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#### PREFACE HERE IT IS: THE NEW PROFESSIONAL PROFILE OF THE NURSE ANAESTHETIST!

Dutch anaesthetics have always occupied a unique position in Europe. At a time in the Netherlands, when little anaesthesiological manpower was found to be available to meet the need for anaesthesiological care, a view emerged that high-quality and safe patient care had to be supported by three pillars:

1. high-quality training,

2. high-quality monitoring and control, and

3. anaesthetics as teamwork: a task that can be delivered by an anaesthetist and qualified, well-trained nurse anaesthetists.

Anaesthesiology has not been a one-man activity for a long time, even though this is still the case in many countries in Europe. In the Netherlands, we realised a long time ago that the monitoring of a patient and adjusting the anaesthesia within pre-determined parameters, can be carried out to a high standard of quality by specially trained and dedicated people: nurse anaesthetists. In the Netherlands, anaesthesia is always administered by a highly qualified team of professionals who value and respect each other. This has meant that the quality and safety of anaesthesia in the Netherlands is of a high standard, despite the fact that the number of anaesthesiologists per 100,000 inhabitants in the Netherlands is among the lowest in Europe. Despite this, the quality is good, and this can only be achieved through first-rate collaboration within a highly qualified team. The Dutch Association of Nurse Anaesthetists has always understood its responsibility to the profession of nurse anaesthetists. During the last few years, a number of knowledgeable nurse anaesthetists, under the guidance of training professionals and a several advisors, have taken on the task of designing a new professional profile and the restructuring of training. This was necessary to do justice to the further diversification of the profession on the one hand, and to reflect the identity and position of the nurse anaesthetist in a forceful and proud manner, on the other. The profession of nurse anaesthetist is a justifiably proud one.

The new professional profile also makes it clear that the profession of nurse anaesthetist is a dynamic and constantly evolving one. Nurse anaesthetists are increasingly deployed in places other than the operating theatre. We now occasionally see them in wards for pre-operative screening; and new fields of activity are being explored, such as pain management and the sedation of patients who are undergoing uncomfortable or unpleasant procedures. The new professional profile recognises these opportunities and offers prospects for the creative interpretation and further, sensible reallocation of responsibilities in anaesthesiology. I congratulate the Dutch Association of Nurse Anaesthetists on this unique step forward. Unique in the Netherlands, and Unique in Europe. The profile once again forcefully underlines the important collaboration on an equal basis that has to exist between anaesthesiologists and nurse anaesthetists. That in itself, will serve what all of us are working towards, namely quality and safety of care for our patients. NVAM: my sincere congratulations on this proud result!

Prof. Hans T.A. Knape, anaesthesiologist, President of the European Society of Anaesthesiology

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2. 3. External persons consulted 21 21

#### CHAPTER 1 INTRODUCTION AND RATIONALE

The previous professional profile of a nurse anaesthetist was created in 2001. Since that time, there have been various developments that (will) have had an influence on the nature and organisation of the work of an nurse anaesthetist. For instance, developments in the areas of providing information to patients, collaboration, quality care and delegation/reallocation of tasks within anaesthetics. These developments will be elaborated on in Chapter 2. The Dutch Association of Nurse Anaesthetists (NVAM) has given instructions for the development of a new professional profile for nurse anaesthetists, based on **competencies**. We were also asked to pay special attention to making the document dynamic and future-oriented. The profile describes the **current** professional tasks of a qualified nurse anaesthetist and, at the same time, provides a **look ahead at** the future.

# 1.1 Scope of the profile

The professional profile is focused on nurse anaesthetists. During the preparation of this profile, the entire breadth of the professional practice has been put into perspective. However, in practice, differences will arise between the work of nurse anaesthetists and the way in which they practice. The result may be that not every nurse anaesthetist will fully recognise himself in all parts of the profile. Why is that? First of all, this relates to the organisational contexts in which nurse anaesthetists operate. There are different kinds of institutions and teams in which a nurse anaesthetist may be working. It makes a significant difference whether a nurse anaesthetist works in a partnership, is seconded, or works as an employee. Secondly, the work, roles and competencies may vary, because they work in an academic setting or on the periphery thereof. In the latter case, tasks and responsibilities will be allocated very differently. As a result and in a relative sense, social and (professional) developments may be more tangible, or less so depending on the circumstances. In this profile, the tasks, roles and competencies have been described, that can and are permitted to be carried out by all types of nurse anaesthetists.

# 1.2

# PRACTICAL VALUE OF THE PROFILE

The professional profile will contribute to the further professionalization of the nurse anaesthetist. The professional profile will enhance the recognition and understanding of the work of an nurse anaesthetist. It must also enhance the identity of the profession. Therefore, the professional profile has various functions:

- It is a showpiece for positioning the nurse anaesthetist. Patients, related professional groups, government and accreditation agencies, will get an insight into what they can expect from the profession.
- It will provide input for the education system to ensure an optimum fit with professional practice, and can also generate information for discussions regarding the required duration and level of the training.
- It will be able to be used in the further professionalization of the profession.
- It will be a foundation document for the development of guidelines and protocols for professional practice.
- It will be able to be used for providing information regarding the profession.
- It will be a guide for the further development of the nurse anaesthetists register.

# 1.3

# DEVELOPMENT OF THE PROFILE

A professional profile cannot be completed from behind a desk. A number of different methods and procedures are required to achieve this. The profile was created through:

- Desktop studies.
- Discussions with persons who have recently been associated with a new professional profile.
- A study of the literature.
- Discussions with professors of anaesthesiology at University Medical Centres (see appendix 3).
- Meetings with the professional profile development task force (see appendix 1).
- Meetings with the group of experts (see appendix 2).
- Consultations with external third parties (see appendix 3).
- Validation by NVAM members.
- A General Meeting of NVAM Members, dated 21/10/2008.

The tasks of the task force consisted of gathering information from practice and literature, discussions on content and the testing of drafts with regard to relevance. The tasks of the group of experts were to provide comments on draft reports and to reach consensus on the end product. When selecting the members of both groups, an effort was made to achieve a spread in settings, areas of work, and regions. In structuring the profile, we have used the most important components of the COLO<sup>1</sup> format: they include the developments, the location of the nurse anaesthetist within healthcare, domains, core tasks and roles, and competencies, in that order. The developments that a nurse anaesthetist will come across, now and in the future, have been described on the basis of publications, research that has been studied and analysed, discussions with three professors at University Medical Centres, and other relevant documents such as training plans and professional profiles. With the assistance of the group of experts, we determined which of the development are or will be influencing the work of a nurse anaesthetist. The task force prepared a matrix of the domains, core tasks, roles and competencies, which was then collectively commented on by the group of experts. After that, the task force prepared a draft document, which, together with a list of questions, was submitted for comment to the board of the NVAM and the group of experts. The comments made, where possible, were then included, and the members of the NVAM were given an opportunity to provide feedback on the draft. After processing this feedback, the document was presented to the members in an Extraordinary General Meeting of the Members. (21-10-2008)

1 Colo (2003). Format professional competency profile. Manual for the preparation of a professional competency profile. Zoetermeer.

#### 1.4 Reading guide

In this profile, we refer to the nurse anaesthetist in the masculine. Obviously, this also refers to the female practitioners. We have also used the masculine form for patients. This refers to both genders. The literature and research that has been used, are referenced in footnotes. The sources consulted can be found in the bibliography. The profile has been structured as follows. Chapter 2 describes the new developments and their consequences for the nurse anaesthetist. Chapter 3 describes the position of the nurse anaesthetist within the healthcare system. Chapter 4 provides an explanation of the domains, core tasks and the roles played by a nurse anaesthetist. Chapter 5 provides an clarification of the choices and assessments that a nurse anaesthetist has to make in the course of his work. In Chapter 6, we describe the competencies required to work in the profession. The profile concludes with a bibliography, a list of terms and a number of appendices.

#### CHAPTER 2 NEW DEVELOPMENTS AND THEIR CONSEQUENCES FOR THE NURSE ANAESTHETIST

Society is subjected to many developments and changes. That these changes will have consequences for the profile of the nurse anaesthetist, is described in this chapter. The chapter starts with a number of basic statistics that relate to anaesthetics. Next, the most relevant developments will be described. These are developments in society, developments in the nature of the work of an nurse anaesthetist, developments in healthcare, innovation and technology, demographics, the employment market and in education. The nurse anaesthetist works in an environment in which these developments have a significant impact on the demand, the supply and the nature of professional practice. There is constant pressure to be alert to these developments, but also to apply their relevance to one's own area of the profession. The increasing complexity of society and organisational contexts requires the nurse anaesthetist to be innovative and to look beyond the limits of his own discipline; to learn new things quickly, and to collaborate with a diverse range of people.

# 2.1

#### A FEW BASIC STATISTICS ABOUT ANAESTHESIA PROFESSIONALS

In the Netherlands, approximately 85% of the nurse anaesthetists are members of the NVAM<sup>2</sup>. In 2007, 1467 anaesthesiologists were registered as being licensed to practise<sup>3</sup>. The number of inhabitants of the Netherlands was 17.2 million and the number of anaesthesiologists per 100.000 inhabitants, was 6.9. The average of the number of anaesthesiologists in Europe, on the other hand. is 12.4 per 100,000 inhabitants. In 2007, 1.2 million procedures<sup>4</sup> were carried out. Because of the calibre of the nurse anaesthetists, the Dutch anaesthesiologist, where the circumstances permit this, is able to give an anaesthetic to **two** patients at the same time. This also explains the low number of anaesthesiologists per person in the Netherlands, compared to other countries in Europe. In the latter countries, because of the absence of highly qualified nurse anaesthetists, the anaesthetist can only give one anaesthetic at the time<sup>5</sup>.

For up-to-date figures, see the member lists of the NVAM.

# 2.2 SOCIAL DEVELOPMENTS

#### 2.2.1

# OTHER TARGET GROUPS AND INCREASING NUMBERS OF ELDERLY WITH MORE COMPLEX CARE NEEDS

Because of prosperity, the ageing<sup>6</sup> of the population and the expansion in treatment techniques, the demand for more complex anaesthesiological care is on the increase. This means that the demand for care is also becoming more intensive and more complex. There is a greater focus on multi-morbidity<sup>7</sup>, obese patients, the mentally handicapped, and the geriatric patients. These changes have repercussions for the support of these patient groups. It makes significant demands on the nurse anaesthetist's empathy. Because the geriatric patient group undergoes a lot of orthopaedic procedures<sup>8</sup>, whereby good post-operative pain management can bring about effective convalescence, there will probably be more work in rehabilitation centres and geriatric institutions, in the form of mobile pain management teams<sup>9</sup>.

The consequence for the nurse anaesthetist will be that an increasing number of patients from other target groups, with different clinical profiles, will require surgery. This requires more knowledge about these target groups and their clinical profiles.

#### 2.2.2

#### INDEPENDENT AND CRITICAL PATIENTS

The nurse anaesthetist has been dealing with increasingly independent and critical patients from some time. The legal system strengthens their position. The government demands transparency with regard to the quality delivered. The patient expects to be briefed and informed about his treatment and treatment plan. Patients these days, are well informed about their rights and think of themselves as customers, and therefore often as being 'King'. They also want information about the consequences of a potential treatment, so that they can make their own, carefully considered choice. <sup>10</sup> A large part of the patient population is emphatic about wanting to be involved in their treatment. However, there is also a part of the patient population who do not enjoy the experience the responsibility and freedom of choice. This may be because of their cultural background and/or language barriers, but also because of fear and a lack of self-confidence. All this demands more time, attention and empathy from the nurse anaesthetist.

The way in which they communicate with the patient, including their tone of voice and use of language, is of vital importance<sup>11</sup>. The nurse anaesthetist increasingly functions as a host, to assure customer satisfaction.

- For exact figures on the ageing of the population, see CBS (2006) *Health and care in figures 2006*. Voorburg. www.cbs.nl For further details on the term multi-morbidity, see National Health Council (2008) *Old age comes with defects*. The Hague Publication no. 2008/01. <u>www.gr.nl</u> Laet CEDH, Hout BA, Hofman A, Ols HAP. The cost of osteoporotic fractures in the Netherlands; options for cost control. Nederlands Tijdschrift voor Geneeskunde 1996;140(33):1684.8.). www.kuleuven.be/cv/u0009433.htm
- 10 www.kiesbeter.nl
- for further information on the work of the patient association, see <u>www.npvzorg.nl</u>

#### 2.2.3 Accessibility of information

These days, information is accessible for everybody. This also applies for medial information. The patient looks for it using a range of sources, such as magazines, (popular) medial programs on television, and the Internet. The latter is accessible for many patients, and is an important source of information. The patient is quickly up-to-speed on the latest developments in the area of anaesthesia techniques and their advantages/disadvantages. This also applies for developments internationally. However, not all information is reliable. Moreover, not every patient is capable of recognising the true value of the amount of information available. The fact that information is so accessible for the patient, has its consequences for the relationship between patient and nurse anaesthetist. The nurse anaesthetist himself must also be up-to-date with current issues. He has to know what information is reliable and which suitable sources of information are available for the patient. This also plays a major role in communicating with a patient. There is a visible shift from convincing the patient, to negotiating with the patient. However, the nurse anaesthetist remains the expert in this field.

#### 2.3

#### DEVELOPMENTS IN THE NATURE OF THE WORK OF THE NURSE ANAESTHETIST

### 2.3.1

### DIFFERENTIATED AND SPECIALIST CARE

The change in demand for healthcare, the reallocation of tasks, the lack of time, the call for quality of care and the need for better organisation, have led to a situation where the tasks of an nurse anaesthetist are changing and expanding. For example, pre-operative screening, pre- and post-operative consultations, post-operative pain management, acute pain management, homologous blood transfusions, working within emergency teams and sedation. For the nurse anaesthetist, this means among other things, being able to establish a case history, making a diagnosis<sup>12</sup>, implementing a method for measuring a patient's pain, gaining a better knowledge of technology, and providing individually tailored advice. Within established limits, the qualifications of the nurse anaesthetists will expand. A different development is the creation of patient pathways. In these pathways, a number of patients are 'treated' for the same complaint in a relatively short time, which means that the work can be done very efficiently and targeted, which saves a significant amount of time. It points to a high level of specific knowledge. The nurse anaesthetist increasingly plays a role in pre-operative screening and post-operative pain management (APS).

<sup>&</sup>lt;sup>12</sup> the Ministry of Health, Welfare and Sports (VWS) (2005) *Position regarding RVZ recommendation diagnostics, Medical diagnosis:* Choose Expertise. (2005). News Report.

# 2.3.2 Evidence Based Practice

Evidence Based Practice (EBP), has gained an important place in public health. The substantiation and reporting of action taken based on scientific insights, has become 'a must'. Not only the patients, but also the healthcare insurers and the government, demand a scientific foundation for action taken. Action justified on the basis of EBP, is a combination of patient preferences, personal judgement based on clinical experience, and the outcomes of scientific research. EPB offers a range of responsible healthcare, in which the patient's wishes, professional knowledge and the assessment of the healthcare provider are approached centrally<sup>13</sup>. This requires an stance on the part of the nurse anaesthetist, whereby critical thinking and the justification of his actions are matters of primary importance. He must be able to read scientific literature and assess it with regard to its value and limitations in respect of healthcare provision. In addition, the nurse anaesthetist must be able to translate the relevant outcomes of scientific research into the practise and responsibilities of anaesthesiological and technology related healthcare. This may manifest itself during the implementation of protocols, standards and guidelines, and during verbal reporting on action taken. In addition to EBP, the nurse anaesthetist must be able to participate in (scientific) research. He must be able to collect the relevant data and critically evaluate the design and approach of a research project.

# 2.3.3

#### QUALITY FOCUSED HEALTHCARE

Quality healthcare is obtaining and then maintaining the desired level of quality of products or services by collecting information and by determining its value<sup>14</sup>. A scientific foundation for the action taken is an important aspect of quality healthcare. EBP makes the actions of a nurse anaesthetist verifiable. The patient is supported by regulations. The professional standard of a nurse anaesthetist consists of the quality and nature of his actions, his professional attitude, and his management of the care. The methodical work on improving and assuring the quality of healthcare provision is supported with guidelines and other instruments. Quality focused healthcare demands from the nurse anaesthetist that he is familiar with the quality standards and regulations, and that he acts accordingly. That he participates in quality audits and accreditation procedures. Moreover, he is responsible for his own actions, and, in accordance with the rules, reports (near) mistakes.

# 2.3.4 Continuity of care and collaboration

Occasionally, organisation is seen as a process in which the stages, pre-operative (holding), perioperative and post-operative (recovery), play a role.

This trend, together with the reallocation of tasks, increased multi-morbidity<sup>15</sup> and growing specialisation, places a heavy strain on the continuity of healthcare provision. It places heavy demands on the professional disciplines, their collaboration and communication; and on the organisation of healthcare provision. Together with other care providers, the required care has to be tailored to the wishes and needs of the patient. Continuity of care, for the nurse anaesthetist as a member of the anaesthesiology team, means independence, flexibility and fulfilling a control function. He will have an overview and ensures that the patient experiences continuity during the care process. When exercising control, the nurse anaesthetist has to communicate and negotiate with all members of participating disciplines<sup>16</sup>. Collaboration and coordination are of crucial importance to providing effective, efficient and high-quality healthcare.

# 2.4 **DEVELOPMENTS IN HEALTHCARE**

#### 2.4.1

#### TASK REALLOCATION

Because of waiting lists in healthcare, efficiency improvements in healthcare, the professional group's desire for more career options, and labour shortages in the healthcare sector, constant shifts are occurring in pratice<sup>17</sup>. These are referred to a reallocation or delegation of tasks. This is supported by the Council for Public Health and Healthcare<sup>18</sup>. In the University Medical Centre of Utrecht (UMC) and in the Academic Medical Centre in Amsterdam (AMC), there are specially trained nurse anaesthetists (Sedation Nurse anaesthetists: SAP) who independently sedate patients for the purpose of various, relevant procedures. There is also a discernable tendency for nurse anaesthetists to be deployed more broadly. This occurs increasingly outside the setting of an operating theatre. For example in the pain management of outpatients, pre-operative screening, post-operative care, acute pain services (APS) and transmural care. 19 However, the reallocation of tasks has to be structured and must be implemented in consultation with other healthcare providers. Important conditions, are the adaptation of the training courses, in-service training, ongoing professional development, regulation (gualifications and responsibilities) and funding. (RVZ, 2002) Task reallocation in healthcare will lead to new career paths in anaesthesia and to an attractive career perspective for ambitious nurse anaesthetists. The politics, the NVAM, the existing training courses and refresher courses, must provided appropriate responses to these developments.

- www.minvws.nl/images/ibe-2645810b.doc\_tcm19-104151.pdf and www.capaciteitsorgaan.nl
   RVZ (2002) Task reallocation in healthcare. The Hague

The Health Council of the Netherlands. (2008). Healthcare for seniors with a number of illnesses has to improve. The Hague. www.gr.nl Essen van G, Paardekooper PJ, Talma HF & Windt W. van der (2006) Arbeid in Zorg en Welzijn 2006 [Work, Healthcare and Wellbeing 2006]. The state of affairs and a forward look at the Healthcare and the Welfare and Social Services sector, Youth Welfare Child Care. Utrecht Prismant.

Kerkkamp H.E.M. (2006). New insights, new fileds of action. NTVA 23, n. 2, Page 20-21.

# 2.5 INNOVATIVE AND TECHNOLOGICAL DEVELOPMENTS

### 2.5.1 The advances in technology

Because of new developments, there is an increasing use of technology in surgery techniques and anaesthesiology. For example in surgery, new imaging techniques, laparoscopic procedures and sensor technology are used. In addition, a variety of instruments is used to reduce the risks of surgery to a minimum. This increasingly asks for an adaptation of anaesthesia techniques. Working with homologous blood transfusions has also gone through rapid developments in the last few years, and is more and more frequently part of the tools of a nurse anaesthetist. Because of the ageing of the population and the availability of new technologies, the demand for advanced medical care will only increase. However, because of the general shift in age of the population, efficiency and cost control, manpower is increasingly replaced with machines. The result is more technology intramurally, but also extramurally. An extramural example is respiration assistance at home and during transport<sup>20</sup>. Another development is the use of information and communications technology. The latter continues to expand. There is an increase in the use of digital patient files. For the nurse anaesthetist, the increased use of technology in healthcare means that he must monitor his own and the patients' safety even more diligently. He will have to check the equipment and the processes more often and more closely. For the smooth introduction and use of (new) technology, both intramurally and extramurally, the nurse anaesthetist will have to communicate effectively with the professionals involved in the development, introduction and use of technology in healthcare. In view of the professional literature that is used, knowledge of English and/or German is essential. Developments in the profession are rapid, and as a professional, he will regard lifelong education of paramount importance.

# 2.6 Demographic change

# 2.6.1 Fewer and fewer general hospitals remain

Two developments in this area will become evident in the coming years. There will be more private clinics, which, in term of format and size, will compete with hospitals. General hospitals will increasingly resemble private clinics, and will start specialising. There are approximately 88 hospitals and 8 university medial centres<sup>21</sup>. At most 70, but more likely only 40 will survive<sup>22</sup>. A hospital with a patient profile that is too homogeneous,

Vendeville, R. (1997). Extramural respiratory assisted transport. NVTA 3 and NTSR 3. 21 <u>www.nvz-ziekenhuizen.nl/dsc?c=getobject&s=obj&!sessionid=1bs5WDcV1j</u>s7tW8jhb9o WMdBXGwqyBTagQ31UqYCWNZ5zySrobBaqys3114qVXDU&ob jectid=28455&!dsname=nvz. 22 www.rivm.nl/vtv/object\_map/o562n26907.html www.bouwcollege.nl/Pdf/zorg/ut533. pdf <u>www.brancherapporten.minvws.nl/object\_document/o323n399.html</u>. cannot provide general training. As a result, there will probably be less training positions. Furthermore, those who have just completed their university studies cannot work with a specialised team. For the nurse anaesthetist, this means that when he works for a specialised centre, he will become a specialist himself, and will loose his broadly-based skills. However, because of the concentration of knowledge, he will be able to conduct more research of his own and will have more opportunities to use Evidence Based Practice (EBP).

#### 2.6.2

#### THE INCREASE IN FOREIGN ANAESTHESIOLOGISTS

The demand for healthcare is growing. The government has been trying for years to regulate this growth and to steer it in the right direction. This is done, partly by slowing growth by creating a threshold for those seeking healthcare, such as the introduction of an excess, and partly by regulating the growth in the number of healthcare providers. To establish a picture of the number of doctors in particular, a series of studies have been undertaken. 23 The shortage of doctors has to be rectified by taking action on a number fronts in the form of expanding the capacity of medical faculties, reducing the numbers that leave the profession, and through a reallocation of tasks. In 2000 and 2005, the capacity agency rang the alarm bells. An increase of 36% in student numbers has only benefited the 'popular' professions such as those of paediatrician, internist and psychiatrist. For anaesthesiologists, the shortage by 2012 has been estimated at 8%. In recent years, the shortfall in academic centres has primarily been filled by anaesthetists from other Western European countries. Germany led the field<sup>24</sup>. Once foreign anaesthesiologists works here, they tend to remain for an extended period. The number of training positions has currently been reduced again. A surplus of 1.2% is expected for 2016, but by 2020, there is expected to be another shortfall of 2%. However, in their last report, the capacity agency indicated that more people were trained between 2003 and 2006 than recommended by the agency. Therefore, more people were trained than forecast, which means that the shortages will be less than expected. At present and across the broad spectrum of specialisations, there is an approximate balance between supply and demand for medical care. For the nurse anaesthetist, this means working with foreign anaesthesiologists, being able to relate and adjust to changed circumstances. In addition to cultural differences in administering anaesthetics, work habits and professional relationships, there will also be language problems, despite the language training prior to the appointment of foreign anaesthetists. It may also present different views on how anaesthetics should be administered. An increase in knowledge.

Nivel. Medical specialists. www.nivel.nl/oc2; www.minocw.nl/documenten/brief2k-2002-doc-15404a.pdf; and www.capaciteitsorgaan.nl and Committee on Market Stimuli Medical Trainings Courses (2002). Recommendation: capacity na funding. Zoetermeer, IOO bv. Pronk, E-J. (2006). Arts sneller aan de bak. Medical contact 61 (42), 1659-1661.

# 2.7 DEVELOPMENTS IN THE EMPLOYMENT MARKET AND IN EDUCATION

# 2.7.1 THE SITUATION IN THE EMPLOYMENT MARKET

# 2.7.1.1 SECONDMENT

A nurse anaesthetist can have himself placed on secondment in a hospital through a contract employment agency. The agencies are commercial entities, which means that salaries are above those paid under the collective labour agreement (CAO), applied in hospitals. They also offer excellent secondary employment conditions. Many agencies offer the opportunity to alternate between working in the Netherlands and abroad. The nurse anaesthetist can also work outside the not-for-profit sector. The development described, offers new opportunities and challenges for the nurse anaesthetist. Working as a contract employee, requires a high degree of independence, flexibility and professionalism on the part of the nurse anaesthetist. Professionalism, particularly in the area of supporting trainees and forming teams.

# 2.7.1.2 NURSE ANAESTHETIST PARTNERSHIPS

A different development, still in its infancy but offering a secure perspective, is partnerships between nurse anaesthetists. This development enables the nurse anaesthetist to work as an independent professional. In addition to the challenges that a nurse anaesthetist may find working for an employment agency, it offers the possibility of running a professional practice in accordance with one's own judgements. Because of the low overhead expenses, this format could be more cost effective for hospitals than contract employment agencies. The learning climate within a health care institution will receive additional impetus from the influence and knowledge of experienced, all-round anaesthesia pratitioners<sup>25</sup>.

# 2.7.1.3

# THE EMPLOYMENT MARKET SITUATION

Because of the greying of the population, technological developments and economic growth, the demand for health care increases<sup>26</sup>. Various agencies that map the employment market in the heath care sector have indicated that supply and demand for health care in the near future will be out of balance. The supply of personnel will lag behind. Problems are already emerging when filling vacancies for nurse anaesthetists. The available positions cannot not be filled, the file with 'backup candidates' is empty, and there is a significant use of contract workers. Because of the aging workforce of nurse anaesthetists, which in a few years will result in a significant outflow, future shortages will only get worse<sup>27</sup>.

www.pulsemedical.nl

Ministry of Public Health, Wellbeing and Sport VWS (2007). Not of later health care. Den Haag. Dam, E. van & Schuit, H. (2007). Final report Arbeidsmarktonderzoek naar de behoefte aan een hbo-opleiding Medische Hulpverlening. [Employment market investigation with regard 26 27 to University courses in the provision of Medicalcare.] Nijmegen: Kenniscentrum Beroepsonderwijs Arbeidsmarkt [Knowledge Centre of Professional Training Employment Market]

# 2.7.1.4 **EXPANDING CAREER PERSPECTIVE**

In addition to the opportunities in the field of organisation (management training) and education (courses in employment counselling or on-the-job training and/or lecturing in Higher Healthcare Education) that have been around for a while, the changes in health care, specialisation and task reallocation offer new opportunities for the nurse anaesthetist (Kerkkamp, 2006). Meanwhile, health care institutions are attaching an increasing importance to the creation of career options for nurse anaesthetists<sup>28</sup>. They are doing this with an eye to recruiting new staff and the retention of incumbent personnel. 29 Healthcare institutions are introducing positions in which the nurse anaesthetist will be able to specialise further to become Physician Assistants (PA) and Nurse Practitioner (NP). In the UMC Utrecht and the AMC, there is the option of being trained to Sedation Nurse Anaesthetist (SAP)<sup>30</sup>. Health care institutions are also creating development prospects by identifying areas of special interest in which the nurse anaesthetist can develop. Examples of this are professional development, education, coaching, research and ICT.

# 2.7.2 **DEVELOPMENTS IN EDUCATION**

# 2.7.2.1 COURSES

Educational institutions are also responding to the abovementioned developments, by offering new courses. The start of a full-timer bachelor degree in Emergency Medical Care (BMH) is planned for September 2009. This development was prompted by feedback from the field, that the employability of emergency medical care personnel is limited, that the training capacity is limited, and that there are or are expected to be shortages of medical care providers because of the ageing of incumbent personnel. (Employment market investigation, 2007). There are also plans for university courses with a major in anaesthetics recognised by the Ministry of Education and fitting into the Bachelor/Master's structure (BAMA).

#### 2.7.2.2 EDUCATION FUND

In an attempt by the government to deal with the shortage and then again a surplus of personnel, an education fund has been established. In the first tranche, the training of medical specialists was regulated and funded<sup>31</sup>. The implementation of a second tranche, which included a course for nurse anaesthetists, has been postponed<sup>32</sup>.

Meeusen, VCH (2004) Geen hersenloze kwallen [No brainless jerks]. A development palette for the age conscious career policy for nurse anaesthetists. Thesis for the course to a

Master of Arts' in health care management. University of Amsterdam, Amsterdam. Windt van der W., Steenbeek R, Eijk van W & Talma HF (2002) Inspanning beloond [Effort rewarded]? An investigation into the employment market of surgical assistants and nurse anaesthetists. Utrecht Prismant.

For more information on this course in Utrecht, see Kalkman CJ. (2006). De anesthesiemedewerker: sedatieassistent [The nurse anaesthetist: Sedation assistant]. NTVA 23, no 2, Page 22-24

NVZ, STZ. (2005). Het opleidingsfonds, een 10-puntenplan [The education fund, a ten-point plan]. Publication number: NVZ/STZ 4-2005-02.

Ministry of Public Health, Wellbeing and Sport VWS (2007). Brief over het opleidingsfonds aan de Tweede Kamer [Letter about the education fund to the Lower House], MEVA/ ABA2781895. The Hague, www.minwws.nl/kamerstukken/meva/2007/opleidingsfonds.asp and www.cbog.nl/uploaded/FILES/htmlcontent/Microsoft%20Word%20-%2 I070105EvdV%20 NW%20aan%20Klink\_%20toewijzing%20opleidingsplaatsen.pdf

## 2.7.2.3 Competency Based Training (CBT)

The curriculum for the current training course for nurse anaesthetist has been determined by 'College Ziekenhuisopledingen' [Hospital Training Council] (CZO). The format for the course will be determined by the training centres and participating hospitals themselves. Many of the training centres have moved to Competency Based Training (CBT). The consequences for student supervision of those that have already graduated, have changed as a result. Supervision and 'demonstration' has shifted more in the direction of 'coach and coaching' training process.

#### CHAPTER 3 DETERMINATION OF THE NURSE ANAESTHETISTIS POSITION

In this chapter, we create a vision of the position of the profession and the (future) professional field of the nurse anaesthetist. The overall picture will be linked to the developments outlined in the last chapter, the context of anaesthesiological care provision, the outlook and the regulatory frameworks, and the training of nurse anaesthetists.

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3.1

#### THE CONTEXT OF ANAESTHESIOLOGICAL CARE PROVISION

Anaesthesiological care provision occupies a special place in Dutch healthcare. In the Netherlands, anaesthetics are seen as a team effort in which at least an anaesthetist and a nurse anaesthetist work in tandem. The nurse anaesthetist is qualified and skilled in the monitoring, and if necessary, the maintenance of the anaesthetic, as well as the monitoring of the patient's vital signs. As a result, the anaesthetist will be able to employ his services for several patients at the one time, thus making full use of his expertise. The collaboration between anaesthetist and nurse anaesthetist contains an element of significant mutual trust, which may be regarded as unique. trust is based on mutual respect, professional skill, independence and a sense of responsibility on the part of the nurse anaesthetist. The anaesthetist has to be able to rely on the nurse anaesthetist to inform him immediately of any catastrophic events or any unexpected changes that have been observed. The nurse anaesthetist works within (multi) disciplinary teams. In addition to the operating theatre complex, the nurse anaesthetist will have a number of work areas. They are also deployed in resuscitation, in recovery rooms, delivery rooms, observation and treatment wards, outpatient pain management, burns and in rescue operations involving (massive) trauma. Because of all the developments in the context of a nurse anaesthetist's tasks, such as pre-operative screening, Acute Pain Service (APS), sedation and pain management, there has been a discernable shift within the hospitals, to having them work outside the operation theatre complex. The tasks of a nurse anaesthetist are now also employed transmurally and as part of mobile trauma teams.

# 3.2

# THE OUTLOOK FOR ANAESTHESIOLOGICAL CARE PROVISION

Central to the current outlook for a nurse anaesthetist, is working within an anaesthesiological team in which collaboration and communication between anaesthetist and nurse anaesthetist is essential, so that the objectives of the overall anaesthesiological policy can be achieved. In essence, the nurse anaesthetist reports to only the one medical specialist, i.e. the anaesthesiologist. When carrying out his tasks, the nurse anaesthetist primarily focuses

on the safety of the patient for which he shares responsibility. All the tasks carried out by the anaesthesiological team, are by definition focused on the interests and the needs of the patient. The nurse anaesthetist has an overview of all the factors that will determine the quality of the care needed and directed at the patient in a perioperative or anaesthesiological respect. In this environment, he acts as 'monitor' of the patient under anaesthesia. What's more, the quality of the care provided is paramount. It must go hand in hand with the correct approach and attitude, the provision of sufficient information, as much as possible the use of evidence based material, and the careful contact with the patient. Because of the increasing amount of technological and healthcare-related developments, the nurse anaesthetist's tasks are becoming more professional, and his area of responsibility is expanding. The nurse anaesthetist is a professional who has specialised knowledge, understanding and skills, together with a capacity for continued learning after completion of his training.

#### 3.3

#### REGULATORY CONTEXTS OF ANAESTHESIOLOGICAL HEALTHCARE PROVISION

Whilst carrying out his professional tasks, the nurse anaesthetist will be subject to laws and regulations such as the Medical Treatment Contracts Act (WGBO), Care Institutions (quality) Act, Client Protection in the Healthcare Sector Act, the Privacy Act, and the Individual Healthcare Professions Act [BIG]. In this paragraph, we will focus on the Individual Healthcare Professions Act (BIG)

# 3.3.1 The BIG [Individual Healthcare Professions] Act

The Individual Healthcare Professions Act was published in Government Gazette no. 665 of 1993, and came into effect on 1 December 1997. It contains rules for the provision of healthcare by professionals. It describes who is permitted to carry out which reserved treatments and who is entitled to use the associated title. The profession of nurse anaesthetist is not regulated by the legal requirements of the BIG Act, but does fall within its ambit. A nurse anaesthetist, who has also completed nursing training, may have the performance of his nursing activities tested under Article 3 of the BIG act. The title of 'nurse' is protected. To be able to use this title, the nurse anaesthetist concerned must be listed in the BIG register and must seek re-registration every five years.

#### 3.3.2 RESERVED TREATMENTS

The nurse anaesthetist is a non-independent, qualified professional. He is only permitted to carry out a reserved treatment when both he and the client can reasonably assume that he possesses the skills to carry out the task properly. Certain groups of professionals, including nurse anaesthetists, regularly carry out

certain reserved treatments in an expert manner, and with a significant degree of autonomy. In such circumstances, the professionals involved will have reasonably determined that direct, personal supervision and/or intervention by a doctor is not required. This is in

accordance with the BIG Act; the rules of authorisation state that supervision and intervention must be possible in cases where this is reasonably required. The nurse anaesthetist is only authorised to undertake such reserved treatments if he is competent to handle them.

# 3.4 The training for nurse anaesthetists

# 3.4.1 The training

The training for nurse anaesthetist takes the form of in-service training. The trainee will be employee and student at the same time. After a preparatory period of at least 12 weeks, the student will work in a training hospital and will attend a number of theory lecture periods each year at an educational institute. The final attainment levels of the three-year course will be determined by the Hospital Training Council (CZO) of the Dutch Hospitals Association (NVZ) and the Dutch Federation of University Medical Centres (NFU). The CZO also determines the prerequisites that the students must have. It also determines who will be qualified to train. There are nine training centres in the Netherlands where hospitals can send their students for the theory component of their training. Not all hospitals actually train. Some 150 students start each year. The hospitals themselves select their own candidates and only train enough for their own requirements. Funding is provided by the hospitals and forms part of the budget that the government allocates to them. The hospital and the training centre must both have CZO accreditation. Accreditation has to be renewed every five years. Every hospital sets up a collaborative relationship with a training institute of its choice. Within the national regulations, prepared by the CZO, the training institutes together with the hospitals, have to structure the format of the training on a regional basis. Arrangements are made with regard to the number of weeks the students are required to be on campus, the format of their lectures, the testing and the manner in which the training is to be completed. After achieving the final attainment level, the student will receive a nationally recognised diploma from the CZO. International recognition differs from country to country.

# 3.4.2 The nurse anaesthetist, European and global

The nurse anaesthetist in the Netherlands will increasingly have to draw on his knowledge of languages. A lot of the professional literature comes from English and German speaking countries. Moreover, an increasing number of anaesthesiologists are of foreign origin, and the nurse anaesthetist is therefore expected to be able to resort to at least one of the abovementioned languages. Together with the multicultural community, it forces the nurse anaesthetist to be multilingual before entering the profession. International research<sup>33</sup> has shown that there are at least 107 other countries in the world where nurses, whether specially trained or not, play an active role in anaesthesiology. Dutch nurse anaesthetists increasingly keep in touch with colleagues in other countries. Given the successes of international conferences, this will increase. Working in Switzerland, Norway, Saudi Arabia or in the interior of Africa for a short time, is no longer a novelty. Unfortunately, this usually only applies for nurses, because in most countries, a nurse anaesthetist has to be at least a qualified nurse, and is regarded as a nursing specialist in many cases. (International Council of Nursing, ICN). The task of the nurse anaesthetist in the defence force certainly requires him to be multilingual because of the increasing frequency of collaboration in international coalitions. Because of his membership of the NVAM, the nurse anaesthetist is represented at the International Federation of Nurses (IFNA), the European Specialist Nurses Organisations (ESNO), and at the ICN. This is called stepped membership. <sup>33</sup> Maura, S. McAuliffe (2002). *Nurse Anesthesia worldwide: practice, education, and regulation. USA*.

#### CHAPTER 4 Domains, core tasks and roles

The previous chapters dealt with developments relating to the profession of nurse anaesthetist, its position and its vocation. The developments described will have consequences for the domains, the tasks, the role and the competencies of the nurse anaesthetist. This chapter describes the domains, the (amended) tasks that nurse anaesthetists carry out and the roles they play.

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4.1

# DOMAINS AND CORE TASKS

Domains are the areas in which the nurse anaesthetist carries out his core tasks. Core tasks indicate what is part of the core of the nurse anaesthetist's profession. A core task is a characteristic and significant part of the professional practice of a representative group, i.e.: it is a set of intrinsically linked, professional activities. Core tasks are in fact the essence of the nurse anaesthetist's profession. The nurse anaesthetist carries out a large number of different tasks, practically all of them collaboratively, within an anaesthesiological team. These tasks are different in substance and nature, and can be divided into the following three domains:

- A. The nature of healthcare;
- B. The organisation of healthcare;
- C. Professionalization.

The following core tasks belong to domain A Nature of healthcare:

- 1. Observation and examination;
- 2. Analysis and making a diagnosis;
- 3. Providing anaesthesiological care;
- 4. Communication with the patient.

The following core tasks belong to domain B Organisation of healthcare:

- 1. Taking responsibility for the quality of the work;
- 2. Taking responsibility for organisation and management;
- 3. Collaboration, communication and coordination with other healthcare providers.

The following core tasks belong to domain C Professionalization:

- 1. Keeping personal knowledge up-to-date;
- 2. Coaching and training students and colleagues;
- 3. Contribution to the development and professionalism of the professional group
- 4. Participation in scientific research.

# 4.1.1 Domain A. The Nature of Care

### CORE TASK 1.

#### **OBSERVATION AND EXAMINATION**

The nurse anaesthetist systematically collects the patient-related details (data) required for the treatment and decision-making process surrounding the healthcare situation of the patient for which the anaesthesiological procedures has been requested. He can obtain these details either verbally whilst taken a case history, during pre-operative screening, as well as with the help of biometric equipment such as invasive measurements during a highly complex surgery. Observations on the basis of expertise and experience also plays an important role in this process. Observation and examination of the patient by the nurse anaesthetist is an ongoing process during the entire healthcare process. All these details are registered by the nurse anaesthetist in accordance with the applicable guidelines and using his own expertise. The nurse anaesthetist will check the wishes and needs of the patient, and supports the patient in the making of choices.

#### PROCESS

The nurse anaesthetist collects, registers and interprets all verbal and written patient related data, and data obtained with biometric equipment.

#### ACTIVITIES

During this process, the nurse anaesthetist mainly carries out exploratory, familiarisation, implementation and investigative tasks.

#### Level

#### Complexity

The complexity of this task is influenced by patient related factors as well as factors such as the planned procedure, the work environment and working conditions. Such as the ASA classification. The higher the classification, the more complex the care. In acute cases, time constraints will also influence complexity.

#### Responsibility

The responsibility for collecting the details lies with the nurse anaesthetist directly. He is expected to respond independently to sudden changes in the vital signs of the patient. The nurse anaesthetist will independently take action because it is important for the wellbeing of the patient, and will inform the anaesthetist of the action taken. This is carried out within the policy framework of the anaesthesia planned.

#### PERSONS INVOLVED

In this task, the nurse anaesthetist has to deal with the patient, the anaesthesiologist, relatives of the patient, colleagues and members of disciplines from other departments within the hospital.

#### Tools

The tools available for this task are:

- the patient file;
- a protocol;
- medical equipment;
- a suitable room for discussion/examination room.

#### CHOICES AND DILEMMAS

The nurse anaesthetist will face the following choices and dilemmas in this task:

- time available for each patient;
- communication problems;
- the wishes of the patient;
- the maturity of the patient;
- a critical attitude on the part of the patient;
- customer friendliness;
- pressure of the operating room schedule by multiple patients at the time;
- personal expertise of the nurse anaesthetist;
- changes to anaesthesia policy;
- digitisation of various patient files/equipment, etc., requiring a knowledge of ICT;
- the limits of authority.

#### Role

It can be deduced from the abovementioned, that the role<sup>34</sup> includes that of **healthcare provider and counsellor.** 

# CORE TASK 2.

#### ANALYSIS AND MAKING A DIAGNOSIS

The nurse anaesthetist makes an analysis of the patient related details obtained from observation and examination. Based on his analysis, the nurse anaesthetist will make a diagnosis, and in consultation with the anaesthesiologist, will adapt the anaesthesia policies. In doing so, the nurse anaesthetist will also act within the frameworks agreed with the anaesthesiologist.

#### PROCESS

The nurse anaesthetist correlates the patient-related details and uses them to make a diagnosis, and then adapts the anaesthesia policies within the agreed frameworks.

#### ACTIVITIES

The nurse anaesthetist's role in this task is to provide advice and information to the patient, the anaesthetist and the specialist treating the patient, as well as carrying out the activities relating to the patient.

#### LEVEL

#### Complexity

In this task, the complexity depends on a number of factors. First, there is the ASA classification of the patient, but the frameworks set by the anaesthetist are also of essential importance. The fact that the nurse anaesthetist has to analyse various sets of data to arrive at a diagnosis independently, has to be regarded as a task of significant complexity. The complexity therefore, is very divers and can at any moment, and acutely, change during one and the same session.

#### Responsibility

The nurse anaesthetist remains completely responsible for his own actions and the progress of the care being provided. In the event of a change in the situation, the nurse anaesthetist will collect the fresh details required, so that an adjusted diagnosis/plan of attack can be determined.

#### PERSONS INVOLVED

During this task, the nurse anaesthetist will deal with the patient, any members of other disciplines that are specifically required for the procedure, the OR team, but especially the anaesthetist and the doctor in charge.

#### TOOLS

The tools available for this task are:

- the patient file;
- the anaesthesia report;
- a protocol;
- the BIG act;
- Care institutions (quality) Act;
- the telephone/intercom.

#### CHOICES AND DILEMMAS

The nurse anaesthetist will face the following choices and dilemmas in this task:

- delineation of responsibilities;
- time available for each patient;
- pressure on the operating room schedule by multiple patients at the time;
- looking after the patient's interests;
- personal expertise of the nurse anaesthetist.

#### 22 Role

It can be deduced from the abovementioned, that this is the role of a healthcare provider and counsellor.

### CORE TASK 3.

#### PROVIDING ANAESTHESIOLOGICAL CARE.

This core task is the most basic of all core tasks. With this core task, the nurse anaesthetist is expected to give form and substance to the objectives of quality anaesthesiological care, in a professional and independent manner. The starting point of the anaesthesiological procedure is ensuring quality and safety vis-à-vis the patient, his environment and the nurse anaesthetist himself. During a procedure or examination, the anaesthetist together with the nurse anaesthetist, form an anaesthesiological team. The nurse anaesthetist will communicate, provide support and collaborate with the anaesthetist during the administration of the various anaesthesia techniques. He ensures that all the requirements for the anaesthesia for each treatment/examination are checked and prepared systematically, paying special attention to logistics in the process. The nurse anaesthetist, after due consultation, will be capable of carrying out all the tasks associated with a good quality anaesthesia. The nurse anaesthetist will also monitor the patient's vital signs, the depth of the anaesthesia, the guality and the safety of the anaesthesia administered. The nurse anaesthetist will communicate his actions and findings to the anaesthetist and other interested persons. In the process, he will be entrusted with the responsibility for continuing and optimising the care provided to the patient. After the start of the anaesthesia procedure, during surgery or an examination, the nurse anaesthetist will monitor the patient. He will think and act on the basis of his anaesthesiological knowledge, Evidence Based Practice (EBP), and the arrangements made with the anaesthesiologist. He will also carry out the activities required for maintaining guality and safety. The essence of this is that he ensures that the anaesthesiological care process for the patient assigned to him, proceeds optimally. In the event of unforeseen and important changes in the process, he will take action (if required) and will immediately inform and/or arrange to warn the anaesthetist. Anaesthetics are based on teamwork. The work of an anaesthesiology team consists of knowing exactly what each team member expects from the other team members. What is unique, is that this may arise in any situation or from any point of view, whilst discussion is often kept to a minimum. The anaesthetist and the nurse anaesthetist must communicate and work well together. For a full anaesthetic, the guideline supported by the Dutch Association for Anaesthesiology (NVA) and the Dutch Association of Nurse Anaesthetists (NVAM), (giving and anaesthetic and reviving the patient must be supervised by members of both disciplines. This ensures that, if necessary for the process, the tasks can be transferred to each other. However, in practice, nurse anaesthetists, on instructions of the anaesthetist, will bring the patient out of the anaesthesia; current practice in peripheral hospitals makes this unavoidable sometimes. This can only be done through good communication and coordination between both professionals.

#### PROCESS

The nurse anaesthetist monitors the vital and other physiological signs and the anaesthesia applied, in a professional manner. He will act in accordance with his findings and the arrangement made. Characteristic in this regard is that he:

- will assess whether the parameters has been disturbed;
- will assess the relationship between the disturbed parameters, the complaints and the symptoms;
- will assess the reliability of the parameter values in the care situation concerned;
- will assess what the actual and potential consequences of the disturbances are/can be;
- will assess the seriousness and the urgency of the actual clinical condition of the patient;
- based on his findings, will recognise the need for action and takes in a timely manner;
- will do the abovementioned independently, accurately, smoothly and within the work process;
- will regularly communicate with the persons involved;
- will collaborate with the members of the anaesthesiological team.

#### ACTIVITIES

The nurse anaesthetist, during this process, is especially concerned with the analysis of the parameters and will act in accordance with his own insights, skills, knowledge and arrangements within the anaesthesiological team.

#### LEVEL

#### Complexity

Some of the core skills of the nurse anaesthetist are the monitoring, support and/or relaying of the vital signs of the patient, and monitoring the depth of the anaesthesia at the same time. The condition of the patient may vary significantly, which means the care is often unpredictable in character. The risk of (unexpected) fast occurring complications with serious if not fatal consequences, is realistically present. The nurse anaesthetist continually gathers details and uses various sources in doing so. The nurse anaesthetist has to analyse these details on an ongoing basis, check them, and integrate them in order to observe subtle changes in the condition of the patient in a timely manner and to adjust his interventions accordingly. The continuous monitoring of the performance of the patient's (vital) physical regulating processes, is very important. The monitoring is carried out with or without biometric equipment. Depending on the invention to be carried out, the nurse anaesthetist will or will not be working independently.

#### Responsibility

The nurse anaesthetist will carry out reserved treatments in accordance with the BIG Act and the Care Institutions (quality) Act. With other tasks, he will do this with indirect supervision, autonomously and at a high level of quality. This means that, if necessary in a

non-standard professional situation, he will also be able to adjust a procedure to the required level of care himself. Through continuous observation, diagnosis and the application of interventions, the nurse anaesthetist will be contributing to the stabilisation of a patient's condition and the prevention of complications. In addition, the nurse anaesthetist will continually observe the patient because of (the threat) of risks associated with surgery, examination or anaesthetic techniques themselves. Because the condition of the patient often leaves little room for delay, it is necessary for the nurse anaesthetist to be able to make a quick judgement about what interventions are required. Communication and collaboration within the anaesthesiology team is indispensable and very important in this respect.

#### PERSONS INVOLVED

In this task, the nurse anaesthetist has a lot of contact with the patient, the anaesthetist, all other personnel in the operation theatre or the treatment room, relative/companion and colleagues from other departments in the hospital.

#### Tools

When carrying out this care assignment, the nurse anaesthetist uses various sources of information for the monitoring, supporting and/ or relaying of the patient's vital signs and the depth of the anaesthesia. The most important source of information is the patient himself, but he will also use biometric monitors and laboratory test results. The wound area itself, the current phase of the procedure/examination, and the information provided by the surgeon/person treating the patient, will provide the nurse anaesthetist with the information he needs. Just observing/registering all measurement data and any changes thereof, is not enough. He must be able to analyse and interpret this type of data and its interconnectedness.

All measurement data, includes:

- the neurological system;
- the respiratory system;
- the cardiovascular system;
- the balance of hydration and electrolytes;
- thermo-regulation;
- blood chemistry;
- the immune system;
- the digestive system;
- the motor skills system;
- the endocrine and the reproductive systems.

#### CHOICES AND DILEMMAS

The nurse anaesthetist, when providing quality care, must continually balance the actions that need to be taken immediately and cannot be delayed, against what action he is allowed to take independently. When taking action, the nurse anaesthetist weighs the pros and cons in terms of:

- his available clinical knowledge and experience;
- considerations of medical issues by the anaesthetist;
- any preferences of the patient or his relatives in light of advantages and disadvantages or possible alternatives;
- the circumstances under which they have to occur;
- regulations/ethics/departmental rules/responsibilities of his own profession
- knowledge from scientific literature.

#### ROLE

It can be deduced from the abovementioned, that this is the role of a healthcare provider.

### CORE TASK 4.

# COMMUNICATING WITH THE PATIENT

The nurse anaesthetist will introduce himself to the patient, identify the patient, and check the details of the patient during the short phase before the treatment. The nurse anaesthetist will provide the patient with advice and will answer questions during the preoperative phase, during surgery, and during the post-operative phase. The nurse anaesthetist will also give the patient instructions, putting him at ease during the pre-operative perioperative and the post-operative phase. The nurse anaesthetist will be able to take the case history during pre-operative screening, and can then undertake the required examination, providing information and advice in the process. The nurse anaesthetist will adjust his communication to the level of understanding of the patient and will check whether the information provided has been understood.

#### PROCESS

The nurse anaesthetist will prepare himself for the patient's arrival for the treatment/procedure, or his presence at the surgery screening hours. The nurse anaesthetist will do this by informing himself about the patient's details, i.e. name, registration number, treatment required, notes, etc., then receives the patient and starts the process. The nurse anaesthetist will ask specific questions and establish a relationship with the patient based on trust. He will allow for feelings of anxiety and uncertainty on the part of the patient. He will provide full and accurate information, so that the patient is able to make carefully considered choices. In cases where the patient is conscious, for example during local/regional anaesthesia, he will communicate with the patient and support and guide him.

#### ACTIVITIES

The tasks of the nurse anaesthetist as the pre-operative screener will usually be those of examining, informing, guiding and referring the patient. During the pre-operative and perioperative phases, the nurse anaesthetist has the role of guiding, informing, instructing and checking the patient. Particularly during the phases surrounding the actual treatment/procedure. During the surgical phase, the activities primarily include the tasks of informing and guiding the patient.

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#### LEVEL

24

#### Complexity

During screening, the complexity is determined by the taking of a case history to determine the ASA classification of the patient. The associated shift in anaesthesiological care from the anaesthetist to the nurse anaesthetist, although in accordance with arrangement made, will not always proceed in accordance with the 'arrangements made' in practice, because of circumstances or information received. The complexity of these activities is also determined by the time factor. Within a tight timeframe, an case history must be taken, information must be provided, any additional examinations need to be carried out, and eventually an estimate needs to be made of the anaesthesiological risks, together with any follow-up appointments. During the activities surrounding the actual treatment/procedure, the complexity is also determined by time; in a short timeframe, the details need to be checked, and the patient is entitled to the attention and care, which may lead to a discussion that, because of time constraints, may need to be truncated. There is a tension between the provision of care and the keeping to the operation theatre schedule.

Responsibility

The nurse anaesthetist, within the arrangements made and the guidelines, will be responsible for the pre-operative screening and for consulting the anaesthetist if the patient, on further consideration, falls outside the 'guidelines'. The nurse anaesthetist works in accordance with anaesthesiological policy determined by the anaesthetist. The nurse anaesthetist is responsible for communication with the patient, with the anaesthesia team, and with the surgery team. Around the surgery, he works independently and often together with the anaesthetist or other OR staff.

#### PERSONS INVOLVED

The nurse anaesthetist has contact with:

- the anaesthetist;
- other OR staff, 'holding nurses', the departmental secretary and the department's nurse;
- the intensive care nurses;
- x-ray department staff;
- laboratory staff;
- medical specialists;
- recovery nurses;
- support staff.

#### TOOLS

The nurse anaesthetist has available the following tools:

- medical status;
- data management systems;
- case history data;
- completed questionnaire;
- stethoscope;
- biomedical equipment.

#### CHOICES AND DILEMMAS

Areas of tension during screening, whether to treat/advise the patient independently or not, and choosing between care and the completion of the program within the time set. Areas of tension around the surgery, providing care or completing the schedule on time and meeting expectations in respect of time factors and the provision of advice based on information needed from the patient and strictly keeping to the professional code. Providing care versus completion of the OR schedule.

#### Role

It can be deduced from the abovementioned, that the role includes that of healthcare provider and counsellor.

#### 4.1.2 DOMAIN B.

#### ORGANISING CARE

#### CORE TASK 1.

#### TAKING RESPONSIBILITY FOR THE QUALITY OF THE WORK

The nurse anaesthetist will demonstrably attend to the quality of his work in respect of both the patient and the organisation. This will occur in the operating theatre, but also outside it. In order to assure this standard of quality, he will demonstrate a professional attitude, with as a staring point where possible, the wishes and needs of the (surgery) patient.

#### Process

The nurse anaesthetist will be responsible for keeping his own expertise up-to-date. This will allow him to guarantee the quality of his work as a professional, and thus the quality of the care provided. The nurse anaesthetist will apply standards, protocols and quality guidelines for the purpose of monitoring and improving the provision of care. As a member of a professional group, he will have an important task: to make a contribution to the development and keeping up-to-date of these instruments of quality healthcare for the purpose of guaranteeing the quality of his professional activities. For this core task, the nurse anaesthetist will carry out the following activities:

- coordination of the care around the patient (care recipient);
- ensuring the continuity of the provision of care;
- evaluating during the provision of care, and adjusting the care if necessary;
- evaluating the entire process of providing care;

- consulting with colleagues;
- working in accordance with standards, protocols and quality guidelines;
- ensuring safety for himself, the patient and the patient's environment;
- taking the initiative to develop instruments of quality care, if they are lacking;
- ensuring a complete transfer of a (surgery) patient to other departments;
- providing accurate registration of data collected and the details of procedures carried out, in an anaesthesia report;
- taking initiatives for the improvement of care provision by asking for feedback from colleagues;
- taking initiatives for the improvement of care provision by providing feedback when asked, or by volunteering feedback;
- taking part in (ward) meetings;
- using intervision models;
- taking part in external reviews and accreditation.

#### ACTIVITIES

The activities of the nurse anaesthetist in this core task, will involve coordination, implementation and collaboration.

# LEVEL

Complexity

Ensuring the quality of the work is a complex task. It is important that the nurse anaesthetist keeps and overview of the continuity of the entire care provision process. He will be carrying out the function of directing matters. In doing so, he will at all times need to weigh the interests of the organisation against the interests of the care recipient.

#### Responsibility

In this area, the nurse anaesthetist has an autonomous responsibility.

#### PERSONS INVOLVED

In this task, the nurse anaesthetist has to deal with the patient, the anaesthesiologist, colleagues, quality control staff and colleagues from other departments in the hospital.

#### Tools

- protocols;
- work arrangement made;
- transfer forms;
- patient files;
- quality guidelines;
- feedback rules;
- intervision models;
- quality measurement instruments;
- data management systems.

#### CHOICES AND DILEMMAS

The nurse anaesthetist will face the following choices and dilemmas in this task:

- making the right decision in the case of conflicting interests between the organisation and the care recipient;
- talking to colleagues about their performance, which will not always be accepted.

#### ROLE

It can be deduced from the abovementioned, that this is the role of a director.

### CORE TASK 2.

#### TAKING RESPONSIBILITY FOR ORGANISATION AND MANAGEMENT

The nurse anaesthetist will bring structure to his activities, which will result in a hierarchy to logical linkages. He will provide a structured classification of materials and tasks. Planned activities will also be carried out at the right time and within the set time constraints. He will participate in the planning of the program. In addition, the nurse anaesthetist will always keep in mind the risk of catastrophic events and will anticipate these without affecting the planned care. The nurse anaesthetist will manage medical equipment in a professional manner.

#### Process

For this core task, the nurse anaesthetist will carry out the following activities:

- checking and switching on the equipment in accordance with regulations and/or operating instructions;
- operating/setting/adjusting the equipment in accordance with regulations and/or operating instructions;
- making the equipment and tools ready for use, and trying to assure a uninterrupted progress;
- knowing and recognizing therapeutic options (or non-options);
- in the case of a multitude of equipment and/or instruments, arranging them conveniently and ergonomically;
- monitoring the condition of the equipment, instruments and tools;
- monitoring the sterility of the stocks of materials and tools;
- undertaking troubleshooting activities in the case of a failure;
- observing the necessary safety guidelines/arrangements;
- sending the equipment/instruments or tools for repairs with detailed instructions;
- maintaining contact with suppliers;

- advising the procurement office of the specifications of the equipment to be purchased. In doing so he consider all equipment available on the market;
- taking care of the progress of the surgery process;
- taking care of the continuity of the anaesthesiology process: revival, admission of trauma victims, pre-operative screening and APS.

#### ACTIVITIES

In this respect, the nurse anaesthetist usually has the task of implementing, advising, coordination and instruction.

#### 26 LEVEL

#### Complexity

The nurse anaesthetist takes care of the organisation and management in all situations. As far as purchasing or replacement decisions are concerned, a choice has to be made in a dynamic market environment with very aggressive selling methods.

#### Responsibility

The nurse anaesthetist is responsible for making equipments and tools ready for use for anaesthetic operations in the broadest sense of the word (not just in OR, but also for pain management, emergency admissions, etc.). The nurse anaesthetist looks after and is responsible for the logistics surrounding anaesthetic operations. One moment the nurse anaesthetist is the only representative of the anaesthesia team, the next he will move into the background (e.g. in training situations involving assistant physicians and supervisors). This requires a large measure of flexibility, good judgement and adaptability on the part of nurse anaesthetist, to fill the appropriate role at the right time. The nurse anaesthetist is the first cab of the rank when there is a need to take action autonomously whilst waiting for an anaesthetist in an acute situation.

#### PERSONS INVOLVED

In this task, the nurse anaesthetist collaborates with fellow surgery assistants, colleagues from the central department for sterilisation, central stores, the purchasing department and representatives of external companies. The nurse anaesthetist will provide supervisors with recommendation regarding purchases.

#### Tools

- order lists;
- check lists;
- safety checklists;
- protocols.

#### CHOICES AND DILEMMAS

The nurse anaesthetist has to make a choice based on quality and ease of use. Making proper comparisons is always made more difficult by the sales techniques of the manufacturers. Although a nurse anaesthetist may be expected to handle equipment in a cost-conscious way, also during the purchase thereof, the purchasing office will not delegate this responsibility. The dilemma is that sometimes the recommendation is to work with equipment of a lesser quality. In this respect, the nurse anaesthetist must provide professional recommendations in the interest of quality and safety.

#### ROLE

It can be deduced from the abovementioned, that this is the role of a **director**.

#### CORE TASK 3.

#### COLLABORATION, COMMUNICATION AND COORDINATION WITH OTHER HEALTHCARE PROVIDERS

The nurse anaesthetist organises his own activities during day, evening and night shifts. He also directs and implements the plans for the patient's care. Delivering this care, involves the members of a number of disciplines apart from the anaesthesia team. All the members of these disciplines must coordinate their activities, to avoid mistakes, overlap, and inefficiency, duplication of work, contradictory advice and confusion on the part of the patient. Particularly for multi-disciplinary teams in the healthcare sector, this is the extent to which input from its members differs, the composition is not fixed, and the persons representing the disciplines change regularly. When implementing directions, the nurse anaesthetist will communicate and negotiate with members of all of the participating disciplines. In doing so, he will use his knowledge of related and overarching disciplines, to ensure effective and efficient collaboration.

#### PROCESS

The nurse anaesthetist often consults and negotiates with members of various disciplines. In doing so, he will ensure that he:

- shares responsibility for a peaceful atmosphere within the team, by adopting a pro-active stance;
- raises for discussion any problems relating to collaboration with the team;
- accepts direction and/or supervision from a colleague or member of a discipline who has ultimate responsibility;
- provides direction and/or supervision;
- is able to handle feedback regarding his own actions and adjusts his actions on the basis of such feedback;
- makes arrangements with colleagues and other members of disciplines and sticks to them;
- provides feedback regarding the actions and attitudes of colleagues;
- is open to receiving feedback;
- actively participates in the various forms of consultation;
- supports the proposals of others, and builds on them towards achieving a collective result;
- does not lose sight of professional principles (makes concessions) when the objective is to reach a collective result;
- helps others in achieving their aims;

- makes positive comments about the performance of colleagues;
- helps colleagues; offers assistance.

#### ACTIVITIES

In respect of the anaesthetist, his activities will predominantly consist of providing information. The surgeon/doctor in charge will also be provided with information. His activities vis-à-vis ward nurses, operating theatre assistants, laboratory assistants, hygienists and quality assurance staff, will be advisory and instructional in nature.

# Level

#### Complexity

Collaboration within and outside the anaesthesia team has a high level of complexity. Part of this complexity is caused by foreign anaesthetists. The nurse anaesthetist must therefore have strong communication skills. The circumstances of the work are such that when communication is less than optimal:

- there is an immediate danger to the patient;
- there is no time or opportunity to discuss the collaboration process at that particular point in time. This can, at best, be done afterwards.

There are rules with regard to feedback, etc. These rules must be applied smoothly and meticulously. The nurse anaesthetist recognises and monitors exceptional and anomalous situations, and will be able to adjust the processes of providing the care in which he is involved.

#### Responsibility

The nurse Anaesthetist does this autonomously, even in unusual work-related situations.

#### PERSONS INVOLVED

When carrying out this core task, the nurse anaesthetist has to deal with all members of the anaesthesia, surgical or treatment team. In addition, with all members of the disciplines working in OR: cleaning, administration, radiologists, hygienists, quality assurance and other staff supporting doctor.

# Tools

- communication skills;
- protocols;
- check lists;
- patient files;
- electronic equipment for gathering data.

#### CHOICES AND DILEMMAS

When collaborating with the others, the nurse anaesthetist must bear in mind the regulations and ethical standards, in what he says or doesn't say. The dilemma in this respect are that the wishes and rights of the patient do not always coincide with the professional code, the ward rules, his own values and norms, or the responsibilities of his own discipline. The nurse anaesthetist will also have to deal with the fact that he will never be able to walk away from a patient and that when being given feedback by others that hasn't been provided properly, he has to decide on how to use such feedback.

#### Role

The role that can be distilled from this is his role of **providing direction and coaching.** 

### 4.1.3 DOMAIN C.

#### PROFESSIONALIZATION

#### CORE TASK 1.

#### KEEPING PERSONAL KNOWLEDGE UP-TO-DATE

Development of the nurse anaesthetist profession is constantly evolving. The nurse anaesthetist will keep his competencies up to scratch with ongoing refresher courses and professional development. The nurse anaesthetist is always conscious of his own actions. He will scrupulously underpin his professional actions with as many scientific arguments as possible. The nurse anaesthetist will reflect on his performance by systematically examining and developing his own opinions, actions and competencies. In doing so, he is open to feedback from others. Professionalization of his own actions must come first. In the process, the nurse anaesthetist will use quality improvement instruments such as testing his knowledge against that of his peers. He will also keep up-to-date with professional literature, ensuring that his actions remain of a professional standard. During interaction with peers, he will provide well-reasoned input.

#### PROCESS

The nurse anaesthetist will be aware of the opportunities in the area of developments and the advancement of expertise, and will have an insight into his personal learning style and opinions, as well as being aware of his feelings. The nurse anaesthetist will indicate in his personal development plan and/or portfolio, the way in which he will be able to achieve his aims. The nurse anaesthetist will set aside time for reflection, and will recognise the importance of self-examination and the development of personal competencies. The nurse anaesthetist will have an insight into the profession and forms his own viewpoint with regard to the vocation. Whilst practising, the nurse anaesthetist will review tangible professional situations to reflect on, and will ask colleagues and supervisors for feedback on this actions (e.g. through performance reviews and annual appraisals). The nurse anaesthetist will evaluate his own conduct based on an analysis of a real situation, and will identify the most important factors (his own and those of others) that impact a real situation. The nurse anaesthetist will allow questions to be raised about his own wellbeing during a work situation, and will also ask questions about what went well according to colleagues. During the process of measurement and comparison, he will, together with colleagues, evaluate the daily provision of care against a number of criteria. They will have developed these criteria themselves, and they will be appropriate for their own situation.

#### ACTIVITIES

During the abovementioned process, the nurse anaesthetist will carry out activities involving observation, analysis, examinations and reporting.

#### 28 LEVEL

#### Complexity

The complexity will depend on the situation, and can be either high or low. In any situation, experience, the measure of support, the personality of the nurse anaesthetist, the organisation, human resources policy and time will all play a role.

#### Responsibility

Keeping his personal expertise up-to-date, is something the nurse anaesthetist will primarily do autonomously. Where necessary, he will do this in consultation with colleagues and supervisors.

#### PERSONS INVOLVED

In this task, the nurse anaesthetist will be involved with colleagues, supervisors and external third parties.

#### TOOLS

The tools available for this task are:

- professional journals;
- conferences;
- presentations;
- scientific literature;
- information from colleagues;
- input from the business world;
- reflection techniques;
- annual appraisals/performance interviews;
- personal development plan/portfolio;
- protocols;
- patient files;
- professional associations;
- professional development guidelines of the professional group;
- Care institutions (quality) Act;
- BIG Act.

#### CHOICES AND DILEMMAS

The choices and dilemmas mainly relate to the opportunities that employer will provide with regard to providing expertise and opportunities for personal development. Personal development versus the interests of the department/organisation, may also generate tensions.

#### ROLE

The role that can be distilled from this is the nurse anaesthetist's role as a professional.

# CORE TASK 2.

#### COACHING AND TRAINING STUDENTS AND COLLEAGUES

The core activities in health care, apart from treating and caring for patients, includes the training of the next generation of health care providers. Because the training of nurse anaesthetists is 'in-service', most of the training hours are spent at work, and 'learning through doing' is very important. The 'master-apprentice' principle is used. Students have to be coached and trained in a practical environment, and in a structured and relevant manner. The nurse anaesthetist will have to be able to provide explanations about theory lessons, and must be able to assist the student in making the transition from theory to practice. The nurse anaesthetist as a supervisor at work, and in consultation with the 'in-service' trainer, will provide information for the assessment of a student. In addition to students in their own profession, there will also be many other students from other disciplines doing work experience in the anaesthesia department (surgery assistants, nurses from colleges and university courses, continued education for nurses and trainee doctors). They must also be trained and coached in a structured and appropriate manner, to enable them to get the most out of their work experience placement. Because of ongoing developments in the profession, continued learning is a necessity. Much of the learning will be through clinical demonstrations at ward level and 'on the job' training. In addition, the nurse anaesthetist is given the opportunity to gain accreditation points systematically through the accreditation system of the professional association (NVAM), thus making the learning process verifiable. The nurse anaesthetist can provide training for his own or for other professional groups. The coaching of trainee doctors as well as interns and doctors' assistants receive some of their training from nurse anaesthetists. The coaching and training takes place in both academic and other hospitals. During his activities as a coach and/or supervisor at work, the nurse anaesthetist will be constantly aware of being a role model, and will focus attention on the trainee's learning process.

#### PROCESS

The nurse anaesthetist will be aware of the opportunities in the area of development, the advancement of expertise, and of learning styles. The nurse anaesthetist will provide support in the preparation of personal training plans and/or the portfolio of the student. The nurse anaesthetist will take into account the learning style of the student by anticipating it in an appropriate manner. During a program

of training, the nurse anaesthetist will navigate between 'taking over', 'giving direction' and 'leaving' the student concerned to his tasks and qualifications in a specific context. In the process, he will supervise the learning process. Together with the work experience lecturer/supervisor and the student, he will plan the student's activities, assessments and evaluations. In addition, the nurse anaesthetist will regularly consult with the students, students on work placement and trainee doctors, in order to provide and clear overview of progress and growth.

#### ACTIVITIES

In this task, the activities of the nurse anaesthetist will include the provision of information and advice, to examine and analyse, and to represent the organisation.

#### Level

#### Complexity

The complexity depends on the situation. The complexity increases with the number of different colleagues, students, students on work placement and doctors that are being coached. Every trainee in the department will have his own individual objective and point of departure. All these issues have to be taken into account during coaching and assessments.

#### Responsibilities

The nurse anaesthetist has to take independent responsibility with regard to the trainees, the safety of the department, his hospital and the maintenance of the standard of quality and size of the professional group. He must also answer for his own actions.

#### PERSONS INVOLVED

In this task, the nurse anaesthetist engages with work placement trainer(s), colleagues (specialists and non-specialists), supervisors, coordinators, lecturers, students and trainee doctors.

#### Tools

The tools available for this task are:

- coaching techniques;
- 360<sup>o</sup> feedback instrument;
- reflection techniques;
- assessment criteria;
- educational media;
- professional literature;
- training programs;
- work placement training manual (POB);
- portfolio and/or personal training plan;
- quality register/accreditation system.

#### CHOICES AND DILEMMAS

The nurse anaesthetist in training, is both a student and a staff member. The interests of the organisation do not always coincide with the interests of the trainee. The coach will have to weigh both sets interests against each other. During training, the interests of the patient and the trainee who has to practise, do not always coincide. The nurse anaesthetist will be faced with the decision of determining the extent of direction he gives to the trainee. In doing so, he will always have to weigh the safety of the patient against the learning process of the trainee. In the event of a conflict between 'training' and 'quality of care', he will be able to make the right choices. The quality of sound anaesthesiological care must not and cannot be compromised. The nurse anaesthetist will be capable of looking after the interests of the patient, and make sure that the right ethical decisions are made with regard to allowing the trainee to learn and practise. Particularly in an academic setting, where there are many trainees, the nurse anaesthetist will face the dilemma of having to make a choice between the interests of the learning process of a trainee doctor on the one hand and a trainee nurse anaesthetist on the other. A training hospital makes an investment in training by making money, manpower and resources available. Training is also

#### ROLE

It can be deduced from the abovementioned, that this is the role of a **coach and director**.

### CORE TASK 3.

# CONTRIBUTING TO THE DEVELOPMENT AND PROFESSIONALISM OF THE PROFESSIONAL GROUP

The nurse anaesthetist will apply standards, protocols and quality guidelines. He will conceive and construct procedures, takes an active part in research or studies, and if a member of the professional association, will seek accreditation by this professional association (NVAM). In addition to providing information and instructions to care providers, the nurse anaesthetist will also provide information to companions and the public. He does this either verbally, or by writing for the professional journal. During public appearances, the nurse anaesthetist will disseminate information about his occupation and his view of the profession, in accordance with applicable professional ethics. He will show exemplary conduct.

#### PROCESS

The nurse anaesthetist will at all times present himself as an independent, practising professional, and will know the limits of his field of expertise. The nurse anaesthetist will communicate in the correct manner with anyone present during the primary care process. The nurse anaesthetist will carefully balance the various interests. The nurse anaesthetist will contribute to the development of the profession by both acquiring knowledge and also disseminating the knowledge acquired. Think about publications, presentations, (clinical) demonstrations, work groups, studies and projects. The nurse anaesthetist will disseminate the viewpoints and vision of the professional group, and act accordingly.

#### ACTIVITIES

In this task, the activities of the nurse anaesthetist will include the provision of information and advice, to examine and analyse, and to represent the organisation.

#### LEVEL

#### Complexity

The complexity depends on the situation. In the situation, experience, the measure of support, the interests of the nurse anaesthetist, departmental culture, the organisation, human resources policy and time, will all play a role.

#### Responsibilities

Because of rapid developments in the area of technology and interventions in the profession and medical practice, a strong appeal is made for flexibility on the part of the nurse anaesthetist. He will often be personally responsible for the immediate care of the patient, but clearly has a shared responsibility with the anaesthetist as well. The present working method, where an anaesthetist has responsibility for more than one patient, is regarded as standard in a lot of hospitals. Research has shown that the anaesthesia team used in the Netherlands has many advantages in the area of safety (Klein, 2003) and other areas<sup>35</sup>. The nurse anaesthetist often makes a contribution to professionalization on his own initiative.

#### Persons involved

In this task, the nurse anaesthetist engages with other professionals, colleagues, fellow professionals, his professional association and external organisations.

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#### Tools

The tools available for this task are:

- his own professional journal;
- professional journals;
- conferences;
- presentations;
- scientific literature;
- information from colleagues;
- input from the business world;
- protocols;
- quality guidelines;
- quality register/accreditation system;
- patient files;
- professional associations;
- the union;
- regulations.

#### CHOICES AND DILEMMAS

The nurse anaesthetist will be aware that within the anaesthesiological process where he is the only one immediately present, he will be representing the anaesthesiological interests. The nurse anaesthetist makes an effort to spread the knowledge and skills of the profession. This may conflict with the interests of other professional groups, parts of the organisation and the business world.

#### Role

It can be deduced from the abovementioned, that this is the role of **a professional.** 

### CORE TASK 4.

#### PARTICIPATING IN SCIENTIFIC RESEARCH.

The nurse anaesthetist will participate in scientific research. He will participate in the collection of data for the purpose of scientific research. The nurse anaesthetist will draw attention to areas in which there is insufficient available knowledge and scientific foundation of the profession, and will formulate his own research questions on the basis of his view of the profession. He will also initiate research, whether or not together with others. He will critically examine (medical and foreign) professional literature, and will correctly interpret scientific studies. He will participate in reference meetings for the discussion of scientific research. The nurse anaesthetist will convert the outcomes of his own research or information from professional literature into practical procedures and will thus contribute to Evidence Based Practice (EBO). In doing so, he will collaborate with members of various disciplines.

#### Process

The nurse anaesthetist will read scientific articles about his professional field on a regular basis. The nurse anaesthetist will make ready everything that is prescribed as being required to be able to conduct research. He will ensure that the collected data/objects such as blood or urine will arrive at the right place and the right time for processing and analysis (such as the laboratory, freezer, etc.). The nurse anaesthetist will conduct research by, for example, preparing questionnaires and completing them or having them completed. Examples in the regard are: the extent of pain experienced, customer satisfaction studies. He will honestly deal with a patient who, having obtained the patient's permission beforehand, participates in the scientific research. The nurse anaesthetist will process and compile the data obtained.

#### ACTIVITIES

In this task, the activities of the nurse anaesthetist will include carrying out research, analysing data, and reporting the results.

#### LEVEL

Complexity

The nurse anaesthetist must collect the correct data during the brief period of a procedure. The data has to be processed correctly in order to produce the correct results.

#### Responsibilities

The nurse anaesthetist will be capable of working autonomously within the agreed procedures He will make sure that he will be able to call for assistance (e.g. in the case of questions or a lack of clarity) to ensure that data collection occurs in the correct manner. The nurse anaesthetist will communicate in a professional manner with those present during the process, such as the participants in the primary process. He will also be able to strike a balance between the various interests, such as the research and the primary process. The nurse anaesthetist will communicate the importance of the research to third parties by answering questions or making presentations.

#### PERSONS INVOLVED

- colleagues;
- anaesthetists, both in pain clinics as in various ORs;
- (surgical) specialists;
- surgical assistants;
- research assistants;
- laboratory staff;
- patients;
- quality assurance staff;

- hygienists;
- scientific researchers.

#### TOOLS

The tools available for this task are:

- computer programs for saving the data;
- the internet;
- telephone;

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- computer mailing programs;
- storage media for specimens and archiving;
- programs for preparing and giving presentations;
- search programs;
- magazines;
- scientific articles;
- written instructions.

#### CHOICES AND DILEMMAS

The nurse anaesthetist will be able to strike the right balance between the various interests, such as the research and the primary process. The nurse anaesthetist will use materials that may cause contamination. In the event that contamination occurs, and in the case of unforeseen complications/incidents, he must personally, or in consultation with others, decide whether to continue the research.

#### Role

The role that can be distilled from this is the nurse anaesthetist's role as a **professional**.

#### 4.2

### THE ROLES OF THE NURSE ANAESTHETIST

In the foregoing paragraphs, we have described the core tasks of the various domains. We can derive from these core tasks that the nurse anaesthetist fills a number of roles. A role acts as hinge between core tasks (the what) and the competencies (the how). A role can be regarded as the cohesive aggregate of tasks and responsibilities, together with the associated competencies. The competencies will be described in detail in Chapter 6. This paragraph describes the roles of the nurse anaesthetist. The nurse anaesthetist fills various roles within the three domains. The following roles can be distinguished:

- anaesthesiological care provider;
- attendant;
- director;
- coach;
- professional.

The roles overlap and reinforce each other. The nurse anaesthetist will have to master all these roles. The extent to which the various roles are fulfilled, varies form one nurse anaesthetist to another. During the nurse anaesthetist's professional activities, he will have to be aware that, in certain situations, he will be acting largely in one role and in other situations in another. The roles of a care provider and attendant mainly fit in the *nature of care* domain. The nurse anaesthetist's roles of director and coach, are mainly played in the *organisation of care* domain. The nurse anaesthetist's roles as a professional and coach, are mainly played in the *professionalization* domain.

## 4.2.1 Description of the roles

#### 4.2.1.1 ANAESTHESIOLOGICAL CARE PROVIDER

The nurse anaesthetist, acting as a professional care provider, plays an important role in the primary process. Together with the rest of the team, he will be providing 'tailored' care. In doing so, he will go though a cyclical process of taking case histories, analysing, making diagnoses, making decisions, carrying out anaesthesiological tasks, evaluation and adjustment policies. Through constant observation and evaluation, he will, if necessary, adjust his own actions and anaesthesiological policy. He will also correlate his findings with the patient by using Evidence Based Practice or 'best practice', which will be result in appropriate, effective and high-quality care provision. His attitude towards the patient will be informative, supportive and protective. The nurse anaesthetist, as a care provider, plays a significant role in the advancement and control of the quality of anaesthesiological care provision. Taking into account the fields of expertise of others and of himself, he will police the limits of his own care provision. The actions of the nurse anaesthetist will be correlated with those of the care providers that are directly involved. He will act in accordance with (safety) guidelines/protocols, quality standards and regulatory stipulations. Based on his experience and knowledge, he will be able to deviate from existing arrangements and guidelines in a justified and responsible manner. He will be able to act autonomously in an acute situation.

### 4.2.1.2 Counsellor

In the role of counsellor, the nurse anaesthetist will be able to guide the patient when making decisions regarding care. In the process, he will take into consideration the needs and wishes of the patient. In certain situations, he will act as the patient's advocate. The nurse anaesthetist has to be the patient's confidential advisor throughout the entire process of receiving care. He will guide the patient in recognising any problems and in making carefully considered choices. The provision of clear information and advice is of major importance

in the fulfilment of this role. As a counsellor, the nurse anaesthetist will always be busy looking at examples, confronting situations, stimulating and motivating others, and the giving or receiving feedback. He will distinguish himself with his open attitude, his ability to adapt, his respect and empathy, and his conversational and listening skills.

#### 4.2.1.3 DIRECTOR

The nurse anaesthetist fills a directing role throughout the entire anaesthesiological care process. In this process, he will be responsible for the organisation surrounding care delivery and the continuity of the treatment. The nurse anaesthetist strives for optimum collaboration and coordination between patient, anaesthesiology and surgical teams, and other involved. As a director, he will know those involved in providing anaesthesiological care. He will know their expertise, responsibilities and authority, and will organise the division of tasks accordingly. He will participate in the planning of the schedule. He will look after the management, monitoring and use of the equipment, materials, tools and the space required. In the process, the nurse anaesthetist will act preventively and in accordance with (safety) guidelines and standards. He will supervise the quality of the care being provided. The nurse anaesthetist as a director must have a wide range of social, negotiation and organisational skills, and a large reserve of energy.

# 4.2.1.4 <mark>Соасн</mark>

The nurse anaesthetist will act as a coach to new trainees/students on work placements and other professional practitioners. He will coach the trainees in their development of insights and competencies, and he will provide support with the formulations of the (personal) training objectives required for the purpose. Because of the diversity of incoming trainees, he will tailor his coaching to their specific needs. In doing this, he will create a learning environment in which the students will enjoy an optimum learning experience. As a coach, he will function as a role model. He will display an attitude of interest and openness towards the trainees. This will enable him to take a critical look at his own actions and those of others. His social skills are such that he will be able to talk with the trainees on the various subjects related to the learning process. He will make the growth and development of the student his primary concern.

# 4.2.1.5 Professional

The developments in, and the knowledge about the discipline, do not stand still. As a professional, the nurse anaesthetist must always be on the lookout for new insights and translate them into patient care and the management of such care. In doing so, he will cast a critical eye over new developments and technologies. He will strive towards improvements and where possible, innovation. In the process, he will carefully consider any ethical issues. Personal values and standards, codes of conduct, guidelines and relevant regulations, will be carefully weighed against each other. In order to expand the level of expertise within the professional group, the nurse anaesthetist will participate in meetings, work groups, research projects, quality audits and accreditation projects. He will attend (international) conferences, symposiums, postgraduate courses, professional development, and refresher courses. He will provide training and make presentation for a diverse public. The nurse anaesthetist as a professional, will take a critical look at his own professional activities, but also those of others. He will encourage and motivate colleagues in the performance of the work. He will also provide feedback, and will be receptive to feedback from others. He will also invest in his own further development.

#### CHAPTER 5 CHOICES AND COMPARATIVE ASSESSMENTS

In this chapter, we will deal with the choices and comparative assessments that a nurse anaesthetist will constantly have to make. These are choices and comparative assessments that are characteristic of his profession and its practice. He will come across them in several of the core tasks and they will fit within a number of contexts. The profession requires that he will be comfortable with making these choices and comparative assessments. They are also essential for making competencies explicit.

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#### SAFETY VERSUS QUALITY

Safety is the extent to which potential causes for a dangerous situation *do not* exist, or the extent to which protective measures against potential causes *do*. Quality is not an accident, but a well reasoned, organised and managed result. It is the capacity to meet the expectations and needs of the patients. Quality care is effective, appropriate and patient focused. The patient expects optimum safety, of course, but he also expects that a great number of other issues are covered, such as being free of pain and nausea, and receiving full attention, being treated correctly and getting explanations for what is going to happen. These issues may be conflicting, especially in special (often hectic) situations. The nurse anaesthetist, whilst carrying out his duties, has the task of constantly ensuring the safety of the care provider as well as guaranteeing the quality of the care provided to the patient.

#### 5.2

5.1

#### CARRYING OUT TASKS YOURSELF, REFERRING OR DELEGATING THEM

A nurse anaesthetist has the task of ensuring that the (logistics) processes surrounding the surgery patient function as efficiently as possible. This means that the nurse anaesthetist will focus as much as possible on activities where his specific expertise is indispensible. For example, he can delegate tasks that do not necessarily have to be carried out by a nurse anaesthetist, to a departmental assistant. Tasks that the nurse anaesthetist cannot carry out because his attendance is required in OR, e.g. fetching blood products, he can delegate to a colleague, a person outside OR or a colleague surgery assistant. Before delegating tasks or activities, the nurse anaesthetist will always make a comparative assessment of whom to delegate to. When delegating activities, he will take into consideration the patient's preference for specific professionals. (inserting a drip into a hospital patient). As a director of the (logistics) process surrounding the patient, the nurse anaesthetist shares the responsibility of guaranteeing the continuity and quality of the treatment. In cases where the patient care requires certain reserved activities or work (treatments) to be carried out, for which the nurse anaesthetist does not consider himself skilled or expert enough, he will have to refuse to carry out such instructions. In the event that the nurse anaesthetist *has* accepted instructions for a task that is reserved, he will have to carry out himself. The person giving the instructions (and/or the anaesthetist) will assume that he will. The nurse anaesthetist must carry out himself all reserved tasks delegated to him. However, when the nurse anaesthetist is relieved in OR, there will be a situation in which he will inadvertently have to delegate all the tasks (explicit and implicit) assigned to him.

### 5.3

#### TIME VERSUS PATIENT SAFETY

Hospitals, and therefore anaesthetics departments, are forced by the DBC (Diagnosis Treatment Integration) structure to carry out each treatment as efficiently and effectively, i.e. as cheaply as possible. The costs are partly related to materials used, but mainly relate to the cost of personnel. Therefore, each staff member must use his time as efficient as possible. The nurse anaesthetist, when making a decision to work more efficiently, must always act as the representative of the patient's interests. If the nurse anaesthetist does not carry out his tasks within the timeframes set, hospital costs will rise. If the nurse anaesthetist works as quickly as possible, time-consuming safety measures will be put under pressure. The nurse anaesthetist must make choices with regard to handling safety and quality procedures in the event of time pressures. He must work safely and recognise unsafe situations. He is also expected to give some thought to possible changes, whilst maintaining or even increasing quality and/or safety.

# 5.4

#### **CORPORATE INTERESTS VERSUS PERSONAL INTERESTS**

The nurse anaesthetist, when carrying out his tasks, will have to weigh the organisation's interests against his own interests. As a result, this issue will have a number of viewpoints.

They relate to:

- Starting time. Is there enough time available for preparation of the work, or will the nurse anaesthetist choose to start work earlier so as to have enough time to prepare the activities.
- Breaks (coffee and tea). Is the situation such that there is no problem taking breaks, or does the nurse anaesthetist have to negotiate with others in order to be able to take a break?
- Lunch breaks. These are arranged in different ways in many hospitals. It is important that the nurse anaesthetist will ensure that he
  is alert when carrying out his tasks. As with driving a car, there is a limit to how long a person can do this work and remain focused.
  It is in the patients' interest to limit the number of changes during anaesthesiological care. In every handover, there lurks a risk to
  continuity. A structured arrangement requires more staff. It is up to the nurse anaesthetist to find a way when continuing to work
  on the task in hand. With unbroken schedules and depending on their nature, some hospitals will relieve staff in a structured way;
  in other hospitals, it is a matter of weighing things up and negotiating.
- End of shift. The nurse anaesthetist will be dealing with a careful plan in one situation, whereas in another situation, the planning
  of a schedule can lead to staffing bottlenecks. The nurse anaesthetist will be able to decide whether to work through into his own
  time, or to have himself relieved.

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- Being on-call. It often happens, that rest periods between shifts are inadequate because the maximum working hours of 13 in every 24 hours, is exceeded. The nurse anaesthetist has to carefully balance various interests in this regard.
- The nurse anaesthetist, when absent due to illness, will weigh up whether the nature of his illness is such that he should go to work or to stay at home, and whether to avoid infecting his colleagues. This may involve such factors as staffing, the attitude towards illness within the institution, a personal attitude towards illness, or the influence of the employer's environment.
- Additional risks for pregnant women. In the event that the nurse anaesthetist is pregnant, a regular and steady work pattern should be offered.

However, this will not always happen. Furthermore, an eye must be kept on the presence of anaesthetic gases. Pregnant women run additional risks during the second and third month after their last period. Each situation where peak exposure to laughing gas may occur during this period, should be avoided. The employer must comply with measures and follow the rules. In the event that there is no certainty that maximum exposure can be avoided in every situation, the employer must provide alternative duties for an employee in the early stages of pregnancy. In extreme cases, she should be temporarily exempted from tasks where there is a risk of maximum exposure to laughing gas<sup>36</sup>.

- The circumstances (ARBO, the atmosphere among staff and their treatment of each other, internal climate) can be such that the employee is forced to choose between acceptance of the situation or trying to change the situation.
- Training climate. Training courses may be offered that are serving the interests of the institution, others may be primarily in the interest of personal development.
- The nurse anaesthetist may refuse to collaborate in tasks/activities that occur in daily practice, if he cannot reconcile them with his philosophy (of life), standards or values. We think in this regard of collaborating in abortions or withholding treatment for Jehovah's witnesses.

### 5.5 Giving or not giving feedback

In his own discipline, the nurse anaesthetist, together with the team on duty, has a role to play in ensuring 24-hour continuity of activities. Healthcare usually involves a number of disciplines. The members of all these disciplines must coordinate their activities, so that mistakes, overlap, inefficiency, duplication of work, contradictory advice and confusion on the part of the patient, will be avoided. Especially in multi-disciplinary healthcare teams the size of the contribution that each member makes, differs markedly, the composition of the team is not fixed, the persons representing a particular discipline changes regularly, etc. Because of the role of the nurse anaesthetist as a director, he will be faced with the task of adopting an amicable attitude towards colleagues and other practitioners, and to keep them and others to arrangements made, at the same time. When a nurse anaesthetist sees that a colleague does not keep to the arrangements made, he must consider whether to raise the matter. The nurse anaesthetist will have to cross a threshold in cases where it is not customary to give each other feedback or comment on the other person's actions.

# 5.6 Deciding Yourself Versus discussing it with others

In an anaesthesiological team, the nurse anaesthetist will be the person who is present in OR during the entire operation, to monitor and support the patient. Anaesthesiological policy will be decided by the anaesthetist. To maintain the anaesthesia, the nurse anaesthetist will make his own decisions. The nurse anaesthetist will consult to adjust anaesthesiology policy. The anaesthetist will be available for this purpose. The dilemma is that the nurse anaesthetist will be making decisions and *carrying out reserved activities* for which he has not been given explicit instructions by the anaesthetist. When making such a decision, the nurse anaesthetist must take into account the interests of the patient and the limits of his own skills. In the event of a threat to the vital functions of the patient, the nurse anaesthetist must decide himself and take action. At a later stage, the interventions will then be discussed with the anaesthetist. At this time, the nurse anaesthetist will estimate the risk that the patient will be exposed to, makes the interventions that are necessary, and delegates the task of alerting the anaesthetist to a (surgical) colleague present in OR. To do so, it will be necessary for the nurse anaesthetist to have an adequate level of knowledge and skills to make the correct decision at such (critical) times.

#### CHAPTER 6 COMPETENCIES FOR THE PROFILE OF THE NURSE ANAESTHETIST

There are a number of definitions for competencies. In drafting this profile, we have used the following definition:

A competency is an integrated body of knowledge, insights, skills, attitude and personal qualities, with which, in a certain context, results can be achieved in an adequate manner. 37

Competencies refer to individual capabilities, and will always be looked at within a certain context. The context will determine the colouring, and will indicate what will be an adequate response. For the nurse anaesthetist, there are a great variety of contexts, both in the nature of settings and in the allocation of tasks. This means that the emphasis in terms of importance of competencies, may differ by context. The competencies have been developed on the basis of core tasks and roles, choices and considerations. We have also had a look at the seven different competency areas of CanMeds<sup>38</sup>, and interpreted them for the work of a nurse anaesthetist. Competencies form a cross section of the profession. The description of the competencies has the advantage that they will cover the overall function of a nurse anaesthetist rather than assigning them one-by-one to individual choices, roles and tasks. Competencies must be mastered in relationship with each other. They can be distinguished but not separated.

# 6.1

## OVERVIEW OF AREAS OF COMPETENCY

Competency area A: Acting in accordance with professional requirements

- A1. Observation and examination
- A2. Analytic capacity
- A3. Providing anaesthesiological and technical care
- A4. Showing autonomy and decisiveness

Competency area B: Communication with the patient.

B1. Working with a patient focus

- B2. Providing information
- B3. Listening and understanding

Competency area C: Giving direction

- C1. Planning and organising
- C2. Coordinating and collaborating
- C3. Giving direction
- C4. Control

#### Competency area D: Professionalism

- D1. Acting ethically
- D2. Setting limits
- D3. Being receptive to innovation
- D4. Developing your own profession

37 Bie de D. (red) (2003). *Morgen doen we het beter [Tomorrow we will do things better]. Handboek voor de competente vernieuwer* [Handbook for the competent innovator]. Houten/Antwerp.
# 6.2.1 Competency area A: Acting in accordance with professional requirements

# A1. OBSERVATION AND EXAMINATION

The nurse anaesthetist will observe, identify and examine the patient to gain as much relevant information as possible for the anaesthetic to be administered to the patient.

## Process criteria

- The nurse anaesthetist:
- will observe the patient;
- will take an case history;
- will conduct a physical examination;
- will recognise and distinguish symptoms, and relates these to the overall health status of the patient;
- will inquire as to the patient's wishes and needs;
- will advise and inform the patient about the options and choices;
- will support the patient with the making of decisions;
- will seek substantiation in professional literature;
- will register the details and document them.

# A2. ANALYTIC CAPACITY

The nurse anaesthetist will continually and systematically analyse the information relating the (health) status of the patient, so that he can make a diagnosis and decide on an approach for administering the anaesthetic.

### Process criteria

#### The nurse anaesthetist:

- will establish links between situations, symptoms and problems;
- will interpret the symptoms and estimate the risks;
- will determine whether the information regarding the (physical) condition of the patient is sufficient for drawing conclusions;
- will identify problems and/or complications;
- will monitor the safety of the patient;
- will make suggestions for the solution of any problems;
- will make a diagnosis when he has obtained sufficient in information about the (physical) condition and medical condition of the patient;
- will, based on the diagnosis, weigh various anaesthesiological options against each other;
- will use relevant results of scientific research in his plan of attack;
- will indicate which anaesthesiological procedures will be used;
- will record the diagnosis, the anaesthesiological procedures and the post-operative policy in the anaesthesia report of the patient;
- will distinguish standard situations from complex, non-standard situations.

# A3. PROVIDING ANAESTHESIOLOGICAL AND TECHNICAL CARE

The nurse anaesthetist will deploy knowledge and

skills specific to the profession, that will ensure that the patient receives adequate anaesthesiological care.

# Process criteria

The nurse anaesthetist:

- will communicate with, and brief the members of the disciplines involved;
- will read professional literature;
- will be capable of recognising the value and limitations of scientific research;
- will use the relevant results from scientific research in providing anaesthesiological and technical care;
- will work in a responsible way with guidelines and protocols;
- will utilise instruments and materials correctly and a responsible manner;
- will provide anaesthesiological care;
- will work in a goal-oriented manner, according to plan and in an ergonomically responsible way;
- will keep to his commitments;
- will monitor vital signs and other physiological functions;
- will monitor the anaesthesiological process;
- will carry out his tasks systemically;
- will assess the parameters;
- will draw conclusions from the values registered;
- will adjust his actions on the basis of his findings, if there is reason to do so during the treatment;
- will provide good and safe conditions for the patient in accordance with regulatory standards and requirements;
- will evaluate the anaesthesiological and technical care provided, as well as the outcomes;
- will arrange the transport of a patient to the ward;
- will arrange the transfer of information to other care providers.

#### A4. SHOWING AUTONOMY AND DECISIVENESS

The nurse anaesthetist, whilst providing care, will make autonomous decisions to ensure that the patient receives the anaesthesiological care he needs.

#### Process criteria

The nurse anaesthetist:

- will be aware of his own points of view and acts accordingly;
- will clearly state his opinion, will provide his own ideas, and will make recommendations;
- will take action on his own accord;
- will act independently in complex, non-standard situations;
- will commit the appropriate resources at the right time;
- will take responsibility for his own actions;
- will show self-discipline;
- will reconsider decisions if the circumstances or situations demand it;
- will involve, where necessary, an anaesthetist, colleague or other professional practitioner;
- will, if possible, include the patient in the decision-making process of anaesthesiological care;
- will act in accordance with regulatory requirements (ARBO/Ergo/etc.);
- will be aware of workplace agreements and will keep to the arrangements made within his own organisation;
- will, if necessary, adjust the workplace agreements;
- will be able to plan and organise his own work;
- will know when it is important to communicate what, and with whom.

# 6.2.2

# COMPETENCY AREA B: COMMUNICATING WITH THE PATIENT

## **B1. WORKING WITH A PATIENT FOCUS**

The nurse anaesthetist will anticipate the wishes, needs and complaints of the patient through interaction, in which the interests of the patient the primary concern.

#### Process criteria

The nurse anaesthetist:

- will enquire into the patient's needs, wishes and problems;
- will show an understanding for the wishes and needs of the patient;
- will actively respond to the questions, wishes and needs of the patient;
- will adequately anticipate the questions, requests and complaints of the patient, and take into account his professional responsibility and options;
- will base his provision of care on the best possible evidence in every situation;
- will adjust policies as quickly as possible, in consultation with the anaesthetist/anaesthesiological team and others involved;
- will provide for the safety of the patient and his environment;
- will monitor patient satisfaction;
- will act within the regulatory frameworks of the WGBO [Medical Treatment Agreement Act], the BIG Act and the Care institutions (quality) Act.

#### **B2.** PROVIDING INFORMATION

The nurse anaesthetist will provide complete and accurate information, within the professionally code, and at the level of the persons involved, so that it can be used for making carefully considered decisions.

#### Process criteria

The nurse anaesthetist:

- will respond the information requirements of the persons concerned;
- will ask relevant questions;
- will answer the patient's questions;
- will show a positive attitude;
- will explain the advantages and disadvantages of a certain treatment;
- will comply with safety rules and other regulations;
- will know various, effective ways of providing information and instructions;
- will select a method for transferring information that is appropriate for the patient;
- will carefully transfer information in accordance with applicable quality assurance criteria, both in writing and verbally;
- will be able to present information in a structured manner;
- will record the information provided in the patient's record;
- will protect the privacy of the patient;
- will, if necessary, use other sources of information;
- will treat others respectfully and correctly, appropriate to the profession.

#### **B3.** LISTENING AND UNDERSTANDING

The nurse anaesthetist will be sensitive to the patient's responses and feelings, so that the patient will have confidence and will feel less anxious or unsure.

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### Process criteria

The nurse anaesthetist:

- will observe and recognise the patient's state of mind and will respond accordingly, recognising the patient type;
- will listen, take time for a chat and show understanding, both in words and attitude;
- will continue questioning and will respond to the answers;
- will use the appropriate language in every specific situation;
- will give communication back and forth an appropriate place in the overall care program;
- will check whether he has properly understood the information provided by the patient, and whether the information he himself has provided, was understood;
- will inform and assist those involved when making choices;
- will show respect for the choices made.

# 6.2.3 Competency area C: Giving direction

# C1. PLANNING AND ORGANISING

The nurse anaesthetist will deploy people, resources and materials in an efficient manner, so that the results and the quality of the care can be assured.

### Process criteria

The nurse anaesthetist:

- will prepare and allocation/plan for the required instruments, materials and tasks;
- will know the capabilities of his colleagues and other members of the other disciplines involved;
- will check, start, operate, set and adjust the equipment;
- will determine priorities during the planning and carrying out of the procedures;
- will work in accordance with regulations, directions for use and professional insight;
- will arrange the orderly and ergonomic placement of equipment and/or instruments;
- will ensure that everyone works in accordance with standards, protocols and quality guidelines;
- will coordinate care around the patient;
- will secure the logistics surrounding the care;
- will ensure continuity of care provision;
- will keep an eye on whether arrangements made, are followed through;
- will ensure the quality of the work and will intervene if necessary;
- will evaluate matters during the provision of care, and, if necessary, make adjustments;
- will work systematically;
- will perform adequately in the face of a disaster;
- will look after internal and external communications of the anaesthesiological team.

# C2. COORDINATING AND COLLABORATING

The nurse anaesthetist will actively manage coordination within and outside the surgery complex, with colleagues and members of other disciplines, and collaborates with them to ensure that the patient receives the care he needs in an effective and efficient manner.

# Process criteria

The nurse anaesthetist:

- will know the expertise and responsibilities of colleagues and/or members of other disciplines involved;
- will coordinate the work processes with colleagues and/or members of other disciplines within and outside the surgery complex;
- will actively manage safety of care with chemo and radiation therapy treatments;
- will show the willingness and initiative to consult;
- will adopt a pro-active attitude;
- will make commitments and honour them;
- will provide an insight into his own tasks and is open about his motivation;
- will be careful when transferring a patient and the information belonging to the patient;
- will adequately deploy his expertise;
- will adopt a flexible attitude;
- will communicate and consult internally with the anaesthesiological team;
- will communicate and consult externally with the anaesthesiological team;
- will put the common interest before his personal interests;
- will conduct visits (in the name of, or with colleagues);
- will evaluate collaboration within the team and raise any problems for discussion;
- will be receptive to feedback from others;
- will provide feedback to colleagues;
- will be open to the opinions of colleagues and other involved;
- will actively participate in discussions;
- will be capable of reconciling conflicts and differences of opinion;
- will handle various conversation techniques.

## C3. GIVING DIRECTION

The nurse anaesthetist will give direction in the work environment, so that optimal and safe care provision will be assured.

#### Process criteria

The nurse anaesthetist:

- will discuss things within the anaesthesiological team;
- will ensure that the roles and tasks of those involved in the team, are clear;
- will adjust his style and methods of providing direction to suit the person concerned;
- will put forward a clear point of view;
- will provide an insight into the method of operation;
- will respond flexibly to changed situations and circumstances;
- will make decisions at the right time;
- will carefully weigh the consequences of these decisions;
- will show leadership where this is needed;
- will take responsibility where required;
- will delegate tasks;
- will show an interest in the achievements of colleagues;
- will report on his actions;
- will raise issues regarding the performance or conduct of team members if below par;
- will encourage the team to communicate with each other and resolve problems together;
- will work in accordance with ARBO and ergonomic guidelines;
- will create a safe environment for the patient;
- will ensure the safety of care using chemo and radiation treatments;
- will ensure the continuity of the anaesthesiology process: revival, receiving trauma victims, pre-operative screening and APS.

### C4. CONTROL

The nurse anaesthetist will make sure of quality and condition of equipment, instruments and materials. The nurse anaesthetist will strive to provide maximum reliability of equipment and other resources, so that the process will run smoothly, and any disasters can be dealt with effortlessly.

### Process criteria

The nurse anaesthetist:

- will monitor the condition of the equipment, instruments and tools;
- will monitor the sterility of the stocks of materials and (essential) supplies;
- will act decisively in the event of a breakdown;
- will monitor the safety of the patient;
- will send equipment, an instrument or tool for repairs with detailed instructions;
- will make recommendations for the replacement of equipment, instruments and (essential) supplies;
- will draw attention to new techniques/developments in the market place;
- will provide estimates of the performance outcomes;
- will be able to justify the choices made;
- will maintain contact with suppliers;
- will negotiate with suppliers;
- will advise the procurement office about the specifications of equipment, instruments and (essential) supplies to be purchased.
- will work in a cost-conscious way.

# 6.2.4

# COMPETENCY AREA D: PROFESSIONALIZATION

#### D1. ACTING ETHICALLY

The nurse anaesthetist will act and communicate in keeping with professional standards, and will demonstrate his social consciousness.

# Process criteria

The nurse anaesthetist:

- will act in accordance with the rules of conduct and professional code of the association;
- will act in accordance with relevant laws and regulations;
- will act in accordance with the rights and obligations of the patient;
- will show respect for patients, colleagues and other professionals;
- will protect the privacy of the patient during his stay;
- will act with integrity, be honest, discriminating and reliable;
- will raise ethical issues for discussion;
- will defend his personal interests;
- will report incidents and accidents;
- will report mistakes and accidents;
- will speak on behalf of high-risk groups;
- will encourage healthy choices on the part of patients and colleagues;
- will adequately deal with the patient's need for information;

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- will respect the right of the patient to make his own decisions;
- will understand how ethical decisions are made;
- will be able justify his own conduct in terms of ethics;
- will be able to state his own moral viewpoints and underpin them with evidence;
- will be able to contribute to the ethical decision-making process relating to treatment and care.

### D2. SETTING LIMITS

The nurse anaesthetist will reflect on his own expertise, thus assuring the quality and continuity of the anaesthesiological care.

### Process criteria

- The nurse anaesthetist:
- will look after his own health;
- will actively strive for an appropriate balance between work and family;
- will look after his own safety;
- will be aware of his own limits, skills and expertise, and act accordingly;
- will indicate the limits of his own expertise and responsibility;
- will ask for help and makes referrals to other care providers when reaching his own limits;
- will process the feedback pertaining to his own actions;
- will monitor his own role as a professional;
- will be aware of the impact of his own attitude and conduct on others.

### D3. BEING OPEN TO INNOVATION

The nurse anaesthetist will, based on basic (scientific) principles, take on board new developments and new opportunities, thereby continuing his own development.

### Process criteria

The nurse anaesthetist:

- will be open to innovations and opportunities;
- will look for innovations and improvements of products and treatment methods in the provision of anaesthesiological care;
- will analyse and critically assess developments with regard to their practical value in delivering quality care;
- will make carefully considered decisions with regard to the application of new technologies;
- will be able to step back from day-to-day run of things;
- will not allow himself to be discouraged by possible limitations;
- will be able to adapt to changing working conditions;
- will share new insights and experiences with colleagues, anaesthetists and other professionals;
- will be flexible and not rigidly stick to the (old) ways;
- will be able to learn how to use new technologies;
- will keep himself informed of developments relating to surgical procedures;
- will trust his own judgement;
- will be able to assess the value of (scientific) literature and incorporate innovations into daily activities;
- will be able to translate the results of developments in areas of therapeutics and diagnostics into the provision of anaesthesiological care.

### D4. DEVELOPING YOUR OWN PROFESSION

The nurse anaesthetist will, after analysis and assessments based on basic scientific principles, include developments and ideas in his activities, thus further expanding his own and the profession's horizons.

# Process criteria

Thenurse anaesthetist:

- will take a pro-active stance with regard to his own development;
- will prepare a personal development plan (PDP);
- will have an understanding of the strengths and weaknesses of his performance;
- will actively keep up-to-date his knowledge and skills, and monitor new developments in his profession;
- will learn from his own experience and from others;
- will learn from and within the anaesthesiological team;
- will be actively pursuing new (technological) skills;
- will have a critical eye for the performance of others, and will learn from it;
- will accept the expertise or the judgement of members of the other disciplines involved;
- will act as a role model;
- will know his own values and norms, and will respect the values and norms of other professionals;
- will be able to justify his view of anaesthesiological care provision, express it, disseminate it, and if necessary, adjust it;
- will underpin his provision of care with concepts and theories;
- will make the link between theory and practice;
- will develop, where necessary, standards, protocols and/or guidelines;
- will display enthusiasm and commitment;
- will participate in activities that further expertise (conferences, additional training, professional development, presentations, clinical instruction, consultations between colleagues, adjudication meetings);
- will coach and train trainee nurse anaesthetists, and when required, other professionals;
- will show an interest in de motivation of those involved;

- will instruct those involved and give tips and pointers;
- will provide training for trainee nurse anaesthetists and other professionals;
- will conduct himself in a professional manner;
- will present a distinct profile towards patients and other professionals;
- will participate in scientific research;
- will be capable of participating in the publication of (scientific) articles for the magazine of the professional association and other scientific publications;
- will be able to identify problem situations in the provision of quality care, define them and analyse them.

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# EPILOGUE

We, nurse anaesthetists, are not writers. This is why we asked for assistance from an expert in this field. She helped us enormously with the drafting of this competency focused professional profile. I therefore want drs. Liesbeth Neeskens be to the first person I thank in this epilogue, for her assistance, hard work and enormous expertise. A word of thanks also has to go to the one colleague in the project group who has, time and again, been prepared to read and re-read the documents and make observations and comments. Another very important contribution was made by the specially formed group of experts from various bodies playing a role in the Dutch healthcare system. During the process, I have developed a great respect for those who drafted the earlier professional profile. After all, they had to do so in far shorter and more hectic time, and without the sources and resources that were available to us this time. The effect of their work has been validated in this profile, thus more than justifying their efforts. This new professional profile is intended to be a dynamic document. This means that it will have to be reviewed and rewritten regularly. I therefore call on my fellow nurse anaesthetists, to provide positive criticism for the purpose of improving the profile, and to send their ideas to: beroepsprofiel@nvam.nl. I wish my future colleagues much success and wisdom in continuing this task.

Jaap Hoekman,

Chairman of the Project Group

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### TERMS LIST

### ANAESTHESIOLOGICAL TEAM

A team in which at least one anaesthetist and one nurse anaesthetist work together in complimentary roles.

## Professional code

The codification of ethical and practical standards relating matters that are required to be done in the practice of a profession and are required to be refrained from vis-à-vis professional colleagues, the patient, or the clients of others (National Council for Public Health, 1988)

### **PROFESSIONAL PROFILE**

Represents the core of a profession (or a group of professions) and provides a description of the professional activities as they are carried out in professional practice, and particularly the professional requirements that a person has to meet who works in the profession or will work in the profession in the (near) future (Netherlands' House of Representatives, 1986).

# COLO FORMAT

Guidelines transcending sectors, prepared by the Colo (Association of knowledge centres for professional training and the business community), for a uniform, schematic and structured way of drafting competency profiles.

#### COMPETENCY

Integrated body of knowledge, insights, skills, attitudes and personal characteristics enabling adequate results to be achieved in a professional context, a learning context, or a community context, requiring professional competencies, learning competencies and citizenship competencies respectively.

#### COMPLEXITY

The extent to which professional activities are based on the application of routines, standards or new procedures. Complexity indicates the degree of difficulty and is determined by the symptoms of the client, the circumstances and the treatment itself.

#### CONTEXT

Circumstances or situation in which someone finds himself, to be differentiated into terms of professional context, learning context and community context.

### TARGET GROUP

Group of people with common characteristics, such as certain age or certain problems, at which the care, assistance and/or service provision is directed.

#### DOMAIN

A domain is an area in which the nurse anaesthetist carries out his core tasks.

#### **CORE TASKS**

A set of professional activities linked by their nature, that are carried out by a significant portion of practitioners of a specific profession or function, and which are characteristic for that profession or function.

#### ROLE

A role can be regarded as the cohesive aggregate of tasks and responsibilities, together with the associated competencies (Klarus, 1998).

#### SUPERVISION

A monitoring role that includes the provision of direction.

### TASK DELEGATION

The handing over by an anaesthetist of specifically described tasks (or parts thereof) to an appropriately trained professional qualified at a lower level in anaesthetics, where the relevant tasks (or parts thereof) are carried out autonomously and at the responsibility of the latter, in accordance with the requirements of the BIG Act and the Care Institutions (Quality) Act.

#### RESPONSIBILITY

The extent to which a practitioner can be held accountable for his professional conduct, and for the consequences thereof for the professional conduct of others (Committee on Qualification Structures, 1996).

#### Reserved treatment

An treatment carrying considerable risk for the health of a patient, if carried out by persons without the requisite expertise (Ministry of Public health and Sport, 1995).

#### BIG ACT.

Professions in Individual Healthcare Act].

# WGBO

Medical Treatment Contracts Act.

## AUTONOMY

The extent to which a practitioner will take independent action, make decisions, and carries out his tasks.

# APPENDIX 1 Members of the work group (as per 01/11/2007)

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## APPENDIX 3

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