



EFFECTIVENESS OF MULTI-DISCIPLINARY INTERVENTION FOCUSED ON THE PREVENTION OF ADVERSE EVENTS IN PATIENTS WITH PERIPHERAL VENOUS CATHETERS

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Introduction

Approximately 70% of patients admitted in a hospital carry a peripheral venous catheter (PVC), and this is the most frequent focus of nosocomial bacteremia.
Bacteremia related to peripheral venous catheter (BRPVC) lead to prolonged hospitalization and increases patient illness and mortality. Few studies assess the effectiveness of the implementation of a bundle based on infection/prevention measures.

Objectives

To implement evidence-based best-practice to improve health in hospitalized patients with PVC.
To know the Baseline Index Rate (IR) of BRCVP in patients admitted to Son Llàtzer University Hospital (HUSLL)
To assess the impact of these activities by annually calculating the BRCVP IR.

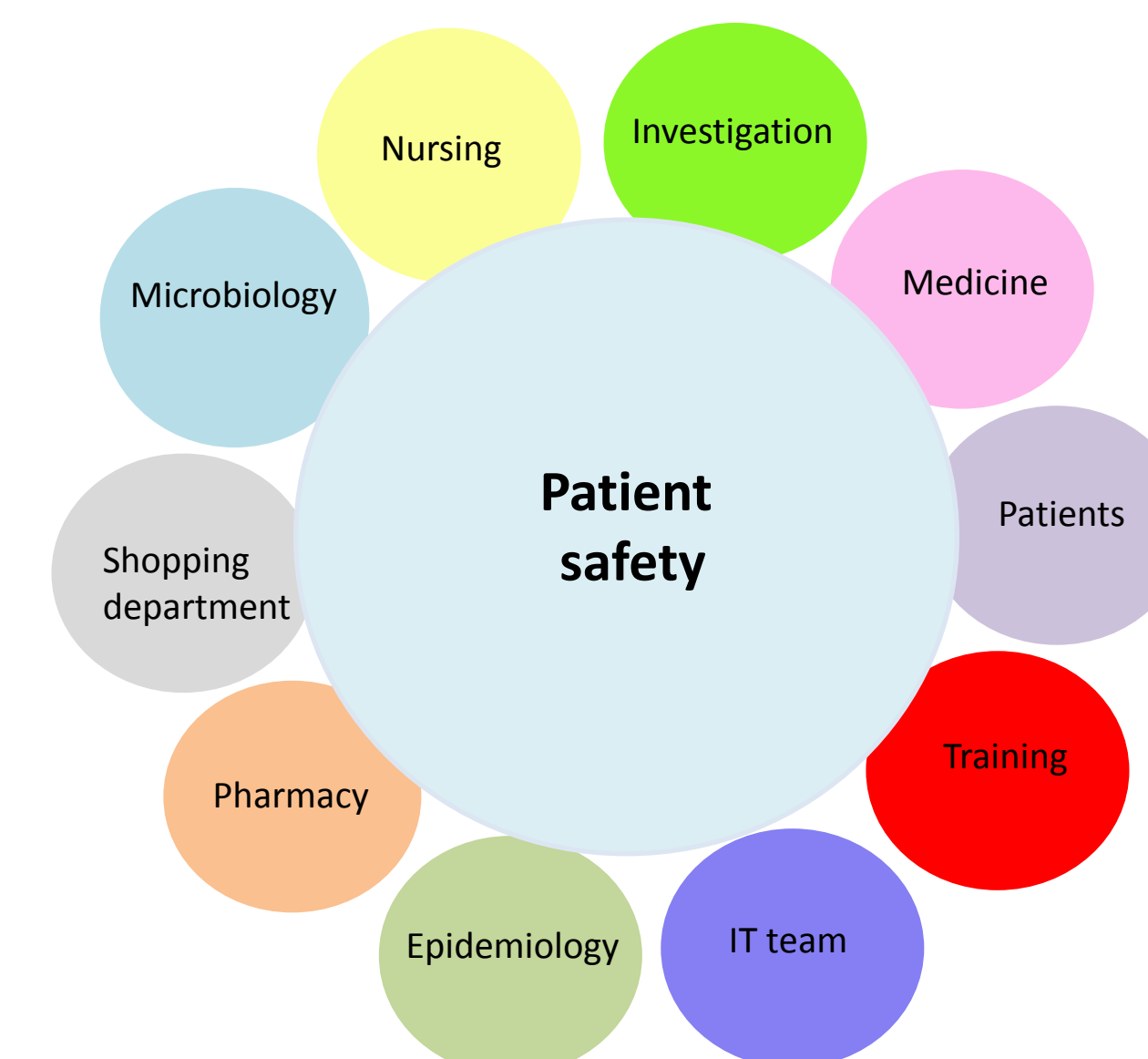
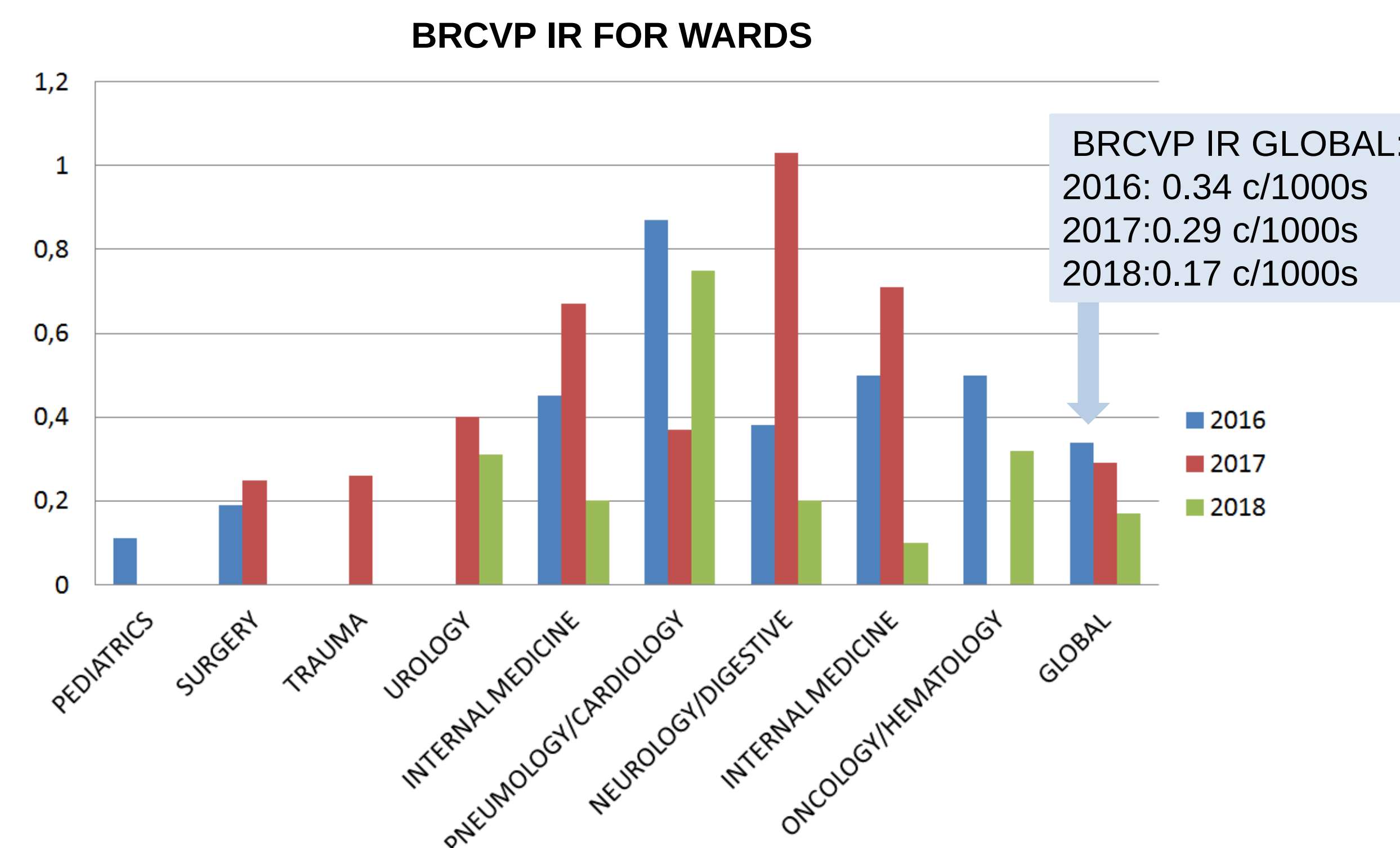
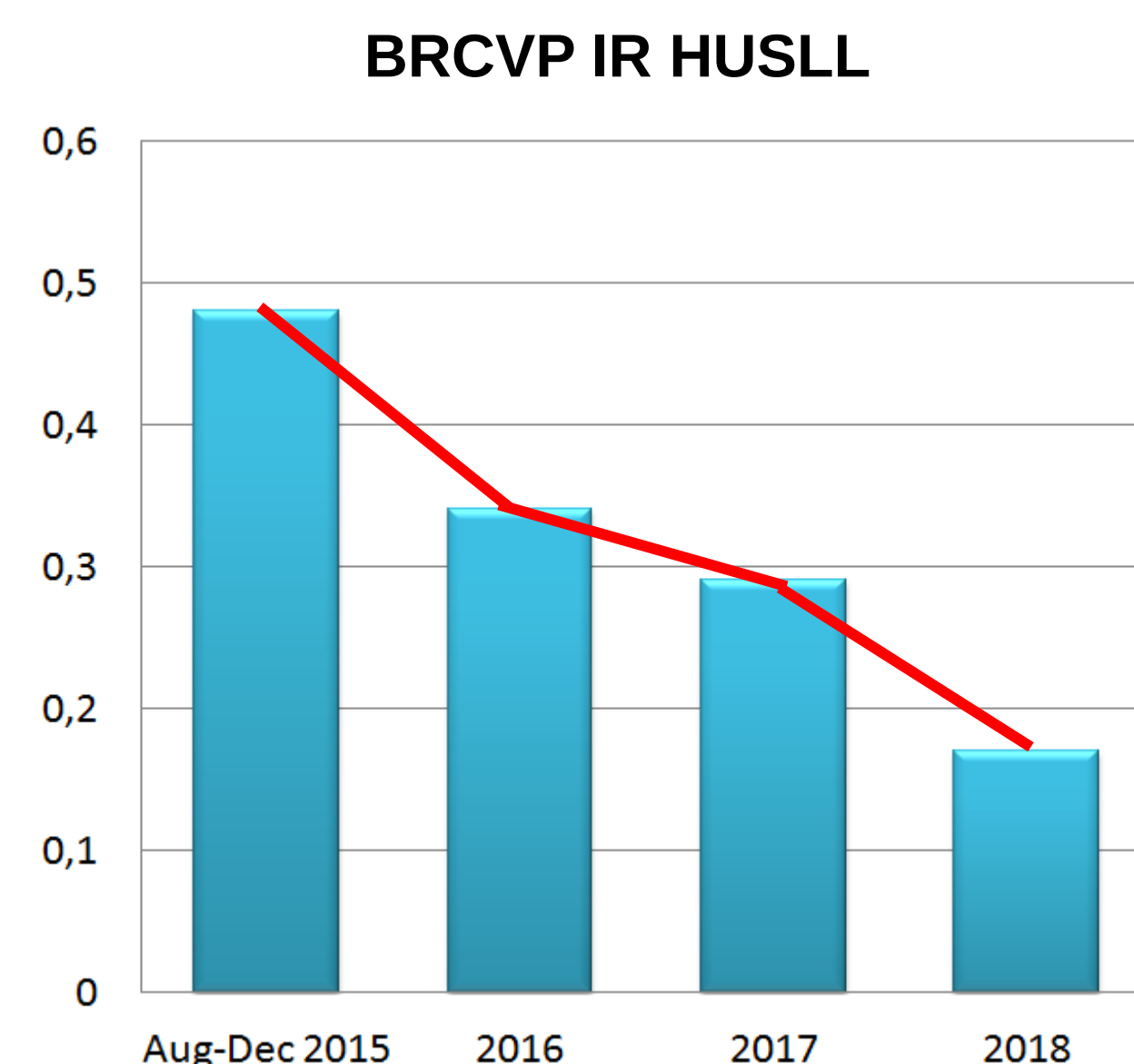
Methodology

To evaluate the effectiveness of a bundle of measures implemented by a multi-disciplinary Catheter Infection Team (CIT) in the reduction of BRPVC. There were studied adult patients admitted to HUSLL with PVC. The study was developed in the following phases:

- I- Observational phase. Base line situation analyzed by calculating the BRPVC IR. CIT created. (Aug–Dec 2015).
- II- Recommendations of clinical practice guidelines were followed by updating procedures for insertion and maintenance of PVC and using as implementation strategies: training sessions, educational safety rounds on wards, incorporating new venous catheter devices, involving the patient in their own care via training videos in rooms, dissemination of algorithm for selection of appropriate catheter according to pH, osmolarity and duration of intravenous treatment. (2016–2017)
- III- New strategies were defined to evaluate and sustain the implementation process. Institutionalization of CIT as a Sub-commission on Vascular Accesses. Adherence to Phlebitis Zero Program allowed action in phases prior to BRPVC. Improvement of computer records establishing quality indicators of nursing care related to PVC (2018).

Results

In phase I, the BRPVC IR was 0.48 cases/1000 stays, in 2016 it was 0.34, in 2017, 0.29 and in 2018, 0.17 cases/1000 stays. It was a reduction of 35.41% in BRPVC in 2018 compared to 2015, in HUSLL.



Discussion & Conclusions

It was a reduction of BRCVP and an improvement of patient health and safety, due to the work of the CIT, active participation of patients for prevention of BRPVC and the collaboration of other areas (computing and purchasing).

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