

*Expert evaluation with regard to mortality relevance of derived and implemented measures*

<b>A3.1.1.3.2 Derivation of measure with unchanged and modified consideration?</b>	<b>The derived measure is relevant for the mortality of patients with ventilation &gt;24h:</b>  1= almost surely relevant 2= likely relevant 3= likely irrelevant 4= almost surely irrelevant NA=No information/ Don't know				
	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R4</b>	<b>Median</b>
Documentation sheet for treatment in the emergency department created	4	3	3	4	3,5
The paging service has been expanded in terms of nursing care	3	2	2	4	2,5
Ventilation protocol has been modified.	1	2	2	2	2
A column with daily goals was added to the intensive care curve.	3	3	3	3	3
delirium screening introduced	3	4	4	2	3,5
The therapy limitation sheet is used consistently.	4	4	4	1	4
Medical qualification was continued	1	2	3	4	2,5
obligatory visit plan	4	4	4	4	4
Documentation in the admitting situation. Chief medical director of the emergency department. Triage system. Training of the emergency department staff	3	4	4	3	3,5
<i>general**</i> Update of the SOPs*	3	4	4	3	3,5
Resuscitation protocol	2	3	2	2	2
Updating of the SOP's* with regard to ventilation	2	3	2	2	2
no clinical microbiologist available yet, but improved dialogue with the microbiological laboratory. E-learning module 'Antibiotic therapy' mandatory for all medical staff Antibiotic guidelines on the intranet	3	3	2	3	3
patient positioning protocols	2	2	3	3	2,5
"Urgent legal guardianship procedures" were administratively optimised	4	4	4	4	4
Videolaryngoscope is purchased	3	4	4	3	3,5
Meetings for PDMS* have taken place, Chief Medical Officer member of PDMS* managing group, but then roll-off by the hospital owner	4	4	4	4	4
ABS* further training with the aim of achieving ABS Expert certificate, building up the ABS team, 1 infectiological visit to IMC and intensive care unit per week. Reason for delayed full implementation: Maximum of only 1 ABS course per year possible (standardized advanced course completed).	1	2	3	2	2
Introduction of PDMS* in internal intensive care units.	3	4	4	4	4
<i>Admission and transfer of intensive care unit patients:**</i> Created for neurosurgical and neurological patients.	3	4	4	4	4
additional intensive care capacity.	3	4	4	4	4
Electronic request of consults	2	4	3	4	3,5
create a new ICU* curve with simplified documentation for rounds and establish a basic electronic recording of specialist rounds via HIS*	4	4	4	4	4
Combination therapy of suprarenin and nioadrenalin was replaced by nor/dobutamine and implemented in the standard perfusors of ICU	3	2	2	3	2,5

has not developed its own resuscitation protocol, but has instead promoted the use of the anaesthesia protocol in resuscitation situations (reason for the deviation: anaesthesia protocol is detailed and daily. no additional form must be set up)	3	2	2	4	2,5
Immediate storage of the OP* protocols in the electronic patient record	3	4	4	4	4
detailed documentation of the nursing rounds	4	4	4	4	4
Documentation legible and complete in the patient record	4	4	4	4	4
<i>Electronic patient record in intensive care unit:**</i> Introduction of a PDMS* not before 2019, call for tender is pending	4	4	4	4	4
Epicrisis must be carried out promptly	4	4	4	4	4
ABS* visits are immediately documented in the patient record	4	2	4	4	4
The existing records are modified. They should then also be incorporated into the PDMS.	4	4	4	4	4
Warning Scores were incorporated into the emergency sheets of the ED*	3	4	4	3	3,5
ABS* Team has now been formed and started to work	2	2	2	2	2
<i>Professional training by external speakers on the topic of sepsis**</i> Topic discussed with internal advisors	?	3	2	4	3
QM* workshops	4	4	4	4	4
Responsibilities regulated	2	2	2	4	2
SOPs developed for <i>Sepsis, antibiotic treatment, microbiological diagnostics, Catecholamine therapy, medical imaging**</i> ; SOP* volume therapy must be revised and supplemented again	2	2	2	2	2
<i>missing intensive care records:**</i> transferred into existing PDMS*	3	4	4	4	4
<i>electronic council:**</i> applied	4	4	4	3	4
Team meeting / joint review of relevant cases of the peer review**	3	3	2	3	3
Survey on corneal donation	4	4	4	4	4
added to PDMS system	1	4	2	4	3
weekly ABS* visit	3	2	2	1	2
Documentation form therapy limitation	2	4	4	4	4
PDMS* adapted, RASS* score, record of therapy goal, weaning protocol	4	4	4	3	4
<i>Highlighting of daily therapy goals, not solely shift records**:</i> Is documented in the journal.	2	4	4	4	4
<i>Documentation of nursery goals,**</i> Visible in the journal.	3	4	4	4	4
documentation is made, forms available.	3	4	4	4	4
Daily joint rounds with treating departments.	2	3	3	1	2,5
<i>modifying SOP Analgo sedation less benzodiazepine perfuser**,,</i> Implemented	3	4	2	4	3,5
Weaning protocol available.	2	4	2	2	2
<i>Documentation of bronchoscopies:**</i> Documentation in the system.	3	4	4	4	4
<i>Therapy limitation form:**</i> Available in the system.	2	4	4	4	4
Corresponding specifications and procedure protocols available at each workstation.	1	2	2	2	2
General SOP's* for documentation, education etc. already available, use also at the intensive care unit	4	4	4	4	4

written definition of daily goals	3	3	3	4	3
SOP pain. Yes. SOP sedation: yes. SOP delirium: no.	2	2	2	3	2
Sepsis: no separate SOP, but S3* guideline is applied. Monitoring: no SOP	2	2	2	2	2
SOP Ventilation	2	2	2	2	2
SOP's ( <i>prevention of ventilator-associated pneumonia, early mobilization</i> )** were already in place, were re-examined	2	2	2	4	2
<i>teleradiology</i> :** critical reflection of the status quo was made. since 1.1.2018 joint radiology department with RKU* Ulm	3	4	4	3	3,5
Plan for new building of interdisciplinary emergency department	3	4	4	4	4
Introduction MTS*	2	3	2	2	2
Planning PDMS* 2020	3	4	4	4	4
New conception of ICU* documentation	3	4	4	4	4
Introduction of electronic consil	3	4	3	4	3,5
Introduction S3* guideline Delir	2	4	3	3	3
Introduction of a complete nursing anamnesis	3	4	3	4	3,5
record once per shift ( <i>pain score</i> )**	4	4	2	4	4
Introduction and implementation of pressure ulcer - expert standard	3	3	2	4	3
Training for pressure ulcer standard carried out, digital recording implemented	3	3	2	4	3
SOPs ( <i>sepsis, emergency intubation</i> )** developed + implemented	2	2	2	1	2
see above: SOPs ( <i>sepsis, emergency intubation</i> )	2	2	2	3	2
Introduction of sedation breaks Introduction of ABS visits Modification of PDMS with (daily goals, work diagnoses)	1	3	2	1	1,5
Checklist introduced in PDMS* - working diagnosis/daily therapy goal	3	3	3	2	3
currently no weaning protocol, but daily sedation breaks	2	2	2	1	2
Training ABS experts, internal PI* ABS	2	2	2	1	2
hire emergency department manager	1	3	3	2	2,5
Update PIs* ( <i>sepsis, volume management, ventilation, complex visceral surgery concepts</i> )**	2	3	2	3	2,5
PI* on End of Life Decision	4	4	3	4	4

**Notes:**

## \* Abbreviations

ABS antibiotic stewardship    HIS hospital information system    ICU intensive care unit    ED: emergency department    MTS Manchester-Triage-System    PDMS Patient data management system    PI process instruction  
 QM quality management    RKU Universitäts- und Rehabilitationskliniken Ulm    S3 highest standard of German medical guideline provided by the Association of the Scientific Medical Societies in Germany  
 SOP standard operating procedure

\*\**Italic entries*: In order to enable interpretation, the results of the protocols were briefly included in the measures by the authors.

Median Overall: 3