

EE105: Impact of Clinical Pharmacist Interventions on Economic Outcomes in Women's Wellness and Research Center in Qatar

Dina Abushanab¹, Shima Ahmed², Daoud Al-Badriyeh², Nurhan Elshafey¹, Islam Eljilany², Moza Al Hail¹, Palli Valappila Abdul Rouf¹, Binny Thomas¹, Wessam El-Kassem¹

¹Pharmacy Department, Hamad Medical Corporation, Doha, Qatar

²College of Pharmacy, QU Health, Qatar University, Doha, Qatar

Background

- The irrational medicine use remains a serious public health problem worldwide.
- Bates et al. reported that the occurrence of adverse drug events (ADEs) in medical and surgical wards was 6.5% of total hospital admissions and 28% of them were adjudicated preventable.
- There are few studies that have evaluated the economic impact of clinical pharmacist interventions in specialized units, however studies that evaluated the economic impact of patients admitted to a women's health setting to evaluate the cost-benefit of preventable ADEs, which occur due to a medication error and result in any degree of harm are currently lacking.

Objective

- We aimed to analyze the economic impact of clinical pharmacists' interventions over a 3-month period in a women's health setting in Qatar.

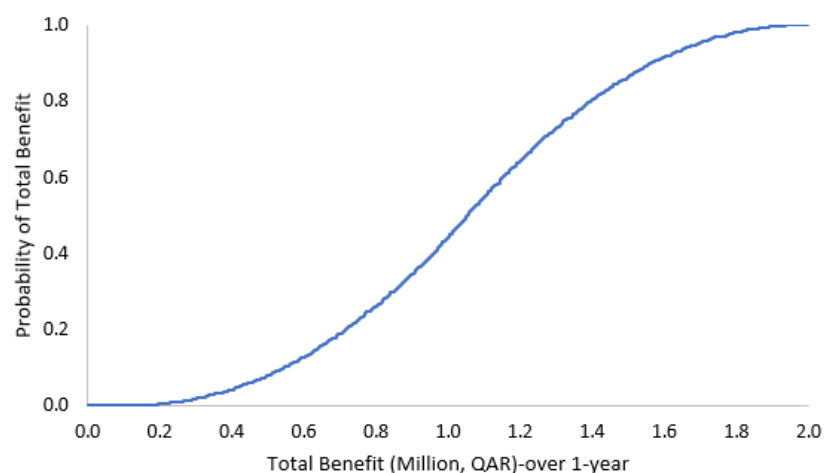
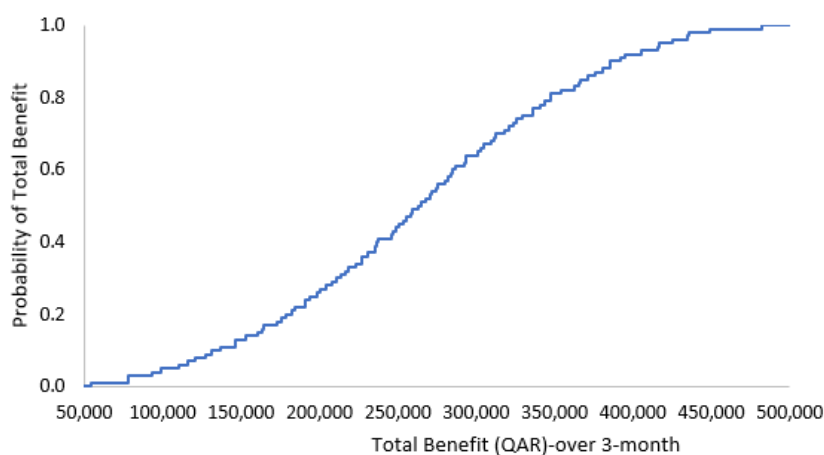
Methods

- The study was a retrospective review of clinical pharmacist interventions, defined as any action by a pharmacist that directly resulted in a change to patient management or therapy over 3-months period. The study was approved by the Medical Research Center, HMC (MRC-01-19-110).
- The study was conducted at the Women's Wellness and Research Center (WWRC) in HMC.

Methods (Cont.)

- The main outcome of this study was to evaluate the economic benefit associated with preventing ADEs through interventions by clinical pharmacists.
- The study was conducted from the perspective of the public WWRC hospital.

Figure 1. Probability curves



Results

- A total of 331 interventions for 165 patients were identified by the clinical pharmacists.
- Our analysis showed that the most common MRPs intercepted by the clinical pharmacists were related to appropriateness of therapy (78%), followed by interventions related to dosing and administration (16%)
- The overall cost saving was QAR1,601 (US\$440)
- The overall cost avoidance was QAR 170,794 (US\$ 46,909)
- The total benefit over 3-month period was QAR 169,192 (US\$ 321,118)
- Multivariate sensitivity analysis the analysis showed that there is a 100% probability that the pharmacist intervention is associated with total benefit as in Fig. 1

Conclusion

- The deployment of clinical pharmacists in general clinical wards is likely to prevent ADEs with significant economic benefits.



كلية الصيدلة
College of Pharmacy
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