# VALIDATION OF SELF-REPORTED CANCER DIAGNOSIS BY COGNITIVE STATUS IN THE HEALTH AND RETIREMENT STUDY

Megan Mullins, Jasdeep Kler, Marissa Eastman, Mohammed Kabeto, Lauren Wallner, and Lindsay Kobayashi, *University of Michigan*, *Ann Arbor*, *Michigan*, *United States* 

Exploring the relationship between cognition and cancer is increasingly important as the number of older adults in the US grows. The Health and Retirement Study (HRS) has longitudinal data on cognitive status and self-reported cancer diagnoses, but these self-reports have not been validated. Using HRS linked to Medicare Fee for Service (FFS) claims (1998-2016), we evaluated the validity of self-reported cancer diagnoses (excluding non-melanoma skin) against Medicare claims by respondent cognitive status. We included 8,280 Medicare-eligible HRS participants aged ≥67 with at least 90% FFS coverage. Cognitive status was ascertained from the HRS interview following the date of cancer diagnosis (or reference claim date) using the Langa-Weir method and was classified as normal, cognitive impairment no dementia (CIND), or dementia. We calculated the sensitivity, specificity, and Cohen's kappa for first incident malignant cancer diagnosis by cognitive status group. The majority (76.4%) of participants scored as cognitively normal, 9.6% had CIND, 14.0% had dementia and, overall, 1,478 had an incident cancer diagnosis. Among participants with normal cognition, sensitivity of self-reported cancer diagnosis was 70.2% and specificity was 99.8% (kappa=0.79). Among participants with CIND, sensitivity was 56.7% and specificity was 99.8% (kappa=0.66). Among participants with dementia, sensitivity was 53.0% and specificity was 99.6% (kappa=0.64). Results indicate poor validity of self-reported cancer diagnoses for older adults with CIND or dementia. These findings suggest researchers interested in cancer and cognition should use the HRS-Medicare linkage to ascertain cancer diagnosis from claims, and they highlight the importance of cognitive status in research among older adults.

### Session 2120 (Paper)

### Pain Assessment and Management

#### BARRIERS AND FACILITATORS OF PAIN MANAGEMENT IN PERSONS WITH DEMENTIA IN LONG-TERM CARE: A SCOPING REVIEW

Yo-Jen Liao,¹ Ying-Ling Jao,² Diane Berish,² and Lisa Kitko,³ 1. Penn State University, University Park, Pennsylvania, United States, 2. Pennsylvania State University, University Park, Pennsylvania, United States, 3. Pennsylvania State University, Pennsylvania State University, Pennsylvania State University, Pennsylvania, United States

Approximately 50% of individuals with dementia regularly experience moderate to severe pain, which is largely undermanaged. Several studies have explored the barriers and facilitators of pain management for persons with dementia; yet the evidence has not been systematically reviewed. This review aimed to synthesize current evidence on the barriers and facilitators of pain management in persons with dementia in long-term care. A PRISMA guided literature search

was conducted in PubMed, CINAHL, and PsycINFO. Titles, abstracts, and full texts were screened. Included articles were original research examining the barriers or facilitators of pain assessment and treatment in individuals with dementia in long-term care. Quality assessment was conducted using the Risk of Bias tool and Johns Hopkins Level of Evidence. Ten studies were identified, including four quantitative studies, five qualitative studies, and one with both quantitative and qualitative research. Barriers of pain management identified include residents' ability to self-report pain, pain medication side effects, need discrepancy among residents and their families, reluctance in administering analgesics, lack of pain assessment tools, lack of guidance in providing nonpharmacological interventions, and lack of clinical guidelines. Facilitators of pain management include clinicians with caring and enthusiastic characteristics, clinicians' knowledge of residents, positive relationships among clinicians, good communication skills, using validated pain assessment tools, understanding pain indicators, clinical experience, and needdriven continuing education. These results can guide clinical practice in long-term care. Interventions should be developed to target these barriers and facilitators and improve pain management in persons with dementia.

## PAIN ASSESSMENT IN IMPAIRED COGNITION (PAIC15) INSTRUMENT: CUTOFFS AGAINST THREE STANDARDS

Jenny van der Steen, Margot de Waal, and Wilco Achterberg, Leiden University Medical Center, Leiden, Zuid-Holland, Netherlands

Observational pain scales can help identify pain in persons with impaired cognition including dementia who may have difficulty expressing pain verbally. The Pain Assessment in Impaired Cognition-15 (PAIC15) observational pain scale covers 15 important items that are indicative of pain, but it is unclear how likely pain is for persons with each summed score (theoretical range 0-45). The goal of our study was to determine sensitivity and specificity of cut offs for probable pain on the PAIC15 against three possible standards. We determined cut offs against (1) self report when able, (2) the established Pain Assessment in Advanced Dementia (PAINAD) cut off of 2, and (3) observer's overall estimate based on a series of systematic observations. We used data of 238 nursing home residents with dementia who were observed by their physician in training or nursing staff in the context of an evidence-based medicine (EBM) training study, with 137 residents assessed twice. The area under the ROC curve was excellent against the PAINAD cut off (0.8) at both assessments, but acceptable or less than acceptable for the other two standards. Across standards and criteria for optimal sensitivity and specificity, cut offs at the PAIC15 could be 3 or 4. Guided by self report we recommend PAIC15 scores of 3 and higher to represent probable pain with sensitivity and specificity in the 0.5 to 0.7 range.

## RELATIONSHIPS OF PAIN TREATMENT WITH DEMENTIA AND FUNCTIONAL OUTCOME IN MEDICARE HOME HEALTH CARE

Jinjiao Wang,¹ Kenrick Cato,² Yeates Conwell,³ Kathi Heffner,¹ Fang Yu,⁴ Thomas Caprio,³ and Yue Li,¹