

EQIPP: Hypertension (Subspecialist)

Data Collection Tool

Pull 20 charts for children ages 6 and older, **with suspected or confirmed hypertension**, that have been seen at least two times within the last year. Try to select charts that represent a range of ages.

NOTE: Try to get a balance of those with **primary hypertension** and secondary hypertension. (**Secondary Hypertension includes but not limited to** : chronic kidney disease, syndromes associated with hypertension (e.g., neurofibromatosis) , structural heart disease, solid organ transplant, or diabetes)

Example:

10 Charts with primary hypertension

10 Charts with secondary conditions

Please note that this document should only be about a subspecialist interaction with the child.

Review all documentation related to the child's care of hypertension within the last 18 months. This review is a retrospective look at the care provided.

Answer the questions based on actual documentation, not on memory or inference. This data collection activity applies to all Subspecialists.

Document the Measurement of Blood Pressure / Interpret Blood Pressure Measurement/ Confirm the Diagnosis of Hypertension

1. Was a diagnosis of hypertension documented and confirmed?

| | |
|--|---|
| a. Blood pressure measurement documented | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| b. Method of blood pressure documented | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| c. Site of blood pressure measurement documented | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| d. Blood pressure measurement repeated twice and averaged | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA, due to reason for high blood pressure (e.g. pain, crying, etc.) |
| e. If yes to 1d, Was blood pressure measurement repeated twice by auscultation? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA, blood pressure not elevated |
| f. Blood pressure classification documented | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| g. Follow up blood pressure readings scheduled or arranged, if average is $\geq 90^{\text{th}}$ percentile | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA, $\geq 90^{\text{th}}$ percentile <input type="checkbox"/> NA, immediate action indicated |

Interpret Blood Pressure Measurement

2. What is the blood pressure classification (See 2017 Clinical Practice Guidelines)?

- ☐ Normal ☐ Elevated ☐ Stage 1 - Hypertension ☐ Stage 2 - Hypertension
☐ Unable to classify due to missing height (patient less than 13 years of age)

UNABLE TO CLASSIFY DUE TO MISSING HEIGHT: DATA COLLECTION ENDS HERE

Confirm the Diagnosis of Hypertension

3. Was ambulatory blood pressure monitoring (ex. 24-hour blood pressure monitoring) used in accordance with the 2017 Clinical Practice Guidelines (Table 7) to further assess blood pressure?

☐ Yes ☐ No ☐ No, no ABPM available ☐ NA, ABPM not recommended

Evaluate for Identifiable Causes and Comorbidity Associated with Hypertension

4. Were the following documented in the medical record?

| | |
|--|--|
| a. Targeted patient and family history | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA |
| b. Perinatal History | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA |
| c. Sleep history | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| d. Use of medications affecting blood pressure | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| e. Complete physical examination | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| f. Upper and Lower blood pressure measurements (on at least one occasion) – in accordance to the 2017 clinical practice guidelines (Table 7) | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Discuss Lifestyle Modification

5. Was there a documented dietary plan (eg. low salt, weight reduction, if appropriate, etc) for the patient?

☐ Yes, seen by or referred to nutritionist or performed counseling and provided plan
☐ Yes, performed counseling and provided plan
☐ No

6. Were additional lifestyle behaviors (aimed at maintaining a normal blood pressure measurement such as physical activity, screen time, caffeine use and tobacco use) discussed with the patient and/or guardian and documented in the patients chart.

☐ Yes ☐ No

NORMAL AND ELEVATED CHARTS ENDS HERE

Develop a Treatment Plan

7. What is the cause of hypertension?

☐ Primary ☐ Secondary

8. Was a treatment plan (written, electronic or other format) provided to the patient/family?

☐ Yes ☐ No

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9. Was this patient treated pharmacologically?

☐ Yes ☐ No

If yes to question 9,

| | |
|---|---|
| 9a. Were lifestyle modifications made prior to initiating pharmacologic treatment? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 9b. Was an ECHO performed at time of consideration of pharmacologic treatment? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 9c. <i>For girls of child-bearing age on ACE inhibitors or ARB:</i> Were the associated risks regarding pregnancy discussed? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA due to gender, age, or patient not on this medication |
| 9d. <i>For patients on ACE inhibitors, ARB, diuretics:</i> Were electrolytes and kidney function checked within 3 months for adverse effects after initiation of therapy? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA, patient not on any of these medications |

10. Was follow up blood pressure monitoring arranged?

☐ Yes ☐ No

11. Was there communication with the PCP regarding the [treatment plan \(target blood pressure, diagnosis, medication and follow up\)](#)?

☐ Yes ☐ No

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Appendix – Definitions

Use of Medications Affecting Blood Pressure

Medications affecting blood pressure include corticosteroids, central nervous system stimulant medications, herbal and nutritional supplements, and oral contraceptives.

Treatment Plan (target blood pressure, diagnosis, medication and follow up)

Appropriate diagnostic testing includes focusing on determining possible causes and/or comorbidities associated with hypertension and includes detailed patient history, family history, physical examination, laboratory evaluation, and imaging.

