

## **Physician-pharmacist collaboration: improving patient care through an interdisciplinary approach**

### *General overview of physician-pharmacist collaborative management*

Within primary care settings, contemporary collaborative practices have aimed to embed the clinical pharmacist into a team-based-care model. Often referred to as the physician-pharmacist collaborative management (PPCM), it has recently been recognized as a key component of the multidisciplinary approach to health care. Within this model, pharmacists work in collaboration with physicians to provide pharmaceutical care services for patients, working alongside other auxiliary health care professionals (e.g., nurses, dietitians, physical therapists). Examples of the types of services that the pharmacist is responsible for include obtaining a thorough medication history, identifying barriers to adherence, and adjusting medication regimens.

### *Chronic disease state management through PPCM*

Previous studies have investigated the impact of PPCM on the management of various chronic disease states. Many of these studies incorporated unique collaborative practice plans that outlined specific responsibilities of the pharmacist. These collaborative practice plans are an essential part of the PPCM as it allows the pharmacist to directly manage medication therapy under the supervision of the physician. Duties outlined in a collaborative practice plan often include assessing vital signs, reviewing and ordering appropriate laboratory tests, screening for drug interactions, identifying barriers to medication adherence, adjusting medication regimens, and providing patient education.

Current research suggests that incorporating PPCM model in primary care may have a positive impact in various chronic disease states, such as hypertension, type 2 diabetes mellitus, and asthma. In a recent prospective study performed at multiple primary care offices nationwide, researchers investigated the effect of PPCM in the management of uncontrolled hypertension compared typical care with the primary care provider. Clinical pharmacists conducted thorough reviews of the patients' medical record and provided a structured interview with the patients, whereby the pharmacists assessed the patients' knowledge of blood pressure medications and addressed any potential barriers to adherence. Strict follow-up with patients occurred at specific timepoints following the initial interview, and after nine months, patients who received care from the pharmacist had lower blood pressure readings and improved blood pressure control compared to patients who did not see the pharmacist. Other studies investigating the impact of PPCM showed similar results.

Much of the clinical benefits seen from the PPCM model is believed to stem from increased health professional contact with the patient. Generally, patients participating in PPCM have higher total number of office visits, with majority of these visits being with pharmacists rather than physicians. Not surprisingly, these patients also are prescribed more medications; however, this does not necessarily translate to taking more pills per day. Overall, a physician-pharmacist collaborative practice was able to provide improved disease control, without compromising patient satisfaction.

### *Challenges in implementing PPCM*

Several challenges exist with implementing a PPCM model within a primary care setting. Despite the advantages of this physician-pharmacist collaboration, physician acceptance of the model can often be a hindrance in incorporating a pharmacist within the practice. Additionally, some physician offices, particularly those not affiliated with an academic center, may lack the required resources needed to employ a pharmacist. This issue is partly complicated by lack of well-defined reimbursement models for pharmacy services, which presents a barrier for effectively generating revenue. Until changes in legislation regarding pharmacist provider status occurs, health care providers should explore unique approaches to efficiently implement PPCM in the primary care settings.

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