

JNC-8 Hypertension Guidelines 2014

Tools to enhance uptake



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Steps from Research to Change in Physician Behavior

(from Davis, 1997; Mostafian, 2015)

- Research evidence
- Guideline development
- Approval by credible association
- Dissemination to targeted professionals
- **Physician behavior change**
- Patient/health care outcome (can be process change, provider level change, or ultimately better patient outcomes)



Active methods are more effective

(Mostafian, 2015)

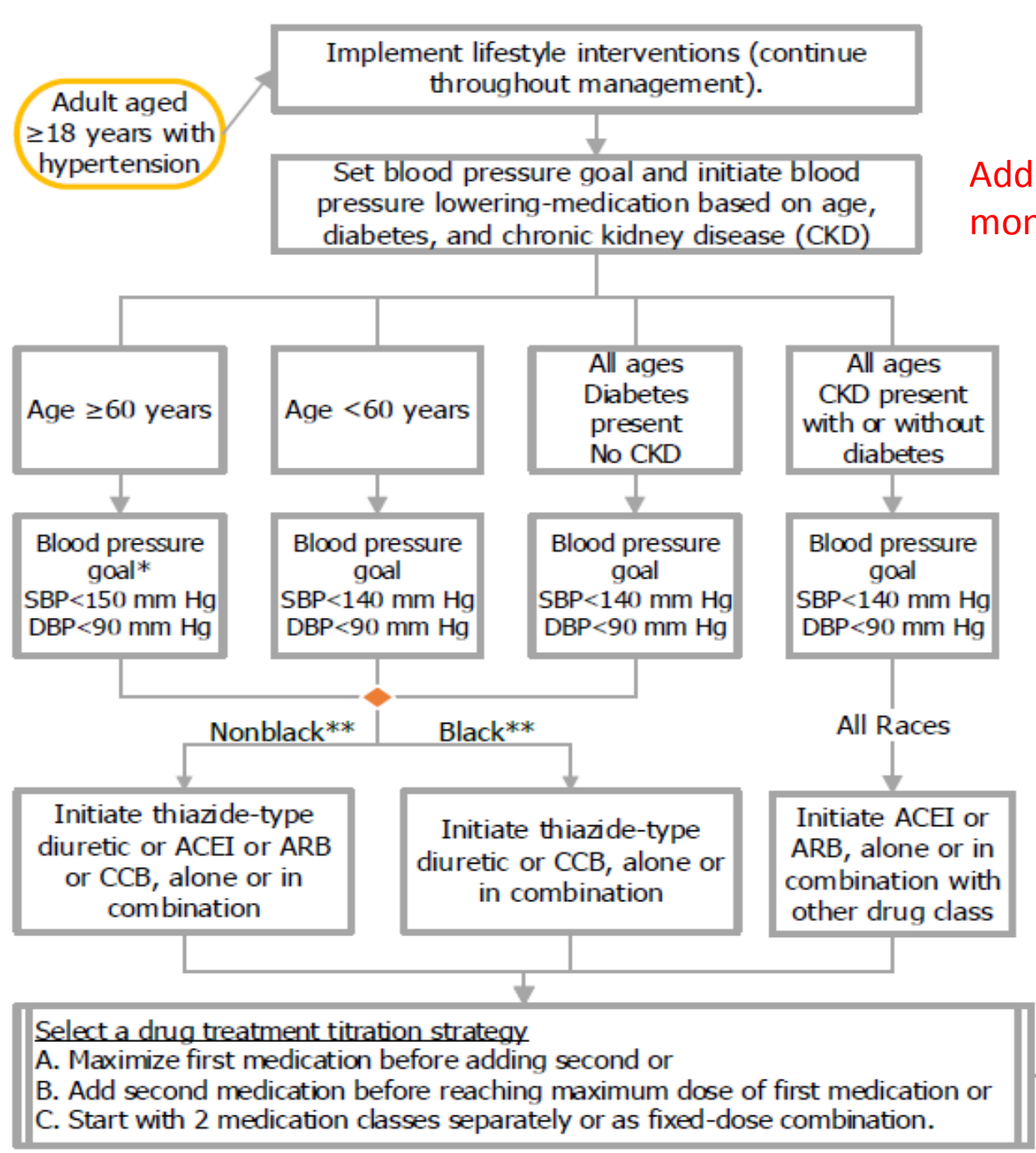


- **Continuing Medical Education** via academic detailing; outreach programs (trained MDs provide education to a group of MDs); learning based on clinical practice (tailor education to a specific problem at a specific clinic); workshop (small-group learning which allows the learner to interact with other learners and participate in discussions with experts)
- **Local opinion leaders** (influentials adopt specific guidelines allowing colleagues to see the outcomes of that action)
- Patient-mediated intervention (patient feedback to physicians)
- Multi-faceted intervention (combine multiple approaches based on applicable guideline, budget, specific practice needs)

JNC-8: What is it, what was the focus?



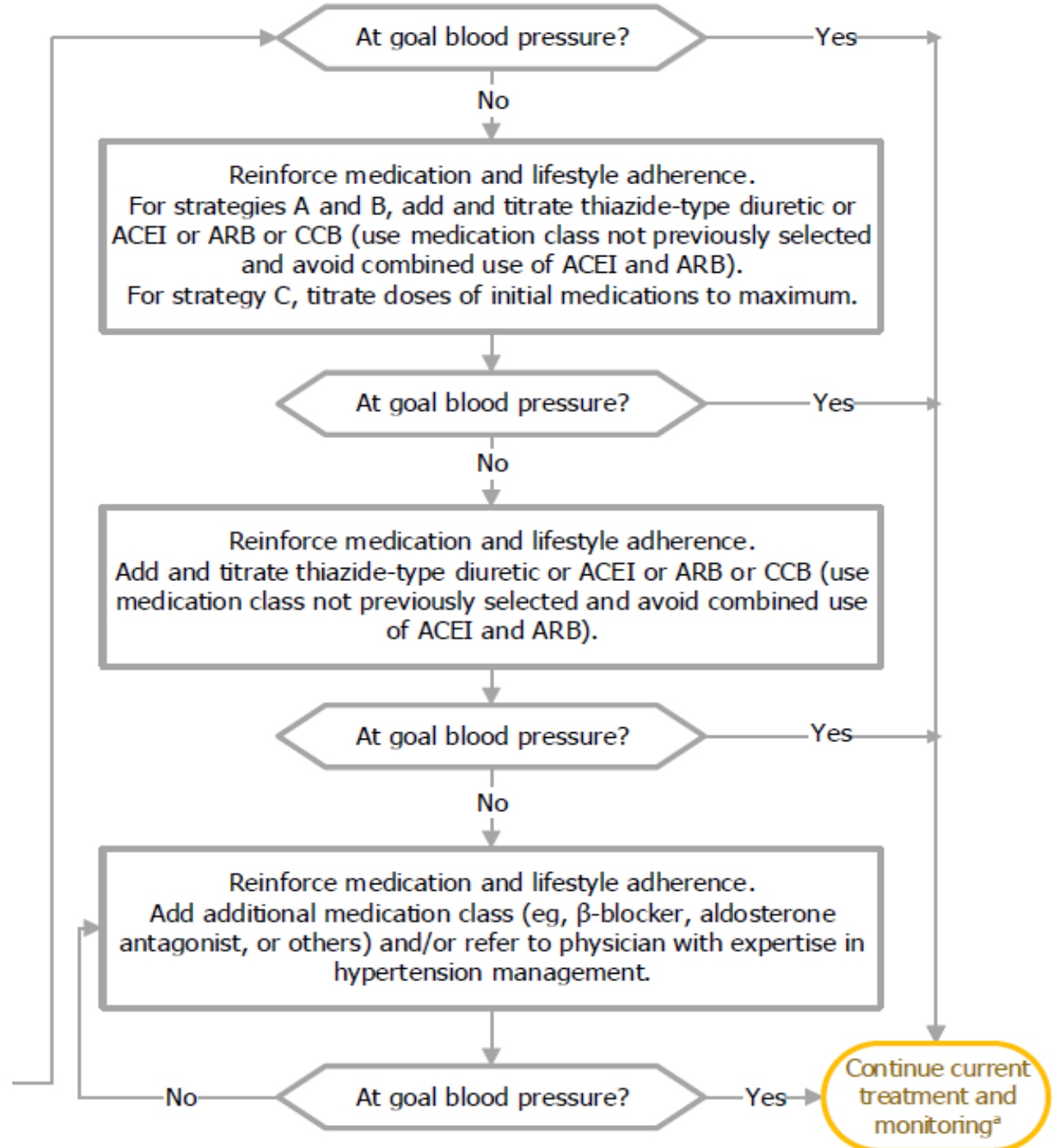
- Joint National Commission-8 was an update about 10 yrs after JNC-7
- JNC-8 was a 17-member panel appointed by NHLBI
- The update focused on 3 questions and used a systematic review of RCTs that met specific criteria:
 - In adults with hypertension, does initiating medication therapy at specific BP thresholds improve health outcomes?
 - In adults with hypertension, does treatment with various medications lead to specific improvements in outcomes?
 - In adults with hypertension, do various drug classes differ in comparative benefits and harms for specific outcomes?



Add initiate home BP monitoring?

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Select a drug treatment titration strategy
A. Maximize first medication before adding second or
B. Add second medication before reaching maximum dose of first medication or
C. Start with 2 medication classes separately or as fixed-dose combination.



Consider adding monitoring/up-titration interval q 2-4 weeks (JNC-8 Rec 9)

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Multiple organizations have endorsed

AAFP

CDC

ACC

AHA

There is some disagreement on BP levels for initiation of treatment among adults over age 60. Some groups wanted to retain the previous age-based guideline (e.g., MGMA Measure Up, Pressure Down) and there is some evidence to support them (INVEST study, Bangalore, 2014).



Therapeutic Lifestyle Changes⁴

Modification	Recommendation	Approximate SBP Reduction (Range)**
Reduce Weight	Maintain normal body weight (body mass index 18.5–24.9 kg/m ²)	5–20 mmHg/10 kg
Adopt DASH eating plan*	Consume a diet rich in fruits, vegetables, and low-fat dairy products with a reduced content of saturated and total fat	8–14 mm Hg
Lower sodium intake	<ul style="list-style-type: none"> a. Consume no more than 2,400 mg of sodium/day; b. Further reduction of sodium intake to 1,500 mg/day is desirable, since it is associated with even greater reduction in BP; and c. Reduce sodium intake by at least 1,000 mg/day since that will lower BP, even if the desired daily sodium intake is not achieved 	2–8 mm Hg
Physical activity	Engage in regular aerobic physical activity such as brisk walking (at least 30 min per day, most days of the week)	4–9 mm Hg
Moderation of alcohol consumption	Limit consumption to no more than 2 drinks (e.g., 24 oz beer, 10 oz wine, or 3 oz 80-proof whiskey) per day in most men, and to no more than 1 drink per day in women and lighter weight persons	2–4 mm Hg

Add tobacco cessation reminder



Provide basic nutritional guidelines including DASH

Components of the Dietary Approaches to Stop Hypertension Diet⁶	
Dietary Component	Amount
Total fat	27% of calories
Saturated fat	6% of calories
Cholesterol	150 mg
Carbohydrates	55% of calories
Fiber	30 g
Protein	18% of calories
Sodium	1,500 mg
Potassium	4,700 mg
Calcium	1,250 mg
Magnesium	500 mg



No basic work-up info in JNC-8, borrow from JNC-7?

Initial Laboratory Evaluation of Hypertension from JNC 7⁶

12-lead electrocardiography

Blood glucose level

Fasting cholesterol panel (including low-density lipoprotein and high-density lipoprotein cholesterol, triglycerides)

Glomerular filtration rate

Hematocrit level

Serum calcium level

Serum potassium level

Urinalysis

What types of simple tools might work in a practice setting?

- Reminder sheet or embedding in EHR to support decisions
- Apps using the guideline – e.g., ACC clinical guideline app could add BP management section
- On-line/website support while working
- Provide information/CME to physicians within their practice setting (what works for your group?)
- Have external academic detailing for physicians at their sites
- Have leaders adopt the guideline and share how it improved their “numbers” (could we have a team for detailing to practices?)
- What are other ideas you have?

Thanks for your dedication to Right Care

Making a change in practice step by step