Pharmacist Impact on Prescription Assistance Programs Within a Medically Underserved Primary Care Clinic

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Disclosure Statement

- The speaker has no actual or potential conflict of interest in relation to this presentation.

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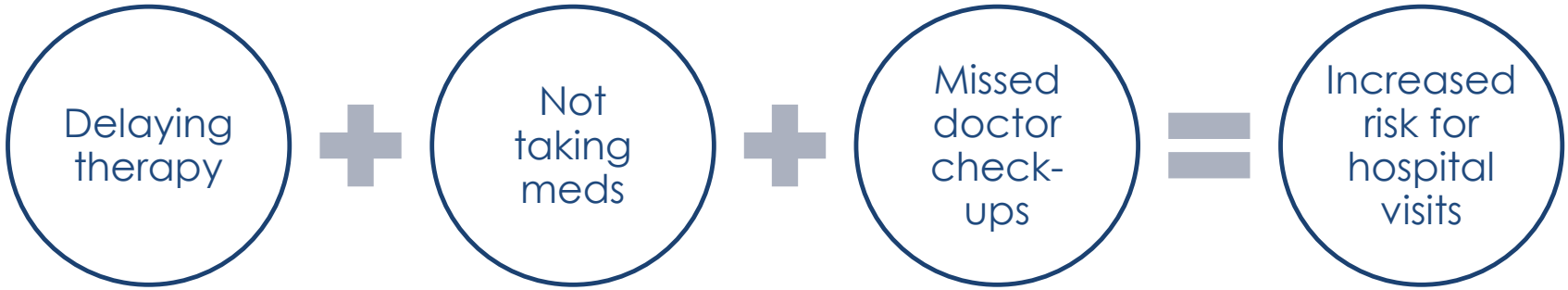
Learning Objective

- Identify pharmacist role with prescription assistance programs to help improve patient care in underserved populations

Lack of Health Insurance

- In 2017, ~28.5 million Americans did not have health insurance and had limited access to prescription medications.



Berchick. US Census Bureau. Updated Sept 2018
KFF Henry J. Kaiser Foundation. Updated Dec 2018
Glied. PBS. The Uninsured.

Impact of Prescription Assistance Programs (PAPs)

Furl et al.

- HIV clinic: those who obtained insurance were more likely to have undetectable HIV viral load

Burley et al.

- ~47% decline in rate of emergency department (ED) and hospital visits in patients who were in enrolled into a PAP by a social worker

Sarrafizadeh et al.

- $1000 cost savings per patient per year who were enrolled in PAPs

Furl. *BMC Infect. Dis.* 2018:18(1):132
Burley. *J Manag Care Spec Pharm.* 2016;22(4):381-387
Sarrafizadeh. *Am J Health Syst Pharm.* 2004;61(17):1816-1820

Pharmacist Role

Focused in specialty clinics

Enroll patients into PAPs

Provide medication management services

- A decrease in hemoglobin A1C, blood pressure, and cholesterol values post-enrollment into PAPs with pharmacist involvement.

Chisholm. *Clin Transplant.* 2000:(4):304
Chrisholm. *Am J Health Syst Pharm.* 2007;64(14_:1506-1512.
SarraFizadeh. *Am J Health Syst Pharm.* 2004;61(17):1816-1820

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Purpose

To assess the impact of a pharmacist working under a collaborative practice agreement (CPA) on prescription assistance programs (PAPs) within a medically underserved clinic

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- Locally owned, not-for-profit health system established in 1906
- Six hospitals, over 80 physician clinics
- >1,000,000 clinic visits annually

Family Medical Care Center (FMCC)

- Primary care clinic serving uninsured and underinsured patients
- Led by 16 faculty providers and 27 medical residents
- CoxHealth Medication Access Program (CMAP) helps patient enroll in PAPs

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Primary Objective

Review the rate of hospitalizations and emergency department (ED) visits in patients enrolled in a PAP, one-year pre-pharmacist CPA initiation and up to one-year post-pharmacist CPA initiation.

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Secondary Objectives

- Review disease state control pre- and post- pharmacist CPA initiation
- Quantify medication therapy management (MTM) interventions completed by pharmacist
- Classify drugs obtained through PAPs by pharmacist
- Estimate price of drugs obtained through PAPs by pharmacist
- Compare adherence rates pre-and post- pharmacist CPA initiation

Study Design

- Single center, retrospective chart review

- Institutional Review Board (IRB) approved this study in October 2019

Study Population

Inclusion Criteria

- Patients without any form of insurance or prescription drug coverage
- Enrolled in CMAP at FMCC from 06/01/2017 through 06/01/2019
- PAPs managed by pharmacist under CPA

Exclusion Criteria

- Pregnant patients
- Patients under 18 years of age
- Patients who transferred care outside of FMCC
- Hospitalizations and ED visits that were a result from trauma

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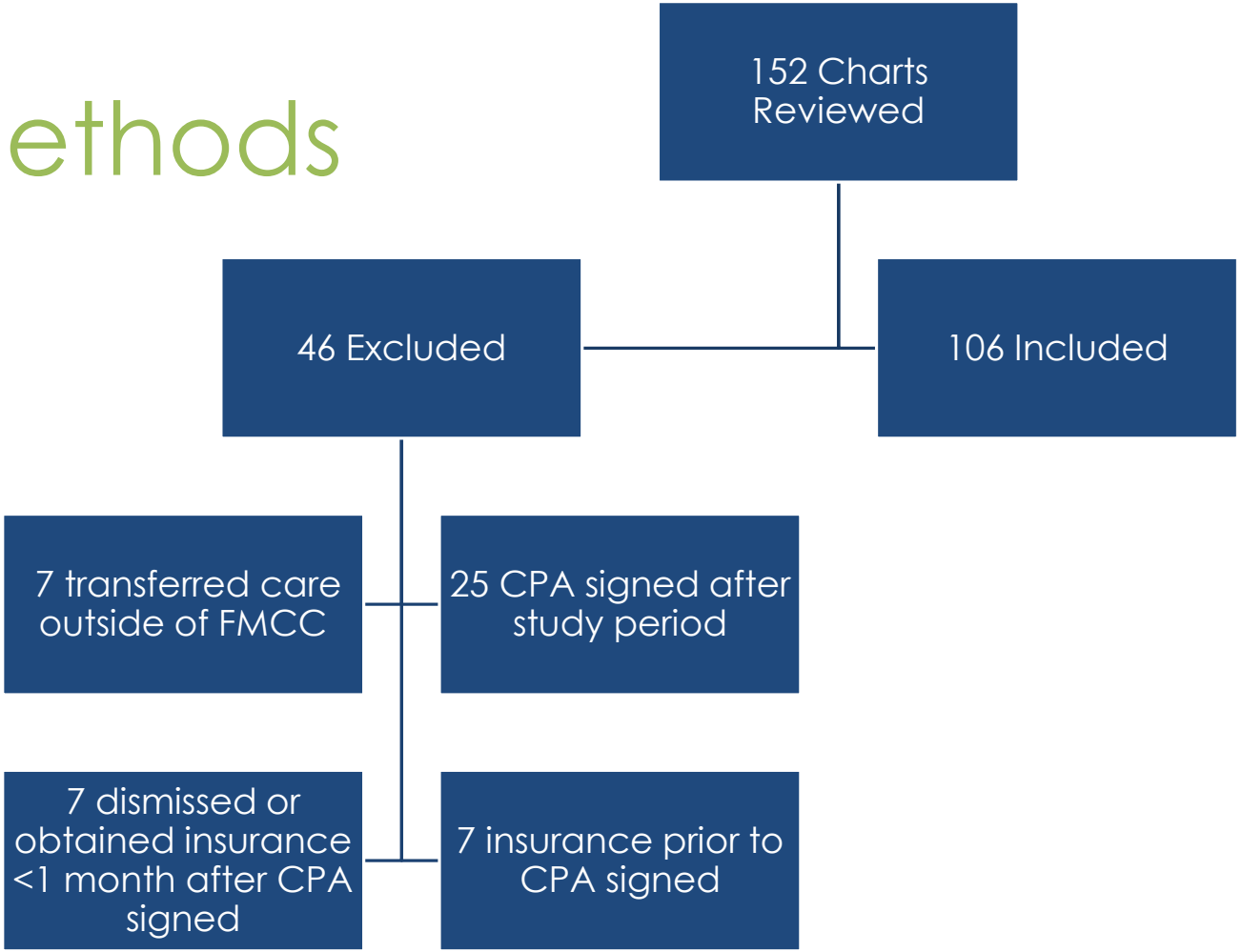
Methods



Baseline Characteristics

	n = 106
Age (years), mean (range)	45 (19-65)
Male, no. (%)	43 (40.6)
Resident Provider, no. (%)	58 (54.7)
Faculty Provider, no. (%)	29 (27.4)
Midlevel Provider, no. (%)	19 (17.9)
Obtained Insurance, no. (%)	16 (15.1)
CMAP prior to CPA, no. (%)	30 (28.3)

Baseline Co-morbidities

	n = 106
Diabetes, no. (%)	44 (41.5)
Depression, no. (%)	24 (22.6)
Hypertension, no. (%)	23 (21.7)
Asthma, no. (%)	22 (20.8)
COPD, no. (%)	12 (11.3)
Smoker, no. (%)	10 (9.4)
Hypothyroidism, no. (%)	6 (5.7)
Hyperlipidemia, no. (%)	5 (4.7)
Hepatitis C, no. (%)	4 (3.8)

COPD: Chronic Obstructive Pulmonary Disease

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Results

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Primary Objective

	Pre-CPA	Post-CPA	Percent Change	P-value (a = 0.05)
Hospitalizations, no.	42	25	-40.5%	0.113
Hospitalizations per person (n=106)	0.40	0.24		
ED visits, no.	114	77	-32.5%	0.011
ED visits per person (n=106)	1.08	0.73		

Pharmacist Interventions

- Total of 515 interventions, ~5/person (n=106)

CMAP medication check in	Medication changes	Diabetes consults
Medication recommendations	Patient counseling	Status updates on CMAP process
Medication reconciliation	Lab recommendations	Appointment recommendations

Disease State Control

Value	Pre CPA Mean ± SD	Post CPA Mean ± SD	P-value (a = 0.05)
Hgb A1c (%, n=38)	9.8 ± 1.6	8.7 ± 2.2	**0.005**
Systolic BP (mmHg, n=23)	144 ± 27	134 ± 12	0.069
Diastolic BP (mmHg, n=23)	85 ± 16	80 ± 12	0.17
FEV1/FVC (n=2)	0.70 ± 0.21	0.72 ± 0.03	0.903
TSH (mIU/mL, n=5)	29.13 ± 55.21	3.09 ± 3.34	0.36
PHQ-9 (n=8)	18 ± 7	16 ± 9	0.36
HCV Viral Load (IU/mL, n=3)	518K ± 581K	<15 ± 0	0.26

Brand Drugs Obtained by Pharmacist

Abilify®	Advair®	Basaglar®	Breo®	Bydureon®
Cialis®	Coreg CR®	Cymbalta®	Dexilant®	Eliquis®
Entresto®	Harvoni®	Humalog®	Imitrex®	Invokamet®
Janumet®	Lamictal®	Lantus®	Maxalt®	Nasonex®
Novolog®	Pristiq®	ProAir®	Prozac®	Pulmicort®
Rexulti®	Symbicort®	Synthroid®	Synvisc-One®	Toujeo®
Trulicity®	Ventolin®	Xarelto®	Zyclara®	Zyprexa®

Cost of Drugs

- Total cost of drugs obtained by pharmacist during study period (n=106): $683,779.96
- Cost per person: $6,450.75
- Example:

Adherence Rates

Mean MPR Pre-CPA: 95.23% (SD 6.22)

Mean MPR Post-CPA: 85.12% (SD 20.4)

- n=30
- p-value = 0.003

MPR: Medication Possession Ratio

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Limitations

- Full year prior to CPA-signed and/or full year after CPA-signed not available for every patient
- Adherence rates are based on charting in EMR
- PAPs cause delays in shipment
- Diagnostic labs not completed

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Future Directions

Additional disease state consults

- Hypertension
- Asthma
- COPD

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Conclusion

- With ~5 pharmacist interventions per patient, pharmacist impact on PAPs shows a significant decrease in ED visits
- Lack of lab data makes it hard to determine disease state control
- With pharmacists able to sign for PAPs, drug cost savings for patients is ~$6450 per patient per year

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