

COMMUNITY-BASED PHARMACISTS WELL POSITIONED FOR HEART HEALTH CARE TEAMS

Victoryn Williams, PharmD, MBA, often sees patients with hypertension who avoid their medication regimen. Normally, that's caused by adverse effects from their prescribed medications, followed by a long delay in returning to a primary care provider for re-evaluation.

Williams is on a mission to tackle high rates of hypertension in her community, and part of that means being accessible to provide patients with appropriate follow-up and monitoring.

More than 6 months ago, Williams spearheaded a hypertension clinic in Springfield, MA, embedded within Caring Health Center, the federally qualified health center where she practices. Along with her medical assistant, she travels to three Caring Health Center sites and sees roughly 12 patients on a typical day. Appointments can last anywhere from 15 minutes for a follow-up visit to 30 to 45 minutes with a new patient.

"The beauty of a pharmacist-led clinic is that patients can come in and see us more frequently for monitoring and to address any questions or concerns they have regarding their medication regimen," said Williams. This is especially important for patients being titrated on blood pressure medications to find out if they are having adverse effects, she noted. Williams is also able to get at the root of medication adherence issues given the time she is able to spend with patients.

"You really have to dig to understand the patient's barriers and lifestyle, their routine," she said.

According to CDC, about one in three American adults has high blood pressure, and nearly one-half don't have it under control. Hypertension increases a person's risk for heart disease and stroke. Pharmacists have been specifically called out in several ways as

important members of the cardiovascular disease (CVD) health care team to help with prevention and treatment. Examples from the past few months alone point to this partnership. CDC

2022 targets specific priority populations: African Americans, individuals aged 35 to 64 years (because event rates are rising), people who have had a heart attack or stroke, and those with mental illness or substance use disorder.

Outside of Million Hearts, the 2017 blood pressure guidelines from the American Heart Association (AHA) and the American College of Cardiol-



released a new guide earlier this year, in collaboration with the Million Hearts initiative, on best practices for CVD prevention. Pharmacists are mentioned in many examples. As the Million Hearts initiative continues to grow, so will the pharmacist's role. In addition to keeping people healthy and optimizing care through the ABCS—aspirin, blood pressure control, cholesterol management, and smoking cessation—Million Hearts

ogy (ACC) strongly recommend a team-based care approach to prevention and treatment and include pharmacists directly in that discussion.

Community-based

While the words "team-based care" might conjure up images of pharmacists in physicians' offices or acute-care settings, it's actually community-based pharmacists, working with prescribers,

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who may be well positioned to provide care for this patient population.

A study¹ published in the *New England Journal of Medicine*, which was announced at this year's ACC meeting in March, found that 63.3% of African American men with uncontrolled hypertension who were part of a cluster-randomized trial saw a drop in blood pressure of less than 130/80 mm Hg when specially trained pharmacists led interventions in black-owned barbershops. Only 11.7% of the control group achieved a reduction.

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Williams said the trial highlighted a critical point: interventions must be culturally relevant to a patient population to be effective. "It's only then that we see the greatest impact," she said.

"I think the most unique aspect of that trial was that they did it in the community. You are taking care of patients where they are versus expecting them to come to you," said Brent Reed, PharmD, BCPS-AQ Cardiology, FAHA, assistant professor at the University of Maryland School of Pharmacy. "The corner drug store has similar potential for that type of outreach."

Courtney Doyle-Campbell, PharmD, agrees.

"Every pharmacist deals with patients with hypertension—it's something you do every couple of minutes in the pharmacy," said Doyle-Campbell, who runs a hypertension clinic within a patient-centered medical home (PCMH) in Springfield, MA. "I would say that the most hypertension management can be done in the community pharmacy, and the potential for assistance for prevention is with the community pharmacist." Community pharmacists working under a collaborative practice agreement (CPA) to care for this patient population do everything from measur-

Opposite page: Victoryn Williams, PharmD, MBA, leads a hypertension clinic within Caring Health Center.
Above: Williams speaks with a primary care provider at Caring Health Center to answer a drug information question.

ing and monitoring blood pressure to faxing medication recommendations to prescribers.

A multicenter, randomized, controlled trial² published in the *Journal of the American College of Cardiology* in 2016 found that intervention programs in 56 community pharmacies across Alberta, Canada, reduced the estimated risk of cardiovascular events in patients by 21%. Patients in the pharmacist intervention group received a standard medication therapy consultation with a blood pressure measurement; lab assessment of A1C, lipids, and kidney function; individualized CVD risk calculation and education about risk; treatment recommendations, prescription adaptation, and prescribing as appropriate to meet treatment targets; and regular follow-up every 3 to 4 weeks for 3 months. The intervention group was compared with a usual care group that received no specific intervention or follow-up care.

Focus on meds

During a hypertension clinic appointment at Caring Health Center, Williams conducts a comprehensive medication review to ensure drug therapy is not only appropriate, but also individual-

ized for each patient and accounts for cultural, economic, and social factors.

Often, Williams finds herself deprescribing medications to prevent polypharmacy.

"The primary care provider is often not aware the patient is not taking their medication, so when they return for follow-up and their blood pressure is still elevated, more medications are added on without really assessing adherence," said Williams. Williams works under a CPA, which she established last year with her supervising physician at Caring Health Center. They work closely together to care for patients.

Outside of his teaching role at the University of Maryland School of Pharmacy, Reed practices in an acute-care setting and an outpatient clinic, both focused on cardiology. He said one of his most frequent recommendations is deprescribing.

"We find that a lot of drugs get added to treat side effects of other drugs. And if you can just get rid of the original offender, it's a much better way to manage the patient than tacking on additional drugs," said Reed.

Reed added that teams who take care of complex patients are so pressed for time, it's often difficult for them to recognize where medication changes should be made.

"Having a pharmacist there to ensure there's a focus on medication is a huge help," said Reed.

Kathleen Lusk, PharmD, BCPS, understands the time crunch as well as the financial struggles that many clinics, physicians, and pharmacists currently experience. She and a fellow pharmacist—both faculty members in the department of pharmacy practice at the University of Incarnate Word Feik School of Pharmacy—are the first pharmacists to be part of the health care team at a cardiology clinic affiliated with the University of Texas



Health Science Center at San Antonio.

After they meet patients with the cardiologist, Lusk and her colleague provide needed follow-up care in the "PharmD clinic," where they can monitor medication safety and efficacy as well as medication titration. To do this, Lusk and her pharmacist colleague work under a broad CPA.

"The [PharmD] clinic went from being not very busy to being very busy relatively quickly, just because it's such a struggle for our specialists who are so strapped for time. They can't physically see patients every week or every 2 weeks like we can," said Lusk.

Lifestyle education

Williams doesn't just focus on medications with her patients. A visit will also cover diet, lifestyle, medication adherence and routine, and more.

"I actually encourage patients to lower their blood pressure without medication," said Williams. "We know that the long-term [benefits] of lifestyle changes [not] only improve blood pressure but also other comorbid conditions like diabetes and high cholesterol."

Doyle-Campbell, who runs the PCMH hypertension clinic, considers herself a hypertension educator. In fact, she is part of a CDC Massachusetts Health Department grant for which she serves as a hypertension expert, working with local community health cen-



Williams verifies that the drug dose, frequency, directions, refills, and prescriber information match what's in the patient's records.



Williams reviews a patient's medications, disease states, clinical labs, and allergies in the electronic medical record to ensure pharmacotherapy is appropriate.

Resources

- 2017 AHA/ACC blood pressure guidelines: <http://apha.us/hypertension-guideline>
- New Board of Pharmacy Specialists Board Certification in cardiology pharmacy: <https://apha.us/BPSCardiologyPharmacy>
- CDC's Best Practices Guide for Cardiovascular Disease Prevention Programs: <https://apha.us/CDCBestPractices-Guide>
- CDC's Using the Pharmacists' Patient Care Process to Manage High Blood Pressure: A Resource Guide for Pharmacists: <https://apha.us/CDCPharmacistResourceGuide>
- CDC's Advancing Team-Based Care Through Collaborative Practice Agreements: <https://apha.us/CPATeam-BasedCare>

ters to help them integrate community pharmacists into hypertension management.

"There are so many other factors that go into high blood pressure, like lifestyle and OTCs. It really does take stepping back and educating the patient about why they should care about hypertension in the first place," she said.

Her patients often have control issues even when taking medications, or they might be intolerant to multiple medications.

"To get them on the right medication, we need to talk about their diet, [and] that would lead to one medication versus another. And the complaints they have in general help me choose the right agent and also know why their blood pressure is high in the first place," said Doyle-Campbell.

A typical encounter with Doyle-Campbell will involve a patient describing their day from morning until night, including their food choices, water intake, sleep habits, as well as the stresses in their lives.

For both Doyle-Campbell and Williams, working intimately with patients has revealed the large knowledge gap many have about CVD.

"The idea is to really prevent these cardiac issues before they happen," said Doyle-Campbell, who is also a professor at Western New England Univer-

sity College of Pharmacy and Health Sciences. "We've gotten so focused on the numbers, cholesterol goals, and good blood pressure that patients are often not told why to care about those things. There is a gap in that education for patients."

Home front

To account for white-coat hypertension—or elevated blood pressure readings in a clinical setting—Williams has a patient's blood pressure taken at the start of the visit and then at the end, when they tend to be more relaxed. "I have seen anywhere from a 10- to 20-mm Hg decrease in systolic blood pressure just by instituting this in the hypertension clinic," she said.

She sees her patients weekly or biweekly, depending on their blood pressure control and whether or not medications are being titrated. All patients are encouraged to get a prescription for a home blood pressure kit, keep a log of their home readings, and bring it to each visit for review, according to Williams.

Doyle-Campbell also talks to her patients about home blood pressure monitoring.

"I encourage them all to do it, to help identify whether they have adequate control, whether their medication is lasting the 24 hours, but also for them to identify their own triggers," she said.

However, a big caveat is that most patients don't take their blood pressure correctly. "It's very frustrating for them when they are doing it wrong and they can't trust the numbers. Then they give up," said Doyle-Campbell.

Pharmacists should refer to section 4 of the new AHA/ACC blood pressure guidelines for more information on accurate blood pressure measurement: <http://apha.us/hypertensionguideline>.

"The guidelines do focus more on making sure you have the right diagnosis and getting patients to check their blood pressure at home," said Doyle-Campbell, who was on board with the new blood pressure guidelines and adopted them right away.

Being included with other providers as a full member of the health care team was significant to Doyle-Campbell when she saw the guidelines for the first time.

"Pharmacists have a huge role to play here," she said, and added that provider status could further the possibilities even more. Giving more pharmacists the incentive to do this work would be a good start.

References

1. N Engl J Med. 2018. doi: 10.1056/NEJ-Moa1717250
2. J Am Coll Cardiol. 2016. doi: 10.1016/j.jacc.2016.03.528

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