44610 - ACUTE PAIN MANAGEMENT SERVICE (APMS) IN-HOUSE CLINICAL LIST - IF YOU HAVEN'T GOT A DATABASE YET

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INTRODUCTION:

Patient assessment recording, surveillance and quality control underlie the clinical efficacy of any acute pain management service [1]. APMS teams exist in 92% of Canadian hospitals, but only 29% have any electronic means to keep track of the patients. We describe an APMS list, based on MEDIVISIT®, a clinic scheduling software application, commonly available on networks in Canadian hospitals.

METHODS:

Local IRB approval was obtained for this study. We adapted MEDIVISIT® to provide a patient list, with the current patient room number, MRN, date & type of surgery, surgeon and modality (PCA opiates, Epidural, Continuous Peripheral Nerve block [CPNB] catheter and Consults). An additional text field allowed us to input pain assessments, side effects and individualized plans; available to each member of the APMS team (MD, Nurse and Resident) and to our colleagues out of hours. This ensures continuity of care on rounds and for review of pain control at evenings and weekends. When a patient no longer required APMS review, they were “discharged” from APMS list, by assigning an “appointment” within MEDIVISIT®; the data is accumulated by the program, within its “clinic appointment list”, allowing retrospective audit as we have presented.

RESULTS:

Data was collected in MEDIVISIT® over 10 weeks in fall 2006 and analyzed. The table shows the number of patients receiving each pain control modality, for each type of surgery and their average length of stay on the APMS. The time they spent on the APMS before discharge from review is shown to be consistently 2-3 days. Polytrauma patients with CPNBs tended to stay longer as they were returning to the operating room for repeat procedures, thus the longer (6 days) length of stay. The total of 689 patients reflects a weekly average of 68-70 new patients; roughly 14 each week day.

TABLE:

	Epidural	Avg. LOS	PCA	Avg. LOS	CPNB	Avg. LOS	PCA +CPNB	Avg. LOS
General Surgery	85	3	55	2				
Gynaecology	11	2	18	1				
Oro-Facial surgery			12	3				
Plastic surgery			5	2	7	3		
Elective orthopaedic	86	4	99	3	41	2	15	3
Trauma surgery	9	2	35	2	17	6		
Spine surgery	59	3						
Thoracic surgery	91	3	30	2	4	2		
Urological surgery	28	3	23	2	5	2		
TOTAL	369		277		74		15	
TOTAL number of patients on service 689 over 10 week period Sept – Dec 2006								

Avg. LOS = average length of stay on APMS

PCA = Patient controlled analgesia

CPNB = Continuous peripheral nerve block

DISCUSSION:

Preceding the adaptation of MEDIVISIT® and in the absence of an APMS database, the clinical execution of the APMS rounds, was purely through a paper-based system, with no resource tracking or audit capabilities. Procedure specific pain management regime implementation achieved some consistency in management, which has been trained to the nurses and the surgical residents. The MEDIVISIT® system allowed us to communicate effectively daily review and plans to members of the APMS, improving the level of safety and quality of care to our patients. Subsequently the retrospective review of data informs us of the service caseload and efficiency, as reflected by the length of stay on service. More detailed analysis cannot be performed, limiting the use of this system to purely a clinical aid. Information technology has the potential to facilitate best practice, improve safety and quality of healthcare [3] with the potential to produce meaningful surgical outcome data [4].

References:

- [1] Pain Res Manage 2004;9(3):123-130
- [2] Can J Anaesth. 2004 Mar;51(3):231-5
- [3] J Healthc Qual. 2006 Jul-Aug;28(4):37-44.
- [4] Pain Res Manag. 2006 Spring;11(1):41-7.