

**Appendix 1: Data on blood culture findings imported from the microbiological laboratories into the Microbial Data Document System (MDDS).**

Variables usually included in the microbiological report	
	Date and time of start of sample processing in the lab
	Date and time of the request of the sample
	Date and time when the blood culture was taken
	Date and time when the blood culture became positive
	Date and time of the report
	Definition of the requesting unit (Hospital, Department, Unit)
	Type of blood culture (aerobic, anaerobic)
	Blood culture positive (yes/no)
	Number of detected pathogens
	Pathogen (defined according to "List of Prokaryotic Names with Standing in Nomenclature", <a href="http://www.bacterio.cict.fr/">http://www.bacterio.cict.fr/</a> )
	Resistance pattern (susceptible/intermediate susceptible/resistant, minimal inhibitory concentration) for each antibiotic tested
Process quality indicators calculated from these	
	Number of BC sets per year and unit
	Number of BC sets per patient and clinical episode
	Proportion of positive BC sets of all BC sets per unit
	Proportion of BC sets with resistant pathogens of all positive BC sets per unit
	Collection-Incubation-Time (hours)

**Appendix 2: Individual patient characteristics collected via an electronic case report form (eCRF) into the Clinical Data Document System (CDDS) on the occasion of clinically relevant positive blood culture findings.**

Individual patient characteristics	
	Date of birth, sex
	Previous in-patient stay in a hospital, rehabilitation center or nursery home in the past 30 days
Information about wards	
	Date and time when blood culture was taken
	Ward on which blood culture was taken
	Wards seen by the patient in the 48 hours before blood culture was taken
Information about infection	
	Nosocomial (type of ward) vs. non-nosocomial
	Suspected origin of infection (primary bacteremia vs. secondary bacteremia (place of primary infection))
	Severity of infection in the 96 hours following blood culture (sepsis, severe sepsis, septic shock)
Risk factors for nosocomial sepsis	
	Surgery in the past 30 days (including OPS-code)
	Risk factors present at the time of blood culture (central venous catheter, periphery venous catheter, urinary catheter, ventilation therapy)
Antimicrobial therapy	
	Present when blood culture was taken (if yes, list of all antibiotics and antimycotics with marketing name and active compound)
	Present after blood culture was taken (if yes, list of all antibiotics and antimycotics with marketing name and active compound)
	Date and time of start and end of therapy for each drug
Diagnoses at discharge	
	Main diagnosis (ICD-10)
	Additional diagnoses (ICD-10; Diabetes mellitus (E10-E14), cardiovascular disease (I50, I11, I13), cerebrovascular disease (I60-I69), renal dysfunction (N17-N19, I12), COPD (J44), liver cirrhosis (K70-K74), cancer, immune-suppressive therapy)
Further information	
	Stay at ICU (if yes, duration of stay)
	Discharge from hospital (if yes, date of discharge (or death, if applicable), place the patient was discharged to (other hospital, rehabilitation centre,

	nursery home, home, unknown)
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**Appendix 3: Institutional variables obtained from hospitals (A) and rehabilitation centres (B).**

**A. Hospitals**

<b>Variable name</b>	<b>Description</b>
<b>Hospital</b>	
	Institutional ID
	Year on which following data is based
	Type of institution
	Level of academic education (University, academic teaching hospital, no academic teaching)
	Level of care provided (defined according to the 6 <sup>th</sup> Thuringian Hospital plan)
	Number of planned beds
	Number of cases
	Mean duration of stay
	Number of short-stay patients. Short-stay patients are defined as patients with a hospital stay of 1 to 3 nights
	Number of long-stay patients. Long-stay patients are defined as patients with a hospital stay longer than the defined maximum length of stay
	Number of days with occupied beds
	Bed occupancy rate
	Number of women divided by the number of all cases
	Number of cases aged 75 years or older
	Case-Mix (without extra charges or deductions)
	Case-Mix-Index (without extra charges or deductions)
	Number of cases coded with R.65.0
	Number of cases coded with R.65.1
	Number of cases coded with R.57.2
	Availability of an in-house microbiological lab offering BC diagnostics
	Ventilation-therapy available
	Number of hours with ventilation-therapy
<b>Surgical departments</b>	
	At least one department of surgery available
	Number of planned beds
	Number of cases
	Number of short-stay patients. Short-stay patients are defined as patients with a hospital stay of 1 to 3 nights
	Number of long-stay patients. Long-stay patients are defined as patients with a hospital stay longer than the defined maximum length of stay
	Number of days with occupied beds
	Bed occupancy rate
	Number of women divided by the number of all cases
	Number of cases aged 75 years or older

	Case-Mix (without extra charges or deductions)
	Case-Mix-Index (without extra charges or deductions)
<b>Departments for Internal Medicine</b>	
	At least one department of internal medicine available
	Number of planned beds
	Number of cases
	Number of short-stay patients. Short-stay patients are defined as patients with a hospital stay of 1 to 3 nights
	Number of long-stay patients. Long-stay patients are defined as patients with a hospital stay longer than the defined maximum length of stay
	Number of days with occupied beds
	Bed occupancy rate
	Number of women divided by the number of all cases
	Number of cases aged 75 years or older
	Case-Mix (without extra charges or deductions)
	Case-Mix-Index (without extra charges or deductions)
<b>Intensive Care Units (ICUs)</b>	
	At least one ICU available
	Number of ICUs
	Type of ICU
	Number of planned beds
	Number of cases
	Number of short-stay patients. Short-stay patients are defined as patients with a hospital stay of 1 to 3 nights
	Number of long-stay patients. Long-stay patients are defined as patients with a hospital stay longer than the defined maximum length of stay
	Number of days with occupied beds
	Bed occupancy rate
	Number of women divided by the number of all cases
	Number of cases aged 75 years or older
	Case-Mix (without extra charges or deductions)
	Case-Mix-Index (without extra charges or deductions)
	Number of hours with ventilation-therapy
	Number of days with cvc therapy

## B. Rehabilitation centres

Variable name	Description
<b>Rehabilitation centre</b>	
	Institutional ID
	Year on which following data is based
	Number of planned beds (overall)
	Number of planned beds (specific insurance carrier)
	Number of planned beds (specific insurance carrier)
	Number of planned beds (specific insurance carrier)
	Number of cases
	Mean duration of stay
	Number of days with occupied beds
	Bed occupancy rate
	Proportion of occupied beds (per insurance carrier)
	Number of women divided by the number of all cases
	Number of cases aged 75 years or older
<b>Surgical departments</b>	
	At least one department of surgery available
	Number of planned beds
	Number of planned beds (specific insurance carrier)
	Number of planned beds (specific insurance carrier)
	Number of planned beds (specific insurance carrier)
	Number of cases
	Mean duration of stay
	Number of days with occupied beds
	Bed occupancy rate
	Proportion of occupied beds (per insurance carrier)
	Number of women divided by the number of all cases
	Number of cases aged 75 years or older
<b>Departments for Internal Medicine</b>	
	At least one department of internal medicine available
	Number of planned beds
	Number of planned beds (specific insurance carrier)
	Number of planned beds (specific insurance carrier)
	Number of planned beds (specific insurance carrier)
	Number of cases
	Mean duration of stay
	Number of days with occupied beds
	Bed occupancy rate
	Proportion of occupied beds (per insurance carrier)
	Number of women divided by the number of all cases
	Number of cases aged 75 years or older
<b>Other departments</b>	
	At least one other department available

	Type of department
	Number of planned beds
	Number of planned beds (specific insurance carrier)
	Number of planned beds (specific insurance carrier)
	Number of planned beds (specific insurance carrier)
	Number of cases
	Mean duration of stay
	Number of days with occupied beds
	Bed occupancy rate
	Proportion of occupied beds (per insurance carrier)
	Number of women divided by the number of all cases
	Number of cases aged 75 years or older