

### I. Problem

In West Virginia, 41% of the population have hypertension and 13% have diabetes (Behavioral Risk Factor Surveillance System, 2013). The public health burden of these two conditions is heightened by the state's shortage of primary care providers to manage patients with these conditions, especially those who live in rural areas. WV is one of the most rural US states with 43 of our 55 counties designated as rural. The 2017 release of the American College of Cardiology/American Heart Association High Blood Pressure Guidelines lowers the criterion for hypertension diagnosis. This change in diagnostic standard will likely increase the prevalence of patients diagnosed with high blood pressure while the ability to obtain a diagnosis decreases in medical shortage areas. The patient centered medical home or primary care medical home (PCMH) is one strategy to address this combination of need and lack of access to care. A PCMH is a primary care system structure that emphasizes inter-professional collaboration for patient management. PCMHs engage an increasing number of non-physician team members participating in patient care, especially in chronic care management, including hypertension and diabetes. Engaging additional providers as a team can be vital to improving care coordination and patient outcomes. Pharmacists are a frequent member of PCMHs and can be utilized to aid patients with chronic diseases. Pharmacists are the most accessible health care provider in the community with 90% of the U.S. population living within two miles of a community pharmacy. Thus, strategies that target pharmacists, especially those in rural areas, may be one critical way to increase the use of team-based care in health systems.

*"Team-based care is vital for optimal patient outcomes with chronic diseases like hypertension and diabetes. Educating physician-pharmacist teams on collaborative pharmacy practice agreements can bring new and enhanced services to patients in the greatest need."*

**- Krista Capehart, WVU Wigner Institute, School of Pharmacy**

### II. Intervention

The WV Bureau for Public Health Division of Health Promotion and Chronic Disease (HPCD) recognized that implementing team-based care in our rural medically underserved state is crucial to improving patient care and long-term outcomes. With funding from the CDC's 1305 award, HPCD collaborated with the WVU Wigner Institute

School of Pharmacy to enhance capacity for pharmacists to serve as members of team-based patient care. This partnership had a two-pronged approach – (1) provide WV pharmacists with advanced certificate training in cardiovascular disease and (2) improve pharmacist-physician relationships leading to the development of collaborative pharmacy practice agreements to assist in medication adherence. This HPCD-led partnership achieved the following outcomes:

- **Coordinated, facilitated, and executed** five American Pharmacist Association (APhA) Pharmacy-Based Cardiovascular Disease Certificate Programs throughout WV and **trained** 19 pharmacists.
- **Engaged** key stakeholders including HPCD, WVU School of Pharmacy, WVU Office of Health Services Research (OHSR), and WV Academy of Family Physicians to identify, assess, plan, and implement strategies to support team-based care protocols.
- **Coordinated, facilitated, and provided** an all-day workshop and continuing education program for 81 physicians and pharmacists. Workshop topics included team-based care, the pharmacist patient care process, and collaborative pharmacy practice agreements.
- **Developed and disseminated** a WV specific model for collaborative pharmacy practice agreements with the WV Board of Pharmacy.
- Strived to **develop and advance** statewide practice protocols for pharmacist-physician partnerships to improve access to care and better patient outcomes.
- **Identified** Collaborative Pharmacy Practice Agreement Champions in WV.
- All three West Virginia schools of pharmacy are now **implementing** the PPCP as a curriculum component, including valuable education that can help advance PPCP use by future West Virginia pharmacists.

### III. Health Impact

Prior to WV's 1305 funding, there were no pharmacists with the APhA Pharmacy-based Cardiovascular Disease Certificates in West Virginia. Now, there are 19 certified pharmacists in West Virginia with the potential for additional certified pharmacists because of future scheduled training. A workshop focusing on "Advancing Team-Based Care Through the use of Collaborative Practice Agreements (CPAs) and Using the Pharmacists' Patient Care Process" reached 81 attendees from WV and four neighboring states. From March 2017 to September 2018, CPAs in WV have increased from 9 to 18, with an additional 12 in development. Additionally, the WV Board of Pharmacy is working with HPCD partners to develop and advance the use of statewide protocols for pharmacist care in WV.

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