

# LONG-TERM REDUCTION RATE IN CATHETER-RELATED BLOODSTREAM INFECTIONS

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## Results

**Background:** Catheter-related bloodstream infection (CRBSI) accounts for 10% to 20% of hospital-acquired infections and is associated with both increased ICU stay and mortality. Rates of CRBSI may be modified by clinical care during insertion and utilization of central venous catheters (CVCs). As such, the incidence of CRBSI has been proposed as a quality indicator.

Standardized questionnaire for the evaluation of CRBSI was implemented in 2010. All catheter days are recorded. Analysis of the data is done twice yearly and data are returned to the ICUs. Additional education or interventions are performed as needed according to the results.

The aim of the present report is to evaluate the long-term results of the implementation of the strategies for prevention of CRBSI.

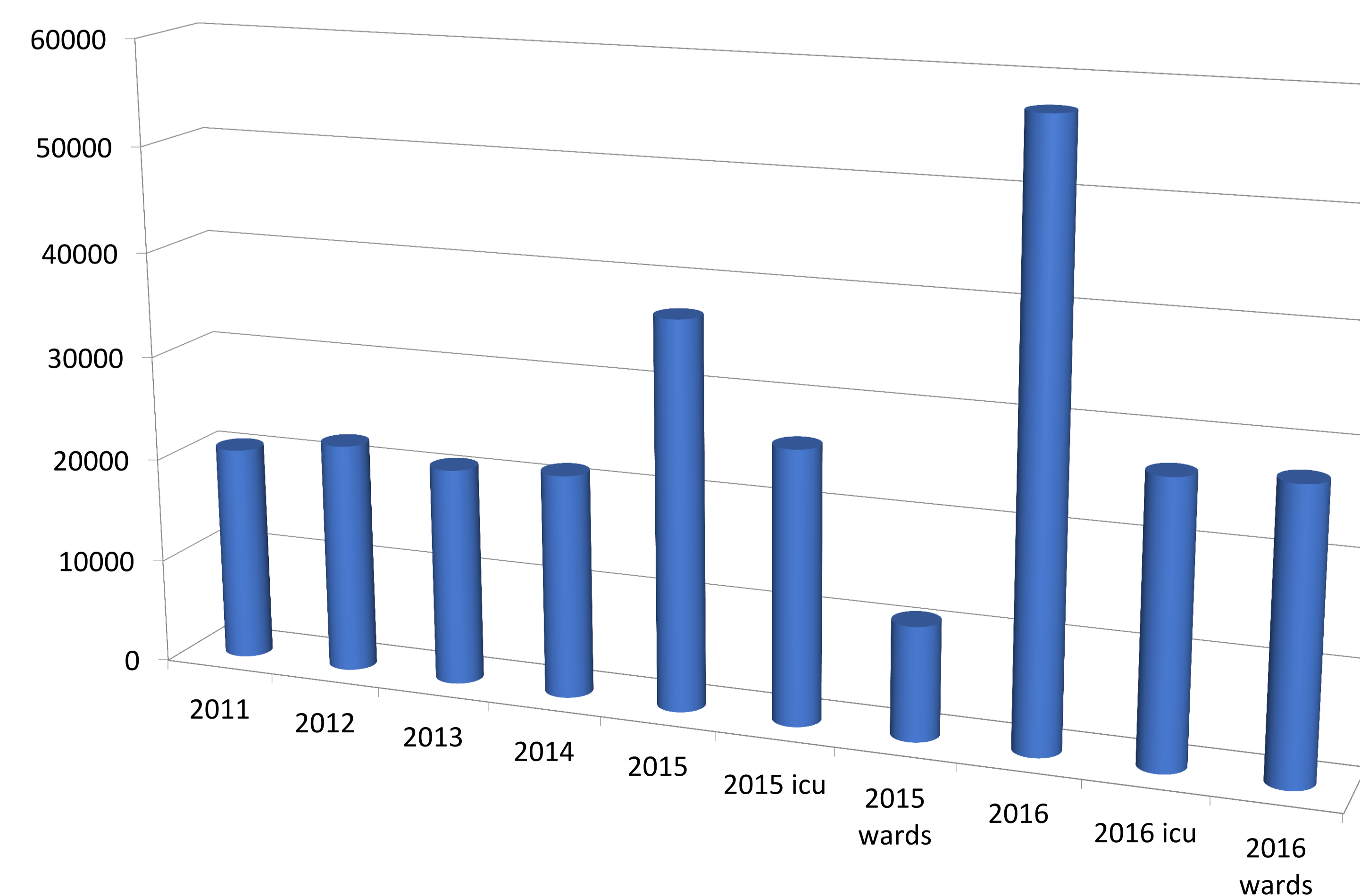
**Material/Methods:** For each CVC the standard questionnaire was completed. Additional microbiological results were collected for each patient with CVC and positive blood cultures. Data were calculated for each ICU and for the hospital yearly.

**Conclusions:** It is possible to maintain low rate of CRBSI also after the study periods without big expenses but with regular surveillance, feedback information and action according to the results. Regular education and practical workshops are also a part of our prevention program.

	ICU1	ICU2	ICU3	ICU4	ICU5
<b>2011 No CD</b>	7345	5527	3234	2026	2497
<b>CRBSI/1000 CD</b>	2.31	1.45	1.85	0.98	0.8
<b>2012 No CD</b>	7936	6159	3143	2386	2474
<b>CRBSI/1000 CD</b>	1.2	0.8	0.3	1.2	0.4
<b>2013 No CD</b>	7253	5006	3031	2247	2812
<b>CRBSI/1000 CD</b>	0.55	0.2	0	0.9	0.35
<b>2014 No CD</b>	7485	5124	3386	2797	2654
<b>CRBSI/1000 CD</b>	0.6	1.5	0.6	0.35	0.75
<b>2015 No CD</b>	7320	5849	3754	2942	3126
<b>CRBSI/1000 CD</b>	0.55	0.85	0.8	0	0.32
<b>2016 No CD</b>	7967	5965	3500	2951	2869
<b>CRBSI/1000 CD</b>	0,50	0,67	0	0,68	0,35

Year	N° CD	CR-BSI/1000 CD
2011	20629	1.80
2012	22098	0.90
2013	20858	0.40
2014	21446	0.80
2015	37034	0.65
ICU	26124	0.50
Regular wards	10910	0.73
2016	57391	0.51
ICU	26947	0.48
Regular wards	27444	0.58

Catheter days



CRBSI / 1.000 CD

