Pain Assessment in Noncommunicative Elderly Persons (PAINE)

Description: PAINE is an informant-based assessment tool that was developed to assess pain in non-communicative older adults due to the limitations of self-report and observational tools for detecting pain in this population. It was developed in collaboration with bedside nurses based on the assumption that in nursing home patients, changes in behavior and activity level are potential indicators of pain and that with proper education, caregivers are able to detect these changes. Along with 4 of the 6 American Geriatric Society pain behavior categories (facial expressions, verbalizations, body movements, and changes in activity patterns or routines) the 22-item PAINE also includes nurse-identified repetitive physical and vocal behaviors, visible cues of pain, such as swollen joints or blood in diaper, and changes in behavior. Since its early development and validation, there has no further psychometric evaluation.

Psychometric testing: PAINE has preliminary good internal consistency (Cronbach's α= 0.75-0.78). Reliability testing shows good interrater reliability even between staff members of variable familiarity with the patient (r= .999 between research assistants, and r= .711 between nursing assistants, p<.001). This is important in employment conditions with high staff turnover rates. Assuming stable pain-states among subjects, there was sufficient test-retest reliability (r= .783, p< 001).

PAINE validity was tested against reports of pain from physicians, nurses, relatives, and the residents themselves, and against other pain assessment tools. There was high correlation between the informant ratings on the PAINE and PADE (r = 0.65). However,

PAINE was weakly correlated with observational and self-report assessment tools. For example, correlation between PAINE and the PAINAD (r = 0.23, p = 0.014) and CNPI (r = 0.22, p<0.05). When compared with self-report and observational measures, PADE, PAINE, and VDS were found to be the most sensitive to treatment effects and most useful in detecting pain.

Languages and Settings: English language (mostly female residents) and nursing homes

Feasibility/Clinical Utility: No data on feasibility or clinical utility. The tool has only been administered through research assistants and has not been studied for feasibility in the clinical setting. There is no discussion about time or skill level needed for administration. No evidence is provided how the sample nursing staff, made up of mostly NAs and LPNs with few RNs in supervisory roles are experts at recognition of pain in dementia patients.

Scoring and Interpretation: There is a 6-point rating scale to measure the frequency of occurrence of pain behaviors ranging from 1 (never) to 7 (several times an hour). There is no further information regarding scoring or interpretation of scores provided.

Summary/Critique: The PAINE is conceptually supported and the method for item generation, while limited in scope, is appropriate. Initial psychometrics employ sound methodology and yield promising reliability and validity but are under-powered. Additional information on scoring, interpretation (including cut-off scores), and level of training to use by clinical staff is warranted. More testing in larger and more diverse

samples of patients is recommended. The low correlation between the PAINE and self-

report instruments raises concern.

Contact information for tool developer:

We were unable to obtain permission to post the contact information.

References:

Cohen-Mansfield, J. (2006). Pain Assessment in Noncommunicative Elderly persons-PAINE. *Clinical Journal of Pain, 22*(6), 569-75.

Cohen-Mansfield, J., & Lipson, S. (2008). The utility of pain assessment for analgesic use in persons with dementia. *Pain, 134*(1-2), p. 16-23.

Revised 3/2019

Resources and tools for quality pain care