>
<tr>
<td>PDC ≥ 80%</td>
<td>56.5%</td>
<td>33.1%</td>
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</tbody>
</table>
Limitations

• Utilization of dual therapy within a single national pharmacy chain.
• Possible selection bias for patients remaining managed, due to individual level health beliefs and behaviors, or cultural beliefs.
• Known influences on adherence from SES or rural location where not controlled.
• No direct comparison of managed status across retail and central channels, give unique structural differences between channels.
Conclusions

- Pharmacy management programs increased adherence to HCV dual therapy medications in both central and retail pharmacy channels.

- Previous research has linked medication adherence to reduced viral loads from drug therapy, and improved clinical outcomes.

- Providing HCV pharmacy management programs that address patient adherence to therapy will likely improve the long-term health outcomes for these patients.