

CURRICULUM FOR SPECIALIST TRAINING IN ANAESTHESIOLOGY - CORE TRAINING PROGRAMME

2013



*Danish Society of Anaesthesiology
and Intensive Care Medicine*

Foreword

According to section 2 of publication no. 1257 of October 25th, 2007 concerning training of specialist doctors, the Curriculum for Specialist training in Anaesthesiology are approved by the Danish Health and Medicines Authority. The publication is available at www.SST.dk. The curriculum contains the required theoretical and practical clinical competences for authorisation concerning the title of specialist in Anaesthesiology.

The curriculum is produced in close cooperation with the scientific societies.

The curriculum 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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Chairman of the Educational Committee

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1 Introduction

According to section 2 of publication no. 1257 of October 25th, 2007 (with later amendments) concerning training of specialist doctors, the Statements of Aims for the medical specialities are approved by the Danish Health and Medicines Authority.

The Statements of Aims define the minimum competences to be achieved and approved during the doctor's specialist training.

The scientific societies have an inherent academic interest to ensure that the competences in the curriculum are relevant and updated – partly in relation to the academic development of the specialities and partly based on the experience achieved during the application of the curriculum and the core training programme.

Separate curricula are produced for the introductory training (1 year) and the core part of the specialty training programme (4 years).

2 The General Part

The specialist training is covered by several statutory regulations and terms, which are identical for curricula across all specialities and for both the introductory training and the core training.

The [Danish Health and Medicines Authority website](#) includes a detailed description of the Danish specialist training, including legal framework, organisation, structure, participants, terminology, etc.

3 The Anaesthesiological Speciality Part

The curriculum for Specialist training in Anaesthesiology and the Core Training Programme describes the speciality, the required minimum competences to be achieved as well as speciality recommendations for learning strategies and established mandatory methods for competence assessment. Also the mandatory courses and research training for anaesthesiologists are described.

3.1 Description of the Anaesthesiology Speciality

Anaesthesiology is a cross-disciplinary clinical speciality that includes the following four areas of function:

1. Anaesthesia and Perioperative Medicine
2. Intensive Care Medicine
3. Pain Management
4. Emergency, Trauma and Pre-hospital Medicine

Approximately 1200 doctors are employed in anaesthesiology in Denmark – 700 of these are specialists in anaesthesiology. The majority of the anaesthesiologists are employed by hospitals with a general function within the speciality or with relation to specific surgical specialities or one of the other areas of function in anaesthesiology. A minority work outside the hospital sector as full-time private practice specialists.

Anaesthesia and Perioperative Medicine

Anaesthesia and perioperative medicine includes anaesthesia and patient management before, during and after surgery or examination. Anaesthesiology is a rather new speciality and was established in 1950. During the first many years, focus was primarily on the patient in the surgical phase, but gradually focus has spread to other parts of the care pathway, preoperatively, intraoperatively, and postoperatively. This holistic care pathway approach is reflected in the development of methods and techniques with special focus on prevention of complications and long-term schedules for the postoperative period.

The trend is towards a closer relationship and dialogue with the surgeons regarding the individual care pathway as well as the initiatives involving research and development of typical patient categories.

Intensive care medicine

Intensive care medicine includes multidisciplinary and organ-related observation, diagnostics, treatment and care for patients with potentially reversible failure of one or multiple organ systems. There are several types of intensive care units.

- Multi-disciplinary intensive care unit with management of patients from several of the basic specialities
- Mono-disciplinary intensive care unit, designed for a special patient category, such as paediatric, thoracic and neurological surgery
- Postoperative intensive care unit with management of patients following major surgery with the need for more extensive observation and treatment, for example respirator treatment

Pain management

Pain management includes diagnostics and treatment of patients with acute and long-term/chronic pain conditions. In the middle of the 1980ies pain management was established as a specific branch in anaesthesiology. There are 3 different primary types of pain:

- Acute pain
- Pain conditions linked to cancer disease/malignant pain conditions
- Long-term/chronic non-malignant pain conditions

In Denmark, the term "acute pain" does not include postoperative pains as these are seen as an integrated part of perioperative patient management. Most departments of anaesthesiology in Denmark are involved in management of acute pain and cancer pain. Individual locations have cross-disciplinary pain centres, which handle the more complicated non-malignant chronic pain conditions, often in cross-disciplinary cooperation with other specialities and professions.

Emergency, trauma and prehospital medicine

Emergency, trauma and prehospital medicine include multidisciplinary primary management and transport of patients with acute lifethreatening condition due to disease or trauma as well as involvement in disaster medicine organisation. The anaesthesiological function in emergency, trauma and prehospital medicine exist in several different areas:

- In-hospital emergency medicine: management of patients with acute lifethreatening condition due to disease or accident and in-hospital cardiac arrest and acute service.
- Prehospital emergency medicine: for example mobile emergency care units with consultants (MECU), sent out from hospitals to assist in major accidents and disasters.
- Disaster response: coordination, organisation and development of emergency response plans, emergency drills, etc.

Research:

DASAIM is the primary scientific society for anaesthesiology and intensive care medicine in Denmark. Both clinical research and basic scientific research is carried out within anaesthesiology. The trend is that researchers are organised in larger multi-professional research groups. Research in training is high on the agenda. Since 1999 anaesthesiology has been covered by a Cochrane group, who conducts systematic reviews of clinical research.

Quality assurance

The initiatives in the quality assurance area are aimed at medical device safety and systematic data collection regarding risks and complications in anaesthesiology. Since 1972, a clinical database for patients with impaired cholinesterase has existed. In addition, a database for malignant hyperthermia, a database for anaesthetic allergy, and a Danish anaesthetic database exists. The trend is towards establishing larger databases for collection of data across a wide spectrum of patient categories to identify complication rates and risks in anaesthesiology.

Training

Anaesthesiology is primarily a postgraduate discipline but is more and more represented in pregraduate training. A society for students with a particular interest in anaesthesiology, Society of Anaesthesiology & Traumatology for Students (SATS) has been established.

Since 1986, the speciality has been covered by the Society of Young Anaesthesiologists, FYA, which is primarily focused on educational matters. The society has been the instigator of courses aimed at the introductory training, which since 1992 has been managed by the regional departments of anaesthesiology collaboratively.

The specialist training programme is closely linked with DASAIM and its educational committee. Since the establishment of the speciality in 1950, formal courses have been a part of the specialist training programme. Form and content in the courses have seen constant development and are increasingly based on interactive learning methods, such as simulation-based training. In 1992, the first full-scale simulator for management of critical situations was developed in Denmark. Today, there are several simulation centres/facilities across the country.

Further training

Scandinavia has five formalised further training programmes in intensive care medicine, pain management, pediatric anaesthesia, critical emergency medicine and advanced obstetric anaesthesia. This training takes 2 years and is managed by Scandinavian Society of Anaesthesiology and Intensive Care Medicine, SSAI. Furthermore, there are some European diploma degrees in different areas in anaesthesiology.

3.2 Description of the Core Training Programme

The mission for specialist training in anaesthesiology is to ensure qualified management of patients and anaesthetic services and to ensure a systematic competence development of the trainees. The training is aimed at training of specialists in anaesthesiology, who are able to manage patients in need of anaesthetic assistance in a function-bearing unit. The training features a presentation of the speciality's many different areas of function and specialist areas and ensures that the specialist doctor is able to improve his/her skills and develop his/her professional profile.

Training structure

The specialist training in anaesthesiology consists of a 1 year introductory training programme and a core training of 4 years. The core clinical rotation consists of several training courses located in several different hospitals. Part of the training is conducted in highly specialised units.

The training takes place while employed as junior doctors in positions that are announced on the Danish Medical Association website www.laegejob.dk and on the website of the Danish secretariat for continuing medical education, Videreuddannelsessekretariatene, in each of the three educational regions. There are a total of 92 introductory positions (2012), and 54 (2012) vacancy positions are announced each year for the core training in anaesthesiology. Passing the introductory training is the competence requirement for the core training.

Training composition and contents

The trainee will regardless of training post obtain experience in anaesthesia for outpatient surgery, anaesthesia for parenchyma surgery, gynaecology, obstetrics, paediatric surgery, ENT/ophthalmic surgery, neurosurgery, thoracic surgery, vascular surgery, orthopaedic surgery, anaesthesia outside of the operating room (e.g. imaging and ECT), intensive care medicine, pain management as well as emergency, trauma and prehospital treatment.

The duration of allocation to each area is described in detail in the training programme of the training posts. The composition is balanced against the training objectives and adapted to the organisation of the healthcare

system in the educational region (North, South or East) and the region (political). The composition is organised in cooperation with the departments and wards which are part of the training posts. The recommendations from DASAIM regarding the composition of the training posts can be found in the "Anaesthesia Training Manual".

The course series

The mandatory courses include the basic courses in leadership, organisation and management. These courses are organised in the Regions or by the Danish Health and Medicines Authority and are described by both authorities. Furthermore, the core training course contains specific courses for anaesthesiologists of a total of 30 days/210 hours for the individual doctor. The courses are meant as a supplement to the clinical training. During the courses the theoretical aspects of anaesthesiology are taught, and several of the courses are proficiency training in simulation scenarios. The proficiency training is aimed at several areas that are difficult to develop systematically in practice due to the rare in-clinic occurrence or the acute or complex nature of the situation. The course series and the associated activities are scheduled by the DASAIM's educational committee in cooperation with the core course leader and the society appointed course leaders for each of the courses from each of the three educational regions. A complete list of the courses can be found on www.dasaim.dk. The contents of the course series, including course objective, teaching and evaluation methods, are described in section 3.4.3.

Course series contents

The teaching methods range from proficiency training, workshops and seminars to elements based on e-learning or remote learning. The courses are mainly based on active learning, where the participants prepare themselves by solving a task prior to the course (participation requirement) or by preparing a presentation of a case during the actual course. Simulation-based training is used during the course, either by use of microsimulators (PC based), proficiency trainers or full-scale simulators. Concurrently, with the development of more and improved tools, the use of e.g. microsimulation programmes can take place at home, as a part of course preparation or daily clinic. Lectures are only a minor part of the individual courses.

On the actual course day, the courses often consist of a mix of the different educational methods. Generally, the course requires some preparation, i.e. problem solving that indicates basic understanding of the subject matter. In certain cases it is mandatory that the trainees should have solved an assignment before he/she is allowed to participate in the course.

Research training

The purpose of the research training is to develop the trainee's approach and ability to continuously improve anaesthesiological practice on a scientific basis. The goal is that the trainee is able to apply a systematic approach here, and the training is therefore aimed at training the trainee in:

1. Systematic evaluation of practice
2. Identification and definition of a thesis
3. Phrasing research questions
4. Systematic collection of data/information, including scientific literature
5. Analysis and evaluation of data/information, including critical evaluation of scientific literature
6. Discussion and interpretation of results

The above items are meant as a framework for this taxonomy and apply in a wide sense.

The core training includes courses to support the research training and cover methodology, statistics and science theory. An ongoing dialogue regarding the scientific basis for practice is carried out in each department. Furthermore, several departments conduct formal sessions with discussions of new literature on a regular basis. Research training includes completion of a project. The project could be an instruction regarding a given procedure in the department, a QA project, a research or development project, a literature assignment or similar.

Practical circumstances regarding research training are described for each educational region on the website for the Danish Secretariat for Continuing Medical Education, Videreuddannelsessekretariatene. A link can be found on the last page of this document.

3.3 Introductory training

See the curriculum for introductory training in anaesthesiology.

3.4 Core Training Programme

3.4.1 Competences

The individual competences to be evaluated are described according to the 7 doctors' roles. For each competency it is indicated which of the 7 medical specialities is addressed. Each department can choose between the recommended learning strategies. The listed method(s) for competence assessment is mandatory.

Learning strategies and methods for Workplace based Assessment

Competence cards and instructions can be found on www.dasaim.dk under "uddannelsesudvalg" (educational committee).

Assessment

Assessment of the trainee serves two purposes: Facilitation of learning and documentation of competence. Workplace based assessment is conducted continuously during the training and therefore provides information about the trainee's development and simultaneously provides an important foundation for planning and modification of the course of training.

General assessment and Mini Clinical Examination (Mini Cex)

During the clinical rotation regular formative general assessment and a formative Mini Cex are 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. The general assessment and Mini Cex are conducted before the end of every relevant training element, such as thoracic anaesthesia, neuroanaesthesia, intensive care therapy, or after a more precise period of time. The schedules are included in the training programmes. At the end of last training element, the last general assessment and the last Mini Cex are conducted. These are considered sufficient when the assessment of the competences is at or above the expected level. If the assessment indicates that this is unachievable, early measures have to be implemented, possibly in cooperation with the regional secretariat for continuing medical education, Det Regionale Videreuddannelsessekretariat.

The general assessment also includes a continuous monitoring of quality and quantity of work, such as *Cusum Scoring of procedures and registration of experience*.

Cusum Scoring

Cusum Scoring is a quantitative registration of (success rate for) the execution of 4 procedures: Spinal anaesthesia, epidural anaesthesia, CVC and artery needle. Cusum Scoring is not mandatory for the core training. However, it can be used with advantage during periods where there might be issues with the performance of one more or more of the four procedures according to you or your supervisor.

Registration of experience

The trainee continuously conducts registration of selected anaesthesiological performances and patient categories as agreed with the consultant responsible for education or the clinical supervisor of a given department or ward. Items for experience registration are based on the key performances and patients treated in the department. At the training interview, a hardcopy of the experience registration is reviewed or it is reviewed on a PDA/computer to adjust the clinical activities to meet the experience registration objectives of the depart-

ment. On the general assessment form the consultant responsible for education or the clinical supervisor certifies that the department's/ward's requirements for the experience registration are met.

Specific assessments

The specific assessments are conducted in relation to the actual tasks and situations. *The specific assessments are used* to provide information on whether the trainee *is able* to perform a task properly, and finally *reflection and elaboration* of practice.

Specific assessments of *quality of work* that has been conducted are possible based on review of record material or other types of quality documentation in practice, such as references or feedback from others, record audits, etc. This documentation can be collected by the trainee in the portfolio and form the basis of the workbased assessment.

Specific assessments of the trainee's ability to *reflect and elaborate* in practice are aimed specifically at unpredictable situations or events with no precise solution. Focus is on systematic analysis of practice and learning from practice in relation to theory and scientific literature. This assessment can be based on oral or written reports based on one or more care pathways or situations.

Various forms of specific and general assessments are included in the portfolio. The documentation is based on the different workplace based assessments and sources are collected in the portfolio with other documentation that the trainee would like to present.

In case of issues with approval of a training element during the core training, the guidance for competence assessment of further medical training from the Danish Health and Medicines Authority applies.

3.4.2 List of Mandatory Competences for the Speciality

This list contains the minimum requirements for the specialist in anaesthesiology with clarification of the competence, the recommended learning strategies and the mandatory method(s) for workplace based assessment. Workplace based assessment tools can be found in the portfolio on www.DASAIM.dk.

The anaesthesiologist's expert role				
Anaesthesiology				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Workplace based assessment method(s), mandatory
<i>1</i>	<i>Demonstrates a basic theoretical, clinical and situational knowledge and understanding as well as sufficient clinical skills in the handling of anaesthesiological work and issues</i>	<ul style="list-style-type: none"> • Manages anaesthesia and perioperative medicine for procedures in surgery, gynaecology, orthopaedic surgery, all ASA classes for both minor and major surgery • Conducts preoperative risk assessment with regard to the comorbidity of the patient, and if necessary, patient optimisation • Is able to account for quality of life factors affecting anaesthesia and surgery related morbidity and mortality and is able to account for appropriate preoperative information, examination and optimisation related to these • Prepares a systematic plan for the perioperative course, such as monitoring and selection of anaesthetic method(s), including pre- and postoperative pain management, such as ultrasound guided/nerve-stimulated nerve blocks when indicated Prevents and handles possible complications and events as they emerge • Is able to manage relevant preoperative monitoring, including assessment of fluids and transfusion needs using, for example, FATE • Is able to manage diagnostics and treatment of coagulopathy in multi-transfused patients and is familiar with treatment of transfusion complications. • Prepares a systematic plan based on recorded care pathway descriptions and deviates from these when necessary • Records experience registration of relevant procedures and patient treatments 	Clinical rotation plan, training programmes and individual training plan Self-study Courses	Formative general assessment following each training element. Summative general assessment at the end of the last training element. Competence assessment no. 1, 2 Selected experience registration.

No.	Competences	Clarification of objectives	Learning strategies, recommendation	Workplace based assessment method(s), mandatory
2	<i>Informs the patient about the preoperative course and possible risks and obtains informed consent for specific procedures</i>	<ul style="list-style-type: none"> • Is able to manage patient identification, information and obtain informed consent from a competent, temporarily incompetent and permanently incompetent patient 	Training programme and individual training plan Self-study	Formative general assessment following each training element
3	<i>Completes the perioperative patient course according to the plan. Utilises relevant precautions, is vigilant and predictive and incorporates information from monitoring data, clinical symptoms and operative procedures in the global assessment of the patient's condition</i>	<ul style="list-style-type: none"> • Bases the plan on an integrated interpretation of clinical and paraclinical information and pathophysiological significance of competing conditions in relation to anaesthesia and surgery • Plans and utilises relevant haemodynamic monitoring grade • Responds adequately to changes in patient conditions • Has obtained an understanding of the role of anaesthesiology in development and implementation of the accelerating patient course with focus on minimum patient pathologisation 	Clinical rotation plan, training programmes and individual training plan Self-study Speciality-specific course	Formative general assessment following each training element. Summative general assessment at the end of the last training element. Formative Mini Cex following relevant training elements. Summative Mini Cex assessment at the end of the last training element. Competence assessment no. 3
4	<i>Carries out efficient patient transfer to the postoperative phase</i>	<ul style="list-style-type: none"> • Describes a plan for monitoring and treatment and criteria for discharge from postoperative observation ward to other ward or own home 	Clinical rotation plan, training programmes and individual training plan.	Formative general assessment following relevant training elements.
5	<i>Bases the plan for the elective and the acute perioperative patient course on balancing anaesthesiological assessment, respect for patient requests in cooperation with the surgeon as well as the organisational, technological and human resources</i>	<ul style="list-style-type: none"> • Assesses the severity and complexity of the task in relation to own resources and qualifications as well as the resources and qualifications of the local organisation • Co-operates with the team • Organises and manages an efficient operating room workflow • Conducts critical analysis and reflection on the actual course • Communicates adequately with the team, utilises the human and technological resources appropriately and requests appropriate assistance when needed • Evaluates the need for any expert guidance or transfer to highly specialised unit in cooperation with a relevant partner • Communicates adequately with surgeon, patient and relatives 	Clinical rotation plan, training programmes and individual training plan. Self-study	Formative general assessment following relevant training elements. Summative general assessment at the end of the last training element. Formative Mini Cex following relevant training elements. Summative Mini Cex assessment at the end of the last training element.

No.	Competences	Clarification of objectives	Learning strategies, recommendation	Workplace based assessment method(s), mandatory
6	<i>Keeps calm and maintains a sense of perspective during unexpected events</i>	<ul style="list-style-type: none"> ● Initiates rational initiatives for stabilisation of patient conditions ● Initiates systematic identification of cause and error ● Reports adverse events when required ● Informs patients about events and rights 	Clinical rotation plan, training programmes and individual training plan Self-study Speciality-specific course	Formative general assessment following relevant training elements. Competence card no. 19
7	<i>Outpatient surgery: Is able to manage patient course and anaesthesia for outpatient surgery</i>	<ul style="list-style-type: none"> ● Informs the patient about the planned course ● Decides together with the surgeon whether the patient is eligible or not for outpatient surgery ● Plans and manages the perioperative course in relation to patient comorbidity. ● Manages pre and postoperative pain management ● Describes a plan for discharge from recovery ward to own home or other ward ● Is part of cross-disciplinary teamwork ● Organises and manages an efficient workflow 	Clinical rotation plan, training programmes and individual training plan Self-study	Approved clinical stay Formative general assessment following relevant training elements. Selected experience registration.
8	<i>Anaesthesia outside of the operating room: Is able to manage anaesthesiological assistance during various procedures</i>	<ul style="list-style-type: none"> ● Is able to utilise safety procedures and equipment on site ● Maintain information and communication with the team and ensures that the team possesses the necessary competences. ● Provides sedation/anaesthesia and patient observation for interventional radiology examinations, ECT treatment, etc. 	Clinical training Self-study	Supervisor interview Selected experience registration.
9	<i>Advanced airway management: Is able to manage handling of both the normal and the expected and unexpected difficult airway</i>	<ul style="list-style-type: none"> ● Identify predictors for difficult mask ventilation or intubation and discuss possible precautions for prevention of unexpected difficult airway ● Is able to utilise algorithms in the management of unexpected difficult airways, including considerations in relation to surgical procedures and other circumstances ● Has conducted training in emergency tracheotomy (cricothyroidotomy) on a manikin 	Clinical training Speciality-specific course	OSCE on speciality-specific course Training plan/report Selected experience registration.

No.	Competences	Clarification of objectives	Learning strategies, recommendation	Workplace based assessment method(s), mandatory
10	<i>Obstetric anaesthesia: Is able to manage anaesthesiological assistance in vaginal delivery and anaesthetic and perioperative course of sectio as well as managing the newborn baby</i>	<ul style="list-style-type: none"> ● Is able to account for and manage pathophysiological conditions of mother and child during normal and complicated pregnancy in connection with anaesthesiological assistance in vaginal delivery and elective and acute sectio ● Is able to account for and manage anaesthesiological assistance in complicated pregnancy, including pre-eclampsia, eclampsia, abruptio, child abnormalities, multiple pregnancy, etc. ● Is able to account for and manage anaesthesiological assistance in extrauterine pregnancy and postpartum bleeding ● Is able to make a rational choice of general vs. regional anaesthesia type in relation to acute/elective sectio, including choice of epidural vs. spinal anaesthesia ● Is able to manage postoperative pain management ● Is able to manage specific ethical dilemmas in relation to mother and child in case of complications ● Is able to utilise guidelines for stabilising newborns in relation to gestational age and Apgar scoring, including standard dosing of medicine in cooperation with paediatrician and/or paediatric anaesthesiologist ● Is able to participate in teamwork and manage communication with team, patient and relatives in elective and acute sectio 	Clinical rotation plan, training programmes and individual training plan. Self-study Speciality-specific course	Approved clinical stay Clinical competence assessment no. 9 Experience registration General formative assessment following training element Formative Mini Cex following relevant training elements.
11	<i>Anaesthesia for vascular surgery: peripheral and central vascular surgery</i>	<ul style="list-style-type: none"> ● Is able to conduct a pre-anaesthesiological assessment of patient comorbidity. ● Is able to manage an anaesthetic and perioperative course for peripheral and central vascular surgery based on patient condition and nature of the procedure, including aortic surgery under supervision ● Is able to plan haemodynamic monitoring grade, choose pharmaceutical. Is able to account for indication, dosing and effect of the most commonly used anaesthetic agents and techniques as well as cardiovascular excipients ● Is able to manage relevant perioperative monitoring, including assessment of transfusion needs, diagnostics and treatment of coagulopathy in multi-transfused patients, familiarity with and treatment of transfusion complications, as well as assessment of hydration status using, for example, FATE ● Is able to manage bloodlessness, clamping of vessels and reperfusion in cooperation with surgeon ● Is able to participate in teamwork and manage communication with team, patient and relatives 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan	Approved clinical stay Formative general assessment following the training element. Clinical competence assessment no. 6 and 10 Selected experience registration.

No.	Competences	Clarification of objectives	Learning strategies, recommendation	Workplace based assessment method(s), mandatory
12	<i>Thoracic anaesthesia: thoracic surgery on heart and lungs, bronchoscopy</i>	<ul style="list-style-type: none"> • Is able to complete anaesthesia and perioperative course for cardiac and pulmonary surgery under supervision • Is able to account for pharmacology, indication, dosing and effect of the most commonly used anaesthetic agents and techniques as well as cardiopulmonary excipients • Is able to utilise techniques in relation to assisted and controlled ventilation and perfusion in connection with the perioperative course • Is able to plan grade for postoperative observation and treatment and possible indication of intensive monitoring. • Is able to utilise single-lung ventilation, is able to insert a double-barrel tube, is able to account for physiology in single-lung ventilation • Is able to manage communication and cooperation with surgeon, team, patient and relatives 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan	Approved clinical stay Formative general assessment following the training element. Clinical competence assessment no. 4, 5 Selected experience registration.
13	<i>Neuroanaesthesia: Head and column trauma, craniotomy</i>	<ul style="list-style-type: none"> • Is able to manage anaesthesiological treatment of patients with increased intracranial pressure increase (SAH, apoplexy, etc.) , including diagnostics, monitoring and treatment with specific focus on admission, stabilising and initial treatment of patients as well as indication – and handling of – patient's transport to highly specialised ward • Is able to account for the anaesthesiological management of head and column trauma from the scene of accident to intra-hospital treatment unit, including prioritisation of head trauma management in relation to other traumas • Is able to handle communication with treatment team during primary admission of patients with intracranial pathology • Is able to account for pharmacology, indication and adverse reactions of the frequently used medication in this patient category • Is familiar with peri- and postoperative course adjusted for the neurosurgical patient and is familiar with sedation regimens, ventilator therapy, haemodynamic and intracerebral monitoring modalities 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Speciality-specific course	Approved clinical stay Formative general assessment following each training element. Clinical competence assessment no. 7 Selected experience registration.
14	<i>Organ donation: Is able to account for anaesthesiological management of organ donors</i>	<ul style="list-style-type: none"> • Is able to account for regulatory, ethical and organisational aspects regarding organ donation • Is able to account for the identification of potential organ donors. • Is able to account for particular medical and pathophysiological conditions in relation to donor care and completion of organ donation • Is able to account for communication and cooperation with relatives, team and transplant centre regarding completion of organ donation. 	Self-study	Supervisor interview

No.	Competences	Clarification of objectives	Learning strategies, recommendation	Workplace based assessment method(s), mandatory
15	<i>Paediatric anaesthesia: Children > 2 years, minor and medium surgery: Is able to manage anaesthetic and perioperative course for ASA 1 and 2</i>	<ul style="list-style-type: none"> ● Is able to premedicate children for minor and medium surgery, manage relevant premedication and rules for fasting period ● Is able to choose relevant anaesthetic agents and calculate dose for such ● Is able to manage perioperative pain management, including inducing relevant paediatric blocks ● Is able to calculate administration of fluid, electrolyte and glucose, blood loss compensation as well as heat loss prevention ● Is able to account for specific conditions regarding airway anatomy for different age groups, the rationale for choice of intubation vs. laryngeal mask airway in relation to surgery ● Is able to handle alternatives for IV administration of fluid and medication as well as techniques for sedation in connection with examination or other procedures ● Is able to account for and handle causes of hypoxia during anaesthesia and utilise algorithms for this ● Is able to handle ethical issues regarding informed consent ● Is able to manage communication and cooperation with team, child and its relatives 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Speciality-specific course	Approved clinical stay Formative general assessment following the training element. Clinical competence assessment no. 8 Selected experience registration.
16	<i>Anaesthesia for Ear Nose and Throat diseases (ENT)</i>	<ul style="list-style-type: none"> ● Is able to manage anaesthesia and perioperative course for ENT. ● Is able to handle patients with pathologies in the upper respiratory tract and throat during sedation and anaesthesia induction ● Is able to manage positioning and secure the patient's airways, cooperation between anaesthesiologist/surgeon on the same working field ● Is able to manage postoperative pain management. ● Is able to communicate and co-operate with surgeon, team, patient and relatives 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan	Approved clinical stay Selected experience registrations. Formative general assessment following the training element.

Intensive care therapy				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
17	<i>Manages intensive care therapy based on a theoretical understanding of clinical and paraclinical indicators for organ dysfunction that requires intensive care treatment</i>	<ul style="list-style-type: none"> Manages intensive care therapy in relation to basic diseases and other complicated conditions, short-term and long-term prognosis Assesses the severity and complexity of the task in relation to own resources and qualifications as well as the resources and qualifications of the local organisation. On this basis, evaluates the need for any expert guidance or transfer to highly specialised unit in cooperation with a relevant partner 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Speciality-specific course	Approved clinical stay Formative general assessment following each training element. Formative Mini Cex following each training element. Competence assessment no. 11
18	<i>Assessment of patient for the purpose of intensive care treatment</i>	<ul style="list-style-type: none"> Assesses indication of intensive care therapy according to current patient condition and any comorbidities in cooperation with the referring unit Makes choices based on a balanced professional assessment, respect for patient requests and dialogue with collaborators Keeps records of considerations and conclusions 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Speciality-specific course	Approved clinical stay Formative general assessment following each training element Competence assessment no. 11
19	<i>Admission of intensive care patient</i>	<ul style="list-style-type: none"> Is able to manage efficient handling of newly admitted patients Informs and communicates relevantly with intensive care personnel prior to admission of new patient Prioritises and institutes immediate efforts based on adequate interpretation of clinical and paraclinical data Formulates and prioritises issues and tentative diagnosis, and prepares appropriate examination and treatment plan as well as adjustment of this according to course Obtains informed consent from competent patient Obtains documentation from temporarily incompetent patient and permanently incompetent patient Communicates and co-operates with patient, relatives, team and referring unit 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan. Speciality-specific course	Structured observation Competence assessment no. 11 Selected experience registration.

No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
20	<i>Ward round for intensive care patient</i>	<ul style="list-style-type: none"> ● Specifies the main issue and prepares a rational plan for monitoring and diagnostics and treatment ● Specifies indicators and plan for changes in treatment plan where appropriate according to patient condition ● Categorises/scores intensive care patients in relation to prognostic considerations generally and in relation to specific cases using recognised scoring system ● Accounts for knowledge about prophylaxis of complicated conditions for intensive care and prevention of these in cooperation with nursing staff ● Specifies criteria and plan for discharge from intensive care unit in cooperation with referring unit ● Communicates and co-operates with patient, relatives, team and referring unit 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan. Speciality-specific courses	Structured observation and oral report Competence assessment no. 12
21	<i>Management of patient with multiple organ failure</i>	<ul style="list-style-type: none"> ● Is able to manage intensive care treatment and perform critical analysis and reflection of patient courses in relation to theoretical and practical considerations ● Is able to account for theoretical considerations regarding clinical and pathophysiological background and cause for development of multiple organ failure ● Is able to utilise rational choice of symptomatic, causal and organ preserving and preventive treatment and monitoring strategies. ● Is able to utilise and account for relevant respiration supportive modes ● Is able to utilise and take steps to ensure haemodynamic optimisation ● Is able to utilise and account for relevant CRRT modes ● Is able to prepare relevant fluid and nutrition plan 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Speciality-specific course	Structured observation and oral report Competence assessment no. 13, 14
22	<i>Withholding or withdrawing intensive care treatment</i>	<ul style="list-style-type: none"> ● Is able to manage co-ordinated decision regarding withholding or withdrawing intensive care treatment under supervision ● Co-ordinates information and discussion about issues concerning the parties involved ● Is able to specify the ethical, regulatory as well as professional basis on which the decision is made ● Communicates and informs the patient, the relatives, the team and referring unit 	Clinical training Self-study Speciality-specific course	Supervisor interview

Emergency, trauma and prehospital treatment				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
23	<i>Is able to manage re-suscitation of children</i>	<ul style="list-style-type: none"> • Is able to utilise algorithms, apply techniques and dose medicine • Is able to account for specific conditions in hypothermic patients • Is able to perform as team leader and handle communication and cooperation with the team and relatives 	Clinical training Self-study Course?	Formative general assessment Supervisor interview
24	<i>Is able to manage re-suscitation of newborns</i>	<ul style="list-style-type: none"> • Is able to utilise algorithms, apply techniques and dose medicine. • Is able to perform as team leader and handle communication and cooperation with the team, including paediatrician. 	Clinical training Self-study Speciality-specific course	Formative general assessment Supervisor interview
25	<i>Transport of patients: Is able to manage intra-hospital and inter-hospital patient transport</i>	<ul style="list-style-type: none"> • Is able to assess patient suitability for transport and initiate adequate measures for stabilisation of the condition prior to transport • Is able to account for specific measures regarding monitoring and treatment during transport • Is able to transfer patient responsibility, including arrangements with recipient, planning and managing transport and handing over patient responsibility • Is able to plan team combination based on patient condition as well as maintaining treatment level during transport • Is able to instruct accompanying personnel – also when not taking part in transport • Is familiar with opportunities and limitations during transport, including different means of transport, such as ambulance, special-purpose ambulance, and helicopter. Is able to perform as team leader and handle communication and cooperation with the team 	Clinical training Self-study Speciality-specific course	Selected experience registration. Formative general assessment Competence assessment no. 16
26	<i>Emergency medicine: Is able to manage acute lifethreatening conditions due to disease or accident</i>	<ul style="list-style-type: none"> • Is able to initiate systematic examination and treatment of vital functions, including utilisation of the ABCDE algorithm • Is able to account for ultrasound, such as FATE/FAST, for patient assessment • Is able to prioritise and organise situations with more than one acute patient • Is able to efficiently manage teamwork and assume team leader position when necessary • Is able to conduct critical analysis and reflection on the actual course • Is able to handle ethical and practical issues regarding information to relatives, collaborator and other stakeholders 	Clinical training, including on-call participation Self-study Clinical rotation plan, training programmes and individual training plan Speciality-specific course	Formative general assessment Competence assessment no. 16

No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
27	<i>Trauma admission</i>	<ul style="list-style-type: none"> ● Is able to initiate systematic examination of treatment of vital functions in trauma patients, including utilisation of the ABCDE algorithm ● Is able to handle communication with treatment provider on trauma site/primary trauma admission ● Is able to account for utilisation of UL, e.g. FAST in trauma admission ● Is able to prioritise and organise situations with more than one patient ● Is able to efficiently manage teamwork and assume team leader position when necessary ● Is able to conduct critical analysis and reflection on the actual course ● Is able to handle ethical and practical issues regarding information to relatives, collaborator and other stakeholders 	Clinical training, including on-call participation Self-study Clinical rotation plan, training programmes and individual training plan Speciality-specific course	Selected experience registration. Formative general assessment. Formative Mini Cex following relevant training elements. Competence assessment no. 16
28	<i>Prehospital treatment</i>	<ul style="list-style-type: none"> ● Is able to account for prehospital organisation with focus on professional healthcare ● Is able to account for applicable guidelines for on-site management, including prehospital organisation and command structure ● Is able to account for the prehospital team and their competences ● Is able to manage communication and teamwork with MECC (Medical Emergency Coordinating Centre) ● Is able to account for acute and critical conditions where early emergency pre-hospital care is relevant ● Is able to account for the importance of context for treatment in "unusual" environments ● Is able to perform under supervision as treating consultant on mobile emergency care unit 	Clinical training Self-study – theoretical knowledge Clinical rotation plan, training programmes and individual training plan Mobile emergency care unit	Approved clinical stay Selected experience registration.

Pain management				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
29	<i>Management of patients with acute pain</i>	<ul style="list-style-type: none"> • Is able to manage patient with acute non-malignant pain • Strives towards treatment of acute pain that is acceptable for the patient • Is able to categorise pain into nociceptive, neuropathic and inflammatory pain • Is able to account for pharmacology and aeqvipotense for analgesics and combination therapy • Is able to account for local analgesic techniques • Is able to institute, titrate and monitor evidence based pain management based on pharmacological knowledge of different types of analgesics and adjunctive medicine and on this basis make a rational choice of pharmaceutical and their form of administration (for example local analgesia) • Is able to identify and plan treatment for patients with complex pain issues, including referral to specialists, e.g. surgical patient with chronic pain condition or drug misuse 	Clinical training training plan Self-study Speciality-specific course	Formative general assessment Competence assessment no. 15
30	<i>Management of patient with cancer pain and patient with chronic non-malignant pain</i>	<ul style="list-style-type: none"> • Is familiar with management of patient with acute cancer pain • Is able to account for acceptable treatment level for the patient • Is able to categorise cancer related pain • Is able to account for basic pharmacological therapy and symptom relief • Is familiar with treatment following bio-psychosocial model which includes pain relief and best possible quality of life • Is familiar with psycho-existential and socially dominant issues • Is able to identify and manage under supervision the somatic part of the overall issue • Is able to categorise pain types into nociceptive, neuropathic and inflammatory pain • Is able to prepare a rational plan under supervision based on a systematic pain diagnosis/pain analysis, such as objective examination, including a neurological examination when this seems relevant 	Training plan Self-study Speciality-specific course	Formative general assessment Competence assessment no. 15

The communicator role				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
31	<i>Difficult interview: Is able to handle conversations with particular behavioural, communicative, ethic, emotional or existential issues.</i>	<ul style="list-style-type: none"> • Is able to handle communication with children and their parents, patients with acute lifethreatening conditions, patients with impaired consciousness, patients without legal capacity, linguistic or cultural barriers • Is able to handle communication with patients and relatives during crisis • Is able to handle communication with patients and relatives in case of unexpected complications, adverse events, dissatisfaction and complaints about treatment 	Clinical training Self-study	Formative general assessment Competence assessment no. 17
32	<i>Inter-professional communication: Is able to handle efficient written and oral communication with collaborators.</i>	<ul style="list-style-type: none"> • Manages correct, adequate and clear record keeping and data registration • Manages structured, sufficient communication during transfer of patient responsibility to others at all hours • Ensures that the recipient understands treatment plans, indicators for intervention and/or call for assistance • Is able to adapt communication and conduct to the situation and maintain constructive and clear communication 	Clinical training Self-study Speciality-specific courses	Formative general assessment Formative Mini Cex

The collaborator role				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
33	<i>Teamwork: Is able to handle constructive teamwork, assess competences, support team members and assume team leader position, if appropriate, in elective and emergency situations</i>	<ul style="list-style-type: none"> • Obtains relevant information about professional qualifications of the team members • Instructs team members in tasks, if required • Utilises human resources optimally and defines the specific roles and functions for team members at all times • Is able to assess the need for any further assistance • Facilitates that the team appears as loyal respecting individual opinions and contributions • Demonstrates receptiveness and respect for team member input • Is able to handle team conflicts • Is able to conduct critical analysis and reflection on the actual course 	Clinical training Self-study Speciality-specific course	Formative general assessment Formative Mini Cex
34	<i>Cross-disciplinary co-operation: Is able to perform constructively with other specialities and staff groups in elective and emergency situations</i>	<ul style="list-style-type: none"> • Is able to co-ordinate multidisciplinary task management • Demonstrates understanding for and ability to communicate constructively with cross-disciplinary teams • Is able to adapt communication to the nature of the situation and demands for intensity of action 	Clinical training Self-study	Formative general assessment Formative Mini Cex
35	<i>Conflict management: Is able to handle conflict management constructively in cooperation with others</i>	<ul style="list-style-type: none"> • Understands and acknowledges conflict of interest in cooperation relations and patient/relative relations • Contributes to active conflict resolution 	Clinical training Self-study Speciality-specific course	Formative general assessment

The academic role				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
36	<i>Own learning: Is able to arrange and complete a continuous plan for own learning</i>	<ul style="list-style-type: none"> Is able to clarify objectives for own learning and utilise different learning methods in achieving these Is able to document the achievement of learning objectives 	Training plan Guide Self-study	Training plan/report
37	<i>Teaching, training of others: Is able to plan and complete teaching, training and guidance of others</i>	<ul style="list-style-type: none"> Utilises different methods in relation to the trainee's qualifications, the current subject matter and the learning objective 	Teaching and potential supervisor tasks	Formative general assessment
38	<i>Obtaining new knowledge in relation to practice: Is able to perform a systematic assessment of practice and reflect on this in relation to theory and scientific literature. Is able to obtain relevant knowledge about a specific issue</i>	<ul style="list-style-type: none"> Is able to formulate an issue statement and formulate this into questions that can be answered through literature Is able to perform focused literature search, critical assessment of literature and discussion of the result in relation to the relevant issue Is able to conduct knowledge search in case of actual issues and utilise this knowledge in the treatment of patients 	Reflective reports Research training project Research training course Self-study	Research training project

The professional role				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
39	<i>Possesses the ability and will to reflect critically on own actions, acknowledge and handles adverse events and possible errors</i>	<ul style="list-style-type: none"> • Follows guidelines, instructions and guidance, substantiates an argument for any deviation from these • Is familiar with department and national policies regarding management of adverse events and errors • Has respect, understanding and empathy for colleagues and others who have encountered adverse events and errors • Contributes to mutual learning for adverse events and possible errors 	Clinical training Self-study Morbidity meetings Speciality-specific course	Formative general assessment Competence assessment no. 19
40	<i>Professional relation to the organisation: Demonstrates awareness of the specific role and expertise of the anaesthesiologist during acute lifethreatening situations especially and the professional responsibility that follows</i>	<ul style="list-style-type: none"> • Demonstrates respect for other people's need and request for anaesthesiological expertise based on an ethical balancing of patient needs for anaesthesiological assistance as well as own and department resources • Includes the aspect of patient safety in day-to-day work • Contributes to constructive and efficient utilisation of anaesthesiological resources • Contributes to increased knowledge of anaesthesiological treatment options in the organisation • Demonstrates responsibility towards oneself, patient, organisation and surroundings 	Clinical training Conferences Self-study Speciality-specific course	Formative general assessment

The organiser and manager role				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
41	<i>Work management: Is able to organise and manage an efficient workflow in the operation theatre, operating room and intensive care unit and on duty in cooperation with other personnel</i>	<ul style="list-style-type: none"> • Is able to prioritise and plan own tasks • Is able to prioritise and allocate tasks in relation to treatment needs, staff resources, organisational conditions and educational responsibility with respect for efficiency and safety in the treatment of patients • Is able to instruct and supervise tasks performed by other people • Provides constructive feedback on completed tasks 	Work manager function	360 ⁰ assessment Formative general assessment
42	<i>Team management: Manages team leader position in elective and emergency situations</i>	<ul style="list-style-type: none"> • Assumes team leader position if appropriate • Includes team member input in decision-making • Organises and prioritises workload with respect for demands for efficiency and safety in patient management and inconsideration of own and organisational resources 	Team leader function	Formative general assessment Formative Mini Cex
43	<i>Conference management: Is able to manage the function as conference manager and contribute to an efficient conduction of work conferences</i>	<ul style="list-style-type: none"> • Is able to organise conduction of conferences, present a relevant summary and conclusion • Demonstrates receptiveness towards participants and provides adequate and constructive response to their contributions • Is able to maintain efficient disposition of time and focus the participant's discussion in a straightforward and unobjectionable way 	Conference manager function	Competence assessment no. 18 Formative general assessment

The health promoter role				
No.	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
44	<i>Is able to account for quality of life factors affecting anaesthesia and surgery related morbidity and mortality, and course of critical disease that require intensive care treatment</i>	<ul style="list-style-type: none"> ● Manages patient counselling regarding quality of life factors ● Is able to account for the possibility of help with smoking, alcohol and drug cessation ● Is able to account for possibility of help with loss of weight 	Clinical training Self-study	Supervisor interview

3.4.3 Mandatory courses

Objectives and teaching methods

The courses provide an introduction to the four columns and address the intermediate objectives described in detail under section 3.4.2. Generally, the subject matters are selected based on the areas that have proven difficult to cover during the clinical training according to experience and those posing a risk for the patient. Teaching methods range between interactive lectures, group work, case discussions, proficiency training of clinical skills, simulation-based training, etc. The courses are mainly based on active learning. Either the participants prepare themselves by solving a task prior to the course or by preparing a presentation of a case during the actual course. The coming years, the courses will increasingly be supported by preparation elements in the form of assignments and video examples, which should be reviewed prior to course attendance. In time, these elements will be web-based. Furthermore, electronic media will be an important part of the follow-up after the course. Simulation-based training is used on more than 50% of the course days. On the actual course day, the courses often consist of a mix of the different teaching methods.

Assessment of participant knowledge and skills and requirements for approval

Assessment of participants' knowledge and skills are conducted on several of the courses. The assessment is conducted by written tests (often prior to and post course) of knowledge and questionnaires (attitudes, level of familiarity with the given assignments, assessment of own competences). Furthermore, individual and team-based objective structured clinical observation is used at the end of several of the courses. The participants complete up to 10 stations with different assignments. Some of these are simulation based scenarios. Subsequently, the participants receive feedback and information whether they have passed/failed. Based on this, the participants prepare a learning plan, which is forwarded to the person responsible for education of the department in order to draft a further training plan for the participants.

Currently, active course participation is the requirement for approval of the course. During the coming year, it will also be a requirement for approval that assignments before and after the course are completed.

Practical conditions

Course methods are increasingly becoming simulation-based. Therefore, the courses are held at simulation centres in cooperation with experts in simulation-based training. All courses are held within one's own speciality (no external course providers). Currently, all courses are non-residential courses. However, it has been discussed whether the first course could be converted to an residential-course.

The course sequence has been established to support the clinical stays in the best possible way. A new course sequence is launched twice a year, in May and November, and each doctor should follow his/her class during the core training. The courses are national and based on identical concepts. Some courses are held in 2 regions but have the same structure and learning objectives. A detailed course description can be found on www.DASAIM.dk.

The table below contains a list of course titles, duration and a short description of the objectives.

Course title	Number of days	Held year	Objectives
Introduction to the Core Training	1	1 st year	Introduction to the core training and teamwork
Airway Management	3	1 st year	Is able to manage handling of the normal as well as the unexpected difficult airway
Intensive Care Therapy	3	1 st year	Assessment of patient for the purpose of intensive care treatment, patient admission. Initial treatment
Acute Pain Chronic Pain	2	1 st year	Manages patient with acute (non-postoperative) pain Familiar with different types of pain and multimodal treatment strategy
Patient Safety and Non-technical Qualifications	3	1 st year	Keeps calm and maintains a sense of perspective during unexpected events. Communication with patient and relatives. Inter-professional communication
Obstetrics and the newborn	2	2 nd year	Manages anaesthesiological assistance during delivery as well as managing the newborn baby
Paediatric Anaesthesia	3	2 nd year	Children > 2 years Paediatric anaesthesia and perioperative course for ASA 1-2
Advanced Intensive Care Therapy	4	3 rd year	Management of patient with multiple organ failure. Withholding or withdrawing therapy Advanced haemodynamics and respiration supportive treatment
Neuro, Trauma and Pre-hospital	3	3 rd year	Head and column trauma, organ donation. Admission and treatment of the acute medical patient and trauma patient. Transport and prehospital treatment
Advanced Anaesthesia	3	4 th year	Completes the perioperative patient course, reacts adequately in case of changes Understanding the role of the anaesthesiology in the accelerating patient course. Treatment limits and ethical dilemmas
Clinical Decision-making	3	4 th year	Professional relations to organisations and expertise in acute lifethreatening situations Specific objectives related to the 4 columns of the speciality

3.4.4 Mandatory Research Training

Please see the description on www.dasaim.dk

4 Documentation

This part contains the documentation necessary to allow the doctor to achieve recognition as specialist doctor during the core training.

The documentation consists of:

1. Approval of mandatory competences and courses
2. Certification of timely completion of training element during further medical training and the research training module

Part 1 is prepared by the Danish Health and Medicines Authority following nomination from the speciality association.

Part 2 is prepared by the Danish Health and Medicines Authority.

4.1 Logbook of Introductory Training

See the curriculum for the introductory training in anaesthesiology.

4.2 Logbook of Core Training

4.2.1 Mandatory Competences

Competence no.	Name of the doctor in training: Personal identification number Competence (text)	Date of approval	Signature and stamp approval/legible name of signatory
1	<i>Demonstrates a basic theoretical, clinical and situational knowledge and understanding as well as sufficient clinical skills in the handling of anaesthesiological work and issues</i> WBA 1, 2, GA (General Assessment)		
2	<i>Informs the patient about the pre-operative course and possible risks and obtains informed consent for specific procedures</i> GA		
3	<i>Completes the perioperative patient course according to the plan. Utilises relevant precautions, is vigilant and predictive, and incorporates information from monitoring data, clinical symptoms and the operative procedure in the global assessment of the patient's condition</i> WBA 3, GA, Mini Cex		
4	<i>Carries out efficient patient transfer to the postoperative phase</i> GA		
5	<i>Bases the plan for the elective and the acute perioperative patient course on balancing anaesthesiological assessment, respect for patient requests in cooperation with the surgeon as well as the organisational, technological and human resources</i> GA, Mini Cex		
6	<i>Keeps calm and maintains a sense of perspective during unexpected events</i> WBA 19, GA		
7	<i>Outpatient surgery: Is able to manage patient course and anaesthesia for outpatient surgery</i> GA		
8	<i>Anaesthesia outside of the operating room: Is able to manage anaesthesiological assistance during various procedures</i> Supervisor interview, GA		
9	<i>Advanced airway management: Is able to manage the handling of the normal, the expected and the unexpected difficult airway</i> OSCE, Training plan, GA		

Competence no.	Name of the doctor in training: Personal identification number Competence (text)	Date of approval	Signature and stamp approval/legible name of signatory
10	<i>Obstetric anaesthesia: Is able to manage anaesthesiological assistance in vaginal delivery and anaesthetic and perioperative course of sectio as well as managing the newborn baby</i> WBA 10, GA, Mini Cex		
11	<i>Anaesthesia for vascular surgery: peripheral and central vascular surgery</i> WBA 6, GA		
12	<i>Thoracic anaesthesia: thoracic surgery on heart and lungs, bronchoscopy, mediastinoscopy</i> WBA 4, 5, GA		
13	<i>Neuroanaesthesia: Head and column trauma, craniotomy</i> WBAA 7, GA		
14	<i>Organ donation: Is able to account for anaesthesiological management of organ donors</i> Supervisor interview, GA		
15	<i>Paediatric anaesthesia: Children < 2 years, minor and medium surgery: Is able to manage anaesthetic and perioperative course for ASA 1 and 2</i> WBA 8, GA		
16	<i>Anaesthesia for Ear Nose and Throat diseases (ENT)</i> GA		
17	<i>Manages intensive care therapy based on a theoretical understanding of clinical and paraclinical indicators for organ dysfunction that require intensive care treatment</i> WBA 11, GA. Mini Cex		
18	<i>Assessment of patient for the purpose of intensive care treatment</i> WBA 11, GA. Mini Cex		
19	<i>Admission of intensive care patient</i> WBA 11, GA. Mini Cex		

Competence no.	Name of the doctor in training: Personal identification number Competence (text)	Date of approval	Signature and stamp approval/legible name of signatory
20	Ward round for intensive care patient WBA 12		
21	Management of patient with multiple organ failure WBA 13, 14		
22	Withholding or withdrawing intensive care treatment Supervisor interview, GA		
23	Is able to manage resuscitation of children Supervisor interview GA		
24	Is able to manage resuscitation of newborns Supervisor interview, GA		
25	Transport of patients: Is able to manage intrahospital and interhospital patient transport WBA 16, GA		
26	Emergency medicine: Is able to manage acute lifethreatening conditions due to disease or accident WBA 16, GA		
27	Trauma admission WBA 16, GA		
28	Prehospital treatment WBA 16, GA		
29	Management of patients with acute pain WBA 15, GA		

Competence no.	Name of the doctor in training: Personal identification number Competence (text)	Date of approval	Signature and stamp approval/legible name of signatory
30	<i>Management of patient with cancer pain and patient with chronic non-malignant pain</i> WBA 15, GA		
31	<i>Difficult interview: Is able to handle conversations with particular behavioural, communicative, ethic, emotional or existential issues</i> WBA 17, GA		
32	<i>Inter-professional communication: Is able to handle efficient written and oral communication with collaborators</i> GA, Mini Cex		
33	<i>Teamwork: Is able to handle constructive teamwork, assess competences, support team members and assume team leader position, if appropriate, in elective and emergency situations</i> GA, Mini Cex		
34	<i>Inter-disciplinary cooperation: Is able to perform constructively with other specialities and staff groups in elective and emergency situations</i> GA, Mini Cex		
35	<i>Conflict management: Is able to handle conflict constructively in cooperation with others</i> GA		
36	<i>Own learning: Is able to arrange and complete a continuous plan for own learning</i> Training plans		
37	<i>Teaching, training of others: Is able to plan and complete teaching, training and guidance of others</i> GA		
38	<i>Obtaining new knowledge in relation to practice: Is able to perform a systematic assessment of practice and reflect on this in relation to theory and scientific literature</i> <i>Is able to obtain relevant knowledge about a specific issue</i> Research training project		
39	<i>Possesses the ability and will to perform critical reflection on own actions, acknowledge and handles adverse events and possible errors</i> WBA 19, GA		

Competence no.	Name of the doctor in training: Personal identification number Competence (text)	Date of approval	Signature and stamp approval/legible name of signatory
40	<i>Professional relation to the organisation: Demonstrates awareness of the specific role and expertise of the anaesthesiologist during acute lifethreatening situations especially, and the professional responsibility that follows</i> GA		
41	<i>Work management: Is able to organise and manage an efficient workflow in the operation theatre, operating room and intensive care unit and on duty in cooperation with other personnel</i> 360 ⁰ assessment, GA		
42	<i>Team management: Assumes team leader position in non-acute and emergency situations</i> GA, Mini Cex		
43	<i>Conference management: Is able to manage the function as conference manager and contribute to an efficient conduction of work conferences</i> WBA 18, GA		
44	<i>Is able to account for quality of life factors affecting anaesthesia and surgery related morbidity and mortality, and course of critical disease that require intensive care treatment</i> Supervisor interview		

WBA = Workplace based assessment

4.2.2 Mandatory Core Training Courses

Basic courses

Course title	Name of the doctor in training: Personal identification number Course period	Date of approval	Signature and stamp approval/legible name of signatory
Course in organisation and management of the health-care system 1			
Course in organisation and management of the health-care system 2			
Course in organisation and management of the health-care system 3			

Specialty-specific courses

Course title	Name of the doctor in training: Personal identification number Course period	Date of approval	Signature and stamp approval/legible name of signatory
Introduction to the Core Training			
Airway Management			
Intensive Care Therapy			
Acute Pain Chronic Pain			
Patient Safety and Non-technical Qualifications			
Obstetrics and the New-born Baby			
Paediatric Anaesthesia			
Advanced Intensive Care Therapy			
Neuro, Trauma and Pre-hospital			
Advanced Anaesthesia			
Clinical Decision-making			
Certification from the core course director			
Certification of completion and approval of all speciality-specific courses	Date, signature and stamp/legible name		

Mini Clinical Examination Mini Cex	Name of the doctor in training: Personal identification number Training course	Date of approval	Signature and stamp approval/legible name of signatory

Certification from the head consultant responsible for education during the last training course:	
This is to certify that the scoring of the last Mini Clinical Examination (Mini Cex) is at "expected level" or "above expected level".	Date, signature and stamp/legible name

4.2.3 Certification of Completion of Research Training

Form: Certification of completion of research training module can be found on [the Danish Health and Medicines Authority website](#). The form is signed by the head consultant responsible for education or research.

4.2.4 Certification of Approved Recruitment

Form: Certification of timely completion of training element during further medical training can be found on [the Danish Health and Medicines Authority website](#). The form is signed by the head consultant responsible for education.

5 Useful Links

5.1 General Links

[Danish Health and Medicines Authority, specialist and further training](#)

[Organization of Danish Medical Societies \(the former Danish Medical Society\)](#)

The regional secretariats for continuing medical education:

[Further Training Region North \(Videreuddannelsesregion Nord\)](#)

[Further Training Region South \(Videreuddannelsesregion Syd\)](#)

[Further Training Region East \(Videreuddannelsesregion Øst\)](#)

5.2 Speciality-specific links

www.dasaim.dk