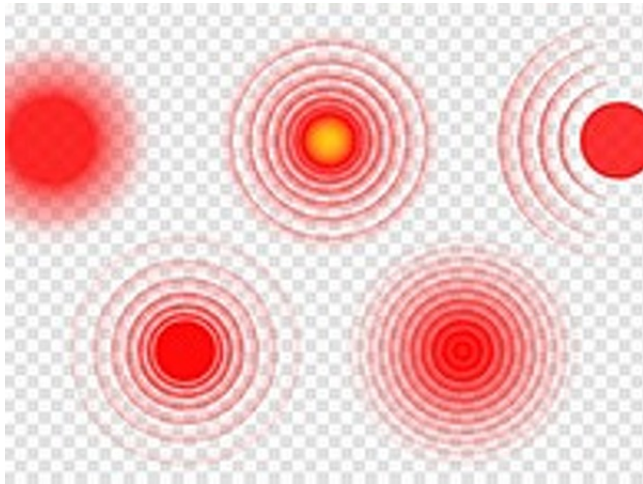




# Face, Legs, Activity, Cry, Consolability Observational Tool as a Measure of Pain

TECHNOLOGY NUMBER: 6581



## OVERVIEW

- FLACC pain scale: a behavioral pain scale used to score pain
- Assist in recognizing, assessing and treating pain in vulnerable populations
- Easy to use, score and document; readily adopted into clinical practice

## BACKGROUND

Infants, children and persons with cognitively impairment frequently lack the verbal and cognitive skills necessary to report physical discomfort and pain intensity. The assessment and effective management of pain in these populations depends upon the observation and expertise of the care providers. Care providers and care takers frequently have difficulty assessing pain in these individual and this often leads to under-treatment of pain.

Researchers at the University of Michigan developed a behavioral observation tool that can be used to quantify pain behaviors in infants, young children, cognitively impaired young persons and children and adults who are intubated. The tool has been tested in these populations and found to be a reliable and valid measure pain.

Behavioral cues remain the primary indicator of pain in persons who are unable to use a self-reporting pain scale. The FLACC Pain tool incorporates five categories of behaviors. The acronym FLACC ( Face, Legs, Activity, Cry and Consolability), was developed to facilitate recall of the categories included in the tool Each category is scored on 0-2 scale and the numbers are added together which results in a total score between 0 and 10. This range is often found in other clinical pain assessment tools.

## Technology ID

6581

## Category

Content

Software & Content

Nursing Innovation/Scales,  
Assessments, and Tools

## Inventor

Sandra Merkel

Terri Voepel-Lewis

## Further information

Drew Bennett

[andbenne@umich.edu](mailto:andbenne@umich.edu)

Innovation Partnerships Tech  
Marketing Team

[IPInventions@umich.edu](mailto:IPInventions@umich.edu)

## [View online](#)



A score is obtained by reviewing the descriptions of behavior in each of the 5 categories and selecting the number that most closely matches the observed behavior. To use the scale the clinician or caregiver should observe or interact with the individual for one to five minutes. Behaviors should also be observed during routine care. It may be necessary to touch and reposition the individual to determine if pain is present with movement and to assess tension and rigidity.

The difficulty in using observations to assess pain is that there may be differences in what clinicians expect and observe. It is important to consider the patients circumstances, environment and time of the assessment. Parents and family members usually know their child's/loved ones typical behavioral response to pain and can identify behaviors unique to the individual that can be included in the assessment of pain.

Keys to the use of behavioral pain tools are to focus on the individual's behavioral presentation (at both rest and on movement or during procedures known to be painful) and to observe for changes in those behaviors with effective treatment. Increases or decreases in the number or intensity of behaviors suggest increasing or decreasing pain. However, a behavioral pain score is not the same as a self-reported pain intensity rating.

## **ADDITIONAL DETAILS**

### **COMMERCIAL LICENSING:**

Please note that effective **July 1, 2021** all commercial licenses to University of Michigan based measures, scales and PRO's are executed through direct licensing with our office. Please use the Contact US link provided on the right-hand side of the page. Based on the volume and nature of these licenses we would request that you provide the following detailed information with your inquiry so that we can provision a quote for your setting and application. **This information includes:** the length of the study (years), number of respondents, number of sites, translation languages required, study ID/tracking number, primary business legal name, contact name and title, contact e-mail, contact physical address and contact phone number. Additionally, we require billing contacts name and e-mail address for invoicing.

**Non-profit health systems and government based use case applications** require a commercial license and do not qualify for the academic/research use license. Due to the volume and nature of our measures licensing program you will be provided an electronic copy of the license for signature, it is an 'as is' license and we do not accept redlines or modifications of the license. Additionally, translations and validations are the responsibility of the licensee and are managed at their expense. All measures are provided in English only. While we appreciate that these standards may create some challenges, we simply are no longer in a position to address individual requests and modifications based on the risk, economics and scale of our program. We appreciate your support and understanding.

### **ACADEMIC and RESEARCH EDUCATION USE LICENSE:**

This license is for academic or research users only, **use** of this license requires authorization. Requests must be made from a valid academic domain email address (.edu or equivalent or submission of academic ID) and must include a description of the nature of your study and research, including detailed information regarding the sponsor and sources of support. The academic research license is solely for use with a federal, foundation or internally funded academic study. Use in ongoing clinical operations use requires a paid commercial license. Failure to provide this information will result in the denial of your request.

**Please note:** Each version of the FLACC also includes the Brief FLACC scale measurement as part of the standard package.

## References

1. Original validation Merkel, S., Voepel-Lewis T., Shayevitz J. & Malviya S. (1997) , The FLACC: A behavioral scale for scoring postoperative pain in young children. *Pediatric Nursing*, 23:293-297.
2. Validation in children with cognitive impairment Voepel-Lewis, T., Merkel, S., Tait, A.R., Trzcinka, A. & Malviya, S. (2002) , The reliability and validity of the face, legs, activity, cry, consolability observational tool as a measure of pain in children with cognitive impairment. *Anesthesia & Analgesia*, 95:1224-9.
3. Malviya, S., Voepel-Lewis, T., Burke, C.N., Merkel, S. & Tait, A.R. (2006) , The revised FLACC observational pain tool: Improved reliability and validity for pain assessment in children with cognitive impairment. *Pediatric Anesthesia*,16:258-65.
4. Voepel-Lewis, T., Zanotti, J., Dammeyer, J. A. & Merkel, S. (2010). , Reliability and validity of the face, legs, activity, cry, consolability behavioral tool in assessing acute pain in critically ill patients. *American Journal of Critical Care*,19(1):1-7.
5. Other publications Voepel-Lewis, R., Malviya, S. Tait, A. R., Merkel, S., Foster, R. & Krane, E. J. (2008). , A comparison of the clinical utility of pain assessment tools for children with cognitive impairment. *Anesthesia &Anesthesiology* 2008,106(1):72-78
6. Merkel, S., Voepel-Lewis, T. & Malviya, S. (2002). , Pain assessment in infants and young children: The FLACC scale. *American Journal of Nursing*,102(10):55-57.