



**Unit Form** (Mandatory : Fill in one form for each unique unit/room included in the survey)

Date of survey (dd/mm/year)	__/__/__	Person(s) completing form (Auditor code) (optional)	
Name institution:		Unit Name	
		Room name(s) (optional)	

Type of speciality - Tick just "one" most appropriate type of outpatient unit		
<input type="checkbox"/> EM (Emergency)	<input type="checkbox"/> GM (General (Internal) Medicine mixed) <sup>1</sup>	<input type="checkbox"/> HCP (Healthcare Practice)
<input type="checkbox"/> OB (Observation)	<input type="checkbox"/> SM (Surgical Mixed)	<input type="checkbox"/> GP (General Practitioner practise)
<input type="checkbox"/> RESP (Respiratory)	<input type="checkbox"/> HO (Haematology-Oncology)	<input type="checkbox"/> MAL (Malnutrition)
<input type="checkbox"/> ID (Infectious disease)	<input type="checkbox"/> PLAS (Plastic Reconstructive Surgical)	<input type="checkbox"/> NM (Neonatal Medical)
<input type="checkbox"/> HIV/TB (HIV-Tuberculosis)	<input type="checkbox"/> ORT (Orthopaedic)	<input type="checkbox"/> ANC (Antenatal care)
<input type="checkbox"/> REN (Nephrology-urology)	<input type="checkbox"/> ENT (Ear Nose and Throat)	<input type="checkbox"/> GYN (Gynaecology)
<input type="checkbox"/> DIAL (Dialyses)	<input type="checkbox"/> EYE (Ophthalmology)	<input type="checkbox"/> OBST (Obstetrics)
<input type="checkbox"/> GAS (Gastroenterology)	<input type="checkbox"/> ENDO (Endoscopy)	<input type="checkbox"/> DEN (Dental Clinic)
	<input type="checkbox"/> STI (Sexually Transmitted Infection)	

Day surgery unit <sup>2</sup>	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Unknown
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Total number of prescribers <sup>3</sup> on the unit/room during defined timeslot of the survey			
N doctor(s)	N nurse(s)	N pharmacist(s)	N other(s)

Timeslot data gathering on the day of the survey <sup>5</sup>	Starting time <sup>4</sup> (hour): _____	<input type="radio"/> a.m.	<input type="radio"/> p.m. (tick as appropriate)
	Ending time <sup>4</sup> (hour): _____	<input type="radio"/> a.m.	<input type="radio"/> p.m. (tick as appropriate)

<sup>1</sup> Includes specialties such as Dermatology, Allergy-Immunology, Cardiovascular, etc. General medicine mixed refers also to paediatrics in general. Tick as well if no speciality is defined.

<sup>2</sup> Day surgery indicates whether surgical procedures are taking place in the unit during the surveillance. If no surgical procedures take place during the survey, but pre- or post-operation consultations are held, then please choose 'No' for this variable.

<sup>3</sup> Specify the profession of person(s) "prescribing" antimicrobials and the number of them included in the survey on the unit/room during the defined timeslot of the survey.

<sup>4</sup> Specify approximate starting hour (e.g. 8 a.m.) and approximate ending hour (e.g. 3 p.m.)

<sup>5</sup> Survey the unit for at least 4 hours; or about a half a day (unless session is shorter, in which case, survey for the whole session duration). Preferably start the survey at the beginning of the session.

**OUTPATIENT Form: Complete for every outpatient seen on the unit/room and not admitted >24 hours or slept overnight during the timeslot of survey<sup>1</sup>**

<b>Name/code of unit</b>	<b>Name/code of the room within the unit</b>	<b>Unique patient identifier or sequential number<sup>2</sup></b>			<b>Survey Number<sup>3</sup></b>
<b>Patient age group (tick as appropriate)</b>	<input type="radio"/> Adult ≥18 years <input type="radio"/> Child ≤17 years <input type="radio"/> Neonate	<b>Sex</b>	M, F, U	<b>Test ordered (tick as appropriate)<sup>4</sup></b>	<input type="radio"/> Biomarker <input type="radio"/> POCT / RDT / malaria microscopy <input type="radio"/> UNK
		<b>Admission status</b>	<input type="radio"/> Already admitted <input type="radio"/> Suspected admission <input type="radio"/> Referral other institution <input type="radio"/> Home <input type="radio"/> UNK		

<b>Presenting symptoms or main reason(s) consultation on the day of the survey (tick if present, multiple choice, max. 6 choices)</b>	<input type="radio"/> Temperature ≥38.3°C/≥101°F <input type="radio"/> Sub-febrile temperature (<38.3°C/<101°F) <input type="radio"/> Sneezing/nasal congestion/runny or stuffy nose <input type="radio"/> Acute cough <input type="radio"/> Chronic cough <input type="radio"/> Sore throat <input type="radio"/> Dyspnoea, difficult breathing <input type="radio"/> Ear pain <input type="radio"/> Ear discharge <input type="radio"/> Eye discharge/red/swollen eyes <input type="radio"/> Chest pain <input type="radio"/> Musculoskeletal pain <input type="radio"/> Headache <input type="radio"/> Fatigue/lethargy/general body weakness <input type="radio"/> General body pain <input type="radio"/> Confusion <input type="radio"/> Dizziness <input type="radio"/> Seizures <input type="radio"/> Diarrhea <input type="radio"/> Bloody diarrhea <input type="radio"/> Painful/frequent urination <input type="radio"/> Abdominal pain <input type="radio"/> Nausea/vomiting <input type="radio"/> Toothache/gum swelling <input type="radio"/> Limb swelling/warmth erythema <input type="radio"/> Itch or other symptoms of genitals/anus <input type="radio"/> Skin lesions/spots <input type="radio"/> Wound/ulcer/burns <input type="radio"/> Trauma <input type="radio"/> Other symptom(s) <input type="radio"/> Unknown <input type="radio"/> None, other reason
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**To complete only if the outpatient was prescribed an antimicrobial during the defined time slot on the day of the survey**

<b>Detailed patient age*<sup>5</sup></b>			<b>Current weight* (in kg)</b>	<b>Birth weight* (in kg, neonate only)</b>	<b>Penicillin allergy?</b>	<input type="radio"/> Yes, confirmed <sup>6</sup> <input type="radio"/> Yes, suspected <input type="radio"/> No <input type="radio"/> UNK	<b>Cultures taken before start antimicrobial?<sup>7</sup></b>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
<b>Years (≥2years)</b>	<b>Months (1-23month)</b>	<b>Days (&lt;1month)</b>					<b>If yes, which type of culture?</b>	<input type="radio"/> Blood <input type="radio"/> Other

<b>Treatment based on biomarker data</b>	<input type="radio"/> Yes <input type="radio"/> No			<b>Treatment based on POCT, RDT, malaria microscopy<sup>9</sup></b>			<input type="radio"/> Yes <input type="radio"/> No		
<b>If yes, which biomarker (CRP, PCT, WBC, serum lactate)<sup>8</sup></b>	<b>Value</b>	<b>Unit<sup>9</sup></b>		<b>If yes, specify which (max. 3)<sup>10</sup></b>	<b>1</b>	<b>2</b>	<b>3</b>		
<b>Type biological sample (Blood/urine/other)</b>				<b>Result, specify<sup>11</sup></b>	<input type="radio"/> Pos. <input type="radio"/> Neg. <input type="radio"/> Inc.	<input type="radio"/> Pos. <input type="radio"/> Neg. <input type="radio"/> Inc.	<input type="radio"/> Pos. <input type="radio"/> Neg. <input type="radio"/> Inc.	<input type="radio"/> Pos. <input type="radio"/> Neg. <input type="radio"/> Inc.	

<b>Underlying morbidity (multiple choice, max. 3 choices)</b>	<input type="radio"/> None <input type="radio"/> Gastroenterological disease: inflammatory bowel disorders <input type="radio"/> Post-COVID <sup>12</sup> <input type="radio"/> Malnutrition <sup>13</sup>	<input type="radio"/> Diabetes mellitus, type 1 or 2 <input type="radio"/> Hematological or solid cancer/ Recent chemotherapy (<3months) <input type="radio"/> Trauma <input type="radio"/> Chronic hepatic disease, cirrhosis	<input type="radio"/> Immunosuppressed not oncology <input type="radio"/> Chronic lung diseases (incl. cystic fibrosis, COPD, bronchiectasis, asthma) <input type="radio"/> Chronic renal failure (incl. patients on dialysis) <input type="radio"/> Chronic cardiovascular disease	<input type="radio"/> AIDS/HIV <input type="radio"/> Patients with foreign body materials (incl. vascular and urinary catheters) <input type="radio"/> Other <input type="radio"/> Unknown
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<b>Antimicrobial (AM) (generic) Name</b>	<b>1.</b>	<b>2.</b>	<b>3.</b>	<b>4.</b>	<b>5.</b>
<b>Specify: new, on-going, switch<sup>15</sup></b>	<b>If ongoing/switch, where obtained? (Here, HCF, Pharm, Self, else, U)<sup>15</sup></b>				
<b>Single Unit Dose<sup>16</sup></b>	<b>Unit (g, mg, IU, MU)<sup>16</sup></b>				
<b>N Doses/day<sup>17</sup></b>	<b>Route (O, R, I, IM, IV)<sup>18</sup></b>				
<b>Intended duration prescription in N days/UNK</b>					
<b>Clinical diagnosis (see appendix I)</b>					
<b>Type of indication (see appendix II)</b>					
<b>Reason in notes (Yes, No, Not assessable, UNK)<sup>19</sup></b>					
<b>Local guideline exists for diagnosis (Y, N, NI, U)<sup>20</sup></b>					
<b>If yes (guideline exists), complete compliance<sup>21</sup></b>					
<b>Drug according to guideline (Y, N, NA, U)</b>					
<b>Dosing according to guideline (Y, N, NA, U)</b>					
<b>Route of Adm. according to guideline (Y, N, NA, U)</b>					
<b>Duration according to guideline (Y, N, NA, U)</b>					

**Note:** \* Detailed patient age, Current weight, Birth weight, 'If ongoing, where previously prescribed' are **optional variables**.

## Explanation OUTPATIENT Form

- <sup>1</sup> **Not admitted >24 hours or slept overnight during the timeslot of survey:** However, include patients on emergency and observation units awaiting transfer to an inpatient ward and may be occupy a bed >24 hours before the survey. Complete an outpatient form for these patients as well; these patients count in the numerator and denominator.
- <sup>2</sup> **Patient Identifier:** A unique patient identifier or sequential attributed number or code which will not be included in the online database.
- <sup>3</sup> **Survey Number:** A unique non-identifiable number given by WebPPS. Leave blank but note down the number after the patient data has been recorded in the online database.
- <sup>4</sup> **Test ordered:** Specify if a biomarker, Point-of-Care Test (POCT), Rapid Diagnostic Test (RDT) or (malaria) microscopy test was ordered for this patient.
- <sup>5</sup> **Detailed patient age:** If the patient is  $\geq 2$  years, **specify only the number of years**, if between 1 and 23 months **specify only number of months**, if < 1 month **specify only number of days**.
- <sup>6</sup> **Penicillin allergy confirmed:** confirmed penicillin allergy is confirmed by Skin testing for penicillin allergy with penicillin G (Pen G), penicilloic acid (PA), and penicilloyl poly-L-lysine (PPL) <sup>i</sup>
- <sup>7</sup> **Cultures taken before start antimicrobial:** specify whether a culture was taken before an antimicrobial was administered to the patient. If yes, specify additionally which one: Blood culture or Other culture.
- <sup>8</sup> If “**treatment based**” on biomarker, specify which one: **CRP** (C-reactive protein), **PCT** (Procalcitonin), **WBC** (white blood cell count), or **serum lactate** (obtained from Arterial or Venous Blood Gas).  
Do not report a biomarker test if it did not contribute to the chosen antimicrobial treatment.
- <sup>9</sup> The **unit** for the biomarker **CRP** or **PCT** value expressed in mg/L,  $\mu\text{g/L}$ , ng/L, mg/dL, ng/dL, ng/mL,  $\mu\text{g/mL}$ , nmol/L. In thousand per microliter ( $\mu\text{L}$ ) for WBC count (normal number of WBCs in the blood is 4,500 to 11,000 WBCs per microliter). The unit for **serum lactate** is expressed as mmol/L (normal range in adults: 0.5-2.2 mmol/L for venous blood; 0.5-1.6 mmol/L for arterial blood).  
For conversion calculator see: <http://unitslab.com/node/67> (CRP) and <http://unitslab.com/node/103> (procalcitonin); <https://unitslab.com/node/152> (serum lactate)
- <sup>10</sup> **Treatment based on POCT, RDT or malaria microscopy:** Do not report any test if it did not contribute to chosen antimicrobial treatment. **If Yes, specify up to 3 single POCT/RDT/microscopy tests:**
- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>➤ <b>HIV,</b></li> <li>➤ <b>Malarial antigen testing,</b></li> <li>➤ <b>Strep A,</b></li> <li>➤ <b>MRSA RDT,</b></li> <li>➤ <b>Dengue RDT</b></li> </ul> | <ul style="list-style-type: none"> <li>➤ <b>TB</b> (includes MTB/RIF (detects MTB and rifampicin (RIF) resistance simultaneously) or MTB/XDR (detects resistance to isoniazid, fluoroquinolones, amikacin, kanamycin, capreomycin and ethionamide),</li> <li>➤ <b>GBS</b> (Intrapartum or antepartum Group B Streptococcus RDT),</li> <li>➤ <b>SARS-CoV-2, Flu/RSV</b> (Rapid detection and differentiation of Flu A, Flu B, or RSV),</li> </ul> | <ul style="list-style-type: none"> <li>➤ <b>HepB</b> (Hepatitis B),</li> <li>➤ <b>Scrub typhus</b> POCT,</li> <li>➤ <b>Syphilis</b> POCT,</li> <li>➤ <b>SH</b> (Sexual Health RDT),</li> <li>➤ <b>Other.</b></li> </ul> |
|---|--|---|
- <sup>11</sup> **Results biomarker:** please indicate whether the result was **Pos.**=positive: e.g. when parasites were seen; **Neg.**=negative: e.g. when no parasites were seen; or **Incl.**=inconclusive: e.g. if it is unknown whether parasites were seen, or when insufficient high-power fields/white blood cells/RBCs were seen or counted, or when the quality control failed, or for another reason.
- <sup>12</sup> Post-COVID refers to symptoms lasting >2 months after initial COVID-19 infection with new symptoms developing >3 months post-infection.
- <sup>13</sup> Malnutrition refers to dietary deficiency which lead to lack of vitamins, minerals and other essential substances. Score illnesses as marasmus, kwashiorkor, scurvy, delayed growth, etc.
- <sup>14</sup> **Specify by prescription/course:** “**New**” refers to newly prescribed antimicrobials, not changed from a previous antimicrobial treatment that was prescribed for the same condition/complaints.  
“**Ongoing**” refers to antimicrobial treatments that are still continuing but are not changed by the prescriber. “**Switch**” is switched to an other antimicrobial and refers to antimicrobial treatments that were changed from a previous antimicrobial treatment that was prescribed for the same condition/complaints.
- <sup>15</sup> **If ongoing, where prescribed:** “**Here**” refers to the current attending institution. “**HCF**” (other healthcare facilities) refer to any hospital departments, outpatient clinics (including dental and day surgery clinics), or primary or community healthcare centers or general practitioner. “**Pharmacy**” refers to ‘over-the-counter’ use of antimicrobials without prescription. “**Self-medication**” refers to any previously administered antimicrobial (include all antimicrobials, exclude analgesics or painkillers, or anti-inflammatory drugs) without prescription (e.g. leftovers at home, received from family/friends).
- <sup>16</sup> **Single Unit Dose:** Numeric value for dose per administration and unit for the dose (in grams, milligrams, IU or MU)
- <sup>17</sup> **N Doses/day:** If necessary provide fractions of doses: (e.g., every 16h = 1.5 doses per day, every 36h = 0.67 doses per day, every 48h = 0.5 doses per day).
- <sup>18</sup> **Route:** Routes of administration are: Oral=**O**; Rectal=**R**; Inhalation=**I**; Intramuscular=**IM**; Intravenous=**IV**.
- <sup>19</sup> **Reason in Notes:** A diagnosis / indication for the antimicrobial course is recorded in the patient’s documentation (treatment chart, notes, etc.). **Y**=Yes; reason recorded in notes. **N**=No; reason not recorded in notes. **Not assessable**=Not assessable because e.g. no patient file was recorded in the institution. **UNK**=Unknown, not known whether reason was recorded in notes.
- <sup>20</sup> **Guideline existing:** A guideline can be a local, national or any other adopted guideline. **Y**=Yes; **N**=No; no guidelines for the specific indication. **NI**=No Information; because diagnosis/indication is unknown; **U**=Unknown.
- <sup>21</sup> **Guideline compliance** according to the **Drug**=type or choice of the antimicrobial; **Dosing**=the dosing of chosen antimicrobial; **Route of Adm.**=the route of administration; and **Duration**=the duration of the therapy/prophylaxes. **Y**=Yes; compliant to the guideline. **N**=No; Not compliant to the guideline. **NA**=Not Available; because information is missing in the guideline; **U**=Unknown.

<sup>i</sup> Sullivan TJ, Wedner HJ, Shatz GS, Yecies LD, Parker CW. Skin testing to detect penicillin allergy. J Allergy Clin Immunol. 1981 Sep;68(3):171-80. doi: 10.1016/0091-6749(81)90180-9. PMID: 6267115.

## Appendix I – Clinical diagnostic codes (what the clinician aims at treating)

Site	Codes	Examples
CNS	Proph CNS	<b>Prophylaxis</b> for CNS (meningococcal)
	CNS	Infections of the Central Nervous System
EYE	Proph EYE	<b>Prophylaxis</b> for Eye operations
	EYE	Therapy for Eye infections e.g., Conjunctivitis, trachoma, blepharitis, keratitis
ENT	Proph ENT	<b>Prophylaxis</b> for Ear, Nose, Throat including mouth (Surgical or Medical prophylaxis)
	PHAR	Therapy for pharyngitis
	SIN	Therapy for sinusitis
	AOM	Acute otitis media and CSOM (Chronic Suppurative Otitis Media)
	ENT	Therapy for Ear, Nose, Throat infections, other than PHAR, SIN or AOM
DEN	Proph DEN	<b>Prophylaxis</b> for dental cases
	DEN	Dental infections e.g. abscess, pulpitis, periodontal disease
RESP	Proph RESP	<b>Prophylaxis</b> for Respiratory pathogens e.g. for aspergillosis
	LUNG	Lung abscess including aspergilloma
	URTI	Upper Respiratory Tract viral Infections including influenza but not ENT
	Bron	Acute Bronchitis or exacerbations of chronic bronchitis
	Bronch	Acute bronchiolitis
	Pneu	<b>Pneumonia</b> or LRTI (lower respiratory tract infections)
	COVID-19	Coronavirus disease caused by SARS-CoV-2 infection
	TB	Pulmonary TB – Tuberculosis / Extrapulmonary TB
	CF	Complication of cystic fibrosis
CVS	Proph CVS	Cardiac or Vascular <b>prophylaxis</b> , endocarditis prophylaxis
	CVS	CardioVascular System infections: endocarditis, endovascular device e.g pacemaker, vascular graft
GI	Proph GI	Gastro-Intestinal <b>prophylaxis</b>
	GO	Acute Infectious Diarrhoea, gastroenteritis (ref <a href="https://www.who.int/publications/i/item/WHO-MHP-HPS-EML-2022.02">https://www.who.int/publications/i/item/WHO-MHP-HPS-EML-2022.02</a> )
	GI	Any other Gastro-Intestinal infection
	CDIF	<i>Clostridioides difficile</i> infection
SSTBJ	Proph SST	<b>Prophylaxis</b> for Skin and Soft Tissue, impetigo, plastic or orthopaedic surgery
	SST	Skin and Soft Tissue: Cellulitis, impetigo, erysipelas, folliculitis, other viral exanthems, burn wound- and bite-related infections.
	Sys-DI	Disseminated infection (viral infections such as measles, Cytomegalovirus ...)
	DST	Deep Soft Tissue not involving bone e.g., infected pressure or diabetic ulcer, abscess
UTI	Proph UTI	<b>Prophylaxis</b> for recurrent Urinary Tract Infection (Medical Prophylaxis)
	Cys	Lower Urinary Tract Infection (UTI), cystitis
	Pye	Upper UTI including catheter related urinary tract infection, pyelonephritis
	ASB	Asymptomatic bacteriuria
GUOB	Proph OBGY	<b>Prophylaxis</b> for OBstetric or GYnaecological surgery (MP: carriage of group B streptococcus)
	OBGY	Obstetric/Gynaecological infections, Sexually Transmitted Diseases (STD) in women, vaginitis, vaginosis
	GUM	Genito-Urinary Males + Prostatitis, epididymo-orchitis, STD in men
No de- fined site (NDS)	BAC	Bacteraemia or fungaemia with no clear anatomic site and no shock
	SEPSIS	Sepsis of any origin (eg urosepsis, pulmonary sepsis etc), sepsis syndrome or septic shock with no clear anatomic site. Include fungaemia (candidemia) with septic symptoms
	Typh-fever	Typhoid fever/enteric fever
	Malaria	
	HIV	Human immunodeficiency virus
	PUO	Pyrexia of Unknown Origin - Fever syndrome with no identified source or site of infection
	LO-LYMPH	Localized acute lymphadenitis
	LYMPH	Lymphatics as the primary source of infection. Suppurative lymphadenitis
	Other	Antimicrobial prescribed with documentation but no defined diagnosis group
	MP-GEN	Drug is for Medical <b>Prophylaxis</b> in general, targeting no specific site, e.g. antifungal prophylaxis
	UNK	Completely Unknown Indication
	PROK	Antimicrobial (e.g. erythromycin) prescribed for Prokinetic use



## APPENDIX II - Type of Indication

<b>CAI</b> Community acquired infection	<b>Concerns any infection</b> acquired in the community, thus outside the healthcare setting in a patient without recent (<48hours) health care exposure.		
<b>HAI</b> Healthcare Associated Infection following admission and/or intervention during hospital stay	<b>HAI1</b> Post-operative surgical site infection (within: 30 days of surgery OR; 90 days after implant surgery)		
	<b>HAI2</b> The patient has been <b>discharged from hospital &lt; 48 hours</b> and <b>has a known hospital infection or a new infection &lt; 48 hours after discharge from hospital</b> . The infection can be an intervention related (e.g. intravenous or urinary catheter-related) or any other hospital acquired infection of mixed or undefined origin.		
	<b>HAI3</b> <i>C. difficile</i> associated diarrhoea (CDAD) (>48 h post-admission or <30 days after discharge from previous admission episode).		
<b>SP</b> Surgical prophylaxis*	<b>SP1</b> Single dose	<b>SP2</b> one day	<b>SP3</b> >1 day
For <b>surgical patients</b> the duration of prophylaxis should be encoded as either prescription of one dose, one day (= multiple doses given within 24 hours) or prescribed >1 day.			
<b>MP</b> Medical prophylaxis	For example long term use to prevent UTI's or penicillin in asplenic patients <i>etc.</i>		
<b>OTH</b> Other	For example erythromycin as a motility agent (motilin agonist).		
<b>UNK</b>	Completely unknown indication		

Select 1 possibility for each reported antimicrobial

\*Surgical prophylaxis includes those antibiotics prescribed on the day of the survey for a **day-case surgical intervention, including dental procedures**.

## Appendix III: Combination anti-infective agents

Combinations of an antibiotic and a beta-lactamase inhibitor:

Ampicillin and beta-lactamase inhibitor: **report only ampicillin dose** (J01CR01)

Amoxicillin and beta-lactamase inhibitor: **report only amoxicillin dose** (J01CR02)

*Example:*

Amoxicillin and beta-lactamase inhibitor 1.2g IV → 1g (amoxicillin) + 200mg (clavulanic acid), **report 1 g as a dose**

Other combinations of multiple antimicrobial substances:

J01EE01 Sulfamethoxazole and Trimethoprim: **report the total amount of sulfamethoxazole and trimethoprim**

Example: Co-trimoxazole 960mg: (sulfamethoxazole. 800mg + trimethoprim 160mg), **report 960mg**