

# Critical Review Form

## Health-Related Quality of Life

Patient Expectations for Pain Medication Delivery, *Am J EM* 2001;19: 399-402

### Objective

“To determine patient expectations for time to delivery of pain medications.” (p 399) Secondary objectives included comparison of satisfaction with care in patients who did or did not have their needs for pain relief met in the ED and patient expectations for time to delivery of pain medications.

### Methods

Prospective convenience sampling of University of Utah ED patients presenting with a painful injury or illness any day between 7AM and midnight. Patients were asked to rate their pain on a 10cm visual analog scale (VAS) upon ED admission and again upon ED discharge. Concurrently, they were also asked what they felt was a reasonable delay until they received pain medication in the ED.

Research associates blinded to the study objectives performed all patient interviews and chart abstractions. The Mann-Whitney method for nonparametric data was used to compare the VAS between patients who received pain medications and those who did not.

Guide		Comments
<b>I.</b>	<b>Are the results valid?</b>	
<b>A.</b>	<b>Have the investigators measured aspects of patients' lives that patients consider important?</b>	Yes, pain which presumably brought them to the ED. They do not explore any other domains of Quality of Life (QOL) however.
<b>B.</b>	<b>Did the health-related quality of life (HRQL) instrument work in the intended way?</b>	No true HRQL instrument was assessed in this study. Rather, this is simply a survey of opinion.
<b>C.</b>	<b>Are there important aspects of HRQL that have been omitted?</b>	Yes, the survey could have expanded upon functional disability related to pain and the resulting economic and social impact.



<b>D.</b>	<b>If there are tradeoffs between quality and quantity of life, or if an economic evaluation has been performed, have the most appropriate measures been used?</b>	VAS is one of the most prevalent validated pain assessment tools in existence, however other measures may someday be developed to offer objective pain assessment and/or long-term pain sequelae.
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<b>II.</b>	<b>What are the results?</b>	
<b>A.</b>	<b>How can we interpret the magnitude of the effect on HRQL?</b>	<ul style="list-style-type: none"> <li>• 458 subjects had complete survey data and 45% received pain medications in the ED.</li> <li>• Patient reported mean time to acceptable delivery of pain medication was 23-minutes, but the actual mean waiting time was 78-minutes.</li> <li>• Although only 45% received pain meds while in the ED, 70% reported having their needs for pain relief met while in the ED. How was the pain of those who didn't receive analgesia addressed?</li> <li>• Table 2 (p 400) demonstrates significant differences between those who did and did not receive pain meds in terms of initial pain score (69 versus 55 on VAS, <math>p &lt; 0.001</math>) and change in pain intensity from admission to discharge (32 versus 13, <math>p &lt; 0.001</math>)</li> </ul>
<b>III.</b>	<b>How can I apply the results to patient care?</b>	
<b>A.</b>	<b>Will the information from the study help patients make informed decisions about treatment?</b>	No, but it may help clinician and administrators better recognize patient expectations.
<b>B.</b>	<b>Did the study design simulate clinical practice?</b>	Yes, survey of patients in a moderately busy ED awaiting pain relief.

## **Limitations**

- 1) Single center convenience sampling in western US ED with annual volume 1/3 our own --- limited external validity.
- 2) No report of nature of pain (traumatic vs. non-traumatic?), co-interventions from home (did they take some pain medication prior to ED arrival?), duration of pain, injury or illness severity scores, patient demographics, adverse drug reactions, or specific ED interventions. How many were prescribed medications? How many who received ED pain medications were not satisfied? What satisfied those who did not receive pain medications, but were nonetheless satisfied?
- 3) What do they mean by “pain meds”? (Tylenol, NSAID, narcotic, homeopathy?)

## **Bottom Line**

Single center survey demonstrating that patients wait three-times longer than they expect for pain relief in the ED. Those with greater degrees of pain are more likely to obtain ED pain medications and those who receive pain medications receive greater pain relief than those who do not.

