The Impact of Pharmacists Engaged in Collaborative Practice Agreements

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INTRODUCTION

- A collaborative practice agreement (CPA) is a formal agreement in which a licensed provider supervises patient care and refers patients to a pharmacist under a protocol that allows the pharmacist to perform specific patient care functions.[1]
- CPAs are in place in all states except for Delaware, with some components varying from state to state.[2]
- Under a CPA, pharmacists are given authority to perform tasks such as patient assessment, referral, and counseling, ordering laboratory tests, administering medications, and adjusting drug regimens.[1]
- Studies show that incorporation of pharmacists in CPAs yields positive outcomes, as indicated by improvements in patient health and advancements in the health system.
- There are opportunities for expansion of pharmacist involvement in CPAs.

PURPOSE

To evaluate the role and impact of pharmacist in CPAs.

METHODS

Database search: Medline: EBSCOhost and PubMed

Keywords: Collaborative practice agreement AND Pharmacists or pharmacist

Filters: Human, English, 2017-2022

Inclusion criteria: Peer reviewed; Addressed effect of pharmacist involvement in CPAs on healthcare

RESULTS

Location	Study Type	Patient Population/ Setting	CPA initially in place	Primary Outcomes
Maryland	Interventional study	• Solid organ transplant recipients • Large academic medical center	• Physicians and 7 clinical transplant pharmacists	• Pharmacist interventions • Cost savings
Wisconsin	Retrospective chart review and survey	• Underserved T2DM patients • Urban, underserved federally qualified health center	• Medical director and pharmacy team • Chronic comorbidities • Pharmacists adjust meds and order labs	• A1c reduction • Increased ACEi/ARB/statin use • Tobacco cessation
Indiana	IRB-approved retrospective analysis	• Patients with positive culture results requiring antimicrobial treatment • Community hospital ED	• ED medical director and 2 ED clinical pharmacists • Pharmacist provides antimicrobial treatment if infection is supported by CPA	• Number of cases reviewed • Number of cases acted upon independently by ED pharmacists per the CPA
California	Descriptive study	• Inmates on warfarin • Anticoagulation clinic at the LA County jail	• Physician and advanced practice pharmacist (APP) • APP initiates, adjusts, or discontinues anticoagulation therapy and orders labs	• % of INR readings within therapeutic range (RR) • Time in therapeutic range (TTR)
4 states	Pilot study	• Cancer patients • 5 ambulatory oncology clinics	• Pharmacists prescribe, dispense/distribute, and follow-up	• Pharmacist interventions • Prescription turnaround time • Patient cost savings • Provider satisfaction survey
Electronic, multi-center	Multi-center, cross-sectional survey	• Hematopoietic stem cell transplant (HCT) patients • 41 institutions	• Oncologists and clinical pharmacists • HCT settings in various institutions with varying protocols	• CPA assessment survey
Minnesota	Uncontrolled quasi-experimental	• Patients on antipsychotic meds • Large academic medical center	• No CPA • Informal pharmacist involvement	• Increasing compliance of metabolic monitoring by 20%
Michigan	Retrospective quasi-experimental	• Patients with positive urine or wound cultures following discharge • 2 urgent care sites	• ED and ID physicians and pharmacists • Pharmacist culture review and patient follow-up • Expanded to include UC physicians and pharmacists	• 10% absolute difference in the total guideline-concordant antibiotic prescribing

- 8 studies from 2017 to 2022 in English in the US; CPAs in 7 studies
- Effect of pharmacists in CPAs on attainment of clinical and financial goals → **Positive**
- Provider satisfaction with pharmacist involvement → **Positive**
- Existing barriers to pharmacist engagement → **lack of reimbursement**
- Pharmacist engagement in CPAs has a positive impact on the attainment of the desired clinical and financial goals.

DISCUSSION

- Pharmacists engaged in CPAs facilitate achievement of clinical goals,[3,4,5,6,7,8,9] financial benefits,[3,9] and improved patient care among various patient populations in many settings, but the lack of reimbursement for services is sometimes a barrier for pharmacist participation in CPAs.
- Some studies had a small sample size, were restricted to only one practice setting, or were affected by survey bias, thus limiting their generalizability to the entire healthcare system.
- It would be beneficial to analyze more generalizable and expansive studies with more statistical analyses to solidify the results of this review, in addition to investigating pharmacists' own perspective on their role in CPAs.

CONCLUSIONS

Pharmacist engagement in CPAs has a positive impact on numerous aspects of the healthcare system, including clinical and financial matters, and there are still prospects for pharmacist involvement in CPAs, particularly in non-traditional settings.

REFERENCES

DISCLOSURE

This literature review has been published in the Journal of Pharmacy Practice.