

# **Curriculum for Specialist Training in Anaesthesiology**

## **Core Training Programme for the Introduction Year**

2018



**DASAIM**

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*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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July 2018

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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 specialities 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 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 and the core part of the speciality training programme.

## 2 Transition to new Statements of Aims

This Statements of Aims and the related documentation and overviews are valid for the Introductory training 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 specialities 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 speciality, the required minimum competences to be achieved as well as speciality 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 Anaesthesia Specialty

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 Prehospital Medicine

The majority of the anaesthesiologists are employed by hospitals with a general function within the speciality or with relation to specific surgical specialties 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 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 and medical doctors 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 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 pain 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 function of anaesthesia 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 education 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.

### *Education*

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.

### *Post specialist training programmes*

Scandinavia has seven formalised post-specialist training programmes in intensive care medicine, pain management, paediatric anaesthesia, critical emergency medicine, 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 Course

### 4.2.1 Rationale

The purpose of the introductory training is to introduce the trainee to the work area of the anaesthesia speciality to enable the trainee to decide, at the end of the training, whether the specialist training in anaesthesiology is the correct choice.

#### 4.2.2 Objective

The purpose of the training is that the trainee develops the ability to acquire the theoretical, the scientific and the skill-based basis for the execution of anaesthesiology in relation to handling the tasks and situations which are expected of the physician.

The theoretical and the scientific basis for anaesthesiology include in particular pathophysiology, pharmacology, anatomy, biochemistry, physics, basic scientific and clinical scientific anaesthesiology as well as clinical medicine in relation to especially the cardiovascular, respiratory, renal, hepatic endocrine, haematological, and neurological function.

In many cases, the tasks and situations to be handled are unpredictable and do not always have a precise or "correct" solution. Therefore, the professional handling is often related to the decision of the optimal solution for the situation in question. These decisions sometimes have to be made despite uncertainty and based on limited information. The purpose of the training is therefore to achieve an appropriate breadth and depth of the clinical experience, which can form the basis of a professional clinical decision and handling of work and situations within the anaesthesia specialty.

To deduce learning from experience it is necessary that the trainee is able to perform a systematic assessment of the quality of the occurrence and is able to reflect on this in relation to a theoretical and the scientific frame of reference. The purpose of the learning strategies and assessments of the training is to develop the trainee's ability and approach to perform an assessment of the quality of practice in order to further develop it.

Following completion of the introductory training the doctor should in a competent manner be able to manage uncomplicated patients and basic issues, which are typical of a function-bearing unit, and be part of a team in the management of more complicated patients.

#### 4.2.3 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.sundhedsjob.dk](http://www.sundhedsjob.dk). The introductory training programme is planned and approved by the Danish Secretariat for Continuing Medical Education, Videreuddannelsessekretariatene. Each year 56 vacancy positions are announced for the core training in anaesthesiology while the number of internships varies between 1.5 to 1.8 in relation to the number of residency positions (92 introductory positions as of 2017) cf. 2018-2020-dimension plan. Passing the introductory training is the competence requirement for the core training.

#### 4.2.4 Introductory Training Contents

The introductory training is focused on training of basic anaesthesiology with management of patients, ASA (American Society of Anaesthesiologists) group 1 to 3 during the perioperative course. The tasks are often focused on one single patient at a time. In addition, the trainee obtains experience in the form of primary management of vital functions in emergency patients and patients during transport and, to a lesser extent, intensive care unit patients.

During the introductory training the trainee will regardless of training centre obtain experience in anaesthesia for orthopaedic surgery and abdominal procedures, e.g. in surgery, urology and/or gynaecology, as well as intensive care medicine and acute pain management. The trainee will have on-call function (evening and night) and will among other things be subjected to acute medical

issues. The scope of allocation to each area is described in detail in the training programmes of the departments.

## 4.3 Introductory Training

### 4.3.1 Competences

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

### 4.3.2 Learning Strategies and Methods for Workplace-based Assessment

Competence cards and instructions can be found on [www.dasaim.dk](http://www.dasaim.dk) > "Uddannelsesudvalg" (educational committee) > Introduktionsuddannelse (introductory 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.

#### *Training plan and learning report*

At the structured conversation with supervisor the individual training plans and learning report are used to focus and systemise the development of competences according to the seven doctor roles. The objectives which the trainee should accomplish in the given time period are concretised and the personal needs and interests are included. The training plans and learning report serve to make the trainee feel responsible for his/her own learning as well as systemise learning and the documentation hereof.

#### *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 is conducted two times and the Mini Cex is conducted three times during the introductory training. 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.

Mini Cex is an assessment of the trainee's ability to organise and prioritise the tasks during the shift.

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 four procedures: spinal anaesthesia, epidural anaesthesia, CVC and artery needle. Cusum Scoring is mandatory in the introductory training.

### *Registration of Experience*

The trainee continuously conducts registration of selected performances within the anaesthesia specialty and patient categories as agreed with the consultant responsible for education or the clinical supervisor. At the assessment interview 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 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 is able to *reflect* and *elaborate* on 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 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 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 logbog.net 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 Authority applies.

### 4.3.3 Courses

The introductory training includes a mandatory general supervisor course ("Supervision in the clinic and Pedagogy II"). These courses are organised in the Regions and descriptions can be found on the websites of Region's Secretariat for Continuing Medical Education, Videreuddannelsessekretariaterne.

In each of the three educational regions it is recommended that the trainees follow the courses in anaesthesiology which are planned by the speciality specific committees. The courses are not mandatory.

#### 4.3.4 List of Mandatory Competences for the Specialty

This list contains the minimum requirements for the trainee 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](http://www.dasaim.dk).

<b>THE ANAESTHESIOLOGIST'S EXPERT ROLE</b>				
<b>Anaesthesiology</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies</b>	<b>Workplace-based assessment method(s)</b>
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"> <li>prepares a rational plan for and manages anaesthesia and perioperative courses for surgical/gynaecological and orthopaedic surgical patients, ASA 1-3</li> <li>conducts risk assessment of the individual patient</li> <li>choice of monitoring, anaesthetic method(s)</li> <li>prevents possible complications and events as they emerge</li> </ul>	Clinical training, training programmes and individual training plan Self-study	Formative general assessment after 6 months, summative general assessment after 11 months Formative Mini Cex after 6 months and after 9 months, summative Mini Cex after 11 months Experience registration
2	<i>Basic airway management: manages handling of the normal airway</i>	<ul style="list-style-type: none"> <li>manages mask ventilation, applies laryngeal mask and endotracheal intubation on uncomplicated patients</li> <li>accounts for anatomical conditions of importance for airway management</li> <li>performs preoperative airway assessment, including assessment of risk of difficult airway</li> <li>accounts for the choice of airway management</li> <li>accounts for benefits and risks associated with Rapid Sequence Induction</li> <li>accounts for the choice of relaxants in connection with intubation</li> <li>prevents and manages information regarding and reporting of any dental trauma</li> <li>is familiar with difficult airway algorithm and is able to initiate relevant treatment during cannot intubate/cannot ventilate situation</li> </ul>	Clinical training Self-study	Structured observation Competence card no 1 Experience registration

No	Competences	Clarification of objectives	Learning strategies	Workplace-based assessment method(s)
3	<i>Tests the anaesthesia device and utilises relevant monitoring</i>	<ul style="list-style-type: none"> <li>• prepares and tests the anaesthesia device</li> <li>• performs troubleshooting and accounts for management algorithm during device and oxygen supply failure</li> <li>• accounts for circle system design and function</li> <li>• accounts for storage of gases</li> </ul>	Clinical training Self-study	Structured observation Competence card no 2
4	<i>Manages anaesthesia and perioperative course for elective patient &gt; 15 years, ASA class 1-3, minor and medium surgery</i>	<ul style="list-style-type: none"> <li>• prepares preoperative holding area and/or operating room</li> <li>• accounts for a plan for anaesthesia, choice of anaesthetics and their pharmacology based on integrated interpretation of clinical, paraclinical and pathophysiological significance of any comorbidities in relation to anaesthesia and surgery</li> <li>• takes relevant precautions to optimise patient conditions</li> <li>• reacts relevantly and adequately to changes in patient conditions</li> <li>• demonstrates understanding of the role of anaesthesiology in development and implementation of the accelerating patient course</li> <li>• documents anaesthesia courses and events on anaesthesia record with care and, if relevant, in the record</li> <li>• accounts for loss of and compensation for fluid, electrolyte, glucose, blood</li> <li>• DVT prophylaxis, positioning, heat loss prevention</li> <li>• produces relevant documentation for the perioperative course in relevant anaesthesia record, EPM, DAD etc.</li> </ul>	Clinical training Self-study	Structured observation Competence card no 3 Experience registration
5	<i>Informing patient about the perioperative course and any risks as well as obtaining informed consent</i>	<ul style="list-style-type: none"> <li>• performs patient identification and obtains informed consent from competent patient</li> </ul>	Clinical training Self-study	Structured observation Competence card no 3 Competence card no 13
6	<i>Carries out efficient patient transfer to the recovery phase</i>	<ul style="list-style-type: none"> <li>• provides structured information about patient, anaesthesia and operative course as well as ensures that the information is understood, and prescribes any postoperative examinations prior to recovery discharge</li> <li>• accounts for applicable criteria for discharge from recovery</li> <li>• prepares a plan for the postoperative course, if it deviates from applicable guidelines for uncomplicated patients, ASA 1-3</li> </ul>	Clinical training Self-study	Structured observation Competence card no 3

No	Competences	Clarification of objectives	Learning strategies	Workplace-based assessment method(s)
7	<i>Manages anaesthesia and perioperative course for acute patient &gt; 15 years, ASA class 1-3, minor and medium surgery. ASA 3 under supervision</i>	<ul style="list-style-type: none"> <li>• accounts for rules for fasting period and factors that affect gastric emptying, as well as risk of and prevention of reflux and aspiration</li> <li>• manages relevant precautions in acute induction</li> <li>• performs correct preoxygenation and accounts for the purpose of this</li> <li>• performs safe acute induction</li> <li>• acknowledges own professional limitations and ensures that relevant personnel are present</li> <li>• incorporates information from monitoring data, clinical condition of the patient and the operative procedure in the global assessment of the patient's condition</li> </ul>	Clinical training Self-study	Structured observation Competence card no 4
8	<i>Bases plans on an assessment of anaesthesia, respect for patient requests, dialogue with the surgeon as well as the organisational, technological and human resources</i>	<ul style="list-style-type: none"> <li>• assesses the severity and complexity of the task in relation to own resources, qualifications as well as the resources and qualifications of the local organisation</li> <li>• cooperates efficiently with the team</li> <li>• communicates adequately with the team and utilises the human and technological resources appropriately and requests relevant assistance when needed</li> </ul>	Clinical training Self-study	Structured observation Competence card no 3 Competence card no 4
9	<i>Manages spinal anaesthesia</i>	<ul style="list-style-type: none"> <li>• accounts for a plan for anaesthesia, choice of equipment and analgesic, dosing, requirements for effect and plan for handling of side effects, undesirable effects and treatment of toxic effects</li> <li>• applies and tests effect and specifies correct distribution of analgesia</li> <li>• accounts for indication, contraindication, complications, prevention and treatment of these</li> </ul>	Clinical training Self-study	Structured observation Competence card no 5 Experience registration
10	<i>Manages epidural analgesia</i>	<ul style="list-style-type: none"> <li>• accounts for a plan for analgesia, choice of equipment and analgesic, dosing, requirements for effect and plan for handling of side effects or undesirable effects and treatment of toxic effects</li> <li>• test of effect and specifies correct distribution of analgesia</li> <li>• accounts for perioperative and postoperative maintenance of analgesia</li> <li>• accounts for indication, contraindication, complications and prevention and treatment of these</li> </ul>	Clinical training Self-study	Structured observation Competence card no 6 Experience registration

No	Competences	Clarification of objectives	Learning strategies	Workplace-based assessment method(s)
11	<i>Is able to insert a central venous catheter</i>	<ul style="list-style-type: none"> <li>• accounts for indication and contraindication</li> <li>• accounts for anatomical and functional pros and cons for two frequently used CVC approaches</li> <li>• uses correct sterile technique during CVC insertion</li> <li>• uses UL during visualisation of vein and CVC insertion</li> <li>• performs test of catheter function and placement</li> <li>• accounts any complications and prevention and treatment of these</li> <li>• accounts for guidelines for observation, use and discontinuation of CVC</li> </ul>	Clinical training Self-study	Structured observation Competence card no 7 Experience registration
12	<i>Accounts for the choice of perioperative management of patients with complicated conditions or diseases</i>	<ul style="list-style-type: none"> <li>• accounts for medical and pharmacological reason for preoperative preparation and medication</li> <li>• accounts for choice and dosage of anaesthetics and technique, choice of fluid/electrolyte administration</li> <li>• accounts for postoperative observation/pain management</li> </ul>	Clinical training Self-study	Written assignment Competence card no 8
13	<i>Has achieved appropriate breadth, volume and quality in management of procedures</i>	<ul style="list-style-type: none"> <li>• utilises Cusum Score and/or experience registration correctly for CVC insertion, artery needle, spinal needle insertion, epidural catheter, block induction and intubation</li> </ul>	Clinical training	Cusum Score Experience registration
14	<i>Has achieved appropriate breadth and volume of clinical experience regarding a sufficient segment and number of patients and issues within the anaesthesia specialty</i>	<ul style="list-style-type: none"> <li>• utilises experience registration correctly</li> </ul>	Clinical training	Cusum Score Experience registration

<b>Intensive care therapy</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s)</b>
15	<i>Prepares fluid/nutrition plan for intensive care patients</i>	<ul style="list-style-type: none"> <li>accounts for clinical and paraclinical indicators, which are used to assess patient hydration status, calculate fluid and electrolyte loss and compensation needs</li> <li>calculates nutrition needs and administration of glucose, protein and fat</li> <li>accounts for indication regarding use of blood, plasma and other replacement products</li> </ul>	Clinical training Self-study	Structured observation Competence card no 9
16	<i>Institutes respirator treatment for uncomplicated intensive care patients</i>	<ul style="list-style-type: none"> <li>accounts for principles regarding respirator treatment/non-invasive ventilation, configuring of respirator/non-invasive ventilation, alarm limits, etc.</li> <li>accounts for indications, contraindications and plan for respirator treatment/non-invasive ventilation, monitoring as well as indications for changes in relation to clinical and paraclinical data</li> <li>accounts for complications for respirator treatment/non-invasive ventilation, and prevention and treatment of these</li> <li>accounts for ethical dilemmas regarding basis for withholding respirator treatment/non-invasive ventilation</li> </ul>	Clinical training Self-study	Structured observation Competence card no 10
17	<i>Manages ward rounds for uncomplicated intensive care patients</i>	<ul style="list-style-type: none"> <li>accounts for organ-specific status based on clinical and paraclinical data</li> <li>formulates relevant issue and plan for examination and treatment</li> <li>behaves ethically correct in relation to patient integrity</li> <li>accounts for considerations regarding communication issues in connection with patient and relatives as well as ethical dilemmas in relation to legislation on information</li> </ul>	Clinical training Self-study	Structured observation Competence card no 11

<b>Pain Management</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s)</b>
18	<i>Manages uncomplicated patients with acute pain (e.g. adjustment of postoperative pain regimen)</i>	<ul style="list-style-type: none"> <li>accounts for pain classification</li> <li>accounts for choice of analgesics, their pharmacology and aeqvipotense of these in relation to administration methods and</li> <li>combination therapy</li> <li>accounts for local analgesic techniques</li> </ul>	Clinical training Self-study	Structured observation Competence card no 14

<b>Acute Conditions</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s), mandatory</b>
19	<i>Manages resuscitation of adults and initiates resuscitation of children</i>	<ul style="list-style-type: none"> <li>accounts for algorithms for resuscitation and management sequence when working alone and in a team</li> <li>accounts for indication for defibrillation and dosing for adults</li> <li>initiates resuscitation of children</li> <li>accounts for indication for and use of standard medicine</li> <li>accounts for hospital cardiac arrest organisation and role and tasks of the department of anaesthesiology</li> <li>accounts for own role as team member/team leader during resuscitation</li> <li>accounts for conditions related to cardiac arrest brain damage as well as ethical dilemmas and basis for decision regarding initiation and discontinuation of resuscitation</li> <li>accounts for indication for hyperthermia and respirator treatment of patients suffering from cardiac arrest</li> </ul>	Clinical training Self-study	Structured observation Competence card no 12
20	<i>Starts initial treatment of patients with acute life-threatening conditions</i>	<ul style="list-style-type: none"> <li>assesses the vital parameters of the patient and how affected they are, utilises algorithms for examination and treatment</li> <li>initiates and maintains treatment until qualified assistance arrives</li> </ul>	Clinical training Self-study	Structured observation Competence card no 12
21	<i>Accounts for precautions for and assessment of patients during transport</i>	<ul style="list-style-type: none"> <li>assesses under supervision patient suitability for internal and external transport as well as participate in the stabilisation of patients prior to transport</li> <li>accounts for procedures and monitoring techniques in connection with transport</li> </ul>	Clinical training Self-study	Structured conversation with supervisor Experience Registration
22	<i>Accounts for organisation of and precautions in relation to emergency management</i>	<ul style="list-style-type: none"> <li>is familiar with precautions in case of fire in the operating room or elsewhere at the hospital</li> <li>is familiar with hospital and local area disaster and emergency response plan</li> <li>is familiar with own and the department's role related to tasks and responsibilities in case of alarm calls</li> </ul>	Clinical training Self-study	Structured conversation with supervisor

<b>Health Promoter</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s)</b>
23	<i>Accounts for lifestyle factors, which affect morbidity and mortality in relation to anaesthesia and surgery</i>	<ul style="list-style-type: none"> <li>accounts for appropriate preoperative information, including any additional examinations related to this</li> </ul>	Self-study	Structured conversation with supervisor

<b>Communicator</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s)</b>
24	<i>Manages effective preoperative patient consultation</i>	<ul style="list-style-type: none"> <li>records relevant anamnesis, objective examination</li> <li>demonstrates receptiveness, responds adequately to patient concerns and problems</li> <li>encourages dialogue with the patient about participation in the decision about the course of anaesthesia, to the extent the patient wishes, and if medically possible and safe</li> <li>provides the patient with information that is understandable, ensures understanding of the information and obtains informed consent</li> </ul>	Clinical training Self-study	Structured observation Competence card no 13 Formative general assessment after 6 months, summative general assessment after 11 months
25	<i>Interprofessional communication Handles efficient written and oral communication with collaborators</i>	<ul style="list-style-type: none"> <li>manages correct, adequate, and clear record keeping and data registration</li> <li>manages structured, sufficient communication during transfer of patient responsibility to others</li> <li>ensures that the recipient understands treatment plans, indicators for intervention and/or call for assistance</li> <li>adapts communication and conduct to the situation and delivers constructive and clear communication</li> </ul>	Clinical training Self-study	Structured observation Competence card no 3 Competence card 13 Formative general assessment after 6 months, summative general assessment after 11 months. Formative Mini Cex after 6 months and after 9 months, summative Mini Cex after 11 months

<b>Collaborator</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s)</b>
26	<i>Performs effectively as member of the team and accepts responsibility for tasks as team leader or team member</i>	<ul style="list-style-type: none"> <li>• demonstrates understanding of and respects other team member's fields and situational roles and tasks</li> <li>• demonstrates receptiveness and openness, respects other people's opinions and at the same time contributes with own expertise</li> <li>• assumes team leader position, if appropriate, and ensures that team members are familiar with their functions</li> </ul>	Clinical work Self-study	Structured observation Competence card no 11 Competence card no 12 Formative general assessment after 6 months, summative general assessment after 11 months. Formative Mini Cex after 6 months and after 9 months, summative Mini Cex after 11 months

<b>Organiser/Manager/Administrator</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s)</b>
27	<i>Organises own work and manages an efficient workflow in the operating room during the daytime</i>	<ul style="list-style-type: none"> <li>• prioritises and plans work tasks with respect for efficiency and safety in the treatment of patients</li> <li>• demonstrates predictiveness and respect for the tasks</li> <li>• works orderly and systematically with the task</li> <li>• demonstrates sense of perspective on the task</li> </ul>	Clinical training Self-study	Structured observation Formative general assessment after 6 months, summative general assessment after 11 months. Formative Mini Cex after 6 months and after 9 months, summative Mini Cex after 11 months
28	<i>Prioritises work tasks during the shift</i>	<ul style="list-style-type: none"> <li>• prioritises in relation to patient conditions, staff resources and considerations for an efficient workflow</li> </ul>	Clinical training Self-study	Structured observation Formative general assessment after 6 months, summative general assessment after 11 months. Formative Mini Cex after 6 months and 9 months, summative Mini Cex after 11 months

<b>Academic</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s)</b>
29	<i>Arranges and completes a continuous plan for own learning</i>	<ul style="list-style-type: none"> <li>demonstrates will and ability to continuously search for new knowledge</li> <li>clarifies own objectives and utilises different learning methods in achieving these, and monitor own learning</li> </ul>	Training plan Guide Self-study	Training plan/learning report Formative general assessment after 6 months, summative general assessment after 11 months
30	<i>Conducts critical analysis and reflection on perioperative management of at specific patient course</i>	<ul style="list-style-type: none"> <li>describes patient courses, including theoretical considerations in relation to the practical circumstances and conditions</li> <li>reflection on the course in relation to theory</li> </ul>	Clinical training Self-study	Written report Workplace-based assessment 15
31	<i>Defines a problem and analyses it in relation to literature</i>	<ul style="list-style-type: none"> <li>rephrases a clinical issue to a question, which can be answered through a search in literature</li> <li>performs focused literature search, assessment, and selection of relevant literature</li> <li>prepares a clear and sufficient written report</li> </ul>	Guide Self-study	Written report Workplace-based assessment 15 Formative general assessment after 6 months, summative general assessment after 11 months

<b>Professional</b>				
<b>No</b>	<b>Competences</b>	<b>Clarification of objectives</b>	<b>Learning strategies, recommendation</b>	<b>Workplace-based assessment method(s)</b>
32	<i>Demonstrates responsibility towards the work tasks Demonstrates commitment, initiative, interest and responsibility in the execution of practise in relation to patients, the organisation</i>	<ul style="list-style-type: none"> <li>demonstrates punctuality in attendance and provides information on his/her whereabouts and how he/she can be summoned</li> <li>possesses the ability to assess the quality of own work, acknowledge own errors and is able to cope with this</li> <li>acknowledges own limitations calls for assistance, when necessary</li> <li>contributes to mutual learning for adverse events and possible errors</li> </ul>	Clinical training Guidance/dialogue with advisor	Formative general assessment after 6 months, summative general assessment after 11 months. Formative Mini Cex after 6 months and after 9 months, summative Mini Cex after 11 months

## 4.4 Core Training

Please find the curriculum for the core training on [www.dasaim.dk](http://www.dasaim.dk).

## 5 Documentation

This part contains the necessary documentation for the doctor in rotation to achieve approval.

The documentation is comprised of:

1. Competence card no 1-16 and uploaded in logbog.net
2. Mandatory courses
3. General assessments
4. Mini Cex
5. Timely completion of training element

## 5.1 Logbook of Introductory Training

Overview over the competences in the logbook for the core training which are approved in [www.logbog.net](http://www.logbog.net).

GA = General Assessment, CC = Competence Card

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 GA and Mini Cex	
2	Basic airway management: manages handling of the normal airway CC 1	
3	Tests anaesthesia device CC 2	
4	Manages anaesthesia and perioperative course for elective patient > 15 years, ASA class 1-3, minor and medium surgery. Utilises relevant precautions, is vigilant and predictive. Incorporates information from monitoring data, clinical signs of the patient and the operative procedure in the global assessment of the patient's condition CC 3	
5	Informing patient about the perioperative course and any risks as well as obtaining informed consent CC 3, CC 13	
6	Carries out efficient patient transfer to the recovery phase CC 3	
7	Manages anaesthesia and perioperative course for acute patient > 15 years, ASA class 1-3, minor and medium surgery. Utilises relevant precautions, is vigilant and predictive. Incorporates information from monitoring data, clinical signs of the patient and the operative procedure in the global assessment of the patient's condition CC 4	
8	Bases plans on a balanced assessment of anaesthesia, respect for patient requests, dialogue with the surgeon as well as the organisational, Technological, and human resources CC 3, CC 4	
9	Manages spinal anaesthesia CC 5	
10	Manages epidural analgesia CC 6	
11	Inserts a central venous catheter CC 7	
12	Accounts for the choice of perioperative management of patients with complicated conditions or diseases CC 8	
13	Has achieved appropriate breadth, volume and quality in management of procedures Cusum Score, experience registration	

14	Has achieved appropriate breadth and volume of clinical experience regarding a sufficient segment and number of patients and issues within the anaesthesia specialty according to list of experience (review this) Cusum Score, experience registration	
15	Prepares fluid/nutrition plan for intensive care patients CC 9	
16	Institutes respirator treatment for uncomplicated intensive care patients CC 10	
17	Manages ward rounds for uncomplicated intensive care patients CC 11 GA, Mini Cex	
18	Manages uncomplicated patients with acute pain (e.g. adjustment of postoperative pain regimen) CC 14	
19	Manages resuscitation of adults and initiate resuscitation of children CC 12	
20	Starts initial treatment of patients with acute life-threatening conditions CC 12, GA, Mini Cex	
21	Accounts for precautions for and assessment of patients during transport	
22	Accounts for organisation of and precautions in relation to emergency care	
23	Accounts for lifestyle factors, which affect morbidity and mortality in relation to anaesthesia and surgery. Accounts for appropriate preoperative information, examination related to these	
24	Manages effective preoperative patient consultation CC 13, GA	
25	Interprofessional communication. Handles efficient written and oral communication with collaborators CC 3, CC 13, GA, Mini Cex	
26	Performs effectively as member of the team and accepts responsibility for tasks as team leader or team member CC 11, CC 12 GA, Mini Cex	
27	Organises own work and manages an efficient workflow in the operating room during the daytime GA, Mini Cex	
28	Prioritises work tasks during the shift GA, Mini Cex	
29	Arranges and completes a continuous plan for own learning GA	

30	Conducts critical analysis and reflection on perioperative management of at specific patient course CC 15	
31	Defines a problem and analyses it in relation to literature CC 15, GA	
32	Demonstrates responsibility towards the work tasks. Demonstrates commitment, initiative, interest, and responsibility in the execution of practise in relation to patients, the organisation GA, Mini Cex	

The document "General vurdering" (General Assessment) is available in the portfolio for the introductory training via [www.dasaim.dk](http://www.dasaim.dk) > Uddannelsesudvalget > Introduktionsuddannelsen.

The document is completed two times during the introductory 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](http://www.dasaim.dk) > Uddannelsesudvalget > hoveduddannelsen.

The document is filled out three times during the introductory training and is uploaded in logbog.net.

<b>Mini Clinical Evaluation Exercise (Mini Cex)</b>	<b>Completion date</b>	<b>Approval in logbog.net</b>

### 5.1.1 Mandatory course in the introductory training

#### General courses

<b>Supervisor course</b>	<b>Completion date</b>	<b>Approval in logbog.net</b>

## 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](http://www.dasaim.dk)