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The goal of our project, called "**T**esting **O**lfaction in **P**rimary care to detect **A**lzheimer's disease and other **D**ementias (TOPAD)", is to test the 12-item BSIT, a short, standardized version of the 40-item University of Pennsylvania Smell Identification Test (UPSIT), for detection of dementia among elderly persons with cognitive concerns in a community-based primary care setting, in response to PAR-15-359 (Novel Approaches to Diagnosing Alzheimer's Disease and Predicting Progression), and its second aim: "Identifying new biomarkers that are minimally invasive, inexpensive, usable in community settings". Many elderly persons develop dementia that remains undiagnosed in primary care settings until it is severe, leading to catastrophic consequences for patients, families, and the health care system. Odor identification impairment with the 40-item UPSIT is a well validated biomarker of dementia, particularly dementia of the Alzheimer's type (DAT), The shorter version of the UPSIT, the 12-item BSIT, has been shown to be similar to the UPSIT in distinguishing and predicting MCI and DAT. We propose the BSIT for detection of dementia in primary care because it takes 5 minutes to administer, is inexpensive, and can be administered by non-medical personnel. We propose to test the BSIT for detection of dementia among 600 patients with cognitive concerns, without a diagnosis of dementia, age 65 years and older, who attend primary care practices in Northern Manhattan. The term cognitive concerns includes subjective cognitive decline (SCD), and warning signs identified by relatives, significant others, and health care providers. All participants will be tested with the BSIT, the MMSE, and other common dementia screening tools. The performance of tools will be assessed using as a gold standard cognitive diagnosis based using the 2011 National Institute on Aging (NIA)/Alzheimer Association (AA) recommendations for dementia and MCI using the National Alzheimer's Coordinating Center (NACC) protocol. Our primary outcome will be dementia diagnosis at the initial evaluation. Cognitive assessments will be repeated every 12 months. Our secondary outcomes will be cognitive transitions to dementia (and subtypes), MCI and MCI subtypes. Our primary aim is to compare the accuracy of the BSIT with the MMSE for dementia detection at initial evaluation among persons aged 65 years and older with cognitive concerns in primary care. In *secondary* analyses, we will examine the secondary outcomes and compare the accuracy of the BSIT for dementia detection with other instruments: Montreal Cognitive Assessment (MOCA), Mini-Cog and Memory Impairment Screen (MIS). Our secondary aim is to compare the BSIT with the MMSE in predicting cognitive transitions at 12 and 24 months. In secondary analyses, we will compare the BSIT with other screening instruments (MOCA, Mini-Cog, MIS). TOPAD will be conducted by a multidisciplinary team of experts in Alzheimer's research, odor identification testing, dementia diagnosis, and primary care.