

# Foreword

## The CPSS: What do we make of it?

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For the last twenty years as Canadian hospital pharmacists, we have observed the slow emergence of clinical pharmacy. Our attitude to it has moved necessarily from a cautious suspicious consideration of clinical pharmacy as a possible activity to the present stark realization that it is what we must do above all.

For those who wondered with scepticism whether there is added value to our clinical activities, the Clinical Pharmacy Services Study (CPSS) goes a long way to measuring our present worth and pointing to a better potential.

It is indeed a pleasure to introduce you to this special publication. Although this study does not answer all our questions on the value of clinical pharmacy activities, it is a major step in the historical development of hospital pharmacy services in Canada. It stands alongside other CSHP-sponsored studies in unit-dose, intravenous additive service, and workload measurement as hallmarks of our solid development.

This study developed its first roots at the 1988 Professional Practice Conference (PPC) where we called a special meeting of the recently formed Clinical Pharmacy Advisory Committee with distinguished invited practice researchers, including names such as Schnell, Hepler, Poston, and Bachynsky. At that meeting, the Einarson-Mann<sup>1</sup> survey on the low level of drug therapy monitoring provided us with even greater concern that efforts must be made to demonstrate the value of such services. As part of our mandate from CSHP, we were looking for a mechanism to show the impact of clinical services and the methodology was certainly the large question. Despite several years of informal discussion with our research consultants (Poston, Mann, Greer, and Stratton), it was the opportunity of the Ontario Hospital Incentive Fund grants and the urging of my boss Michel Bilodeau that an application was quickly put together by myself and Jeff Poston. We were fortunate to engage the services of Barbara Gobis Ogle to coordinate the study. The rest is history: the largest study of clinical pharmacy measurement ever performed anywhere, 4559 recommendations by 132 pharmacists in 17 Ontario hospitals.

Although the study was performed in Ontario with preliminary study in three British Columbia hospitals, no doubt it has application to hospitals across the country.

Interestingly, the study was devised back in the "good times", but it is now more important than ever when hospitals are stripping themselves of any service regarded as not absolutely essential. There are very few studies of the value of the health professions and their impact on patient care.

The CPSS has identified that hospitals with more beds, higher ratios of pharmacist and technician to patient, more pharmacists with residency and advanced degree training, more service hours per patient-day, provide higher intensities of patient pharmacotherapy monitoring (PPM). Hospitals with higher intensities of PPM review more patients' therapies and make more interventions per patient day. They also make more pro-active recommendations, are solicited more often for recommendations, and make recommendations which are more therapeutic than procedural. The assessed impact of these recommendations reveals greater therapeutic benefit and greater reduction of risk than with less intense monitoring. Cost impact is on average \$4.75 per day in decreased drug costs for each intervention.


These results suggest the following actions by all of us:

- the need to review the White Paper<sup>2</sup> and the CSHP document on the transition from PPM to Pharmaceutical Care<sup>3</sup> and then to make a commitment;
- to review the present levels of monitoring in our own institutions and identify unattended risks; such identification should be done in front of the Pharmacy and Therapeutics Committee;
- to plan mechanisms to augment the level and extent of PPM;
- to review our technician numbers and their role in everything from formulary management, drug ordering and checking;

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- to review the potential to automate distribution activities to provide greater resources for PPM;
- to identify and meet the clinical training needs of pharmacists;
- to prioritize our approach for maximum impact, for example with the sickest patients, those on the most drugs, etc.
- to assure patient follow-up and outcome assessment as part of our responsibility for patient care.

Clearly, the results suggest that performing at less than full monitoring capacity is no longer justifiable. Recognizing the almost geometric growth in the identification and resolution of drug-related problems with more intense PPM, it is clearly a major concern that thousands of drug-related problems continue to exist in our institutions and are never resolved. Our patients are at risk!

The short answer to the question as to what to do with the results is simple: get them and our eight-page "Summary of Findings"<sup>4</sup> into the hands of all people responsible for the planning, evaluating and performing of pharmacy services in our hospitals! 

### References

1. Einarson TR, Mann JL. Survey of pharmacotherapy monitoring in Canadian acute care hospitals. *Can J Hosp Pharm* 1989; 42:229-34.
2. A White Paper on the Establishment and Elaboration of Clinical Pharmacy Service in Hospitals; (1990) Canadian Society of Hospital Pharmacists. Ottawa
3. Patient Pharmacotherapy Monitoring to Pharmaceutical Care, Official Publications 1995, Clinical Pharmacy Advisory Committee, Canadian Society of Hospital Pharmacists, Ottawa.
4. Ogle B, McLean W, Poston J. The Clinical Pharmacy Services Study – Summary of Findings. Canadian Society of Hospital Pharmacists and Apotex; February 1996.