

# Nurses' evaluations of the Critical-Care Pain Observation Tool (CPOT) use at 12-month post-implementation in the ICU

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## PURPOSE

To describe the nurses' evaluation of the feasibility, clinical relevance, and satisfaction with the CPOT use 12 months after its implementation in the ICU.

## METHODS

### Design

A descriptive study design was used.

### Procedures

The CPOT was implemented in a medical-surgical ICU of CSSS Champlain-Charles-LeMoine, Hôpital Charles LeMoine at Greenfield Park, Qc. At 12-month post-implementation of the CPOT, nurses who were trained for its use completed anonymously a self-administered evaluation questionnaire.

### CPOT Implementation Strategies

- Attendance of a 90-min standardized training session:
  - CPOT directives of use
  - Practice of CPOT scoring with patient videos
- Offering a pocket size card of CPOT scale
- Placement of two posters in the ICU with an enlarged version of the CPOT and its directives of use
- Inclusion of the CPOT in the ICU flow sheet
- Creation of an ICU clinical support team

### Critical-Care Pain Observation Tool (CPOT)

Four behavioral items rated from 0-2 for a possible total score from 0-8:

- Facial expression
- Body movement
- Compliance with ventilator or vocalization (intubated or not)
- Muscle tension

The CPOT is recommended for clinical use in the 2013 practice guidelines of the Society of Critical Care Medicine (SCCM: Barr et al. Crit Care Med 2013;41(11):263-306)

## RESULTS

### Nurse participants

- Out of 60 ICU nurses who were trained for the CPOT use, 38 completed the self-administered questionnaire (63% participation rate; 3 were males)
- 61% received a college diploma in nursing
- 76% had received an education in pain

**TABLE 1**  
NURSES' RESPONSES TO THE QUESTIONNAIRE ABOUT THE FEASIBILITY, CLINICAL RELEVANCE, AND SATISFACTION WITH THE CPOT USE IN THE ICU

Question	Frequency (n)				% of Nurses who answered 3 or 4
	1 Not at all	2 A little	3 Sufficiently	4 Very	
1. Is the CPOT quick to use?	0	3	17	18	92.1%
2. Were the directives about the use of the CPOT clear?	0	2	18	18	94.8%
3. Is the CPOT simple to understand?	0	1	19	18	97.4%
4. Is the CPOT easy to complete?	0	0	18	20	100%
5. Is the CPOT helpful for nursing practice?	1	7	19	11	78.9%
6. Has the CPOT influenced your practice in assessing the patient pain?	4	8	20	6	68.4%
7. Has the CPOT allowed you to adequately evaluate pain in patients who are unable to communicate?	0	5	20	13	86.8%
8. Has the CPOT allowed you to improve your practice in terms of pain management?*	2	8	18	9	73.0%
9. Has the CPOT helped you communicate effectively the results of the pain assessment to other members of the team:					
• Nurses*	1	7	17	12	78.0%
• Doctors and residents**	7	11	11	7	50.0%
• Other members of the team (physiotherapists, occupational therapists)	9	10	9	5	36.9%
10. How satisfied are you with the use of the CPOT in the ICU?	2	2	3	24	81.6%

\* This question has one missing data

\*\* This question has three missing data



### Evaluation of CPOT implementation strategies

- The educational training and clinical support were identified as the most helpful by 70-95% of ICU nurses
- The pocket card and poster were considered less useful

## CONCLUSIONS

- ICU nurses rated the CPOT as quick to use, easy to complete, feasible and relevant in the daily nursing practice
- Accurate CPOT scores are contingent on training that ensures that nurses are skilled at assessing pain behaviors
- Training on the CPOT use should also be offered to other health care professionals involved in the care of ICU patients to facilitate effective interdisciplinary communication of pain assessment results
- Other implementation strategies should be explored to improve the decision-making process regarding pain management



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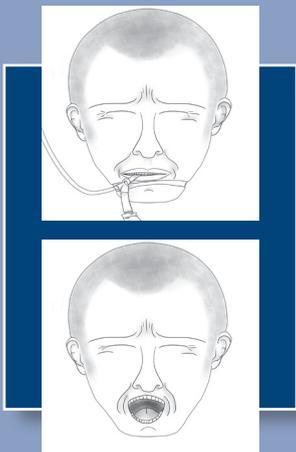


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Poster design by Linda Vanlnwegen



For more information about the CPOT, please contact the author at [celine.gelinas@mcgill.ca](mailto:celine.gelinas@mcgill.ca)



A grimace score for facial expression on the CPOT