



## Effective Health Care

### Psychiatric Side Effects of Blood Pressure Medication Nomination Summary Document

#### Results of Topic Selection Process & Next Steps

- The topic, *Psychiatric Side Effects of Blood Pressure Medication*, is not feasible for a full systematic review due to the limited data available for a review at this time.

#### Topic Description

**Nominator(s):** Individual

**Nomination Summary:** The nominator is interested in the possible adverse mental health and related side effects associated with antihypertensive medications, such as depression, mood swings, hostility, and anger, with a specific focus on African American men ages 35 and above.

##### Staff-Generated PICO

**Population(s):** Adults (18 years of age or older) with hypertension, with and without comorbidities

**Intervention(s):** Antihypertensive drug

**Comparator(s):** Another antihypertensive drug; combination of drugs; placebo; any other treatment to manage hypertension (e.g., life style changes)

**Outcome(s):** Mental health; patient quality of life, functional status

**Key Questions from Nominator:**

1. In adults with hypertension, do various antihypertensive drugs, drug classes, or their combinations differ in comparative harms as related to mental health outcomes?
  - a. Do these harms vary across different ethnic / racial groups?

#### Considerations

- High blood pressure, or hypertension, is a common, long-term health condition, particularly frequent among older adults. Effective management of blood pressure, including with antihypertensive medications, has been shown to significantly decrease the incidence of stroke, heart attack, and heart failure. The effects of antihypertensive medications on behavior- and mood-related issues are not well understood.
- There is limited research on this topic. The most relevant review that we located was an AHRQ comparative effectiveness review on the long-term benefits and harms of antihypertensive drugs (angiotensin-converting enzyme inhibitors, angiotensin II receptor antagonists, and direct renin inhibitors). Results that were relevant to the current nomination (i.e., patient quality of life) were based on low or insufficient evidence. Also, the studies included in the review (that were relevant to the

current nomination) were published between 1999 and 2002. Our search yielded a limited evidence base focused on depression among patients taking different antihypertensive medications.