# **Supplementary report Annex C:**

Cluster signals identify by AMASS-SatScan

**Hospital name: Hypothetical Hospital** 

**Country name: Hypothetical Country** 

Data from:

02 Jan 2016 to 31 Dec 2016

This is a detailed report for records with cluster signals identified by the AMASS-SatScan. This report, together with the full list in Excel format, is for users to check and validate the cluster and the patients in each cluster identified by the SatScan. The information available in this PDF file include ward names used in the dictionary files. The identifiers in the Excel files for the Annex C include hospital number and specimen collection date. Users should not share or transfer this report and the excel files for the Annex C to any party outside of the hospital without data security management and confidential agreement.

# **Blood specimen: MRSA**

### **Baseline information**

No. of patients = 19

No. of wards = 1

No. of AMR profiles = 1

### List of profiles

Profile ID	Cefoxitin	Oxacillin by MIC	Vancomycin	Clindamycin	Chloramphenicol	Erythromycin	Ofloxacin	Gentamycin	Amikacin	Co-trimoxazole	Rifampicin	Teicoplanin	Daptomycin	Linezolid	Ceftaroline	Piperacillin/tazobactam	No. of patients
profile_MRSA_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# **Blood specimen: MRSA**

### List of ward

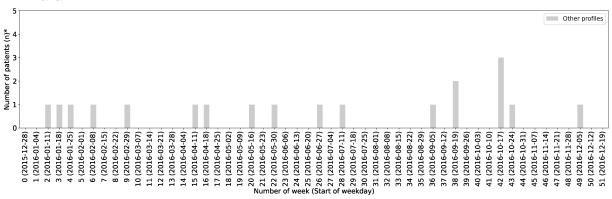
Ward ID	No. of patients
-	19
Total	19

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### **Blood specimen: MRSA**

# Display of patients with blood culture positive for MRSA in each ward over time

#### Ward: -



<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: MRSA

### **Baseline information**

No. of patients = 57

No. of wards = 1

No. of AMR profiles = 1

### List of profiles

Profile ID	Cefoxitin	Oxacillin by MIC	Vancomycin	Clindamycin	Chloramphenicol	Erythromycin	Ofloxacin	Gentamycin	Amikacin	Co-trimoxazole	Rifampicin	Teicoplanin	Daptomycin	Linezolid	Ceftaroline	Piperacillin/tazobactam	No. of patients
profile_MRSA_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# All specimens: MRSA

### List of ward

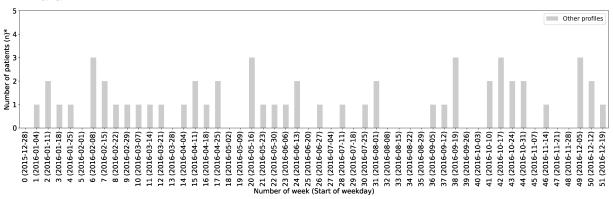
Ward ID	No. of patients
-	57
Total	57

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### All specimens: MRSA

# Display of patients with a clinical specimen culture positive for MRSA in each ward over time

#### Ward: -



<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# **Blood specimen: VREfs**

### **Baseline information**

No. of patients = 0No. of wards = 0No. of AMR profiles = 0

### list of profiles

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# **Blood specimen: VREfs**

list of wards

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### **Blood specimen: VREfs**

Display of patients with blood culture positive for VREfs in each ward over time

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: VREfs

### **Baseline information**

No. of patients = 0No. of wards = 0

No. of AMR profiles = 0

### list of profiles

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

All specimens: VREfs

list of wards

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### All specimens: VREfs

Display of patients with a clinical specimen culture positive for VREfs in each ward over time

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# **Blood specimen: VREfm**

### **Baseline information**

No. of patients = 0No. of wards = 0No. of AMR profiles = 0

### list of profiles

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# **Blood specimen: VREfm**

list of wards

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### **Blood specimen: VREfm**

Display of patients with blood culture positive for VREfm in each ward over time

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: VREfm

### **Baseline information**

No. of patients = 0No. of wards = 0

No. of AMR profiles = 0

### list of profiles

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

All specimens: VREfm

list of wards

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### All specimens: VREfm

Display of patients with a clinical specimen culture positive for VREfm in each ward over time

None

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# **Blood specimen: CREC**

### **Baseline information**

No. of patients = 4

No. of wards = 1

No. of AMR profiles = 1

### List of profiles

Profile ID	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/fazobactam	Cefoperazone/sulbactam	No. of patients
profile_CREC_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# **Blood specimen: CREC**

### List of ward

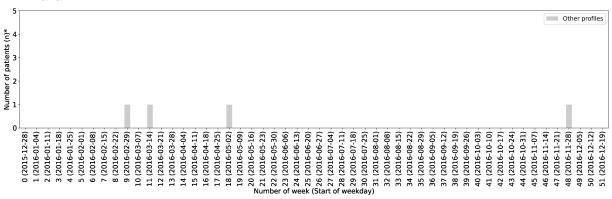
Ward ID	No. of patients
-	4
Total	4

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### **Blood specimen: CREC**

# Display of patients with blood culture positive for CREC in each ward over time

#### Ward: -



<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: CREC

### **Baseline information**

No. of patients = 12

No. of wards = 1

No. of AMR profiles = 1

### List of profiles

Profile ID	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/fazobactam	Cefoperazone/sulbactam	No. of patients
profile_CREC_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# All specimens: CREC

### List of ward

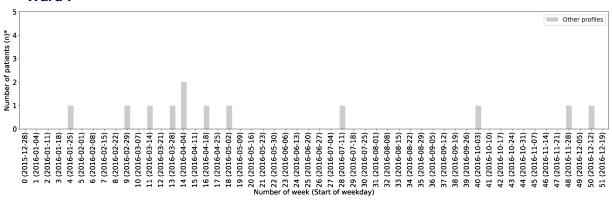
Ward ID	No. of patients
-	12
Total	12

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### All specimens: CREC

# Display of patients with a clinical specimen culture positive for CREC in each ward over time

#### Ward: -



<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# **Blood specimen: CRKP**

### **Baseline information**

No. of patients = 2

No. of wards = 1

No. of AMR profiles = 1

### List of profiles

Profile ID	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CRKP_1	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	2
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# **Blood specimen: CRKP**

### List of ward

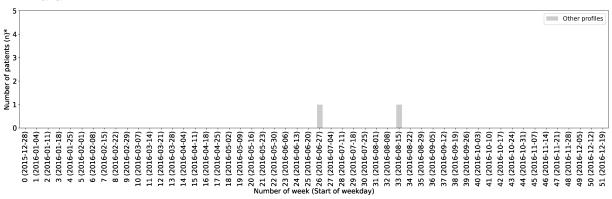
Ward ID	No. of patients
-	2
Total	2

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### **Blood specimen: CRKP**

# Display of patients with blood culture positive for CRKP in each ward over time

#### Ward: -



<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: CRKP

### **Baseline information**

No. of patients = 15

No. of wards = 1

No. of AMR profiles = 2

### List of profiles

Profile ID	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CRKP_1	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	11
profile_CRKP_2	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	4
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# All specimens: CRKP

### List of ward

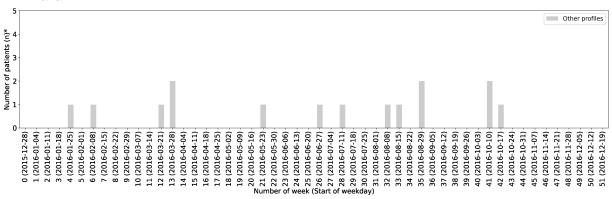
Ward ID	No. of patients
-	15
Total	15

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### All specimens: CRKP

# Display of patients with a clinical specimen culture positive for CRKP in each ward over time

#### Ward: -



<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# **Blood specimen: CRPA**

### **Baseline information**

No. of patients = 4

No. of wards = 1

No. of AMR profiles = 2

### List of profiles

Profile ID	Ceftazidime	Ciprofloxacin	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CRPA_1	-	R	-	-	-	-	-	-	-	-	2
profile_CRPA_2	-	S	-	-	-	-	-	-	-	-	2
Total	-	-	-	-	-	-	-	-	-	-	4

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# **Blood specimen: CRPA**

### List of ward

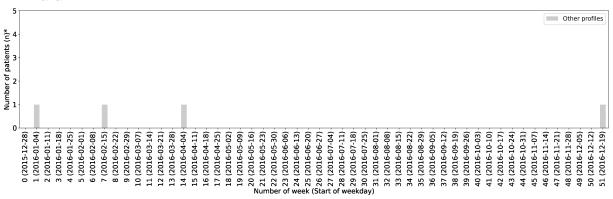
Ward ID	No. of patients
-	4
Total	4

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### **Blood specimen: CRPA**

# Display of patients with blood culture positive for CRPA in each ward over time

#### Ward: -



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<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: CRPA

### **Baseline information**

No. of patients = 28

No. of wards = 1

No. of AMR profiles = 2

### List of profiles

Profile ID	Ceftazidime	Ciprofloxacin	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CRPA_1	-	R	-	-	-	-	-	-	-	-	14
profile_CRPA_2	-	S	-	-	-	-	-	-	-	-	14
Total	-	-	-	-	-	-	-	-	-	-	28

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# All specimens: CRPA

### List of ward

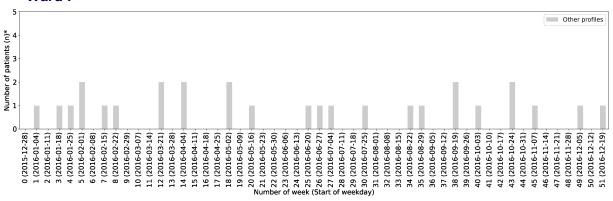
Ward ID	No. of patients
-	28
Total	28

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### All specimens: CRPA

# Display of patients with a clinical specimen culture positive for CRPA in each ward over time

#### Ward: -



<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# **Blood specimen: CRAB**

### **Baseline information**

No. of patients = 45

No. of wards = 1

No. of AMR profiles = 2

### List of profiles

Profile ID	Tigecycline	Minocycline	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CRAB_1	-	-	R	-	-	R	-	-	-	-	44
profile_CRAB_2	-	-	S	-	-	S	-	-	-	-	1
Total	-	-	-	-	-	-	-	-	-	-	45

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# **Blood specimen: CRAB**

### List of ward

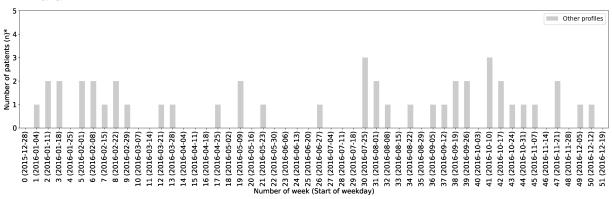
Ward ID	No. of patients
-	45
Total	45

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### **Blood specimen: CRAB**

# Display of patients with blood culture positive for CRAB in each ward over time

#### Ward: -



<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: CRAB

### **Baseline information**

No. of patients = 156

No. of wards = 1

No. of AMR profiles = 3

### List of profiles

Profile ID	Tigecycline	Minocycline	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CRAB_1	-	-	R	-	-	R	-	-	-	-	150
profile_CRAB_2	-	-	S	-	-	S	-	-	-	-	5
profile_CRAB_3	-	-	S	-	-	R	-	-	-	-	1
Total	-	-	-	-	-	-	-	-	-	-	156

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

# All specimens: CRAB

### List of ward

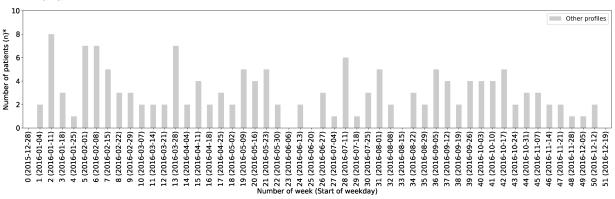
Ward ID	No. of patients
-	156
Total	156

<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

### All specimens: CRAB

# Display of patients with a clinical specimen culture positive for CRAB in each ward over time





<sup>\*</sup> The AMASS-SatScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# Table S1: List of ward names in your microbiology\_data file

None

<sup>\*</sup> In case that there are ward names in your hospital\_admission\_data file, this list and the analysis will prioritize the ward names in the microbiology\_data file over the ones in hospital\_admission\_data file.