

NCOG

National Curriculum for
Obstetrics and Gynecology



NEDERLANDSE VERENIGING VOOR
OBSTETRIE & GYNAECOLOGIE

LOGO

Landelijk Opleidingsplan
Gynaecologie & Obstetrie

Foreword

"The education of gynecologists is well designed and progressive. Not only compared to other specialist education programs in the Netherlands, but also compared to other countries. Competency-based education with plenty of room for individual variation is a great thing."

This introduced the VAGO vision document "Gynecologist 2025 - the education" in 2019.

Rising healthcare costs, societal changes, acute pandemics and technological developments require continuous adjustments to the Dutch healthcare system. Gynecologists of the future will increasingly become supervisors, striving for continuous improvement of care in collaboration with other healthcare providers in consultation with the 'unique woman'. (See also the NVOG vision document "Gynecologist 2025").

In addition to substantive professional competence, gynecologists of the future fulfil a role as a networker, innovator and clinical leader. Enthusiasm and compassion are qualities 'par excellence' that contribute to ensuring that, in line with the mission of the NVOG, as gynecologists we provide the best care to every woman in every stage of life.

NCOG (National Curriculum for Obstetrics and Gynecology) responds to the social changes around us. Besides professional knowledge and skills, work-related competences and personal or professional development are equally important aspects of gynecology education. Lifelong learning from a broad basis with room for individual interpretation, in which reflection and adaptive capacity are important competences.

As Dutch gynecologists, both nationally and internationally, we are frontrunners in developing competence-based and innovative curriculums. The creation of NCOG therefore seems a logical and natural consequence of previous successful curriculums such as HOOG and BOEG. NVOG is ready for the future with NCOG!

On behalf of the NVOG and VAGO board,

Astrid Vollebregt, chairman NVOG board
Felicia Yarde, president VAGO board
September 2021

Abbreviations:

VAGO = Association of Residents in Gynecology and Obstetrics

NVOG = Dutch Society for Obstetrics and Gynecology

HOOG = Revision of Training in Obstetrics and Gynecology - 1st competency-based national curriculum from 2005

BOEG = Reflection on Objectives in Gynecology - national curriculum from 2013



Introduction

NCOG, a logical sequel to BOEG

This document describes the National Curriculum for Obstetrics and Gynecology (NCOG). The result of a joint effort by gynecologists, program directors, residents and educationalists, among others. Dutch obstetrics and gynecology can rightly be proud of its national and international role as a leader in innovative education. This curriculum continues that tradition. The previous curriculum, Reflection on Objectives in Gynecology (BOEG), dates from 2013. Since then, developments in the field, social changes and changing scientific insights on education have formed the basis for NCOG.

Providing the best possible care for women in all stages of life requires healthcare providers to make continuous efforts to provide good care and organize care well, in consultation with patients. This requires remaining critical of their own actions and continuing to learn. The same applies to the proper education of gynecologists. In NCOG, we build on BOEG, using research into curriculum design, assessment, and workplace learning, among others, as well as lessons from the practice of working with previous competency-based national curricula. NCOG is characterized by trust in residents and gynecologists to jointly and judiciously shape the education of future gynecologists, by a holistic approach to the development of gynecology and by room to realize individualized curriculums in addition to a solid basis. NCOG represents that we need to educate with one leg in the here and now, focusing on the best possible care today, and with the other leg already taking a step forward and (learning to) keep learning and laying the foundation for good care in the future.

For reading NCOG, it is important to know that the plan has been drawn up using the three layers that make up an educational revision; strategic, tactical and operational levels. At the strategic level, within the frameworks of the legal boundaries set out by the Board of Medical Specialties (CGS), the vision on content and process of the education is developed for the coming period, laid down in a number of frameworks. Where NCOG talks about the future gynecologist, it clearly refers to the strategic level. A vision has been developed from within the NVOG, for example shown in the vision document 'Gynecologist 2025'. It is up to us to propagate this vision and translate it into education. Propagating the vision at the tactical level is the national curriculum called NCOG. NCOG sets out the frameworks within which regional and local education must take place. It thus offers optimal scope for individual customization and also requires residents and supervisors to take responsibility for the implementation of education in line with the workplace. The operational level refers to the implementation of the frameworks at local level. This concerns the elaboration of the frameworks in regional/local curriculums and their implementation.

On behalf of the developers of NCOG,

Pim Teunissen and Fedde Scheele
May 2021

Abbreviations:

NCOG = National Curriculum for Obstetrics and Gynecology

BOEG = Reflection on Objectives in Gynecology - national curriculum from 2013

CGS = Board of Medical Specialties

NVOG = Dutch Society for Obstetrics and Gynecology



The development of NCOG started in mid-2018 and was completed in spring 2021. During this period, a large group of people contributed to the development process, many throughout the process, others to a part of it. Below are the names of the gynecologists, residents, policy staff and others who were closely involved in the development. Also, a list of groups whose feedback was taken into account in the drafting of the final text is provided.

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	PMDD Netherlands Foundation
	Lichen Sclerosus Foundation
	Pelvic floor4All
	Olive Foundation

Table of contents

Foreword	2
Introduction	3
1. Professional field, developments in education and competence profile	7
<i>Developments relevant to our field and education</i>	7
<i>Lessons from medical education research</i>	9
<i>Competence profile for education as a gynecologist</i>	9
2. Education content	10
<i>Vision on education</i>	10
<i>Education in three domains</i>	10
<i>On-the-job education using EPAs and Themes</i>	12
3. Structure of education	14
<i>Obstetrics and gynecology education in time</i>	14
<i>Place of education</i>	14
4. EPA basic section and Themes	15
<i>12 Basic EPAs</i>	15
<i>Themes</i>	17
5. Differentiation phase	18
<i>Differentiation plan</i>	18
<i>EPAs basic and EPAs differentiation</i>	18
<i>Themes</i>	18
6. Feedback, guidance and review	20
<i>Feedback culture</i>	20
<i>Review of EPAs</i>	20
<i>Guidance within themes</i>	21
<i>Clinical competence judgments of education group</i>	21
<i>Recurring formal educational conversations</i>	21
<i>Portfolio</i>	22
<i>Recognizing underperforming residents</i>	22
7. Frameworks for education nationwide and locoregionally	24
<i>Nationally organized educational offerings</i>	24
<i>Locoregionally organized educational activities</i>	24
<i>Simulation education</i>	24



<i>Surgical skills</i>	25
<i>Acute obstetric situations</i>	26
8. Ensuring the quality of education	28
<i>Residents, program director and education group in charge</i>	28
<i>Structure of education in regional and local curriculum</i>	29
9. Quality assurance	31
10. Relevant literature	32
Overview of annexes	34

Overview of abbreviations and terminology used

Resident	Physician in training for Obstetrics and Gynecology
BOEG	Reflection on Objectives in Gynecology - national curriculum from 2013
CanMEDS	Canadian Medical Education Directives for Specialists
CGS	Board of Medical Specialties
COC	Central Training Committee
CRM	Crew Resource Management
EBCOG-PACT	European Board & College of Obstetrics and Gynaecology - Project of Achieving Consensus in Training
Education Group	Collective of Obs & Gyn specialist working at an institution that are jointly responsible for the education and supervision of Obs & Gyn residents at that institution/hospital
EPAs	Entrustable Professional Activities
FMS	Federation of Medical Specialists
HOOG	Revision of Training in Obstetrics and Gynecology - 1 st competency-based national curriculum from 2005
ICT	Information and communication technology
ITP	Individual Curriculum
NCOG	National Curriculum for Obstetrics and Gynecology
LOD	National Training Days for Obstetrics and Gynecology
LOGO	National Curriculum for Obstetrics and Gynecology (NCOG)
MERS	Middle-East Respiratory Syndrome
MUST	Managing Obstetrics Emergencies and Trauma
NLS	Neonatal Life Support
NVOG	Dutch Society for Obstetrics and Gynecology
Program Director	Member of an Education Groups who has the formal responsibility for overseeing and managing Obs & Gyn education at an institution. Includes key administrative and leadership roles as well as a coaching role for residents.
PVC	Plenary Visitation Committee
Regional Education Cluster	University hospital together with a number of partnering general hospitals who jointly provide Obs & Gyn education for residents in their geographical region.
RGS	Registration Board for Medical Specialists
SARS-CoV1/2	Severe Acute Respiratory Syndrome Coronavirus-1/2
VAGO	Association of Residents in Gynecology and Obstetrics



1. Professional field, developments in education and competence profile

Developments relevant to our field and education

The specific Obstetrics and Gynecology Decree of the Board of Medical Specialties (CGS) briefly describes what the Obstetrics and Gynecology profile entails: it is the specialism that focuses on reproduction, parturition in all its facets and the prevention, recognition and treatment of diseases of the female sexual organs. In practice, the gynecological profession involves much more than just clinical skills in these areas. Gynecologists assist women at all stages of life with a multitude of medical problems. This includes a diverse range of pathologies, from caring for young women with endocrinological disorders to complex care for the elderly with oncological disease, from an unfulfilled pregnancy wish to a complicated pregnancy and from menstrual problems to counselling around menopause. Education for the specialty of gynecology must address this diversity.

Besides the fact that residents are trained as subject-matter experts, there are a number of important developments in healthcare and beyond that are relevant to gynecology education. From mainly curative care, the focus is shifting towards increasing attention to preventive care and quality of life, from treatment of disease to guidance in dealing with risks, and from intramural work to participation in networks of care. The government policy document 'the right care in the right place' discusses this development in more detail. This vision has been translated to the gynecologists' world by the board of the Dutch Society for Obstetrics and Gynecology (NVOG) and the Association of Residents in Gynecology and Obstetrics (VAGO). The NVOG and VAGO have both prepared vision documents on the 'Gynecologist 2025'. From these, too, it is clear that not only the professional practice of the gynecologist, but also the environment in which the profession practices is changing. It is important for curricula to anticipate these changes in order to continue to provide good care that meets the needs of society and the profession. A number of relevant developments in healthcare are highlighted below. The following chapters explain how NCOG responds to these developments.

Positive health

The NVOG states that the starting point of care is Positive Health: 'Health as the ability to adapt and take control of oneself, in the context of the physical, emotional and social challenges of life'. Machteld Huber (2011) puts functioning, resilience and self-direction at the center of this. Working from a positive health perspective, in addition to work from the biopsychosocial model, requires gynecologists to pay attention to dimensions such as meaning, quality of life and patients' vital ability to take care of themselves.

Patient-physician relationship characterized by partnership

The patient in tomorrow's care is more of a director than a consumer or even passive recipient of care. It is important that gynecologists arrive at choices about the best possible care together with patients. In terms of prevention and lifestyle, the patient has a great responsibility and the gynecologist is more in the role of coach. Collaborative decision-making is an essential part of good care, but not obvious and can lead to situations that result in difficult trade-offs for both patient and doctor. Clinical expertise and skills of the gynecologist are prerequisites, but a holistic, empathetic and equal approach to the patient is increasingly at the heart of the patient experience.

Developments that require adaptive capacity

- 'Emerging infectious diseases', for example due to viruses such as SARS-CoV1, MERS-CoV, Zika, Chikungunya and SARS-CoV2 all have, and in different ways, implications for the population of patients that gynecologists care for. From specific risks for a subset of pregnant women (Zika) to disruption of society including the healthcare system with implications for all healthcare providers and patients (SARS-CoV2). Dealing with new conditions, especially rapidly emerging 'emerging infectious diseases' requires adaptive capacity of gynecologists.
- Rapidly succeeding technical developments and digitization of care and care processes will influence not only the medical content of care, but also logistics. Telephone and video consultations are increasingly used in healthcare. ICT developments such as 'artificial intelligence' are expected to become disruptive for our practice.

- Influenced by various societal trends such as ageing, obesity and delayed childbearing, but also by an increase in, for example, improved care for patients with chronic conditions, possibilities of gene diagnostics and developments in fertility preservation, gynecologists will be faced with a different patient population and with different questions.
- Sustainability is a topic that is receiving increasing attention in healthcare. In 2019, the government signed the Green Deal Sustainable Care with more than 200 parties. Besides reducing CO₂ emissions, it includes agreements on circular and socially responsible procurement, less medicine residues in drinking water and creating a healthy working and living environment for healthcare staff and patients. This is obviously also important for gynecologists and requires increasing attention in the future.

The above developments require healthcare providers to take an adaptive and creative view that goes beyond the boundaries of their own specialism and institution/hospital. One that increasingly draws on insights from disciplines such as change management. For education, it means that it is essential that we all learn to deal with change and disruption in a more strategic and informed way.

Lifelong learning and vital in the profession

The developments mentioned above and the corresponding adaptive capacity of gynecologists encompass two major topics: lifelong learning and personal leadership. Education as a gynecologist should not only train an independent medical specialist, but also a medical professional who has learned how to continue to develop throughout her career. Personal leadership and attention to wellbeing is an increasingly important topic which is only marginally mentioned in the 2015 Canadian Medical Education Directives for Specialists (CanMEDS). The NVOG really wants to work on this with NCOG. Within professional development, ensuring a good work-life balance on the one hand and inspiration and meaning on the other is very important. There are various possibilities to shape self-care in groups or individually. There are also opportunities for the work environment to contribute to wellbeing by, for example, working towards an open culture and an environment that encourages learning and development together. These work environment and work culture aspects are shaped by all stakeholders together, from gynecologists (in training) to nurses and from patients to hospital management. NCOG contains components (called themes) in which the individual basis for lifelong learning and vitality in professional practice are addressed. In addition, NCOG's education approach contributes to fostering a work environment that is conducive to development and learning.

Interprofessional collaboration and network medicine

Reorganization of care aims to ensure quality and continuity of care, but also creates more complex patient-centered forms of cooperation between various (para)medical professional groups. In this interprofessional cooperation, issues such as equality, mutual respect, knowledge of each other's activities and responsibilities, taking decisions together, leadership based on expertise rather than status, recognizing the limits of one's own ability and keeping each other accountable for undesirable behavior will feature prominently. For gynecologists of the future, they are 'as strong as their network'; complex issues and treatments can be approached in a network context in consultation with the patient. This requires insight and good coordination with healthcare providers from other medical specialties, such as urology, surgery or radiology, and other professions, such as physiotherapy and sexology.

Shaping professional care

The increasing focus of government and health insurers on the cost and quality of care makes care more performance-oriented and long-term policy-making more important. In this bureaucratic playing field, the voice of the medical professional must be preserved in order to keep healthcare honest, patient-centered, ethical, sustainable, environmentally aware, affordable and workable. To this end, it is important for healthcare professionals to learn to stand for equity and quality, to be able to put themselves in the shoes of healthcare managers and to meet both regulatory requirements and budgetary constraints with professional vision and strength. Part of our professional mission is to provide high-quality care at a reasonable price and care in the right place, often summarized under the term value-driven care.

Lessons from medical education research

Recent literature in the field of medical education and health professions education more broadly, takes a critical look at the connection of competence frameworks to the practice of care and education within that context. Meanwhile, there is a lot of experience with competence-based education, including within our field since the introduction of the curriculum 'Revision of Training in Obstetrics and Gynecology' (HOOG) – the first national competency-based curriculum for obstetrics and gynecology – in 2005. National and international research show that the introduction of concrete learning objectives leads to more focused supervision and assessment. Residents have more control over the content of their education leading to personalized education pathways. The introduction of Entrustable Professional Activities (EPAs), groups of professional activities, has made it possible to use assessments of functioning in the workplace to specifically indicate which tasks residents may perform with which degree of independence. However, a linear, simplified subdivision of competences, to sub-competences, to learning objectives can lead to a large number of activities to be assessed. Instruments intended to support residents and education groups in the didactic process of learning and education are often undermined in practice by the assessment of residents that depends on those same instruments. This undermining is thus mainly due to the mixing of development-oriented (formative) assessment as a form of input for a learning conversation and summative assessment on which, for example, the awarding of a higher level of independence will depend. In this curriculum, NCOG, we choose not to set requirements on which or how much formative assessment should be collected in a portfolio and to judiciously document summative assessment. This is different from the practice in BOEG. In terms of content, we also have a different approach: we make it explicit that there is more to a good curriculum design than EPAs. In our daily practice, there already is much more learning and education than can meaningfully be captured in framework focused on increasing independence. EPAs are not suited to encompass the entire breadth of development of a specialist (in training) and can encourage a tick-box mentality. The aim of most curricula for postgraduate medical education is to 'deliver' competent individuals. However, we posit that the level of ambition should be higher. Competent individuals are necessary but not sufficient to contribute to good care now and in the future through medical specialist education; for that, competent individuals must also be team players with attention to the individual needs and population-specific needs of the patients they are jointly responsible for.

Competence profile for education as a gynecologist

The CGS Framework Decree describes the general competences of a medical specialist and clusters them, based on the CanMEDS model, into seven competence areas, namely: medical expertise, communication, collaboration, leadership, health advocate, scholarship and professionalism. General competencies, as the name suggests, apply to all medical specialists to a greater or lesser extent. Each competency area consists of four sub-competencies. The CGS considers competences to be clusters of skills, knowledge, behavior, attitude and insight. They are context-related and always linked to activities, tasks and/or responsibilities. In this way, the CGS links competencies to the practice of the profession. NCOG builds on the vision that led to the description of these general competencies of medical specialists. The competence profile for the gynecologist is attached in appendix A.

NCOG used the latest scientific knowledge and medical educational insights to arrive at a curricular design in line with the developments and goals formulated above for the education of medical specialists, further elaborated for the education of gynaecologists (see also Chapter 2). Specifically, this means a national curriculum, which is based on the CanMEDS and the Union Européenne Médicale Spécialiste (UEMS)'s 'European training requirement for obstetricians and gynaecologists' and includes all required competencies. However, NCOG adopts a system for education that does not primarily use CanMEDS terminology but takes an approach that optimally matches the goals of gynecology education and the practice of education in the workplace. NCOG is therefore competence-based education, is in line with the CanMEDS, fits within the guidelines of the CGS Framework Decree and is innovative in the way these frameworks have been translated into a national curriculum. Appendix C justifies how NCOG fits within education based on CanMEDS competences and builds on BOEG.



2. Education content

Vision on education

NCOG aligns with a vision on education in which education contributes to excellent care and excellent care is the basis for good education. Education and care reinforce each other in the shared ambition to (learn to) improve. The NVOG's goal with NCOG is to train individuals who contribute to the best possible care. This requires educating competent individual gynecologists. However, we do not see a competent gynecologist as a sum of ticked-off competences, and excellent care is not a sum of competent individuals. To function well as a collective, aspects such as mutual relationships, expectations, willingness and ability to learn from each other, flexibility, routines, agreements and coordination are also essential. There is now a lot of research on what is meant by the term 'collective competence'; clearly good care requires a well-functioning collective. In line with this vision, NCOG has translated education in three domains. These are explained in this chapter. Collectively, these domains help recognize and structure what it takes to train competent gynecologists who contribute, with and for patients, to the optimal functioning of care.

The developments described in chapter 1 have been embedded in NCOG. Here, a balance was sought between uniformity in education outcomes and room for individualization of learning plans and responding to specific education opportunities offered by a workplace. NCOG also balances professional diversity of gynecology education (including the tendency towards increasing sub-specialization) and a broad generalist base that supports a holistic approach to patients. A certain degree of generalism, the core of the profession and the bearer of the positive health outlook, will continue to be ensured by educating residents, especially in the first 4 years of education; diagnostically broadly supplemented by some essential aspects of the gynecologists' therapeutic arsenal.

Finally, it is important to make explicit that workplace learning is the most important way for residents to develop as specialists. At the workplace, learning is largely guaranteed by the daily instructions, guidance and feedback residents receive from their direct supervisor, the education group and other professionals in the immediate working environment. This is known as informal learning. Patient care is thus the basis of workplace learning. There are numerous activities that are not only part of good care but also contribute to education. These include participating in and leading handovers, grand rounds, mortality & morbidity meetings and multidisciplinary meetings. Providing care makes it clear which things go well and where things could be improved. It is the starting point for reflection on one's own actions and those of the team and the system of which residents are a part. However, learning in the workplace is more effective when it is supported by an educational system that provides structure in learning objectives and methods, when there is formal education to supplement and deepen workplace learning and when there is room to learn through placements or targeted assignments to focus on objectives that are not or insufficiently addressed in the workplace. It is therefore necessary to organize nationally, regionally and locally a number of education components, such as discipline-specific and trans-disciplinary education, simulation and team training, and coaching.

Education in three domains

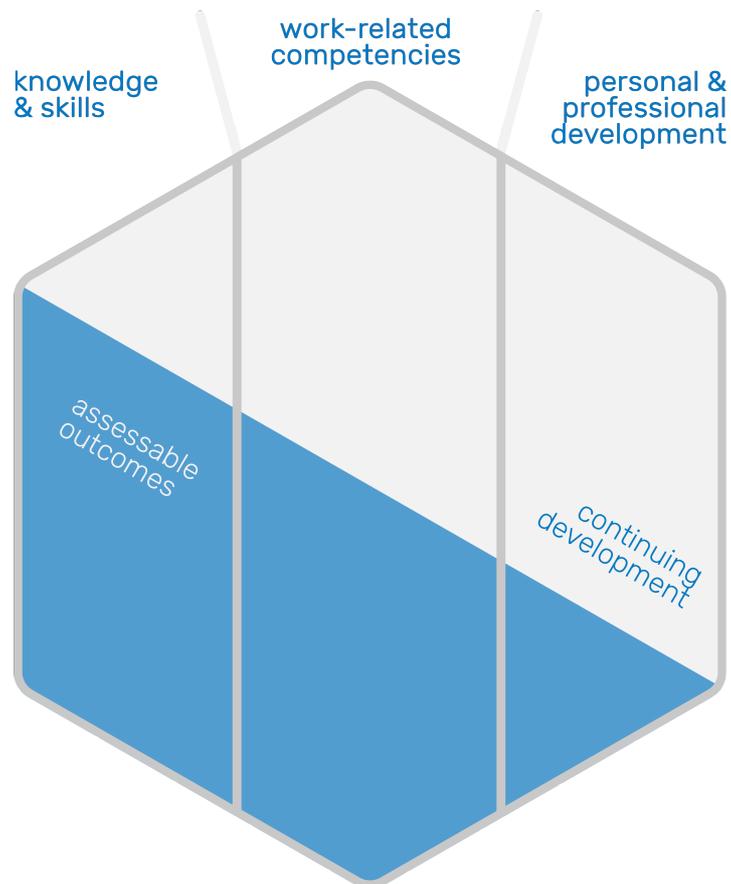
The above vision leads to a course that pays attention to three domains; these are:

- Knowledge and skills
- Work-related competences
- Personal and professional development

The first domain of development is individual and context-specific knowledge and skills. The second domain focuses on work-related competences. The third domain concerns the development of the healthcare provider as a person and professional. Figure 2.1 shows that education within these three domains means that the education partly consists of assessable learning outcomes and that, in addition, we also recognize (parts of) domains where it is not about assessable outcomes but about stimulating and supporting continuous development.



Figure 2.1 education in three domains



The Knowledge & Skills domain focuses on assessable individual learning outcomes. For the various aspects of the field of Gynecology and Obstetrics, Chapter 4 elaborates on what residents must know and be able to do. Residents develop individual knowledge and skills within this domain and collect evidence of clinical skills and successfully completed education. These individual achievements are prerequisites for gradually being able to function more independently in practice.

Besides knowledge & skills, it is essential for residents to develop work-related competences in order to function with increasing independence within our field. Following the European curriculum for obstetrics and gynecology (EBCOG-PACT, 2018), the following classification of work-related competences was chosen:

- Patient-centered care
- Teamwork
- System-based practice

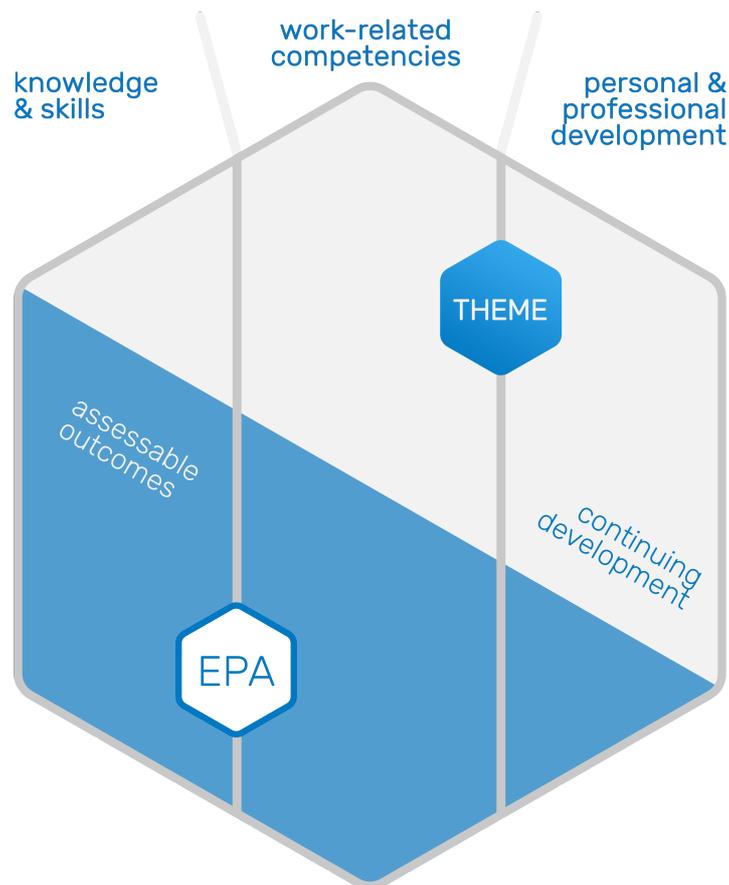
This format fits well with the challenges and learning opportunities faced by gynecologists in their daily practice.

Education in knowledge & skills and work-related competences is not complete without also paying attention to the personal and professional development of residents. This concerns topics such as work engagement, dealing with mistakes, learning to learn (self-directed), contributing to innovation of care, and scientific activities.

On-the-job education using EPAs and Themes

The three domains of NCOG described above provide a useful framework to identify where a resident's strengths lie and where further development is necessary and/or possible. This educational framework should be linked to the educational opportunities offered by daily practice. NCOG does this through EPAs and Themes. By educating in three domains using EPAs and Themes (Appendix B), NCOG covers the 'Competence Profile for the Gynecologist' (Appendix A).

Figure 2.2 relationship between three domains of education, EPAs and Themes



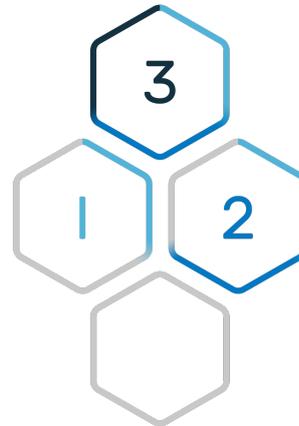
The domains of knowledge and skills and basic work-related competences are primarily covered within EPAs. More sophisticated aspects of work-related competences and personal and professional development are primarily part of Themes (see below), but in practice are obviously linked to the development that residents go through within subject-related EPAs. Compared to BOEG, changes have been made in NCOG with regard to the EPA categorization and interpretation, see chapter 4. The main characteristics of an EPA remain unchanged. In NCOG an EPA is:

- ...a core activity of the profession entrusted to a suitably competent resident,
- ...appeals to multiple domains, especially knowledge and skills and work-related competences, which are collectively essential to successfully perform the EPA,
- ...is initially performed under strict supervision after which, through education and experience, increasingly independent work is allowed, within a set timeframe.

When a resident meets the requirements for knowledge and skills and work-related competences within an EPA, resident and the program director (or education group) can jointly decide that the resident is ready for the next level of independence. In today's education practice, a resident starts working under strict supervision. This starting level is similar to what used to be the second independence level in BOEG. The first step of importance in educating for increasing independence is from strict supervision to little supervision.

Assuming that all residents start with functioning under strict supervision, there are therefore four important supervisory levels resulting in three steps (important decisions moments). Hence, NCOG distinguished the following important decision moments; a level of independence leading to:

1. little supervision
2. no supervision
3. residents in supervisory role



This is a change from BOEG. BOEG used 5 levels of proficiency. The conceptual difference between proficiency and independence is important. EPAs are about more than having knowledge and skills and more than the individual competence of a resident. EPAs are about how a resident contributes to optimal care in a defined part of our profession. This is an assessment that concerns not only the residents' knowledge and skills, but also their development in work-related competences, the degree of self-assessment and self-regulation, among other things, in combination with the vulnerability of the patients involved, the organization of care and the availability of back-up mechanisms in unexpectedly difficult situations. Hence, the assessment made at the level of an EPA, by both residents and program director(s), is not only about an individual level of proficiency.

Another change from BOEG is the introduction of 'Themes'. Themes are descriptions of subjects in which residents can further develop sophisticated aspects of work-related competences and pay attention to personal and professional development. Attention to both EPAs and Themes are necessary to educate gynecologists who can contribute to the best possible care for women in all stages of life now and in the future. Of course, topics within Themes often also require specific knowledge and skills, just like EPAs. This should not be forgotten but should also not take precedence in the focus on Themes. Chapter 4 elaborates on the four Themes described in NCOG, which together make pertinent topics explicit and legitimize them for inclusion in education in obstetrics and gynecology. NCOG provides guidance for education within themes. It also leaves ample room for interpretation in line with the interests of individual residents and the possibilities offered by specific educational institutions. Within each theme there are a number of relevant topics. Residents and program directors are expected to pay attention to all themes and topics at a basic level. In addition, there is room for in-depth study of a topic or for individual topics within these deliberately broadly chosen themes. Residents and program directors have the freedom to determine the education activities they use to flesh out the themes themselves.

3. Structure of education

Obstetrics and gynecology education in time

Education for the medical specialty of obstetrics and gynecology spans an average of six years. This is partly due to the structure of the education specified as follows:

- two years of providing low-complex care (basics, part 1), followed by
- two years of providing moderately complex care (basics, part 2)
- two years of elaboration of specific aspects of obstetrics and gynecology while consolidating the basics

This means that residents spend the first four years working on a foundation that is diagnostically broad and therapeutically focused on common and essential treatments options. In the last two years, the foundation is consolidated and further work is done on parts of the therapeutic arsenal, depth is sought in parts of the profession and more space is created for attention to themes. The last two years of education are completed in an individualized way that suits the learning objectives and capabilities of the resident, in consultation with the program director(s) involved. For this reason, we talk about the possibility of differentiation in the last 2 years of education. This differentiation part is described in chapter 5. Chapter 4 explains the basic EPAs and Themes. Based on the above structure, it is expected that residents will pay attention to all these basic EPAs and Themes in the first 4 years. In the initial part of the education (first 1-2 years), relatively more attention will be paid to independence within basic EPAs. Some topics, for example self-directed learning and coping with setbacks (part of Theme 1) and clinical leadership (part of Theme 3) are expected to fit well with this phase of residents' development. Over the course of the first 4 education years, when a resident is performing well within low- and moderately complex care situations, proportionately more attention can be paid to themes as residents continue to work towards increasing independence within EPAs.

Table 3.1

Attention to	12 basic EPAs	differentiation EPAs and consolidation basic EPAs
	(selected) topics from 4 Themes deepening and possibly expanding topics within Themes	
Education phase	4-year foundation	+/- 2 years of differentiation

The CGS framework decree contains a description of the regulation on individualization of education duration. This regulation allows an experienced or excellent resident to complete the education in a shorter duration. It also allows taking into account competences previously acquired by a resident. However, individualization also means extending education if necessary. For residents and program directors, this means that it is important to record how a resident functions per EPA at the start of education and which themes may already have received attention during a period as a researcher, resident in another profession, or physician not in training as a specialist. Also, during the education, recording development within EPAs and Themes is essential to be able to substantiate discounting or extension of the education time.

Place of education

A resident completes at least two years and at most four years of education at a university institution/hospital. In principle, education happens in no more than three institutions, i.e. under the responsibility of at most three program directors. Given the shift of care to locations outside large hospitals, it is of course possible for residents to do placements at several locations without changing education institution. During the differentiation part of the education, a resident may move to another education institution, ultimately resulting in education in more than three education institutions. How the first four years of education are divided between university and non-university hospitals should be agreed and defined regionally. The two most common divisions are:

Option a: years 1 and 2 non-university education institution/hospital, years 3 and 4 university education institution/hospital

Option b: year 1 non-university education institution/hospital, years 2 and 3 university education institution/hospital, year 4 non-university education institution/hospital



4. EPA basic section and Themes

The vision behind the content of gynecology education is explained in previous chapters. In practice, in the first 4 years of education, this amounts to education based on 12 basic EPAs and 4 Themes. Themes continue in the differentiation phase of education. Residents complete one or more differentiation EPAs during the differentiation phase. See the explanation of this in chapter 5.

12 Basic EPAs

As explained in chapter 2, EPAs are groups of activities in which a resident develops increasing independence during education. This independence results from an increase in knowledge & skills and functioning within the three work-related competences: patient-centered care, teamwork and system-based practice. For this reason, each EPA is developed in a similar way (see appendix B). An EPA starts with a brief (and therefore non-comprehensive) description of the content of that EPA based on the following elements: knowledge; skills; patient-centered care; teamwork; system-based practice. This description gives an idea of the content and is not meant to be a complete description of all facets that can be part of patient care within this EPA. The minimum conditions that a resident must have met to qualify for a next independence level are also described. Making specific knowledge or competence within specific skills/activities conditional, clarifies what fits a certain level of independence. It also provides insight into which phase of education residents need specific courses, simulation education or practice experiences, see also chapter 7. Finally, yet importantly, to arrive at the judgement that a resident performs at a certain level of independence, meeting the relevant minimum conditions is insufficient. In addition, the residents will have to provide a brief description of three (or more) situations showing that they can function at the requested level of independence. Residents substantiate this with information from their portfolio, collected through feedback forms, reflection reports, case descriptions, etc. This is the basis on which a program director, in consultation with the education group, determines (the progression to) an independence level.

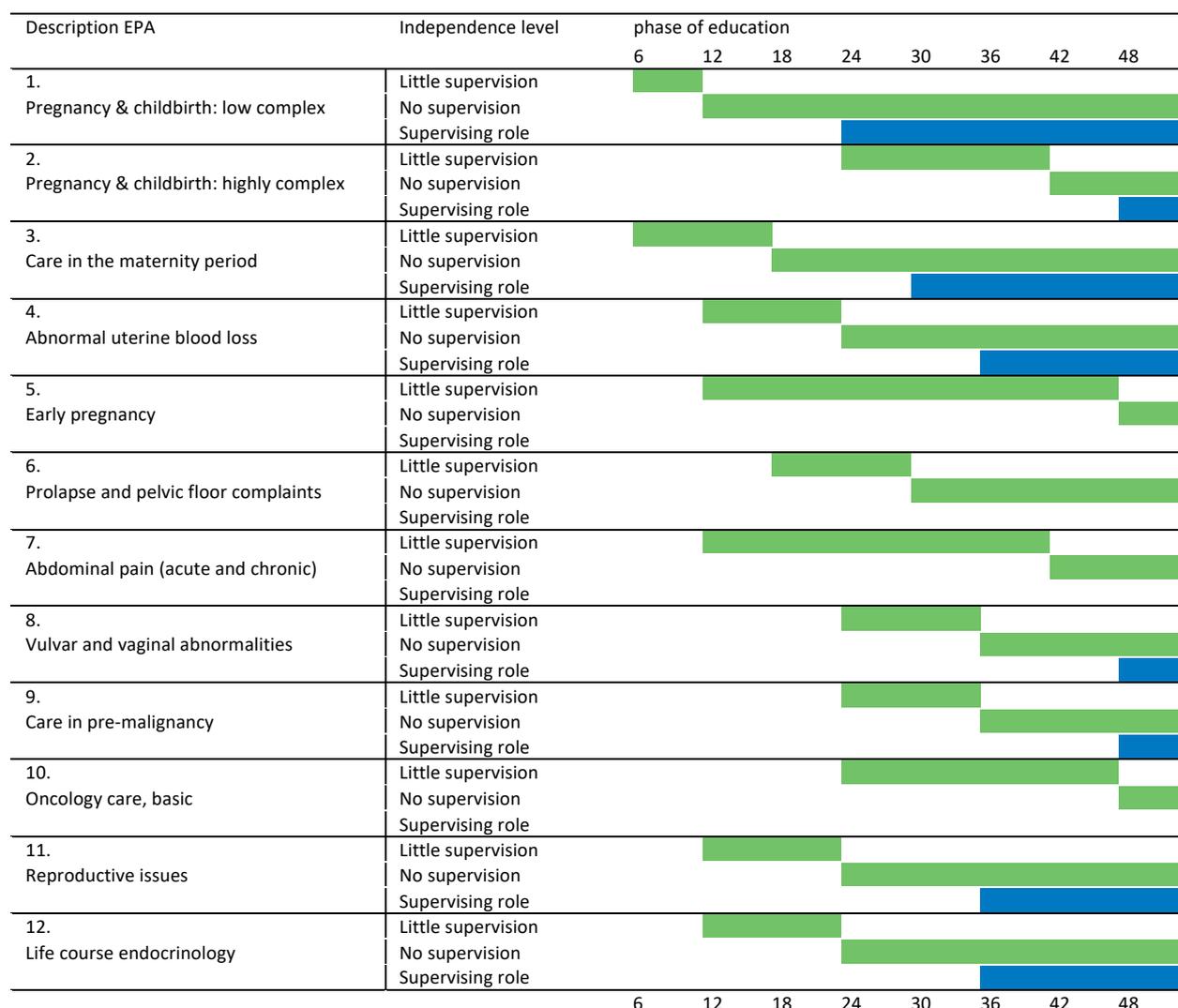


Below is an overview of the 12 basic EPAs in NCOG that residents spend the first four years of education on. The rationale behind this classification is that a basic EPA fits in as much as possible with the work of residents and they have been chosen in such a way that growth in performance is possible (and becomes visible) during education. An EPA that covers too large or too complex a part of the profession can lead to limited opportunities for residents to develop increasing independence in the first four years of education. Where possible, an EPA follows the care pathway of patients. The expected growth in the first 4 years is shown for each basic EPA and independence level in Table 4.1. These benchmarks can be adjusted, for example when the regional division of the education schedule requires it. Moreover, after several years of working in accordance with NCOG, this table may be recalibrated on the basis of practical experience.

EPA 1: pregnancy and childbirth, low complex
 EPA 2: pregnancy and childbirth, high complexity
 EPA 3: care in the maternity period
 EPA 4: abnormal uterine blood loss
 EPA 5: early pregnancy
 EPA 6: prolapse and pelvic floor complaints

EPA 7: abdominal pain (acute and chronic)
 EPA 8: vulvar and vaginal abnormalities
 EPA 9: pre-malignancy care
 EPA 10: oncological care, basic
 EPA 11: reproductive issues
 EPA 12: life course endocrinology

Table 4.1 - Benchmarks independence levels during first 4 years of education



Green blocks indicate the phase of education in which residents are expected to function at the relevant level. Blue blocks indicate an expectation of the phase of education in which residents could perform in a supervisory role in addition to functioning independently. That level is not expected to be reached in every EPA in the first four years of education. Although this follows the 'no supervision' level in terms of independence, in practice, residents will alternate moments of working without supervision with supervising others. For this reason, the blue areas partly overlap with the green areas representing 'no supervision'.

Themes

Themes in NCOG are used to legitimize topics that deserve attention in obstetrics and gynecology education, see explanation in chapter 2. In terms of content, the topics that require attention can be divided into four categories, which are:

Theme 1.	Being Engaged, Staying Engaged	
Topics:	Maintaining balance and motivation Self-directed learning Dealing with setbacks	
Theme 2.	Network medicine for specific target groups	
Topics:	Women's Health Care for patients in vulnerable situations	
Theme 3.	Organization-based care	
Topics:	Quality, management, safety and sustainability Efficiency and value-driven care Clinical leadership	
Theme 4.	Knowledge and innovation	
Topics:	Contributing to and managing change Innovative techniques Education and training Science	

The themes are described in more detail in appendix B. They are based on BOEG, vision documents on medical (specialist) care in the future and scientific literature on the content and form of health profession education.

Themes appear throughout education. They can be recognized in the vast majority of the work of residents and gynecologists. It is the explicit intention to pay attention to both EPAs and Themes in daily work. Often, during feedback moments, aspects of one or more EPAs and themes can be chosen as learning objectives and be the subject of interaction between resident and supervisor. Themes can be supported by various forms of education. These should be targeted and deliberately used to make learning in practice more efficient or to deepen it.

Each topic of the four Themes should receive attention at a basic level. Later in the education there will be room for more in-depth coverage of selected topics or for the addition of topics. This provides opportunities for individual interpretation by residents or within local or regional education programs. Regional and local programs should work out how the deliberately broadly chosen topics are fleshed out and how space is provided for individually chosen topics. This can be done with educational activities that have their origin in the workplace and/or with education activities such as a course, training or targeted project. In addition, other forms of guidance can be considered, such as coaching or InterVision. For example, residents can also contribute to development and improvement projects in a healthcare institution or region on topics that they are required to pay attention to or that they select together with the program director. NCOG recommends some working forms and suggests many possible working forms (see annex B).

5. Differentiation phase

The last two years of education provide scope for differentiation. These 2 years are devoted to consolidation of the foundation; gaining more experience and developing more independence within basic EPAs. The differentiation phase is also explicitly the period for more elaborate attention to specific parts of the profession and/or to deepening particular topics within themes. In this way, the differentiation phase contributes to the development of competent gynecologists with a broad basis and additional expertise appropriate to their personal ambitions.

Differentiation plan

A differentiation plan for education years 5 and 6 is drawn up by a resident and program director together. The Individual Training Plan (ITP) drawn up by the resident and agreed with the relevant program director(s) is leading for the activities of the resident during the last two years of education. The basic principle here is that one third to two thirds of the time is spent on tasks related to the differentiation and the remaining time on consolidation of the foundation of the first four years of education. It is important that the concrete learning objectives of the differentiation EPAs and themes are attainable.

The differentiation plan consists of 3 parts as shown schematically below. One or more differentiation EPAs that indicate the professional depth the resident pursues. The components of the differentiation phase in NCOG are similar to those in BOEG, but the aim is to do more justice to individual possibilities. Differentiation EPAs are logically divided into the main areas of our profession, but more specific choices are possible within them. The term 'role specialization' introduced in BOEG is dropped in NCOG, but in line with what a 'role specialization' offered, residents can deepen previously addressed Themes or can add individually chosen topics to Themes.

Differentiation plan	
Consolidation foundation	Picking basic EPAs for consolidation or improvement
Supplemented by 1 or more differentiation EPAs of your choice +	Obstetrics (prenatal diagnosis, foetal and maternal medicine) Benign gynaecology/minimally invasive Urogynaecology Gynaecological oncology Reproductive Medicine Own fill-in options (examples at www.nvog-NCOG.nl) Combination of basic and differentiation EPAs*
Working on themes	Deepening a topic or complementing it with own topic

*A combi differentiation is intended for residents who opt for a more generalist profile or for residents who have not yet completed the basic EPAs at expected level by the end of year 4.

EPAs basic and EPAs differentiation

The differentiation plan is filled with basic EPAs and, in addition, with individually tailored differentiation EPAs fitting the chosen differentiation profiles. The EPAs that fit common chosen profiles will be made digitally available (www.nvog-LOGO.nl). Of course, it is also possible to collaborate with groups within and outside the NVOG, such as the NVOG Working Group on Child and Adolescent Gynecology, which has developed example differentiation EPAs, or the Dutch Society of Abortion Specialists, with which the NVOG has a cooperation covenant that also includes collaboration in education. The examples made available online are intended to give residents and program directors a handle on how to fill in the differentiation phase. They are not meant to be pre- or restrictive. The intention is explicitly to create differentiation EPAs in an individualized way, with attainable learning objectives and in line with local and regional possibilities. The design/layout of differentiation EPAs is similar to that of basic EPAs, with the same independence levels.

Themes

The individual differentiation plan also describes which topics within which themes are deepened during differentiation. In other words, there is no longer talk of 'role specialization', but a natural transition is created from the first four foundation years of education in which of all themes have been covered at a basic level. Issues such as science, innovative techniques and ethics also fit within the themes. A deliberate choice was

made not to include themes other than those described in chapter 4, since these broadly chosen themes offer enough room to residents and program directors for personalized education. Depending on the progress of the resident, it can be discussed with the program director how these themes fit into the in-depth plan in terms of content, time allocation and learning objectives.



6. Feedback, guidance and review

Feedback culture

Feedback is one of the most important ways for residents to learn. Feedback is not just providing some points for improvement to another person. It is an essential part of social interaction and is influenced by various contextual factors such as culture, expectations, experiences, and relationships. You could think of feedback as dialectic, as a conversation, instead of as unilaterally giving information to another person hoping they will change.

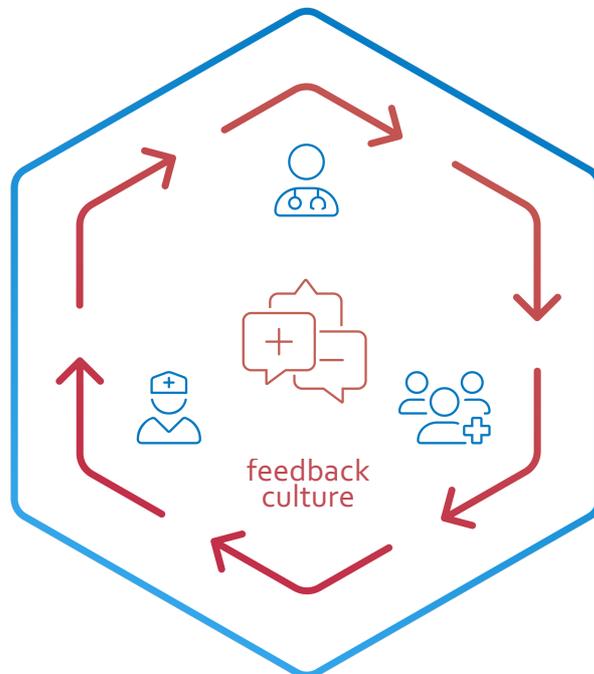
For feedback to be effective, at least a supportive climate and feedback culture is needed. This means that it should be normal to provide each other with explanations and feedback. If there is a feedback culture in which the entire team participates, it becomes normal for a resident to engage with and act on feedback. Leading by example is important here. The entire team of healthcare professionals should strive to create a culture of (wanting to) learn together and thus be able to give each other feedback. An important role model for residents are the gynecologist from the education group. They should also be open to engaging with feedback pertaining their performance.

Stimulating this desirable feedback culture is part of the quality cycle (see Chapter 8). It is important to regularly discuss with each other, for instance in response to evaluations or on the basis of questionnaires on the educational environment (D-RECT) or supervisors' educational performance (SETQ) which can help to improve the quality of feedback. This process in itself contributes to a commonly supported culture in which together with the program director, residents and other members of the team, try to become even better.

If feedback given is recorded, for instance in a portfolio, it may be helpful to use for future reference but it may also be perceived as assessment contributing to a judgment of the learner. It is important to ensure that this perception does not hinder the value of feedback. The challenge is creating a feedback culture in which it is normal to discuss each other's actions. The feedback as described above can but need not always be recorded in the portfolio used for supervision and assessment of residents. The residents can of course keep a record of the feedback given in order to use it at the next (similar) moment. Also, residents and program director can use recorded information to argue that the residents has reached a level of independence. Residents and program directors can use various feedback tools and feedback forms to support and record learning and supervision within EPAs and themes. So, as described below, (workplace) assessments continue to play an important role in obstetrics and gynecology education.

Review of EPAs

For each EPA, the knowledge and skills covered and the work-related competences 'patient-centered care provision', 'teamwork' and 'system-based practice' are described. These are usually descriptions in the form of assessable learning outcomes. The assessment of functioning within an EPA can have a formative purpose (the development of the residents within that EPA) and is then the basis of a feedback conversation. At some point, assessment also has a summative aspect, which needs to be carefully documented in the resident's portfolio. Typically initiated by a resident, the program director must decide, based on workplace assessments and the argumentation of the resident, together with the opinion of the education group, whether a resident has



achieved a certain level of independence. In this way, portfolios are records of what residents can do; which is of interest to residents themselves, those who work with them and it provides transparency on the education.

In addition to independence levels for an EPA, for individual skills or procedures residents can be declared competent, as was the case in BOEG. To perform a procedure, such as a vacuum extraction, or a diagnostic laparoscopy, the resident must know the indication and potential complications, be able to perform the associated actions and master the issues associated with such a procedure, such as communication with the team, preparation, consultation with patient. Resident should discuss their level of competence with their supervisor in a timely manner and act accordingly. This means that residents should let it be known for each procedure what level of competence they are at and what their specific learning objectives are. Supervisors should indicate what residents need to further develop in this procedure. Of course, when a resident has achieved a certain level of independence, this does not mean that a resident can no longer consult with a supervisor or ask for supervision.

Guidance within themes

Themes are mainly (but not only) about supervision of development in topics for which no universal learning outcomes can be agreed upon. Nevertheless, an individual resident can discuss with the program director what developmental goals they have for specific topics and themes, and how development towards these goals can be supported and monitored. Feedback on development within themes will then often involve openness and self-reflection on the part of the resident and the supervising program director. To facilitate this conversation and create some form of transparency around development within themes, a resident is asked to occasionally reflect on the following questions (and to record this in the portfolio) for each topic:

- inspiration: what was the reason to pay attention to this topic and what development was sought?
- effort: what is/has been done in terms of development on this topic?
- impact: what impact do the efforts have on the development of the residents and/or on the working environment?

These aspects can be illustrated in the portfolio in a variety of ways. Residents are given freedom in this regard. Of course, it is also possible to use feedback forms that are incorporated in the portfolio and link these to a topic within a theme. Examples of ways to record effort and impact are:

- Reflection report
- 360-degree feedback
- Published paper
- Project description or report
- Letter from a patient about her experience of care received
- Minutes of a meeting

Clinical competence judgments of education group

The growth in independence level of the resident should be discussed regularly in the education group. This does not mean that every decision to progress to a subsequent independence level must first be discussed by the entire education group. Regional and local agreements can be made as to who discusses and approves (or not) requests for a subsequent independence level for residents. When residents are discussed in the education group, it is advisable to structure this, for example by asking members of the education group in advance to record their own impression and experience with the residents and to combine this with the experiences and assessments contained in residents' portfolio. If a request to approve a progression in independence level is discussed, a resident's reasoning for moving to a subsequent independence level should also be included in the conversation.

Recurring formal educational conversations

Discussions on progress in both Themes and EPAs can be initiated by both residents and program director and will often be linked to placement periods. A fixed item on the annual agenda are progress conversations between resident and the (deputy) program director or another member of the education group. Placements begin with a starting conversation and are concluded with a closing conversation, with at least one conversation on progress at the halfway point. The minimum frequency of these conversations is set as follows (of course, there is flexibility to adjust this if necessary):



Education year	1	2	3	4	5	6
Progress conversations with PD frequency	4x	3x	2x	2x	2x	2x
Placement conversation with placement supervisor (minimum/placement)	3x	3x	3x	3x	3x	3x
Time spent on formal education activities (courses) (minimum/year)	10 days					

Portfolio

An electronic portfolio is an important tool to support the learning process of residents. For the education group it is the tool that facilitates education, supervision, assessment and judgment. A third objective is the possibility of providing some insight into the development of residents as a group in an education institution, for instance during accreditation processes.

The portfolio maintained by the resident is a collection of products that reflect the learning process and learning outcomes of the resident. The individual (or personal) training plan (ITP) is also included in the portfolio. The ITP is drawn up by the resident in consultation with the program director(s) within the framework of this NCOG and locoregional agreements on education. Within the regional education cluster, agreements are made on the division of the education into placements. Placements can be a form of block or line learning: block learning is a defined period in which a limited number of EPAs and/or themes are central. Line learning spreads over a longer period and multiple workplaces in which multiple EPAs and/or Themes are addressed. ITPs specify when the residents will take which work placements. The placement schedule that is part of the ITP is a requirement before education can officially start. During the education, the ITP will be adjusted or expanded with learning objectives and plans for the upcoming period during progress conversations. The portfolio plays an important role during the progress conversations. It is the resident's responsibility to keep the portfolio up to date and prepare for these meetings.

Recognizing underperforming residents

Dysfunction of residents in the workplace is not something that can be determined after one observation. It is a process in which usually several members of the education group and program director recognize that a resident is underperforming. For the program director, it is important to recognize doubts about a resident's development in time to prevent dysfunction if possible. To recognize suboptimal functioning, it is important to know how it manifests itself. Broadly speaking, it can manifest itself in four categories:

- dealing with work at the patient level
- dealing with others at team level
- dealing with the organization of care and education
- dealing with self/personal matters

Recognizing suboptimal functioning should lead to a conversation between program director and resident. If it can be jointly established where extra developmental needs lie, an adapted individual training plan and extra guidance and assessment can be agreed. If, despite these efforts, a situation of dysfunction arises, an intensified supervision process can be started. This intensified trajectory makes it possible to apply for extra education time through the Registration Board for Medical Specialists (RGS). However, if the improvement is not realized during this period, it means the end of the education in accordance with RGS regulations. This trajectory will differ for each resident and depend on the residents' degree and area of dysfunction. Documentation is important in all cases to gain a good insight into the residents' shortcomings. Intensive coaching and guidance from the program director and education group or externally will then be necessary. In this phase, the resident and program director clearly lay down in the individual training plan that there is an intensified trajectory in place with clear objectives and milestones on the way to these objectives, linked to a time schedule. This plan is leading in assessing whether the resident meets the agreements made within the set time. The start of an intensified trajectory must be reported to the RGS. It should also be reported to the chairman of the Central Training Committee (COC) of the education institution, who can then also provide



support in the process of monitoring of the agreed trajectory. A resident can formally object to decisions made by the program director. The dispute procedure has been specified and can be found on the RGS website (see [link](#)). In general, the earlier shortcomings are signaled, the less robust the remediation needs to be. Early identification not only means more chances for the resident to address any attention points, but ultimately also less burden on the education group.



7. Frameworks for education nationwide and locoregionally

NCOG makes clear what is expected of program directors, education groups and individual residents. Part of the knowledge and skills, work-related competences and personal and professional development within which residents develop is supported by nationally or locoregionally organized educational activities such as courses, national and regional education days and simulation education. Often, the emphasis in this education is on providing knowledge and skills to be applied in practice. It is important that the formal education provision is aligned with workplace learning and matches the development that residents go through in the three NCOG domains. Guidelines for the organization and alignment of national and locoregional education activities are discussed in this chapter. When talking about mandatory or recommended courses, residents should be able to participate with funding from their education institution and as part of their education time. Each year, there are at least 10 days of formal education in which residents can participate. This chapter also pays explicit attention to education in surgical skills and acute obstetric situations.

Nationally organized educational offerings

Nationwide, the scientific societies, together with the Federation of Medical Specialists (FMS), are working on discipline-transcending course offerings. These educational offerings could be relevant to both EPAs and themes. An overview is available at www.nvog-LOGO.nl. Cross-disciplinary educational activities can also be offered regionally or locally, such as simulation education with other surgical courses or communication education with other professions and/or disciplines. A number of working formats can be organized or supported nationally, for example by including it in the cycle of the National Training Days (LOD). In the future, the NVOG Education Committee could play a role in assessing how relevant courses are and indicate which courses are compulsory, recommended and which are optional for obstetrics and gynecology residents. Opportunities to cooperate across disciplines and internationally in the development of relevant education are increasing.

Specific to obstetrics and gynecology, there are nationally organized formal education activities for residents. Besides the LOD, these include for instance a course in ultrasound scanning and a course in fetal monitoring. Courses are classified as mandatory, recommended (the residents is expected to take the course unless it can be argued why the course has no added value for this particular residents) or optional. Mandatory and recommended courses provide knowledge, skills, work-related competences or personal development opportunities that are considered essential or important for residents. This translates, among other things, into setting specific courses as conditional to argue for a level of independence within an EPA.

Locoregionally organized educational activities

At a regional and local level, education activities are organized and laid down in an educational cycle, such as academic half-days or evenings, research meetings, or teaching of residents by residents. Cross-disciplinary education is also offered in many regional education clusters. It is important that educational organizers are clear about how this education links up with the development of residents within EPAs and Themes. NCOG specifically calls for attention to multidisciplinary team training and simulation education to support the development of surgical skills and contribute to team functioning (e.g. in the delivery room, operating theatre, emergency room). A common thread running through this education is the importance of effective communication. Communication features in all aspects of obstetrics and gynecology practice and education.

Simulation education

There are an increasing number of components in our field where simulation education has a place. Communication skills, obstetric and surgical skills are obviously not the only areas where simulation can be of use and it is up to regional education clusters to decide whether they want to use simulation for other purposes as well. It is expected that this form of education will be used at least for education in communication, obstetric and surgical skills. It is important that education in these skills is in line with the curriculum in the workplace. Starting points for the content of each simulation education consist of attention to:

1. relevant knowledge and diagnostic skills
2. the development of motor skills
3. recognizing factors affecting the exercise of skills, such as communication

This is achieved by:

1. a curriculum based on specific goals
2. learning methods based on the best available evidence
3. continuing to repeat / train these skills and getting feedback on them
4. opportunities to gain clinical experience with the trained skills

Simulation has long been embedded in medical education. It goes without saying that, if possible, actions that are stressful for the patient are first practiced in simulation environments. However, this does not always seem to be self-evident. The need for simulation has also increased for other reasons. Residents nowadays have less clinical exposure because fewer hours are spent in the clinic due to changed working hours, some surgeries are performed less frequently because they have been replaced by conservative treatments, and the availability of simulation models makes it a lot less acceptable not to practice infrequent but crucial skills. Simulation can shorten the learning curve and overcome the reduced clinical exposure. As a result of technological developments, simulation takes many forms: classic imitation of a practical situation in which aspects of that practice can be practiced, as well as virtual, augmented and mixed reality, serious gaming, advanced box trainers with artificial tissue models, etc. that contribute to optimizing simulation education. In addition, new learning tools have become available via the Internet. Online e-learning and Apps make simulation education easily accessible. Video-based learning can also be considered a form of simulation; complex tasks like surgical procedures are easier to understand in the calm environment of a video review than during the hectic pace of live operations.

Both nationally and locoregionally, it is important that simulation modalities that fit residents' learning trajectory in practice are used sensibly. This requires a description of which simulations are used in education, when, and for what reason. This implies building an infrastructure within the NVOG to peer-review the available simulation models for their usability. To a large extent, this seems possible within the existing course organizations in collaboration with the education committee.

Two areas where locoregional education is important and where the potential of simulation education should be exploited are highlighted below. These are surgical skills and acute obstetric situations. The fact that they are highlighted here does not mean that these are the only components where locoregional education is necessary. They have been elaborated here to serve as examples for other components, always keeping in mind their interrelationship and overlap.

Surgical skills

Again, the importance of feedback

In surgical procedures, feedback is often limited to direct feedback during the operation, and afterwards by discussing the procedure using a feedback form. This can be extended, for example, to joint review of surgery videos. Nowadays, many hospitals record endoscopic operations so that complications that come to light later can be reviewed. These surgery videos (provided permission has been obtained from the patient) can also be used for educational purposes. Watching these surgery videos together where selective coaching can be provided has been shown to improve self-assessment of operative skills and is a valuable complement to feedback and obtaining reflection when learning surgical procedures. A structured analysis of (near) complications using a video review also provides valuable feedback for those involved. In addition, video analyses of (near) complications can be used by other residents as important learning moments: video exposure to risky situations (cognitive hazard training) leads to increased knowledge and awareness of complication-prone surgical situations⁸.

Non-technical skills for surgeons

The operating theatre is a technologically highly complex working environment where good multidisciplinary cooperation is essential for the work process to run smoothly, and for unexpected acute situations to be adequately resolved. Cognitive and interpersonal skills are then of great importance.

No Dutch-language team education is yet available for learning these skills in operating theatres. Although not true team education for acute situations, until Dutch-language education is available, an [English-language online course on non-technical skills](#) for surgeons (NOTSS) set up by the Royal College of Surgeons of Edinburgh could possibly be used. Another example of team education and team functioning in the OR is Crew Resource

Management (CRM) education. This involves education effective cooperation by all disciplines working in operating theatres. This method is derived from aviation.

Guidelines for local and regional education in surgical skills

The following guidelines can be used for the organization of locoregional education:

- Mandatory availability of laparoscopic box trainer or laparoscopic simulation trainers with sufficient equipment to perform validated exercises in every teaching hospital
- Box trainer always accessible to the residents, so that practice can be done when the residents has time for it
- Availability of a simulation program with validated exercises

- Also desirable:
 - Virtual reality trainer (e.g. Simendo or similar)
 - Allocate time to practice on box trainer with e.g. monthly education sessions and organization of mutual competitions (serious gaming)
 - Regular organization of half-day mandatory practice on box trainers/virtual reality trainer

Acute obstetric situations

Serious and life-threatening obstetric complications usually occur over a short period of time and often unexpectedly, even in women who are not at increased risk of serious complications. Regular obstetric emergency training ensures rapid diagnosis and treatment that can be life-saving for the mother and fetus. Specific education in the acute obstetric field is offered both nationally and locally. Here, the approach can vary from only medical content, only focusing on teamwork or a combination of both.

Learning and working as a team

Many hospitals already have local emergency response training or on-site CRM training where healthcare professionals train simultaneously and with each other. In teaching hospitals where this is not the case, it is advised to consider introducing this. In a familiar environment, healthcare professionals can practice with the materials they work with every day. This makes the final application of the learned protocols easier. Because everyone learns the same protocols at the same time, this leads to uniform treatment of patients and better mutual communication. It also brings to the surface possible improvements and streamlining of local processes in acute care. Multidisciplinary education has the great advantage of working with different groups that may have different views. The ultimate goal of the education is to reduce the risk of perinatal and maternal morbidity and mortality by learning to solve acute obstetric situations in a systematic and protocolized way. In a controlled, simulated environment experience can be gained in effectively solving emergency situations and immediate feedback can be provided. The difficulty level can be adapted to the target group and progress. Residents can play a role appropriate to the level of education, hands-on for novice residents and a more supervisory role for a senior resident.

Practice makes perfect

Once the residents enters the workplace, it is important to train on the frequent and less frequent obstetric scenarios. In this regard, the power of repetition is of value not to be underestimated. This can be in the form of the above-mentioned contingency training. The main scenarios that should be trained are: fluxus post-partum, eclamptic insult, resuscitation of the pregnant woman (Basic Life Support) including post mortem cesarean section, shoulder dystocia, breech delivery, twin delivery and care of the neonate including resuscitation (Neonatal Life Support). Regular practice of these skills will improve a team's ability to deal with such a practice situation. A scenario should mimic reality as closely as possible whereby necessary materials and medicines should also actually be used and prepared. It is important to discuss the scenario immediately after its execution in a so-called debriefing. This involves the team discussing what went well and what could be improved, as well as learning points for the team, but also for the individual caregiver. It is of importance that the scenario supervisors/instructors guarantee a safe learning climate. Also, such education should be disconnected from assessment moments of the individual caregiver.

In addition to education in obstetric emergencies, short training sessions can be valuable. This can take the form of weekly morning teachings, for example, or if the opportunity arises during duty hours in the delivery rooms.



Course offer

Mandatory and other courses can be found on the website www.nvog-LOGO.nl. Note: The MOET course is a mandatory part of the education, but is reserved for the final years of education despite the fact that workplace emergencies are not reserved for those final years. It is therefore recommended to take the NLS education and the SAVE'r Course in the early years of education and, in addition, on-site education in acute obstetric scenarios.

Development in a theme

The obstetric emergency response courses are also an opportunity for residents to develop in a (sub)theme such as quality improvement, clinical leadership and education. For instance, the organization of the education sessions may include a role for residents. Among other things, residents can then develop in creating a safe learning environment and providing a structured form of feedback during debriefing.

Guidelines for locoregional education in acute obstetric situations

NCOG emphasizes locoregional education and provides guidelines for local implementation of education. The following frameworks can be used for organizing locoregional education:

- Mandatory periodic emergency education based on CRM principles where a safe learning environment and structured opportunity for feedback and reflection is a requirement.
- An obstetric model as well as forceps and ventouses should always be accessible to residents so that procedures, maneuvers and assisted deliveries can be simulated and practiced if the residents needs them.

Also desirable:

- Schedule allocated time to practice on anatomical models with, e.g., monthly morning teaching with simulation scenarios.
- Active engagement of residents in organizing and shaping emergency education.

8. Ensuring the quality of education

'Quality is made by people learning together.' (Koksma and Kremer 2019)

Residents, program director and education group in charge

The quality of education is in the hands of several players. The list below is not exhaustive, but gives an idea:

- Residents
- Program director and deputy program director
- Education group
- Multiprofessional team in education institution
- Central training committee (COC)
- Residents' representation in the education institution
- Education institution
- Regional partnership
- Regional education committee
- RGS

The CGS framework decree sets out the obligations of some of these players. In this piece, we focus a little less on what all must do, but mainly on what is useful and what can be expected of every education program in this day and age.

Residents as the most influential player

Residents are primarily responsible for their (own) learning objectives, how they monitor their progress and how they substantiate they are making progress. Residents shall ensure that statements of competence are prepared and applied for in good time. Residents need to show responsibility for care in the workplace and for appropriate social functioning. Residents should actively participate in the continuous improvement of education.

Managing education by a program director with expertise

Nowadays, program directors' main concern is education management. This means that program directors should be versed in the concepts behind the concrete actions required by this national curriculum and in the Dutch post-graduate medical education system in general. They should be able to reflect on essential elements of workplace learning:

- a continuous reflection on the why of the educational objectives and their validity
- a carefully chosen education structure (where and when do you learn what), sufficient clinical exposition, optimal use of the network?
- a view on how to learn most efficiently, including the use of e-learning and simulations
- limited assessment that stimulates learning and provides sufficient accountability,
- a vision of the roles and responsibilities of the resident and the education team in learning and assessment
- how to make a continuous improvement system work

This will be supported by encouraging new program directors from 2020/2021 onwards to complete a NVOG education course for beginning program directors.

Changing roles for program director and education group

The role of manager of education for program directors and an increasing didactic role for the education group is new. The role of program director has changed in recent decades. Where previously the role of expert/master was enough for the resident, now the education group has a shared responsibility in providing the varying expertise the groups of residents might need. The program director directs the education group where necessary, understands leadership of professionals, coaching and change techniques. Didactic knowledge is mainly expected from members of the education groups in daily practice. The education group as a whole will therefore be trained in didactic vision. The program director is expected to deploy the entire team in the best possible way for the program, entice the group into excellent education and successfully implement improvements with appropriate change techniques.

Continuous improvement in an open and safe culture

The RGS, the national regulator of postgraduate medical education, will mainly check if education institutions have continuous improvement cycles in place. An improvement system in which continuous monitoring of education performance is accompanied by the use of Plan-Do-Check-Act cycles and in which the Act really comes to life is relatively challenging. It requires efficient handling of one's own bureaucracy and the stamina to hold each other accountable for areas of improvement. Using the quality cycle consists of:

- PLAN - the local curriculum and individual education agreements,
- DO - implementation in daily practice,
- CHECK - monitoring with measurements of the education climate, identifying didactic qualities of education team members and holding education meetings and conducting exit conversations at the end of a placement
- ACT - implementing improvements and recording them

Holding each other accountable for areas of improvement requires an open culture and willingness to change, and there are still many challenges in this in many education institutions. The program director is an essential player on the road to an open culture. On this path, the program director must receive support from the education group and the COC, which is the guardian of the improvement culture in the new system of RGS regulations. If residents need another channel to discuss questions and concerns with, each hospital also has a confidential advisor to whom they can turn.

Accountability to the RGS

The program director and his team ensure transparency of the effects of learning in a well-structured education program and a continuous improvement system. The Plenary Visitation Committee (PVC) of the NVOG carries out the accreditation visits on behalf of the RGS. Educational programs are assessed in a five-yearly cycle against the rules of the CGS, laid down in the CGS framework decree and also assessed against the CGS/RGS quality framework, the specific decree and this national curriculum. If the program director, education group and educational institute/hospital meet the requirements set for them, they are recognized as such by the RGS for an indefinite period of time and are subject to periodic evaluations by the PSC.

The CGS framework decision offers the possibility of recognizing several educational institutes in a joint accreditation process, making it possible to accredit regional education clusters of a university hospital together with their partnering general hospitals. The NVOG aspires to a speedy implementation of regional visitation and thus abandons the separate visitation of an education institution, barring exceptions when the quality of the education appears to be insufficiently guaranteed. The NVOG views obstetrics and gynecology education as a regional effort in which harmonization between the regional (cluster) hospitals and supervision of each other's quality is conditional and, as such, can also be assessed in a regional review process. The requirement is that every program director and institution in the partnership meets the accreditation requirements and that at least the agreements between the institutions on placements, the content and duration of the various components of the education and on the mutual relationship and responsibility of the institutions are laid down. More information and regulations can be found at www.knmg.nl.

Patients as partner in interprofessional education

A so far little deployed, yet potentially very powerful partner in education, is the patient. Structural patient feedback and the active engagement of patients in answering the question of what constitutes good quality of education fits in with quality care of education. Additionally, the interprofessional team of midwives and nurses, among others, can contribute enormously to the education of residents and the quest for the best quality of education.

Structure of education in regional and local curriculum

Now that we have discussed the most important people (because they make quality), it is important to explain something about the purpose of the required documents 'regional and local curriculum'. NCOG is a national curriculum which deals with strategy and tactics of education. The intention of NCOG is to give direction to good education within the framework of the law as laid down in the CGS framework decree. NCOG was created by professionals for professionals. How NCOG is shaped at regional or local level is up to the professionals on the ground to determine. The RGS rightly considers it reasonable that regional and local agreements to achieve operationalization of NCOG are available in the form of regional and local/institutional curricular descriptions. A regional curriculum description should at least cover the following aspects:



- Procedure for selection of new residents
- Procedure allocation of differentiations
- InterVision / mentoring / coaching scheme
- Course fee agreements
- Regional education quality assurance scheme

Furthermore, the regional education cluster can include at its own discretion:

- Division of education into placements
- Linking EPAs and Themes to placements
- Implementing the Themes in the regional education structure
- Developing a feedback culture
- The use of various feedback and assessment tools
- Professionalization of the education group

Regional Education Cluster meetings

With this quality information in hand, it is desirable to organize regional education cluster meetings about twice a year, in which program directors from each hospital involved in the regional cluster and residents' representatives work in an open and constructive manner on improvements to (continue to) guarantee a high quality of education.

9. Quality assurance

Transitional arrangement

After the introduction date of the new curriculum, a transition phase of basically 1 year applies. This gives education institutions the opportunity to make the necessary changes.

The following transitional arrangements are in place:

- Residents entering education from the introduction date of this national curriculum will be subject to the regulations set out in this plan for the entire education.
- Residents who are already in education at the time the new curriculum comes into effect must decide, in consultation with their program director, when they will switch to the new plan. There is then a joint responsibility for individual residents and their program director to adjust the ITP if necessary. Residents in the final year of their education may choose not to switch.
- It is the responsibility of the education institution to translate the curriculum into a regional and/or local implementation within a year of the implementation date.

National implementation committee

As part of the implementation of NCOG, a committee will be set up that will fall under the Section Education of the NVOG. The committee's task is to monitor and promote the implementation of NCOG and, in the longer term, to prepare for adjustments to the curriculum. To this end, it will perform the following tasks:

- Provision of implementation materials: NCOG website, presentations, workshops for the purpose of implementing NCOG.
- Develop and maintain an online platform to share additional education information and best practices related to NCOG.
- Based on feedback, periodically adjust content of EPAs and themes or other components in the curriculum.
- Implement and monitor and, if necessary, have the supporting e-portfolio adjusted.

The committee will liaise with the chairs of Section Education NVOG on the above and has an advisory role.

From national to regional and local curriculum

National framework

The national curriculum is a national framework for the design of education and its implementation by the education institute/hospital. It describes the content of frameworks and requirements for education. The program directors cooperating in the region base the regional and local curriculum, which describes the actual set-up of the education at regional or local level, on the national curriculum.

A regional/local curriculum will elaborate at least:

- Vision of joint education
- Organization of education (communication, schedules, transfer to other clinic, roles and responsibilities of those involved, application process)
- Ensure quality of education locally and regionally. How is quality monitoring organized for each cluster hospital in the region (improvement cycle)?
- Professionalization of program directors and education group members
- Governance: how are the agreements secured?
- What (differentiation) placements, EPAs, themes and (profiling) opportunities are there for residents and where in the region? What is the allocation procedure for differentiations?
- What arrangements are in place for peer review (local or regional), mentoring and coaching?
- Organization of (cursory) and cross-disciplinary education including funding

The local elaboration includes (if not provided for in the regional plan) a supplement to the regional curriculum (e.g.: contact persons, education group weekly schedules).

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Overview of annexes

- A. Competence profile of the gynecologist
- B. Elaborated basic EPAs and Themes
- C. Notes on translation of CanMEDS competences and BOEG to NCOG



Annex A: Competence profile of the gynecologist

Based on the CanMEDS competency framework

See Annex C for explanation of how CanMEDS are incorporated into NCOG

1. Medical Expertise

- 1.1 The gynecologist possesses adequate knowledge and skill according to the state of the profession.
- 1.2 The gynecologist applies the diagnostic, therapeutic and preventive arsenal of the specialty adequately and on evidence-based grounds.
- 1.3 The gynecologist provides effective and ethical patient care.
- 1.4 The gynecologist quickly finds the required information and applies it properly.

2. Communication

- 2.1 The gynecologist builds effective treatment relationships with patients.
- 2.2 The gynecologist listens carefully and efficiently obtains relevant patient information.
- 2.3 The gynecologist discusses medical information properly with patients and family or loved ones.
- 2.4 The gynecologist provides adequate oral and written reports on patient cases.

3. Collaboration

- 3.1 The gynecologist consults effectively with colleagues and other healthcare providers.
- 3.2 The gynecologist refers appropriately.
- 3.3 The gynecologist provides effective peer consultation.
- 3.4 The gynecologist contributes to effective interdisciplinary collaboration and chain care.

4. Scholarship

- 4.1 The gynecologist considers medical information critically.
- 4.2 The gynecologist promotes the broadening and development of scientific professional knowledge.
- 4.3 The gynecologist develops and maintains a personal CVT plan.
- 4.4 The gynecologist promotes the expertise of students, residents, and of colleagues, patients and other healthcare stakeholders.

5. Health Advocate

- 5.1 The gynecologist knows and recognizes the determinants of disease.
- 5.2 The gynecologist promotes the health of patients and the community as a whole.
- 5.3 The gynecologist acts in accordance with the relevant legal provisions.
- 5.4 The gynecologist responds appropriately to incidents in care.

6. Leadership

- 6.1 The gynecologist organizes work towards a balance in patient care and personal development.
- 6.2 The gynecologist works effectively and efficiently within a healthcare organization.
- 6.3 The gynecologist spends the resources available for patient care responsibly.
- 6.4 The gynecologist uses information technology for optimal patient care and for continuing education.

7. Professionalism

- 7.1 The gynecologist provides high-quality patient care with integrity, sincerity and commitment.
- 7.2 The gynecologist exhibits appropriate personal and inter-personal professional conduct.
- 7.3 The gynecologist knows the limits of his/her own competence and acts within them.
- 7.4 The gynecologist practices medicine according to the usual ethical standards of the profession.

Annex B: Elaborated basic EPAs and Themes

Basic EPAs

An EPA starts with a brief (and therefore non-comprehensive) description of the content of that EPA based on the following elements: knowledge; skills; patient-centered care; teamwork; system-based practice. This description gives an idea of the content and is not intended to be a complete description of all facets that may be part of patient care within this part of our profession. Residents should be able to argue at what level of independence they function. They do this based on workplace assessments and other information they deem useful in combination with a brief outline of three real-life situations. Where examples are given in this document, this is intended as an aid. Examples and suggestions will be built into the e-portfolio.

1. Pregnancy and childbirth, low complex

Components of EPA

Knowledge

- Physiological pregnancy and parturition
- Physiological (including anatomical and endocrinological) changes in pregnancy
- Cardiotocogram (CTG) for assessment of fetal condition during pregnancy
- Anal sphincter lesions and cervical ruptures
- Pathology in pregnancy, including gestational hypertension, PE and HELLP syndrome, fetal growth restriction, (imminent) preterm birth, gestational diabetes, cholestasis of pregnancy, non-vertex presentation, IUGR, abnormal amount of amniotic fluid, possible rupture of membranes, blood group antagonism.
- Pathology during vaginal parturition, including fever and blood loss, suboptimal or abnormal CTG pattern, non-progressing parturition

Skills

- Echo basic obstetrics (fetal position, amniotic fluid, placenta localization, cervical length measurement)
- External examination of pregnant woman (position, growth, engagement of head)
- Vaginal examination of pregnant woman and parturient (POVIAS)
- Indicating and performing assisted delivery
- Indicating and performing episiotomy
- Suture episiotomy and 1st and 2nd degree anal sphincter lesions
- Estimation of fetal condition during parturition, based on CTG, fetal scalp sampling, and STAN if available
- Birth of placenta and postpartum care
- Examination of the newborn
- Neonatal basic care, including *Newborn Life Support (NLS)*

Patient-centered care

- Providing tailor-made explanations of pregnancy-related risks and corresponding counselling plan from the start of pregnancy

- Arriving at a delivery plan with the pregnant woman
- Education on (im)possibilities of antenatal diagnostics, including basic knowledge of NIPT, NT, SEO, GUO and invasive diagnostics
- Counselling within the framework of the WGBO with regard to childbirth after previous caesarean section(s) and breech presentation and reaching a joint decision on planned manner of delivery
- Explaining pain relief during delivery
- Discuss with patient options and trade-offs in counselling during delivery
- Informing on (treatment) options, acting on informed consent, also during delivery
- Recognizes patients with low health literacy and has an eye for low literacy

Teamwork

- Involving other medical specialties, such as pediatrician, anesthetist, internist, psychologist, psychiatrist, social work, dietician
- Participating and initiating multidisciplinary consultations
- Collaboration with other relevant healthcare providers, such as nurse, midwife, maternity nurse, GP, neighborhood team, etc. in counselling pregnant woman
- Timely recognition and appropriate action, both in terms of technique and cooperation with pregnant woman and team, in acute obstetric complications such as fluxus post-partum, shoulder dystocia, eclampsia and umbilical cord prolapse

System-based practice

- Be able to work in Dutch obstetric care system, such as readmission from 1st line with feedback
- Be able to organize transfer/referral
- Triage and organization in delivery rooms.
- Adequate and efficient transfer of care.

Independence levels

Little supervision

This resident is able to perform care falling under 'EPA Pregnancy and Childbirth: low complexity' with little supervision. This is demonstrated at least by (but not limited to):

Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.

The following minimum conditions were met, with little supervision:

- Can perform ultrasound basic obstetrics; position, amniotic fluid, placenta localization
- Physiological parturition guidance
- Performing micro blood sampling
- *Newborn Life Support* (NLS) training (or alternative) completed
- *Basic Life Support* (BLS) training (or alternative) completed
- SAVE'r course (or alternative) completed
- Completed a CTG course (local or national course)

In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):

- Able to perform outpatient antenatal monitoring of pregnant women with pregnancy-induced hypertension. Able to explain to pregnant person the

	<p>clinical picture, propose policy in consultation with supervisor and effectuate.</p> <ul style="list-style-type: none"> - Able to guide vaginal parturition. Discusses expectations of pregnant woman and partner and guides them through the process of parturition with respect for the woman's freedom of choice. to consult with the supervising gynecologist in a clear and timely manner and to register all relevant data concerning the parturition in the appropriate registration systems (Perined). - ...
<p>Without supervision</p> <p>This resident is able to perform care falling under 'EPA Pregnancy and Childbirth: low complexity' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - The conditions listed under 'little supervision' - Echo basic obstetrics including cervical length - Episiotomy and 2nd degree rupture suturing - Echo course (basic obstetrics) completed <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Able to recognize the most common obstetric problems (see description above) in outpatient consultations and independently make policy for them. Ensures balance between adequate time management of consultations and attention to specific points of interest for each individual pregnant woman. - Able to show leadership in the delivery rooms. Creates situation where other residents, (clinical) midwives, nurses and others involved know what is going on in which delivery room, what new patients to expect, where to priorities for which reason (triage) and who will perform which tasks. - Able to deal with a patient's complaint about care during pregnancy or childbirth. Identifies where the dissatisfaction is focused, explores what is important for this individual in the handling of the complaint, involves other healthcare providers involved if necessary and ensures reporting. If possible, the complaint is used as part of a quality cycle. - ...

<p>Supervising role</p> <p>This resident is able to <u>supervise</u> care falling under 'EPA Pregnancy and Childbirth: low complexity'. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Able to supervise a resident not in training or clinical midwife during the management of a vaginal delivery, jointly assess CTG and agree clear policies. - Able to supervise/train other residents in performing ultrasound examinations. - Able to deviate from protocol or guideline with justification and explain and coordinate this with other healthcare providers involved.
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2. Pregnancy and childbirth, high complexity

Components of EPA

Knowledge

- Pregnancy with high estimated risk including multiple births, placenta previa, pre-existing conditions (such as kidney or heart defects), pre-existing diabetes, previous (extreme) preterm birth, autoimmune disorders, uterine anomaly, obesity.
- Pathology in pregnancy, including gestational hypertension, PE/HELLP syndrome, fetal growth restriction, congenital anomalies, (threatened) preterm birth, gestational diabetes, cholestasis, non-vertex presentation, IUGR, abnormal amount of amniotic fluid, possible rupture of membranes, cervical insufficiency, intra-hepatic cholestasis, blood group antagonism.
- Pathology during vaginal parturition, including fever during delivery, blood loss during delivery, suboptimal or abnormal CTG pattern, non-progressing parturition.
- Counselling of breech birth, delivery of multiple gestation, forceps extraction, uterine inversion
- Care for pregnant woman in vulnerable situations on psychosocial or psychiatric issues

Skills

- Vacuum extraction
- Cesarean section low assessed risk
- Cesarean section high assessed risk
- Treating fluxus post-partum
- Manual placenta removal
- Shoulder dystocia
- Multiple gestation delivery
- Suturing 3rd, 4th degree tear and cervical ruptures
- Ultrasound biometry, doppler arteria umbilicalis, doppler arteria cerebri media
- Showing on anatomical model the procedures for a breech delivery, forceps extraction, vaginal delivery of twins and uterine inversion

Patient-centered care

- Preconception counselling after previous (severe) pathology/pre-existing condition.
- Postpartum counselling of patients after complicated pregnancy, linking with patient associations (such as HELLP syndrome Foundation, Erbse Parese Foundation) and advising on aftercare.
- Creating a delivery plan with a pregnant woman with complicated delivery (e.g. cesarean section or total rupture) in her history.
- Counselling pregnant woman and partner after loss of child in pregnancy, including procedure of declaration/obduction/burial/cremation
- Pregnancy at relatively advanced age
- Educate on choice between vacuum extraction or caesarean section during parturition, act on informed consent
- Be able to individualize care with knowledge of background to guidelines and protocols
- Post-operative care

Teamwork

- Collaborating with other healthcare providers within obstetric partnership, integrated birth care organization
- Working with organizations around care for unborn child (e.g. with addiction and psychiatric issues and teenage pregnancies)

<ul style="list-style-type: none"> - Organization of aftercare process, including informing stakeholders (team, midwife, GP) - Taking charge in acute situations - Triage and working within the organization of 1st, 2nd and 3rd echelons of care <p>System-based practice</p> <ul style="list-style-type: none"> - Legislation on perinatal mortality and (late) termination of pregnancy - Be able to work with care providers in social domain, such as initiation of a 'child in need' notification - Triage in delivery rooms 	
<p>Independence levels</p>	
<p>Little supervision</p> <p>This resident is able to perform care falling under 'EPA Pregnancy and Childbirth: highly complex' with <u>little supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> were met, with little supervision:</p> <ul style="list-style-type: none"> - Ultrasound biometrics and dopplers/flows - Vacuum extraction - Shoulder dystocia - Cesarean section at term - Manual placenta removal <p>NB. Condition for vaginal breech delivery, vaginal multiples delivery and forceps extraction is that these are practiced in simulation setting to the satisfaction of the trainer and that sufficient knowledge is present to be able to explain these actions to patients.</p> <ul style="list-style-type: none"> - Echo course (basic obstetrics with dopplers/flows) completed - NVOG fetal monitoring course completed <p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Able to establish the indication for an artificial delivery and perform it after consultation with supervision and based on informed consent from the birthing patient. - Able to anticipate risk factors for a shoulder dystocia, recognize a shoulder dystocia in a timely manner, call for help and adequately instruct help and apply maneuvers. - ...
<p>Without supervision</p> <p>This resident is able to perform care falling under 'EPA Pregnancy and Childbirth: highly complex' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - Cesarean section repeat - Cesarean section high risk (e.g. severe obesity, preterm) - Sutures 3^e and 4^e degree rupture - MOET Provider Course completed

<p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Able to identify and guide high-risk pregnancy through (interpretation of) ultrasound examinations such as growth and doppler flow measurements, makes policy in pregnancy, counseling of patient and partner about possible interventions. - Able to take the lead in fetal distress or non-progressing parturition with setting for and performing the indication for artificial delivery or cesarean section. - ...
<p>Supervising role</p> <p>This resident is able to <u>supervise</u> care falling under 'EPA Pregnancy and Childbirth: highly complex'. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p><u>The following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Lead major visits, indicate and supervise transfers. - Able to play a guiding and supervisory role during artificial deliveries and cesarean sections. - Able to create and review learning moments. - ...

3. Care in the maternity period

Components of EPA

Knowledge

- maternity counselling, including MEWS score interpretation, advice on physical activity and (wound) care (e.g. episiotomy, cesarean section scar), basic psychological support
- pathology in puerperium, including abnormal blood loss (incl treatment placental remnant), infection (organ-specific such as mastitis and endometritis and systemic), urinary retention, suspected thromboembolic processes, vulvar hematoma or abscess, small pelvic abscess, v ovarian thrombosis, hypertension, (pre-)eclampsia (incl HELLP)
- pathological course newborn, icterus, hypoglycemia and hypothermia and involve pediatrician
- anticoagulation in puerperium
- clinical postpartum period (observation of mother and/or neonate), e.g. when mother uses psychopharmaceuticals

Skills

- maternity checks: knows points of attention and corresponding examination of newborn and maternity woman
- inspect cesarean section wound, knowledge about normal wound healing
- focus examination in patient presenting with fever post-partum
- treatment in case of infection or hematoma of episiotomy

Patient-centered care

- explaining and advising on the normal course of the maternity period (including physiological and psychological changes)
- provide explanation and advice in the context of pathology maternity (including after fluxus, complications after artificial delivery/cesarean sections, high risk of traumatically experienced delivery, advice on formulating next pregnancy)
- counselling healthy newborns, including basic advice on feeding, care, recognition of alarm signals
- contribute to counselling after loss of child
- explaining and advising on breast/bottle feeding, taking into account factors such as prematurity or use of medication by the mother
- at follow-up check-ups, evaluate the recovery of the new mother and discuss any advice/consequences for the next pregnancy

Teamwork

- postpartum pediatrician consultation
- social or psychological counselling, e.g. for trauma or loss
- psychiatric evaluation and/or treatment, e.g. for depression or psychosis
- 'child in need' notification, to be discussed in care team and with mother/parents
- check neonate with extra attention to status after non-vertex position, assisted delivery, use of cranial electrode, or micro-blood sampling

System-based practice

- ensure proper transfer of data about delivery to 1^e line care providers
- introducing pregnant women to the maternity care system

Independence levels	
<p>Little supervision</p> <p>This resident is able to perform care that falls under 'EPA Care in Maternity' with <u>little supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> were met, with little supervision:</p> <ul style="list-style-type: none"> - Visiting the maternity ward - Recognizes PE/HELLP postpartum and knows how to act - Able to make differential diagnosis of fever postpartum including targeted treatment plan - <i>Newborn Life Support (NLS) training (or alternative) successfully completed</i> <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Able to perform maternity visits independently in women with little complex maternity period. Knows and checks newborn, mammae, uterus, bladder, legs, blood loss and blood pressure. Gives specific advice on wound care and feeding the newborn baby in an understandable way to the mother and possibly the partner. - Able to recognize (unexpected) morbidity in neonates, providing first vital support if necessary. Adequate cooperation with nursing and/or obstetrician and pediatrician. Resident is able to reflect on own actions and perception in this situation. - Able to organize transfer for maternity (and possibly newborn). Consults with relevant healthcare providers internally and externally (e.g. receiving healthcare facility, ambulance). Ensures concise yet complete reporting. Knows who should receive verbal handover when. - ...
<p>Without supervision</p> <p>This resident is able to perform care that falls under 'EPA Care in Maternity' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - Taking the lead in care for complicated puerperium <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Recognize and treat postpartum complications including organizing MULTIDISCIPLINARY MEETING in complex postpartum care. - Able to take the lead in organizing necessary care and debrief the team when unexpected outcomes. - ...
<p>Supervising role</p> <p>This resident is able to <u>supervise</u> care that falls under 'EPA Care in Maternity'. This is evidenced at least by (but is not limited to):</p>	<p><u>The following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Supervising less experienced residents or midwife when visiting maternity ward. - Teaching physiology and pathology in puerperium.

<p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<ul style="list-style-type: none">- Recognizing postpartum psychosis and developing a treatment plan for/with the postpartum woman.- ...
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4. Abnormal Uterine Blood Loss

Components of EPA

Knowledge

- Uterine fibroids
- Uterine niche
- Adenomyosis
- Dysfunctional blood loss
- Postmenopausal blood loss
- Endometrial polyps

Skills

- Gynecological physical examination
- Basic gynecological ultrasound
- Advanced gynecological ultrasound
- Pipelle
- TCRM/P type 0 and 1 abnormalities
- TCRM type 2 fibroids
- Thermal ablation
- Assisting with hysterectomy and myoma enucleations

Patient-centered care

- Indication for an intervention, for type and setting (ambulatory/OR) intervention
- Counselling on different interventions: purpose of the intervention, procedure and possible complications
- Explanation of normal anatomy and physiology
- Properly apply findings from history, physical and additional examination
- Shared decision making
- Explanation of normal and abnormal postoperative course
- Adequate discharge conversation with selfcare advice for after the procedure
- Discuss resuscitation policy/organ donation
- WGBO information surgery
- Pre-operative care
- Post-operative care

Teamwork

- Cooperation on OR
- Coordination perioperative care (anesthesia, anticoagulation, diabetes nurse, etc.)
- Adequate cooperation with all healthcare providers involved
- Presents patients at OR indication meeting
- Presents patients at complication meeting

System-based practice

- Has insight into home situation patient; organizes home care if needed
- Takes lead on reporting incidents/complications
- Takes lead on implementation of improvement measures

Independence levels

Little supervision

This resident is able to perform care falling under EPA 'Abnormal uterine

The following minimum conditions were met, with little supervision:

- Performing diagnostic hysteroscopy
- Gynecological outpatient clinic (e.g. IUD placement, start drug treatment)

<p>blood loss' with <u>little supervision</u>. This is evidenced at least by (but not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<ul style="list-style-type: none"> - Performing gynecological ultrasound - Conduct counselling interview before uterine ultrasound, fibroid enucleation and embolization - NVOG ultrasound course completed - Basic course in laparoscopy and hysteroscopy (or similar course completed locally) <p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Able to perform simple diagnostic procedures in the outpatient clinic or (outpatient) OR and then make corresponding diagnosis. This should be shared adequately with the patient. Knows how to ask for supervision in a timely manner. - Able to draw up the appropriate treatment plan in consultation with patient and then bring it up for discussion at the OR indication meeting. Then executing and coordinating agreements made. - Able to lead OR time-out for simple procedures. Coordinates with OR assistants required equipment and knows its operation. Then ensures that patient is positioned appropriately. - ...
<p>Without supervision</p> <p>This resident is able to perform care covered by EPA 'Abnormal Uterine Blood Loss' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'low supervision' without supervision and resolve most common complications independently - Diagnostic hysteroscopy and management of stalked intrauterine abnormalities - Cobra Alpha Training completed <p>NB. Also expectation that residents is able to perform a hysterectomy (vaginal, laparoscopic, open) with supervision/supervised.</p> <p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Capable of counselling the patient regarding the procedure to be performed in a way that is understandable for everyone. Is attentive to the patient's specific wishes. Also clearly explains possible complications and discusses resuscitation policy. - Able to perform simple hysteroscopic or laparoscopic procedures independently and knows when to ask for supervision. Ensures that the process in (P)OR runs smoothly and manages staff correctly. - Able to recognize and treat an OR-related complication. Explains this in a clear manner to the patient and family and finds out what can be done in the future to prevent it and brings this to the complication meeting.

	- ...
<p>Supervising role</p> <p>This resident is able to <u>supervise</u> care falling under EPA 'Abnormal uterine blood loss'. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p><u>The following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Able to supervise A(N)IOS working at (non-)independent level in simple laparoscopic and/or hysteroscopic procedures. Ensures that patient safety is maintained in the process. - Able to lead complication discussion and develop and implement resulting improvement plans in practice. - Able to teach recognition, diagnosis and treatment of the most common complications related to the procedures within this EPA. - ...

5. Early pregnancy

Components of EPA

Knowledge

- Course of early pregnancy, including abnormal course and repeated miscarriage
- Indication for medicinal or surgical treatment of extrauterine gravidity
- Niche pregnancy
- (Repeated) miscarriage
- Contraception
- Sterilization
- Mola pregnancy

Skills

- Ultrasound of early pregnancy
- Medical treatment and curettage in cases of non-vital gravidity
- Follow-up and treatment of pregnancy of unknown location and extra-uterine pregnancy either surgically or medical such as, laparoscopic tubectomy and tubotomy, methotrexate
- Tubectomy
- Tubotomy
- Curettage
- Transcervical resection placenta remnant
- IUD placement
- Implanon placement
- Sterilization

Patient-centered care

- Continuity of care in patients with non-vital gravidity, pregnancy of unknown location or extra-uterine pregnancy
- Recognizes patients with low health literacy and knows how to inform patients in situations like that

Teamwork

- Collaboration with 1st echelon of care; general practitioners, clinical midwives
- Working with the surgical team

System-based practice

- Organization of care in cases of non-vital gravidity with 1st echelon of care
- Knowledge of when to refer extra-uterine pregnancy that is not-located in Fallopan tube

Independence levels

Little supervision

This resident is able to perform care falling under EPA 'Early pregnancy' with little supervision. This is evidenced at least by (but not limited to):

Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.

The following minimum conditions were met, with little supervision:

- Early pregnancy ultrasound; location, term, vitals
- Starting drug treatment for miscarriage
- Basic laparoscopy and hysteroscopy course (or similar course locally)

In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):

	<ul style="list-style-type: none"> - Can explain to the patient the different treatment options for miscarriage and weigh up the pros and cons with the patient. - Has contact with the midwife or GP about the course of the miscarriage - ...
<p>Without supervision</p> <p>This resident is able to perform care covered by EPA 'Early pregnancy' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - Perform curettage - Performing diagnostic laparoscopy - Performing tubectomy - Perform transcervical resection placental remnant <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Recognizing extra-uterine pregnancy on ultrasound, counselling before treatment and during treatment (e.g. surgery) and deciding what treatment is needed, such as tubectomy. - Can assess when a complication occurs during curettage and know how to act. - Knows the drug treatment options for fluxus in curettage. - ...
<p>Supervising role</p>	<p>The expectation is that the resident can perform specific parts of the EPA at this level, for example in operations, but not develop a supervisory role for the full EPA during basic education.</p>

6. Prolapse and pelvic floor complaints

Components of EPA

Knowledge

- Prolapse
- Incontinence
- Urinalysis
- Sexology
- Pelvic floor function
- Evacuation complaints
- Pain in urogenital area and lower abdomen

Skills

- Specific physical examination prolapse, miction dysfunction and, evacuation complaints
- Examination according to POP-Q
- Pessary fitting
- Conservative treatment urogynecology (including medication and physiotherapy)
- Plastic front panel
- Plastic back panel
- Vaginal uterine extirpation
- Exposure to prolapse surgery, such as sacro-spinal fixation, Manchester-Fothergill, Sacrocolpopexy

Patient-centered care

- Pointing out the use of decision aids and using them for shared decision-making
- Addressing complexity of care in frail older people
- Counselling under in accordance with relevant guidelines
- Counselling on different interventions: purpose of the intervention, procedure and possible complications and alternatives
- (Recognize) complications or unexpected outcomes of treatment and take responsibility in aftercare process

Teamwork

- Outpatient logistics planning
- Adequate cooperation with all healthcare providers involved
- Presents patients at outpatient meeting or a pelvic floor multidisciplinary meeting
- Consultations with social workers when necessary
- Working with the OR team
- Recognize when referral to another specialty or more specialized gynecologist is necessary

System-based practice

- Knowledge of relevant guidelines/protocols
- Contact with primary care about conservative treatment

Independence levels

Little supervision

This trainee is able to perform care falling under EPA 'Prolapse and pelvic floor complaints' with little supervision. This is demonstrated at least by (but not limited to):

The following minimum conditions were met, with little supervision:

- Specific physical examination pelvic floor, prolapse and micturition disorders
- Conducting examination according to POP-Q
- Pessary selection, placement and monitoring

<p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>NB. Also expectation that residents participated in at least some consultations with sex therapist in care and with urologist in assessment of patient and of urodynamic examination.</p> <p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Residents can independently perform and interpret gynecological physical examination including POP-Q examination. - The resident discusses findings from examination of common pathology and can educate patient on policy and treatment. - Residents can perform standardized history and physical examination for prolapse complaints and, in case of conservative treatment, fit pessaries and perform pessary control. - ...
<p>Without supervision</p> <p>This trainee is able to perform care that falls under EPA 'Prolapse and pelvic floor complaints' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - Pessary selection and placement - Deployment of conservative treatment urogynecology (including medication and physiotherapy) - Recognizing and treating pelvic floor hyper- and hypotonia - Provide counselling on various prolapse surgeries (anterior and posterior wall surgery, sacro-spinal fixation, Manchester-Fothergill, sacrocolpopexy, vaginal uterine extirpation). - Cobra Alpha Training completed <p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Resident acts as case manager of complex outpatient in multidisciplinary care. Creates learning opportunities for other residents at patient meetings. - Can take a leading role during discussions. - Resident is able to impart knowledge in the field of ultrasound examination to other residents. - ...
<p>Supervising role</p>	<p>The expectation is that the resident can perform specific parts of the EPA at this level, for example in operations, but not develop a supervisory role for the full EPA during basic education.</p>

7. Abdominal pain (acute and chronic)

Components of EPA

Knowledge

- Endometriosis
- Adenomyosis
- PID / TOA
- Somatic unexplained complaints
- Dyspareunia
- Pelvic floor hyper- and hypotonia
- Abnormal adnexal mass
- Torsion ovary
- Alternative diagnoses such as diverticulitis, appendicitis, etc.

Skills

- Endo- and adenomyosis-focused ultrasound
- Laparoscopy for an ovarian torsion
- Ultrasound of adnexa according to IOTA
- Adnexal extirpation

Patient-centered care

- Referral of a patient with severe endometriosis to an endometriosis center
- Paying attention to careful treatment and communication, especially with difficult-to-treat (pain) complaints
- Creating individualized plan for treatment of pain symptoms
- Recognizes patients with low health literacy and has an eye for low literacy

Teamwork

- With pelvic physiotherapist and sex therapist
- Knowing who to refer to

System-based practice

- Be able to counsel patients with somatic unexplained complaints and create a treatment plan together with patient and primary caregiver

Independence levels

Little supervision

This resident is able to perform care falling under EPA 'Abdominal pain acute and chronic' with little supervision. This is demonstrated at least by (but not limited to):

Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.

The following minimum conditions were met, with little supervision:

- Recognize TOA/PID/infection/torsion and discuss different treatment options
- Start medicinal treatment of infections
- Start medicinal treatment endometriosis
- Be able to discuss treatment options for cycle-related abdominal pain symptoms
- Discuss patients with somatic unexplained complaints in (multidisciplinary) team

In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):

- Can assess a patient in A&E and make differential diagnosis with additional investigations

	<ul style="list-style-type: none"> - Recognizes a uterine infection and/or PID and knows which drug treatment options are available. - Knows what patients with somatic unexplained complaints are and can initial assessment - ...
<p>Without supervision</p> <p>This resident is able to provide care falling under EPA 'Abdominal pain acute and chronic' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - Laparoscopic detorsion adnexa - Adnexal extirpation/ tubectomy/ cystectomy - Diagnostics and counselling endometriosis - Ultrasound adnexa - NVOG ultrasound course completed <p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Knows the guideline on the treatment of a ovarian torsion and can apply it during surgery. - The resident uses the IOTA points to assess adnexa and can use the result to formulate a treatment plan that meets recent guidelines. - Able to deal with complications. Ensures complication discussion, pays attention to improvement process and ensures reporting. If possible, the complication is used as part of a quality cycle. - ...
<p>Supervising role</p>	<p>The expectation is that the resident can perform specific parts of the EPA at this level, for example in operations, but not develop a supervisory role for the full EPA during basic education.</p>

8. Vulvar and vaginal abnormalities

Components of EPA

Knowledge

- Dyspareunia
- Vulvodynia
- Skin abnormalities of the vulva, such as lichen sclerosus, eczema, vitiligo, psoriasis
- Fluor
- STD screening and treatment
- Sexual history and issues
- Knowledge of (pre)malignancies of the vulva

Skills

- Minor procedures vulva, such as a biopsy
- Word catheter placement
- Marsupialization

Patient-centered care

- Counselling patient and partner about sexuality and sexual issues
- Discuss therapeutic options for sexual problems
- Counselling and supporting patient with lichen sclerosus

Teamwork

- Collaborate with (for example) dermatologist, sexologist or physiotherapist
- Consultation with medical microbiologist on treatment

System-based practice

- Discuss continued treatment by the 1st echelon of care.

Independence levels

Little supervision

This trainee is able to perform care falling under EPA 'Vulvar and vaginal abnormalities' with little supervision. This is evidenced at least by (but not limited to):

Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.

The following minimum conditions were met, with little supervision:

- Performance of a vaginal/vulva examination
- Recognizing trigger points
- Causes abnormal fluoride vaginalis diagnosed and treated
- Recognizing lichen sclerosus

In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):

- Know what trigger points are and their significance for diagnosis and possible treatment.
- Can give a most probable diagnosis for abnormal fluoride based on history and physical examination and make an appropriate treatment plan, or alternatively explain the benefit of no treatment.
- Explains what physical examination she will do and gives the patient confidence so she can indicate her limits.
- ...

<p>Without supervision</p> <p>This resident is able to perform care that falls under EPA 'Vulvar and vaginal abnormalities' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - Word catheter placement - Taking a sexual history - Performing marsupialization - Perform minor surgery on the vulva <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Discussing patient problem in multidisciplinary team - The resident can place a Word catheter without supervision, informing the patient about the duration of the treatment and possible complaints. The resident also gives advice for selfcare. - ...
<p>Supervising role</p> <p>This resident is able to <u>supervise</u> care falling under EPA 'Vulvar and vaginal abnormalities'. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p><u>The following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - ...

9. Care in pre-malignancy

Components of EPA

Knowledge

- Cervical screening
- Vaginal intraepithelial neoplasia (VAIN)
- Vulvar intraepithelial neoplasia (VIN)
- Cervical intraepithelial neoplasia (CIN)
- Lichen sclerosis
- Atypical endometrium
- BRCA gene carrier risks

Skills

- Colposcopy / vaginoscopy
- Cervical cytology
- Large loop of excision of the transformation zone (LLETZ)
- Local excision vulva

Patient-centered care

- Counselling on treatment options and follow-up in patients with premalignant vulva disorders (lichen sclerosis, HSIL vulva, dVIN)
- Patients with abnormal smears: explanation
- Counselling on treatment options and follow-up in patients with CIN 1-3
- Involve psychosocial context in drafting treatment plan

Teamwork

- Collaboration with oncology center
- Conducting multidisciplinary consultations

System-based practice

- Discuss ethical issues with the treatment team and seek expertise if necessary
- Discussing the different treatment options
- Meaningful treatment

Independence levels

Little supervision

This resident is able to perform care falling under EPA 'Care in pre-malignancy' with little supervision. This is evidenced at least by (but not limited to):

Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.

The following minimum conditions were met, with little supervision:

- Perform colposcopy incl biopsy
- Recognizing premalignant abnormalities
- Performing a vulva biopsy
- Taking pipelle

- Have completed basic colposcopy course

In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):

- Able to explain to patients with abnormal smears what cytology/HPV means, can perform colposcopy, and deploy policy in case of CIN abnormalities.
- Able to recognize premalignant vulva disorders, diagnose and initiate policy.

	<ul style="list-style-type: none"> - Recognizes determinants of illness and counsels for prevention. - ...
<p>Without supervision</p> <p>This resident is able to perform care covered by EPA 'Care in pre-malignancy' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - LLETZ perform <p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Can perform a LETZ and discusses complications with the patient. In doing so, explains when the patient should call and knows what to do in case of post-bleeding. - Knows how to take a biopsy and how to send it to the pathologist. In doing so, writes a clear request with question. - Can do a colposcopy consultation independently, within the given time and ensures proper documentation of the examination in the file. - ...
<p>Supervising role</p> <p>This resident is able to <u>supervise</u> care falling under EPA 'Care in pre-malignancy'. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p><u>The following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - ...

10. Oncological care, basic

Components of EPA

Knowledge

- 4 most common gynecological malignancies: endometrial carcinoma, ovarian carcinoma, cervical carcinoma and vulvar carcinoma.
- Trophoblast tumors
- Perioperative care: ASA classification, postoperative complications, fluid and bowel function, postoperative mobilization, medication, analgesia, anticoagulation, nutrition
- Legislation around euthanasia/palliative sedation
- Ethics: treatment boundaries
- Knowledge about fertility preservation

Skills

- Diagnosis/bad news conversation
- Palliative care
- Ascites puncture
- Complicated wound care
- Pain relief
- Physical examination of oncology patient
- Assess small pelvis/ genitalia interna on CT and MRI
- Introduction to diversity of oncological procedures

Patient-centered care

- Discuss CPR code, donation
- Counselling optimal treatment at outpatient clinic (including possible decision not to treat)
- Conversations around the end of life
- Counselling the frail elderly (weighing up treatment options and quality of life in relation to co-morbidity, discussing treatment limits, reaching consensus on these with patients and treatment team, tailored education)
- Recognizes patients with low health literacy

Teamwork

- Communication with team/transfer to 1st line
- Participation in multidisciplinary meeting, involving other specialties (medical oncologist, radiotherapist, pathologist, radiologist, surgeon)
- Organization of palliative care/involvement of palliative team
- Basic social and/or psychological counselling

System-based practice

- Knows indications for 2nd and 3rd echelons of care
- Ensures adequate referral to appropriate cancer healthcare provider
- Requests appropriate additional investigations, taking into account effective care

Independence levels

Little supervision

This resident is able to perform care falling under EPA 'Oncology care, basic' with little supervision. This is evidenced at least by (but not limited to):

The following minimum conditions were met, with little supervision:

- Oncology consultation
- Ascites puncture
- In collaboration with pain team prescribe pain relief
- Setting up palliative pathway

- Applied gynecological anatomy course completed

<p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>NB. Also expectation that resident has assisted at least several times in uterine extirpations and debulking/staging operations.</p> <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Able to explain gynecological malignancy to outpatients with gynecological malignancy, propose policy in consultation with supervisor and implement. - Able to prepare multidisciplinary meeting. Distinguishes between main and minor issues, knows which healthcare providers to involve in case discussions, and presents cases in a structured manner. - Able to monitor clinical patients postoperatively, recognizes complications of major surgery, institutes appropriate diagnostics and treatment. - ...
<p>Without supervision</p> <p>This resident is able to perform care covered by EPA 'Oncology care, basic' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - Organizing post-operative wound care - Conducting bad news conversation - Course on caring for frail elderly completed - Cobra Alpha Training completed <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Able to recognize most common oncological problems in outpatient consultations and independently make policy for them. Ensures balance between adequate time management of consultations and offering attention to specific points of interest for each individual patient. - Able to show leadership in the department. Creates situation where other residents, PAs, nurses and other stakeholders know what is going on in the department. - ...
<p>Supervising role</p>	<p>The expectation is that the resident can perform specific parts of the EPA at this level, for example in operations, but not develop a supervisory role for the full EPA during basic education.</p>

11. Reproductive issues

Components of EPA

Knowledge

- Causes of sub/infertility, including male, tubal and undiagnosed subfertility
- Effects of fibroids and endometriosis/adenomyosis on fertility .
- Uterine anomaly and effects on fertility
- Andrology (basic anatomy and endocrinology of man) and interpretation of semen analysis
- Indications and contraindications for exploratory fertility testing
- Indication for and global knowledge of test characteristics of tubal diagnostics (CAT, FOAM ultrasound, hysterosalpingography and laparoscopy with tubal testing).
- Global odds and complications of IUI/ IVF/ ICSI/ TESE, with special focus on OHSS
- Global indication for, and possibilities of, fertility preservation
- Indication to treat or wait based on prognostic models, dealing with probabilities

Skills

- Gynecological ultrasound with follicle counting
- Hysterosalpingography
- SIS/GIS or 3D ultrasound
- Diagnostic hysteroscopy
- Diagnostic laparoscopy with tubal testing
- Laparoscopic treatment of grade 1 endometriosis, peritoneal endometriosis coagulation
- Relieving ascites puncture

Patient-centered care

- Preconception counselling, lifestyle advice and healthy pregnancies
- Discussing findings and consequences of exploratory fertility testing with patient and partner
- Giving explanation on expected spontaneous probability of pregnancy based on prediction model according to Hunault, explaining expectant management, how to convey probabilities to patients
- Information on the various forms of assisted reproductive treatments, with regard to chance of conception, risks, complications

Teamwork

- Participate in and initiate multidisciplinary meeting, involve other care providers, such as sexologist, MMW, embryologist, etc.
- Preconception referral due to maternal illness to obstetric care provider
- Collaborate in team with fertility doctors, nurses, role in fertility meeting

System-based practice

- Participation in NVOG registration of fertility treatments
- Science, consortium participation
- Organization of fertility care and IVF centers (academic and non-academic), cost of fertility care

Independence levels

Little supervision

This resident is able to perform care falling under EPA 'Reproductive Issues' with little supervision. This is evidenced

The following minimum conditions were met, with little supervision:

- Preparing fertility discussion, integrating knowledge of gynecological conditions into the discussion
- Diagnostic laparoscopy with tubal testing

<p>at least by (but not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<ul style="list-style-type: none"> - Perform hysterosalpingogram - Coagulation peritoneal endometriosis - Basic laparoscopy and hysteroscopy course completed <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Able to conduct an intake interview for OFO during which a proposal for further additional research is made, showing that (contra)indications for starting research are known. - Able to provide education on healthy pregnancy. - Able to make policy with supervisor for patients with OHSS. - ...
<p>Without supervision</p> <p>This resident is able to perform care covered by EPA 'Reproductive Issues' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision - Laparoscopic tubectomy for hydrosalpinx - Laparoscopic simple adhesiolysis - Exploratory fertility testing - Gynecological follicle measurement - Perform hysterosalpingography - Cobra Alpha Training completed <p><u>In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Able to explain diagnosis and prognosis and global treatment options after completing exploratory fertility testing. This takes into account the current state of science and any gynecological conditions in patients. - Able to take a directive role in fertility discussions. - Able to discuss global probabilities of continuing pregnancy, non-intact gravidity and extra-uterine pregnancy from assisted reproductive techniques with patients. - ...
<p>Supervising role</p> <p>This resident is able to <u>supervise</u> care falling under EPA 'Reproductive Issues'. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p><u>The following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):</u></p> <ul style="list-style-type: none"> - Able to make an integrated policy in patients with endometriosis or fibroids and childbearing. - Able to conduct a bad news conversation and leading role in complaints in patients with childbearing intentions. - Able to organize moral deliberation in patients with childbearing intentions. - ...

12. Life course endocrinology

Components of EPA

Knowledge

- Normal puberty development and development of internal and external genitalia
- Functioning of the hypothalamic-pituitary-ovarian axis at different stages of life
- Causes of primary and secondary oligo and amenorrhea
- PCOS, short- and long-term effects
- Endocrine disorders with effect on menstrual cycle (thyroid, adrenal, prolactin)
- Effect and side effects of hormonal contraception, including interaction with other medications
- (Peri-)menopausal physiology and issues
- Hormonal substitution therapy (HST), alternatives to HST, side effects, interactions and (contra) indications
- Premature ovarian dysfunction and general health effects

Skills

- Insertion IUD
- Implanon
- Laparoscopic sterilization

Patient-centered care

- Counselling on (emergency) contraception, including co-morbidity
- Counselling definitive forms of contraception
- Counselling menopause hormone therapy
- Bad news conversation in premature ovarian insufficiency

Teamwork

- Collaboration with 1^e echelon of care and public health services in contraception
- Collaboration with pediatricians in adolescent care

System-based practice

- Ethics including re-fertilization, embryo research, moral deliberation
- Knowledge about contraception reimbursements

Independence levels

Little supervision

This resident is able to perform care that falls under EPA 'Lifespan endocrinology' with little supervision. This is evidenced at least by (but not limited to):

Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc for all 3 work-related competences.

The following minimum conditions were met, with little supervision:

- Laparoscopic sterilization
- IUD insertion
- Placing Implanon
- Gynecological ultrasound for uterine anomaly

- NVOG ultrasound course completed
- Basic laparoscopy and hysteroscopy course completed

In addition, the following three situations show that the resident can function at the requested level of independence (the following are EXAMPLES):

	<ul style="list-style-type: none"> - Capable of explaining (abnormalities of) the menstrual cycle and (peri)menopause to patients at the outpatient clinic, demonstrating knowledge about it. - Able to provide advice on contraception at the outpatient clinic with minimal supervision, integrating patient perspective into advice, including counselling risks. - ...
<p>Without supervision</p> <p>This resident is able to perform care that falls under EPA 'Lifespan endocrinology' <u>without supervision</u>. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p>The following <u>minimum conditions</u> are met without supervision:</p> <ul style="list-style-type: none"> - Able to perform conditions listed under 'little supervision' without supervision <p><u>In addition, the following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Able to give advice on HST including counselling risks. - Able to explain to patients about PCOS and health consequences. - ...
<p>Supervising role</p> <p>This resident is able to <u>supervise</u> care that falls under EPA 'Lifespan endocrinology'. This is evidenced at least by (but is not limited to):</p> <p>Add argumentation in form of e.g. KPB, OSATS, reflection reports, MSF, course certificates, etc. for all 3 work-related competences.</p>	<p><u>The following three situations show</u> that the resident can function at the requested level of independence (the following are EXAMPLES):</p> <ul style="list-style-type: none"> - Able to independently conduct a counselling interview with patients with preterm ovarian insufficiency regarding general health, integrating patient perspective. - Independently initiate work-up for primary amenorrhea and guide and refer patients to appropriate persons. - ...

Themes

During the first four years of education, the basics of all themes should be covered. From the start of residency, there is the possibility of adding more depth to the interpretation of a topic within a theme. This will certainly be the case during the differentiation phase.

1. Theme Being Engaged, Staying Engaged

General description

Engagement is essential for a lifetime of enjoyable work as a gynecologist. Engaged and motivated employees feel vital and energetic, are dedicated, and are fully absorbed in their work. Engaged employees are more productive, less absent, make fewer mistakes, are more innovative and creative. Maintaining engagement appears to be related to characteristics of work referred to as 'energy sources'. Examples include: feedback from supervisors, support from colleagues, sense of control/autonomy. Experiencing competence (self-efficacy) also plays an important role. It is therefore important to pay attention to engagement already early on during residency and to teach residents how to stay engaged.



Subject	Concrete concerns
Maintaining balance and motivation (1A)	<p>Residents can combine work and private life well. Together, residents, program director and education group strive for three important aspects in work:</p> <ul style="list-style-type: none"> - Autonomy: giving residents as much opportunity as possible to make their own decisions and influence their work and learning. - Relatedness: residents experience being part of something bigger than themselves. The aspect of 'relatedness', experiencing being part of a group, is very important here. - Competence: residents notice that they have mastered something and that they are getting better at it. Within the frameworks of NCOG's learning outcomes, residents, program director and education group work to build on one's qualities and skills.
Self-directed learning (1B)	<p>Self-directed learning is an important predictor of successful learning and a successful career; and plays an important role in 'lifelong learning'. Self-directed learning means that the resident is able to value his own competence, then formulate learning goals and learning activities and test whether these have been achieved by obtaining feedback. Task variation and development opportunities are important here.</p> <ul style="list-style-type: none"> - Residents know what self-directed learning is and recognize its importance. With help from the program director and education group, residents reflect on their own actions and are encouraged to ask others for feedback. - Residents are supported by the program director and the education group in recognizing their own qualities and learning points. They develop their talents and show personal leadership. - Residents collect various forms of feedback (including 360-degree assessment) to understand their progress and then act on it when completing their work.
Dealing with setbacks (1C)	<p>Our profession is challenging and beautiful in many facets, but is also characterized by poignant casework, disappointments and unintended outcomes. Setbacks can be experienced in the personal or working sphere and are diverse in manifestation, for instance dissatisfaction or formal complaints from patients.</p> <ul style="list-style-type: none"> - Residents learn, supported by the program director and the education group, how to deal with adversity. They learn to recognize what can be valuable and what can be counterproductive in this. They know where to get formal and informal support. Residents are able to share their concerns with others. - Residents offer help and support to others in the face of adversity. Residents do not judge others or themselves too quickly. - Residents are prepared during education and come into contact with the laws and regulations surrounding the handling of complaints.

Highly recommended forms of work

Formal education	Education supporting the topics within this theme. Think specifically, for example, of 'self-directed learning workshop' and Education on laws and regulations/legal procedures for complaints.
Individual Training Plan (ITP)	ITP with attention to balance, motivation and how a resident (re)manages themselves in this area. (particularly appropriate for 1A) ITP focused on developing talents, strengthening areas of improvement. (particularly fitting for 1B) Stage of education: focus on ITP during each annual appraisal.
Mentor	Offer trainees a mentor in their own working environment with whom low-threshold work situations, career-related or personal issues can be discussed.
InterVision	Plan at least 1 series of peer review meetings during the education, preferably with a fixed group of gynecology residents. Take into account the education schedules and duty rosters of this fixed group in order to ensure as much continuity as possible and to be able to plan InterVision in the daily schedule.
Coaching	Offer residents the opportunity to attend a coaching program at least once during their education.

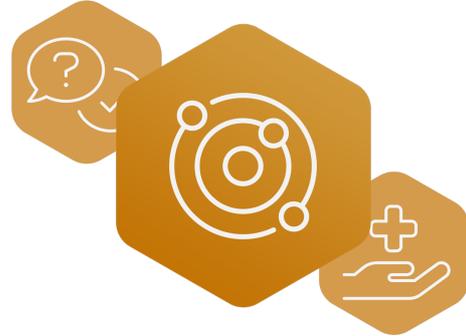
Optional forms of work

Mindfulness course; team activities; personal leadership pathway; Personal SWOT analysis discussion with program director including plan of action; peer support; peer mentoring; complication discussion with role modelling by gynecologists in showing vulnerability; interview with gynecologists on what setbacks have done to them; guidance on complaints procedure (through Peer Support and/or support by program director/complaints officer).

2. Theme Network Medicine for specific target groups

General description

Central to this theme are the patient and multidisciplinary and transmural care provision. Care is provided in a team of healthcare providers, often from different organizations. This also means that we will increasingly enter into discussions with our (transmural) colleagues and the patient to determine what the goal of our care is and where the boundaries of action lie. The focus of care provision will shift from healing to (preserving) functionality, and more and more the question will be asked whether everything that can be done should be done. The gynecologist will therefore have to become even more aware of the healthcare providers (network) involved around a patient and start the conversation with them about the right care. This is to assist the patient in finding care that suits her, to monitor that the quality of care remains high and that care remains accessible and affordable.



The resident is able to identify the *care needs* for specific patient groups in vulnerable situations and to individualize and organize the *required care* within *the network of healthcare providers*. Residents are aware of the network in which they provide care and plays an active role in it. This includes involving other specialisms or specific supporting organizations. Where necessary or desired, residents may act as case manager to ensure the necessary continuity in care provision.

We recognize 2 sub-themes within this theme. The patient groups mentioned under both themes have in common that there is often a medically complex care demand and/or an extensive network of healthcare providers involved that extends beyond the gynecological work area.

Each resident will reflect on the topics below using a patient of their own choosing from both sub-themes. Reflect on this with a supervisor and present your findings to the group:

- How does the patient himself perceive the intended purpose and limitations of the care provided?
- What are the specific knowledge and skills needed around caring for this patient?
- Which healthcare providers are involved in this network and how do they work in this team?
- What ethical dilemmas can be identified and how are they dealt with?
- What options for what forms of prevention are available for this patient/population?

The 6 dimensions of positive health according to Huber are applied to the selected patient group.

<https://www.allesisgezondheid.nl/knowledgebase/positieve-gezondheid/>

Subject	Concrete concerns
Women's Health (2A)	This concerns gender-specific care at different stages of life and within various specialties (e.g. cardiac disorders in women), with menopause being an important tipping point. This care requires attention from both 1 ^e -line and preventive care and also from specialist multidisciplinary care.
Caring for patients in vulnerable situations (2B)	These include care for the elderly patient with complex issues, care for patients with psychosocial problems, cultural diversity, teenage issues and care for women with severe multimorbidity.

Highly recommended forms of work

Formal education	Education supporting the topics within this theme. For example, specific education on life-stage changes, menopause effects and education on dealing with situations with complex problems (medical or psychosocial). Workshop on the social map in the region and the role of the gynecologist in this. Education on communication and treatment of patients also fits in with this.
Case study	In the first 4 years of residency, work on at least one case related to women's health and one related to care for patients in vulnerable situations on the basis of a concrete patient.

Optional forms of work

Participation in multidisciplinary teams on gender-specific/life-stage-specific issues; Participation in courses on specific patient groups.

3. Theme Organization-bound care

General description

It is very important for specialists nowadays to have knowledge of the organization of care, at micro, meso (department or institution) and macro level (macro-economic and social context) and to be aware of efficiency of care, quality and safety aspects and sustainability. All this to contribute to quality patient-centered care. Current developments such as Value-Based Healthcare, shared decision making and interprofessional education are in line with this. The current NCOG education plan endorses requirements with regard to the aforementioned future developments at a basic level and ensures that residents can further train in specific topics in the themes below to be adequately prepared for the future image of gynecology.



Subject	Concrete concerns
Quality, management and safety (3A)	Residents take note of a system of quality assurance and how to participate in and improve it. Moreover, residents are aware of the management of the institution or department and the organization of the Dutch healthcare system.
Efficiency and Value-Based Healthcare (3B)	Healthcare in the Netherlands is of very good quality but is accompanied by high and also rising healthcare costs. To keep healthcare affordable while ensuring quality, it is important that we make efficient and value-driven choices. In this, patient outcomes (in the patient's interest) are central to healthcare costs. Developments in patient-reported outcome measures (PROMs) are a widely used tool in this respect. Issues surrounding the design of care processes that contribute to sustainable care also fit in here. Residents are expected to form an opinion on efficiency and sustainability projects, be able to (co-)develop them and learn to work efficiently so that unnecessary healthcare costs can be saved. Also, residents take note of developments around value-driven care. Residents are also aware of the Value-Based Healthcare concept used by many healthcare institutions to improve the quality of care.
Clinical leadership (3C)	As a clinical leader, the doctor plays an important role in organizing the care process, both at the institution level and at the individual patient level. Clinical leaders are the link between the organization/patient and the shop floor. In many decisions in healthcare, it is essential that doctors are involved and able to take charge or show leadership. Residents develop the basics of (clinical) leadership skills. This may be further expanded within the education at their discretion and desire if necessary.

Highly recommended forms of work

Formal education	Education supporting the topics within this theme. Think specifically, for example, of education on quality and safety in patient care, insight into different approaches to improve sustainability of care, education on the structure of healthcare products and DBCs, insight into the development of PROMs and (a series of) workshop(s) on clinical leadership.
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Optional forms of work

Participation in wonder and improvement projects; safety and incident reporting committees; complication registration; implementation guidelines/protocols and care evaluations; Online course awareness project; Setting up efficiency project; Participation Value-Based Healthcare project; Research on sustainability aspects or project in the context of sustainability; Research cost-effectiveness of certain care; Medical leadership course (e.g. via <https://www.medischevervolgopleidingen.nl/medisch-leiderschap>); Hospital management course; Participation in committees (assistant representation, NVOG, VAGO and the like).

4. Theme Innovation and Knowledge

General description

Developments in medicine are rapid, for both knowledge and introduction of new care models and techniques. As a gynecologist of the future, it is very important that the trainee is open to these medical-technical developments and science, takes note of them and learns to apply these innovations appropriately (*adaptive capacity*).

In education, residents should be involved in increasing (medical) knowledge, the development and implementation of healthcare innovations and, where possible, be a pioneer of innovations within their institution or department. This will benefit the quality and accessibility of care in the future and could possibly be a solution in the increasing demand for care and healthcare costs.

The resident should also be able to teach and transfer knowledge that will enable him or her to function in the healthcare network and ensure a circle of quality in the network/region.



Subject	Concrete concerns
Contributing to and managing change (4A)	Healthcare and the healthcare landscape or healthcare institution are constantly changing. It is important for professionals to be able to adapt to changes and learn to deal with them. Developing adaptive capacity can give insight into or contribute to change processes. This allows the specialist to contribute to the vision on healthcare developments. Residents develop an increasing adaptive capacity during education. At the beginning of the education, this may focus on the micro level, for example applying new guidelines or studies on the shop floor. Later in education, active participation in implementing new practices or innovation projects can take place at meso level.
Innovative techniques (4B)	Residents are involved or aware of innovations that are necessary to make healthcare more efficient and affordable or better. Important examples are the use of robots in surgical interventions, ICT systems, electronic patient files and the use of apps for patients or virtual reality training to improve the skills of residents. See the Young Specialist's guide to technological innovation in specialist medical continuing education.
Education and training (4C)	Residents are able to exchange knowledge within different networks and between disciplines in order to improve the quality of care around the patient. The focus here is on the teaching skills of the trainee.
Science (4D)	Residents are able to relate clinical policy to evidence-based medicine. In doing so, he or she can identify knowledge gaps and critically consider scientific evidence to help patients make the right choices and optimally promote their health.

Highly recommended forms of work

Formal education	Education supporting the topics within this theme. Think specifically of, for example, Teaching Skills Course (<i>Coach the Co, Teach the Teacher, The Residents as Teacher, etc.</i>) and an Evidence-based medicine course.
PICO - CAT Literature/science review	Establish a cycle of education at each education institution where residents provide science-based education to clinical medical students and fellow healthcare providers.

Optional forms of work

Participation in change management course; Setting up change project within department/hospital; Involvement in innovation project; Reference evenings within the network; Journal club.

Annex C: Notes on translation of CanMEDS competences and BOEG to NCOG

Chapter 1 briefly summarized developments in medical education research. Combined with experiences gained from over 15 years of competence-based gynecology training in the Netherlands, this has led to a revised vision on training. This vision and its translation into training in three domains is described in chapter 2. Besides offering more attention to personal and professional development, a goal of this change is to better connect 'learning' and 'working'. The thinking behind the CanMEDS competence fits into this strategy, but its elaboration into the 7 CanMEDS competences and specific sub-competences did not sufficiently connect with workplace learning. However, to illustrate that NCOG did not ignore essential parts of BOEG's CanMEDS competency-based training content, below we show how the 7 CanMEDS competencies per BOEG EPAs fit within the 3 work-related competencies (the second domain of training) in NCOG. The account below illustrates that NCOG builds on BOEG, a key focus in the development of NCOG because the foundation of the field has not changed.

Underlying the interpretation of EPAs and Themes in NCOG is a focus on three training domains. The three interconnected domains are:

- knowledge and skills,
- work-related competences and
- personal & professional development.

Knowledge and skills are of course also important within the 7 CanMEDS competences. These are clearly defined in NCOG but not described separately in the table below. NCOG distinguishes three aspects within the work-related competences: patient-centered care provision (detailed in table 1), teamwork (table 2) and system-based practice (table 3). Together, these work-related competences encompass many aspects of the (sub-)competences described in the CanMEDS competence profile. The focus on personal and professional development is partly captured in the CanMEDS, for example in the competence 'professionalism'. NCOG goes further and makes training in these vital aspects of development concrete.

In the tables below, the numbers refer to the BOEG-EPAs where the competence description can be found. A column has also been added to clarify which CanMEDS competence is concerned.

Table 1, 2 and 3: Distribution of CanMEDS competence descriptions from BOEG by work-related competence

Table 1. Patient-centered care - includes 27 items from BOEG competency descriptions		
<i>Description competence in BOEG (cleaned up)</i>	<i>BOEG EPA</i>	<i>CanMEDS competence</i>
Midwifery counselling.	1.1	communication
Preconception counselling, guidance severe pathology.	1.2	communication
Knowing how to give extra guidance where needed.	1.2	professionalism
Provide tailored education to patient (and partner) on diagnosis and course.	1.3	communication

Provide education for pregnant women and their partners.	1.3	health advocacy
Psychological counselling in delivery rooms.	1.3	professionalism
Provide tailored education to patient (and partner) on diagnosis, course and patient organizations. Grief and bad-news conversation.	1.4	communication
Supervised 'life event'.	1.4	professionalism
Counselling breech birth and twin birth.	1.5	communication
Dealing with emotionally stressful situation. Educate patient and partner.	1.6	communication
Educating patient and partner diagnosis and course. Breaking bad news, grief counselling and counselling. Educate about patient organizations.	1.7	communication
Provide information on lifestyles and treatment (im)possibilities. Recognizing feelings of disappointment, sadness or uncertainty and referring to other healthcare providers if appropriate. Reporting.	2.1	communication
Inform patients on where to obtain additional information and point out the existence of patient associations.	2.1	scholarship
In the field of psychosomatics. Educate patient.	3.1	communication
Consultation with patient and loved ones.	3.2	communication
Monitor and promote patient safety.	3.2	health advocacy
Taking sexual history. Reflect with patient and partner on psychosocial impact of condition Educate about patient organizations.	4.1	communication
Taking sexual history. Reflecting with patient and partner on psychosocial impact of condition. Educate about patient organizations.	4.2	communication
Dealing with women with sexual violence experiences.	4.2	professionalism
Provide information on diagnostic and treatment process of gynecological tumors. Have bad news conversation, recognize grief counselling and refer as necessary, deal with grief, fear or uncertainty and anger of patients or their partners.	5.1	communication
Educate patients about available leaflets and brochures and patient associations.	5.1	scholarship
Dealing with euthanasia request and palliative sedation.	5.1	health advocacy

Dealing with different beliefs around illness and end of life.		
Be able to deal with patients with oncological conditions. Mortality counselling.	5.1	professionalism
Dealing with different beliefs around blood transfusion.	5.2	communication
Achieve consensus limits treatment with patient and treatment team. Tailored history (hard of hearing, low vision, heteroanalysis) Tailored education for patient and relatives.	6.1	communication
Aftercare extramural. Care to improve quality of life.	6.1	collaboration
Dealing with different beliefs around illness and end of life.	6.1	health advocacy

Table 2. Teamwork - includes 38 items BOEG competency descriptions		
<i>Description competence in BOEG (cleaned up)</i>	<i>BOEG EPA</i>	<i>CanMEDS competence</i>
Collaborating with 1 st echelon of care.	1.1	collaboration
Constructive participation in obstetric chain care.	1.1	professionalism
Lead/chair multidisciplinary treatment meeting.	1.2	leadership
Taking the lead in acute situations.	1.2	leadership
With team members and patients. Service transfer. With obstetrician on readmission of patient from 1st line. Feedback to midwives and GPs.	1.3	communication
Participate in multidisciplinary obstetric team.	1.3	collaboration
Leading midwifery team (taking direction).	1.3	leadership
Reflect on own performance and that of team members in the delivery rooms during debriefing.	1.3	professionalism
Inform stakeholders (team, midwife, GP).	1.4	communication
Teamwork and taking appropriate leadership in stressful situations. Make use of an appropriate division of roles between residents, senior residents and gynecologist and the other participants in the healthcare network.	1.4	leadership
Reflecting on own actions and perception of event.	1.4	professionalism
Consultation supervisor.	1.5	communication

Adequate distribution of tasks, taking charge.	1.5	leadership
Being able to maintain overview. Reflection on complications.	1.5	professionalism
Feedback conversation with primary care midwife.	1.6	communication
Discuss treatment plan with patient, nurse and clinical midwife.	1.6	collaboration
Make use of an appropriate division of roles between residents, senior residents and gynecologist and the other participants in the healthcare network.	1.7	collaboration
Make use of an appropriate division of roles between residents, senior residents and gynecologist and the other participants in the healthcare network. Coordinate policy with other disciplines.	2.1	collaboration
Determine own position on ethical dilemmas. Monitor own limits of knowledge and action. NB. also fits in with working group 3	2.1	professionalism
Correspondence with primary caregivers.	3.1	communication
Make use of an appropriate division of roles between residents, senior residents and gynecologist and the other participants in the healthcare network.	3.1	collaboration
Participation in indication for surgery discussions.	3.1	collaboration
Reflecting on own actions and perceptions.	3.1	professionalism
Pre- and post-meeting with OK team.	3.2	communication
Participating in OR team, providing leadership in acute situations.	3.2	leadership
Addressing undesirable behavior of colleagues.	3.2	health advocacy
Make use of an appropriate division of roles between residents, senior residents and gynecologist and the other participants in the healthcare network.	4.1	collaboration
Optimize multidisciplinary approach.	4.1	collaboration
Reflecting on own limits in knowledge and actions.	4.1	professionalism
Maintain portfolio. Reflecting on own actions and those of others.	3.2	professionalism
Referral to or consultation with sex therapist and psychologist.	4.2	collaboration
Participate in multidisciplinary team including primary caregivers. Assume the role of case manager.	5.1	leadership
Reflecting on own actions and perceptions.	5.1	professionalism

Multidisciplinary collaboration with anesthetist and other consultants, among others. Visiting efficiently. Knowledge of effective handover techniques.	5.2	collaboration
Uniform policy discussed in team and adhered to.	5.2	collaboration
Provide time-out procedure and debriefing.	5.2	professionalism
Reflecting on own knowledge and skills and operative limitations.	5.2	professionalism
Participate in multidisciplinary approaches intra- and extramurally.	6.1	collaboration

Table 3. System-based practice - includes 27 items BOEG competency descriptions		
<i>Description competence in BOEG (cleaned up)</i>	<i>BOEG EPA</i>	<i>CanMEDS competence</i>
Participating in obstetric care system.	1.1	collaboration
Dealing with WGBO. Initiating maternity care. Prevention through education.	1.1	health advocacy
Transfer arrangements. Organizing participation in a multicenter study.	1.2	collaboration
Legislation on perinatal mortality and (late) termination of pregnancy. Working with organizations around care for unborn child (with addicted/psychiatric mother).	1.2	health advocacy
Management and time management multiple delivery rooms. Arrange antepartum transfer.	1.3	collaboration
Triage and dealing with the organization of 1 st , 2 nd and 3 rd echelons of care. Organization aftercare process.	1.4	collaboration
Responding to infrastructure (e.g. availability of OR and pediatricians). Regular organization of team training for acute situations.	1.5	collaboration
ICU care newborn.	1.6	collaboration
Using NICU care appropriately. Organizing aftercare process.	1.7	collaboration
Handle procedures declaration and burial.	1.7	health advocacy
Showing responsibility for continuity of care.	1.7	professionalism

Dealing with national transmural agreements on 1 st and 2 nd echelons of care regarding centralized treatments in specialized centers.	2.1	collaboration
Adhere to and enforce protocols and guidelines.	2.1	health advocacy
Planning logistics at the outpatient clinic.	3.1	collaboration
Adequate written report of surgical procedures.	3.2	communication
Time monitoring.	3.2	collaboration
Dealing with complications.	3.2	professionalism
Knowledge, monitoring and optimization of protocols and guidelines.	3.2	health advocacy
Be familiar with procedures of medical examination after sexual assault.	4.2	professionalism
Dealing with and adherence to existing consultation structures and agreements regarding referrals.	5.1	collaboration
Working with transmural care options.	5.1	health advocacy
Reporting patient information adequately.	5.2	communication
Efficient organization of care pathway.	5.2	collaboration
Compliance with protocols and guidelines.	5.2	health advocacy
Dealing with complications. Dealing with complaints.	5.2	professionalism
Working with involved disciplines and organizations around elderly care.	6.1	health advocacy
Reflecting on own role in elderly care.	6.1	professionalism