Pain management continues to be a significant issue for both patients and nurses. Nurses have not implemented current pain standards into clinical practice. The purpose of this study is to examine the relationship between nurses’ knowledge of pain management and the pain outcomes of postoperative orthopedic patients in a Midwestern community hospital. The sample consists of registered nurses (N = 32) and patients having surgery (N = 46). Data will be collected using The Toronto Pain Inventory to measure pain knowledge of nurses and The Patient Pain Interview. The conceptual model of this study is the Gate Control Theory. Findings will provide information about nurses’ pain knowledge and patient outcomes for use in the development of an educational program to increase nurses’ pain knowledge.