Effective Health Care

# Dental Interventions in Persons with Intellectual Disabilities Nomination Summary Document

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

The topic, Effectiveness of Dental Interventions to Increase Procedure Tolerance in Persons with Intellectual Disabilities (ID), 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 The nomination is concerned with the effectiveness of interventions prior to and during dental care (including desensitization programs, sedation, behavioral modifications and standard immobilization) to improve tolerance of dental procedures for persons with intellectual disabilities (ID). Specifically, the nomination is interested in interventions with the potential to reduce dental intrusions that are generally considered more extreme or harsh, including teeth extractions versus restorations, or using sedation for routine office procedures.

#### Staff-Generated PICO

Population(s): Persons with intellectual disabilities.

**Intervention(s):** Any tools or guidelines that aim to reduce more invasive procedures (i.e., desensitization programs, sedation, behavioral guidance and standard immobilization)

**Comparator(s):** No dental procedure tolerance interventions as well as comparisons between interventions

**Outcome(s):** Reduction of risk for such dental problems as gingivitis, poor oral hygiene, caries, and periodontal disease as well as evaluation of quality of life, oral pain and associated patient distress.

Key Questions from Nominator:

- 1. What is the effectiveness of interventions prior to and during dental care (including desensitization programs, sedation, behavioral modifications and standard immobilization) to improve tolerance of dental procedures for persons with intellectual disabilities (ID)?
- 2. Does effectiveness differ by type and severity of ID and other characteristics of the individual?
- 3. Does effectiveness differ by provider and provider training?

### Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <a href="http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/">http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/</a>.)
- Intellectually disabled (ID) persons are defined as persons with subnormal intellectual functioning which originates during the developmental period. It has multiple etiologies, including genetic defects and perinatal insults. Intelligence quotient (IQ) scores are commonly used to determine whether an individual has an intellectual disability; IQ scores ranging from 70-79 are considered to be borderline, and scores of 67 and below are classified as disabled.
- Dental problems in people with ID remain one of the top ten rated secondary health concerns that significantly detract from overall quality of life. Undetected or untreated dental pain contributes to poor nutrition, irritability, and aggressive and self-injurious behaviors. Dental interventions in people with ID carry more risk, as they typically involve more teeth extractions than restorations, and physical restraint or sedation for dental procedures. Individuals with ID may have sensory, motor or behavior problems that complicate treatment, families may minimize oral health relative to more urgent medical concerns, and most dentists and hygienists are not trained to work specifically with patients with ID.
- Greater understanding is needed of the effectiveness of ID training for dental professionals, educating families about oral hygiene, and increasing patient compliance in the office via behavioral analytic or de-sensitization procedures. However, very few studies have been conducted on the comparative effectiveness of dental interventions to increase the procedure tolerance in persons with intellectual disabilities.
- Given the limited available evidence to address this topic, a systematic review will not be undertaken.