



Pharmacy: Collaborative Practice Agreements to Enable Collaborative Drug Therapy Management

Collaborative drug therapy management (CDTM), also known as coordinated drug therapy management, involves developing a collaborative practice agreement (CPA) between one or more health care providers and pharmacists. A CPA allows qualified pharmacists working within the context of a defined protocol to assume professional responsibility for performing patient assessments, counseling, and referrals; ordering laboratory tests; administering drugs; and selecting, initiating, monitoring, continuing, and adjusting drug regimens.¹ The use of CDTM through a CPA is a strategy that can be considered to straddle both Domains 3 (health care system interventions) and 4 (community-clinical links).

Summary

CDTM enabled by a CPA is a formal partnership between qualified pharmacists and prescribers to expand a pharmacist’s scope of practice. CDTM is a cost-effective strategy for lowering blood pressure, blood sugar, and LDL cholesterol levels; improving treatment quality; and increasing medication adherence.

Stories From the Field:
 El Rio Community Center (Pima County, Arizona).

Evidence of Effectiveness

Effect 	Implementation Guidance 	Research Design 
Internal Validity 	Independent Replication 	External & Ecological Validity 

Legend: Well supported/Supported  Promising/Emerging  Unsupported/Harmful 

Evidence of Impact

Health Impact 	Health Disparity Impact 	Economic Impact 
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Legend: Supported  Moderate  Insufficient 



Evidence of Effectiveness

Strong evidence exists that CDTM enabled by a CPA is effective. Solid evidence exists that this strategy achieves desired outcomes, with studies demonstrating internal and external validity. This strategy has also been independently replicated, and systematic reviews assessing the use of CDTM have confirmed reliability of impact. Implementation guidance on CPAs to enable CDTM was found to be lacking in comprehensiveness.

Evidence of Impact

Health Impact

CDTM, enabled by CPAs between pharmacists and other health care providers, has been shown effective in improving clinical and behavioral health indicators, including lowering blood pressure, HbA1c, and LDL cholesterol levels; improving treatment quality through pharmacist compliance with clinical guidelines; and increasing patient knowledge and adherence to medication regimens.²



Health Disparity Impact

The goals of reaching populations at risk and reducing health disparities have been taken into account in the development and implementation of CPAs, particularly by pharmacy organizations (e.g., the American Pharmacists Association), state medical and pharmacy boards, and state pharmacy organizations. However, no studies have directly examined the impact of CPAs between pharmacists and providers serving low-income populations. Because pharmacists often work directly with the public in community settings, they are often considered the public's most accessible health care providers. CPAs can authorize pharmacists to make changes to a patient's medication or dosage, which can reduce the number of visits a patient has to make and lower costs, while also making it easier for patients to adhere to their medications.

Economic Impact

Research suggests that clinical pharmacy services like CDTM can be cost-saving to the health care system, primarily through avoided hospitalizations and emergency room (ER) visits.³ For example, in 2006, Missouri's Pharmacy-Assisted CDTM program resulted in a 12% decrease in any-cause hospitalizations, a 25% reduction in ER visits, and a decrease in drug-related problems among beneficiaries after 1 year. This program was also found to have a 2.5 to 1 ROI to the state, with an estimated savings of \$518.10 per patient per month.³

Strong evidence exists that CDTM enabled by a CPA is effective.

Stories from the Field

Collaborative Practice Agreements



CPAs at El Rio Community Center

El Rio Community Health Center serves over 75,000 people in Pima County, Arizona. In 2011, 20% of El Rio's adult patients (8,954 of 44,952) had diagnosed hypertension, but only 67% of those diagnosed had the condition under control. Pharmacists at El Rio were encouraged to establish CPAs with the center's medical providers. These agreements enable pharmacists to work directly with patients to help them manage their hypertension and other chronic conditions, such as diabetes and hyperlipidemia. Within the scope of the CPA, pharmacists have the discretion to change patient medications. After CDTM was implemented, El Rio reported improved clinical outcomes (e.g., lower cholesterol and blood pressure levels), increased use of recommended screenings, and reduced ER visits. The El Rio case study highlights several important considerations for CDTM implementation. These considerations include instilling mission-driven values through training and orientation, accepting pharmacy student interns, and using broad strategies and networks to improve patient care and increase potential partnerships that may extend the use of CPAs.

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Four Considerations for Implementation

1 Settings

Enabling CDTM through CPAs has been found to be effective in several clinical and community settings, including federally qualified health centers (FQHC), patient-centered medical homes, managed care health systems, community pharmacies, hospital pharmacies, and primary care clinics.

2 Policy and Law-Related Considerations

CPAs are typically authorized through state scope-of-practice laws that may or may not allow for their use within pharmacist scope-of-practice laws. Challenges associated with billing for services exist, even at the federal level.^{12,13} When a CPA is developed, the pharmacist and the prescriber work together to develop the terms of the CPA. They may use recommendations and model language available from various organizations.^{5,6,14}

3 Implementation Guidance

CDC has recently developed a CPA tool kit that provides implementation guidance:

- [Advancing Team-Based Care Through Collaborative Practice Agreements: A Resource and Implementation Guide for Adding Pharmacists to the Care Team.](#)⁴

Guidance from the state level comes from the following sources:

- [National Association of State Pharmacy Associations.](#)⁵
- [American Pharmacy Association.](#)⁶

4 Resources

Several guides and examples are available to educate and guide health care providers, decision makers, insurers, and pharmacists about how pharmacists and other health care providers can better serve patients through CPAs and CDTM. Examples include the following:

- [Collaborative Practice Agreements and Pharmacists' Patient Care Services: A Resource for Pharmacists.](#)⁷
- [A Resource for Nurses, Physician Assistants, and Other Providers.](#)⁸
- [A Resource for Government and Private Payers.](#)⁹
- [A Program Guide for Public Health: Partnering with Pharmacists.](#)¹⁰
- [Agency for Healthcare Research and Quality, Pharmacy Quality Alliance.](#)¹¹



References

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