

## Physician Undertreatment of Hypertension

*Oliveria SA, Lapuerta P, McCarthy BD, et al. Physician-related barriers to the effective management of uncontrolled hypertension. Arch Intern Med 2002;162:413–20.*

### Study Overview

**Objective.** To identify barriers to primary care physicians' willingness to intensify treatment for uncontrolled hypertension.

**Design.** A written survey of primary care physicians regarding outpatient visits of patients with uncontrolled hypertension combined with a patient telephone survey.

**Setting and participants.** Patients and physicians were selected from a single site at the Henry Ford Medical Group (a salaried physician group in the Detroit area). Patients with uncontrolled hypertension were eligible for inclusion if they had a diagnosis of hypertension during the past 6 months; had at least 1 visit during the prior year; had a systolic blood pressure (BP) of 140 mm Hg or greater or a diastolic BP of 90 mm Hg or greater at an index visit during a specified 3-week time period in October 1999; and had an elevation of their mean systolic or diastolic BP for up to 6 readings during the past 6 months. All patients had health insurance through the same health system and had a regular source of care.

**Main outcome measures.** Physicians were asked about changes in hypertension treatment or about reasons for not making treatment changes during the index visits of patients with uncontrolled hypertension. They were also asked about their familiarity and agreement with the Joint National Committee VI (JNC-VI) [1] report on hypertension. The distribution of BP readings during the index visits also was reported.

**Main results.** 81% (21/26) of the surveyed physicians responded to the questionnaire, yielding data for 270/314 eligible patients. 77% of the patients completed the telephone interview. At 93% of these visits, systolic BP values were 140 mm Hg or higher and 35% were 150 mm Hg or higher. Lifestyle modification was recommended at 47% of the visits, and medication was initiated or increased at 38% of visits. 61% of patients had no initiation or change in their hypertensive medications. The most common reason given for not increasing treatment was that the physician was satisfied with the achieved BP (satisfied with BP, 30%; satisfied with diastolic BP, 16%; only borderline hypertension, 10%). For 35% of visits, the physician felt continued monitoring was

needed before changing medication, and for 29% hypertension was not the focus of the visit. Physicians reported high rates of familiarity (100%) and agreement (76%) with JNC-VI guidelines. Patients reported high rates of medication compliance and satisfaction with care.

**Conclusion.** The physicians surveyed appeared willing to accept elevated systolic hypertension, which was not in accordance with widespread evidenced-based hypertension guidelines.

### Commentary

During the past few decades, considerable evidence has accumulated demonstrating the safety and efficacy of therapies for hypertension. The benefit of treating isolated systolic hypertension has been proven [2,3]. Maximal benefits of treatment may be achieved at BP values under 140/90 mm Hg, and subjects treated aggressively do not seem to face significant risks from overtreatment [4]. For persons with certain comorbidities, benefits have been shown for even greater reductions [1,4]. In addition, observational data suggest that adults with systolic BP values from 130 to 139 mm Hg and diastolic values from 85 to 89 mm Hg face an increased cardiovascular risk compared to those with optimal BP [5].

Clinical practice guidelines from 1997 provide physicians with a useable approach to the large literature on hypertension [1]. Why then are these goals not achieved for so many? Oliveria et al nicely focus on the physician's role in this shortfall. By examining an insured population who made regular contact with the health system, they minimized the role played by the lack of access to health care. As it turns out, most of their respondents reported adherence to their prescribed treatment, so it seems unlikely that patient noncompliance was a major reason why this population's hypertension was uncontrolled. For the group in this study, most of the responsibility clearly rests with the physicians. These findings are preliminary because they are based on only a small number of physicians at a single site, but are nonetheless provocative. Relying on the physician encounter alone may not be an adequate way to achieve hypertension control. Automated physician decision support systems, case audits, or other methods could be used to improve the achievement of evidence-based treatment goals.

**Applications for Clinical Practice**

Hypertension is an area where clear medical evidence is too often overlooked. Physicians should be attentive to past and current BP measurements when they make decisions on hypertension therapy. The availability of evidence-based guidelines may not be enough to bring about appropriate treatment, and further action may be necessary.

—Review by *Stephen D. Persell, MD*

**References**

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