

## 2017 HTN CPG QI Metrics – Subspecialist

\*\*\*All aims, questions, and measures were gathered from the [2018 Education in Quality Improvement for Pediatric Practice \(EQIPP\) module on Hypertension](#).\*\*\*

**Inclusion Criteria:** ≥3 years of age and have had at least 2 visits in the last year

**Exclusion Criteria:** BMI ≥85<sup>th</sup> percentile

Document the Measurement of Blood Pressure (BP)		
Aim	Data Collection Question	Measure
90% of patients diagnosed with hypertension (HTN) will have diagnosis documented and confirmed	<p>1. Was a diagnosis of HTN documented and confirmed?</p> <p>A. BP measurement documented</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul> <p>B. Method of BP measurement documented</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul> <p>C. Site of BP measurement documented</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul> <p>D. BP measurement repeated twice and averaged</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> <li>- NA, due to reason for high BP (e.g., pain, crying, etc.)</li> </ul> <p>E. If yes to 1D, was BP measurement repeated once by auscultation?</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> <li>- NA, BP not elevated</li> </ul> <p>F. BP classification documented</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul> <p>G. Follow up BP readings scheduled or arranged, if average is ≥ 90<sup>th</sup> percentile</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> <li>- NA, ≥ 90<sup>th</sup> percentile</li> <li>- NA, immediate action indicated</li> </ul>	<p>Numerator: Total number of charts with “Yes” or “NA” selected in questions 1A – 1G</p> <hr/> <p>Denominator: Total number of charts in chart set</p>

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Interpret the BP Measurement		
Aim	Data Collection Question	Measure
90% of patients will have their BP classified according to the 2017 Clinical Practice Guideline (CPG)	2. What is the BP classification? (See 2017 CPG) <ul style="list-style-type: none"> <li>- Normal</li> <li>- Elevated</li> <li>- Stage 1 - HTN</li> <li>- Stage 2 - HTN</li> <li>- Unable to classify due to missing height (patient less than 13 years of age)</li> </ul>	Numerator: Total number of charts with “Normal” OR “Elevated” OR “Stage 1 - HTN” OR “Stage 2 - HTN” selected in Q2
		Denominator: Total number of charts in chart set

Confirm Diagnosis of HTN		
Aim	Data Collection Question	Measure
90% of patients will have ambulatory BP monitoring (ABPM) used in accordance with the 2017 CPG to further assess BP	3. Was ABPM (ex. 24-hour blood pressure monitoring) used in accordance with the 2017 CPG (Table 7) to further assess BP? <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> <li>- No, no ABPM available</li> <li>- NA, ABPM not recommended</li> </ul>	Numerator: Total number of charts with “Yes” selected in Q3
		Denominator: Total number of charts in chart set MINUS “No, no ABPM available” MINUS “NA, ABPM not recommended”

Evaluate for Identifiable Causes and Comorbidity Associated HTN		
Aim	Data Collection Question	Measure
90% of patients will have identifiable causes and comorbidity associated with HTN documented in the medical record	4. Were the following documented in the medical record? <ul style="list-style-type: none"> <li>A. Targeted patient and family history                             <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> <li>- NA</li> </ul> </li> <li>B. Perinatal history                             <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> <li>- NA</li> </ul> </li> </ul>	Numerator: Total number of charts with “Yes OR NA” selected in Q4A – Q4F
		Denominator: Total number of charts in chart set

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	<ul style="list-style-type: none"> <li>C. Sleep history                             <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul> </li> <li>D. Use of medications affecting BP                             <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul> </li> <li>E. Complete physical examination                             <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul> </li> <li>F. Upper and lower BP measurements (on at least one occasion) - in accordance to the CPG (Table 7)                             <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul> </li> </ul>	
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### Discuss Lifestyle Modifications

Aim	Data Collection Question	Measure
90% of patients will have a documented dietary plan	5. Was there a documented dietary plan (e.g., low salt, weight reduction, if appropriate, etc.) for the patient? <ul style="list-style-type: none"> <li>- Yes, seen by or referred to nutritionist</li> <li>- Yes, performed counseling and provided plan</li> <li>- No</li> </ul>	Numerator: Total number of charts with "Yes" selected in Q5
		Denominator: Total number of charts in chart set

90% of patients will have additional lifestyle behaviors (aimed at maintaining a normal BP measurement) discussed with the patient or guardian	6. Were additional lifestyle behaviors (aimed at maintaining a normal BP measurement such as physical activity, screen time, caffeine use and tobacco use) discussed with the patient and/or guardian and documented in the patient's chart <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul>	Numerator: Total number of charts with "Yes" selected in Q6
		Denominator: Total number of charts in chart set

### Develop a Treatment Plan

Aim	Data Collection Question	Measure
	7. What is the cause of hypertension? <ul style="list-style-type: none"> <li>- Primary</li> <li>- Secondary</li> </ul>	Not Measured

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90% of patients with Stage 1 or Stage 2 HTN will have a treatment plan (written, electronic or other format) provided to the patient/family	8. Was a treatment plan (written, electronic or other format) provided to the patient/family? - Yes - No	Numerator: Total number of charts with “Yes” selected in Q8
		Denominator: Total number of charts with “Stage 1” or “Stage 2” selected in Q2
	9. Was this patient treated pharmacologically? - Yes - No	Not Measured
90% of patients with primary HTN will have lifestyle modifications made prior to pharmacologic treatment	If yes to question 9, A. Were lifestyle modifications made prior to initiating pharmacologic treatment? - Yes - No	Numerator: Total number of charts with “Primary” selected in Q7 AND “Yes” selected in Q9 AND “Yes” selected in Q9A
		Denominator: Total number of charts with “Primary” selected in Q7 AND “Yes” selected in Q9
90% of treated patients will have an ECHO performed at the time of consideration of pharmacologic treatment	B. Was an ECHO performed at time of consideration of pharmacologic treatment? - Yes - No	Numerator: Total number of charts with “Yes” selected in Q9 AND “Yes” selected in Q9B
		Denominator: Total number of charts with “Yes” selected in Q9
90% of treated patients (on ACE inhibitors or ARB) with primary HTN will have associated risks regarding pregnancy discussed	C. For girls of child-bearing age on ACE inhibitors or ARB: Were the associated risks regarding pregnancy discussed? - Yes - No - NA, due to gender, age, or patient not on this medication	Numerator: Total number of charts with “Yes” selected in Q9 AND “Yes” selected in Q9C
		Denominator: Total number of charts with “Yes” selected in Q9 MINUS “NA, due to gender, age, or patient not on this medication” selected in Q9C

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90% of treated patients (ACE inhibitors, ARB, diuretics) with primary HTN will have electrolytes and kidney function checked for adverse effects after initiation of therapy	<p>D. For patients on ACE inhibitors, ARB, diuretics: Were electrolytes and kidney function checked within 3 months for adverse effects after initiation of therapy?</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> <li>- NA, patient not on any of these medications</li> </ul>	Numerator: Total number of charts with “Yes” selected in Q9 AND “Yes” selected in Q9D
		Denominator: Total number of charts with “Yes” selected in Q9 MINUS “NA patient not on any of these medications” selected in Q9D
90% of patients with Stage 1 or Stage 2 HTN will have follow up blood pressure monitoring arranged	<p>10. Was follow up blood pressure monitoring arranged?</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul>	Numerator: Total number of charts with “Yes” selected in Q10
		Denominator: Total number of charts with “Stage 1” or “Stage 2” selected in Q2
90% of patients with Stage 1 or Stage 2 HTN will have communication with the PCP regarding the treatment plan	<p>11. Was there communication with the PCP regarding the treatment plan (target BP, diagnosis, medication and follow up)?</p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- No</li> </ul>	Numerator: Total number of charts with “Yes” selected in Q11
		Denominator: Total number of charts with “Stage 1” or “Stage 2” selected in Q2