



Improving the Control of Hypertension

The incidence of hypertension is rising. Currently, thirty one percent of adults in Arizona are believed to have the diagnosis. Treated properly, the health risks strongly linked to untreated hypertension--heart attack, stroke, and renal disease--can be minimized. Collaborative Ventures Network has prioritized achieving the [Healthy People 2020](#) goal of controlling hypertension in 61 percent of adults diagnosed with it (controversy surrounding what constitutes proper control can be understood here: [AAFP](#)).

CVN Quality Committee has identified evidence-based and Network best practices that reveal a path to getting there. Strategies include: 1) following current guidelines that improve the correct diagnosis of hypertension, 2) improve the process of obtaining and documenting blood pressure measurements, 3) standardize the treatment of patients with hypertension, 4) improve patient understanding, and 5) incorporate population health approaches that include surveillance of hypertension patient registries. Several of our health centers have already demonstrated that this Healthy People 2020 target is attainable. The CVN team stands ready to assist all CHCs that seek to improve their quality numbers.

Strategies for Improvement:

- The QI committee found evidence that **patient education** is an important foundation to improved blood pressure control and should include a care team approach with lifestyle and disease education, self-management goals, medication reconciliation, and appointment recall. Sensitive appraisal of patient cultural perspectives is a must if success can be achieved in controlling this asymptomatic condition.

- Successful health centers pay particular attention to **proper blood pressure measurement** as outlined in [USPSTF guidelines](#). They ensure that the entire clinical team, including physician, NP, PA, RN, and MA understand guidelines and have attained competency in blood pressure testing to prevent misdiagnosis. Emphasis has been placed on the following clinical practices:

- a. Patient should be at rest for ≥ 5 minutes with back supported, feet on floor, arm supported
- b. Patient should not talk or use phone during measurement
- c. Placing correct cuff size (large arms require large adult or thigh cuff size and proper width fit being $\frac{3}{4}$ of the arm length from axilla to elbow)
- d. At least 30 minutes after last tobacco use, if patient smokes.
- e. All elevated initial blood pressures ($\geq 140/90$) should be rechecked after ≥ 10 minutes and if available with average measurements from ABPM—see next item.
- f. Research confirms ambulatory BP measurement (ABPM) decreases the rate falsely diagnosed hypertension based on in-office recordings. The devices, which are expensive, automatically obtain multiple home measurements and relay results to the practice. In-office devices that performs multiple measurements without an attendant may approximate the accuracy ABPM (e.g., BpTRU).

- The QI committee emphasizes care in line with current hypertension **treatment guidelines** ([JNC-8 recommendations](#)):

- a. If BP \geq 160/100, begin with two medications
- b. Choose once daily or combination medicines to improve compliance when possible
- c. Consider chlorthalidone or indapamide over hydrochlorothiazide due to better evidence of benefit.
- d. See patient back to reassess blood pressure in 2-3 weeks after adding or changing medication
- e. If blood pressure not at goal with 3 medications at maximum dosage, consider secondary causes of hypertension, and/or consider referral (e.g., nephrologist)
- f. Use behavioral health or health coach assessment for barriers to successful treatment

•Last but not least, access the power of informatics, that is using data generated by the EHR to improve care through a **population health** perspective. CVN and several CHCs have licensed AZARA software for this critical task which extracts UDS and other important EHR data for analysis and interpretation with available support from the CVN team. An example is the generation of frequent, regular, unblinded reports of percentage of controlled hypertensive patients by provider. Sharing results across medical teams can develop a culture that values quality improvement. Registries of uncontrolled hypertensive patients, by location and/or provider, and targeted outreach for appointment recall (electronic) can lead to significant improvements in blood pressure control.