Public Health England

Protecting and improving the nation's health

ECDC-PPS 2016

Data Collection Forms and Flow Charts

Instructions

This should be printed full size on both sides of A4 paper.

Sheet 3. Ward sheet. One sheet needed per ward

Sheet 4. Grouped denominator data. 1 page per 10 patients (e.g. if a ward has 24 patients, 3 sheets required for the ward)

Sheet 5 and 6 if not using Sheet 4, this should be printed on both sides of an A4 sheet per patient surveyed (e.g. if not using Sheet 4, for a ward with 24 patients, needs 24 sheets)

Sheet 7 and 8 should be used if using Sheet 4, this should be printed on both sides of an A4 sheet per patient on antibiotics or with HAI (e.g. if using Sheet 4, for a ward with 24 patients, only need sheets for those on antibiotics or have active HAI)

Sheet 9-19 are flow charts. It is recommended that these are printed and laminated for use on the wards by the data collectors to assist with case definitions for HAI.

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Point Prevalence Survey 2016: healthcare-associated infections and antimicrobial use
Ward data

ecdc EUROPEAN CENTRE FOR DISEASE PREVENTION AND CONTROL

Hospital code: _____ **Ward name/unit ID[1]:** _____ **Survey date[2]:** ____/____/_____

For 2015/2016 financial year (or most recent FY data)
This should be requested from hospital analysts and procurement team and be available before web data entry commences

	Number	Year
Number of patient days*		____/____
Alcohol hand rub (AHR) consumption		____/____
Number of hand hygiene opportunities		____/____

* Provide data for same year as AHR consumption

Data to be reported at time of survey	Number
Number of eligible[3] patients on ward	
Number of beds	
Number of beds with AHR dispenser	
Number of healthcare workers (HCWs)	
Number of HCWs carrying AHR	
Number of rooms	
Number of single rooms	
Number of single rooms with individual toilet and shower	
Number of beds occupied at midnight the night before survey	

Please provide for all eligible[3] patients

Consultant/patient specialty (see codebook)	Number

Is there a formal procedure (external to primary clinical team or ward pharmacy team) to review the appropriateness of an antimicrobial within 72 hours from the initial order in this ward (post-prescription review)?

☐ Yes ☐ No ☐ Unknown

Comments/observations:

[1] Unique identifier for each unit (abbreviated ward name) within a hospital; this should remain identical between PPS years
[2] Patients on the same ward should be included on a single day
[3] Patients admitted to the ward before or at 8:00 AM and not discharged from the ward at time of survey

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Point Prevalence Survey 2016: healthcare-associated infections and antimicrobial use
Ward handover form

ecdc EUROPEAN CENTRE FOR DISEASE PREVENTION AND CONTROL

To be completed for all eligible patients[1] at time of survey

Hospital code: _____ Ward name/unit ID[2]: _____ Survey date: ____/____/_____

Initials	NHS no.	Hosp. no.	DoB	Gender M/F/U/O	Adm. date	Specialty[3] If <3m or on NICU include birthwt too	Surgery[4]	McCabe score (Non/Ult/ Rap/ Unk)	CVC Y/N/U	PVC Y/N/U	Urinary catheter Y/N/U	Intubated Y/N/U	Abx[5] Y/N	HAI[6] Y/N

[1] Patients admitted to the ward before or at 8:00 AM and not discharged from the ward at time of survey

[2] Unique identifier for each unit (abbreviated ward name) within a hospital

[3] See codebook for patient specialty (the specialty of consultant looking after the patient)

[4] Surgery since admission - No surgery / Minimal invasive/non-NHSN surgery/ Unknown If NHSN surgery → specify

[5] At the time of the survey, except for surgical prophylaxis 24h before 8:00 AM on the day of the survey; if yes, fill antimicrobial use data; if patient receives >5 antimicrobials, add a new form

[6] [infection with onset ≥ Day 3, OR SSI criteria met (surgery in previous 30d/90d), OR discharged from acute care hospital <48h ago, OR CDI and discharged from acute care hospital < 28 days ago OR onset < Day 3 after invasive device/procedure on D1 or D2] **AND** [HAI case criteria met on survey day OR patient is receiving (any) treatment for HAI AND case criteria are met between D1 of treatment and survey day; if patient has >3 HAI, add a new form

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Point Prevalence Survey 2016: healthcare-associated infections and antimicrobial use
Patient data, antimicrobial usage

ecdc EUROPEAN CENTRE FOR DISEASE PREVENTION AND CONTROL

Hospital code: _____ **Ward name/unit ID[1]:** _____ **Survey date:** ____/____/_____

Collect for all eligible patients

NHS number: _____

Hospital number: _____

Date of birth: ____/____/_____ **Gender:** _____

Admission date: ____/____/_____

Consultant/patient specialty[2]: _____

Surgery since admission (most recent NHSN surgery)?

☐ No surgery ☐ Minimal invasive/non-NHSN surgery

☐ Unknown ☐ NHSN surgery → specify[2] _____

McCabe score

☐ Non-fatal disease ☐ Ultimately fatal disease

☐ Rapidly fatal disease ☐ Unknown

If neonate, birthweight _____ grams (less than 3m/ NICU)

Presence of any of the following (at time of survey):

Central venous catheter: ☐ Yes ☐ No ☐ Unknown

Peripheral venous catheter: ☐ Yes ☐ No ☐ Unknown

Urinary catheter: ☐ Yes ☐ No ☐ Unknown

Intubation: ☐ Yes ☐ No ☐ Unknown

How many antimicrobials is the patient receiving[3]? ____

If ≥ 1, complete antimicrobial usage data

How many active HAIs does the patient have[4]? ____

If ≥ 1, complete HAI data form **[over page]**

Antimicrobial (generic name)	Route	Dosage per day: Number of doses	Dosage per day: Strength per dose (mg/ MU)	Indication	Infection site	Reason documented in notes	Date this AM started	AM changed? (+ reason)	If antibiotic changed: Date AM started for this indication (not site)	Antibiotic Review? (b/n 48-72h after start)
							/ /		/ /	
							/ /		/ /	
							/ /		/ /	
							/ /		/ /	
							/ /		/ /	

Route: P: parenteral, O: oral, R: rectal, I: inhalation; **Dosage: Number of doses** – OD, BD, TDS, QDS, 5 per day, 6 per day, every 18 hours, every 36 hours, every 48 hours, twice per week, three times per week, continuous infusion; **Strength of dose** in MU or mg (ie if in g convert to mg by x1000); **Indication**: treatment intention for community (CI), long-term care (LI) or acute hospital (HI) infection; surgical prophylaxis: SP1: single dose, SP2: one day, SP3: >1day; MP: medical prophylaxis; O: other; UI: Unknown indication; **Infection site**: see site list, only for CI-LI-HI; **Reason in notes**: Y/N; **AM changed? (+ reason):** N=no change; E=escalation; D=De-escalation; S=switch IV to oral; A=adverse effects; OU=changed, other/unknown reason; U=unknown; **If changed, date 1st AM started** given for the same indication; **Antibiotic Review:** C=Continue; I=IV to Oral Switch; CH=Change to another antimicrobial; O=OPAT; UNK =Unknown, not dedicated; NA=not applicable (i.e. treatment is less than 2 days)

[1] Unique identifier for each unit (abbreviated ward name) within a hospital

[2] See codebook

[3] At the time of the survey, except for surgical prophylaxis 24h before 8:00 AM on the day of the survey; if yes, fill antimicrobial use data; if patient receives >5 antimicrobials, add a new form

[4] [infection with onset ≥ Day 3, OR SSI criteria met (surgery in previous 30d/90d), OR discharged from acute care hospital <48h ago, OR CDI and discharged from acute care hospital < 28 days ago OR onset < Day 3 after invasive device/procedure on D1 or D2] **AND** [HAI case criteria met on survey day OR patient is receiving (any) treatment for HAI AND case criteria are met between D1 of treatment and survey day]; if patient has >3 HAI, add a new form

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Point Prevalence Survey 2016: healthcare-associated infections and antimicrobial use
HAI data

ecdc EUROPEAN CENTRE FOR DISEASE PREVENTION AND CONTROL

Hospital code: _____ **Ward name/unit ID[1]:** _____ **Survey date:** ____/____/_____

NHS number: _____ **Hospital number:**_____ **Date of birth:** ____/____/_____ **Gender:** _____

	HAI 1				HAI 2				HAI 3			
Infection type												
Invasive device[2]	☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown			
Present on admission	☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown			
Date of onset[3]	/ /				/ /				/ /			
Origin of infection	☐ Current hospital ☐ Other hospital ☐ Other/ unknown				☐ Current hospital ☐ Other hospital ☐ Other/ unknown				☐ Current hospital ☐ Other hospital ☐ Other/ unknown			
HAI associated to current ward	☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown			
If BSI: source[4]												
	MO code	AMR AB[5]	AMR SIR	PDR	MO code	AMR AB[5]	AMR SIR	PDR	MO code	AMR AB[5]	AMR SIR	PDR
Microorganism 1												
Microorganism 2												
Microorganism 3												

[1] Unique identifier for each unit (abbreviated ward name) within a hospital
[2] Relevant invasive device present (even intermittently) 48 hours before onset infection; intubation for pneumonia (PN); CVC/PVC for BSI; urinary catheter for UTI
[3] Only for infections not present/active on admission (dd/mm/yyyy)
[4] C-CVC (central venous catheter), C-PVC (peripheral venous catheter), S-PUL (pulmonary infection), S-UTI (urinary tract infection), S-DIG (digestive tract infection), S-SSI (surgical site infection), S-SST (skin/soft tissue infection), S-OTH (other), UO (none of the above, BSI of unknown origin, clinically asserted), UNK (unknown)
[5] AB: tested antibiotic(s): STAAUR: OXA (includes oxacillin or other marker for MRSA such as cefoxitin, cloxacillin, dicloxacillin, flucloxacillin or methicillin) and GLY; Enterococci: GLY; *Enterobacteriaceae*: C3G and CAR; PSEAER and ACIBAU: CAR; SIR: S=sensitive, I=intermediate, R=resistant, U=unknown; PDR: Pan-drug resistant: N=No, P=Possible, C=Confirmed, U=Unknown

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Point Prevalence Survey 2016: healthcare-associated infections and antimicrobial use
Antimicrobial usage data

ecdc EUROPEAN CENTRE FOR DISEASE PREVENTION AND CONTROL

Hospital code: _____ **Ward name/unit ID[1]:** _____ **Survey date:** ____/____/_____

NHS number: _____ **Hospital number:**_____ **Date of birth:** ____/____/_____ **Gender:** _____

Antimicrobial (generic name)	Route	Dosage per day		Indication	Infection site	Reason documented in notes	Date this AM started	AM changed? (+ reason)	If antibiotic changed: Date AM started for this indication (not site)	Antibiotic Review? (b/n 48-72h after start)
		Number of doses	Strength per dose (mg/ MU)				/ /		/ /	
							/ /		/ /	
							/ /		/ /	
							/ /		/ /	
							/ /		/ /	

[1] Unique identifier for each unit (abbreviated ward name) within a hospital

Route: P: parenteral, O: oral, R: rectal, I: inhalation; **Dosage: Number of doses** – OD, BD, TDS, QDS, 5 per day, 6 per day, every 18 hours, every 36 hours, every 48 hours, twice per week, three times per week, continuous infusion; **Strength of dose** in MU or mg (ie if in g convert to mg by x1000); **Indication**: treatment intention for community (CI), long-term care (LI) or acute hospital (HI) infection; surgical prophylaxis: SP1: single dose, SP2: one day, SP3: >1day; MP: medical prophylaxis; O: other; UI: Unknown indication; **Infection site**: see site list, only for CI-LI-HI; **Reason in notes**: Y/N; **AM changed? (+ reason):** N=no change; E=escalation; D=De-escalation; S=switch IV to oral; A=adverse effects; OU=changed, other/unknown reason; U=unknown; **If changed, date 1st AM started** given for the same indication; **Antibiotic Review:** C=Continue; I=IV to Oral Switch; CH=Change to another antimicrobial; O=OPAT; UNK =Unknown, not dedicated; NA=not applicable (i.e. treatment is less than 2 days)

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Point Prevalence Survey 2016: healthcare-associated infections and antimicrobial use
HAI data

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Hospital code: _____ **Ward name/unit ID[1]:** _____ **Survey date:** ____/____/_____

NHS number: _____ **Hospital number:**_____ **Date of birth:** ____/____/_____ **Gender:** _____

	HAI 1				HAI 2				HAI 3			
Infection type												
Invasive device[2]	☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown			
Present on admission	☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown			
Date of onset[3]	/ /				/ /				/ /			
Origin of infection	☐ Current hospital ☐ Other hospital ☐ Other/ unknown				☐ Current hospital ☐ Other hospital ☐ Other/ unknown				☐ Current hospital ☐ Other hospital ☐ Other/ unknown			
HAI associated to current ward	☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown				☐ Yes ☐ No ☐ Unknown			
If BSI: source[4]												
	MO code	AMR AB[5]	AMR SIR	PDR	MO code	AMR AB[5]	AMR SIR	PDR	MO code	AMR AB[5]	AMR SIR	PDR
Microorganism 1												
Microorganism 2												
Microorganism 3												

[1] Unique identifier for each unit (abbreviated ward name) within a hospital
[2] Relevant invasive device present (even intermittently) 48 hours before onset infection; intubation for pneumonia (PN); CVC/PVC for BSI; urinary catheter for UTI
[3] Only for infections not present/active on admission (dd/mm/yyyy)
[4] C-CVC (central venous catheter), C-PVC (peripheral venous catheter), S-PUL (pulmonary infection), S-UTI (urinary tract infection), S-DIG (digestive tract infection), S-SSI (surgical site infection), S-SST (skin/soft tissue infection), S-OTH (other), UO (none of the above, BSI of unknown origin, clinically asserted), UNK (unknown)
[5] AB: tested antibiotic(s): STAAUR: OXA (includes oxacillin or other marker for MRSA such as cefoxitin, cloxacillin, dicloxacillin, flucloxacillin or methicillin) and GLY; Enterococci: GLY; *Enterobacteriaceae*: C3G and CAR; PSEAER and ACIBAU: CAR; SIR: S=sensitive, I=intermediate, R=resistant, U=unknown; PDR: Pan-drug resistant: N=No, P=Possible, C=Confirmed, U=Unknown

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SSI: Surgical site infection

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Infection occurs within 30 days after operation (no implant in place)

Infection occurs within 90 days after operation (implant in place) **AND** infection appears to be related to operation

Infection involves only subcutaneous tissue of the incisions

AND

Purulent drainage with or without laboratory confirmation, from the superficial incision

OR

Organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision

OR

At least one of the following signs or symptoms of infection: pain or tenderness, localised swelling, redness, or heat, and superficial incision is deliberately opened by surgeon, unless incision is culture-negative

OR

Diagnosis of superficial incisional SSI made by a surgeon or attending physician

SSI-S
Superficial incisional

Infection involves deep soft tissue (e.g. fascia, muscle) of the incision

AND

Purulent drainage from the deep incision but not from the organ/space component of the surgical site

OR

A deep incision spontaneously dehisces or is deliberately opened by a surgeon when the patient has **at least one** of the following signs or symptoms: fever (> 38 °C), localised pain or tenderness, unless incision is culture-negative

OR

An abscess or other evidence of infection involving the deep incision is found on direct examination, during reoperation, or by histopathologic or radiologic examination

OR

Diagnosis of deep incisional SSI made by a surgeon or attending physician

SSI-D
Deep incisional

Infection involves any part of the anatomy (e.g. organs and spaces) other than the incision which was manipulated during the operation

AND

Purulent drainage from a drain that is placed through a stab wound into the organ/space

OR

Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space

OR

An abscess or other evidence of infection involving the organ/space that is found on direct examination, during reoperation, or by histopathologic or radiologic examination

OR

Diagnosis of organ/space SSI made by a surgeon or attending physician

SSI-O
Organ/space

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PN: Pneumonia (includes VAP)

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Patient has underlying cardiac or pulmonary disease?

YES

≥2 serial chest X-rays or CT-scans with a suggestive image of pneumonia*

NO

≥ 1 definitive chest X-ray or CT-scan for pneumonia

AND

Fever > 38°C with no other cause

OR

Leukopenia (<4000 WBC/mm^3) or leucocytosis (≥ 12 000 WBC/mm^3)

AND^

New onset of purulent sputum, or change in character of sputum (color, odor, quantity, consistency)

OR

Cough or dyspnea or tachypnea

OR

Suggestive auscultation (rales or bronchial breath sounds), ronchi, wheezing

OR

Worsening gas exchange (e.g., O_2 desaturation or increased oxygen requirements or increased ventilation demand)

* One definitive chest X-ray or CT-scan for the current pneumonia episode may be sufficient in patients with underlying cardiac or pulmonary disease if comparison with previous X-rays is possible

^ ≥ 2 required if clinical pneumonia diagnostic **PN4** and **PN5**

AND HAS THE FOLLOWING DIAGNOSTICS

PN1	**PN2**	**PN3**	**PN4**	**PN5**
Positive quantitative culture from minimally contaminated LRT specimen - Broncho-alveolar lavage (BAL) with a threshold of > 10^4 CFU/ml or ≥ 5% of BAL obtained cells contain intracellular bacteria on direct microscopic exam - Protected brush (PB Wimberley) with a threshold of >10^3 CFU/ml - Distal protected aspirate (DPA) with a threshold of > 10^3 CFU/ml	**Quantitative culture from possibly *contaminated* LRT specimen (i.e. ETA)** - Quantitative culture of LRT specimen (e.g. endotracheal aspirate) with a threshold of 10^6 CFU/ml)	**Alternative microbiology methods** - Positive BC not related to other source - Positive growth in pleural fluid culture - Pleural/ pulmonary abscess with positive needle aspiration - Histologic pulmonary exam = pneumonia - Positive detection of viral antigen or antibody from respiratory secretions - Positive direct exam or positive culture from bronchial secretions or tissue - Seroconversion -Detection of antigens in urine	**Positive sputum culture or non-quantitative LRT specimen culture**	**No positive micro-biology**

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LRI: Lower respiratory tract infection, other than pneumonia

Patient has no clinical or radiographic evidence of pneumonia (*or only 1 abnormal CXR when requires 2 abnormal CXR for PN)*

AND

At least 2 of the following:
- fever (>38°C)
- cough
-new/ increased sputum production
- rhonchi
- wheezing

AND

At least 1 of the following:
- positive culture obtained by deep tracheal aspirate or bronchoscopy
- positive antigen test on respiratory secretions

LRI-BRON
Bronchitis, tracheobronchitis, bronchiolitis, tracheitis, without evidence of pneumonia

Note: Do not report chronic bronchitis in a patient with chronic lung disease as an infection unless there is evidence of an acute secondary infection, manifested by change in organism.

Patient has **at least one** of the following:

Organisms seen on smear or cultured from lung tissue or fluid, including pleural fluid

OR

A lung abscess or empyema seen during a surgical operation or histopathologic examination

OR

An abscess cavity seen on radiographic examination of lung

LRI-LUNG
Other infections of the lower respiratory tract

Note: Report lung abscess or empyema without pneumonia as **LRI-LUNG**.

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UTI: Urinary tract infection

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Patient has a positive urine culture (MSU/ CSU/ suprapubic etc.) ≥10^5 microorganisms per ml of urine and ≤2 species of microorganism

AND

Patient has **at least two** of the following with no other recognised cause:

Fever (>38°C) **OR** Urgency **OR** Frequency **OR** Dysuria **OR** Suprapubic tenderness

AND

Positive dipstick for leukocyte esterase and/or nitrites

OR

Pyuria urine specimen with ≥10 WBC/ml or ≥ 3 WBC/high-power field of unspun urine

OR

Organisms seen on Gram stain of unspun urine

OR

At least two urine cultures with repeated isolation of the same uropathogen (Gram-negative bacteria or *S. saprophyticus*) with ≥ 10^2 colonies/ml urine in nonvoided specimens

OR

≤10^5 colonies/ml of a single uropathogen (Gram-negative bacteria or *S. saprophyticus*) in a patient being treated with effective antimicrobial agent for a urinary infection

OR

Physician diagnosis of a urinary tract infection

OR

Physician institutes appropriate therapy for a urinary infection

UTI-A
Microbiologically confirmed symptomatic UTI

UTI-B
Non-microbiologically confirmed symptomatic UTI

Note: Asymptomatic bacteriuria are not to be reported, but **bloodstream infections secondary to asymptomatic bacteriuria <u>are reported</u> as BSI with source (origin) S-UTI.**

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BSI: Bloodstream infection

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Patient has 1 positive blood culture for a **recognised pathogen**

Patient has 2 positive blood cultures for a common skin contaminant* (from 2 separate blood samples, usually within 48 hours)

AND

Fever (>38°C) **OR** Chills **OR** Hypotension

BSI: Bloodstream infection
Report one of the following sources

Catheter-related
Same micro-organism was cultured from the catheter or symptoms improve within 48 hours after removal of the catheter

C-PVC: Peripheral vascular catheter
C-CVC: Central vascular catheter

Note: Report C-CVC or C-PVC BSI as CRI3-CVC or CRI3-PVC respectively if microbiologically confirmed with positive tip culture

Secondary^
To another infection: the same micro-organism was isolated from another infection site OR strong clinical evidence exists that bloodstream infection was secondary to another infection site, invasive diagnostic procedure or foreign body.

S-PUL: Pulmonary
S-UTI: Urinary tract infection
S-DIG: Digestive tract infection
S-SSI: Surgical site infection
S-SST: Skin and soft tissue infection
S-OTH: Other

Unknown origin
BSI of unknown origin (verified during survey and no source found)

UO: Unknown origin

Unknown
No information available about the source of the BSI
OR
Information missing

UNK: Unknown

* Skin contaminants = coagulase-negative staphylococci, *Micrococcus* sp., *Propionibacterium acnes*, *Bacillus* sp., *Corynebacterium* sp.

^ Does not need to meet case definition for this to be noted. If the primary infection is an active HAI and meets a case definition, report both primary HAI and secondary BSI.

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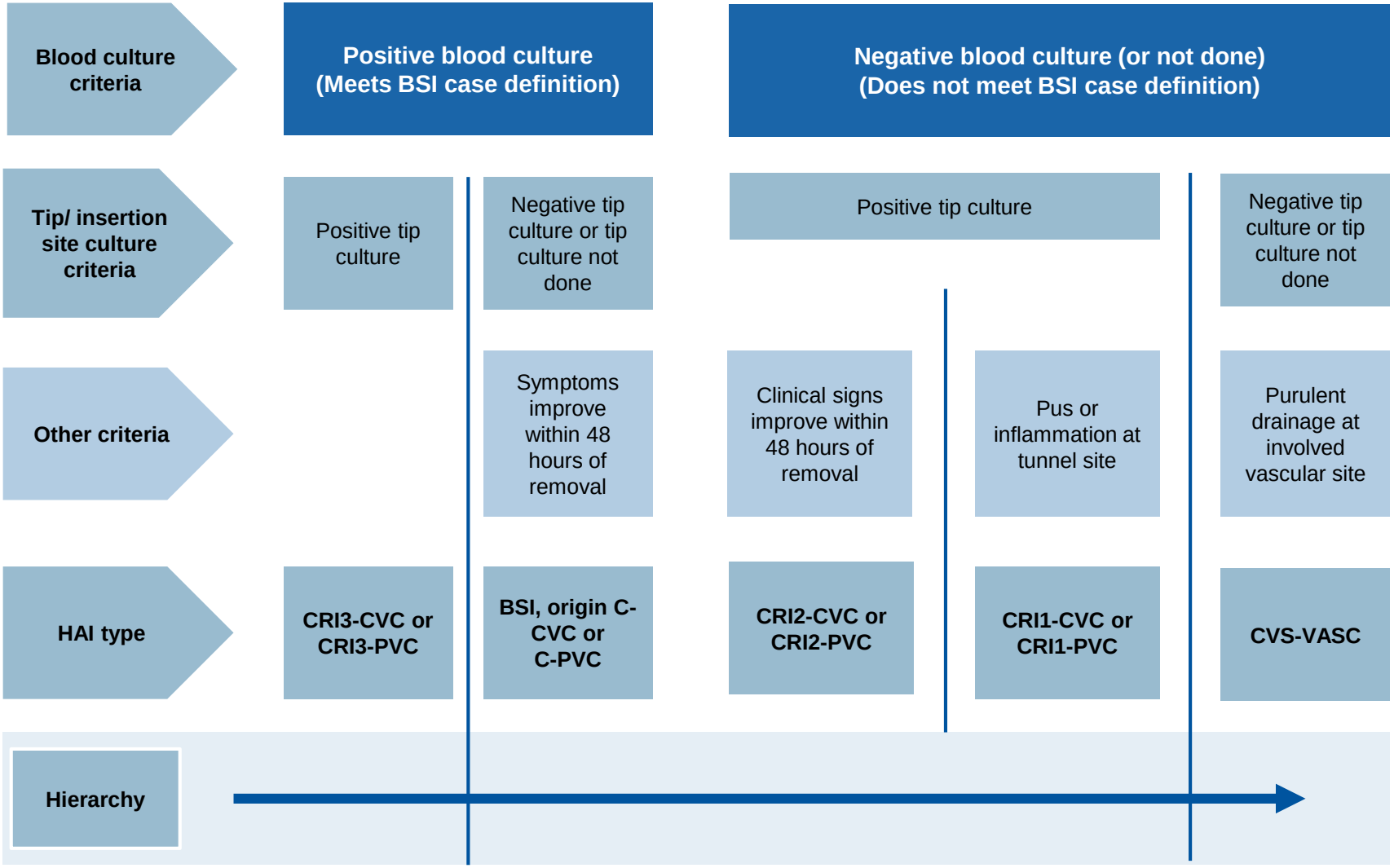
CRI: Catheter-related infection (CVC or PVC infections)



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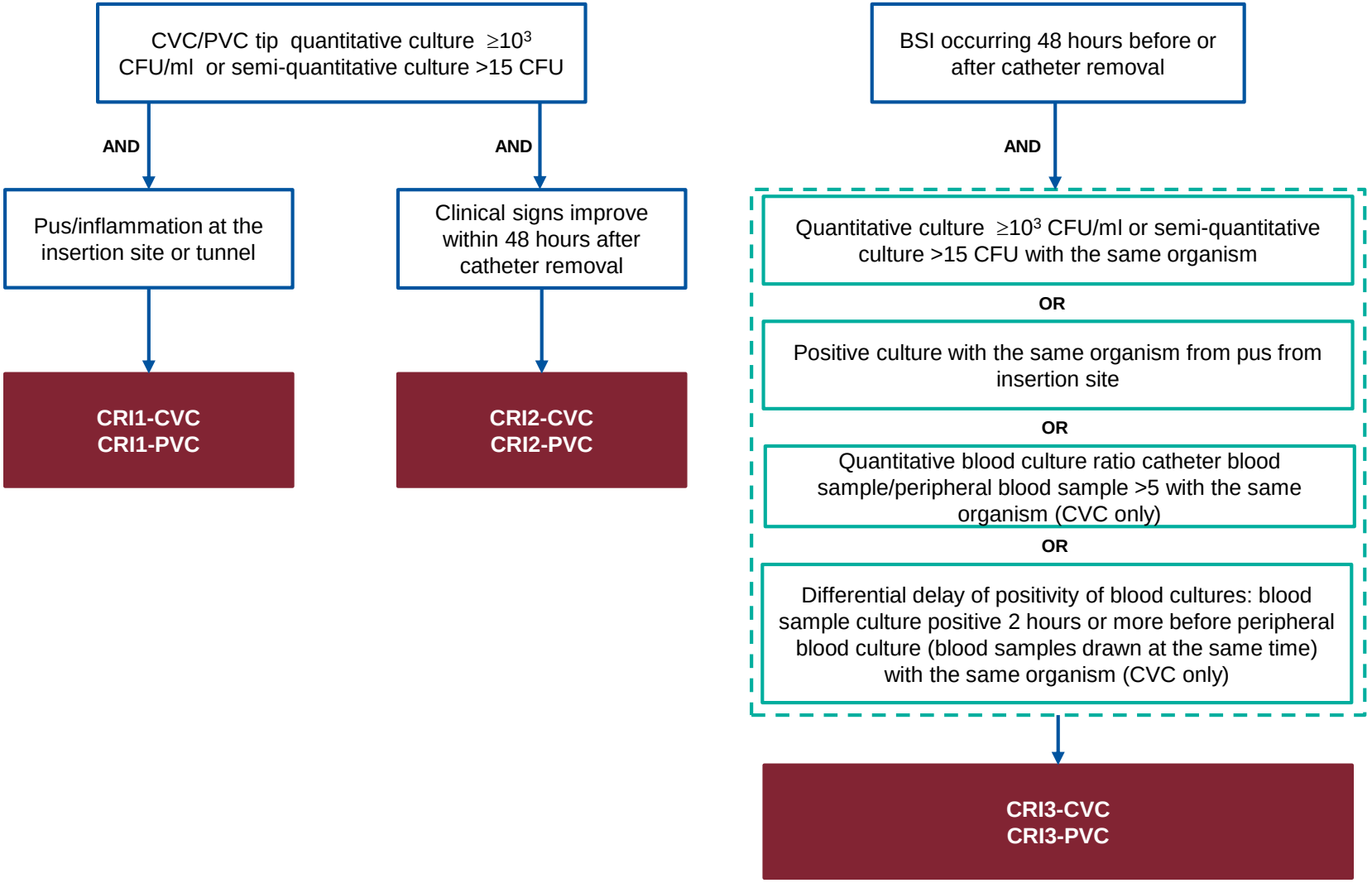
CRI: Catheter-related infection

Central vascular catheter (CVC) or peripheral vascular catheter (PVC) infections



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CVS: Cardiovascular system infection

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CVS-VASC

Organisms cultured from arteries or veins removed during a surgical operation
AND
Blood culture not done or no organisms cultured from blood

OR

Evidence of arterial or venous infection seen during a surgical operation or histopathologic examination

OR

≥1 of the following signs or symptoms with no other recognized cause: fever (>38°C), pain, erythema, or heat at involved vascular site
AND
More than 15 colonies cultured from intravascular cannula tip using semiquantitative culture method
AND
Blood culture not done or no organisms cultured from blood

OR

Purulent drainage at involved vascular site
AND
Blood culture not done or no organisms cultured from blood

CVS-ENDO

Organisms cultured from valve or vegetation

OR

≥ 2 of the following signs or symptoms with no other recognized cause: fever (>38°C), new or changing murmur, embolic phenomena, skin manifestations (ie, petechiae, splinter hemorrhages, painful subcutaneous nodules), congestive heart failure, or cardiac conduction abnormality

AND

Organisms cultured from ≥ 2 blood cultures

OR

Organisms seen on Gram's stain of valve when culture is negative or not done

OR

Valvular vegetation seen during a surgical operation or autopsy

OR

Positive antigen test on blood or urine (eg, *H. influenzae*, *S. pneumoniae*, *N. meningitidis*, or Group B *Streptococcus*)

OR

Evidence of new vegetation seen on echocardiogram **AND** if diagnosis is made antemortem, physician institutes appropriate antimicrobial therapy.

CVS-CARD

Organisms cultured from pericardial tissue or fluid obtained by needle aspiration or during a surgical operation

OR

≥ 2 of the following signs or symptoms with no other recognized cause: fever (>38°C), chest pain, paradoxical pulse, or increased heart size

AND

Abnormal ECG/EKG consistent with myocarditis or pericarditis

OR

Positive antigen test on blood (eg, *H. influenzae*, *S. pneumoniae*)

OR

Evidence of myocarditis or pericarditis on histologic examination of heart tissue

OR

4-fold rise in type-specific antibody with or without isolation of virus from pharynx or feces

OR

Pericardial effusion identified by echocardiogram, CT scan, MRI, or angiography.

CVS-MED

Organisms cultured from mediastinal tissue or fluid obtained during a surgical operation or needle aspiration

OR

Evidence of mediastinitis seen during a surgical operation or histopathologic examination

OR

≥ 1 of the following signs or symptoms with no other recognized cause: fever (>38°C), chest pain, or sternal instability

AND

Purulent discharge from mediastinal area

OR

Organisms cultured from blood or discharge from mediastinal area

OR

Mediastinal widening on x-ray

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GI: Gastrointestinal system infection (also GI-GIT, GI-HEP, GI-IAB)

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Clostridium difficile infection must meet **at least 1** of the following criteria:

Diarrhoeal stools or toxic megacolon, and a positive laboratory assay for *C. difficile* toxin A and/or B in stools

OR

Pseudomembranous colitis revealed by lower gastro-intestinal endoscopy

OR

Colonic histopathology characteristic of *C. difficile* infection (with or without diarrhoea) on a specimen obtained during endoscopy, colectomy or autopsy

GI-CDI
***Clostridium difficile* infection**

Note: If clinical signs of *Clostridium difficile* infection appear in 28 days after hospital discharge period, GI-CDI must be defined as healthcare-associated infection

Patient has an acute onset of diarrhea (liquid stools for more than 12 hours) with or without vomiting or fever (>38°C) and no likely noninfectious cause (eg, diagnostic tests, therapeutic regimen other than antimicrobial agents, acute exacerbation of a chronic condition, or psychologic stress)

Patient has **≥ 2** of the following signs or symptoms with no other recognized cause: nausea, vomiting, abdominal pain, fever (>38°C), or headache

AND

An enteric pathogen is cultured from stool or rectal swab

OR

An enteric pathogen is detected by routine or electron microscopy

OR

An enteric pathogen is detected by antigen or antibody assay on blood or feces

OR

Evidence of an enteric pathogen is detected by cytopathic changes in tissue culture (toxin assay)

OR

Diagnostic single antibody titer (IgM) or 4-fold increase in paired sera (IgG) for pathogen

GI-GE
Gastroenteritis (excl. CDI)

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SST: Skin and soft tissue infection (also SST-BURN & SST-BRST)

ecdc EUROPEAN CENTRE FOR DISEASE PREVENTION AND CONTROL

Purulent drainage, pustules, vesicles, or boils

OR

≥ 2 of the following signs or symptoms with no other recognized cause: pain or tenderness, localized swelling, redness, or heat

AND

Organisms cultured from aspirate or drainage from affected site; if organisms are normal skin flora (ie, diphtheroids [*Corynebacterium* spp], *Bacillus* [not *B. anthracis*] spp, *Propionibacterium* spp, coagulase-negative staphylococci [including *S. epidermidis*], viridans group streptococci, *Aerococcus* spp, *Micrococcus* spp), they must be a pure culture

OR

Organisms cultured from blood

OR

Positive antigen test performed on infected tissue or blood (eg, herpes simplex, varicella zoster, *H. influenzae*, *N. meningitidis*)

OR

Multinucleated giant cells seen on microscopic examination of affected tissue

OR

Diagnostic single antibody titer (IgM) or 4-fold increase in paired sera (IgG) for pathogen

SST-SKIN: Skin infection

Organisms cultured from tissue or drainage from affected site

OR

Purulent drainage at affected site

OR

An abscess or other evidence of infection seen during a surgical operation or histopathologic examination

OR

≥ 2 of the following signs or symptoms at the affected site with no other recognized cause: localized pain or tenderness, redness, swelling, or heat

AND

Organisms cultured from blood

OR

Positive antigen test performed on blood or urine (eg, *H. influenzae, S. pneumoniae, N. meningitidis*, Group B Streptococcus, *Candida* spp)

OR

Diagnostic single antibody titer (IgM) or 4-fold increase in paired sera (IgG) for pathogen

SST-ST: Soft tissue

≥ 2 of the following signs or symptoms with no other recognized cause: redness, tenderness, or swelling of decubitus wound edges

AND

Organisms cultured from properly collected fluid or tissue*

OR

Organisms cultured from blood

SST-DECU: Decubitus ulcer, including both deep and superficial infections

* Purulent drainage alone is not sufficient evidence of an infection. Organisms cultured from the surface of a decubitus ulcer are not sufficient evidence that the ulcer is infected. A properly collected specimen from a decubitus ulcer involves needle aspiration of fluid or biopsy of tissue from the ulcer margin.

Note:
- Report infected decubitus ulcers as **SST-DECU**
- Report infected burns as **SST-BURN**
- Report breast abscesses or mastitis as **SST-BRST**
- Report infection of deep pelvic tissues as **SST-OREP**

Public Health England

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SYS: Systemic infection

Disseminated infection is infection involving multiple organs or systems, without an apparent single site of infection, usually of viral origin, and with signs or symptoms with no other recognized cause and compatible with infectious involvement of multiple organs or systems

SYS-DI
Disseminated infection

Note:
- Use SYS-DI for viral infections involving multiple organ systems (eg, measles, mumps, rubella, varicella, erythema infectiosum). These infections often can be identified by clinical criteria alone
- Report viral exanthems or rash illness as SYS-DI
- **Do not** use SYS-DI for healthcare-associated infections with multiple metastatic sites, such as with bacterial endocarditis; only the primary site of these infections should be reported
- **Do not** report fever of unknown origin (FUO) as SYS-DI

Patient has **≥ 1** of the following:
- Clinical signs or symptoms with no other recognized cause
- Fever (38°C)
- Hypotension (systolic pressure <90 mm),
- Oliguria (20 cm^3(ml)/hr)

AND

Blood culture not done or no organisms or antigen detected in blood

AND

No apparent infection at another site

AND

Physician institutes treatment for sepsis

SYS-CSEP
Treated unidentified severe infection