



Effective Health Care

Screening for Seizure Disorders

Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Screening for seizure disorders is not feasible for a full systematic review due to the limited data available for a review at this time.

Topic Description

Nominator: Anonymous individual

Nomination Summary: The nominator is interested in strategies to improve the detection of seizure disorders in specific populations listed below in the PICO.

Staff-Generated PICO:

Population(s): Patients with autism spectrum disorders, attention deficit disorder, cerebral palsy, mental impairment, and those with a family history of seizures

Intervention(s): Screening via electroencephalography (EEG), education of the public to identify seizure types, tools to make general practitioners more effective at identifying seizure disorders (e.g., increased questioning or history taking)

Comparator(s): No screening

Outcome(s): Most appropriate screening intervals based on ages when onset is most common for each patient group, incidence of intractable epilepsy, incidence of accidental injury from first-detected seizures, general practitioner's ability to detect seizure disorders, general public's ability to identify seizure disorders, cost-benefit analysis

Key Questions from Nominator: 1. What are the appropriate circumstances and methods to screen for seizure disorders?

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- Individuals with certain conditions such as those identified by the nominator are at higher risk for epilepsy development. Existing clinical practice guidelines suggest that screening these populations who are at increased risk but have no history of seizure with an electroencephalogram (EEG) is generally not recommended and there is insufficient evidence for its use in some populations. The

clinical significance of EEG findings in patients without seizures is unclear at this time. Furthermore, it is not clear whether treating the EEG abnormalities in patients without seizures prevents future seizure occurrence or improves behavior, cognition, or underlying symptoms of potential disorders such as autism.

- The literature documents the need for more basic and clinical research to better understand the role of EEG findings in patients with neurobehavioral and psychiatric disorders but without a history of seizures. Therefore, research surrounding this topic is too limited at this time for EHC Program product development.