K-3368. A Sustained Reduction of Methicillin Resistant *Staphylococcus aureus* (MRSA) in an Intensive Care Unit (ICU) at an Australian Tertiary Hospital over an 8-Year Period in the Absence of Intensive Infection Control Measures

Background: Intensive efforts to control nosocomial MRSA remain controversial. We report a decline in MRSA blood stream and other clinical isolates from our ICU in the absence of specific interventions against MRSA.
Methods: Retrospective time series analysis of *Staphylococcus aureus* (SA) isolates from the Royal Melbourne Hospital ICU 2000-2007. Clinical isolates were electronically extracted from the microbiology database. Screening swabs and duplicate isolates collected within 7d from sterile and 30d from non-sterile sites respectively were excluded. **Results:**
Consecutive 6 monthly MRSA (& total SA) clinical isolates/1000 occupied ICU bed days and MRSA (& total SA) blood culture isolates (unadjusted for occupancy) from 2000-2007 is presented in table 1. Trauma, cardiothoracic & other surgical comprised 63% (mean) of ICU admissions/ year. No MRSA specific interventions i.e. active screening, decolonisation or isolation were implemented. Interventions included antibiotic stewardship incorporating a computerized program (Jan 2001), regular rounds by infectious diseases physicians (April 2004), temporary screening & barrier nursing of *Acinetobacter* colonised patients during an outbreak of non-multiresistant *Acinetobacter* (Nov 2004-Dec 2005) and hand hygiene education (May 2005). **Conclusions:** Sustained reduction of endemic MRSA was achieved by quality improvement measures and limited infection control interventions. Intensive and expensive control measures may not always be necessary.

Table 1

2 year period	Consecutive 6 monthly MRSA (SA) clinical isolates/ 1000 ICU bed days	Consecutive 12 monthly blood cultures MRSA (SA)
2000-2001	31 (53) 35 (62) 26 (48) 23 (50)	28 (39) 18 (28)
2002-2003	14 (50) 25 (54) 24 (56) 26 (53)	15 (26) 18 (30)
2004-2005	26 (56) 28 (58) 17 (40) 16 (43)	12 (27) 11 (20)
2006-2007	6 (38) 14 (48) 11 (45) 3 (22)	3 (16) 4 (16)

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