The Pain Assessment Scale for Seniors with Severe Dementia (PACSLAC)

Description: The Pain Assessment Scale for Seniors with Severe Dementia (PACSLAC) developed by a Canadian team, is a tool for the familiar caregiver to observe and assess both common and subtle pain behaviors. The tool is a checklist with four subscales and a total of 60 items: Facial expressions (13 items), Activity/body movements (20 items), Social/personality/mood (12 items) and Physiological indicators/eating and sleeping changes/vocal behaviors (15 items). Each item is scored on a present/absent dichotomous scale. Subscale scores are summed to arrive at a total score ranging from 0 to 60.

Psychometrics: Several follow-up studies have been conducted on the PACSLAC since it was developed, providing substantial psychometric data on the tool. Solid support for construct, concurrent, and discriminant validity has been demonstrated, as has the ability to detect differences in levels of pain, as expressed in numbers of behaviors exhibited. In studies comparing pain scores on the PACSLAC to proxy pain reports by a health care professional, a range of (0.35-0.54) has been reported. The tool appears to be sensitive to treatment effects as well. Internal consistency evaluations have supported good to very good ranges (0.74-0.92). There has been very good agreement in interrater reliability testing (94%), using percent agreement as the chosen calculation. Additional studies provide intra-class correlation ranges between 0.77 and 0.96, providing further support of strong inter-rater reliability, for both caregivers and qualified nurses. Intra-class correlations were also used to evaluate intra-rater reliability, with ranges of 0.72 to 0.96 reported. The PACSLAC has been

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tested for convergent validity with the PAINAD (r = .625), the shortened PACSLAC-II (r = 0.613), the visual analog scale (r = .684).

Languages and Settings: The PACSLAC originated in English, but has been translated into French, Portuguese, Korean, Japanese, Turkish, and Dutch. Studies of the original tool have been limited to the nursing home setting.

Feasibility/Clinical Utility: The length of the PACSLAC has been voiced as a concern among clinicians prior to use, but developers report that both nurses and caregivers endorse the tool's applicability in daily use. Despite the 60 items, simple instructions are provided for the tool's use. One study found the average length of time for trained raters to complete the PACSLAC was 135 ± 53 seconds, this was significantly more time than the PAINAD and shortened PACSLAC-II. Consensus reviews of the tool report that training is necessary prior to use of the tool, but no information is provided about the required length or level of training to achieve strong reliability scores. Clinical utility has not been specifically evaluated, though preliminary cut-offs for determining pain presence are provided by the authors. A qualitative study with emergency department nurses reported that nurses found the PACSLAC as unsuitable for the emergency setting based on scale length.

Scoring and Interpretation: Simple instructions for scoring are provided at the beginning of the tool. Some guidelines for interpretation have been provided (see Hadjistavropoulos et al., 2010).

Summary/Critique: The PACSLAC is a potentially clinically useful behavior checklist that is reportedly easy to use for assessing and monitoring changes in persons with dementia exhibiting behaviors associated with pain. With 60 items, the tool is

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comprehensive and addresses pertinent indicators noted in the literature and AGS

Guideline. Preliminary normative data and cut-offs are provided but require further

validation in larger, more diverse samples. A concern about the effect of cultural

background and perceptions of the observer/caregiver has been raised, as both may

affect interpretation of the behavioral indicators of the PACSLAC. Further, additional

factor analysis in English-speaking and other diverse samples and settings would be

useful. In particular, samples of older adults with increased levels of pain severity need

to be included.

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References:

Buyukturan, O., Buyukturan, B., Yetis, A., Naharci, M. I., & Kirdi, N. (2018). Reliability and validity of the Turkish version of Pain Assessment Checklist for Seniors with Limited Ability to Communicate (PACSLAC-T). *Turk J Med Sci, 48*(4), 805-810. doi:10.3906/sag-1801-120

Corbett, A., Husebo B., Malcangio, M., Staniland, A., Cohen-Mansfield, J., Aarsland, D., & Ballard, C. (2012). Assessment and treatment of pain in people with dementia. *National Review of Neurology, 8*(5), 264-274.

Fry, M., Arendts, G., & Chenoweth, L. (2017). Emergency nurses' evaluation of observational pain assessment tools for older people with cognitive impairment. *Journal of Clinical Nursing*, *26*(9-10), 1281-1290.

Fuchs-Lacelle, S., & Hadjistavropoulos, T. (2004). Development and preliminary validation of the Pain Assessment Checklist for Seniors with Limited Ability to Communicate (PACSLAC). *Pain Management Nursing*, *5*(2), 37-49.

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Fuchs-Lacelle, S., & Hadjistavropoulos, T. (2005). A checklist for pain assessment in LTC. PACSLAC: Pain Assessment Checklist for Seniors with Limited Ability to Communicate. *Canadian Nursing Home, 16*(4), 4-7.

Fuchs-Lacelle, S., Hadjistavropolous, T., & Lix, L. (2008). Pain assessment as intervention: A study of older adults with severe dementia. *Clinical Journal of Pain, 24*(8), 697-707.

Herr, K., Bjoro, K., Decker, S. (2006). Tools for assessment of pain in nonverbal older adults with dementia: a state-of-the-science review. *Journal of Pain and Symptom Management*, *31*(2), 170-192.

Hadjistavropoulos, T., Dever Fitzgerald, T. & Marchildon, G. (2010). Practice guidelines for assessing pain in older persons who reside in long-term care facilities. *Physiotherapy Canada, 62,* 104-113.

Kim, E.K., Kim, S.Y., Eom, M.R., Kim, H.S., & Lee, E. (2014). Validity and reliability of the Korean version of the pain assessment checklist for seniors with limited ability to communicate. *Journal of Korean and Academic Nursing*, *44*(4), 398-406.

Lints-Martindale, A.C., Hadjistavropoulos, T., Lix, L. M., & Thorpe, L. (2012). A comparative investigation of observational pain assessment tools for older adults with dementia. *Clinical Journal of Pain, 28*, 226-237.

Liu, J., Briggs, M., & Closs, S.J. (2010). The psychometric qualities of four observational pain tools (OPTs) for the assessment of pain in elderly people with osteoarthritic pain. *Journal of Pain and Symptom Management, 40*(4), 582-595.

Qi, N. S., Brammer, J. D., Creedy, D.K. (2012). The psychometric properties, feasibility, and utility of behavioral-observation methods in pain assessment of cognitively impaired elderly people in acute and long-term care: A systematic review. *JBI Library of Systematic Reviews S1, 10*(17).

Ruest, M., Bourque, M., Laroche, S., Harvey, M. P., Martel, M., Bergeron-Vezina, K., Leonard, G. (2017). Can We Quickly and Thoroughly Assess Pain with the PACSLAC-II? A Convergent Validity Study in Long-Term Care Residents Suffering from Dementia. *Pain Management Nursing*, *18*(6), 410-417.

Schofield, P., Clarke, A., Faulkner, M., Ryan, T., Dunham M., & Howarth, A. (2005). *International Journal of Disabilities and Human Disease, 4*(2), 59-66.

Smith, M. (2005). Pain assessment in nonverbal older adults with advanced dementia. *Perspectives on Psychiatric Care, 41*(3), 99-113.

The, K. B., Gazoni, F. M., Cherpak, G. L., Lorenzet, I. C., Santos, L. A., Nardes, E. M., & Santos, F. C. (2016). Pain assessment in elderly with dementia: Brazilian validation of

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the PACSLAC scale. *Einstein (Sao Paulo), 14*(2), 152-157. doi:10.1590/s1679-45082016ao3628

Van Herk, R., van Dijk, M. Baar, F. P., Tibboel D., & de Wit, R. (2007). Observation scales for pain assessment in older adults with cognitive impairments or communication difficulties. *Nursing Research*, *56*(1), 34-43.

Zwakhalen, S., Hamers, J., Abu-Saad, H., & Berger, M. (2006). Pain in elderly people with severe dementia: A systematic review of behavioural pain assessment tools. *BMC Geriatrics, 6*(1), 3.

Zwakhalen, S., Hamers, J., & Berger, M. (2006). The psychometric quality and clinical usefulness of three pain assessment tools for elderly people dementia. *Pain, 126*(1-3), 210-220.

Zwakhalen, S., Hamers, J., & Berger, M. (2007). Improving the clinical usefulness of a behavioral pain scale for older people with dementia. *Journal of Advanced Nursing, 58*(5), 493-502.

Zwakhalen, S., Koopmans, R., Geels, P., Berger, M., & Hamers, J. (2009). The prevalence of pain in nursing home residents with dementia measured using an observational pain scale. *European Journal of Pain, 13*, 89-93.

Additional articles pertaining to a French language version of the PACSLAC:

Aubin, M., Verreault, R., Savoie, M., LeMay, S., Hadjistavropoulos, T., Fillion, L., Beaulieu, M., Viens, C., Bergeron, R., Vézina, L., Misson, L. & Fuchs-Lacelle, S. (2008). Validité et utilité clinique d'une grille d'observation (PACSLAC-F) pour évaluer la douleur chez des aînés atteints de démence vivant en milieu de soins de longue durée. *Canadian Journal on Aging/La revue canadienne du vieillissement, 27*, 45-55. (DISCUSSION OF PACSLAC-F)

Aubin, M., Giguère, A., Hadjistavropoulos, T. & Verreault, R. (2007). Evaluation systématique des instruments pour mesurer la douleur chez les personnes âgées ayant des capacités réduites à communiquer. *Pain Research and Management, 12*, 195-203.

Kim, E. K., Kim, S. Y., Eom, M. R., Kim, H. S., & Lee, E. (2014). Validity and Reliability of the Korean Version of the Pain Assessment Checklist for Seniors with Limited Ability to Communicate. *Journal of Korean Academy of Nursing*, *44*(4).

Takai, Y., Yamamoto-Mitani, N., Suzuki, M., Furuta, Y., Sato, A., & Fujimaki, Y. (2013). Developing and validating a Japanese version of the Assessment of Pain in Elderly People with Communication Impairment. *Archives of gerontology and geriatrics*, *57*(3), 403-410.

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