

## **Medication management of chronic pain: A comparison of 2 care delivery models: Pharmacist + Physician team compared to a solely physician model**

**Marlene Slipp**

Central Alberta Pain and Research Institute, Canada

**Background:** The prevalence of chronic pain is high and increasing. Medication management is an important yet challenging component of chronic pain management. There is a shortage of physicians who are available and comfortable providing this service. In Alberta, pharmacists have been granted an advanced scope of practice. Given this empowerment, their availability, training and skill set, pharmacists are well-positioned to play an expanded role in the medication management of chronic pain sufferers.

**Objective:** The objective of this study was to compare the effectiveness and cost of a physician only versus a pharmacist-physician team model of medication management for chronic nonmalignant pain sufferers.

**Method:** Demographic and prospectively gathered outcome data were analyzed of 89 patients who had received exclusively medication management for chronic nonmalignant pain at a rural Alberta multidisciplinary chronic pain management clinic. For 56 of the patients, all medication management services had been provided by a physician only. 33 of the patients had received medication management by a team comprised of a pharmacist and physician. In the team model, the physician did the medical assessment, diagnosed the type of pain and established a treatment plan in consultation with the patient and pharmacist. The pharmacist then provided the ongoing follow up including education, dose titration,

side effect management and consulted with the physician as needed. Change in pain (Numerical Rating Scale) and disability (Pain Interference Questionnaire) over the course of treatment were recorded. The treatment duration and number of visits were used to calculate cost of care. Cost-effectiveness (treatment cost/improvement) was calculated. Outcome variables were analyzed using an Analysis of Variance.

**Results:** Patients treated by the physician only model had suffered with pain longer and perceived themselves to be significantly more disabled prior to treatment. Both the physician only and the pharmacist-physician team model of medication management resulted in significant and comparable improvements in pain, disability and patient perception of medication effectiveness. Patients in the physician only group were seen more frequently and at a greater cost. The pharmacist-physician team approach was markedly more cost-effective, and patients expressed a high level of satisfaction with their medication management.

**Conclusions:** The pharmacist-physician team model of medication management results in significant reductions of pain and disability for chronic nonmalignant pain sufferers at a reduced cost and is well accepted by patients.

### **Biography**

Marlene Slipp graduated from the University of Alberta in 1982 with a Bachelor of Science in Pharmacy. The following year she completed a residency in Hospital Pharmacy at Victoria Hospital in London Ontario. Her residency project won the Upjohn Pharmaceutical award. She has continued her career in hospital pharmacy at the Red Deer Hospital and the Lacombe Hospital as well as working at CAPRI (Central Alberta Pain & Research Institute). She was honored to receive an Alberta Pharmacy "Centennial Award of Distinction" in 2011.

Marlene.Slipp@albertahealthservices.ca

 Notes: