

# Effective Health Care

## Impaired Glucose Tolerance Nomination Summary Document

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

- Treatment of impaired glucose tolerance was found to be addressed by the 2008 U.S. Preventive Services Task Force (USPSTF) recommendations for screening adults for type 2 diabetes and the corresponding AHRQ evidence synthesis from 2008 titled Screening for Type 2 Diabetes Mellitus: Update of 2003 Systematic Evidence Review for the U.S. Preventive Services Task Force.
  - Norris SL, Kansagara D, Bougatsos C, Nygren P. Screening for Type 2 Diabetes: Update of 2003 Systematic Evidence Review for the U.S. Preventive Services Task Force. Evidence Synthesis No. 61. AHRQ Publication No. 08-05116-EF-1. Rockville, Maryland: Agency for Healthcare Research and Quality. June 2008. <u>http://www.ahrq.gov/clinic/uspstf/uspsdiab.htm</u>
- Given that the USPSTF recommendations and corresponding AHRQ report cover this nomination, no further activity will be undertaken on the topic.

### **Topic Description**

- Nominator: Health care professional association
- NominationThe nominator is interested in further understanding the comparative effectivenessSummary:evidence base for the treatment of impaired glucose tolerance (IGT)

Population(s): Adults with impaired glucose tolerance
Intervention(s): Treatment of IGT with medication, lifestyle modification, or both
Comparator(s): Medication versus lifestyle modification or a combination of both. The original nomination also includes a comparison of care delivery models.
Outcome(s): Either delayed progression to type 2 diabetes or regression to normal glucose tolerance. Harms are also of interest, including potential harms of medications for IGT and from inadequate treatment. Also, the nominator is interested in knowing the long-term patient-oriented benefits from treatment of IGT.

**Key Questions 1.** What are the long-term patient-oriented benefits from treatment of IGT with medication, lifestyle modification, or both?

#### 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>.)
- This topic was found to be addressed by the 2008 ARHQ report titled Screening for Type 2 Diabetes Mellitus: Update of 2003 Systematic Evidence Review for the U. S. Preventive Services Task Force. The key questions from this report include (key question 3 is most relevant to this nomination):
  - 1. Is there direct evidence that systematic screening for type 2 diabetes, IFG, or IGT among asymptomatic adults over the age of 20 years at high-risk for diabetes complications improves health outcomes? Does it improve health outcomes for asymptomatic individuals at average-risk for diabetes complications?
  - **2.** Does beginning treatment of type 2 diabetes in adults early as a result of screening provide an incremental benefit in health outcomes compared with initiating treatment after clinical diagnosis?
  - 3. Does beginning treatment for IFG and/or IGT in adults early as a result of screening provide an incremental benefit in final health outcomes compared with initiating treatment after clinical diagnosis of type 2 diabetes?
  - 4. What adverse effects result from screening an adult for type 2 diabetes or IFG/IGT?
  - 5. What adverse effects result from treating an adult with type 2 diabetes, IFG, or IGT detected by screening?
  - 6. What are the yields (accuracy and reliability) of different re-screening intervals among persons with an initial normal fasting glucose?
  - 7. What is the yield [accuracy, reliability, and prevalence] of screening for type 2 diabetes with A1c?
  - **8.** Does beginning treatment for IFG or IGT early as a result of screening decrease the incidence of diabetes compared with initiating treatment after clinical diagnosis?