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Evaluation of a Pharmacy-Led Statin Medication Use Review and Outreach Initiative

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Megan Wagner, PharmD
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This study and presentation have no disclosures or potential conflicts of interest for the primary investigator and co-investigators
Definitions

- Statin Use in Persons with Diabetes (SUPD)
- Statin Therapy for Patients With Cardiovascular Disease (SPC)
- Both are quality-based metrics adopted by the Centers for Medicare and Medicaid Services (CMS)
In adults 40 to 75 years of age with diabetes mellitus, regardless of estimated 10-year ASCVD risk, moderate-intensity statin therapy is indicated.

In adults with diabetes mellitus who have multiple ASCVD risk factors, it is reasonable to prescribe high-intensity statin therapy with the aim to reduce LDL-C levels by 50% or more.
For patients with diabetes aged 40-75 years without ASCVD, use moderate-intensity statin therapy in addition to lifestyle therapy.

In patients with diabetes at higher risk, especially those with multiple ASCVD risk factors or aged 50-70 years, it is reasonable to use high-intensity statin therapy.
In adults 40 to 75 years of age with diabetes mellitus, regardless of estimated 10-year ASCVD risk, moderate-intensity statin therapy is indicated.

In adults with diabetes mellitus who have multiple ASCVD risk factors, it is reasonable to prescribe high-intensity statin therapy with the aim to reduce LDL-C levels by 50% or more.

For patients with diabetes aged 40-75 years without ASCVD, use moderate-intensity statin therapy in addition to lifestyle therapy.

In patients with diabetes at higher risk, especially those with multiple ASCVD risk factors or aged 50-70 years, it is reasonable to use high-intensity statin therapy.
In patients who are 75 years of age or younger with clinical ASCVD, high-intensity statin therapy should be initiated or continued with the aim of achieving a 50% or greater reduction in LDL-C levels.

In patients with clinical ASCVD in whom high-intensity statin therapy is contraindicated or who experience statin-associated side effects, moderate-intensity statin therapy should be initiated or continued with the aim of achieving a 30% to 49% reduction in LDL-C levels.
Star Ratings

- In 2021 the weight of the SUPD measure on a health system’s overall Star Rating increased

<table>
<thead>
<tr>
<th>SUPD Star Rating thresholds for Medicare Advantage Plans</th>
<th>SPC Star Rating thresholds for Medicare Advantage Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Star &lt;77%</td>
<td>1 Star &lt;75%</td>
</tr>
<tr>
<td>2 Stars ≥77% to &lt;81%</td>
<td>2 Stars ≥75% to &lt;79%</td>
</tr>
<tr>
<td>3 Stars ≥81% to &lt;83%</td>
<td>3 Stars ≥79% to &lt;83%</td>
</tr>
<tr>
<td>4 Stars ≥83% to &lt;87%</td>
<td>4 Stars ≥83% to &lt;87%</td>
</tr>
<tr>
<td>5 Stars ≥87%</td>
<td>5 Stars ≥87%</td>
</tr>
</tbody>
</table>
Pharmacist-to-prescriber intervention to close therapeutic gaps for statin use in patients with diabetes: A randomized controlled trial

- Randomized controlled study
- 221 intervention-group patients and 199 control-group patients
- SUPD-qualifying patients not on a statin per prescription claims data

Intervention

- Community pharmacists contacted PCP to recommend statin initiation
- Up to 3 phone calls, followed by up to 2 faxes sent to the providers’ office

Results

- 46 statins prescribed in the intervention group compared to 17 in the control group (20.8% vs 8.5%, P<0.001)
- 34 statins dispensed in the intervention group compared to 15 in the control group (15.4% vs 7.5%, P=0.015)

*PCP: Primary care provider
Literature Review

Pharmacist Statin Prescribing Initiative in Diabetic Patients at an Internal Medicine Resident Clinic

- Pre-post intervention study of SUPD-qualifying patients
- Included patients with a PCP in the clinic and no active statin prescription

**Intervention**

- Clinical pharmacist reviewed patients with an upcoming appointment to determine statin recommendations
- Recommendations given to provider in-person or through EMR message on the day of appointment
- Physician or pharmacist counseled the patient and initiated statin therapy if the patient agreed

**Results**

- Active statin prescriptions increased from 75.6% to 82.6% in 3 months
- Of 61 statin recommendations, 32 statin prescriptions were initiated
- At 1 month, 29 (90.6%) patients had picked up their statin prescription

*PCP: Primary care provider*
Self Assessment Question #1

Which of the following is true of the based-on recommendations from the 2018 ACC Guideline on the Management of Blood Cholesterol?

A. Begin moderate-intensity statin therapy in patients 40 to 75 years of age with diabetes mellitus, LDC ≥70 mg/dL, and a 10-year ASCVD risk of ≥ 15%.

B. Begin moderate-intensity statin therapy in patients with clinical ASCVD.

C. Begin moderate-intensity statin therapy in patients 40 to 75 years of age with diabetes mellitus and LDL-C ≥70 mg/dL, without calculating 10-year ASCVD risk.

D. Use of a high-intensity statin therapy is not recommended in patients with LDL <100 on moderate-intensity statin therapy
Self Assessment Question #1

Which of the following is true of the based-on recommendations from the 2018 ACC Guideline on the Management of Blood Cholesterol?

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C. Begin moderate-intensity statin therapy in patients 40 to 75 years of age with diabetes mellitus and LDL-C ≥70 mg/dL, without calculating 10-year ASCVD risk.

D. Use of a high-intensity statin therapy is not recommended in patients with LDL <100 on moderate-intensity statin therapy.
Setting

- Parkview Health
  - Not-for-profit, community-owned organization
  - Northeast Indiana and Northwest Ohio
  - 10 hospital health system
  - Over 200 primary care clinics
Workflow at Parkview Health

- Written population health workflow
- Expanded to pharmacy students on rotation in multiple ambulatory care rotations under preceptor guidance
- Included workflow for:
  - Messaging of primary care provider
  - Patient education phone calls
  - Documentation of review
- Implemented September of 2021
Workflow at Parkview Health

**Chart Review**
- Worklist created from insurer information
- Patients with a care gap for SUPD or SPC measures

**Provider Outreach**
- Patients without an active statin prescription
- Message to care team with statin recommendations

**Patient Outreach**
- Patients with an active statin prescription
- Assess barriers to statin initiation
- Provide education on ASCVD risk

**Documentation**
- Review and outreach documented in EMR
- Outreach or clinical reasoning for no outreach documented in the shared worklist
Purpose

• To analyze the impact of patient profile review with provider or patient outreach by ambulatory care pharmacists and pharmacy students on the SUPD and SPC measures
Study Design

• IRB approved retrospective chart review
• September 1\textsuperscript{st} through December 31\textsuperscript{st} 2021
• Review of patients reported on the SUPD or SPC care-gap list by two insurers with quality-based contracts in Sept and Oct of 2021
Outcomes

• Primary
  • Percentage of patients with a new prescription for a statin medication between Sept 1, 2021 and Dec 31, 2021
  • Verified care-gap closure between Sept 1, 2021 and Dec 31, 2021
Outcomes

• Secondary
  • Percentage of patients in compliance with the SUPD and SPC measures for included insurers in 2019, 2020, and 2021
  • Predicted STAR rating in the SUPD and SPC measures for included insurers in 2019, 2020, and 2021
Outcomes

• Descriptive
  • Percentage of reviewed patients without intervention
  • Documented reason for not pursuing statin prescription
## Patient Population

### Inclusion Criteria

- All patients appearing on the care-gap list for SUPD or SPC metrics for two included insurers in September and October of 2021

### Exclusion Criteria

- None – reviewed patients found to be not appropriate for the measure were still included in the final analysis
Demographics

302 patients included

187 patients reviewed

146 SUPD Patients | 43 SPC Patients

Outreach for 62 patients

No outreach for 125 patients
Outreach

60 messages to providers

2 calls to patients

125 clinical chart reviews
Self Assessment Question #2

Based on the interventions found in this study, which was the most common intervention performed by pharmacy students?

A. Message sent to provider to recommend statin initiation
B. Telephone call to patient for adherence counseling
C. MyChart electronic message sent to patient for adherence counseling
D. Pharmacy students initiated statin prescription based on collaborative practice agreement
Self Assessment Question #2

Based on the interventions found in this study, which was the most common intervention performed by pharmacy students?

A. Message sent to provider to recommend statin initiation
B. Telephone call to patient for adherence counseling
C. MyChart electronic message sent to patient for adherence counseling
D. Pharmacy students initiated statin prescription based on collaborative practice agreement
Primary Outcome

- Number of new statin prescriptions in reviewed patients:

<table>
<thead>
<tr>
<th>Patients reviewed (n=187)</th>
<th>Number of new prescriptions during study time frame</th>
<th>Percentage of patients with a new prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18</td>
<td>9.6%</td>
</tr>
</tbody>
</table>
Primary Outcome

- Care-gap closure in patients with outreach:

<table>
<thead>
<tr>
<th></th>
<th>Number of new prescriptions</th>
<th>Verified gap closure</th>
<th>Rate of gap closure by outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider outreach</td>
<td>5</td>
<td>4</td>
<td>6.7%</td>
</tr>
<tr>
<td>(n=60)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient outreach</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>(n=2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any outreach</td>
<td>5</td>
<td>4</td>
<td>6.5%</td>
</tr>
<tr>
<td>(n=62)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Secondary Outcomes

- Compliance rate for the SPC measure

Plan 1 SPC Measure

Plan 2 SPC Measure
Secondary Outcomes

- Compliance rate for the SUPD measure

Plan 1 SUPD Measure

Plan 2 SUPD Measure
Secondary Outcomes

- Star ratings as of December 2019, 2020, and 2021 for included insurers

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Star Rating</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPC</td>
<td>Plan 1</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Plan 2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Average</strong></td>
<td><strong>3</strong></td>
<td><strong>2.5</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>SUPD</td>
<td>Plan 1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Plan 2</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Average</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
<td><strong>3.5</strong></td>
</tr>
</tbody>
</table>
Descriptive Outcomes

- 125/187 (67%) patients were determined to not need intervention
  - 25/43 (58%) SPC patients
  - 101/146 (69%) SUPD patients
Descriptive Outcomes

Documented Reason for No Intervention

- Patient Refusal: 11%
- LDL Below 100: 18%
- Statin Allergy: 6%
- Statin Prescribed After List Generation: 4%
- Statin Intolerance: 54%
- Other: 7%

*Workflow deviation occurred in 18 patients (15%)
Conclusions

- New statins prescribed at a lower rate when compared to similar intervention groups in published literature
- Verified gap closure rate of 6.5%
- Increase in patient compliance with SUPD or SPC metric compared to previous years
- 67% of reviewed patients did not warrant outreach
  - LDL “below goal” and error contributed to this number
Limitations

• Small sample size
• Limited time frame
• Workflow deviations
  • Classifying patients
  • Submission of non-eligible patients
Future Directions

• Student education revisions
  • Documentation with chart note
  • Standardized “I-vent”
• Increase protocol specifics for non-outreach
  • Documented intolerance to 2 statins, one being rosvuavastatin or pravastatin
  • Patient refusal documented within the calendar year
  • LDL <50 with current regimen
Future Directions

- Improve patient outreach planning
  - Telephone encounter script
  - Centralized callback number
- Update education to ambulatory care preceptors
- Video walk-through
Acknowledgements

• Elise Carpenter, PharmD, BCACP
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• Sarah Ferrell, PharmD, BCPPS
• Ashley Parrott, PharmD, MBA, BCPS, BCACP
• Sarah Pfaehler, PharmD, MBA, BCPS
References


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