

Parkview Health

Parkview Health Research Repository

Pharmacy

Parkview Research Center

4-2022

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

Megan Wagner PharmD

Follow this and additional works at: <https://researchrepository.parkviewhealth.org/pharma>



Part of the Pharmacy and Pharmaceutical Sciences Commons

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

Megan Wagner, PharmD

PGY-2 Ambulatory Care Resident with Parkview Health

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)

Background: SUPD



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

Background: SUPD



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

Background: SUPD



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

Background: SPC



Secondary Prevention in Patients With Clinical ASCVD

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

SUPD Star Rating thresholds for Medicare Advantage Plans

1 Star	<77%
2 Stars	≥77% to <81%
3 Stars	≥81% to <83%
4 Stars	≥83% to <87%
5 Stars	≥87 %

SPC Star Rating thresholds for Medicare Advantage Plans

1 Star	<75%
2 Stars	≥75% to <79%
3 Stars	≥79% to <83%
4 Stars	≥83% to <87%
5 Stars	≥87 %

Literature Review

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%, $P = 0.015$)

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

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 $\geq 15\%$.
- 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?

- 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 $\geq 15\%$.
- 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

Setting

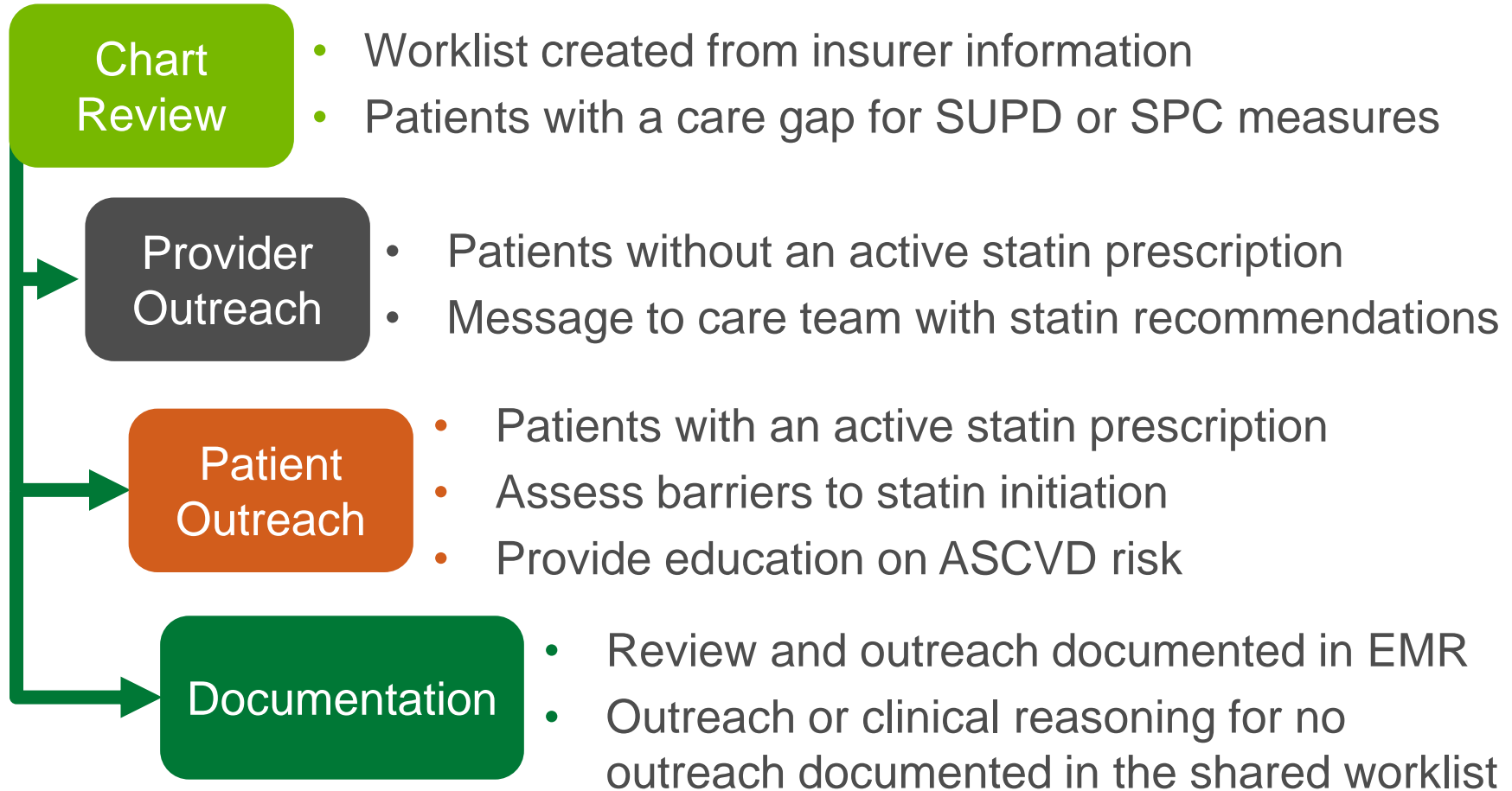
- Parkview Health
 - Not-for-profit, community-owned organization
 - Northeast Indiana and Northwest Ohio
 - 10 hospital health system
 - Over 200 primary care clinics



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



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 1st through December 31st 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

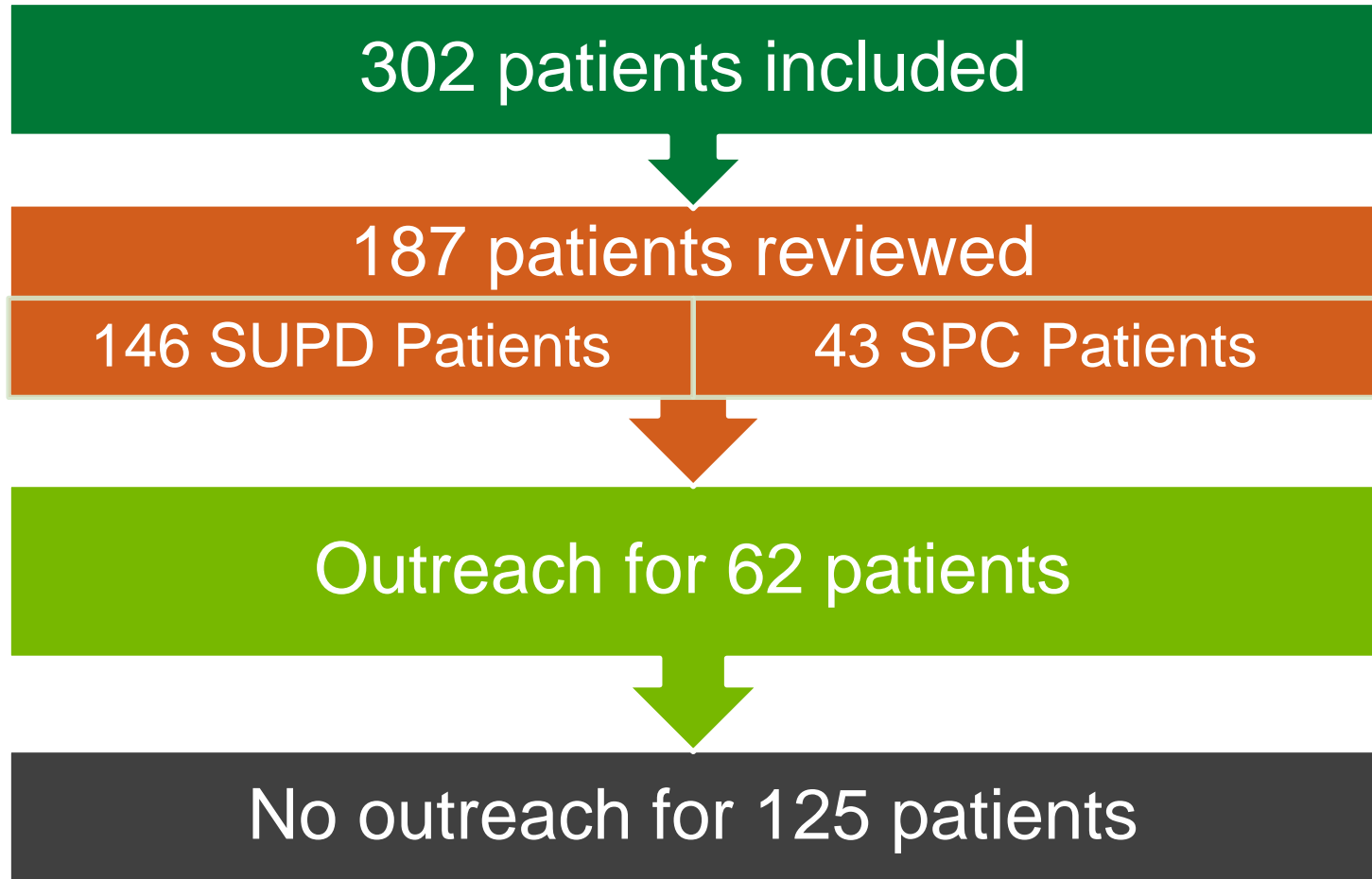
Outcomes

- Descriptive
 - Percentage of reviewed patients without intervention
 - Documented reason for not pursuing statin prescription

Patient Population

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none">All patients appearing on the care-gap list for SUPD or SPC metrics for two included insurers in September and October of 2021	<ul style="list-style-type: none">None – reviewed patients found to be not appropriate for the measure were still included in the final analysis

Demographics



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:

	Number of new prescriptions during study time frame	Percentage of patients with a new prescription
Patients reviewed (n=187)	18	9.6%

Primary Outcome

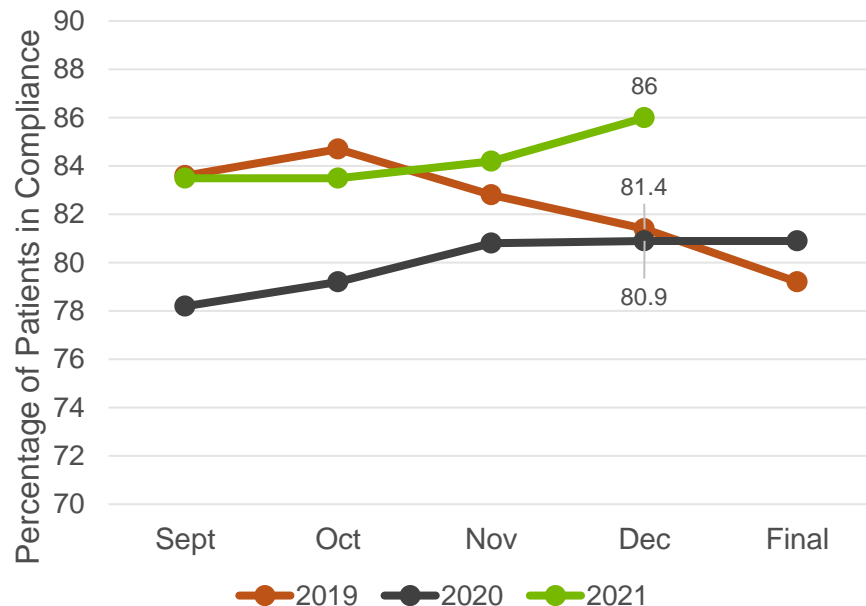
- Care-gap closure in patients with outreach:

	Number of new prescriptions	Verified gap closure	Rate of gap closure by outreach
Provider outreach (n=60)	5	4	6.7%
Patient outreach (n=2)	0	0	0%
Any outreach (n=62)	5	4	6.5%

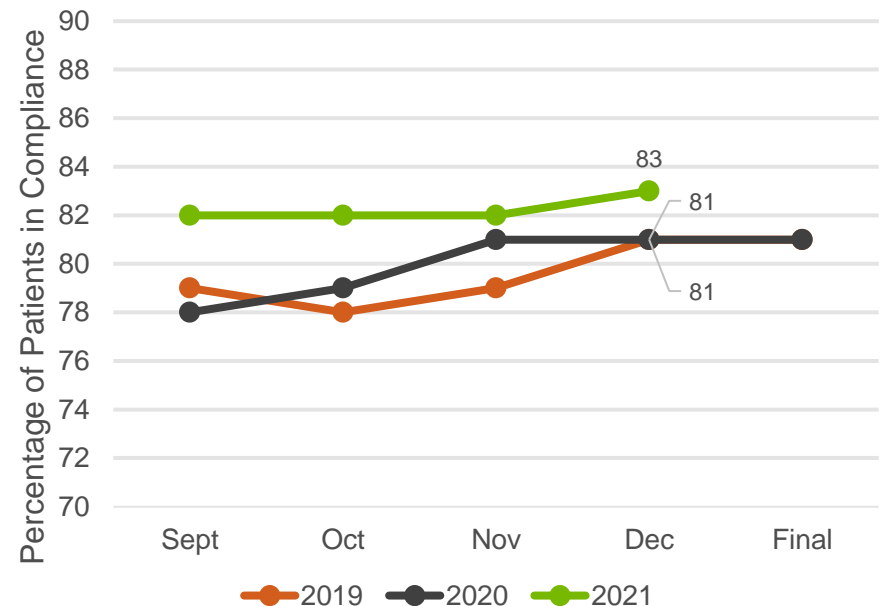
Secondary Outcomes

- Compliance rate for the SPC measure

Plan 1 SPC Measure



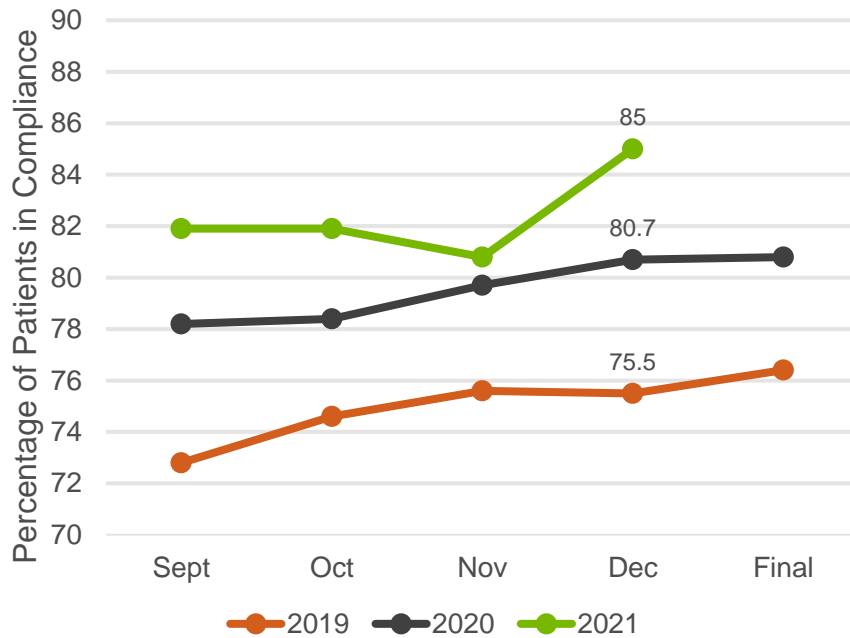
Plan 2 SPC Measure



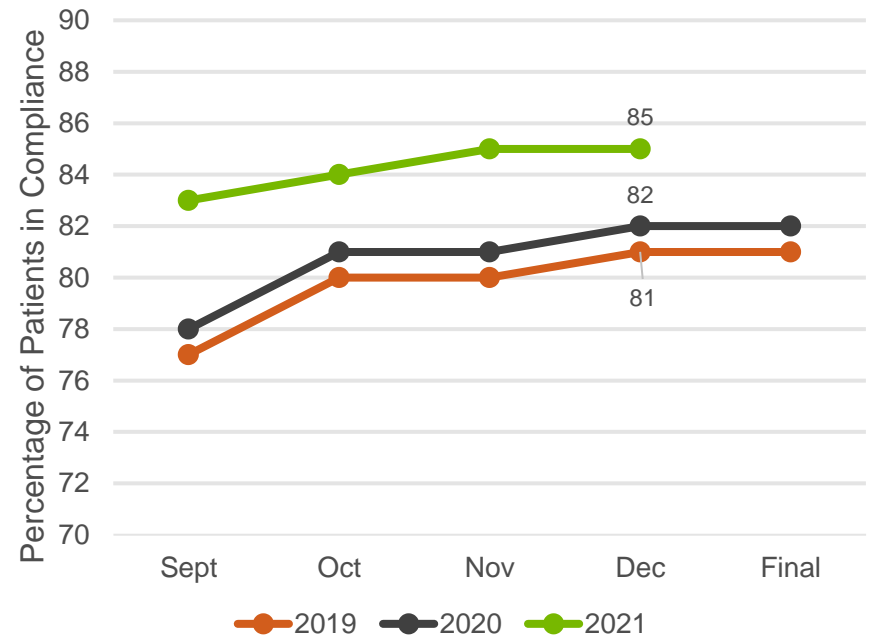
Secondary Outcomes

- 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

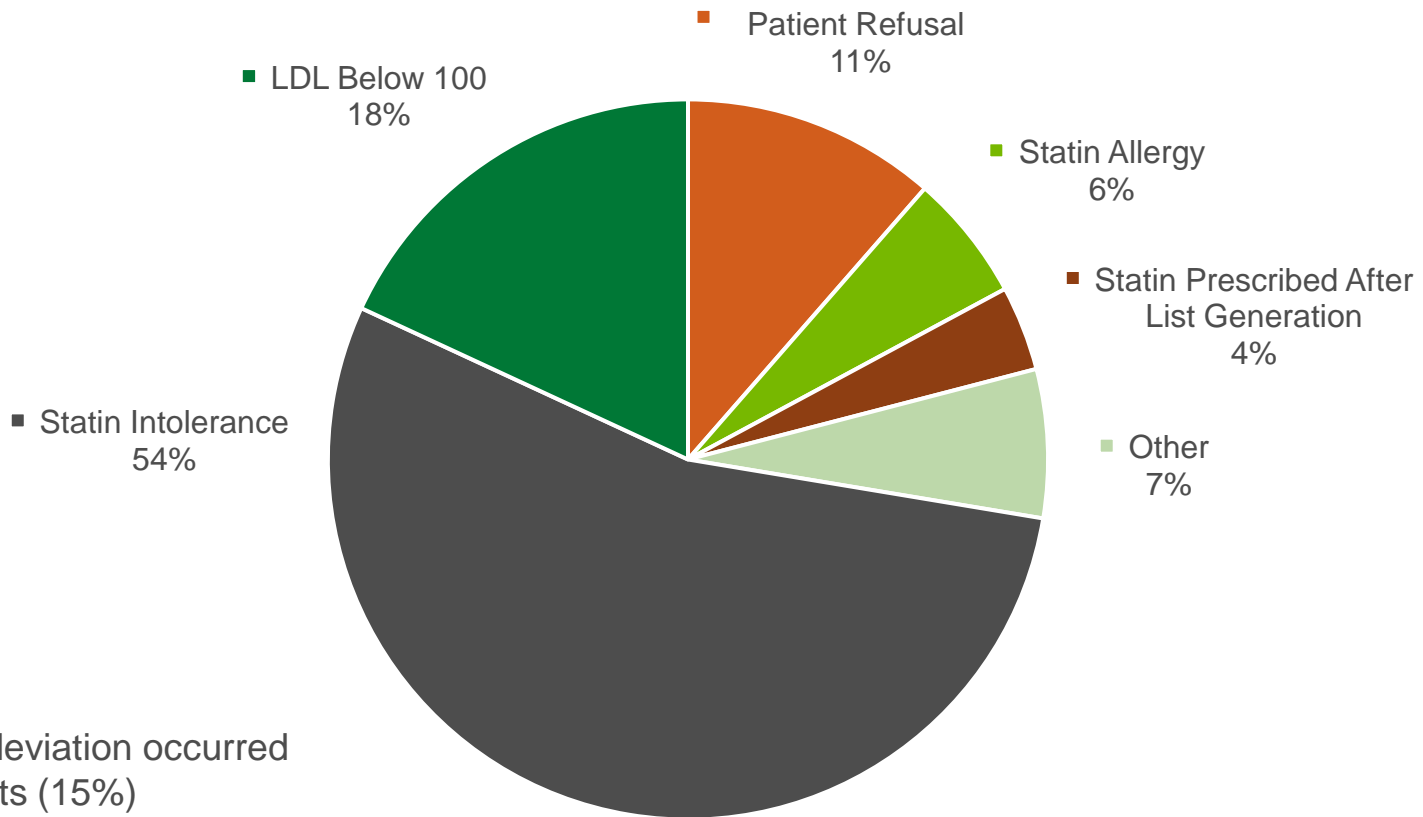
		Estimated Star Rating		
Year		2019	2020	2021
SPC	Plan 1	3	2	3
	Plan 2	3	3	3
	Average	3	2.5	3
SUPD	Plan 1	2	3	3
	Plan 2	4	3	4
	Average	3	3	3.5

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



*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 rosuvastatin 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
- Kris Howard, PharmD, AACCC
- Sarah Ferrell, PharmD, BCPPS
- Ashley Parrott, PharmD, MBA, BCPS, BCACP
- Sarah Pfaehler, PharmD, MBA, BCPS

References

1. Grundy SM, Stone NJ, Bailey AL, et al. 2018
AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Blood Cholesterol: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Circulation*. 2019 Jun 18;139(25):e1082-e1143.
2. American Diabetes Association Professional Practice Committee; American Diabetes Association Professional Practice Committee:, Draznin B, Aroda VR, Bakris G, et al. 16. *Diabetes Care: Standards of Medical Care in Diabetes-2022*. *Diabetes Care*. 2022 Jan 1;45(Supplement_1):S244-S253.
3. Renner HM, Hollar A, Stolpe SF, Marciniak MW. Pharmacist-to-prescriber intervention to close therapeutic gaps for statin use in patients with diabetes: A randomized controlled trial. *J Am Pharm Assoc (2003)*. 2017;57(3S):S236-S242.e1
4. Vincent R, Kim J, Ahmed T, Patel V. Pharmacist Statin Prescribing Initiative in Diabetic Patients at an Internal Medicine Resident Clinic. *J Pharm Pract*. 2020;33(5):598-604.
5. Medicare 2022 Part C & D Star Ratings Technical Notes [Internet]. Centers for Medicare and Medicaid Services. Centers for Medicare and Medicaid Services; 2021 [cited 2022 March 7]. Available from: <https://www.cms.gov/files/document/2022-star-ratings-technical-notes-oct-4-2022.pdf>

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

Megan Wagner, PharmD
PGY-2 Ambulatory Care Resident
Parkview Health
megan.wagner@parkview.com