Core Training in Anaesthesiology – Introduction Year

Portfolio

July 2018

D A S A I M

Danish Society of Anaesthesiology and Intensive Care Medicine

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Foreword

This portfolio contains templates for preparation of training plan; forms and competence assessment for the mandatory workplace-based training assessments. Monitoring of whether the objectives for the training have been achieved are kept in the logbog.net in the Curriculum for Specialist training in Anaesthesiology – Core Training programme for Introduction year. The following contains a short description of the procedures concerning workplace-based training. The anaesthesia training manual contains a more detailed description of how the assessment is conducted in practice.

The portfolio for specialist training in anaesthesiology is produced by a designated work group under the Danish Society of Anaesthesiology and Intensive Care Medicine (DASAIM).

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July 2018

Workplace-based assessment

Plans for training and learning reports

Training plans/reports should be prepared every third month as a part of the structured conversation with supervisor during the introductory training. The training plans and the learning report contribute to ensure responsibility for the trainee's own learning and methodology, which ensures learning and documentation of the acquired knowledge.

General assessment

During the training course, often after six and again after nine months, a regular formative general assessment is conducted of the trainee's handling and behaviour, i.e. how the trainee *performs* in practice. This assessment is related to the described competence objectives.

Mini Clinical Evaluation Exercise (Mini Cex)

Twice during the training course, after approx. six and again after nine months, a formative assessment is conducted of the trainee's handling and behaviour during on-call execution.

For both the general assessment and the Mini Cex the supervisor should provide constructive feedback for the trainee when the assessments have been conducted. The assessments are used to indicate areas where the trainee could improve or needs to make improvements. The supervisor should ensure that the interview is constructive and that the supervisor and the trainee at the end of the interview agree on possible focus areas. If an assessment is below expected the level, a written plan of action for improvements for the next assessment is prepared, as well as how and when the next assessment is conducted.
The general assessment also includes a continuous monitoring of quality of work, such as *Cusum Scoring of procedures* and *experience registration*.

The assessments are conducted in relation to the objectives (please see the statement of aims) with specification of the basis of assessment, which can include one or several of the following methods:
- Assessment using specific methods
- Observation of the trainee
- Review of record material
- Discussion with the trainee
- Feedback from others
- Other

During the last part of the introductory training, when the last general assessment and the last Mini Cex have been conducted, these along with the specific workplace-based assessments form the basis for approval of the introductory training. If this is not the case, early measures have to be implemented, possibly in cooperation with the Regional Secretariat for Continuing Medical Education ("Det Regionale Videreuddannelsessekretariat").
The final assessment should be conducted by the consultant responsible for education with the trainee and his/her supervisor.

Assessment using specific methods

The training includes a number of mandatory specific assessments during the course of training. Furthermore, in some cases the different wards and departments will choose to use specific methods for assessment of competences in selected areas. This will appear from the training programmes.

Observation of the trainee

Observation of the trainee during his/her work performance and the trainee's contribution at conferences and professional discussions etc. is an important source of information about his/her competences.

Review of record material

Records are an important source for assessment of the trainee's competences. It can be helpful to organise the review and in advance prepare for areas of interest. Record review combined with a discussion with the trainee may be useful. The structured interview conducted by the supervisor could be based on record review with fixed subjects for discussion.

Discussion with the trainee

Regularly, the supervisor will discuss different issues and tasks with the trainee. Among other things these discussions serve to identify whether the trainee possesses the necessary background knowledge and is able to link this to practice. Finally, the discussion may include considerations regarding generalisation according to concrete examples. During the interviews the discussion is focused on whether the trainee's progress on training course is satisfactory. Among other things this review is used as basis for assessment of the expertise within the anaesthesia specialty.

Feedback from others

In many cases, the supervisor will not supervise the trainees directly during his/her work. This is partly due to logistic issues, and partly because it is important, that the trainee develops independence in his/her work. In many cases, the supervisor will have to rely on statements about the trainee from other people. Several different people, who work closely with the trainee, would be able to provide different types of information regarding the trainee's competences.

Feedback regarding the trainee's work method from other people can be both positive and negative. It is the responsibility of the supervisor to ensure that the information is as valid and reliable as possible. It can be useful to specify the desired or available information and, if necessary, organise the collection of information.

Other

The portfolio can include several types of quality documentation of the work performance and of the way that different issues and tasks are being handled. For instance, it could be written statements from other people, course certificates, reports on management of particular issues, etc. The trainee presents this documentation to the supervisor when he/she is going to conduct the general assessment. The documentation is filed in the portfolio and is uploaded in logbog.net. The trainee is free to collect different types of documentation in the portfolio. It is recommended to collect documentation of specific activities, such as specific or complicated patients, management of difficult issues, statements from others, direct assessment of performances, prepared instructions for the department, QA projects, etc.

Cusum Scoring and experience registration

The general assessment also includes a continuous registration of quantity and quality of work, such as Cusum Scoring of certain procedures and experience registration. During the clinical working day, the experience registration form in the portfolio can be used. It is important to register as many activities as possible. At the introductory interview, this is agreed in detail with the consultant responsible for education. As a minimum, the registrations are reviewed at the midway assessment interview to adjust the clinical activities and thereby ensure extensive experience as evidence of participation in department activities. At

the final assessment interview, the consultant responsible for education certificates review of the experience registration and the trainee holds the documents in the portfolio.

Specific assessments

DASAIM recommends several mandatory specific assessments, which are included in this portfolio. The criteria for assessment are included in forms, which can be found in the portfolio. The specific assessments can be conducted by the supervisor or another staff member.

In order to achieve an overall approval of the performance, the supervisor must be able to respond with YES to all items in a form. A YES next to an item means, that the item has been completed sufficiently and with sufficient quality. It is the responsibility of the individual supervisor to assess "the sufficiency" based on the supervisor's professional responsibility for good medical practice. Finally, the supervisor presents an overall assessment of the performance and decides whether it can be approved, and if so, he/she signs the assessment.

If a workplace-based assessment cannot be approved, the trainee will receive indications of areas where he/she needs to make improvements as well as the measures to achieve this. A new assessment is conducted when the trainee believes to be ready for this. If a performance cannot be approved after the third attempt, something is wrong and the consultant responsible for education should be included in the assessment.

The trainee keeps the approved form and uploads it in logbog.net as documentation and presents it to the supervisor at the meetings. To receive approval for the entire training course, all specific objectives must be achieved.

Courses

Specialty-specific courses are held in all three regions.

The course series for the specialty-specific courses are organised by the regional departments of anaesthesiology collaboratively. The course series differs slightly from region to region. The scope and content of the courses are included in the training programme of the departments.

The specialty-specific courses are a supplement to the clinical training and are primarily aimed at content that is assumed to be difficult to learn for the individual trainee doctor, i.e. difficult to comprehend, difficult to put into practice or where group work is necessary, such as communication, management or co-operation between team members.

It is recommended that all trainees are offered these courses, but it is not a mandatory element.

Training course approval

Obtaining competences must be documented by approval in logbog.net, typically in connection with supervisor interview, where the trainee presents his/her approved competence assessments and other assessments. The training is approved based on the collected documentation of competences. The consultant responsible for education conducts an overall certification of the introductory training in logbog.net.

Assessment of the learning framework

The assessment of the department and the learning framework for the training serves the purpose of gathering information about the trainees' opinion of the quality of the department's educational measures. This assessment is conducted according to the guidelines of the Danish Health Authority and the Regional Secretariats for Continuing Medical Education.

Overall list of workplace-based assessments

Competence		Method	Time
Expertise within the anaesthesia specialty		General assessment Cusum scoring/experience registration	After 6th and 9th month
		Mini Cex	After 6th, 9th and 11th month
Anaesthesia/perioperative medicine			
1.	Airway Management	Structured observation	Before 3rd month
2.	Anaesthesia device	Structured observation	Before 3rd month
3.	General anaesthesia	Structured observation	Before 3rd month
4.	Anaesthesia for acute patient	Structured observation	Before 3rd month
5.	Spinal anaesthesia	Structured observation	
6.	Epidural anaesthesia	Structured observation	
7.	Central venous catheter	Structured observation	
8.	Anaesthesia for patients with complicated conditions	Written assignment	Before 6th month
Intensive Care Therapy			
9.	Fluid/nutrition plan	Record review	
10.	Respirator treatment	Observation	
11.	Ward round, intensive care patient	Observation	
Acute conditions			
12.	Advanced resuscitation	Observation	Before 3rd month
Communication		General assessment Mini Cex	After 6th and 9th month After 6th, 9th and 11th month
13.	Preoperative patient consultation	Observation	Before 3rd month
Pain Management			
14.	Postoperative pain management	Structured conversation with supervisor	Before 6th month
Cooperation		General assessment Mini Cex	After 6th and 9th month After 6th, 9th and 11th month
Organisation/management		General assessment Mini Cex	After 6th and 9th month After 6th, 9th and 11th month
Academic competence		General assessment	After 6th and 9th month
15.	Reflection on patient courses	Reflective report	
Professionalism		General assessment	After 6th and 9th month

Plan for training

The trainee prepares the plan for the training every third month and hands it to the supervisor at least three days prior to the meeting. The plan is discussed with the supervisor and may be adjusted later on. The plan is filed in the trainee's portfolio and can be uploaded to logbog.net.

Training plan for clinical stay Ward or department .... Hospital .... Period from .... to	
Name, Trainee .... Name, Supervisor .... Date of the meeting .... Date of the next meeting	
Learning need/interest	
Learning objective: Which objectives are there for this time period?	
Activities: Which activities are needed to complete the objective, and when are they to be performed?	
Assessment criteria: Which type of documentation should be collected to demonstrate that the objective has been completed?	

Learning report

Following the end of the time period, the trainee prepares a report every third month on the acquired knowledge according to the training plan. The report is given to the supervisor at least three days prior to the meeting and is then discussed. Is filed in the trainee's portfolio.

Training plan for clinical stay Ward or department .... Hospital .... Period from .... to	
Name, Trainee .... Name, Supervisor .... Date of the meeting	
Learning objective: Which objectives have been completed for this time period?	
Assessment criteria: How has the completion of the objective been documented?	
Insufficiencies: Which objectives have not been met? Reason? Could/should measures be implemented, and if so, which/how?	
Reflection: Thoughts and considerations of the course of training and the acquired knowledge.	

General assessment

Name, Trainee ....

Training element (hospital, department, ward) ....

Period: From date .... To date ....

During the past period, the trainee has demonstrated the following action way and behaviour:	Can not be asses- sed	1 Poor	2	3	4	5	6	7	8	9 Excellent
		Below expected level			Expected level			Above expected level		
Expertise within the anaesthesia specialty Demonstrates a theoretical, clinical and situational knowledge and understanding in the handling of work and issues within the anaesthesia specialty.	....	....	....	....	....	....	....	....	....	....
Demonstrates sufficient clinical skills equivalent to the expected level.	....	....	....	....	....	....	....	....	....	....
Communication Handles communication as characterised by understanding and respect for the recipient's wishes and need for information and dialogue.	....	....	....	....	....	....	....	....	....	....
Cooperation Cooperates with others with respect and attention to their professionalism, situational roles and functions and contributes with own expertise.	....	....	....	....	....	....	....	....	....	....
Organisation/management Organises and prioritises work respecting demands for efficiency and safety in patient management and in consideration of own and organisational resources. Assumes team leader position if appropriate.	....	....	....	....	....	....	....	....	....	....
Academic competence Demonstrates will and ability to continuously search for new knowledge, assess and develop own expertise as well as contribute to the development of other people and the profession in general.	....	....	....	....	....	....	....	....	....	....
Professionalism Demonstrates responsibility in the execution of practice in relation to patients, the organisation, the profession and the surroundings.	....	....	....	....	....	....	....	....	....	....

Any comments and proposals for improvements *must* be present in case of assessment below expected level

Date: .... Signature: ....

The above general assessment is conducted based on one or more of the following methods:

Specific method (enclosed)	*Observation of the trainee*	*Review of record material*	*Discussion with the trainee*	*Feedback from others*	*Other (please specify)*
☐	☐	☐	☐	☐	☐

Any comments and proposals for improvements regarding handling and behaviour are enclosed: YES ☐
(**must** be available at assessments 1, 2 and 3)

Experience	YES	NO
The trainee has achieved appropriate breadth, volume, and quality in relation to the objectives of the period.	☐	☐
Cusum Scoring (enclosed)	☐	☐
Review of experience registration	☐	☐
Observation of the trainee	☐	☐
Discussion with the trainee	☐	☐
Feedback from others	☐	☐
Other (please specify)	☐	☐

Date: ....   Signature: ....

On-call competence – Mini Clinical Evaluation Exercise (Mini Cex)

Name, Trainee ....

Training element (hospital, department, ward) ....

Date .... **Assessed by physician** ....

Competence card:

This assessment of the trainee should be conducted three times during the introductory training. The schedules are included in the training programme. The trainee schedules the assessment with the on-call specialist anaesthesiologist at the beginning of the shift.

Prior to finishing the shift, the form is completed, and the specialist doctor gives constructive feedback with focus on development areas. The assessment should be present at the supervisor interviews.

The last assessment should be at "expected level" or "above expected level". If this is not the case, the consultant responsible for education is involved and a plan of action is agreed upon, possibly with the involvement of the Continuing Medical Education (Den Lægelige Videreuddannelse).

During the past period, the trainee has demonstrated the following handling and behaviour:	Can not be assessed	1 Poor	2	3	4	5	6	7	8	9 Excellent
		Below expected level			Expected level			Above expected level		
Acquaints oneself with the on-call tasks at the beginning of the shift	....	....	....	....	....	....	....	....	....	....
Prioritisation of tasks	....	....	....	....	....	....	....	....	....	....
Communication with team about execution of tasks	....	....	....	....	....	....	....	....	....	....
Communication with collaborators from other departments	....	....	....	....	....	....	....	....	....	....
Knowledge about own competences/ limitations – relevant request for assistance	....	....	....	....	....	....	....	....	....	....
Sense of perspective and organising of tasks/resources	....	....	....	....	....	....	....	....	....	....
Demonstrates receptiveness towards team member experience	....	....	....	....	....	....	....	....	....	....
Contributes actively to constructive cooperation	....	....	....	....	....	....	....	....	....	....

Feedback: Very good performance by the trainee

Feedback: Room for improvements by the trainee:

Feedback: Scheduled plan for improvements:

Any comments and proposals for improvements *must* be present in case of assessment below expected level

CUSUM SCORE, qualitative scoring of performance

Name, Trainee: …………………………………………………………………………………

Qualitative registration of success rate for: epidural, spinal, CVC, and artery needle. The form can be used during periods when you wish to Cusum Score one or more of the specified procedures. The scoring is applied as below, and a continuous summary is performed for each procedure. It is useful to complete the registration electronically, www.dasaim.dk. The form can be used to make notes during the day or shift and data can later be registered in the database.

Procedure and definition of "failed"

Epidural: failed is missing take, dura puncture or more than two passes. New pass is defined as at new level or shift from median to paramedian technique. Accidental pass in vessels does not count as a pass.
Spinal: failed is missing take or more than two passes, definition similar to epidural.
CVC: failed is new vein attempt.
Artery needle: failed is new artery attempt.

	Epidural	Spinal	CVC	A needle
Scores for fail	+ 0.93	+ 0.86	+ 0.91	+ 0.71
Scores for success	÷ 0.07	÷ 0.14	÷ 0.09	÷ 0.29
Max acceptable score	+ 2.94	+ 2.71	+ 1.81	+ 2.24

Procedure number	Epidural	Spinal	CVC	A needle
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Experience registration, qualitative registration of anaesthesia service

Name, Trainee …………………………………………………………………………………

Please specify the following for each patient:
Date, age, sex, ASA group, risk factors, type of surgery, elective/emergency, type of anaesthesia, procedures, complications

It is useful to complete the registration electronically. The form can be used to enter notes continually.

1	
2	
3	
4	
5	
6	
7	
8	

1 Airway Management – *structured observation*

Name, Trainee …………………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability to manage airway management.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Communicates adequately with the patient and prepares the patient according to the situation	☐
Performs a preoperative airway assessment, including assessment of difficult airways	☐
Accounts for purpose and indication for intubation	☐
Positions the patient optimally for airway management	☐
Uses mask correctly during spontaneous respiration and assisted ventilation	☐
Accounts for the choice of endotracheal tube	☐
Performs oral intubation and tests tube position	☐
Exercises caution in relation to teeth during intubation	☐
Accounts for indication and contraindication for use of laryngeal mask	☐
Accounts for the choice of relaxants and monitoring of neuromuscular blockade in connection with intubation and operation (non-depolarising and depolarising agents) as well as reversal of this	☐
Prepares and performs smooth arousal and extubation of the patient at the relevant and planned time	☐
Is systematic in the practical handling of the tasks	☐
Handles medication and utensils orderly	☐
Accounts for prevention of and precautions in relation to dental trauma	☐
Accounts for the initial steps in difficult airway algorithm including the timing of call for assistance	☐

The overall assessment for this competence is approved	☐

Supervisor's signature: ……………………………………………… **Date** ………..

2 Anaesthesia device – *structured observation*

Name, Trainee …………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's knowledge about and ability to test an anaesthesia device.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Accounts for design and function of an anaesthesia device, including gas supply, gas pressure, flow conditions in the device, flow meters, valves, absorber, vaporizer, suction	☐
Accounts for volume and pressure-controlled ventilation	☐
Uses monitoring equipment correctly, ECG, BP, pulse oximeter, capnograph, airway pressure, and neuromuscular monitoring	☐
Accounts for function and most common sources of error in monitoring equipment: ECG monitor, blood pressure device, pulse oximeter, capnograph, gas monitoring device, neuromuscular monitor	☐
Demonstrates sufficient test of an anaesthesia device	☐
Is systematic in the practical handling of the tasks	☐
Finds and corrects three errors in the device inflicted by the supervisor	☐
Accounts for handling of a situation with anaesthesia ventilator failure	☐
Accounts for handling of a situation with oxygen supply failure	☐
Accounts for location and conditions for gas storage	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ……………………………………………… **Date** ………..

3 General anaesthesia, uncomplicated elective patient – *structured observation*

Name, Trainee …………………………………………………………………………….

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability to manage general anaesthesia. The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below. Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Accounts for a plan for anaesthesia, including appropriate choice of anaesthetics, medical/pharmacological reason for dosing conditions and sequence of administration	☐
Accounts for pharmacokinetics and -dynamics for the choice and dosing of anaesthetics	☐
Prepares preoperative holding area and/or operating room adequately	☐
Performs satisfactory test of anaesthesia device and suction at the operation suite	☐
Verifies patient identity	☐
Communicates adequately with the patient and prepares the patient according to the situation	☐
Positions the patient appropriately	☐
Establishes appropriate monitoring prior to induction	☐
Performs preoxygenation, if necessary	☐
Manages anaesthesia induction uncomplicated	☐
Maintains anaesthesia appropriately, including fluid administration, heat loss prevention and administration of relevant medicine	☐
Performs smooth arousal of the patient	☐
Handles medication and utensils orderly	☐
Is systematic in the practical handling of the tasks	☐
Communicates and cooperates adequately with the team to ensure that the team has a common situation awareness of the operation	☐
Keeps anaesthesia record with care	☐
Accounts for prevention of PONV	☐
Chooses rationally and prescribes postoperative treatment (fluid, analgesics, observation, other)	☐
Performs transfer to postoperative ward and accounts for postoperative observation, possible complications and planned pain management	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ………………………………………………… **Date** ………..

4 General anaesthesia for acute patient – *structured observation*

Name, Trainee ………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability to manage general anaesthesia for an acute patient.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Formulates a plan for anaesthesia, accounts for the sense of urgency, type of operation and the patient's comorbidity	☐
Prepares preoperative holding area and remedies adequately	☐
Verifies patient identity	☐
Communicates adequately with the patient and prepares the patient according to the situation, including positioning	☐
Performs preoxygenation correctly	☐
Utilises an appropriate sequence and dose of anaesthetics for induction	☐
Handles medication and utensils orderly	☐
Is systematic in the practical handling of the tasks	☐
Communicates and cooperates adequately with the team to ensure that the team has a common situation awareness of the operation	☐
Keeps anaesthesia record with care	☐
Accounts for rules for fasting period which affect gastric emptying	☐
Accounts for indication of acute initiation	☐
Accounts for the physiology of preoxygenation	☐
Accounts for causes of sudden hypoxia during anaesthesia and a plan of action	☐
Accounts for causes of sudden decrease in BP during anaesthesia a plan of action	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ……………………………………………… **Date** ………..

5 Spinal anaesthesia – *structured observation*

Name, Trainee …………………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability to induce and manage spinal anaesthesia.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Sets up procedure table and verifies medicine and instruments	☐
Prepares preoperative holding area and/or operating room adequately	☐
Accounts for choice of local anaesthetic, dose, and equipment	☐
Formulates a plan for handling of side effects or undesirable and toxic effects	☐
Communicates adequately with the patient regarding procedure and positioning during insertion	☐
	☐
Positions the patient in collaboration with assistant	☐
Identifies relevant insertion point	☐
Disinfects and drapes insertion area	☐
Manages relevant insertion technique and ensuring positioning prior to injection of anaesthetic	☐
Observes the patient after induction of spinal anaesthesia	☐
Manages circulatory support measures in connection with spinal anaesthesia	☐
Tests and specifies level of anaesthesia distribution	☐
Handles medication and utensils orderly	☐
Is systematic in the practical handling of the tasks	☐
Communicates and cooperates adequately with the team	☐
Accounts for indications and contraindications for spinal anaesthesia	☐
Mentions three significant complications of spinal anaesthesia and accounts for relevant management of these complications	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: …………………………………………… **Date** ………..

6 Epidural block – *structured observation*

Name, Trainee ……………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability to induce and manage epidural anaesthesia.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Sets up procedure table and verifies medicine and instruments	☐
Prepares preoperative holding area and/or operating room adequately	☐
Accounts for choice of local anaesthetic, dose, and equipment	☐
Formulates a plan for handling of side effects or undesirable and toxic effects	☐
Communicates adequately with the patient regarding procedure and positioning during insertion	☐
Positions the patient in collaboration with assistant	☐
Identifies relevant insertion point	☐
Disinfects and drapes insertion area	☐
Manages correct insertion technique and identifies epidural space – (loss of resistance)	☐
Inserts epidural catheter correctly and fixates epidural catheter adequately	☐
Tests catheter placement and explains background for testing	☐
Performs relevant observation of the patient after insertion of epidural catheter	☐
Manages circulatory support measures in connection with epidural anaesthesia	☐
Identifies area of distribution – with specification of levels	☐
Communicates and cooperates adequately with the team	☐
Handles medication and utensils orderly	☐
Is systematic in the practical handling of the tasks	☐
Accounts for indications and contraindications for insertion of epidural catheter	☐
Mentions three significant complications of epidural anaesthesia and accounts for relevant management of these complications	☐

The overall assessment for this competence is approved ☐

Supervisor's signature: ……………………………………………… **Date** ………..

7 Central venous catheter – *structured observation*

Name, Trainee …………………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability to insert a central venous catheter.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Specifies indications and contraindications for CVC insertion – in relation to the actual patient	☐
Mentions two frequently used CVC approaches and argues for the choice of vein for CVC in relation to anatomical conditions as well as pros and cons for the individual patient	☐
Sets up procedure table and verifies medicine and instruments	☐
Prepares preoperative holding area and/or operating room adequately	☐
Communicates adequately with the patient regarding procedure and positioning during insertion	☐
Positions the patient in collaboration with assistant	☐
Identifies relevant insertion point	☐
Disinfects and drapes insertion area	☐
Performs application of local anaesthetic satisfactory	☐
Manages correct insertion technique inserts US-guided catheter, inserts guide wire and catheter, and verifies position	☐
Tests catheter function and accounts for indications for x-ray verification of catheter and particular points of interest during assessment of x-rays	☐
Communicates and cooperates adequately with the team	☐
Handles medication and utensils orderly	☐
Is systematic in the practical handling of the tasks	☐
Accounts for three significant complications for CVC insertion, precautions in relation to prevention of these as well as handling complications	☐
Keeps record notes, including any prescription in relation to observation, use and discontinuation of CVC	☐

The overall assessment for this competence is approved	☐

Supervisor's signature: ………………………………………………… **Date** ………..

8 Anaesthesia for patients with complicated conditions – *written report*

Name, Trainee ………………………………………………………………………..

Competence card:
This is an assignment in critical reflection on practice in management of anaesthesia for major (open) abdominal surgery. The assignment is submitted to the advisor, who reviews it according to this form and provides a follow-up with specific and constructive oral and written feedback. Any lack of approval must be substantiated and focus areas should be defined. A report is prepared (max five pages in A4 format, 1.5 spacing) and submitted to the supervisor. The report is assessed according to the form below.

The assignment:
This assignment consists of several case scenarios. For all scenarios, the patient is to undergo elective, medium-sized lower abdominal surgery. For case 1 you should describe perioperative management in connection with general anaesthesia. The description should contain: Reason for preoperative preparation and any medication, choice and dosage of anaesthetics and anaesthesia technique (induction, relaxation, maintenance, reversal), choice of fluid/electrolyte administration and postoperative pain management. For each of the following scenarios, 2-11, you should account for any changes in your choice of preoperative management of the patient and provide a pharmacological reason for this.

1. The patient is age 36, female, 60 kg, and otherwise healthy
2. The patient is similar to item 1, but is suffering from insulin-dependent diabetes mellitus
3. The patient is similar to item 1, but is suffering from moderate COPD and is using inhalation steroid
4. The patient is similar to item 1, but age 86
5. The patient is similar to item 1, but weighs 120 kg
6. The patient is similar to item 1, but is four months pregnant
7. The patient is similar to item 1, but is breastfeeding her child
8. The patient is similar to item 1, but is on anticoagulation treatment
9. The patient is similar to item 1, but former drug addict, on methadone treatment now. Suffered from hepatitis earlier, liver parameters now normal
10. The patient is age 50, but is suffering from mild renal impairment and well-managed hypertension
11. The patient is age 60, but suffering from ischaemic heart disease, previous myocardial infarction and is being treated for incompensation

Assessment of the report based on the items listed below: Acceptable and well-founded choice of perioperative management of the patient in	YES
Case 1	☐
Case 2	☐
Case 3	☐
Case 4	☐
Case 5	☐
Case 6	☐
Case 7	☐
Case 8	☐
Case 9	☐
Case 10	☐
Case 11	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ………………………………………… **Date** ………..

9 Fluid/nutrition plan for intensive care patient – *structured observation*

Name, Trainee …………………………………………………………………..

Competence card:
This competence card is a structured observation based on a presentation of fluid plans prepared by the trainee.
The supervisor observes the trainee according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Account for clinical, including haemodynamic, and paraclinical indicators, which are used to assess a patient's fluid status	☐
Accounts for clinical and paraclinical indicators, which are used to assess the patient's nutrition status	☐
Accounts for possible routes of administration for fluid, nutrition, and medicine as well as pros and cons for these	☐
Calculates a patient's daily nutritional needs	☐
Accounts indications for blood product substitution and potential complications from this according to clinical and paraclinical indicators	☐
Accounts for the importance of the fluid balance by organ failure	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: …………………………………………… **Date** ………..

10 Respiration supportive treatment – *structured observation*

Name, Trainee …………………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability to manage an otherwise uncomplicated patient with need for respirator treatment.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Accounts for invasive and non-invasive mechanical ventilation including the difference between spontaneous and controlled ventilation as well as volume and pressure-controlled ventilation	☐
Sets up respirator for uncomplicated intensive care patient, including alarm limits as well as explains the importance of this	☐
Communicates adequately with the patient and prepares the patient according to the situation	☐
Considers choice of dosing of anaesthetics for induction of an intensive care patient	☐
Outlines adequate plan for respirator treatment and accounts for monitoring	☐
Performs reasonable changes in respirator settings	☐
Discusses indications and contraindications for sedation and relaxation during respirator treatment	☐
Accounts for importance of daily wake-up call	☐
Mentions at least three significant complications of respirator treatment, the prevention and any treatment of them	☐
Discusses timing of extubation	☐
Accounts for indications and contraindications of invasive and non-invasive mechanical ventilation	☐
Discusses ethical dilemmas regarding basis for withholding respirator treatment	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ……………………………………………… **Date** ………..

11 Ward rounds for uncomplicated intensive care patient – *structured observation*

Name, Trainee ………………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability to manage ward rounds for uncomplicated intensive care patient.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Defines the framework for the ward rounds, clarifies participation in the ward rounds, and agrees the flow of the ward round with the care personnel	☐
Assesses the patient based on clinical and paraclinical variables:	
• cerebral condition, including use of sedation, delirium and pain scale	☐
• respiratory status	☐
• circulatory status based on haemodynamic parameters	☐
• gastrointestinal function	☐
• renal function, including hydration status	☐
• infection status	☐
• coagulation status	☐
Creates an overview of the most important present issue and presents a treatment plan based on the clinical variables together with the team and defines goals for the next 24 hours	☐
Considers which issue should be investigated further (examination, consultations with other specialities)	☐
Is systematic in the practical handling of the tasks	☐
Is respectful in relation to patient integrity during ward round and communicates adequately with the patient	☐
Communicates and cooperates adequately with the team	☐
Presents patient case systematically at conference	☐
Discusses communication issues in relation to patient and relatives as well as ethical dilemmas, e.g. in relation to legislation for disclosure of patient information and patient confidentiality	☐
Documents course and treatment in the records	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ……………………………………………… **Date** ………..

12 Advanced resuscitation – *structured observation*

Name, Trainee ………………………………………………………………………..

Competence card:
This competence card is assessed during the introductory training, no later than three months after employment. The assessment is made by the supervisor during observation and discussion of the below items with the trainee. The assessment can be made in the clinic or on a phantom.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Demonstrates utilisation of algorithm according to international standard for resuscitation	☐
Accounts for indication for defibrillation and demonstrates use of device as well as defibrillation in adults and children	☐
Accounts for indication for use of different standard medicine as well as standard dosing conditions in adults and children	☐
Accounts for routine procedures during cardiac arrest in operating room as well as in hospital at locations with defibrillators and demonstrates the use of these	☐
Accounts for indications for and use of external pacemaker	☐
Accounts for the organisation of the hospital's cardiopulmonary resuscitation, the role of the department of anaesthesiology in the cardiac arrest team and the role of other staff groups. Accounts for own role in the cardiac arrest team as well as any changes in this as team member/team leader under special circumstances	☐
Accounts for indications for post cardiac arrest induced hypothermia (Targeted temperature management)	☐
Accounts for ethical dilemmas and basis for decision regarding initiation and discontinuation of resuscitation	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ……………………………………………… **Date** ………..

13 Preoperative patient consultation – *structured observation*

Name, Trainee …………………………………………………………………………..

Competence card:
This competence card is a structured observation, which should demonstrate the trainee's ability preoperative assessment.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Records relevant anamnesis	☐
Performs relevant objective examination, including assessment of airway and teeth status	☐
Demonstrates receptiveness, responds adequately to patient concerns and problems	☐
Explains anaesthesia as well as sequence of events to the patient	☐
Explains and instructs the patient in preoperative precautions, such as fasting, medication. etc.	☐
Obtains informed consent for relevant specific procedures and treatments	☐
Discusses postoperative pain regimen with the patient	☐
Encourages the patient to dialogue about participation in the decision about the course regarding anaesthesia	☐
Provides the patient with information that is understandable and ensures understanding of the information	☐
Assesses relevant preoperative medicine, examinations, fluid, etc.	☐
Checks preoperative examinations	☐
Accounts for the ASA classification system	☐
Discusses issues regarding informed consent in relation to people without legal capacity and/or incompetent people such as children and people with dementia	☐

The overall assessment for this competence is approved ☐

Supervisor's signature: …………………………………………… **Date** ………..

14 Postoperative pain management – *structured observation*

Name, Trainee …………………………………………………………………………..

Competence card:
This competence card is a structured observation and record review of two anaesthesia courses. One where the patient is under general anaesthesia without block, and a course where the patient besides general anaesthesia is receiving pain management in the form of nerve block.
The supervisor observes the trainee during the practical course and performs continuous and subsequent assessment according to the items listed below.
Regardless of approved or failed competence, the supervisor provides specific and constructive feedback to the trainee.

	YES
Accounts for classification of pain	☐
Accounts for the pharmaceuticals used for conventional pain management, their indications, contraindications and treatment of their side effects as well as pharmacokinetics and -dynamics/elimination	☐
Accounts for indications, contraindications and complications for the use of epidural for postoperative pain management	☐
Accounts for the course of conventional postoperative pain management of a patient who you anaesthetised, prepared plan for the perioperative pain management (please bring copy of anaesthesia and recovery form)	☐
Accounts for the course of the postoperative pain management of a patient who besides general anaesthesia received nerve block, and who you anaesthetised, prepared plan for the perioperative pain management (please bring copy of anaesthesia and recovery form)	☐
Accounts for the utilisation of the VAS scale for the assessment of postoperative pain	☐
Accounts for the possibilities in prevention and treatment of postoperative nausea	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ……………………………………………… **Date** ………..

15 Reflection on patient courses – *reflective report*

Name, Trainee …………………………………………………………………………..

Competence card:
The patient course description is meant to demonstrate the trainee's ability to assess practice and reflect on this.
The trainee chooses a patient course. The following patient course description should contain theoretical considerations in relation to the practical circumstances and conditions. Notes should be taken during the actual course. Then the trainee performs an analysis of actual course.

According to the analysis and in cooperation with your supervisor, please define the problem you want to clarify further through a search in literature. Assess the literature and discuss the outcome in relation to the problem.

A report on the patient course is prepared (max 10 A4 pages, 1.5 line spacing), which should contain a description of the items listed below and a copy of the anaesthesia form and observation form from the recovery room. Please provide appropriate references. The report is submitted to the supervisor who reviews it according to this form and provides a follow-up with specific and constructive oral and written feedback. Any lack of approval must be substantiated, and focus areas should be defined.

	YES
Describes the patient and the planned operation	☐
Accounts for theoretical and practical considerations regarding choice of anaesthetic technology (type of anaesthesia, technique, procedures, monitoring, etc.) in relation to patient's condition and wishes as well as the upcoming surgical procedure and the organisational conditions	☐
Accounts for the actual course of anaesthesia and recovery	☐
Analyses the course and any complications	☐
Formulates the problem and questions, which can be answered through a search in literature	☐
Concludes the results found in literature in relation to the problem	☐
Concludes any implications for own or department practice	☐
The overall assessment for this competence is approved	☐

Supervisor's signature: ……………………………………………… **Date** ………..