



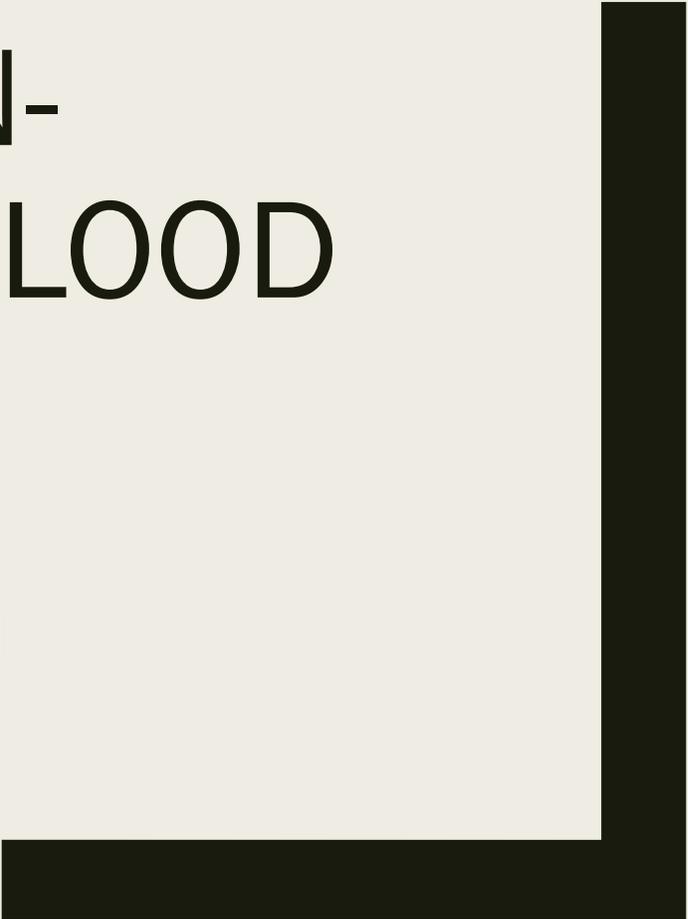
# HYPERTENSION- IMPROVEMENT IN BLOOD PRESSURE

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# Agenda

- 2017 ACC/AHA Guidelines Overview
- Blood Pressure Monitoring Guidelines
- 2019 QPP Hypertension Measure
- Special Populations: Hypertension (HTN) Management
- QPP Improvement Strategies
  - *373 Hypertension: Improvement in Blood Pressure (eCQM)*
  - *Unspecified vs Specific Codes*
  - *Best practice for documentation of hypertension*
  - *Best practice for coding hypertension*
  - *Example of de-identified HTN progress note*

# What's New: 2017 ACC/AHA Hypertension (HTN) Care

## \*\*\*KEY RECOMMENDATIONS\*\*\*

Category	New Guideline
Classification of Blood Pressure	Normal Systolic (<120/80); <b>Elevated BP</b> (120 -129/<80); Stage I (130-190/80-90) Stage II ( $\geq 140/\geq 90$ ); Healthy lifestyle changes
Pharmacological Recommendations	BP Lowering medications for Stage I with CVD or 10-year ASCVD >10%. Stage II, 2-BP meds in addition healthy lifestyle changes. - African Americans: 2 or more BP meds; target $\leq 130/80$ .
Emphasis on CVD	*Use of BP meds for primary and secondary prevention of CVD in adults
Focus on Accurate Measurements	Avoid smoking, caffeine, or exercise w/i 30 mins, empty bladder, sit 5 mins;
Focus on Self Monitoring	Home monitoring and reporting for diagnosis, treatment and management
Treatment Recommendations <b>**NEW**</b>	<ul style="list-style-type: none"> <li>- DASH diet promotion (Fruits, vegetables, whole grains and low-fat dairy, low sodium</li> <li>- Target Ideal Body Weight (IDW); 1mm Hg BP reduction for every 1 KG reduction loss</li> <li>- In CVD, in Stage I &amp; II target &lt; 130/80 (previously 140/90)</li> </ul>
Anti-hypertensive treatment	<ul style="list-style-type: none"> <li>- Treatment: thiazide diuretics, CCB, ACE or ARB</li> <li>- Tx for HBP with clinical CVD with avg <math>\geq 130/80</math></li> </ul>

# What's New: 2017 ACC/AHA Hypertension Care

## \*\*\*KEY RECOMMENDATIONS\*\*\*

Nonpharmacological Interventions	New Guidelines
Nonpharmacological Interventions	Rich in fruits, vegetables, whole grains, and low-fat dairy products with reduced content of saturated and total fat
Weight loss	Ideal body weight is best goal; aim for at least 1 kg body weight reduction for most overweight adults Expect about 1 mm Hg for every 1 kg reduction in body weight
Sodium	Reduce intake of dietary sodium: < 1.5 grams/day optimal; aim for < 1 gr/day reduction in most adults
Potassium	3.5K – 5K mgs/day; preferable by consumption of a diet rich in potassium
Physical Activity (Aerobic)	Add aerobic exercises to weekly routine; 90-150 min/week. 65%-75% heart rate reserve
Physical Activity (Dynamic resistance)	Add resistance training to weekly routine; include isometric resistance exercises 90 – 150 min/week 50% - 80% heart rate reserve 6 exercises, 3 sets/exercise, 10 reps/set
Reduce alcohol consumption	For those who drink alcohol, the recommended daily consumption is no more than 2 drinks for men and 1 drink for women

# Accurate Blood Pressure Monitoring



- Use out-of-office BP measurements to help confirm HTN and adjust meds along with telehealth counseling or clinical interventions
  - *Ambulatory BP monitoring \*\*best predictor\*\**
  - *Monitoring recommendations (home)*
    - 2 readings 1 minute apart each morning before medication and each evening before supper
    - Weekly readings 2 weeks after a treatment change and the week before a clinic visit
- Masked Hypertension
  - *Normal BP in office but elevated at home*
- White Coat Hypertension
  - *Higher office readings; normal at home*

# 2019 QPP Hypertension Measure

- High Priority Measure: Intermediate Outcome  
*“Percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90 mm Hg) during the measure period”*

*Applies to: Cardiology, Family Medicine, Internal Medicine, Obstetrics/Gyn, Vascular Surgery, Rheumatology, and NCQA*

# Special Populations: HTN Best Practices (1)

- Chlorthalidone (12.5-25mg) is the preferred diuretic due to long half-life and proven reduction of CVD risk
- ACE/ARBs increase risk of hyperkalemia in CKD and potassium sparing drugs
- ACE/ARBs should be discontinued during pregnancy
- Calcium Channel blockers (CCBs) dihydropyridines cause edema
- Non-dihydropyridine CCBS are associated with bradycardia and heart block and should be avoided in HFrEF
- Abrupt cessation of beta-blockers (BBs) should be avoided
- Loop diuretics are preferred in HF and when the GFR is <30 ml/min

*Source: [www.acc.org/latest-in-cardiology/ten-points-to-remember/](http://www.acc.org/latest-in-cardiology/ten-points-to-remember/)*

# Special Populations: HTN Best Practices (2)

- Spironolactone and eplerenone is preferred in the treatment of primary aldosteronism and resistant hypertension.
- Alpha blockers are associated with orthostatic hypotension; BPH
- Direct acting vasodilators are associated with sodium and water retention and must be used with a diuretic or BB.
- DM & HTN: medical treatment should be initiated at BP > 130/80 mm Hg. First line medications (i.e., diuretics, ACE inhibitors, ARBs and CCBs are useful and effective. ACE inhibitors and ARBs may be useful in albuminuria.
- African Americans with HTN but without HF or CKD, including those with DM, should be initially treated with thiazide-type diuretic or CCB. Two or more meds are recommended to achieve target control <130/80 mm Hg in adults

*Source: [www.acc.org/latest-in-cardiology/ten-points-to-remember/](http://www.acc.org/latest-in-cardiology/ten-points-to-remember/)*

# Improvement Strategies: QPP Hypertension

- Adhere to the 2017 ACC/AHA treatment guidelines
- Ensure patient accuracy with home blood pressure monitoring equipment and technique
- Emphasize and educate patients on important lifestyle modifications
- Utilize ambulatory BP monitoring for documenting BP control and treatment effectiveness
- Encourage patient and family engagement
- Ensure compliance with drug therapy principles for special populations

# SUMMARY

- 2017 ACC/AHA Guidelines Overview
- Blood Pressure Monitoring Guidelines
- 2019 QPP Hypertension Measure
- Special Populations: Hypertension (HTN) Management
- QPP Improvement Strategies

# Learning Objectives



- 373 Hypertension: Improvement in Blood Pressure (eCQM)
- Unspecified vs Specific Codes
- Best practice for documentation of hypertension
- Best practice for coding hypertension
- Example of de-identified HTN progress note

# 373 Hypertension: Improvement in Blood Pressure (eCQM)



**Description** Percentage of patients aged 18-85 years of age with a diagnosis of hypertension whose blood pressure improved during the measurement period.

**Numerator** Patients whose follow-up blood pressure is at least 10 mmHg less than their baseline blood pressure or is adequately controlled. If a follow-up blood pressure reading is not recorded during the measurement year, the patient's blood pressure is assumed "not improved."

**Denominator** All patients aged 18-85 years of age, who had at least one outpatient visit in the first six months of the measurement year, who have a diagnosis of essential hypertension documented during that outpatient visit, and who have uncontrolled baseline blood pressure at the time of that visit.

**Denominator Exclusions** Exclude from the denominator all patients with evidence of end-stage renal disease (ESRD) on or prior to December 31 of the measurement year. Documentation of dialysis or kidney transplant also meets the criteria for evidence of ESRD. Exclude from the denominator all patients with a diagnosis of pregnancy during the measurement year. Exclude patients who were in hospice care during the measurement year.

**Rationale** Hypertension, or high blood pressure, is a very common and dangerous condition that increases risk for heart disease and stroke, two of the leading causes of death for Americans (Farley et al., 2010). Compared with other dietary, lifestyle, and metabolic risk factors, high blood pressure is the leading cause of death in women and the second-leading cause of death in men, behind smoking (Danaei et al., 2011). Approximately 1 in 3 U.S. adults, or about 70 million people, have high blood pressure but only about half (52%) of these people have their high blood pressure under control. Additionally, data from NHANES 2011 to 2012 found that 17.2% of U.S. adults are not aware they have hypertension (Nwankwo et al., 2013). Projections show that by 2030, approximately 41.4% of US adults will have hypertension, an increase of 8.4% from 2012 estimates (Heidenreich et al., 2011). The estimated direct and indirect cost of high blood pressure for 2011 is \$46.4 billion. This total includes direct costs such as the cost of physicians and other health professionals, hospital services, prescribed medications and home health care, as well as indirect costs due to loss of productivity from premature mortality (Mozaffarian et al., 2015). Projections show that by 2030, the total cost of high blood pressure could increase to an estimated \$274 billion (Heidenreich et al., 2011). Better control of blood pressure has been shown to significantly reduce the probability that undesirable and costly outcomes will occur. In clinical trials, antihypertensive therapy has been associated with reductions in stroke incidence (35-40%), myocardial infarction (20-25%) and heart failure (>50%) (Chobanian et al., 2003). Thus, the relationship between the measure (control of hypertension) and the long-term clinical outcomes listed is well established.

# HYPERTENSION



Hypertension is a major risk factor for myocardial infarction, vascular disease, chronic kidney disease, and stroke.

Cardiovascular diseases including hypertension are on the Hierarchical Condition Categories (HCC) list, as they are chronic and demand long-term treatment.

Blood pressure and efficacy of pharmacologic therapy should be assessed at every patient encounter.

The key to the documentation is specificity with regards to *type, stage, and acuity*.

# Documentation Tips:

High blood pressure may be incidental;  
Hypertension is a chronic condition. Document hypertension when it exists to avoid ambiguity.

An isolated instance of elevated blood pressure  
Should be documented, and will be reported with R03.0 *Elevated blood pressure reading without a diagnosis of hypertension*. Also reported with R03.0 is borderline hypertension.

A patient on medication for hypertension who has normal blood pressure readings  
Still has hypertension, not history of hypertension. Ensure the diagnosis is captured by noting it in documentation. Coders cannot abstract diagnoses from Past Medical History.

The ICD Guidelines state that a causal relationship can be assumed  
For hypertension when it occurs with diabetes, heart failure, or chronic kidney disease. Be sure to document when these conditions coexist and are NOT related to hypertension.

# Documentation Tips:

**Coders cannot abstract diagnoses from numbers.**

A blood pressure reading of 180/110 cannot be coded at all. Coders can only abstract the provider diagnoses.

**If a patient has secondary hypertension**

Identify the source as, for example, renovascular, other renal, or endocrine, and link the specific underlying condition to the hypertension in documentation.

**Specify a pregnant patient with hypertension** As having a pre-existing, gestational, pre-eclampsic, or eclampsic hypertension.

**Document the smoking status of a patient with hypertension** As current smoker, history of tobacco dependence, tobacco use, or exposure to environmental tobacco smoke.

**When a patient has hypotension**

Identify the etiology, for example, drug-induced (also document medication), idiopathic, orthostatic, or other cause.

# HYPERTENSION Diagnosis Coding



In ICD-10, hypertension is defined as essential (primary). The concept of “benign or malignant” as it relates to hypertension no longer exists.

When documenting hypertension, include the following:

1. Type: e.g. essential, secondary, etc.
2. Causal relationship: e.g. Renal, Pulmonary, etc.

## ICD-10 Code Examples

I10	<b>Essential (primary) hypertension</b>
I11.9	<b>Hypertensive heart disease without heart failure</b>
I15.0	<b>Renovascular hypertension</b>

# 2019 ICD-10 Hypertension Updates

## Hypertension with Heart Disease



Hypertension with heart conditions classified to I50.XX are assigned to a code from category I11 - Hypertensive Heart Disease.

Use additional code(s) from category I50, Heart failure, to identify the type(s) of heart failure.

The same heart conditions with hypertension are coded separately if the provider has documented they are unrelated to the hypertension. Sequence according to the circumstances of the encounter.

# 2019 ICD-10 Hypertension Updates

## Pulmonary Hypertension



Pulmonary hypertension is classified to category I27, Other Pulmonary Heart Diseases.

For secondary pulmonary hypertension, also code any associated conditions or adverse effects of drugs or toxins.

The sequencing is based on the reason for the encounter, except for adverse effects of drugs.

# Unspecified Codes

## **UNSPECIFIED CODES**

*Codes that do not fully define important parameters of the patient's condition, that should otherwise be defined, given information available to the clinician and the coder.*



**V.S.**

## **Specific codes**

*Codes reflecting the most appropriate level of certainty known for an encounter should be documented accordingly.*

## A PLACE FOR “UNSPECIFIED” CODES

*Sometimes assigning “Unspecified”  
codes makes sense...*

The patient may be early in  
the course of evaluation

The claim may be coming from a provider who is  
not directly diagnosing the patient’s condition

The clinician seeing the patient may be more of a  
generalist and not able to define the condition at the  
level of detail expected by a specialist

If there is insufficient information to more accurately  
define a condition



## Scenario: Blood Pressure Check CC, HPI, ROS



**CC:** Pt is here for BP Check

**History of Present Illness:** Patient here today f/u HTN. Denies CP, SOB, HA, or Dizziness. States that she has a lump in her upper abdomen for 5 years that may have enlarged, and that she has a hernia in her navel that has been hurting 1 week. She also states that she is drinking at least 7 glasses of wine a day.

**ROS:**

**General:** Patient denies fatigue, malaise, weight loss, fevers, chills, sweats, anorexia.

**Cardiovascular:** Patient denies chest pain, palpitations, syncope, dyspnea on exertion, orthopnea, PND, peripheral edema.

**Respiratory:** Patient denies excessive sputum, hemoptysis, wheezing, cough, dyspnea.

**Gastrointestinal:** Lump upper abdomen and umbilical hernia. Patient complains of moderate abdominal pain. Patient denies nausea, vomiting, change in bowel habits, diarrhea, constipation, heartburn, melena, hematochezia, jaundice.

## Scenario: Blood Pressure Check Exam & Assessment

### EXAM:

**General:** Well developed, well nourished, in no acute distress.

**Neck:** No masses, thyromegaly, or abnormal cervical nodes.

**Lungs:** Clear to auscultation.

**Heart:** Chest non-tender; regular rate and rhythm, S1, S2 without murmurs, rubs, or gallops

**Abdomen:** Mass upper abdomen approx. 4 CM, umbilical hernia with tenderness on palpation

**Psych:** Alert, normal attention span, normal mood.

### ASSESSMENT:

1. Hypertension (DX: I10)
2. Hernia, umbilical (K42.9)
3. Abdominal mass generalized (R19.07)
4. Alcohol abuse with intoxication (F10.12)



**Complaints/HPI:**

Mr. A 47 year 1 month 1 week old male is here for a hospital follow up.

Eligible clinician attests to documenting in the medical record they obtained, updated, or reviewed the patient's current medications Pt was admitted on 10/14/17 at hospital for an acute stroke. CT Brain showed focal hypodensity in the right basal ganglia extending to the semi ovale subacute infarction. It also showed hypodensity in the left periventricular white matter and basal ganglia. He initially had slurred speech and by the time he got to the ER, his symptoms had recovered. BP in the ER was 161/117.

-MRI showed acute - subacute infarct right caudate head, remote infarct in the left frontal periventricular areas.

-Echo showed mild concentric LVH with normal systolic function, mild TR and MR

-Carotid US showed minimal atherosclerotic plaques, b/l carotid arteries, no stenosis

-Labs show LDL 151, Cr- 1.81.

**Assessment:**

Essential (primary) hypertension (DX: I10)

Hyperlipidemia, unspecified (E78.5)

Cerebral infarction, unspecified (I63.9)

Dizziness and giddiness (R42)

**Prescription:**

1 Hydralazine 50 Mg Tablet SIG: take 1/2 tab twice a day

2 Nifedipine Er 30 Mg Tablet SIG: Take 1 at bedtime QTY: 90.00

**Diagnostic/Lab:**

Comp. Metabolic Panel (14)

C-reactive Protein, Cardiac

Cardiovascular Risk Assessment

**Plan:**

DIET: low calorie, diabetic (1500 calories/day), low salt and low carbohydrate. FOLLOW UP: after 1 week(s). OTHER: -dizziness is likely sec to lower blood pressure -do not take BP meds again today.



# In Conclusion

Effective documentation and coding for hypertension is all about the details.

The documentation tells the relevant story of a patient. It may sound like a lot of work, but if the provider documents well on the initial visit, documenting for a subsequent visit is easier.

The key to accurate coding and billing is all in the documentation!



# References

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