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# Title

*Exploring the association between physician continuity of care and diagnosing hypertension* 

# Priority 1 (Research Category)

Cardiovascular disease

#### Presenters

Mingliang Dai, PhD, Andrew Bazemore, MD, MPH, Sarah Fleischer, MS, Zachary Morgan, MS

#### Abstract

Context. The American Board of Family Medicine was funded by the Gordon Betty Moore Foundation to study the association between physician continuity of care, a clinical quality measure, and its impact on accurate, timely, efficient, and cost-effective diagnosis of target conditions that contribute to cardiovascular disease. In this exploratory analysis, we used electronic health records data from the PRIME registry to examine the association of continuity with factors leading to a hypertension diagnosis.

Objective. 1) to determine the rate and timeliness of hypertension diagnosis, 2) to investigate the number of hypertension-level blood pressure (BP) readings in the 12 months prior to the diagnosis, and 3) to explore the association between physician continuity of care and these variables.

Study Design and Population Studied. In this cohort study, we created two patient cohorts. Our prospective cohort consisted of patients who had 2 or more BP readings greater than SBP of 130 or DBP of 80 mm Hg in 2017-2018 and who did not have a hypertension diagnosis prior to the date of the second reading. Our retrospective cohort consisted of patients who had a hypertension diagnosis in 2018-2019.

Dataset. Electronic health records extracted from the PRIME registry

Outcome Measures. The rate of diagnosis was calculated by dividing the number of patients with a hypertension diagnosis by the number of patients whose BP readings exceeded the thresholds for hypertension per clinical guidelines. We investigated the timeliness of diagnosis by counting the average days between the second reading and the diagnosis dates. We also identified the number of hypertension-level BP readings in the past 12 months for patients diagnosed with hypertension.

Results. Of 7,615 eligible patients from 4 pilot practices, the rate of hypertension diagnosis varied from 39.6% (solo practice) to 11.5% (large practice). The average days until diagnosis ranged from 142 days (solo practice) to 247 days (medium practice). Among patients diagnosed with hypertension

(n=104,727), 25.7% had 0, 39.8% had 1, 14.7% had 2 and 19.7 had 3 or more hypertension-level BP readings in the 12 months prior to the diagnosis. We found no significant association between physician continuity of care and the rate or timeliness of the hypertension diagnosis.

Conclusions. Factors leading to a hypertension diagnosis may be influenced more by other unobserved variables than by physician continuity of care.