

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 = 2

No. of AMR profiles = 2

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_2	-	-	S	R	-	-	-	-	-	-	-	-	-	-	-	-	16
profile_MRSA_1	-	-	R	S	-	-	-	-	-	-	-	-	-	-	-	-	3
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19

* 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

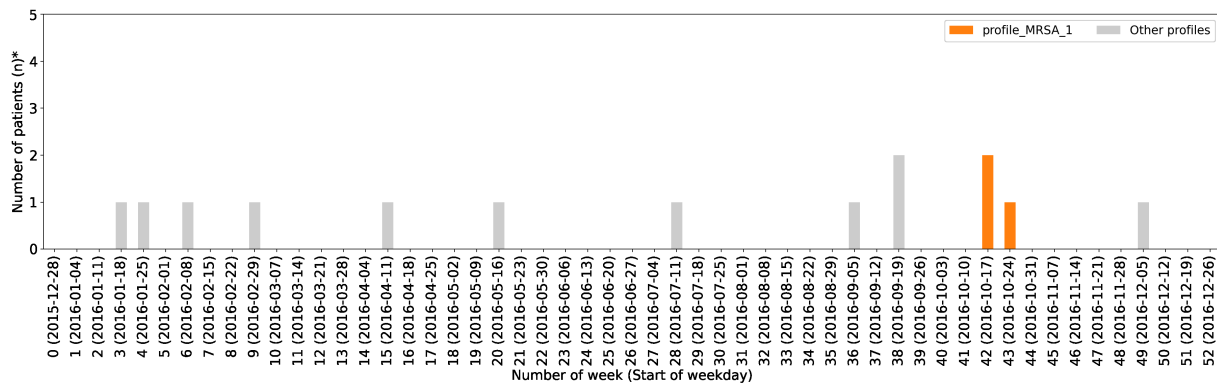
Ward ID	No. of patients
ward_001	14
ward_002	5
Total	19

* The AMASS-SaTScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

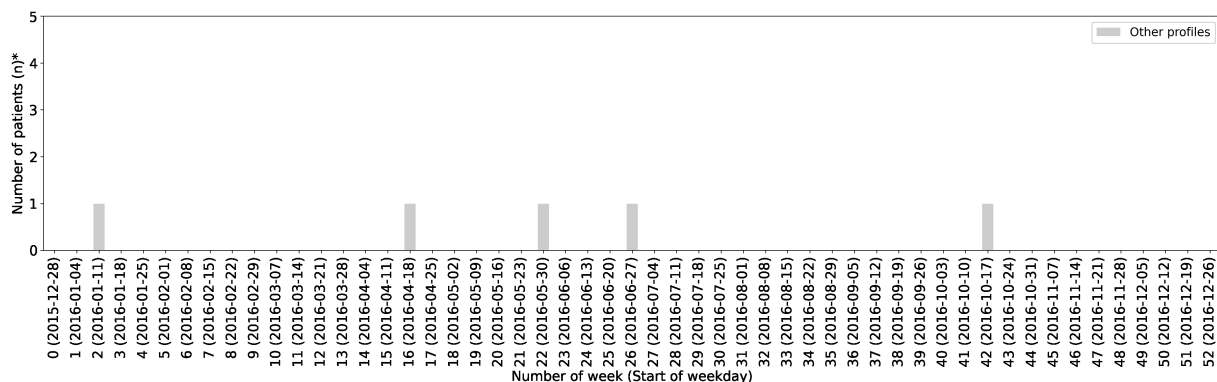
Blood specimen: MRSA

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

Ward : ward_001



Ward : ward_002



* 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 = 56

No. of wards = 2

No. of AMR profiles = 2

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_2	-	-	S	R	-	-	-	-	-	-	-	-	-	-	-	-	53
profile_MRSA_1	-	-	R	S	-	-	-	-	-	-	-	-	-	-	-	-	3
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56

* 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

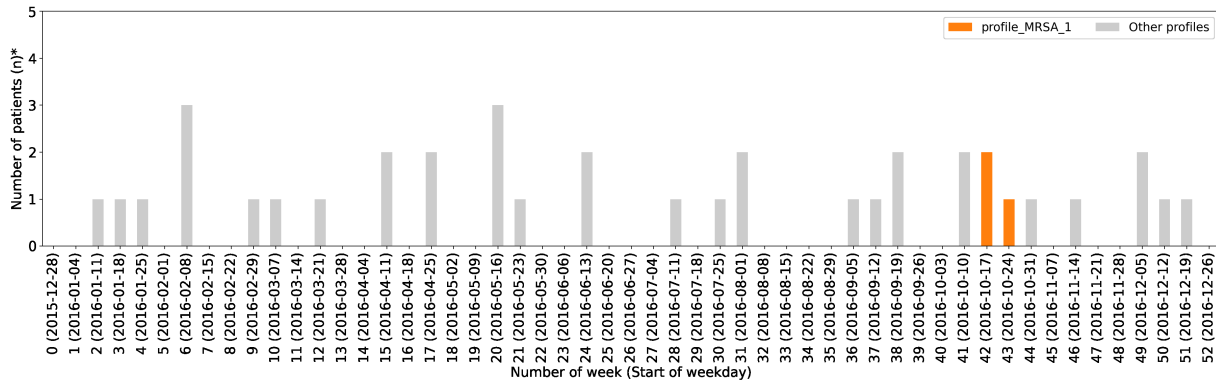
Ward ID	No. of patients
ward_001	38
ward_002	18
Total	56

* The AMASS-SaTScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

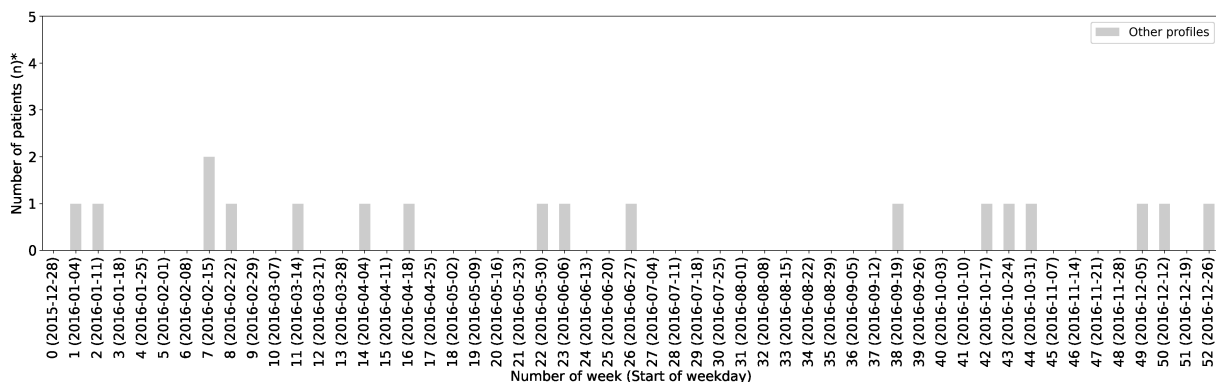
All specimens: MRSA

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

Ward : ward_001



Ward : ward_002



* 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 = 0

No. of wards = 0

No. of AMR profiles = 0

list of profiles

None

* 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

* 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

* 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 = 0

No. of wards = 0

No. of AMR profiles = 0

list of profiles

None

* 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

* 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

* 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 = 0

No. of wards = 0

No. of AMR profiles = 0

list of profiles

None

* 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

* 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

* 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 = 0

No. of wards = 0

No. of AMR profiles = 0

list of profiles

None

* 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

* 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

* 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/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CREC_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4

* 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

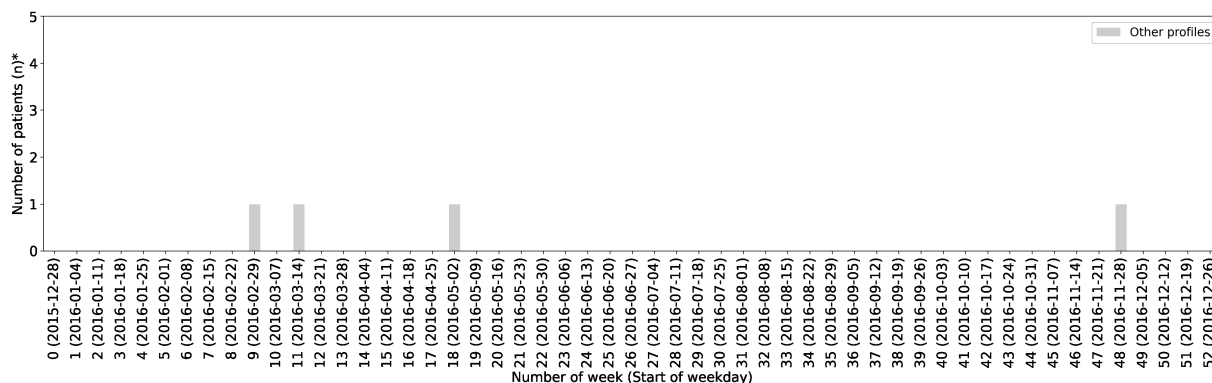
Ward ID	No. of patients
ward_003	4
Total	4

* 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 : ward_003



* 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/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CREC_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12

* 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

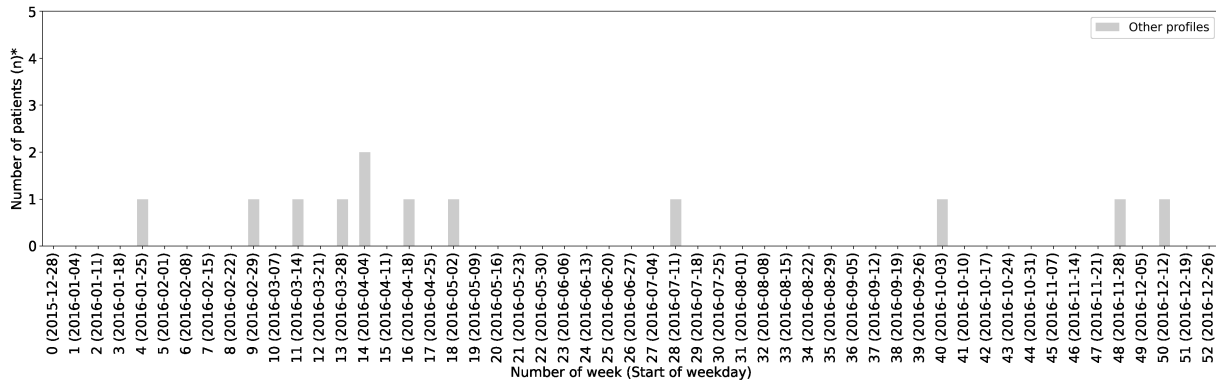
Ward ID	No. of patients
ward_003	12
Total	12

* 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 : ward_003



* 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

* 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

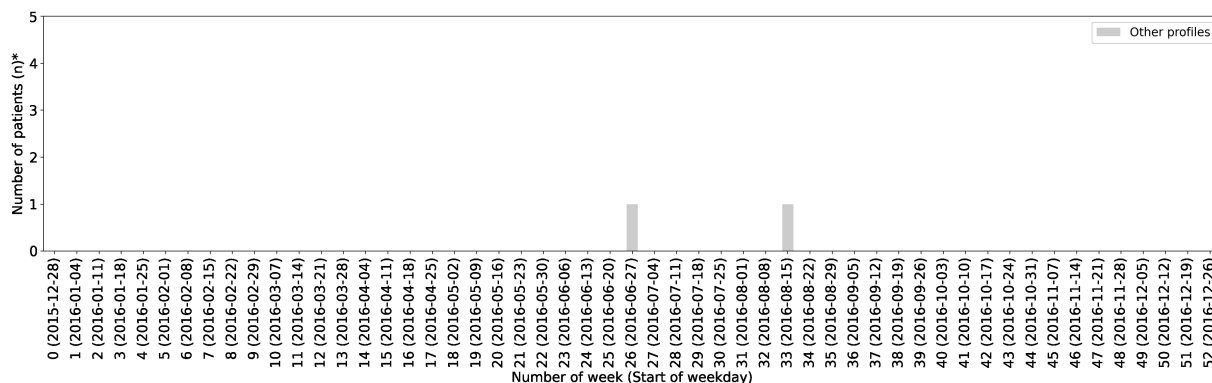
Ward ID	No. of patients
ward_001	2
Total	2

* 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 : ward_001



* 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

* 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

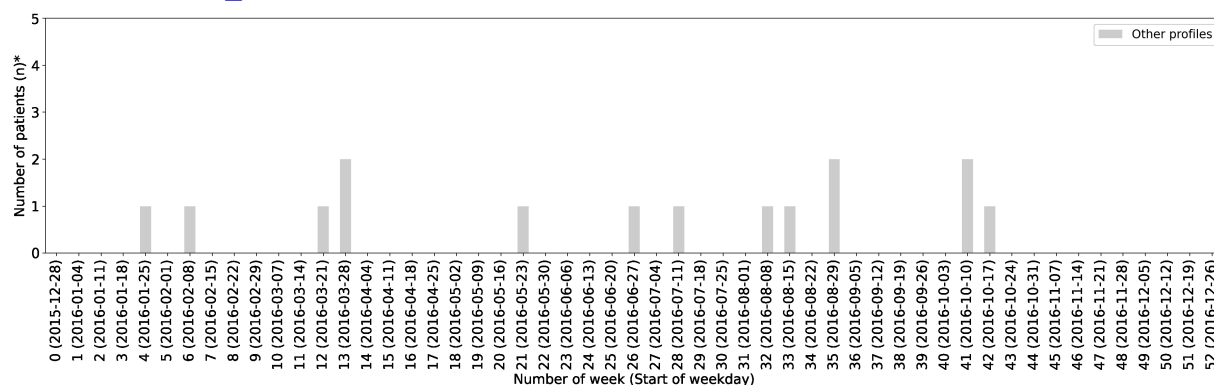
Ward ID	No. of patients
ward_001	15
Total	15

* 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 : ward_001



* 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

* 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

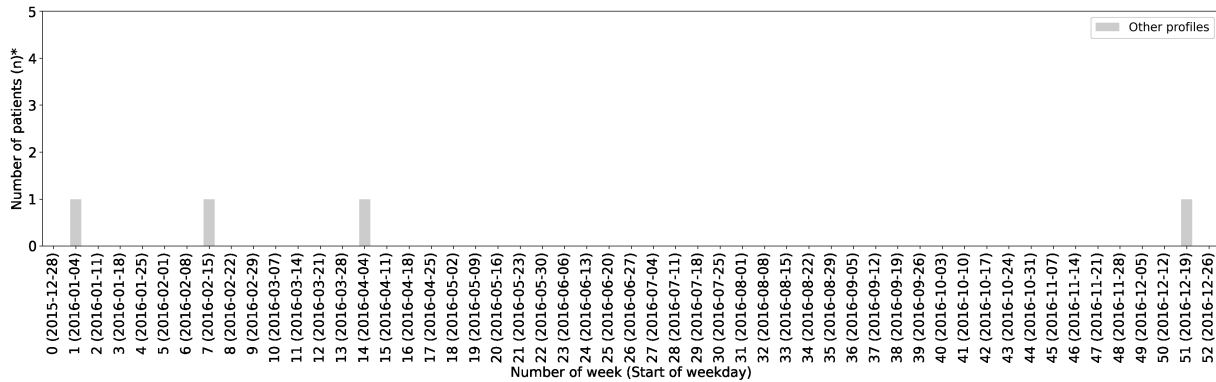
Ward ID	No. of patients
ward_001	4
Total	4

* 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 : ward_001



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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

* 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

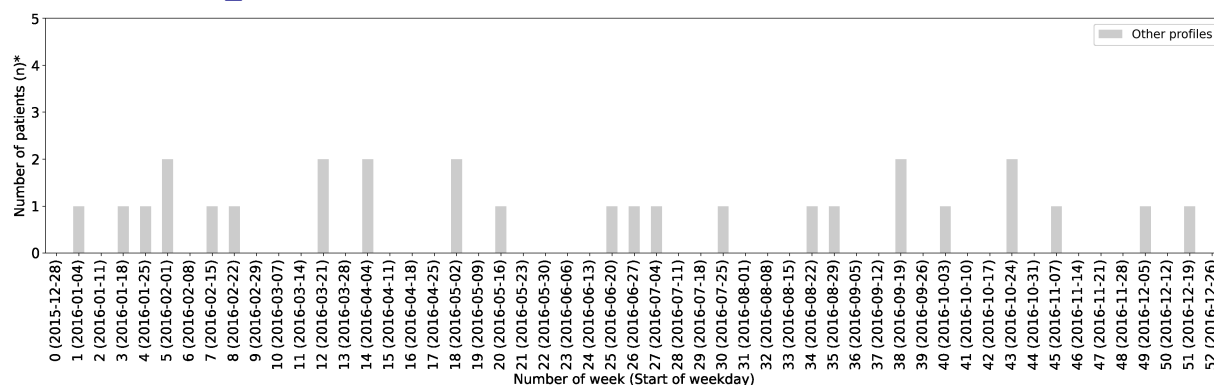
Ward ID	No. of patients
ward_001	28
Total	28

* 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 : ward_001



* 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 = 2

No. of AMR profiles = 4

List of profiles

Profile ID	Tigecycline	Minocycline	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CRAB_2	-	-	R	-	-	R	-	-	-	-	35
profile_CRAB_3	-	-	S	-	-	R	-	-	-	-	5
profile_CRAB_1	-	-	R	-	-	I	-	-	-	-	4
profile_CRAB_4	-	-	S	-	-	S	-	-	-	-	1
Total	-	-	-	-	-	-	-	-	-	-	45

* 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

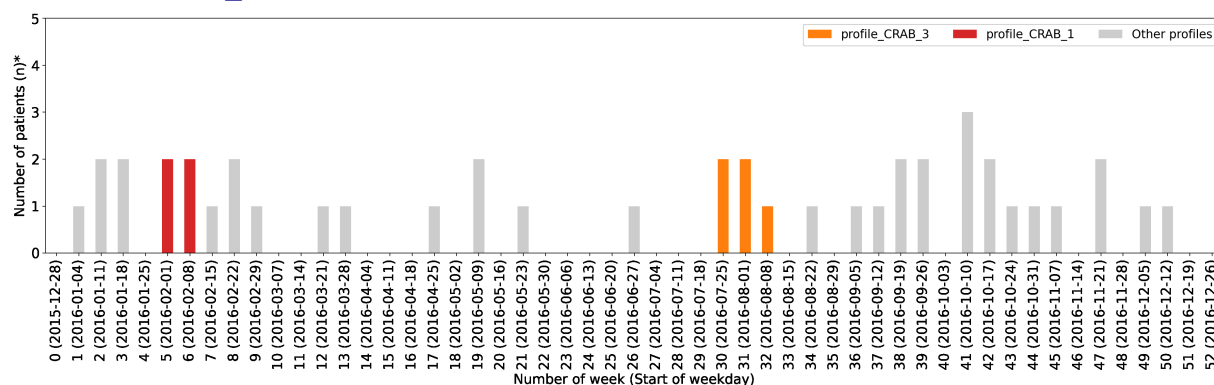
Ward ID	No. of patients
ward_004	44
ward_001	1
Total	45

* The AMASS-SaTScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

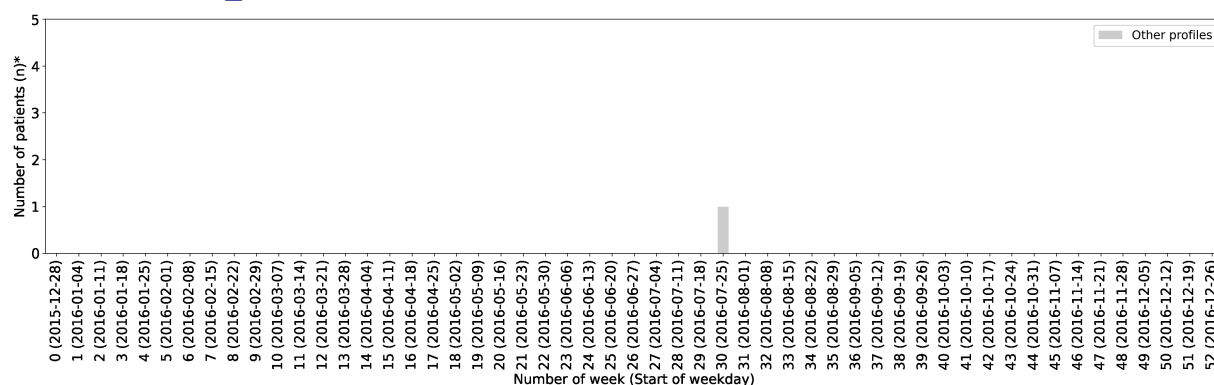
Blood specimen: CRAB

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

Ward : ward_004



Ward : ward_001



* 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 = 2

No. of AMR profiles = 4

List of profiles

Profile ID	Tigecycline	Minocycline	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
profile_CRAB_2	-	-	R	-	-	R	-	-	-	-	142
profile_CRAB_3	-	-	S	-	-	R	-	-	-	-	5
profile_CRAB_4	-	-	S	-	-	S	-	-	-	-	5
profile_CRAB_1	-	-	R	-	-	I	-	-	-	-	4
Total	-	-	-	-	-	-	-	-	-	-	156

* 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

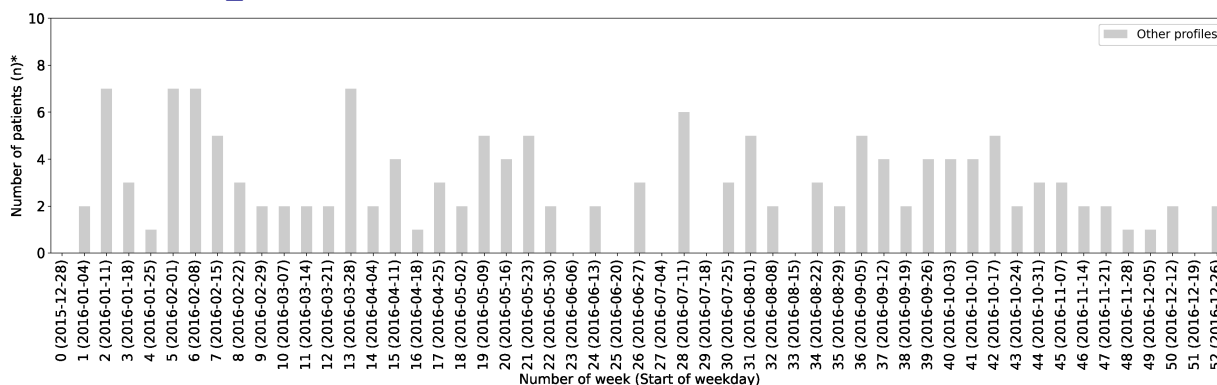
Ward ID	No. of patients
ward_004	151
ward_001	5
Total	156

* The AMASS-SaTScan (Annex C) de-duplicated by including only the first resistant isolate per patient per specimen type per evaluation period.

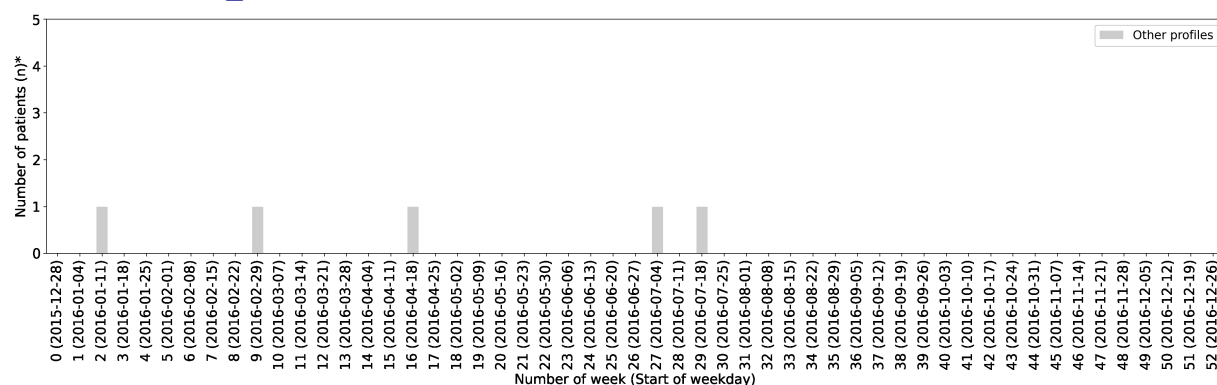
All specimens: CRAB

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

Ward : ward_004



Ward : ward_001



* 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

List of ward

Ward ID	Ward name
ward_001	male medical ward 1
ward_002	ICU med.
ward_003	male medical ward 2
ward_004	female medical ward
ward_005	female surgery ward
ward_006	male medical ward 3

* 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.