ABSTRACT
Purpose: To assist cancer centers in improving pain management, we conducted a systematic review of institutional interventions designed to improve the assessment and treatment of pain in hospitalized cancer patients.
Methods: We performed a MEDLINE search for all English-language articles published from January 1966 through February 2006 using the medical subject headings terms of pain or pain measurement and outcome assessment (health care) or quality assurance (health care). Selected bibliographies were also searched. Studies were reviewed if they included clinical interventions directed at improving the treatment of cancer pain across an institution or nursing unit. Meta-analyses and randomized controlled trials or other controlled studies were included where possible. If no such trials were identified, then the best evidence available from studies with other designs was included.
Results: Five interventions were identified. These interventions included professional and patient education, instituting regular pain assessment (pain as a vital sign), audit of pain results and feedback to clinical staff, computerized decisional support systems, and specialist-level pain consultation services. Most studies were small in size and used quasiexperimental pre-post test designs. Successes were reported in increasing patient satisfaction, increasing documentation of pain intensity, and improving nurses’ knowledge and attitudes. No study reported successful interventions that consistently improved patients’ pain severity.
Conclusion: Although professional knowledge and attitudes about pain and nursing pain assessment rates have been shown to be improvable, no systematic, hospital-wide intervention has yet to be associated with improvement in pain severity. Future research on the development of new interventions, perhaps targeted specifically at physicians, is urgently needed.

COMMENTS
Strengths/uniqueness: This is the first systematic review of studies of strategies to improve pain control in hospitalized cancer patients.
Weaknesses: Only a single database (Medline) was searched. The authors acknowledge that the search was limited to English-language papers, and that no attempt was made to identify unpublished studies. There was no formal quality assessment of identified studies, although quality was described informally.
Relevance to Palliative Care: Although pain management for hospitalized cancer patients has been documented to be suboptimal, existing evidence does not provide clear guidance on how to improve the situation. This review highlights the need for well-designed studies. Also, in order for results to be interpretable, it would be important to describe the pain syndromes in the population under study. In the meantime, evidence from one meta-analysis supports the role of palliative care consultation services in improving pain outcomes; however, as it would not be feasible for such teams to see every hospitalized cancer patient, additional measures would need to be in place.