### APIC Surveillance SIG Surveillance Answers April 2022

In the following scenarios, use the Infection Window Period (IWP), Date of Event (DOE), Repeat Infection Timeframe (RIT), and Secondary BSI Attribution Period (SBAP) to determine what type of Healthcare Associated Infection (HAI) criteria are met.

#### Scenario

- 3/18 45-year-old male arrived in the ED with shortness of breath, chills, dizziness, and weakness. He is noted to have a temperature of  $38.2^{\circ}$ C and his  $O_2$  saturation is 80% on room air. He is placed on oxygen and orders are placed for a COVID-19 (SARS-CoV-2) test, chest Xray and blood cultures.
- **3/18** COVID-19 test: Positive
- 3/18 chest Xray: findings demonstrate dense airspace opacity throughout both lungs with air bronchograms
- 3/18 blood cultures: MRSA
- **3/19** He is admitted to ICU with a diagnosis of COVID-19 pneumonia. A right subclavian central line is inserted

#### **Question #1**: What criterion does he meet?

- A. Laboratory-Confirmed Bloodstream Infection (LCBI) 1
- B. Laboratory-Confirmed Bloodstream Infection (LCBI) 2
- C. Mucosal Barrier Injury Laboratory-Confirmed Bloodstream Infection (MBI-LCBI) 1
- D. Pneumonia (PNU) 1
- E. Pneumonia (PNU) 2
- F. None of the above (Explain why?)

Question #2: Is this a present on admission (POA) or healthcare associated infection (HAI) event?

- A. Present on admission (POA)
- B. Healthcare associated infection (HAI)

# **Scenario Continues**

- 3/22 blood cultures: MRSA
- 3/25 He continues to decompensate and is in acute hypoxic respiratory failure. He is placed on extracorporeal life support (ECMO)
- 3/26 blood cultures: MRSA
- 3/29 blood cultures: MRSA
- 3/31 He has a temperature of 38.6°C
- **4/1** blood cultures: MRSA

### Question #3: What criterion does he meet on 4/1?

- A. LCBI 1
- B. LCBI 2
- C. MBILCBI1
- D. PNU 1
- E. PNU 2
- F. None of the above (Explain why?) 4/1 blood culture in SBAP of 3/19 PNU 2

#### **Scenario Continues**

4/2 blood cultures: MRSA

#### Question #4: What criterion does he meet on 4/2?

- A. LCBI 1
- B. LCBI 2

- C. MBILCBI1
- D. PNU 1
- E. PNU 2
- F. None of the above (Explain why?)

# Question #5: On 4/2 how many CL days have occurred to determine if the BSI is a CLABSI?

- A. 12 CL days
- B. 13 CL days
- C. 14 CL days
- D. 15 CL days

### Question #6: On 4/2 how many days is ECMO present on the BSI date of event (DOE)?

- A. 7 days
- B. 8 days
- C. 9 days
- D. 10 days

#### Question #7: Is the ECMO CLABSI exclusion met?

- A. No
- B. Not Enough Information to Determine
- C. Yes

### **Question #8**: Does this need to be reported to NHSN?

- A. Yes (The events do not contribute to the CLABSI SIR measure.)
- B. No

# Question #9: How should you answer the Central Line (CL) field when reporting this event?

- A. CL=Yes
- B. CL=No

# Question #10: How should you answer the device field when reporting this event?

- A. ECMO=Yes
- B. ECMO=No

# nhsn.cdc.gov says

You have selected a calendar day that occurs in the POA time period defined as two days before and one day after inpatient admission. For purposes of NHSN surveillance and determination of Repeat Infection Timeframe, if the date of event is determined to be either of the two days prior to admit date, then the date of event will be hospital day 1. Likewise, the first day of the RIT will be hospital day 1.

#### Admit date: 3/19/2022

Hospital Day/Date	First Diagnostic Test	Infection Window Period (*)	Date of Event	Repeat Infection Timeframe (*)	Secondary BSI Attribution Period (*)
3/17/2022			-		
3/18/2022	<b>√</b>	cxr: opacity, temp 38.2 C, dyspnea, placed on oxygen, blood culture: MRSA	-		
1 3/19/2022 - Admit			- POA		
Date			- POA		
2 3/20/2022			-		
3 3/21/2022			-		
4 3/22/2022			-		blood culture: MRSA
5 3/23/2022			-		
6 3/24/2022			-		
7 3/25/2022			-		
8 3/26/2022			-		blood culture: MRSA
9 3/27/2022			-		
10 3/28/2022			-		
11 3/29/2022			-		blood culture: MRSA
12 3/30/2022			-		
13 3/31/2022			-		
14 4/1/2022			-		blood culture: MRSA

Admit date: 3/19/2022

Hospital Day/Date	First Diagnostic Test	Infection Window Period (*)	Date of Event	Repeat Infection Timeframe (*)
12 3/30/2022			-	
13 3/31/2022			-	
14 4/1/2022			-	
15 4/2/2022	✓	✓ blood culture: MRSA	- HAI	
16 4/3/2022			-	
17 4/4/2022			-	
18 4/5/2022			-	
19 4/6/2022			-	
20 4/7/2022			-	
21 4/8/2022			-	
22 4/9/2022			-	
23 4/10/2022			-	
24 4/11/2022			-	
25 4/12/2022			-	
26 4/13/2022			-	
27 4/14/2022			-	
28 4/15/2022			-	