

Staphylococcus aureus Bacteraemia (SAB) Surveillance – Application of SAB Case Definitions – Example Scenarios

Since commencing SAB data collection in Victoria there have been several scenarios that required clarification. See below table for commonly encountered scenarios and application of current definitions:

- SAB Definition 1 – Healthcare associated: SAB > 48 hours after admission or within 48 hours of discharge
- SAB Definition 2 – Healthcare associated: SAB ≤ 48 hours after admission and one of the key clinical criteria met
- SAB Definition 3 – Community associated: SAB ≤ 48 hours after admission and none of the key clinical criteria met

For each scenario, the following coding has been applied:

- Hospital A – Hospital
- Hospital B – Hospital
- Hospital C – Residential aged care facility

Scenario	Details	SAB Definition	Rationale
1.	<ul style="list-style-type: none"> o Patient in Hospital C (residential aged care) for > 48 hours, blood culture collected & SAB detected. o Patient transferred to Hospital A, blood culture collected on admission – SAB 	Hosp C – no report Hosp A – 3	Hospital C is a residential aged care facility thus is not reporting SABs Community acquired (3) as does not meet definition 1 or 2. A patient from a residential aged care assessed the same as from own home
2.	<ul style="list-style-type: none"> o Patient in Hospital C (residential aged care) for > 48 hours, blood culture collected & SAB detected. o Patient transferred to Hospital A, no blood culture collected 	Hosp C – no report Hops A – no report	Hospital C is a residential aged care facility thus is not reporting SABs Hospital A ICP unaware patient exists as there is no SAB result to initiate investigation
3.	<ul style="list-style-type: none"> o Patient presents to ED in hospital A – blood culture collected & SAB detected o Patient transferred to Hospital B (not admitted to hospital A), no blood culture collected 	Hosp A – 2 or 3 if admitted Hosp B – no report	Hosp A ICP obligated to ascertain if patient was admitted to another facility (via medical history). If so, Hosp A reports as 2/3 Note: this approach relies upon the accuracy and completeness of medical notes.
4.	<ul style="list-style-type: none"> o SAB detected in ED and admitted. o Patient had THR (implant) 6 months ago – SAB related to organ space infection 	3	Less than 48 hours after admission Surgery > 30 days ago
5.	<ul style="list-style-type: none"> o Patient in hospital A for >48 hours, no blood cultures collected o Patient with IV insitu transferred to hospital B, blood culture collected on admission – SAB detected 	Hosp A – 1 Hosp B – no report	Hosp A reports SAB as occurs within 48 hours of discharge. Hospital B ICP reviews case and notifies Hosp A ICP that SAB is attributed to hospital A (otherwise Hosp A will be unaware SAB occurred)
6.	<ul style="list-style-type: none"> o SAB detected on admission hospital A o 12 days later transfer to Hospital B, SAB detected on admission 	Hosp A – 2 or 3 Hosp B – no report	Hosp B not reporting because cases where known previous positive SAB within last 14 days are excluded.(there must be 14 clear days for new SAB to be recorded)
7.	<ul style="list-style-type: none"> o Patient with SAB in Hospital A (fistula insitu - endocarditis) o Transfer to Hospital B, blood cultures on admission negative o 4 days after transfer (i.e.10 days after SAB detected in hosp A) subsequent blood culture - positive SAB 	Hosp A – 1 or 2 Hosp B – no report	Hosp A – 1 or 2 depending on time of collection of SAB (< or > 48 hours after admission) Hosp B - cases where known previous positive SAB within last 14 days are excluded.(there must be 14 clear days for new SAB to be recorded)
8.	<ul style="list-style-type: none"> o Patient in Hospital A > 48 hours with PICC insitu. o Transfer to Hospital B, failed vascath insertion on admission o Blood culture collected 8 hours after admission – positive SAB 	Hosp A –1 Hosp B – no report	SAB occurred within 48 hours of discharge from hospital A