# Linking nursing pain assessment, decision-making and documentation

**By Carolyn Tayler and Barbara McLeod**

## Abstract

*A clinical nurse specialist's (CNS) experience in the development and implementation of a pain assessment and treatment flowsheet (PATF) to enhance the nursing assessment, decision-making, and documentation of pain on a palliative care unit in a community hospital is described in this article. Members of the palliative care interdisciplinary team use the PATF for clinical decision-making in the day-to-day management of patients' pain. The PATF is undergoing revision and re-implementation to promote the utilization of the tool beyond the specialty of palliative care and into the general patient population.*

A prerequisite to the effective treatment of pain is appropriate assessment (Vallerand, 1997). A serious challenge that nurses face in caring for patients experiencing pain is to make sure that pain is accurately assessed and consistently documented in a timely manner.

The authors believe that by linking pain assessment and documentation on a pain assessment and treatment flowsheet (PATF), nurses are able to make more appropriate and effective nursing decisions about pain management in accordance with the patient's identified comfort goal or acceptable level of pain. Appropriate nursing decision-making based on current pain management research may support nurses in meeting their professional standards of nursing practice as they relate to pain management in clinical practice (Ferrell, Eberts, McCaffery, & Grant, 1991). However, as McCaffery and Ferrell (1999) found, nurses have become more informed about pain assessment and relief, yet too many nurses still lack the basic knowledge necessary to manage pain appropriately.

A Master's-prepared clinical nurse specialist (CNS) in palliative care was responsible for the development and implementation of the PATF on a palliative care unit in 1994. This tool, along with supporting guidelines for use, became the nursing standard of practice for pain assessment and documentation on the palliative care unit. Every three years, each nursing standard is routinely reviewed by Nursing Practice Council in accordance with specific criteria to ensure that the nursing standard is both current and meeting community standards of practice. An interesting finding of the PATF's standard review process in 1998 revealed that the PATF remained unchanged in clinical practice following its initial introduction. In addition, no continuous quality improvement initiatives were undertaken, nor was an outcome-based evaluation done with the PATF. There was a significant gap in nursing practice because no mechanisms were established for monitoring the outcomes of patient care related to pain management using the PATF. Consequently, only anecdotal evidence existed regarding the nurses' actual effectiveness in managing pain while using the PATF. As a first step towards outcome measures, the clinical resource nurse (CRN) in surgery/medicine worked with the palliative care staff to revise the tool. The process of initial development and revision is documented in this paper.

**Carolyn Tayler**

**Barbara McLeod**

## ABRÉGÉ:
## VERS L'INTÉGRATION, SELON UNE PERSPECTIVE INFIRMIÈRE, DE L'ÉVALUATION DE LA DOULEUR ET DE LA PRISE DE DÉCISIONS ET DE LA DOCUMENTATION CONNEXES

*Cet article décrit l'expérience d'une infirmière clinicienne spécialisée en matière de développement et de mise en œuvre d'un bilan d'évaluation et de traitement de la douleur en vue d'améliorer, selon une perspective infirmière, l'évaluation de la douleur, la prise de décisions et la documentation connexes dans un service de soins palliatifs d'un hôpital communautaire. Les membres de l'équipe interdisciplinaire de soins palliatifs utilisent ce bilan pour prendre des décisions de nature clinique dans le cadre de la gestion quotidienne de la douleur chez les patients. Le bilan d'évaluation et de traitement de la douleur fait actuellement l'objet d'une révision et d'une nouvelle mise en œuvre afin de promouvoir l'emploi de cet outil en dehors de la spécialité des soins palliatifs et donc dans la population hospitalière générale.*

Carolyn Tayler, RN, BN, MSA, CON(C), is regional director, palliative care, at the Simon Fraser Health Region, New Westminster, BC. Barbara McLeod, RN, BSN, MSN, is coordinator of the hospice palliative care program at Langley Health Services, South Fraser Health Region, BC.

## Literature review

Three central themes were identified in the literature during the review and revision process of the PATF: the slowness of organizations to incorporate pain assessments into the routine care of patients (Gaston-Johansson & Fall-Dickson, 1995); the inadequacy of poorly documented pain assessments (Carr, 1997); and the paucity of tools such as pain flow records and pain rating scales to guide clinical decision-making in practice (Barnason, Merboth, Pozehl, & Tietjen, 1998).

Pain is regarded as a subjective phenomenon. For example, the Agency for Health Care Policy and Research (AHCPR) states that "the single most reliable indicator of the existence and intensity of pain and any resultant distress is the patient's self-report" (Acute Pain Management Guideline Panel, 1992, p.6). Therefore, various pain assessment tools focus on the subjective nature of pain and the importance of self-report. However, the choice of tools used depends on the purpose of the assessment (baseline versus ongoing), patient setting and patient characteristics, treatments used, and, finally, issues related to time, feasibility, and relevance (Groenwald, Frogge, Goodman, & Yarbro, 1997).

It was also noted that a shift in focus from pain relief to pain management evolved as an outcome of several developments. These developments included the expansion of knowledge about the psychology of pain; the creation of new diagnostic and treatment modalities, such as patient controlled analgesia; and the involvement of many different specialists in pain research and new services for the treatment of chronic pain (Benoliel, 1995).

Some researchers have begun to document the use of pain management tools in practice. For example, Ferrell, Wisdom, Rhiner, and Alletto (1991) described a simple one-page audit tool that measured whether or not objective pain ratings were used, and if the pain assessment reflected what medications were used. Sources of data included admission notes, care plan, RN notes, and MD notes. The audit tool also noted if there was evidence of follow-up evaluations. Ferrell, Wisdom et al.'s pain audit tool (PAT) was developed based on a review of the literature and the authors' clinical experiences. It was validated after extensive use by experts throughout the USA.

The purpose of this article is to describe the development, implementation, and revising of one specific pain assessment and documentation tool to support nursing decision-making in clinical practice. While it is recognized that once pain assessment and documentation tools have been integrated into practice, it is crucial to use a formal evaluation process to determine the effectiveness of the tools in assisting the team to provide comprehensive pain management, no formal evaluation of the tool has yet been undertaken.

## Identified need for the PATF

The original development of the PATF took place in 1994 to enhance the care of patients on a 16-bed palliative care unit which offered intensive symptom management, respite, and end-of-life care. The nursing staff were experienced registered nurses and were supported by an interdisciplinary team. The majority of patients had lung or breast cancer and were typically admitted for management of uncontrolled pain or terminal/hospice care.

The CNS observed that the nurses consistently assessed and verbally described the patients' pain levels, but these assessments were rarely documented in the chart. Nurses were aware of the need to assess pain, but reported that they did not "have time" to chart their assessments. A medication cart was used to dispense routine medications and analgesics. The nurse signed for breakthrough analgesic medication on a "PRN and Stat Dose" medication record. The patient's chart and nursing narrative notes were housed at the nursing station. A nurse dispensing an opioid to a patient had to return to the nursing station to document the rationale for administrating breakthrough medication. This process would have to be repeated if the nurse also had to document the therapeutic effect of the pain medication.

The CNS believed that unless a more practical way was found to link nursing pain assessment and documentation, it was unlikely that nurses would find the time to chart in a timely manner. Therefore, the CNS conducted a retrospective chart audit utilizing Ferrell, Wisdom et al.'s (1991) audit tool. Approximately 50 charts of patients cared for in 1994 were audited. Following the guidelines outlined by Ferrell, Wisdom et al., one 24-hour period of documentation was chosen for review. The results of the audit confirmed that pain ratings were not consistently documented, and assessments consisted of vague descriptors such as "pain worse" or "pain does not seem to be relieved." The audit results provided the CNS with further incentive to develop a documentation tool specifically for pain assessment, and encouraged other members of the interdisciplinary team, especially the palliative care physician and pharmacist, to become involved in the development of the PATF.

The first step in developing the tool involved reviewing nursing pain assessment tools that were described in the literature and within the local community. Three tools were especially important in influencing the development of the PATF at Saint Mary's Hospital, New Westminster, British Columbia. These included the pain flowsheet by McCaffery and Beebe (1989), the nursing pain assessment flowsheet used at the BC Cancer Agency (1991), and the pain flowsheet instrument from the Vancouver General Hospital (1992).

## Development of the PATF

Since so many patients were experiencing escalating and unstable pain levels, the decision was made to design a tool for a 24-hour time period. Detailed assessments were required and could not be easily portrayed on a multi-day form. The PATF (see Figure One) included four assessment and documentation sections: assessment; regular narcotics; breakthrough narcotics; and total number of milligrams in the previous 24 hours compared with total number of milligrams in the current 24 hours.

The assessment component included three possible measurements from which the nurse could choose. The first was a 5-point or 10-point visual analogue scale (VAS). The second was a verbal rating scale from "0" (no pain) to "5" (excruciating pain). The third possible rating allowed the nurse to make a behavioural observation, such as restless, agitated, or moaning, in those instances where patients could not articulate a rating. The flowsheet directed the nurse to note the location of the pain, given that patients may experience more than one site of pain. In addition, the audit had revealed that a specific description of the location of the pain was often not documented.

The nurse could also document respiratory rate, and the guidelines for use specified that this did not have to be filled in routinely, but rather on an exceptional basis for palliative care patients. Since pain is the physiological antagonist to the central depressant effects of opioids, clinically important respiratory depression is rare in cancer patients (World Health Organization, 1996). Therefore, unlike scales used to assess post-operative pain, the scales used to assess patients who are terminally ill often do not focus on respiratory rate. Respiratory rate is documented if the nurse notes the patient is sedated or shows a sudden or unexpected change in respiratory status. It is understood that any nurse assessing a patient considers the entire clinical picture and uses judgment in ascertaining changes in respiratory rate or levels of consciousness.

The next two sections of the flowsheet (regular narcotics and breakthrough narcotics) became the actual medication administration record. This allows the nurse to simultaneously document the assessment and administration of the regular narcotic dose and any breakthrough dose. A breakthrough dose is defined as a dose of medication that is essential to handle pain that "breaks through" the regular doses of pain medications, either because pain is uncontrolled or because the pain has peaked in intensity (Librach, 1991). The frequency is usually hourly and increases in amount depending on the regular opioid dose. The response to the breakthrough, in terms of the pain rating, is to be documented within one hour following its administration. A red pen is used to document breakthrough, stat, and PRN medications. The reverse side of the flowsheet is used for stat and PRN dosages of medications other than opioids. The flowsheet can also be used to document a continuous infusion of narcotics via a portable pump, thereby eliminating the need to document in multiple areas.

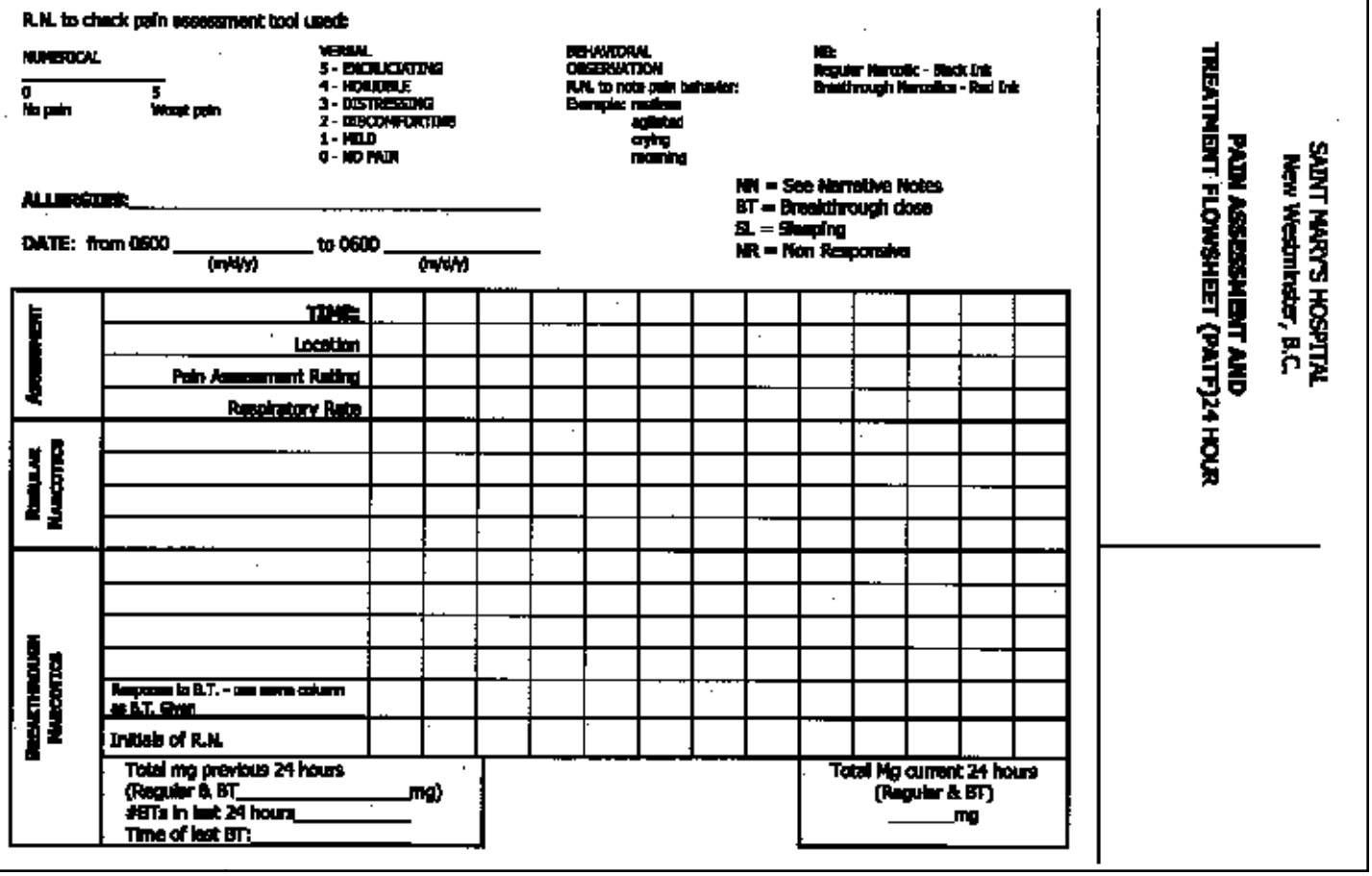
The bottom of the flowsheet was developed with the support and assistance of the palliative care physicians on the unit. However, patients are admitted to the unit under the care of a family physician who is generally responsible for ordering opioid medications. Comprehensive pain protocols are available which provide direction for escalating daily dosages and ordering breakthrough medications. The use of this 24-hour flowsheet presented an excellent opportunity to support decision-making by the family physician, in that it allowed the physician to compare the total milligrams (regular plus breakthrough dose) in the previous 24 hours and the total milligrams in the current 24-hour period. The number of breakthroughs was also highlighted. Therefore, if a patient experienced numerous breakthrough doses, it was clearly documented and these doses were added to the total milligrams administered in the previous 24 hours. The new 24-hour dose was then calculated based on the objective recording of narcotic doses administered.

Objective ratings and calculations can be important educational tools in and of themselves because they highlight the need to continually assess and adjust both breakthrough and regular medication dosages. Nurses were encouraged to review the PATF with the prescribing physician, either over the phone or when the physician made a patient visit. A clear medication history provided evidence for increasing the regular or breakthrough dose. This was particularly useful for nurses who often had a dosing range from which to choose, within the context of physicians' orders.

Input was sought from all interdisciplinary team members and emphasis was placed on practicality and ease of use. Discussions took place at interdisciplinary team meetings, in meetings with nursing staff, and with family physicians involved in patients' care.

Originally, an attempt was made to also include non-opioids on the medication list since these often act as adjuncts to pain relief; e.g., amitriptyline, ibuprofen, etc. However, this became too confusing for the nursing staff because analgesics may be used for multiple reasons. For example, the same drug could be used with analgesic intent and as an anti-pyretic. Thus, it was important to review the daily medication profile along with the PATF when the overall response to pain was considered.

**Figure One:**



## Implementation of the PATF

The tool was presented to the hospital physician group at a meeting of the medical advisory committee. Some resistance was encountered, as the tool required physicians on the palliative care unit to review an "extra" and "different" form. Medication carts were being introduced at the hospital around the same time and physicians were concerned that medication histories would not be readily available. Access to the PATF was ensured by placing the PATF on the patient's chart by 0700 hours to support physicians in their assessment and decision-making regarding pain management.

The original PATF draft allowed the nurse or patient to choose a 0-5 or a 0-10 VAS. Feedback from nurses indicated that patients seemed to prefer a 0-5 VAS and, thus, the PATF was amended to include only the 0-5 VAS.

Nursing staff reported that the tool was easy to use. The CNS conducted additional chart audits at various times post implementation of the PATF. The audit results were favourable indicating that the PATF was being used appropriately in clinical practice. For example, most sections were completed fully and pain assessment was done at the intervals specified in the guidelines for use of the PATF. As physicians became increasingly comfortable with reviewing the tool, they would ask that nurses on other units use the tool when a patient was experiencing a complex pain problem!

## Current utilization of the PATF

Informally, the palliative care nurses report that the PATF is an invaluable tool in clinical practice. It is believed to support nursing assessment, documentation, and decision-making in clinical palliative care practice. However, a formal evaluation would be required to validate this finding. An initial pain assessment and careplan is documented in the interdisciplinary progress notes using the concept of Focus Charting® as the documentation standard (Lampe, 1997). Subsequently, the PATF is initiated and is used by the disciplines of nursing, medicine, and pharmacy to make decisions in relation to increasing and/or decreasing the regular four-hourly opioid administration, along with the one-hourly breakthrough medication administration. For a number of patients, the PATF is also used to titrate long-acting preparations.

## Revisions to the PATF

The CRN surgery/medicine has recently made changes to the original PATF (see Figure One) based on a review of the literature and community standards and in collaboration with the nurses, physicians, and pharmacists using the form in palliative care. The present goal is to advance and integrate the revised PATF (see Figure Two) into palliative care and then into the general patient population. Figure Two illustrates the assessment, documentation, and decision-making of a typical patient scenario where the patient is experiencing escalating pain. The overall aim is to enhance everyday pain assessment, documentation, and decision-making in clinical practice beyond the specialty of palliative care.

Two important changes were made to the revised PATF to enhance nursing assessment and decision-making – the addition of

**Figure Two:**

SAINT MARY'S HOSPITAL
New Westminster, B.C.

**24 Hour Pain Assessment & Treatment Flowsheet (PATF)**

SEDATION SCALE:
0 = Sleep, easily aroused
1 = Awake and alert
2 = Occasionally drowsy, easy to arouse
3 = Frequently drowsy, arousable, drifts off to sleep during conversation.
4 = Somnolent, minimal or no response to stimuli

PAIN SCALE:
0 = Sleeping
0-10 Numeric Pain Intensity Scale
0 No Pain; 5 Moderate Pain; 10 Worst Possible Pain

PAIN BEHAVIOURS:
Examples
Restless
Agitated
Crying
Moaning
None

LEGEND:
Regular Narcotics – Black Ink
Breakthrough Narcotics – Red Ink
PC = Focus Charting® Interdisciplinary Progress Notes

DATE: from 0600 99/12/10 (yy/mm/dd) to 0600 99/12/11 (yy/mm/dd) Patient's Comfort Goal: 4 ALLERGIES: No known allergies

24 HOUR

| | TIME: | 0600 | 0610 | 0920 | 1000 | 1400 | 1800 | 1915 | 2020 | 2200 | 0200 | 0510 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Assessment | Location | back | back | hip | hip | hip | hip | hip | hip | hip | hip | hip |
| | Respiratory Rate | | | | 16 | | | | | | | |
| | Sedation Scale | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| | Pain Scale/Pain Behaviors | 8 | 6 | 8 | 10 | 8 | 10 | 8 | 8 | 6 | 6 | 6 |
| Regular Narcotics | Morphine Sulphate (MOS) 10 mg, po every 4 hrs. | 10 | | | 10 | 10 | 10 | | | 10 | 10 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Breakthrough Narcotics BT = Breakthrough Dose | MOS 2.5 mg po every hr prn | | 2.5 | 2.5 | | | | 2.5 | 2.5 | | | 2.5 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | Response to breakthrough dose | | 3 | 4 | | | | 7 | 4 | | | 4 |
| | Initials of R.N. | CT | CT | CT | CT | CT | CT | CT | BM | BM | BM | BM |
| | Interdisciplinary Progress Notes | ✓ | | | | | | ✓ | | | | |

Total mg previous 24 hours (Regular & BT 55 mg)
#BTs in last 24 hours 5
Time of last BT: 0710 hours

Total mg current 24 hours (Regular & BT) 22.5 mg

a patient's comfort goal and a sedation scale. The patient's comfort goal is visible on the PATF and is used to evaluate the effectiveness of the pain management plan (McCaffery & Pasero, 1999). Patients with clinically significant respiratory depression are usually also sedated because more opioid is required to produce respiratory depression than is required to produce sedation. This means that monitoring of sedation level is at least as important, if not more so, than monitoring respiratory status (Pasero & McCaffery, 1994).

Assessing and monitoring the depth and quality of respirations is a fundamental nursing assessment parameter in the general patient population. However, the meaning of a respiratory rate and its subsequent treatment may vary depending upon its clinical significance. For example, in a post-operative patient who has a respiratory rate of eight and a sedation level of "4", the antagonist Narcan® may be administered to reverse the sedative effects of the opioid and alleviate respiratory depression.

The numeric pain intensity scale was changed from 0-5, which had previously been recommended by nursing staff, to a 0-10 VAS. This change was based on the AHCPR's recommendation to use a 10-centimetre baseline if a graphic rating scale is used for a patient's self-report of pain (Acute Pain Management Guideline Panel, 1992).

The assessment category of pain behaviours remains on the PATF because we recognized that indirect methods of pain assessment, such as observation of pain behaviours or next-of-kin evaluation to estimate pain may need to be used when patients are unable or unwilling to communicate information about their pain to the caregiver (Vallerand, 1997).

## Implications for nursing practice and research

As the health care system continues to evolve, nursing leadership is required to coordinate, plan, monitor, and evaluate patient care outcomes in clinical practice. By encouraging the integration of the practice of pain assessment, documentation, and decision-making into routine practice, nursing leaders can create an environment in which nurses will be able to provide a more consistent and comprehensive approach to pain management.

Organizational programs and nursing practice need to be routinely evaluated by well-designed quantitative and qualitative research designs. These program evaluations are essential for the development and synthesis of nursing knowledge to advance the art and science of nursing practice. A comprehensive evaluation of the revised PATF is needed to demonstrate and quantify the nurses' effectiveness when using the PATF to make nursing decisions about pain management.

## Conclusion

A major accomplishment of the development, implementation, and revision of the 24-hour PATF in this organization was the establishment of clinical standards of care to link the routine nursing assessment of pain, documentation, and decision-making. Integration of this standard has fostered a move toward nursing accountability for pain management in daily clinical practice.

Nursing decisions regarding pain management can be made using a combination of four assessment parameters, such as the patient's comfort goal, pain scale/pain behaviours, sedation scale, and respiratory rate. Ideally, as the PATF is integrated into the general patient population and across clinical settings, what will change is how nurses apply these assessment parameters to make decisions and, ultimately, provide appropriate pain management for all patients in all clinical settings.


## Acknowledgement

*The authors gratefully acknowledge the palliative care staff at Saint Mary's Hospital, New Westminster, BC, and Dr. Barbara Paterson, professor, at the University of British Columbia School of Nursing, Vancouver, BC.*


# References


Acute Pain Management Guideline Panel. (1992). **Quick reference guide for clinicians: Acute pain management in adults-operative procedures.** (AHCPR Pub. NO 920019). Rockville, MD: Agency for Health Care Policy and Research.

Barnason, S., Merboth, M., Pozehl, B., & Tietjen, M.J. (1998). Utilizing an outcomes approach to improve pain management by nurses: A pilot study. **CNS, 12**(1), 28-36.

Benoliel, J.Q. (1995). Multiple meanings of pain and complexities of pain management. **Nursing Clinics of North America, 30**(4), 583-596.

British Columbia Cancer Agency. (1991). **Nursing pain assessment tool**. Unpublished. Vancouver, British Columbia, Canada.

Carr, E. (1997). Assessing pain: a vital part of nursing care. **Nursing Times, Sept.17-23**, 46-48.

Ferrell, B.R., Eberts, M.T., McCaffery, M., & Grant, M. (1991). Clinical decision making and pain. **Cancer Nursing, 14**(6), 289-297.

Ferrell, B.R., Wisdom, C., Rhiner, M., & Alletto, J. (1991). Pain management as a quality of care outcome. **Journal of Nursing Quality Assurance, 5**(2), 50-58.

Gaston-Johansson, F., & Fall-Dickson, J.M. (1995). The importance of nursing research design and methods in cancer pain management. **Nursing Clinics of North America, 30**(4), 597-607.

Groenwald, S., Frogge, M.H., Goodman, M., & Yarbro, C. H. (1997). **Cancer nursing: Principles and practice** (4th ed.). Sudbury, MA: Jones and Bartlett.

Lampe, S. (1997). **Focus charting®: Documentation for patient-centered care** (7th ed.). Minneapolis, MN: Creative Healthcare Management, Inc.

Librach, S.L. (1991). **The pain manual: Principles and issues in cancer pain management**. Montreal, PQ: Pegasus Healthcare International.

McCaffery, M., & Beebe, A. (1989). **Pain. Clinical manual for nursing practice**. St. Louis: The C.V. Mosby Company.

McCaffery, M., & Ferrell, B.R., (1999). Opioids and pain management. What do nurses know? **Nursing 99, March**, 48-52.

McCaffery, M., & Pasero, C. (1999). **Pain clinical manual** (2nd ed.). St. Louis: Mosby.

Pasero, C.I., & McCaffery, M.M. (1994). Avoiding opioid-induced respiratory depression. **AJN, April**, 25-31.

Vallerand, A.H. (1997). Measurement issues in the comprehensive assessment of cancer pain. **Seminars in Oncology Nursing, 13**(1), 16-24.

Vancouver General Hospital. (1992). Pain flowsheet. Unpublished. Vancouver, British Columbia, Canada.

World Health Organization. (1996). **Cancer pain relief: With a guide to opioid availability** (2nd ed.). Geneva, Switzerland: Author.