# Do We Have Evidence that Formularies Save Money?

*Peter J. Jewesson*

I'm getting a little tired of the question posed in the title of this article. The answer is "Absolutely". Although saving money should definitely not be the only reason for maintaining a formulary system, the literature contains countless descriptions of successful activities related to the formulary system that hospitals have instituted at the local level. We have very good evidence that various components of a formulary system, such as therapeutic interchange programs, generic substitutions, and drug protocols, can significantly reduce overall drug costs, if they are carefully implemented. Most of these components involve drugs that tend to be used exclusively in the hospital setting. Many pharmacists across Canada have made contributions to the literature that only strengthen the argument that formulary-related activities can reduce costs with no apparent negative effects on patient outcomes. Pick up some past issues of this Journal and leaf through them. You'll discover reports of all sorts of local successes.

Even the American opponents of the formulary system, such as Jeff Green in his 1986 paper about the "emperor's new clothes"[1] and Susan Horn and colleagues in their 1996 articles regarding the unintended consequences of drug formularies in US care management organization settings,[2,3] have been willing to admit that, despite some inherent flaws, formulary-related cost containment practices can decrease resource utilization. True, some poorly designed interventions may have resulted in cost-shifting (some Pharmacare reference drug programs in British Columbia may represent a good local example of this effect) as opposed to cost avoidance, but the majority of activities have been successful.[4]

Formularies save money through their effects on negotiations for purchasing contracts and by reducing carrying costs, reducing the overhead costs associated with creating guidelines for drug use, reducing complexity, and improving familiarity with drugs, which should in turn reduce the potential for inappropriate use. Although often difficult to quantify, these benefits are nonetheless tangible.

Generic substitutions constitute an excellent example of a formulary-related activity that has led to significant savings on drug costs. Sole-source drug costs have been kept low by therapeutic interchange programs. Protocols for standardizing drug regimens (for example, cefazolin q8h) have had a significant positive impact on drug costs and labour requirements without any negative impact on patient care. Of respondents (from 122 [45%] of 271 institutions across Canada) to the 1997/98 Hospital Pharmacy in Canada survey,[5] 65% conducted drug use evaluations, 80% had therapeutic interchange programs, and 22% had decreased total drug purchases. Most importantly, many of the respondents with reduced drug expenditures reported that these decreases could be attributed to drug use evaluation (37%), restrictive drug policies (56%), and other formulary system review processes. Imagine what conditions would have been in the absence of these initiatives.

In a "Focus on the Formulary" published in early 1999, Neil MacKinnon[6] remarked that most directors of pharmacy are in a difficult situation regarding formulary management, because they are responsible for meeting the drug budget at their respective institutions. This is a responsibility that pharmacists in my hospital began to shed several years ago. Much of the responsibility for drug expenditures has now been shifted to the individual business units, with guidance provided by the Pharmaceutical Sciences Clinical Service Unit and the Drugs and Therapeutics Committee. In other words, the formulary system is centralized, but the responsibility for drug expenditures is decentralized. Our job is to assist the practice units to keep within their budgets and to defend their overexpenditures when these are legitimate and the budgets may have been unrealistic (as is often the case). Dr MacKinnon went on to suggest that the pharmaceutical industry may even be willing to fund studies on the effectiveness of formularies.[6] In fact, pharmaceutical companies sponsor preliminary formulary effectiveness studies every time they fund a comparative

drug trial. The underlying objective of these exercises is to determine if one drug is equivalent or superior to another for a given clinical indication. Under a non-formulary system, the hospital would be obliged to carry both products, regardless of the outcome of the study. And if a drug was preferentially carried by the hospital, a formulary system would be in place. I agree with Dr MacKinnon's final recommendation that we must focus on finding ways to improve the use of formularies and reduce the unintended consequences of maintaining such a system. However, I am not sure that I can agree with his suggestion that industry be involved in this process.

Once again, the real issue isn't whether or not we should have a formulary system, but how we can make it better. We should focus less on how many drugs we carry and how much money we spend, and concentrate more on how well we use the drugs available and how well we spend the money needed to provide Canadians with the care they deserve.

### References


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## TRANSLATION FOR "COMMODITATIDECORIETMONVM"

The cover photograph for the October issue of CJHP showed the door into the pharmacy in the façade of the *Ospedale Civile* (civil hospital) in Venice, Italy. Authors Scott Walker and Dan Marcuzzi pointed out that directly above the door the inscription reads "FARMACIA", and in the mantle above the door the inscription reads "COMMODITATIDECORIETMONVM".[1] The Journal's editorial staff asked for insight into the meaning of the latter of these two inscriptions.[1]

As with many epigraphical texts, this Latin inscription has been abbreviated by the omission of one or more letters. "Commoditas" meant "opportuneness", "suitability", or "utility" in classical Latin and "health" in late antiquity. "Decoro" means to "adorn (a thing)" or "to add honor to or glorify". "Monum" must be an abbreviation for "monumentum", which can mean a commemorative statue or building or a written record. Therefore, the inscription would translate roughly as "A building will add honour to health" or, less literally, "[this] edifice will promote health".


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