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CRITICAL CARE ANNUAL REPORT

CENTRAL VENOUS CATHETER AND VENTILATOR ASSOCIATED PNEUMONIA

2009

**ABERTAWA BRO MORGANNWG
UNIVERSITY HEALTH BOARD**

SUMMARY REPORT

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1. ABERTAWE BRO MORGANNWG UNIVERSITY HEALTH BOARD RESULTS - Central Venous Catheter (CVC) Surveillance

The time period for this report is based on the insertion date. Therefore only records with the insertion date completed have been included for analysis. Patients that have not been on Critical Care for over 48 hours or have not had a line in situ for over 48 hours have also been excluded.

Table 1.1 Form returns for Abertawe Bro Morgannwg University Health Board for patients with lines inserted for the period 01/01/2009 - 31/12/2009

Number of forms received for critical care patients with lines inserted	Number of valid forms*	Percentage of valid forms
945	938	99.3%

* Valid forms include forms where insertion date, admission to critical care date and (removal or discharge) date are completed

Table 1.2 Percentage completion of data items on the CVC Surveillance forms for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 - 31/12/2009

Question	Number completed	Number expected	Completion rate %
Age	940	945	99.5%
Sex	944	945	99.9%
Date of admission to hospital	939	945	99.4%
Date of admission to critical care	941	945	99.6%
Site of CVC insertion	940	945	99.5%
Hospital location of CVC insertion	935	945	98.9%
CVC removal date	898	945	95.0%
Date of discharge from critical care*	454	454	100.0%

* Excludes records where the patient has not yet been discharged from critical care

Table 1.3 Overall HELICS defined CVC infection rate for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 - 31/12/2009

Number of HELICS CVC infections	Number of critical care catheter days*	HELICS CVC infection rate** (per 1000 critical care catheter days)
0	6152	0.0

* Only catheter days up to discharge of patient from critical care are included. Number of critical care catheter days calculated = removal date - insertion date + 1 (unless the insertion date precedes the admission to critical care date i.e. insertion date is replaced by admission to critical care date, or if the removal date succeeds discharge date from critical care then removal date is replaced by discharge date)

** Calculation of HELICS CVC infection rate = total number of HELICS CVC infections / number of critical care catheter days * 1000

Figure 1.1 Percentage of CVC insertions and numbers of HELICS defined CVC infections by insertion location for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 – 31/12/2009

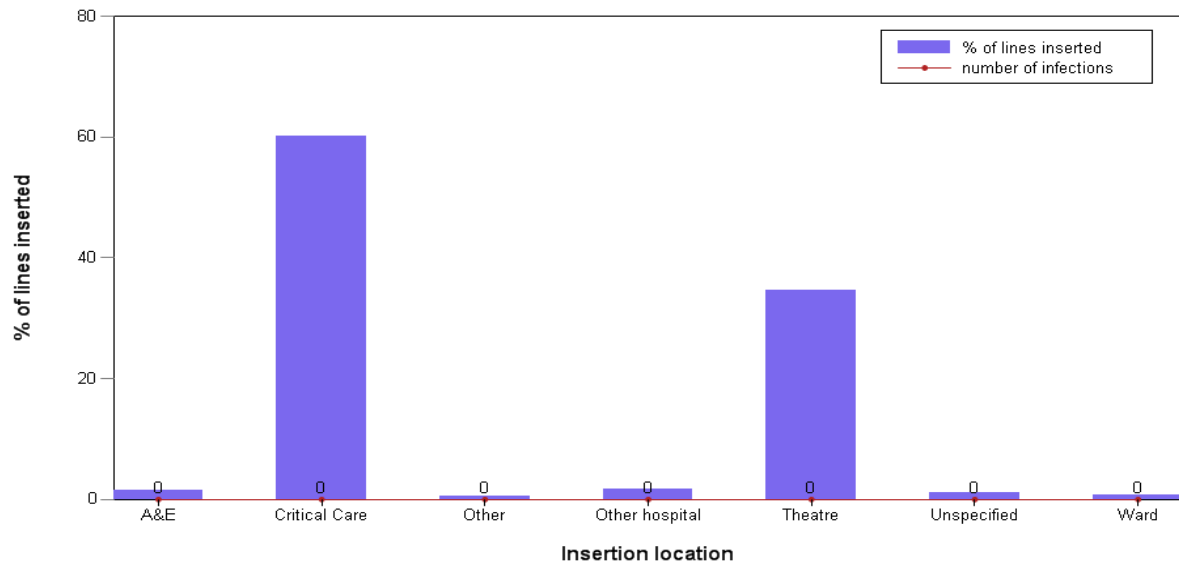
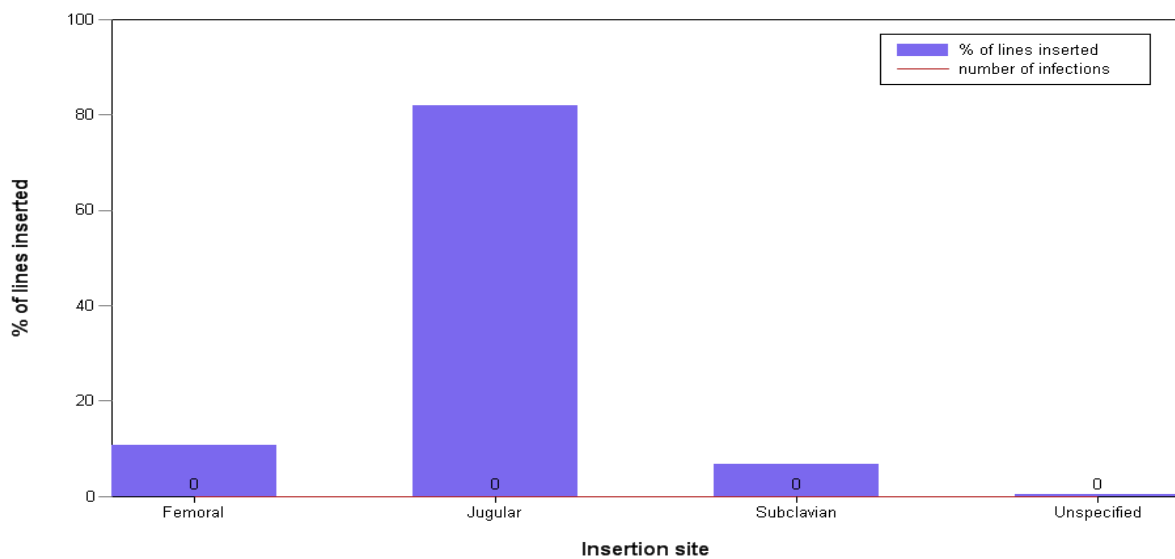


Figure 1.2 Percentage of CVC insertions and numbers of HELICS defined CVC infections by insertion site for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 – 31/12/2009



2. ABERTAWE BRO MORGANNWG UNIVERSITY HEALTH BOARD RESULTS – Ventilator Associated Pneumonia (VAP) Surveillance

The time period for this report is based on the date of intubation. Therefore only records with the date of intubation completed have been included for analysis. Patients that have not been on Critical Care for over 48 hours have also been excluded.

Table 2.1 Form returns for Abertawe Bro Morgannwg University Health Board for patients ventilated for the period 01/01/2009 - 31/12/2009

Number of forms received for critical care patients with lines inserted	Number of valid forms*	Percentage of valid forms
362	361	99.7%

* Valid forms include forms where intubation date, admission to critical care date and (extubation or discharge date) are completed

Table 2.2 Percentage completion of data items on the VAP surveillance forms for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 - 31/12/2009

Question	Number completed	Number expected	Completion rate %
Age	362	362	100.0%
Sex	362	362	100.0%
Date of admission to hospital	360	362	99.4%
Date of admission to critical care	362	362	100.0%
Risk factors	95	Not applicable	
Type of case	351	362	97.0%
Date of extubation	349	362	96.4%
Date of discharge from critical care*	177	177	100.0%

* Excludes records where the patient has not yet been discharged from critical care

Table 2.3 Overall HELICS defined VAP rate for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 - 31/12/2009

Number of HELICS VAP	Number of critical care ventilator days*	HELICS VAP rate** (per 1000 critical care ventilator days)
3	3451	0.9

* Only ventilator days up to discharge of patient from Critical Care are included. Number of Critical Care ventilator days calculated = extubation date - intubation date + 1 (unless the intubation date precedes the admission to critical care date i.e. intubation date is replaced by admission to critical care date, or if the extubation date succeeds discharge date from Critical Care then extubation date is replaced by discharge date)

** Calculation of HELICS VAP rate = total number of HELICS VAP / number of critical care ventilator days * 1000

Table 2.4 Breakdown of HELICS defined VAP rate by VAP type for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 - 31/12/2009

VAP type	Number of HELICS VAP	HELICS VAP rate* (per 1000 critical care ventilator days)
PN1	2	0.58
PN2	1	0.29

* Calculation of HELICS VAP rate = total number of HELICS VAP / number of critical care ventilator days * 1000

Figure 2.1 Percentage of intubations and HELICS defined VAP numbers by case type for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 – 31/12/2009

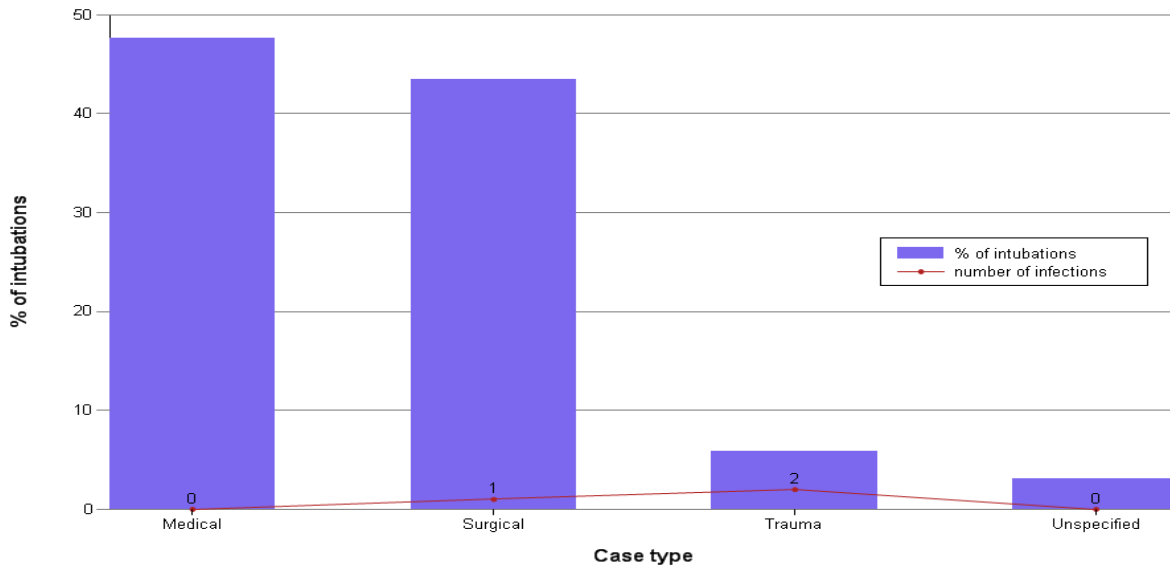


Table 2.5 Numbers of HELICS defined VAP by organism for Abertawe Bro Morgannwg University Health Board for the period 01/01/2009 – 31/12/2009

Organism	Number of HELICS VAP*
<i>Escherichia coli</i>	2
<i>Pseudomonas sp.</i>	3
Total	5

*The VAP may include more than 1 result organism. Microbiological diagnosis allows for up to 3 positive organisms to be noted. The number of VAP may therefore not correspond to the number of organisms