Eurobact II Center Report Form

Eurobact 2 center n° _____

Section 1 – ICU Structure

1.1 The ICU is situated in a

- ☐ Teaching hospital
- ☐ Non-teaching Hospital

1.2 Funding

(*please enter what is most prevalent, if less than 10% of private funding please enter public)*

- ☐ Public
- ☐ Private
- ☐ Mixed

1.3 Type of ICU

- ☐ Mixed (medical-surgical)
- ☐ Medical
- ☐ Surgical

1.4 Specific recruitment (check all that apply)

- ☐ General
- ☐ Cardiac-Surgical
- ☐ Post-Operative
- ☐ Neuro-surgical
- ☐ Trauma
- ☐ Paediatric
- ☐ Coronary-Care
- ☐ Burns

1.5 Structure of the ICU

- ☐ Open-ICU
- ☐ Closed ICU

1.6 Number of Ventilator equivalent beds in the ICU _____

(what is the maximum number of ventilated patients your ICU can accommodate at one time)

1.7 Number of non-ventilator capable or High dependency unit (HDU) beds in the ICU _____

(additionally to the ventilator equivalent beds, are there any beds available for lower acuity or a different group of patients)

1.8 How many nurses are available in the ICU for patient care at a given time _____

(if variable please provide the mean)

1.9 How many Doctors are available in the ICU for patient care at a given time _____

(if variable please provide the mean)

Of which ____ senior level, ____ junior or in training

1.10 The ICU has 24-hour medical coverage by (check all that apply)

- ☐ Physicians in training
- ☐ Staff physicians

1.11 A general surgery team and an operating theatre is usually available for emergency operations:

- ☐ 24/7
- ☐ During the day (but not at night)
- ☐ Weekdays but not the weekend

1.12 Severity score most commonly used in your ICU (one possible answer)

None ☐ SAPSII ☐ SAPSIII ☐ APACHE II ☐ APACHEIII ☐ APACHE IV ☐

ANZROD ☐ OTHER ☐

Section 2 – ID and Antibiotics

2.1 Infectious diseases (ID) specialists or clinical microbiologists are consulted (check all that apply):

- ☐ Never or sporadically.
- ☐ When required, only during business hours.
- ☐ When required, 24/7.
- ☐ Available as part of the permanent staff of the ICU, or at least one ICU physician is an ID specialist.
- ☐ Scheduled ID rounds or multidisciplinary meetings, at least weekly.

2.2 Clinical pharmacists are consulted (check all that apply)

- ☐ Never or sporadically.
- ☐ Available only during business hours.
- ☐ Available when requested 24/7.
- ☐ Available as part of the permanent staff of the ICU.
- ☐ Scheduled multidisciplinary staff meetings.

2.3 Choice of empirical antibiotic treatment is determined by (check all that apply):

- ☐ Local infection treatment guidelines
- ☐ National/international infection treatment guidelines
- ☐ Surveillance cultures
- ☐ Routine consultation of infectious diseases specialists, microbiologists or clinical pharmacists
- ☐ The treating physician.
- ☐ none of the above

2.4 Selective oropharyngeal and/or digestive tract decontamination is used:

- ☐ Never
- ☐ In All ICU patients
- ☐ In a selected group of patients, please specify _____

2.5 Surveillance cultures and screening for multidrug resistant organism carriage is performed:

- ☐ Never
- ☐ Only when clinically indicated
- ☐ For all (most) patients, on admission
- ☐ For all (most) patients, on admission and at least once weekly during the ICU stay

2.6 Central Vein Catheter tip culture is performed:

- ☐ Never
- ☐ Only when clinically indicated
- ☐ Every-time a catheter is removed

2.7 In case of fever or hypothermia, blood cultures are taken

- ☐ Following a written protocol and initiated by nurses if the temperature reaches a threshold.
- ☐ Routinely performed by nurses without a specific written protocol.
- ☐ Only if prescribed by specific physician order.

2.8 Following a positive blood culture, do you check for microbiological resolution with a follow-up blood culture within the next 4 days? Most commonly:

- ☐ A subsequent blood-culture is taken every 1 or 2 days until resolution is confirmed.
- ☐ At least 1 subsequent blood culture is taken within the following 4 days.
- ☐ Only if clinical signs of sepsis or infection persist.
- ☐ Practice is variable owing to attending clinician's preference
- ☐ Unfrequently or never.

2.9 With regards to source control, when an infection is suspected, surgical site or procedural site specimens are taken and sent for culture:

- ☐ Never
- ☐ Always
- ☐ Most frequently
- ☐ Only when requested by the treating physician

2.10 Regarding Therapeutic Drug Monitoring (TDM) for the following antibiotics:

Aminoglycosides

- ☐ TDM is not available
- ☐ TDM is available at least once a week
- ☐ TDM is available everyday

Results are usually available:

- ☐ within a few hours
- ☐ within 24 hours
- ☐ More than 24 hours after

Vancomycin

- ☐ TDM is not available
- ☐ TDM is available at least once a week
- ☐ TDM is available everyday

Results are available:

☐ within a few hours
☐ within 24 hours
☐ More than 24 hours after sampling

Beta-Lactams
☐ TDM is not available
☐ TDM is available at least once a week
☐ TDM is available everyday

Results are available:
☐ within a few hours
☐ within 24 hours
☐ More than 24 hours after sampling

2.11 Does your ICU use hydrocortisone for the following indications? (one possible answer)

☐ Sepsis
☐ Septic shock
☐ Septic shock with high vasoactive drugs requirements, please specify ____ (unit selector)

If yes:

what dosing regimen: (one possible answer)

☐ 50mg intravenously every 6 hours
☐ 200mg/24 hrs continuous intravenous infusion
☐ Other, please specify_____

Does your ICU use fludrocortisone in addition to hydrocortisone:

☐ Yes ☐ No

What is the usual duration of treatment (one possible answer)

☐ 7 days or until ICU discharge
☐ Until resolution of shock
☐ Other, please specify_____

Section 3 – Microbiology and Laboratory practices

This section is intended to be completed by the microbiologist

3.1 Location of the microbiology lab where blood cultures are processed

- ☐ Inside the hospital or in the same campus
- ☐ At another hospital with a partnership or agreement
- ☐ Off site at an independent microbiology laboratory

3.2 When blood cultures are taken, is incubation started (check all that apply)

- ☐ 24 hours / 7 days a week.
- ☐ If taken at night they will be processed in the morning.
- ☐ If taken during the weekend they will be processed on the Monday.

3.3 Automated blood culture processing is used

- ☐ No
- ☐ Yes, Bactec
- ☐ Yes, BactAlert
- ☐ Yes, Other _____

3.4 Is there monitoring for positive blood cultures:
(is someone able to check and process any positive blood culture at those times)

- ☐ 24 hours / 7 days a week
- ☐ Every day (including week-end), but not at night
- ☐ During business hours of week days only (not weekends nor nights)

3.5 The results of direct microscopic examination (Gram's stain) of a positive blood culture are reported.(multiple possible answers)

- ☐ They are not reported
- ☐ On paper
- ☐ Electronic system (up to the clinician to check).
- ☐ Personal contact (e.g. phone call or any other alert) 24/7, as soon as the result is available.
- ☐ Personal contact during week days, business hours only (not night or weekends).
- ☐ Personal contact during the day, 7 days a week.

3.6 Time to positivity is reported :

- ☐ Not reported
- ☐ Reported depending on bacterial species (this should open a short list of choices)
- ☐ Always reported.

3.7 Do you use molecular test for *S. aureus* identification and methicillin resistance detection when Gram positive cocci are seen at the direct smear examination of a positive blood culture?

- ☐ Yes
- ☐ No

3.8 Do you perform an antibiotic susceptibility test:

☐ Directly from the positive blood culture (unless the direct smear examination shows different bacteria)

☐ From a sub-culture of the positive blood culture

3.9 Interpretation of antibiotic susceptibility is done following the recommendations of:

☐ EUCAST

☐ CLSI

☐ Other, please specify _____

3.10 Susceptibility testing is routinely performed by:

☐ disk diffusion

☐ broth dilution test

☐ Other, please specify _____

3.11 MIC determination is performed by:

☐ broth dilution test

☐ E-test

☐ Both, depending on the antibiotic

☐ No MIC is performed

3.12 In case of multidrug resistant bacteria, do you perform (check all that applies):

☐ Phenotypic tests to confirm the underlying mechanism (e.g. DDST, betalacta-test, CARBA-NP)

ticking this opens sublist of tickboxes with what is above + free textfield please describe

☐ Molecular tests (e.g. commercial panels, home-brewed PCRs)

ticking this opens free textfield please describe

☐ Whole genome sequencing

☐ None of the above

3.13 The results of susceptibility testing and the antibiogram are reported to the treating physician:

☐ Not reported

☐ On paper

☐ Electronic system.

☐ Personal contact (e.g. phone call) 24/7, as soon as the result is available.

☐ Personal contact during business hours only (not night or weekends).

☐ Personal contact during the day, 7 days a week.

3.14 Susceptibility results are reported to the treating physician:

☐ Selectively (in other words not all agents that are tested are reported)

☐ All antibiotic agents that are tested are reported

3.15 Does your lab routinely provide susceptibility results as (check all that apply):

☐ Sensitive /Resistant (without further detail)

☐ Inhibition zones diameter with interpretation S/I/R

☐ MIC data

Section 4 – Background resistance levels

4.1 Percentage of Staphylococcus aureus isolates resistant to methicillin (MRSA):

In the ICU : ☐ less than 10 % ☐ 10 to 25 % ☐ 25 to 50% ☐ more than 50% ☐ Unknown

In the hospital: ☐ less than 10 % ☐ 10 to 25 % ☐ 25 to 50% ☐ more than 50% ☐ Unknown

4.2 Percentage of Enterococcus spp. isolates resistant to vancomycin (VRE):

In the ICU: ☐ less than 10 % ☐ 10 to 25 % ☐ 25 to 50% ☐ more than 50% ☐ Unknown

In the hospital: ☐ less than 10 % ☐ 10 to 25 % ☐ 25 to 50% ☐ more than 50% ☐ Unknown

4.3 Percentage of Enterobacteriaceae isolates producing extended-spectrum β-lactamase (ESBL):

In the ICU: ☐ less than 10 % ☐ 10 to 25 % ☐ 25 to 50% ☐ more than 50% ☐ Unknown

In the hospital: ☐ less than 10 % ☐ 10 to 25 % ☐ 25 to 50% ☐ more than 50% ☐ Unknown

4.4 Percentage of Enterobacteriaceae isolates producing carbapenemases:

In the ICU: ☐ less than 5 % ☐ less than 10 % ☐ 10 to 25 % ☐ 25 to 50%
☐ more than 50% ☐ Unknown

In the hospital: ☐ less than 5 % ☐ less than 10 % ☐ 10 to 25 % ☐ 25 to 50%
☐ more than 50% ☐ Unknown

Definitions (Should go as hover text in the e-crf)

Open/Closed ICU: “Open” means the physician responsible for the patient admits the patient to the ICU and keeps the formal responsibility for the patient and his treatment. The intensivist is a consultant without primary responsibility for the patient. A “closed” format means the patient is admitted to the ICU and the responsibility for the patient and his treatment is transferred to the intensivist.