



# A comparison of results: The Accreditation Canada Managing Medications Standards and the Hospital Pharmacy in Canada Report

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## Introduction

- ◆ Numerous Canadian healthcare stakeholders recognize the importance of an optimal drug use process within hospitals to ensure safe medication use
- ◆ Our hypothesis was that there exists a discrepancy between the levels of conformity to the drug use processes that are documented by different sources.
- ◆ The authors proposed to Accreditation Canada to explore the discrepancy about the conformity of the drug use process between the accreditation process compliance rating and the Canadian pharmacy survey.



## Objectives

- ◆ The main objective of this study was to compare aggregate national results from the Accreditation Canada Managing Medications Standards (MMS) and results from the Hospital Pharmacy in Canada Report (HPC).

## Methods

- ◆ This is a retrospective cross-sectional study.
- ◆ Whenever possible, **each MMS criterion was paired** by a pharmacy resident **with specific results from the 2009-2010 HPC report**. Pairing was validated by a five-person panel.
- ◆ A discrepancy ratio was calculated between the results of the 2009-2010 HPC and the 2010 MMS by dividing both levels of conformity per criterion.
- ◆ **Discrepancy ratio was considered significant if value was either below 80% or higher than 120%.**

## Conclusion

- ◆ A total of 60% of the MMS criteria have been paired with some 2009-2010 HPC results.
- ◆ The average calculated discrepancy ratio between both sources is 0.62±0.28.
- ◆ Further studies are required to explore the reasons for such discrepancy.

## Results

### Domains description and examples of paired criteria and discrepancy ratios

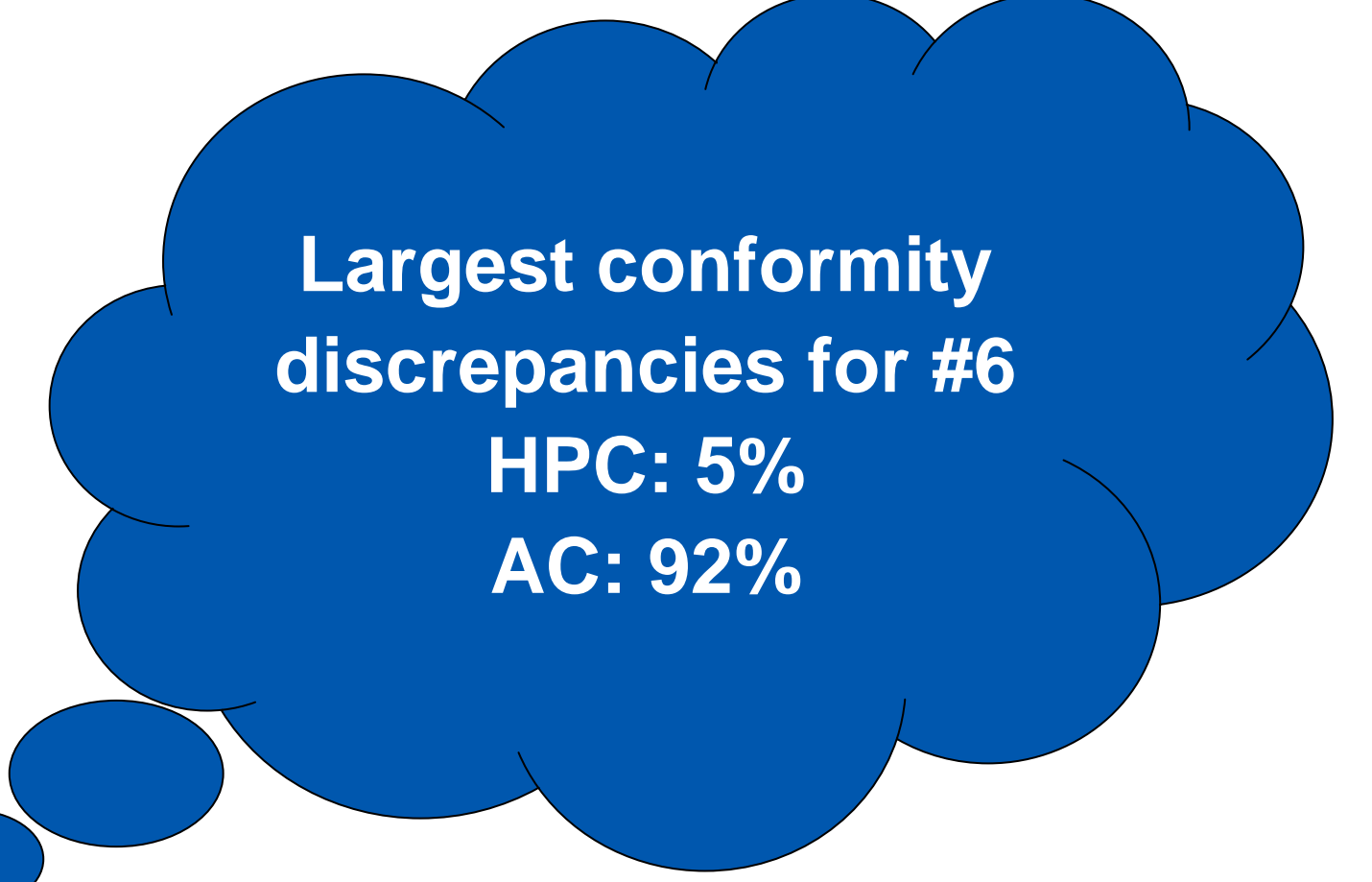
Domain description	Number of paired criteria	Criteria	Short description	HPC/AC	Discrepancy ratio	Average ratio	Min-max ratio
1. Working together to promote medication safety	5	1.2	Drug use management	49%/96%	0.51	0.61	0.35-0.95
		1.4	Patient information on electronic tools	93%/98%	0.95		
2. Carefully selecting and procuring medications	12	2.4	Inclusion or exclusion of drugs from the formulary	92%/92%	1.00	0.62	0.16-1.00
		3.3	Packages and labels examination to avoid confusion	33%/95%	0.35		
3. Properly labelling and storing medications	7	7.4	Drug administered in service areas stored in unit dose package	85%/79%	1.08	0.76	0.40-1.08
		7.6	Drugs and emergency supply meet standards stored and kept safely in patient service areas	64%/96%	0.67		
4. Appropriately ordering and transcribing medications	18	9.1	Medication history	42%/99%	0.42	0.71	0.33-1.19
		10.13	Policies and procedures verification before delivery	84%/80%	1.05		
5. Accurately preparing and dispensing medications	13	12.2	Policies and procedures warranting safe drug preparation	87%/97%	0.90	0.58	0.08-0.97
		15.1	Drug delivery in patient service areas	41%/97%	0.42		
6. Safely administering medications to clients	18	16.1	Education on safely administering medications to clients	5%/92%	0.05	0.49	0.05-1.06
		18.6	Administration hours	82%/97%	0.85		
7. Monitoring quality and achieving positive results	7	21.4	Process to report an adverse drug event	50%/92%	0.54	0.64	0.05-0.91
		21.6	Process related to examination of adverse drug events	81%/92%	0.88		
<b>Averages</b>					<b>0.62</b>	<b>0.63</b>	
					<b>± 0.28</b>	<b>± 0.09</b>	

Discrepancy ratio: **blue color** means the ratio is significant (**either below 80% or higher than 120%**)  
 HPC: Hospital Pharmacy in Canada Report; AC: Accreditation Canada Managing Medications Standards

- ◆ **A total of 60% (81/135 criteria) of the MMS criteria could be paired with some 2009-2010 HPC results by the panel members.**
- ◆ The average calculated discrepancy ratio between the MMS and HPC results was 0.62 ± 0.28 [min: 0.05 - max: 1.19].
- ◆ **Significant discrepancy** was noted between the 2010 MMS results and the 2009/2010 HPC results for **62 criteria**.

## Discussion

- ◆ The level of conformity of the 62 criteria that could be matched was consistently lower across all domains following self-reporting (HPC data) than with surveyors' observations during on-site visits (MMS data). These discrepancies appeared to be largest for the domain #6 (safely administering medications to clients).



- ◆ There are a number of factors that can affect the level of conformity to drug-use process criteria, such as the clarity and assessability of the criterion, the observational methods used and their potential bias, and the period of observation.
- ◆ There are an increasing number of standards applicable to the drug-use process throughout the country in the last decade. Such activity regarding new criteria can create a moving target for decision makers and pharmacists.