

Curriculum for Specialist Training in Anaesthesiology

Core Training Programme

2018



DASAIM

*Danish Society of Anaesthesiology
and Intensive Care Medicine*

Foreword

According to section 2 of publication no. 96 of 2 February 2018 concerning training of specialist doctors, the Curriculum for Specialist Training in Anaesthesiology is approved by the Danish Health Authority.

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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1 Introduction

According to section 2 of publication no. 96 of 2 February 2018 (with later amendments) concerning training of specialist doctors, the Statements of Aims for the medical specialties are approved by the Danish Health 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 specialties 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 and the core part of the specialty training programme.

2 Transition to new Statements of Aims

This Statements of Aims and the related documentation and overviews are valid for the clinical rotations advertised by 1 November 2018 or hereafter. The advertised rotations and current rotations on this date can complete the rotation under the former Statement of Aims or by agreement choose to follow this Statements of Aims and Documentation.

3 The General Part

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

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

4 The Anaesthesia Specialty Part

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

4.1 Description of the Anaesthesiology Specialty

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

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

The majority of the anaesthesiologists are employed by hospitals with a general function within the specialty 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 include anaesthesia and patient management before, during and after surgery or examination. Anaesthesiology is a rather new specialty 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 specialties
- 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 1980s pain management was established as a specific branch in anaesthesiology. There are three 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. At some locations they 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 life-threatening condition due to disease or trauma as well as involvement in disaster medicine organisation. The anaesthesiologic function in emergency, trauma and prehospital medicine exist in several different areas:

- In-hospital emergency medicine: management of patients with acute life-threatening 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 are carried out within anaesthesiology. The trend is that researchers are organised in larger multi-professional research groups. Research in training is well established. 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 increasingly 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 seven formalised further training programmes in intensive care medicine, pain management, paediatric anaesthesia, critical emergency medicine and advanced obstetric anaesthesia, thoracic anaesthesia, and perioperative management. This training takes two 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.

4.2 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 goal of the

training is that the specialists in anaesthesiology will be able to manage patients in need of anaesthetic assistance in a function-bearing unit. The training features a presentation of the specialty'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 one-year introductory training programme and a core training of four 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's website www.sundhedsjobs.dk and on the website of the Danish secretariat for continuing medical education, Videreuddannelsessekretariaterne, in each of the three educational regions. There is a total of 92 introductory positions and each year 56 vacancy positions are announced for the core training in anaesthesiology (cf. 2018-2020 dimension plan). Passing the introductory training is the competence requirement for the core training.

Training composition and contents

The trainee will regardless of training site 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 Regional Councils for Further Medical Education plan and approve the training programme. 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 Authority and are described by both authorities. Furthermore, the core training course contains specific courses for anaesthesiologists of a total of 27 days/189 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 train 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. The contents of the course series, including course objective, teaching and evaluation methods, are described in section 4.4.4.

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 the practice within the anaesthesia specialty on a scientific basis. The goal is that the trainee is able to apply a systematic approach here, and the program encompass the following

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 a guideline 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.

4.3 Introductory training

See the curriculum for introductory training in anaesthesiology.

4.4 Core Training Programme

4.4.1 Competences

The individual competences to be evaluated are described according in section 4.4.4 according to the seven doctor roles. Each department can choose between the recommended learning strategies. The listed method(s) for competence assessment is mandatory.

4.4.2 Learning strategies and methods for Workplace-Based Assessment

Competence cards and instructions can be found on www.dasaim.dk under "uddannelsesudvalg" (educational committee) -> "hoveduddannelse" (core training).

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 Evaluation Exercise (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 Secretary for Continuing Medical Education, Det Regionale Videreuddannelsessekretariatene. 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 the execution of four procedures: spinal anaesthesia, epidural anaesthesia, Central Venous Line 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 or more of the four procedures according to oneself or the supervisor.

Registration of experience

The trainee continuously conducts registration of selected performances within the anaesthesia speciality 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. By the structured conversation with supervisor the experience registration is reviewed to adjust the clinical activities to meet the experience registration objectives of the department. 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 achieved.

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 is able to *reflect* and *elaborate* on practice.

Specific assessments of *quality of work* that has been conducted are 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 workplace-based 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 patient cases 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 logbog.net with other documentation that the trainee would like to present.

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

4.4.3 List of Mandatory Competences for the Specialty

This list contains the minimum requirements for a 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
1	<i>Demonstrates a basic theoretical, clinical and situational knowledge and understanding as well as sufficient clinical skills in the handling of work and issues within the anaesthesia specialty.</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 optimization. • Accounts for quality of life factors affecting anaesthesia and surgery related morbidity and mortality and accounts 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. • Manages relevant preoperative monitoring, including assessment of fluids and transfusion needs using, for example, FATE. • Manages 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 Formative Mini Cex after relevant training elements Summative Mini Cex assessment at the end of the last training element Competence card no 1, 2 Selected experience registration

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"> Manages patient identification, information and obtains 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"> Conducts 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 "fast track" plans with focus on minimum patient pathologizing. 	Clinical rotation plan, training programmes and individual training plan Self-study Specialty-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 card 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 balancing on anaesthesia 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. Cooperates 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

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 Specialty-specific course	Formative general assessment following relevant training elements. Competence card no 20
7	<i>Outpatient surgery: manages 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 another ward. • Is a 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 the operating room: manages anaesthesia assistance during various procedures.</i>	<ul style="list-style-type: none"> • Utilises safety procedures and equipment on site. • Ensures 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	Structured conversation with supervisor Selected experience registration
9	<i>Advanced airway management: manages handling of both the normal and the expected and unexpected difficult airway.</i>	<ul style="list-style-type: none"> • Identifies predictors for difficult mask ventilation or intubation and discusses possible precautions for prevention of unexpected difficult airway. • Utilises 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 Specialty-specific course	OSCE on specialty specific course Training plan/report Selected experience registration Competence card no 11

10	<i>Obstetric anaesthesia: manages anaesthesia 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"> • Accounts for and manages pathophysiological conditions of mother and child during normal and complicated pregnancy in connection with anaesthesia assistance in vaginal delivery and elective and acute section. • Accounts for and manages anaesthesia assistance in complicated pregnancy, including pre-eclampsia, eclampsia, abrutio, child abnormalities, multiple pregnancy, etc. • Accounts for and manages anaesthesia assistance in extrauterine pregnancy and postpartum bleeding. • Makes a rational choice of general vs. regional anaesthesia type in relation to acute/elective sectio, including choice of epidural vs. spinal anaesthesia. • Manages postoperative pain management. • Manages specific ethical dilemmas in relation to mother and child in case of complications. • Utilises 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. • Participates in teamwork and manages communication with team, patient and relatives in elective and acute section. 	Clinical rotation plan, training programmes and individual training plan. Self-study Specialty-specific course	Approved clinical stay Competence card 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"> • Conducts a pre-anaesthesia assessment of patient comorbidity. • Manages 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. • Plans haemodynamic monitoring grade, chooses relevant pharmacae. Accounts for indication, dose and effect of the most commonly used anaesthetic agents and techniques as well as cardiovascular drugs. • Manages relevant perioperative monitoring, including assessment of transfusion needed, diagnostics and treatment of coagulopathy in multi-transfused patients, knowledge and treatment of transfusion complications, as well an assessment of hydration status using, for example, FATE. • Manages bloodlessness, clamping of vessels and reperfusion in cooperation with surgeon. • Participates 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 Competence card no 6 and 10 Selected experience registration
12	<i>Thoracic anaesthesia: thoracic surgery on heart and lungs, bronchoscopy</i>	<ul style="list-style-type: none"> • Completes anaesthesia and perioperative course for cardiac and pulmonary surgery under supervision. 	Clinical training Self-study	Approved clinical stay

		<ul style="list-style-type: none"> • Accounts for pharmacology, indication, dosing and effect of the most commonly used anaesthetic agents and techniques as well as cardiopulmonary drugs. • Utilises techniques in relation to assisted and controlled ventilation and perfusion in connection with the perioperative course. • Makes a plan for postoperative observation and treatment and possible indication of intensive monitoring. • Utilises single-lung ventilation, inserts a double-barrel tube, accounts for physiology in single-lung ventilation. • Manages communication and cooperation with surgeon, team, patient and relatives. 	Clinical rotation plan, training programmes and individual training plan	Formative general assessment following the training element. Competence card no 4, 5 Selected experience registration
13	<i>Neuroanaesthesia: head and column trauma, craniotomy</i>	<ul style="list-style-type: none"> • Manages anaesthesia 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. • Accounts for the anaesthesia 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. • Handles communication with treatment team during primary admission of patients with intracranial pathology. • Accounts 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 Specialty -specific course	Approved clinical stay Formative general assessment following each training element Competence card no 7 Selected experience registration
14	<i>Organ donation: accounts for anaesthesia management of organ donors.</i>	<ul style="list-style-type: none"> • Accounts for regulatory, ethical and organisational aspects regarding organ donation. • Accounts for the identification of potential organ donors. • Accounts for particular medical and pathophysiological conditions in relation to donor care and completion of organ donation. • Accounts for communication and cooperation with relatives, team and transplant centre regarding completion of organ donation. 	Self-study	Structured conversation with supervisor

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"> • Premedicates children for minor and medium surgery, manages relevant premedication and rules for fasting period. • Chooses relevant anaesthetic agents and calculates dose for such. • Manages perioperative pain management, including inducing relevant paediatric blocks. • Calculates administration of fluid, electrolyte and glucose, blood loss compensation as well as heat loss prevention. • Accounts for specific conditions regarding airway anatomy for different age groups, the rationale for choice of intubation vs. laryngeal mask airway in relation to surgery. • Handles alternatives for IV administration of fluid and medication as well as techniques for sedation in connection with examination or other procedures. • Accounts for and handle causes of hypoxia during anaesthesia and utilise algorithms for this. • Handles ethical issues regarding informed consent. • Manages communication and cooperation with team, child and its relatives. 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Specialty-specific course	Approved clinical stay Formative general assessment following the training element Competence card no 8 Selected experience registration
16	<i>Anaesthesia for Ear Nose and Throat diseases (ENT)</i>	<ul style="list-style-type: none"> • Manages anaesthesia and perioperative course for ENT. • Handles patients with pathologies in the upper respiratory tract and throat during sedation and anaesthesia induction. • Manages positioning and secure the patient's airways in cooperation between anaesthesiologist/surgeon on the same working field. • Manages postoperative pain management. • Communicates and co-operates 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 Competence card no 11

<i>Intensive care therapy</i>				
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 Specialty-specific course	Approved clinical stay Formative general assessment following each training element Formative Mini Cex following each training element Competence card no 12
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 Specialty-specific course	Approved clinical stay Formative general assessment following each training element Competence card no 12
19	<i>Admission of intensive care patient</i>	<ul style="list-style-type: none"> • Manages 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 cooperates with patient, relatives, team and referring unit. 	Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Specialty-specific course	Structured observation Competence card no 12 Selected experience registration.

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 plans 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 plans for discharge from intensive care unit in cooperation with referring unit. • Communicates and cooperates with patient, relatives, team and referring unit. 	<p>Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Specialty-specific courses</p>	<p>Structured observation and oral report Competence card no 13</p>
21	<i>Management of patient with multiple organ failure</i>	<ul style="list-style-type: none"> • Manages intensive care treatment and performs critical analysis and reflection of patient courses in relation to theoretical and practical considerations. • Accounts for theoretical considerations regarding clinical and pathophysiological background and cause for development of multiple organ failure. • Makes rational choice based on symptomatic, causal and organ preserving and preventive treatment and monitoring strategies. • Utilises and accounts for relevant respiration supportive modes. • Utilises and takes steps to ensure haemodynamic optimisation. • Utilises and accounts for relevant CRRT modes. • Prepares relevant fluid and nutrition plan. 	<p>Clinical training Self-study Clinical rotation plan, training programmes and individual training plan Specialty-specific course</p>	<p>Structured observation and oral report Competence card no 14, 15</p>
22	<i>Withholding or withdrawing intensive care treatment</i>	<ul style="list-style-type: none"> • Manages coordinated decision regarding withholding or withdrawing intensive care treatment under supervision. • Coordinates information and discussion about issues concerning the parties involved. • Specifies 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. 	<p>Clinical training Self-study Specialty-specific course</p>	<p>Structured conversation with supervisor</p>

<i>Emergency, trauma and prehospital treatment</i>				
No	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
23	<i>Manages resuscitation of children.</i>	<ul style="list-style-type: none"> Utilises algorithms, applies techniques and doses medicine. Accounts for specific conditions in hypothermic patients. Performs as team leader and handles communication and cooperation with the team and relatives. 	Clinical training Self-study Specialty-specific course	Formative general assessment Structured conversation with supervisor
24	<i>Manages resuscitation of newborns.</i>	<ul style="list-style-type: none"> Utilises algorithms, applies techniques and doses medicine. Performs as team leader and handles communication and cooperation with the team, including paediatrician. 	Clinical training Self-study Specialty-specific course	Formative general assessment Structured conversation with supervisor
25	<i>Transport of patients: manages intrahospital and interhospital patient transport.</i>	<ul style="list-style-type: none"> Assesses patient suitability for transport and initiates adequate measures for stabilisation of the condition prior to transport. Accounts for specific measures regarding monitoring and treatment during transport. Transfers patient responsibility, including arrangements with recipient, planning and managing transport and handing over patient responsibility. Plans team combination based on patient condition as well as maintaining treatment level during transport. Instructs accompanying personnel – also when not taking part in transport. Is familiar with opportunities and limitations during transport, including different transport units, such as ambulance, special-purpose ambulance, and helicopter. Performs as team leader and handles communication and cooperation with the team. 	Clinical training Self-study Specialty-specific course	Selected experience registration Formative general assessment Competence card no 17

26	<i>Emergency medicine: manages acute life-threatening conditions due to disease or accident.</i>	<ul style="list-style-type: none"> • Initiates systematic examination and treatment of vital functions, including utilisation of the ABCDE algorithm. • Accounts for ultrasound, e.g. FATE/FAST, for patient assessment. • Prioritises and organises situations with more than one acute patient. • Manages teamwork efficiently and assumes team leader position when necessary. • Conducts critical analysis and reflection on the actual course. • Handles 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 Specialty-specific course	Formative general assessment Competence card no 17
27	<i>Trauma admission</i>	<ul style="list-style-type: none"> • Initiates systematic examination of treatment of vital functions in trauma patients, including utilisation of the ABCDE algorithm. • Handles communication with treatment provider on trauma site/primary trauma admission. • Accounts for utilisation of UL, e.g. FAST in trauma admission. • Prioritises and organises situations with more than one patient. • Manages teamwork efficiently and assumes team leader position when necessary. • Conducts critical analysis and reflection on the actual course. • Handles 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 Specialty-specific course	Selected experience registration Formative general assessment Formative Mini Cex following relevant training elements Competence card no 17
28	<i>Prehospital treatment</i>	<ul style="list-style-type: none"> • Accounts for prehospital organisation with focus on professional healthcare. • Accounts for applicable guidelines for on-site management, including prehospital organisation and command structure. • Accounts for the prehospital team and their competences. • Manages communication and teamwork with AMK (Acute Medical Coordinating Centre). • Accounts for acute and critical conditions where early emergency prehospital care is relevant. • Accounts for the importance of context for treatment in "unusual" environments. • Performs 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

<i>Pain management</i>				
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"> • Manages patient with acute non-malignant pain. • Strives towards treatment of acute pain that is acceptable for the patient. • Categorises pain into nociceptive, neuropathic and inflammatory pain. • Accounts for pharmacology and equipotency for analgesics and combination therapy. • Accounts for local analgesic techniques. • Institutes, titrates and monitors evidence-based pain management based on pharmacological knowledge of different types of analgesics and adjunctive medicine and on this basis makes a rational choice of pharmaceutical and their form of administration (e.g. local analgesia). • Identifies 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 plan Self-study Specialty-specific course	Formative general assessment Competence card no 16
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. • Accounts for acceptable treatment level for the patient. • Categorises cancer related pain. • Accounts 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. • Identifies and manages under supervision the somatic part of the overall issue. • Categorises pain types into nociceptive, neuropathic and inflammatory pain. • Prepares 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 Specialty-specific course	Formative general assessment Competence card no 16

The Communicator Role				
No	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
31	<i>Difficult interview: handles conversations with particular behavioural, communicative, ethic, emotional or existential issues.</i>	<ul style="list-style-type: none"> • Handles communication with children and their parents, patients with acute life-threatening conditions, patients with impaired consciousness, patients without legal capacity, linguistic or cultural barriers. • Handles communication with patients and relatives during crisis. • Handles 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 card no 18
32	<i>Inter-professional communication: handles 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 • Adapts communication and conduct to the situation and maintain constructive and clear communication. 	Clinical training Self-study Specialty-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: handles 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. • Assesses 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. • Handles team conflicts. • Conducts critical analysis and reflection on the actual course. 	Clinical training Self-study Specialty-specific course	Formative general assessment Formative Mini Cex
34	<i>Cross-disciplinary cooperation: performs constructively with other specialties and staff groups in elective and emergency situations.</i>	<ul style="list-style-type: none"> • Coordinates multidisciplinary task management. • Demonstrates understanding for and ability to communicate constructively with cross-disciplinary teams. • Adapts 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: handles 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 Specialty-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: i arranges and completes a continuous plan for own learning.</i>	<ul style="list-style-type: none"> • Clarifies objectives for own learning and utilises different learning strategies in achieving these. • Documents the achievement of learning objectives. 	Training plan Guide Self-study	Training plan/report
37	<i>Teaching, training of others: plans and completes teaching, training and supervision 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: performs a systematic assessment of practice and reflect on this in relation to theory and scientific literature. Obtains relevant knowledge about a specific issue.</i>	<ul style="list-style-type: none"> • Formulates an issue statement and formulate this into questions that can be answered through literature. • Performs focused literature search, critical assessment of literature and discussion of the result in relation to the relevant issue. • Conducts knowledge search in case of actual issues and utilises 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 Specialty-specific course	Formative general assessment Competence card no 20
40	<i>Professional relation to the organisation: demonstrates awareness of the specific role and expertise of the anaesthesiologist during acute life-threatening 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 anaesthesia expertise based on an ethical balancing of patient needs for anaesthesia assistance as well as own and department resources. Includes the aspect of patient safety in in clinical practice. Contributes to constructive and efficient utilisation of anaesthesia resources. Contributes to increased knowledge of anaesthesia treatment options in the organisation. Demonstrates responsibility towards oneself, patient, organisation and surroundings. 	Clinical training Conferences Self-study Specialty-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: organises and manages 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"> • Prioritises and plans own tasks. • Prioritises and allocates tasks in relation to treatment needs, staff resources, organisational conditions and educational responsibility with respect for efficiency and safety in the treatment of patients. • Instructs and supervises tasks performed by other people. • Provides constructive feedback on completed tasks. 	Work manager function	360° 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: manages the function as conference manager and contributes to an efficient conduction of work conferences.</i>	<ul style="list-style-type: none"> • Organises conduction of conferences, presents a relevant summary and conclusion. • Demonstrates receptiveness towards participants and provides adequate and constructive response to their contributions. • Maintains efficient disposition of time and focuses the participant's discussion in a straightforward and unobjectionable way. 	Conference manager function	Competence assessment no 19 Formative general assessment

The Health Promoter Role				
No	Competences	Clarification of objectives	Learning strategies, recommendation	Competence assessment method(s), mandatory
44	<i>Accounts 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. • Accounts for the possibility of help with smoking, alcohol and drug cessation. • Accounts for possibility of help with loss of weight. 	Clinical training Self-study	Structured conversation with supervisor

4.4.4 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 4.4.3.

Generally, the subjects are selected based on the areas that have proven difficult to cover during the clinical training according to experience and subjects at 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 courses will increasingly be supported by preparation elements in the form of assignments, video examples, e-learning 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 will be an important element on many 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 the participants' competence will take place on all courses. The assessment is conducted by theoretical 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 (OSCE/TOSCE). Currently, the requirement for approval of the course is a maximum of 10% absence and active course participation.

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 specialty (no external course providers). Currently, all courses are non-residential courses. 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 two regions but have the same structure and learning objectives.

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

Course title	No of days	Held year	Objective
Introduction to the Core Training and Airway Management	4	1 st year	Introduction to the core training and teamwork Manages handling of the normal as well as the unexpected difficult airway.
Intensive Care Therapy	2	1 st year	Assessment of patient for the purpose of intensive care treatment, patient admission. Initial treatment.
Ultrasound for anaesthesiologists	1	1 st year	Utilises ultrasound as examination in relevant cases within anaesthesia.
Acute and 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 Interprofessional Communication	2	1 st year	Keeps calm and maintains a sense of perspective during unexpected events. Communication with patient and relatives. Interprofessional communication.
Obstetrics and the Newborn	2	2 nd year	Manages anaesthesia 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	3	3 rd year	Management of patient with multiple organ failure. Withholding or withdrawing therapy Advanced haemodynamics and respiration supportive treatment.
Neuro, Trauma and Prehospital	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.
Anaesthesia	2	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 life-threatening situations. Specific objectives related to the 4 columns of the speciality.

4.4.5 Mandatory general courses about the organisation of healthcare

The interdisciplinary courses encompass topics of general interest about the organisation and leadership of healthcare in Denmark.

4.4.6 Mandatory research training

Please see the description on the regional secretariats' websites (Videreuddannelsessekretariaterne):

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

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

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

5 Documentation

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

The following documents need to be approved and certified in logbog.net:

1. Competence card no 1-20 and uploaded in logbog.net
2. Mandatory courses
3. Mandatory specialty-specific courses
4. Approved research training project
5. General assessments
6. Mini Cex
7. 360° evaluation
8. Timely completion of training element

In order for a doctor to achieve recognition as specialist doctor an approved documentation for the introductory training as well as the core training programme is required.

The documentation is registered in logbog.net - <https://secure.logbog.net/login.dt> - and consists of:

1. Approval of mandatory competences and courses (specialty-specific and general)
2. Certification of timely completion of training element during further medical training
3. Certification of completion of research training module

Please refer to the Danish Patient Safety Authority's website for further details on documentation and certification of the core training programme.

5.1 Logbook of Introductory Training

See the curriculum for the introductory training in anaesthesiology.

5.2 Logbook of Core Training

Overview over the competences in the logbook for the core training which are approved in <http://www.logbog.net>.

Competence card = CC

Competence card no	Competence (text)	Approval in logbog.net
1	Demonstrates a basic theoretical, clinical and situational knowledge and understanding as well as sufficient clinical skills in the handling of work and issues within the anaesthesia specialty. CC 1, 2, GA (General Assessment)	
2	Informs the patient about the preoperative course and possible risks and obtains informed consent for specific procedures. GA	
3	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. CC 3, GA, Mini Cex	
4	Carries out efficient patient transfer to the postoperative phase. GA	
5	Bases the plan for the elective and the acute perioperative patient course on balancing assessment of anaesthesia, respect for patient requests in cooperation with the surgeon as well as the organisational, technological and human resources. GA, Mini Cex	
6	Keeps calm and maintains a sense of perspective during unexpected events. CC 20, GA	
7	Outpatient surgery: is able to manage patient course and anaesthesia for outpatient surgery. GA	
8	Anaesthesia outside of the operating room: manages assistance of anaesthesia during various procedures. Structured conversation with supervisor	
9	Advanced airway management: manages the handling of the normal, the expected and the unexpected difficult airway OSCE, Training plan CC 11, GA	
10	Obstetric anaesthesia: is able to manage anaesthesia assistance in vaginal delivery and anaesthetic and perioperative course of sectio as well as managing the newborn baby. CC 9, GA, Mini Cex	

Competence card no	Competence (text)	Approval in logbog.net
11	Anaesthesia for vascular surgery: peripheral and central vascular surgery CC 10, GA	
12	Thoracic anaesthesia: thoracic surgery on heart and lungs, bronchoscopy, mediastinoscopy CC 4, 5, GA	
13	Neuroanaesthesia: head and column trauma, craniotomy CC 7, GA	
14	Organ donation: is able to account for anaesthesia management of organ donors Structured conversation with supervisor	
15	Paediatric anaesthesia: children > 2 years, minor and medium surgery: manages anaesthetic and perioperative course for ASA 1 and 2. CC 8, GA	
16	Anaesthesia for Ear Nose and Throat diseases (ENT) CC 11, GA	
17	Manages intensive care therapy based on a theoretical understanding of clinical and paraclinical indicators for organ dysfunction that require intensive care treatment CC 12, GA, Mini Cex	
18	Assessment of patient for the purpose of intensive care treatment CC 12, GA	
19	Admission of intensive care patient CC 12, GA	
20	Ward round for intensive care patient CC 13	
21	Management of patient with multiple organ failure CC 14, 15	
22	Withholding or withdrawing intensive care treatment Structured conversation with supervisor, GA	
23	Manages resuscitation of children. Structured conversation with supervisor GA	
24	Is able to manage resuscitation of newborns Structured conversation with supervisor, GA	
25	Transport of patients: manages intrahospital and interhospital patient transport CC 17, GA	
26	Emergency medicine: manages acute life-threatening conditions due to disease or accident. CC 17, GA	
27	Trauma admission CC 17, GA, Mini Cex	
28	Prehospital treatment GA	
29	Management of patients with acute pain CC 16, GA	
30	Management of patient with cancer pain and patient with chronic non-malignant pain CC 16, GA	

Competence card no	Competence (text)	Approval in logbog.net
31	Difficult interview: handles conversations with particular behavioural, communicative, ethic, emotional or existential issues. CC 18, GA	
32	Interprofessional communication: handles efficient written and oral communication with collaborators GA, Mini Cex	
33	Teamwork: handles constructive teamwork, assesses competences, support team members and assume team leader position, if appropriate, in elective and emergency situations. GA, Mini Cex	
34	Inter-disciplinary cooperation: performs constructively with other specialities and staff groups in elective and emergency situations. GA, Mini Cex	
35	Conflict management: handles conflict constructively in cooperation with others. GA	
36	Own learning: arranges and completes a continuous plan for own learning. Training plans	
37	Teaching, training of others: plans and completes teaching, training and guidance of others GA	
38	Obtaining new knowledge in relation to practice: performs a systematic assessment of practice and reflect on this in relation to theory and scientific literature Obtains relevant knowledge about a specific issue Research training project	
39	Possesses the ability and will to perform critical reflection on own actions, acknowledge and handles adverse events and possible errors CC 20, GA	
40	Professional relation to the organisation: demonstrates awareness of the specific role and expertise of the anaesthesiologist during acute life-threatening situations especially, and the professional responsibility that follows. GA	
41	Work management: organises and manages an efficient workflow in the operation theatre, operating room and intensive care unit and on duty in cooperation with other personnel. 360° assessment, GA	
42	Team management: assumes team leader position in non-acute and emergency situations. GA, Mini Cex	
43	Conference management: manages the function as conference manager and contribute to an efficient conduction of work conferences. CC 19, GA	
44	Accounts for quality of life factors affecting anaesthesia and surgery related morbidity and mortality, and course of critical disease that require intensive care treatment. Structured conversation with supervisor	

The document "General Assessment" is available in the portfolio for the core training via www.dasaim.dk -> Uddannelsesudvalget -> Hoveduddannelsen.

The document is filled out for each completed training element in the core training and is uploaded in logbog.net.

General Assessment	Completion date	Approval in logbog.net

The document "Mini-Cex" is available in the portfolio for the core training via www.dasaim.dk -> Uddannelsesudvalget -> hoveduddannelsen.

The document is filled every third month in the core training and is uploaded in logbog.net.

Mini Clinical Evaluation Exercise (Mini Cex)	Completion date	Approval in logbog.net

6 Useful links

6.1 General links

Danish Health Authority: <https://www.sst.dk/da/uddannelse/speciallaeger>

Organisation of Danish Medical Societies: <https://selskaberne.dk/>

The regional secretariats for continuing medical education:

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

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

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

Logbog.net:

<https://secure.logbog.net/login.dt>

Applications are available via:

<https://www.videreuddannelsen.dk/Account/Login>

6.2 Specialty-specific links

www.dasaim.dk