Controlling High Blood Pressure

Clinical Information

- People with diabetes are twice as likely to experience high blood pressure (BP) compared to those without. [4] ~2/3 of adults with diabetes have BP greater than 130/80 mmHg or use prescription medications for hypertension. [4]
- Someone with diabetes and high BP is 4 times as likely to develop heart disease than a person without either. [4]
- Excessive blood pressure can harden the arteries. The reduction of blood flow and oxygen to the heart may cause chest pain, heart attack, heart failure, and irregular heartbeat. [10]
- Hypertension can also cause kidney damage and may block or burst arteries that supply blood and oxygen to the brain, causing stroke. [10]
- Systolic pressure refers to the pressure inside the artery when the heart contracts; diastolic pressure refers to the pressure when the heart is at rest. [4]

Percentage of patients with hypertension (HTN) whose blood pressure was controlled, which is defined as ***<140/90 mmHg***.

Best Practices

- Blood pressure (BP) readings must include distinct systolic and diastolic values rather than ranges.
- If the patient's BP is $\geq$ 140 and/or $\geq$ 90:
  - Repeat the reading at end of the visit
  - Schedule a follow-up
  - Encourage at-home monitoring with a BP log and ask them to share readings at each visit
- Ensure the cuff is calibrated, the correct size, and is on the bare arm.
- The patient's arm should be supported, with the elbow at chest height and legs uncrossed.

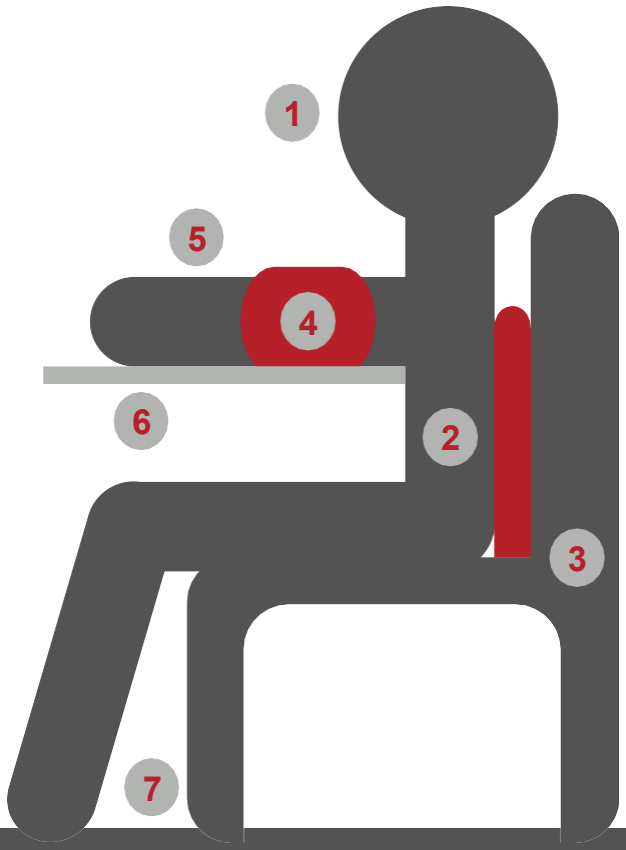
Health Equity Considerations

- BP control rates have worsened over the last 10 years, with non-Hispanic Black persons having 10% lower control rates compared to non-Hispanic White counterparts. [2]
- Non- Hispanic Black patients are diagnosed with hypertension earlier in life, experiencing 30% higher risk of stroke, 50% high risk of cardiovascular disease (CVD) mortality, and more than 4 times higher risk of end- stage renal disease. [2]
- Overall, non-Hispanic Black persons experience ~4-5 times greater hypertension-related mortality compared to non-Hispanic White Americans. [2]

7 Simple Tips

TO GET AN ACCURATE BLOOD PRESSURE READING

1. **Refrain from having a conversation**
   Talking or active listening adds ***10 mmHg***
2. **Empty bladder first**
   Full bladder adds ***10 mmHg***
3. **Support back and feet**
   Unsupported back or feet adds ***6 mmHg***
4. **Use the correct cuff size**
   Small cuffs add ***2-10 mmHg***
5. **Put the cuff on bare arm**
   Cuff over clothing adds ***5-50 mmHg***
6. **Support arm at heart level**
   Unsupported arm adds ***10 mmHg***
7. **Keep legs uncrossed**
   Crossed legs add ***2-8 mmHg***



Sources and Additional Resources:

https://www.ahrq.gov/sites/default/files/wysiwyg/evidencenow/heart-health/blood-pressure-home-measure.pdf

https://www.heart.org/-/media/files/professional/million-hearts/success-stories/7-simple-tips-to-get-accurate-blood-pressure-ucm_493556.pdf

Glycemic Status Assessment
For Patients with Diabetes

Best Practices

- Consider scheduling all routine appointments for diabetic patients at the beginning of the year.
- Recommend office visits every three months for diabetes management.
- Chart preparation before appointments to ensure labs and screenings were completed.
- Consider implementing standing lab orders.
- For Point-of-Care testing, ensure results are documented and all appropriate codes are submitted.
- Discuss goals with patients and openly discuss any barriers.
- Assess behavioral or social health needs that could be creating barriers to diabetes management.

Health Equity Considerations

- There is overall poorer glycemic control in adults with diabetes across the US. [6]
- Literature reviews suggest that A1c levels are higher among African-American and other minority populations.
- Improvements in glycemic control can prevent microvascular complications among patients with diabetes, which also disproportionately impact marginalized populations. [6]

Percentage of patients with diabetes who most recent glycemic status (hemoglobin A1c [HbA1c] or glucose management indicator [GMI]) was ***≤ 9.0%***

Clinical Information

- A1c test reflect average blood sugar level for the past 2-3 months. [1]
- It measures the percentage of hemoglobin proteins that are coated with sugar.
- Higher A1c levels indicate poorer blood sugar control and a higher risk of diabetes complications.
- Among patients with diabetes, an initial A1c test establishes baseline A1c levels; regular repetitions of the test are essential to monitor diabetes treatment
- plan. [1]
  Elevated A1c can be an independent risk factor for coronary heart disease and stroke in patients with or without DM. [6]

Kidney Health Evaluations

For Patients with Diabetes

***Two* Tests Required Annually**

1. **Estimated glomerular filtration rate (eGFR)**
   - HEDIS CPT Codes: 88047-88048, 80050, 80053, 80069, 82565
2. **Urine albumin-creatinine ration (uACR)**
   - HEDIS CPT Codes: 82570 (Urine Creatinine) **AND** 82043 (Urine Albumin)

*Please note: A quantitative urine albumin test **and** a urine creatinine are required to meet compliance for uACR for the HEDIS Measure. If the tests are scheduled separately, they must be completed within 4 days of each other.*

Clinical Information

- Diabetes is the most common cause of kidney failure requiring kidney transplantation or dialysis. [5]
- Chronic Kidney Disease (CKD) is most often identified through routine screening.
- eGFR assesses kidney function; uACR assesses for kidney damage.
  - Unlike urine dipstick for albumin alone, a urine albumin creatinine ratio is **unaffected** by variation in urine concentration. [8]
- 9/10 individuals are unaware they have underlying CKD, including 2/5 with severe CKD. [5]
- Evidence of CKD is often present at the time of diagnosis of type 2 diabetes. [5]
- Less than half of patients with type 2 diabetes are screened for albuminuria each year. [5]

Best Practices

- Chart preparation before appointment to review labs.
- eGFR and uACR should be required health maintenance for patients with diabetes.

Health Equity Considerations

- There are lower completion rates of eGFR and uACR among Black and socioeconomically disadvantaged groups. [9]
- Patients who are Black account for > 85% of patients receiving dialysis for kidney failure, even though they only make up 13% of the overall population. [9]
- Race-based adjustments used in eGFR calculations (CKD-EPI) overestimate Black patients' kidney function by as much as 16% - this delays diagnosis & treatment of CKD and leads to worse health outcomes and delayed kidney transplant. [9]
- There is a movement to eliminate the race-adjusted calculation for eGFR. Until then, understanding the basis for the eGFR calculation could improve diagnosis among patients who are Black.

Eye Exam
For Patients with Diabetes

Clinical Information

- High blood sugar due to diabetes can damage the retina, causing diabetic retinopathy (DR). [3]
- If left untreated, DR can lead to other serious conditions:
  - Diabetic macular edema (DME) occurs in ~1/15 people with diabetes. Blood vessels in the retina leak fluid into the macula, which may cause blurry vision. [3]
  - Neovascular glaucoma results when blood vessels grow out of the retina and block fluid drainage out of the eye, causing vision loss and blindness.
- Anyone with diabetes is at risk for DR, but the risk increases the longer one has diabetes. [3]
- Dilated eye exams can detect DR. Early treatment can stop damage and prevent blindness.

Health Equity Considerations

- For patients with diabetes, adherence to annual eye exams is poor.
- Studies report that minorities are less likely to receive care. [7]
- A study evaluating data from the Centers for Medicare & Medicaid Services found that only ~55% of those with diabetes had an eye exam. [7]
- The prevalence of eye exams was lower among Black and Hispanic individuals with diabetes than non-Hispanic White patients.
- Women with diabetes who become pregnant or with gestational diabetes are at high risk of diabetic retinopathy. [3]

The percentage of patients with Diabetes who had a retinal eye exam.

Please Note: If the patient has history of diabetic retinopathy, screen annually. Otherwise, complete an eye exam every other year.

Best Practices

- Review most recent retinal eye exam during chart preparation.
- Ask patients to have their eye specialist end eye exam results and include request on the referral.
- If desired, CCA has a standard Eye Exam Report.
- Blindness is not an eligible exclusion for a diabetic retinal eye exam.
- If the patient has had a unilateral enucleation, continue annual retinal screening of the remaining eye.
- Include a history of retinal eye exam with eye care specialist and data of service in the medical record.

Additional Resources	Link
HEDIS	https://www.commonwealthcarealliance.org/provider-news/provider-resource-guides/
CMS Stars	https://www.cms.gov/medicare/health-drug-plans/part-c-d-performance-data

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