

# Study Finds Substantial Cost Savings for Hospitals Using Flexi-Seal® Fecal Management System

Potential Benefits Also Tied to Fewer Pressure Ulcers and Better Use of Nursing Time

## Study Details:

A Budget Impact Analysis Comparing Use of a Modern Fecal Management System to Traditional Fecal Management Methods in Two Canadian Hospitals

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## Key Highlights:

- An economic evaluation of the costs of managing fecal incontinence in intensive care units (ICUs) at two hospitals found a 35-42% decrease in daily costs with use of the Flexi-Seal® Fecal Management System (FMS) (ConvaTec Inc.) compared to traditional methods.
- The study also showed potential additional health and economic benefits from avoiding pressure ulcers, a common complication of fecal incontinence.
- The use of the Flexi-Seal® FMS also resulted in substantial reduction in nursing time required to manage fecal incontinence allowing more time to be allocated to other clinical priorities.

## Methods:

- A Budget Impact Model (BIM), developed at ConvaTec and validated by clinicians, was populated with experiential data from ICUs at two hospitals in Canada to evaluate material costs for fecal management at each center, comparing traditional methods and the FMS method.
- The budget impact analysis included all material/product and nursing time costs for fecal management with traditional methods (e.g., changes of pads/briefs and bed linen, employing makeshift collection bags, and use of perineal skin cleansers, moisturizers, and protectants) or with the Flexi-Seal® FMS.
- Annual cost savings were projected based on an average 7-day course of diarrhea for the total number of ICU patients expected to use Flexi-Seal® FMS at each hospital.

## Results:

Hospital 1	Traditional Method (average course of diarrhea: 7 days)		Flexi-Seal® FMS (average course of diarrhea: 7 days)	
	Average Patient <sup>a</sup>	Complex Patient <sup>b</sup>	Average Patient <sup>a</sup>	Complex Patient <sup>b</sup>
Daily material costs (CAN\$) per patient	\$144	\$476	\$94	\$151
Annual material costs (CAN\$) based on all Flexi-Seal® FMS indicated patients (N=130: average 124, complex 6)	\$144,905.74		\$87,689.42	
Daily nursing time per patient (Not included in costs)	348 minutes	763 minutes	120 minutes	241 minutes

<sup>a</sup> Uncomplicated patients, usually intubated, with diarrhea as a primary issue and no significant comorbidities such as wounds/ulcers or dressing soiling

<sup>b</sup> Patients with significant comorbidities such as the presence of any wound/ulcer at high risk for soiling dressings, and/or bariatric with ambulation/mobility/repositioning complexities

Hospital 2	Traditional Method (average course of diarrhea: 7 days)		Flexi-Seal® FMS (average course of diarrhea: 7 days)	
	Daily material costs (CAN\$) per patient	\$105		\$61
Annual material costs (CAN\$) based on all Flexi-Seal® FMS indicated patients (N=2050)	\$1,504,597.50		\$877,502.50	

- Based on the reductions in daily material costs, annual savings were projected at CA\$627,095 for the larger of the two hospitals in the study. Annual savings on materials for the smaller hospital were projected at CA\$57,216. Average daily material cost per patient ranged from CA\$105 to CA\$144 with traditional management, and was reduced to CA\$61 to CA\$94 with Flexi-Seal® FMS.
- In the study, the larger hospital reported a nearly 20% prevalence of pressure ulcers in patients with fecal incontinence managed traditionally, and no pressure ulcers in patients managed with Flexi-Seal® FMS. Using the cost estimate of CA\$20,000 per pressure ulcer case, potential additional cost savings per year for the hospital were estimated to be nearly CA\$8 million.
- The smaller hospital reported that daily nursing time per patient was reduced from nearly 6 hours (348 minutes) to 2 hours (120 minutes) – freeing up nursing time to be reallocated to other clinical priorities.



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