



**nvog**

NEDERLANDSE VERENIGING VOOR  
OBSTETRIE & GYNAECOLOGIE

# BOEG<sup>1</sup>

**Better Education for Obstetrics and Gynecology**



**Dutch National Competency Based Curriculum  
for Obstetrics & Gynaecology (NL)**

**English version with advice from Professor Olle ten Cate**

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<sup>1</sup> (1) BOEG in Dutch means the bow of a ship. We look ahead and aim to become future proof.

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## Preface

Today's training of gynaecologists needs to produce competent gynaecological professionals, who are both good doctors and excellent managers of care.

The world is changing and this dictates that our health organizations are responsive to a world of individualization, computerization, and globalization. The internet provides a worldwide network of knowledge and information for both doctors and patients to consult anywhere and anytime. People want to direct their own lives; freedom of choice is increasing and reliance on traditional organizations is fading. As a result of these social developments, the momentum for change in health care will further increase.

Anticipating these changes in the health care system, the gynaecologist must evolve from a passionate 'doctor' to an appreciated 'professional'; taking a broader role in delivering patient-centred women's healthcare in a collaborative team-based approach.

Today's and tomorrow's gynaecologist will be not only be a provider of medically expert care, but also a manager of that care.

Because of the normalization of working hours in residency, training must become more efficient. The BOEG project provides an educational approach that is strongly focused on a structured education with steep learning curves. In addition to the common path of four years of basic and intensified training for the gynaecological trainee, BOEG offers a differentiation period of two years. This ensures that all BOEG trained gynaecologists will be able to function as a multi-competent generalist gynaecologist with a general view but be able to offer additional "know how" in an area of special interest. This ability to provide training in differentiated areas not only allows the specialty to meet the specific demands of a diverse healthcare system with diverse needs, but also fulfils the social demand for transparency with regard to the process of "knowing and being able to".

The balance between general and differentiated training will allow the specialty to meet the needs of the full spectrum of patients requiring our care in a holistic and patient-centred manner, while offering residents the opportunity to fulfil these needs with training that best suits their strengths and inclinations.

Dr. J. Wijma

President of the Netherlands Society of Obstetrics and Gynaecology

## Outline

The BOEG curriculum evolved from HOOG which was the first competency-based postgraduate medical curriculum in the Netherlands. Since the introduction of HOOG we, as educators, have gained significant experience and learned what works and what does not work with respect to this form of training. There has also been further development of the regulations governing the medical specialist training program which determine the structure of this curriculum. Experience with assessment in HOOG has led to a less detailed national curriculum, with the realization that specific refinements should be specified in the local curriculum and not on a national level. An important component of this curriculum is increased social orientation, which will become more embedded in the successor of the national BOEG curriculum.

Healthcare organizations are undergoing significant changes as a result of limited financial resources, growing diagnostic and therapeutic possibilities and ethical choices that will have to be made. These include decisions about the care of the chronically ill and elderly, increasing involvement of patients and families in care, coupled with the declining autonomy of the professional, societal expectations for transparency in healthcare and education and an increased focus on patient safety. All of these have a significant impact on the structure of a training program as developments in healthcare and training are two sides of the same coin.

The new BOEG curriculum that now lies before you incorporates expected developments in healthcare in the coming years. It takes into account that specialists will have to retain possession of a full breadth of expertise to ensure appropriate diagnosis and treatment. The curriculum recognizes that developments within the discipline have become so rapid that no one is able to keep up with the knowledge explosion occurring in the sub-specialties and thus training is structured so that once a comprehensive foundation that covers the basics is laid, concentration on specific areas takes place.

This curriculum also affords the opportunity for the development of intrinsic (i.e. non-medical expert) competencies beyond what is required on the basic level. For example, in the latter phase of their training, residents could obtain an understanding of aspects of management and organization on both departmental and institutional levels. This would allow them to develop the expertise to contribute in constructive ways to the changes that are happening in healthcare from the perspective of the professional on behalf of their discipline or institution. This could include improving the efficiency and quality of care from an organizational perspective or strengthening inter- and intra-professional collaboration. The development of medical leadership skills would be integral to this process and thus the curriculum will be structured to accommodate the acquisition of such skills.

BOEG enhances patient safety by ensuring that residents demonstrate that they possess appropriate skills for their level of training by a system of structured certification of competencies. This certification system, with common standards, is of critical importance in a landscape in which residents will acquire skills in a wider variety of areas than they do now.

From its inception, BOEG has become the new national curriculum for all training in Obstetrics and Gynecology in the Netherlands, replacing the former national curriculum known as HOOG. The new curriculum delineates the core elements of the training program and provides a framework for program directors to construct more detailed local training that meets the present and future specifications of the specialty.

### The Three Levels of Educational Reform

Educational reform in BOEG is configured on three levels; strategic, tactical and operational. These are best visualized in the form of a pyramid.

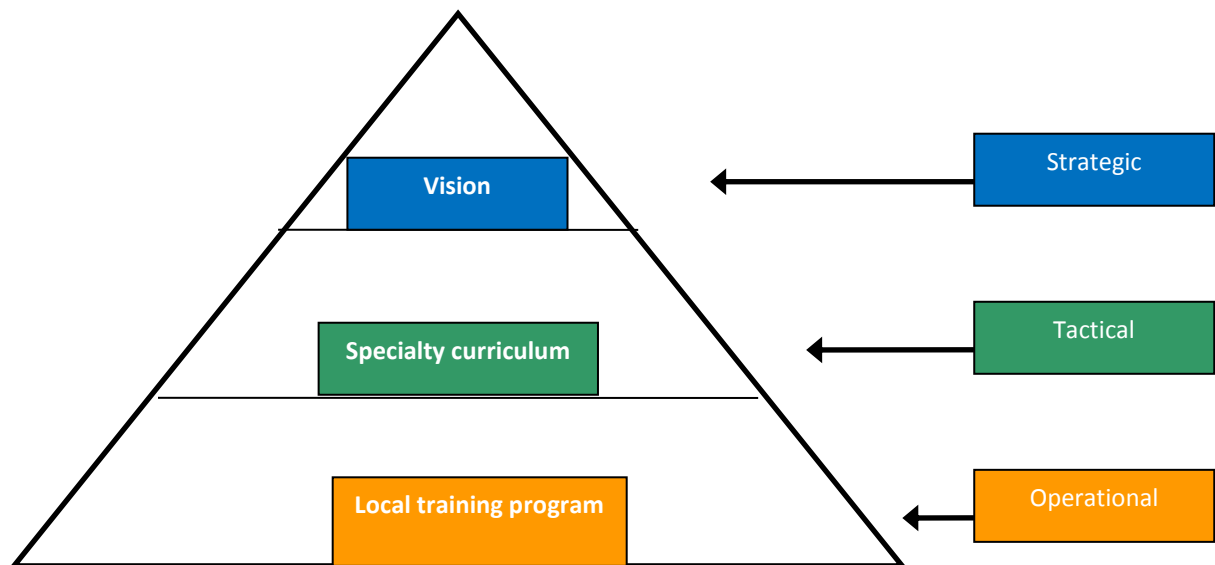


Figure: The three levels of BOEG.

The strategic component of BOEG provides an overarching vision of the future of gynecology. The NVOG (the Dutch Society of Obstetrics and Gynecology) is responsible for developing that vision, so it is their responsibility to transmit this vision to the training program. The tactical level translates this vision into practice on a broad level with the BOEG curriculum, which provides the framework for training at regional and local levels. This allows these programs to design a program that makes best use of their own resources to fulfill the requirements of the BOEG curriculum.

To successfully reform a training program, it is imperative that all three levels are well defined. BOEG provides an overview of the strategic level in part I of the document. The tactical component is addressed in part II which elaborates on the themes outlined in part I. Part III describes how the new national curriculum could be used at the operational level in the local (regional) training programs.

# PART I

## *Strategy & Frames*

# 1. Vision and Strategic Starting Points of BOEG

## 1.1 Background information

The Board of the NVOG recognized that the current discipline and practice of Obstetrics & Gynecology has changed enough that it is no longer well supported by the current training of residents with HOOG.

The underlying causes of this are:

Continuing rapid advancements in professional knowledge and medical treatment

- As a result of ongoing refinement and expansion of care within the five subspecialties, it is no longer feasible for a single practitioner to deliver optimal care in all subspecialties. In oncology, for instance, there are now strict rules about who can do which treatment or surgery and where. This type of regulation is also becoming necessary for other sub-specialties.
- Other disciplines such as *surgery* and *internal medicine* faced similar problems and responded by implementing subspecialties with defined scopes of practice

The professional differentiation among different members of a discipline

- Within the specialty of obstetrics and gynecology there is implicit and sometimes explicit sub-specialization. The majority of advertisements for employment opportunities are looking for a solid base and a specific sub-specialization within the discipline.
- Competence must be maintained on an ongoing basis and meet current professional standards
- Subspecialties have an increasing role in the definition of the norms for qualitatively responsible practice, driven by the increasing complexity of professional competency and logistical considerations. For subspecialist professional competencies sufficient ongoing exposure must be ensured to maintain competence.

Regionalization

- With recognition of volume considerations, reorganization and regionalization of *care* has become inevitable and so training within multiple training centers has become inevitable as well.

The 48-hour work week and the changes in work-life balance of the average gynecologist

- Duty hours have been decreased to 48 hours per week, based on EU regulations.
- In addition, many residents choose a part time residency position and prefer to continue to work part time when they become a specialist.
- This results in a decrease in the amount of hours both during training, and after, compared to previous decades, with a resulting decrease in exposure to less common diseases and procedures.

Society's call for transparency about quality

- This demand has grown much faster than anticipated.
- Recent decisions have given health insurance companies the right to contract selectively.
- The *Directorate of Public Health* has played a role in accelerating this demand through the discourse generated around discussions of volumes.

HOOG attempted to train generalists who were capable of delivering competent care that encompassed all subspecialties. However, it has become increasingly obvious that exposure to the breadth and depth of subspecialty therapeutic competencies is insufficient to prepare HOOG-educated residents for independent practice in a subspecialty. This is due in part to the fact that less frequently occurring procedures must be taught to more trainees in less time. This also conflicts with the evolving discussion about the need for sufficient volumes to develop and maintain competence and the increasing emphasis on patient safety. In addition, HOOG does not prepare the trainee for the current practice where each practitioner shares common basic skills but has specific areas of differentiation. This requires more individualization of the training of the gynecologist.

Whereas the HOOG-project reflects more of an educational revision of the gynecologist's training, the BOEG-project reflects more of an all-round revision of the complete preparation of a gynecologist.



## 1.2 Strategic principles

Cognizant of the above-mentioned changes, the following strategic principles have been formulated:

1. In practice, obstetrics and gynecology are inter-related in both content and execution, thus we have not separated obstetrics and gynecology within the training.
2. Every gynecologist should
  - Have high quality obstetrical skills
  - When on call to be able to handle a complicated caesarean section, operative delivery and emergency gynecological surgery,
  - Be able to diagnose the entire breadth of outpatient problems in obstetrics and gynecology and manage these problems, knowing when to refer (appropriate diagnostic and therapeutic breadth and depth).
  - Have a portfolio that shows competency in elective basic surgeries and with procedures specific to their area of sub specialization (therapeutic depth).
  - Demonstrate good basic skills in communication, collaboration, organization, health advocacy and (reflective) professionalism.
  - Have basic skills in the principles of science, critical appraisal and lifelong learning.
3. Sub-specialization is rooted in further development within the chosen subspecialties and is undertaken after a mutual decision by the resident and the training program keeping in mind that:
  - There is no current need for sharply defined borders between diverse subspecialties.
  - Therapeutic qualification depends on the accrued portfolio and the context in which the professional works. The responsibility for defining competence in the performance of a given treatment should be rooted in portfolio expansion rather than in formal accreditation. (This applies both to acquisition of the competency during the training, as well as its maintenance after training).
  - Role specialization means that the gynecologist that has just ended his/her training can obtain special knowledge in a variety of non-traditional fields, such as information and communication technology (ICT) in healthcare, resource planning in healthcare, quality management or management of patient safety.
4. A sub-specialization contributes to portfolio building for a fellowship. Currently the discussion concerning sub-specialization is ongoing. Further policy will follow from the NVOG.
5. Gynecologists can adjust their sub-specialization and portfolio concerning elective surgeries via professional development.
  - Ongoing professional development in the discipline should be encouraged.
  - If possible, the portfolio should build on previously acquired competencies.
6. Rigid and complete regulation of the objectives of sub specialization training is not advised:
  - Under the oversight of the NVOG-board, the board of subspecialties will be the coordinator for the development of further professional standards.
  - On an ongoing basis, subspecialties will adjust standards within their particular area based on new medical and social developments.
  - A transition phase to the new curriculum will be required. Curricula of current residents could be individualized by developing an alternate training path in the transition phase between the old program and the revised (BOEG) version. The changed plans will be developed in concert with the local sites and evaluated by local clinical staff and (if necessary) the specialty board for education (concilium obstetricum et gynaecologicum) will act as the final arbiter.
7. Training will be increasingly regionalized, which will require a more robust organization of the training of residents and more integrated control.
8. The revised curriculum will integrate the teaching methodologies of HOOG specifically:
  - Development of a portfolio based on in-training assessment and entrustable professional activities (EPAs) with statements of awarded responsibility (STARs).

- This revised curriculum will be shaped, as was the old version of HOOG, by the legal framework of the College of Medical Specialties (CSG) and its future developments.
9. Quality is an integral part of the curriculum revision. The improvement of the quality of training at all levels is an ongoing process. Based on the systematic collection of data, the specialty curriculum can be evaluated and adjusted. At local and regional levels this can take place using their own methods and tools.
  10. Learning in a variety of communities of practice will enhance the implementation of BOEG. These communities of learners can be established on different levels: specialty boards, program directors, group of residents, educators. Such a community offers space to learn with and about each other, thus enhancing collaboration and communication.
  11. Training must be competency-based: Competencies are the synthesis of knowledge, skills and attitudes and are reflected in professional activities. Residents at a given stage of training should have attained competencies, demonstrated by adequately performing specific activities. These relevant activities should therefore be clearly described. This is further delineated in the section of this document outlining the system of testing based on *Entrustable Professional Activities (EPAs)* and the awarding of statements of awarded responsibility (STAR).
  12. Despite the changes, the vast majority of the learning activities are still workplace-based. Thus work situations can and indeed must, serve as a learning situation. The small part of the training that will not be workplace-based will most often consist of theoretical courses at a local or national level.

These strategic principles have led to the new curriculum BOEG which will be further elaborated in following chapters on a tactical level.

## 2. Profile of the Gynecologist

In broad terms, Obstetrics and Gynecology is the specialty that focuses on propagation, parturition in all its facets, and on preventing, recognizing and treating the diseases of the female genitalia.

In practice, the discipline of the gynecologist includes more than clinical skills. Moreover, the world of the gynecologist has changed over recent decades and will continue to change in the coming years. It is important that our training anticipates and adapts to these changes so as to be able to provide quality care in the future that fulfills the needs of both the society and the specialty. Qualitative research on the future of the discipline and the needs of the societal stakeholders has led to a more broadly based definition of the gynecologist of the future. It is evident that not only the practice of the gynecologist, but also the environment in which he/she practices is rapidly changing, necessitating a (re-)shaping the training programs. We should base the general abilities a gynecologist needs to acquire on what we predict will be the future profile of the gynecologist in the Netherlands.

### 2.1 Developments within the Specialty

#### *From generalist to subspecialist*

The specialty of the gynecologist has changed as a consequence of developments such as the feminization of medicine, increasing part-time work and increasing demands for oversight and improvement of quality. This demands logistical changes in such areas as scheduling and the design of morning reports but also changes in the practice itself. It is increasingly evident that it is not feasible for one practitioner to still deliver quality care in all aspects of gynecology, leading to the need for sub-specialization to some degree for all practitioners. However, caution is necessary to prevent fragmentation of care and the loss of the holistic view of the patient.

#### *Interprofessional collaboration*

The reorganization of healthcare has the primary goal of ensuring the quality and continuity of care. The intendant task reallocation requires complex patient-oriented collaboration-models between several (para)-medical specialties. Successful inter-professional collaboration requires equality, mutual respect, knowledge of each' roles and responsibilities, evidence-based practice, collaborative decision making, leadership based on expertise instead of status and communication and conflict management skills.

#### *Technological developments*

Rapid technological developments and digitalization of care and healthcare management will not only influence the content of medical care, but will also influence the logistics of delivery of care. Long distance and international consultation, tele-operating and consulting from home will become real possibilities. Establishing contact may become easier and offers new care and collaboration opportunities between providers of primary, secondary and tertiary care. This requires that healthcare providers have an understanding beyond the limits of their own specialty and hospital and that they are open to, and recognize what opportunities are available.

#### *Monitoring professional care*

The attention of the government and insurance companies to the cost and quality of care has made care more performance-oriented and transparent and has added a new dimension to the development of long term policies. To provide balance to these bureaucratic concerns, the voice of the medical professional should be heard to ensure that healthcare remains integrated, patient oriented, ethically responsible, cost efficient and feasible. Therefore it is incumbent on each healthcare provider to look beyond the limits of their own practice, collect relevant information and take an active role in future developments.

#### *The relationship between patient and doctor is characterized as a partnership*

The relationship between doctor and patient will change significantly in the future, with an increased emphasis on equality, shared decision making and patient-centered care. The clinical expertise and skills of the

gynecologist will remain essential, but there will need to be increasing attention to a holistic, empathic and a respectful approach to the patient and her needs. Such societal trends as an aging population, obesity and delayed childbearing, combined with a widening range of diagnostic and therapeutic possibilities, will change the expectations and character of our patient-population and expand the management of preventive and chronic aspects of healthcare.

### *Lifelong learning*

Over the career of a gynecologist, there will be changes in focus of practice, with concurrent improvement in clinical expertise and skills. Sub-specialization and quality monitoring will likely lead to a shift to a diagnostically broad and therapeutically more intense practice. Clinical expertise and skills, supported by proficient collaborating- and communication skills, will form the basis of good practice. Social pressure to provide publically responsible care demands more awareness and input from gynecologists in the process of quality monitoring and improvement. Gynecologists must *know and recognize* the limits of their own capabilities and reflect on their own practice (both with and without other healthcare providers). This requires engagement in lifelong learning to keep knowledge up-to-date and, where necessary, to adjust content related practices and/or their careers in interest of the healthcare providers, team or patient. In many instances expansion of knowledge and practice occurs beyond the boundaries of our own specialty, including knowledge and skills about using advanced technologies, financial and independent entrepreneurship, policy development and management of healthcare resources, and national policy discussions. These will become important areas of expertise for the gynecologist of the future.

This outline of the professional profile of the gynecologist of the future reflects how the specialty is expected to develop. This professional profile will be the starting point for the development of the new curriculum in Obstetrics and Gynecology and will lay the foundation for strategic policy development of the NVOG, nationally as well as internationally.

## 2.2 CanMEDS

The CGS (the College of Medical Specialties, the legislative board for medical specialists) legal framework describes the common competencies of a medical specialist and clusters them into seven areas of competence: medical expert, communicator, collaborator, scholar, health advocate, manager and professional. There is of course a robust connection with the Canadian Medical Education Directives for Specialists 2005 (CanMEDS-2005<sup>2</sup>). These common competencies are applicable to all medical specialists. Every competency consists of four sub-competencies, in the so-called common competencies.

Refinement of these areas of competence for the gynecologist allows for the construction of a competency profile of the gynecologist at the end of training and the start of his/her professional career. The Society has chosen to structure the profile as themes that constitute a limited number of broad EPAs. Theme-related refinement and operationalization of the competencies into workplace activities grounds assessment and learning in everyday practice and codifies expectations for residents and teachers as well as other members of the healthcare team, on a more detailed level. See chapter 6 for the translation of competencies to themes.

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<sup>2</sup> Jason R, Frank, MA (Ed) The Can MEDS 2005 Physician Competency Framework; Better standards. Better physicians. Better care, Ottawa, 2005.

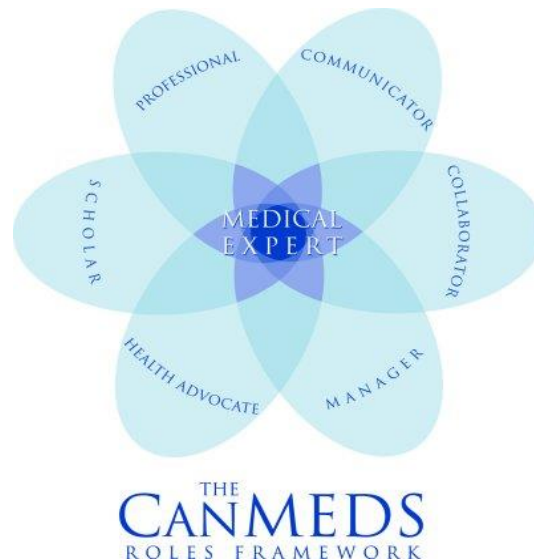


Figure 3. The CanMEDS-roles, as presented by the Canadian Medical Education Directives for Specialists 2005

### 2.3 Competency Profile of the Gynecologist

Competencies of the gynecologist	
1	Medical expert
1.1 The gynecologist possesses adequate knowledge and skills relevant to the specialty:	<ul style="list-style-type: none"> <li>• Possesses adequate knowledge of the anatomy and physiology underlying obstetrics and gynecology.</li> <li>• Knows the basics of epidemiology, etiology, pathogenesis and pathophysiology of abnormalities in the area of gynecology and obstetrics.</li> <li>• Knows the common classification systems, grading systems and guidelines.</li> </ul>
1.2 The gynecologist applies diagnostic, therapeutic and preventive skills to provide sound and evidence based care:	<ul style="list-style-type: none"> <li>• Is able to take an adequate and careful history.</li> <li>• Performs adequately and carefully the usual physical examination and interprets the findings well.</li> <li>• Knows which complementary assessments should be performed.</li> <li>• Synthesizes information to provide holistic view of the patient and her disease.</li> <li>• Is able to apply basic imaging techniques, assess the findings and estimate diagnostic value, as well as being able to consult well with radiologists.</li> <li>• Is able to perform basic invasive and functional assessments and interpret the results correctly.</li> <li>• Biopsies where necessary, interprets the results correctly and is able to consult well with pathologists.</li> <li>• Establishes comprehensive management plans with the given information.</li> <li>• Understands the advantages, side effects and complications of different therapeutic interventions and can provide a balanced approach to selecting therapy.</li> <li>• Is able to adequately guide and support the patient in her eventual choice of therapeutic interventions.</li> <li>• Ensures appropriate and successful acute therapeutic interventions. The gynecologist is aware of the indications, contra-indications and side effects of these interventions. Understands when medical interventions, non-operative, invasive or operative interventions should be performed and also knows when other forms of therapy deserve preference.</li> </ul>
1.3 The gynecologist provides effective and ethically responsible patient care:	<ul style="list-style-type: none"> <li>• Makes certain that the diagnostic process is adequately performed, causes no unnecessary side effects for the patient and that the process is performed within acceptable parameters.</li> <li>• Makes a careful cost-benefit analysis before every therapeutic intervention. Is able to place in a societal context such issues as assisted reproduction,</li> </ul>

	<ul style="list-style-type: none"> <li>antenatal diagnosis and termination of pregnancy.</li> <li>Provides timely and adequate response to complications and undesired side effects.</li> <li>Adjusts care for vulnerable persons such as the disabled or elderly.</li> </ul>
1.4 The gynecologists finds required information quickly and applies it well:	<ul style="list-style-type: none"> <li>Is able to formulate the correct questions when he/she is confronted with difficult cases.</li> <li>Is able to access relevant and factually correct information in the literature. Can engage in critical appraisal.</li> <li>Has a collegial network to consult for difficult diagnoses and to obtain additional aid.</li> </ul>
<b>2 Communicator</b>	
2.1 The gynecologist builds effective therapeutic relationship with the patient:	<ul style="list-style-type: none"> <li>Provides adequate explanations about the assessment to be performed and about the nuisance and undesired side effects that this assessment could cause.</li> <li>Is able to meet with the patient and family when needed.</li> <li>Is able to grasp the fears and insecurities of the patient and is able to provide, or have provided, adequate psychosocial support.</li> </ul>
2.2 The gynecologist listens and gains efficient, relevant information about the patient:	<ul style="list-style-type: none"> <li>Carefully and adequately performs history taking, taking into account the feelings of the patient and her relatives.</li> <li>Provides succinct but comprehensive explanation about diagnostic steps and about the undesired side effects of the diagnostic steps.</li> </ul>
2.3 The gynecologist communicates medical information well to the patient and her relatives:	<ul style="list-style-type: none"> <li>Adequately communicates findings with the patient and possible family or relatives, including the communication of bad news, i.e. the finding of malignancy or a conversation with the parents of a newborn with serious pathology.</li> <li>Is cognizant of the feelings of the patient and gives her room to express them. Communicates with the patient, possible family and possible co-specialists as to who will do the follow-up and how the follow-up will be performed.</li> </ul>
2.4 The gynecologist adequately reports (oral and written) about the patient's case:	<ul style="list-style-type: none"> <li>Provides accurate documentation of the relevant history, physical assessment and course of treatment.</li> <li>Provides timely and comprehensive written response to consultation.</li> <li>Ensures adequate handover to the colleague on duty for the evening-, night- and weekend shifts.</li> </ul>
<b>3 Collaborator</b>	
3.1 The gynecologist communicates efficiently with colleagues and other caregivers:	<ul style="list-style-type: none"> <li>Communicates efficiently <b>with</b> other healthcare providers when treating patients, in both uniprofessional and multiprofessional situations.</li> <li>Ensures timely and adequately consultation with possible co-specialists.</li> <li>Consults efficiently with primary care providers and others that refer patients</li> <li>Participates in transfer of care agreements (on local-regional and national level) and complies with these.</li> </ul>
3.2 The gynecologist refers adequately:	<ul style="list-style-type: none"> <li>Refers to the correct provider or institute, either specialist or primary care provider, and determines the degree of urgency</li> </ul>
3.3 The gynecologist performs	<ul style="list-style-type: none"> <li>Communicates clearly, concisely and collegially with referring specialists and</li> </ul>

intercollegial consults effectively:	obstetricians.
3.4 The gynecologist contributes to effective interdisciplinary collaboration and integrated care	<ul style="list-style-type: none"> <li>• Works with obstetrical and gynecological care team members to optimize the environment to ensure adequate collaboration.</li> <li>• Has understanding of group processes and is willing to lead and to be led.</li> <li>• Recognizes and formulates when and why a group is not functioning and learns to delineate the problems and to mediate solutions.</li> </ul>
<b>4 Scholar</b>	
4.1 The gynecologist considers medical information critically:	<ul style="list-style-type: none"> <li>• Considers critically the information collected in both consultation and follow up and is able to come to the right conclusions.</li> <li>• Understands when intervention should be offered.</li> </ul>
4.2 The gynecologist improves the breadth of and develops scientific specialty knowledge:	<ul style="list-style-type: none"> <li>• Recognizes the limits of available scientific knowledge in practice and is able to formulate clinically relevant scientific hypotheses.</li> <li>• Participates in scientific research. The extent, nature and intensity of this participation is dependent on the setting in which the gynecologist is working.</li> </ul>
4.3 The gynecologist develops and maintains a lifelong learning plan in medical education:	<ul style="list-style-type: none"> <li>• Demonstrates the capability to learn new techniques, considers sources of medical information critically, and has a professional development strategy to keep up with the developments within the specialty during his/her career.</li> <li>• Aspires to contribute to the discovery and development of new knowledge relevant to practice of the specialty as well as information that can impact the logistics of patient oriented care.</li> <li>• Unlearns obsolete habits and is adaptable in a changing world.</li> </ul>
4.4 The gynecologist improves the expertise of students, residents, colleagues, patients and other healthcare stakeholders:	<ul style="list-style-type: none"> <li>• Facilitates education of patients, colleagues and other healthcare providers.</li> <li>• Stimulates learning using strategies based on modern educational principles.</li> <li>• Displays the ability to collaborate with medical and paramedical staff in developing educational activities such as simulation exercises with the team.</li> </ul>
<b>5 Health advocate</b>	
5.1 The gynecologist knows and recognizes the determinants of diseases.	<ul style="list-style-type: none"> <li>• Shows personal interest in the patient and the milieu in which she lives and is aware of the possible consequences of disease for her personal and work life</li> <li>• Demonstrates professionalism specific to the social consequences of psychosomatic and psychiatric diseases.</li> </ul>
5.2 The gynecologist improves the health of the patient and the community as a whole:	<ul style="list-style-type: none"> <li>• Contributes effectively to programs for injury and disease prevention and health promotion.</li> <li>• Contributes effectively to patient safety within care.</li> <li>• Promotes practices that improve healthcare and the general wellbeing.</li> <li>• Has knowledge and insights about public health interventions and strategies</li> </ul>
5.3 The gynecologist acts according to relevant regulatory determinants:	<ul style="list-style-type: none"> <li>• Counsels the patient about proposed interventions and possible alternatives.</li> <li>• Obtains informed consent and records the informed consent in the patient record.</li> <li>• Understands and respects the important determinants of patient rights.</li> </ul>

	<ul style="list-style-type: none"> <li>Adheres to the current behavioral legal codes of the Netherlands.</li> </ul>
5.4 The gynecologist responds adequately to undesirable incidents in healthcare:	<ul style="list-style-type: none"> <li>Is able to cope with complications resulting from clinical interventions.</li> <li>Applies appropriate tools to learn from patient safety events.</li> <li>Identifies and acknowledges his/her own mistakes and those of colleagues and is able to learn from them.</li> </ul>
<b>6 Manager</b>	
6.1 The gynecologist organizes work to maintain a reasonable work –life balance:	<ul style="list-style-type: none"> <li>Creates a balance between clinical activities, personal care and social activities to support personal wellbeing.</li> <li>Delegates activities appropriately to maintain this balance.</li> </ul>
6.2 The gynecologist works effectively and efficiently within the healthcare organization:	<ul style="list-style-type: none"> <li>Ensures that the diagnostic process proceeds appropriately, minimizing adverse effects for the patient and that it is completed in a timely fashion. Delivers cost-efficient care.</li> <li>Takes responsibility for the prevention of unnecessary costs.</li> <li>Participates in healthcare innovation projects (current examples: working without waitlist, patient centered care, integrated care with substitution of care).</li> <li>Participates in processes to enhance patient safety.</li> <li>Is cognizant of the basic principles of the organization of healthcare.</li> <li>Applies principles of effective meeting and time-management.</li> <li>Is able to cope with medical administration on all levels.</li> <li>Implements quality improvement systems for providing care.</li> <li>Demonstrates medical leadership and entrepreneurship when necessary.</li> <li>Takes the appropriate role in teams for the care of vulnerable, including the elderly.</li> </ul>
6.3 The gynecologist deploys available resources responsibly for the care of patients:	<ul style="list-style-type: none"> <li>Keeping in mind social requirements, negotiates the use of available resources for optimal care.</li> </ul>
6.4 The gynecologist uses information technologies for optimal care of patients and for continuing medical education	<ul style="list-style-type: none"> <li>Takes advantage of e-health possibilities in the system and in personal practice</li> <li>Makes appropriate use of social media taking into account privacy regulations.</li> <li>Uses information technology to support and enhance continuing medical education</li> </ul>
<b>7 Professional</b>	
7.1 The gynecologist delivers high quality patient care with integrity, honesty and in a concerned manner.	<ul style="list-style-type: none"> <li>Considers the patient as partner in the healthcare process.</li> <li>Ensures that research progresses in a professional medical atmosphere.</li> <li>Ensures that the privacy of the patient is guaranteed and that the research is not too demanding for the patient.</li> <li>Endeavors to prevent unnecessary treatment.</li> </ul>
7.2 The gynecologist demonstrates appropriate personal and interpersonal professional behavior:	<ul style="list-style-type: none"> <li>Shows an empathic attitude in relating to patients</li> <li>Conforms to the requirements expected for a specialist in the medical, ethical, judicial and collegial arenas.</li> <li>Demonstrates standards and values that are appropriate for the specialty. Is committed to providing appropriate care to patients with special</li> </ul>



	needs/complex problems
7.3 The gynecologist knows the limit of his own competencies and acts within these limits:	<ul style="list-style-type: none"> <li>• Knows the limits of his/her own knowledge and skills.</li> <li>• Refers patients in a timely manner to expert colleagues, when indicated.</li> <li>• Reflects on own actions and functioning, is able to receive feedback and acts accordingly to implement changes and/or improvements.</li> </ul>
7.4 The gynecologist practices medicine to meet the common ethical standards of the profession:	<ul style="list-style-type: none"> <li>• Is able to codify and support own moral principles with arguments and justify them to patients, colleagues and other healthcare providers.</li> </ul>

### 3. Guidance of Teaching and Learning

While the program director is important in the training of the resident, faculty and clinical staff, residents, nurses, all comprise the comprehensive team that cooperates in the training of new residents. This team provides day-to-day structure, including hand overs, and guidance and coaching in the required competencies, while the program directors are responsible for the organization of the training program and directing the training process. This process starts on the first workday of the residency and ends after the final assessment.

#### 3.1 Facilitation and Support

The coaching process is based on the idea of ‘scaffolding’. Scaffolds are provided by the program director, who defines the parameters of what must be learned and selects the appropriate work experience to provide the opportunity to learn. Thus counseling by the program director is about facilitating, coaching and supporting. In the first years, extra support and guidance should be provided to the resident to ensure a firm foundation, however, as the end of the training program approaches and the resident is learning to build on this foundation, guidance will be less intensive and the program director will have a different role, specifically to coach and support the resident in making a choice of a sub specialization. The other major role of the program director is that of facilitator and this task is pervasive and ongoing, as the need for facilitation remains present throughout residency.

There are three interrelated stages of residency that require different types of support from the program director:

1. Acquisition of theoretical knowledge and becoming aware of how this knowledge is applied in practice to develop competence. The main competencies in this phase are medical expert, communication and collaboration.
2. Application of the knowledge acquired in stage 1 while contributing to the work within the department.
3. Exploration and development of proficiency in one of the focus areas.

The role of the program director is different in each of these stages; however, they cannot be classified in a stepwise fashion as they blend into each other. The emphasis shifts to the third stage as the resident moves from the initial general curriculum years towards the specialization years.

##### **3.1.1 The program director during the basic training program years.**

In the first phase where basic skills are taught (stage 1 and 2) the program director acts mainly as a role model and supporter of the training process. By means of periodic conversations with the residents, their progression is monitored and the program director guides them in the right direction to ensure the basic requirements are met. In these conversations, the program director reviews the resident’s portfolio and is subsequently able to provide him/her with substantive feedback about the performed work activities. The program director, together with the resident, ascertains if the resident is gaining enough and varied learning experiences, is receiving well-explained and relevant assignments, and is being observed, receives feedback and is adequately evaluated and assessed by the faculty/clinical staff.

Since the program director is not likely to be present for the majority of learning moments of the resident, it is of vital importance that all progress is recorded in a portfolio to allow review and feedback by the program director. In the first years of the training, the major role of the program director is to provide direction of the learning process. Another significant role in the general curriculum years is ‘modeling’, in either an implicit or explicit fashion. Implicit modeling is performing a task correctly while being observed by the resident so they can learn by example. Explicit modeling adds the dimension of thinking out loud, as a task is performed, providing explanation and discussing strategy. Explicit modeling is of particular use in early training to inculcate good habits and this modeling can be reduced over time when the residents are able to provide the

explanations themselves. This ability to provide explanation can be assessed with help of the reports and feedback from KPBs (mini CEX procedures for structured observation of clinical consultations) and OSATS (structured observation of procedural skills) in the portfolio.

As the resident becomes increasingly able to perform activities independently allowing his/her contribution to the department to grow (step 2), guidance by the program director with respect to clinical tasks becomes less necessary and 'fading' takes place as the direct supervision of the program director slowly fades to the background. The resident displays increasing independence and competency statements become more important.

### ***3.1.2 The program director during years for consolidation and sub-specialization***

During the last phase of the training, in addition to keeping up with basic work activities, the resident will focus on one of the subspecialties. Given that the program director is unlikely to be an expert in this area, the program director will leave the assessment of acquisition of content to staff that have specialized in the chosen area, replacing the program director's role as guide and assessor with that of coach. This does not mean that the program director no longer supports or assesses. The program director retains the overall responsibility for assessment, but stimulating of the resident and facilitating access to venues to acquire the skills and knowledge of the subspecialty become the primary activities of the program director. At the same time, the program director will offer support and guidance in career planning. Through intensive interactions in the first years, the program director has developed a clear picture of the areas of gynecology to which the resident is suited by both interest and ability. As the resident passes the required milestones within basic training, a dialogue should be instituted about the specific areas within the discipline of gynecology, allowing the resident to explore how they see themselves as a gynecologist. This lays the groundwork for allowing the resident to choose which subspecialty and further specialization he or she wishes to pursue (stage 3).

### ***3.1.3 Visualization of the methods of guidance***

The utilization of guidance strategies by the program director over the six years of residency is shown in Figure 1. This is not set in stone as the needs of different residents will not be the same, but it provides an overall schema for the process of guidance by the program director.

#### *Guidance of Learning*

As has been shown, strict guidance decreases as the years of training pass, and the resident assumes greater control over their own learning and the program director transitions from teacher to mentor.

#### *Creating a vision together*

In the early years the focus of the resident is on learning new skills and the feedback from the program director will concentrate on these skills. In the latter years of the training, the focus shifts to creating a vision as to where the resident will fit in the practice of gynecology and the role of the program director is to help build that vision and then provide the tools to make that vision a reality

#### *Facilitation and Feedback*

Facilitation and providing feedback during the training process, represented by the red line, remains constant over the program. While the methods of providing feedback and the frequency of feedback will perhaps differ over the years, this remains an important task for the program director throughout training.

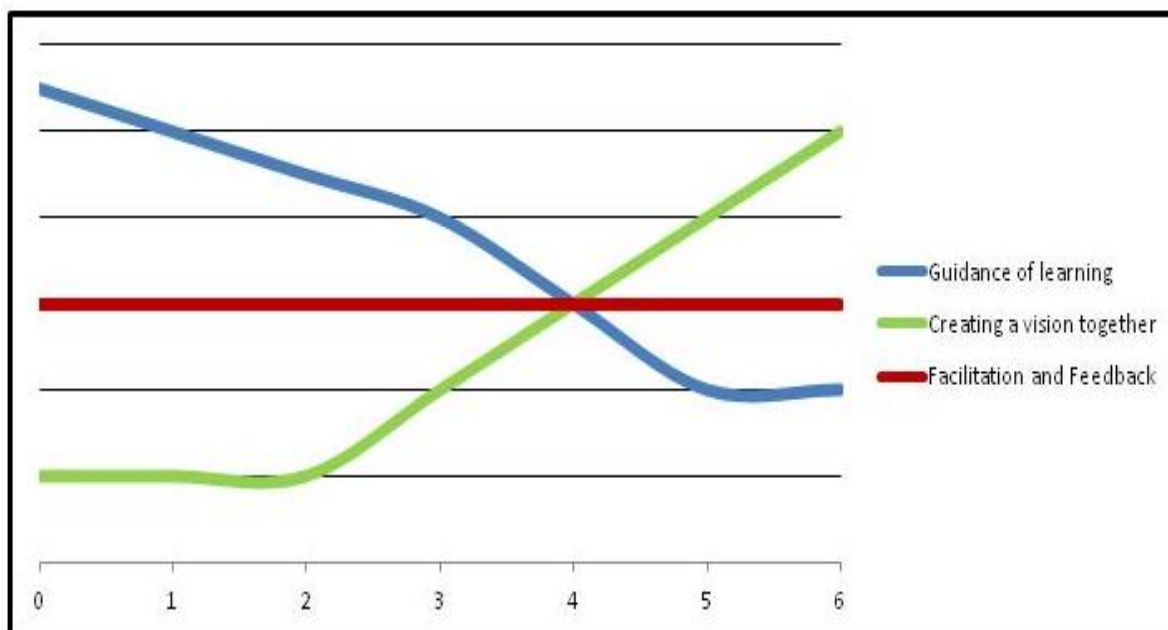


Figure 1: Utilization of Guidance Strategies by the Program Director over the Six years of Residency

### 3.2 Individual training program (IOP)

The IOP is designed by the resident in cooperation with the program director(s) and is structured according to the framework of the regional training agreements. All individual learning objectives are included and the resident's rotation schedule is clearly outlined. Before the training can officially commence, a plan of rotations is required. During in-training progress evaluations, the IOP will be adjusted to expand learning objectives and outline plans for the coming period. It is thus imperative that the resident records the progress in the electronic portfolio, to allow both assessment and suitable adjustment of the IOP during the meetings between program director and resident.

### 3.3 Evaluation of Progress

Progress evaluations provide an important venue for giving feedback. During these meetings, progress is reviewed using the portfolio. The portfolio contains all of the assessment instruments, so based on the portfolio the program director is able to assess if all requirements have been fulfilled and if all competencies have been addressed. If a resident is behind schedule with regard to the IOP or has had difficulties in performing the work according to the plan, this should be addressed during the evaluations. In the last two years, when the resident is specializing, the evaluations will be partly about reflection on the specialty as has been described previously.

#### Summary of meetings

Period	Activity	Feedback gathered by means of:	Action
Before commencing the training and before commencing each rotation.	Introduction, themes and objectives of the rotation.	Introduction form, individual program plan and insertion of IOP in portfolio.	Resident
Advise: every quarter of the entire training period. <i>The legal framework</i>	Progress evaluations: evaluate objectives of previous period and formulate objectives for	KPB, 360° feedback, self-reflection, letter assessment, CAT, OSATS, knowledge test, portfolio	Resident Program director

<i>allows reducing the frequency of evaluations</i>	the coming period, including agreeing on the themes for the coming period.  Assessment of competency acquisition.	data, and assessment forms.	Supervisor/staff
The end of every year and three months before finalizing the training.	Capability assessment, assessment by program directors.	Knowledge test, KPB, OSATS, 360° feedback, portfolio, evaluation documentation of rotation.	Program director and staff

### 3.4 The Poorly-Performing Resident

Whether a resident is not functioning well in the work environment cannot be established with a single observation. Recognizing a poorly performing resident is a process in which multiple supervisors observe that the resident repeatedly demonstrates skills that are below par. It is crucial for the program director to be cognizant of poor function as early as possible, in order to intervene in time.

To recognize poor performance, it is important to know how it manifests.

Poor function can manifest itself in three broad areas:

- Coping with work
- Coping with others
- Coping with self/private matters

The specific context of the learning environment must be looked at as a whole when assessing poor performance as there are often multiple manifestations of competency deficits. Poor performance is not phase-related, as at any time during the training program the resident can run into trouble

If a resident continues to underperform, despite appropriate guidance and feedback, the program director will commence remediation. The specifics of remediation will differ between residents and will depend on the extent and domain of poor performance. Documentation is key to achieving insight into the shortcomings of the resident. Once shortcomings have been identified, intensive coaching and guidance by the program director will be crucial, with frequent consultations with the resident concerning the individual training program. This allows the program to monitor whether the resident complies with the (adjusted) plan and utilizes the offered help to bring his/her performance to acceptable levels. If no substantive improvement takes place, the regulations of the 'Registratiecommissie' (board for accreditation) are to be followed, which in the most extreme cases could lead to termination of training.

In general, the earlier the shortcomings are detected, the less robust the remedies need be. Early identification affords the resident more time to improve and thus is likely to place less of a burden on staff.

### 3.5 Overview of the Coaching Process

In the schema below the main coaching processes are classified based on the three different phases that a resident passes through.

Phase of training	Substantial focus Focused on:	Method of feedback Focused on:	Competency statement Focused on:	Focus of counseling Focused on:	Counseling method Focused on:
2 years Basic (novice)	<ul style="list-style-type: none"> <li>- On call</li> <li>- Operative skills</li> <li>- Outpatient clinic skills</li> </ul>	<ul style="list-style-type: none"> <li>- Skills</li> <li>- Therapeutic interventions</li> <li>- Main competencies are medical expert, communication, collaboration</li> </ul> <i>Instrumentation</i> KPB OSATS MSF	<ul style="list-style-type: none"> <li>- Separate skills</li> <li>- Primarily mono-disciplinary questions</li> <li>- Limited independence</li> </ul>	<ul style="list-style-type: none"> <li>- Guidance of learning</li> <li>- Functioning within clinical setting</li> <li>- Role modelling for the resident</li> </ul>	<ul style="list-style-type: none"> <li>- Scaffolding; instruction and motivation by program director</li> <li>- Modeling; demonstrating to resident</li> <li>- Reflection by resident</li> </ul>
2 years Intensification (Intermediate)	<ul style="list-style-type: none"> <li>- On call</li> <li>- Operative skills</li> <li>- Outpatient clinic skills</li> </ul>	<ul style="list-style-type: none"> <li>- All Competencies (addition of health advocate, manager scholar, professional)</li> </ul>	<ul style="list-style-type: none"> <li>- Completing themes</li> <li>- Maturing independence</li> </ul>	<ul style="list-style-type: none"> <li>- Vision of future role in the specialty</li> <li>- Career development</li> </ul>	<ul style="list-style-type: none"> <li>- Motivation and coaching by program director</li> <li>- Reflection by resident</li> </ul>
2 years Consolidation and sub-specialization (Junior specialist)	<ul style="list-style-type: none"> <li>- On call</li> <li>- Operative skills (Sub specialization focus area)</li> <li>- Outpatient clinic skills</li> <li>- Role-specialization</li> <li>- Therapeutic deepening</li> </ul>	<ul style="list-style-type: none"> <li>- Therapeutic deepening</li> <li>- Competencies become integrated and contextually dependent (in particular professionalism, collaboration, manager and health advocate)</li> <li>- Role-specialization</li> </ul> <i>Instrumentation</i> Critical reflection on practice (KPB-®) OSATS MSF	<ul style="list-style-type: none"> <li>- Complete themes</li> <li>- Complete independence</li> </ul>	<ul style="list-style-type: none"> <li>- Career development</li> <li>- Creation and realization of vision</li> <li>- Holistic view of care</li> </ul>	<ul style="list-style-type: none"> <li>- Coaching and advising by program director</li> <li>- Reflection by resident</li> </ul>

## 4. Feedback

### 4.1 Provision of Feedback

Feedback is an ongoing process that often passes unnoticed. In the workplace, the resident is instructed, aided and corrected. This kind of feedback can, and often is, performed by the program director. In addition, it is the task of the program director to ensure that all the staff deliver feedback during work.

The majority of feedback occurs informally. Formal feedback is provided based on specific *feedback instruments* described in 4.2. The use of feedback instruments provides insight in the functioning of the resident and standardizes assessment. The information garnered can be used formatively (focused on development) or summatively (focused on assessment) and to be of maximum use should be followed by reflection on the part of the resident.

Progress evaluations with the program director provide an opportunity to discuss the feedback collected from the portfolio about the function and development of a given resident. Staff assessments are an important component of the final judgment of progress. The results of the progress evaluations will be included in the portfolio by the resident, followed by reflection, to allow the program director to be able to assess later whether the feedback has been incorporated appropriately in the activities of the resident.

#### *The growth of the resident and the matching developments of feedback*

Just as guidance changes during each training year, the methods of feedback are stage-specific. The career of a resident is roughly divisible into three stages: Novice, Intermediate, and Junior-Specialist. The program director must take into account which stage the resident is in to determine where the feedback should be focused and which feedback instruments are suitable. The mini-CEX observations (*KPBs*) are meaningful the first years, but lose their power in the latter training years. A resident who is a Junior-Specialist does not need to have their patient encounters observed by staff, as this skill has been acquired in the Novice phase and documented by the awarding of STARS. A discussion about the perspective of the resident on particularly difficult cases or in general about how the discipline of gynecology will look like in a few years is of greater value. This is evaluated using the *Critical Reflection on Practice (KPB\*)*

### 4.2 Feedback instruments

#### *Mini CEX (KPB)*

A Mini-CEX (*KPB*), a brief observation of clinical work in practice, usually a patient consultation) is a formative instrument commonly used in early years of training when skills are being built and involves observation followed by feedback. The resident is responsible to ensure that a sufficient number of *KPBs* are obtained and the program director is supposed to offer sufficient opportunities for conducting a *KPB*. This method can be easily used in the daily practice. Discussion before, and debriefing after, the *KPB* can enhance resident learning. After performing a *KPB*, the observer writes specific feedback on what was observed and judges if the resident met the expected standard. This feedback is included in the portfolio of the resident.

#### *Critical Reflection on Practice (CRP)*

This is a formative instrument that supports reflection on the part of the resident and is a critical component in a resident's development as a professional. It is a discussion of subjects that are broader and go beyond daily direct patient care. These discussions explore subjects that encourage the resident to think about who they want to become as a gynecologist and how to express this identity in daily work. The subjects can encompass all competencies, but in general the emphasis is on professionalism, managerial skills and health advocacy. The resident will record the outcome of the reflection in his IOP, including any learning goals and the steps to perform to reach the goal.

### *Objective Structured Assessment of Technical Skills (OSATS)<sup>3</sup>*

Procedures and skill are assessed with an OSATS. After performing an operation or procedure the resident is assessed and given immediate formative feedback. The assessor decides whether the resident's performance is under, at or above the standard for the given point in training. OSATS are usually formative instruments and can be used to give tips to the resident. After sufficient formative OSATS the program director could apply the instrument in a summative fashion to assess competency.

### *Multi source feedback (MSF)*

The resident is able to request a 360 degree feedback through the electronic portfolio. The resident provides a list of people with whom he/she interacts in a clinical setting, who are then asked to fill out the feedback form. It can be as many as all persons working in the department but it must be a selection of people involved with his/her clinical tasks. Once the form has been completed by everyone, the program director determines whether the feedback is sufficient, and if not, disapproves the MSF. The results of an MSF are discussed during the progress evaluations.

### *Critically Appraised Topic (CAT)*

A CAT is used to teach the resident how to read literature, interpret and translate it to daily practice. A CAT is generated by a clinical question. The resident answers the question in a presentation based on a review of the literature. The CAT is a formative instrument.

### *Progress test*

The yearly progress test of the NVOG provides feedback on level of knowledge about the sub-specializations, obstetrics, gynecology (benign gynecology and urogynecology and pelvic floor together), reproductive science and gynecological oncology. The results of this progress test are an important component of the portfolio.

### *Self-reflection*

Reflection is an important part of the assessment armamentarium. Residents can, and should, reflect on all clinical tasks; not only during assessed procedures, but also on their performance of other clinical tasks. Reflection forms a basis for practice improvement and is essential for the development of the resident. These reflections should be recorded in the electronic portfolio to afford the program director insight into the reinterpretations of the resident. The program director could use this information during progress evaluations, but its main purpose of reflection is to spur the development of the resident.

There is no example of a Critical Reflection on Practice (CRP) because a CRP is mainly a discussion with the resident, who then records it in the portfolio. Thus it does not have a fixed structure.

## **4.3 The Portfolio**

The portfolio is instrumental in affording the program director insight into, and allowing them to assess, the clinical activities of the resident. The resident-recorded portfolio is a collection of (written) records that reflect the learning process and the results of that learning. Because the individual training program (IOP) is included in the portfolio, the program director is able to determine at any moment whether learning is proceeding according to the IOP.

During the progress evaluations and final assessments the portfolio plays an important role. After discussing progress since the last evaluation the resident is able to provide self-reflection on his/her own development during the evaluations. All relevant registered training-activities, statements of awarded responsibility (STARs) and expansions of the progress evaluations are included in the portfolio where the program director is able to see for the final assessment how the resident has performed during the training.

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<sup>3</sup> The word OSATS is derived from a surgical assessment procedure in a simulated environment, developed at the University of Toronto. In the Dutch language OSATS has come to be an observation of procedural skills in practice. We use that the latter terminology in this document.



### 4.3.1 Working with an electronic portfolio

Residents are responsible for setting up an account to access to their own electronic portfolio which is to be recorded electronically with the program ePASS, to allow access by the resident and program director, as well as others allowed by the resident. The ePASS portfolio is a dynamic instrument that keeps track of all activities engaged in by the resident and allows the program director to look at and assess the activities of the resident at any given time, and also allows the resident to add new performed activities, to request a STAR or to reflect on his/her own clinical tasks and the assessment of them.

When a STAR is requested by the resident through the electronic portfolio, the resident chooses the areas in which he/she feels sufficiently competent and provides justification for the request, and then it is up to the program director to approve it. The program director can review the resident's past scores on the subjects for which the resident has requested a STAR. Using the different graphs, the program director can see the progress of previous assessments and the scores of the resident in comparison to their cohort. These are all helpful tools for the program director to provide a good assessment (see also p 27-28).

For an introduction to the electronic portfolio ePASS in English see: [http://www.epass-maastricht.nl/en\\_US/index](http://www.epass-maastricht.nl/en_US/index)

The Test-Matrix table: Overview of education- and test-instruments, competencies and assessments.

☺ signifies satisfactory completion.

Testing	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Progress evaluations</b> <i>All competencies</i>	4 x ☺	4 x ☺	2 x ☺	2 x ☺	2 x ☺	2 x ☺
<b>Rotation assessment</b> <i>All competencies</i>	4 x ☺	4 x ☺	3 x ☺	3 x ☺	N.A.	N.A.
<b>Statements of awarded responsibility</b> <i>All competencies</i>	☺	☺	☺	☺	☺	☺
<b>Multi-source feedback</b> <i>Communicator, Collaborator, Manager and Professional</i>	1 x ☺	N.A.	N.A.	1 x ☺	N.A.	N.A.
<b>CAT (Critical Appraised Topic)</b> <i>Scholar, Manager</i>	2 x ☺	2 x ☺	2 x ☺	2 x ☺	2 x ☺	2 x ☺
<b>Case based discussion</b> <i>Scholar, Medical Expert, Manager</i>	1 x ☺	1 x ☺	1 x ☺	1 x ☺	1 x ☺	1 x ☺
<b>KPB/CRP</b> <i>All competencies</i>	>10 a year	>10 a year	>10 a year	>10 a year	>10 a year	>10 a year
<b>OSATS</b> <i>Medical expert</i>	≥ 20	≥ 20	≥ 20	≥ 20	≥ 20	≥ 20
<b>Education (10 days a year)</b> <i>All competencies</i>	10 days	10 days	10 days	10 days	10 days	10 days
<b>Article or lecture</b> <i>Scholar</i>	Minimum of one lecture or presentation of one poster or publishing at least one article in a scientific magazine or medical journal, during the training program.					

## 5. Structure of the Training Program

The duration of the training for gynecologist is three phases of approximately two years each which together are expected to take five to six years for the majority of trainees. The duration depends on competencies acquired before the formal ObGyne training and on the personal learning curves. In this curriculum fixed time schedules are used for readability only. The goal of the training program is to produce a medical specialist who is capable of all basic activities without supervision, has specialized in one of the subspecialties, or combi-profile covering more than one subspecialty, or has qualified in a role specialization. The structure illustrating how the resident progresses is delineated in this chapter.

### 5.1 Training Program Schema

In the first two phases (approximately 4 years), a firm foundation is built in which the resident learns all the basic skills of the discipline of gynecology. This foundation forms the basis for consolidation in the last phase that usually spans two years. This phase offers an opportunity to focus. During this phase at least 40% of the time is spent in on-call shifts, general outpatient clinics and surgery. Additionally, at least 40% of the time is allocated for focusing on a therapeutic focus area and the remaining 20% of the time remains for possible role specialization.

Fig. 1: Scheme with space for training in a subspecialty

<ul style="list-style-type: none"> <li>- On call</li> <li>- Surgical skills</li> <li>- Outpatient clinic skills</li> </ul>	<ul style="list-style-type: none"> <li>- On call</li> <li>- Surgical skills</li> <li>- Outpatient clinic skills</li> </ul>
	- Role specialization
	- Therapeutic focus area
4 years <b>basic</b>	2 years intensification and focus

As a therapeutic focus area, the resident has the choice of the following sub-specializations:

- Perinatology and obstetrical management
- Benign gynecology
- Urogynecology
- Gynecological oncology
- Reproductive medicine
- Combi-profile

The combi-profile is meant for the resident that wishes a more general profile or to combine parts of the above sub-specializations, for example benign gynecology with urogynecology or reproductive medicine. In consultation with the program director(s), a program is devised that fits best with their ambitions.

#### 5.1.1 Organization of the first 4 years

For every resident the training is divided between community and academic sites. The usual resident will spend two of the first four years of training in a community hospital but the distribution of these years is not fixed; the distributions illustrated below are most common and reflect that the usual time period for this phase is four years.

##### Option 1: Organization first 4 years

Year	Place	Global content
1 <sup>st</sup> en 2 <sup>nd</sup>	General hospital	Obstetrics, basic surgery skills
3 <sup>rd</sup> en 4 <sup>th</sup>	University hospital	Outpatient clinic and intensification of skills of the first 2 years

#### Option 2: Organization first 4 years

Year	Place	Global material
1 <sup>st</sup>	General hospital	Obstetrics, basic surgical skills
2 <sup>nd</sup> en 3 <sup>rd</sup>	University hospital	Outpatient clinic and intensification of skills of the first 2 years
4 <sup>th</sup>	General hospital	Further refinement of basic surgical skills

## 5.2 Development of CanMEDS

CanMEDS has as a vision that all roles will be taught concurrently, as they are practiced concurrently and thus would be addressed in all years of the training. However, the focus of the roles differs in different phases of the training. These phases can be differentiated as follows:

- 2 year basic
  - Focus on communication, professionalism and collaboration
- 2 year intensification of basic training
  - Focus on health advocate, organization and science
- 2 year consolidation and intensification
  - Consolidation of CanMEDS roles
  - Role specialization

The specific content of the CanMEDS roles have been elaborated on based on advice from non-physician healthcare providers. To ensure that general professional competencies can be effectively imparted, residents may not be on call more than one third of the time. This will ensure that there is sufficient time for the resident to develop competencies during regular working hours.

## 5.3 Role specialization

In the last two years of the training there is room for role specialization for up to 20% of the two years. Examples of role specialization are:

<i>Patient safety</i>	<i>Science</i>
<i>Quality improvement</i>	<i>Education</i>
<i>Health care system and teams</i>	<i>Medical leadership</i>
<i>Communication and marketing</i>	<i>Financial streams</i>

Development of increased knowledge in such areas can increase the 'value' of the resident. The task of the program director is to help the resident choose a role specialization that best suits him/her. The program director is not responsible for providing the specialization, but helps the resident to find a suitable program. In cases where a resident chooses not to pursue a role specialization, this time will be spent in the standard activities.

Based on the development of the resident and their preferences for a certain role specialization, the program director and resident will determine how the last two years will be arranged. This will, of course, be different for different residents. The planning and execution of these will be recorded in the individual resident's training program. These are the requirements with which the IOP for the last two years must comply:

1. Formulate learning objectives with regard to the role specialization.
2. Delineate the training activities that will be performed in order to obtain the role specialization
3. Record how the program director and resident will evaluate the progress and levels of achievement midway and at the end.
4. Create agreements about time management and planning.

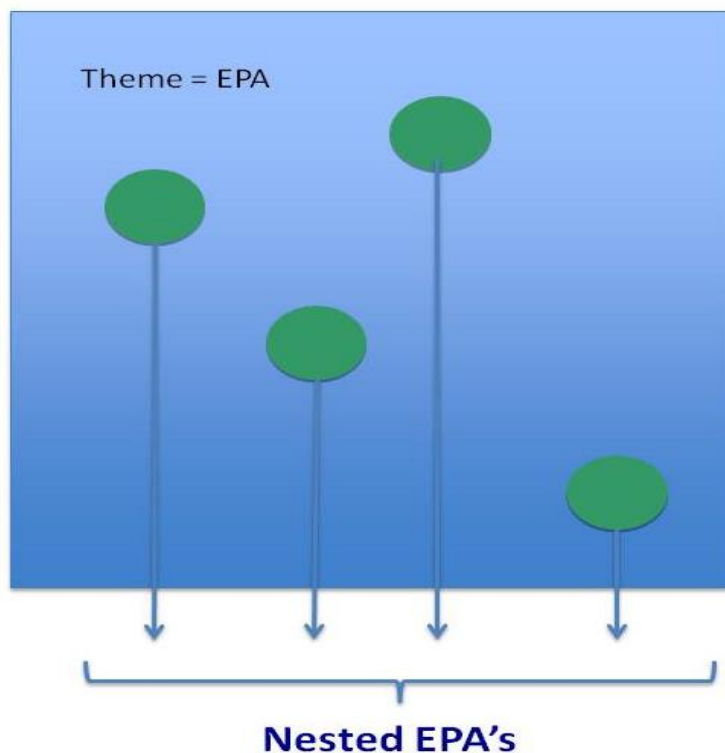
# PART II

*Themes/EPA's*

## 6. Content of the Training Program

The program consists of 28 themes: 15 basic themes and 13 for the 5 subspecialties as each subspecialty has one to three EPAs. Together these 28 themes cover the discipline of Obstetrics and Gynecology.

For each theme, the competencies are translated to sub competencies, specific to the theme. In the parlance of the educational scientist Olle ten Cate, each of the themes is an 'entrustable professional activity' (EPA), and the activities or interventions that are contained within a theme are 'nested EPAs'. The 'nested EPAs' can be procedures that have attendant risk (for example: caesarean section) or are demonstrate certain general competencies (for example: disclosing bad news such as a cancer diagnosis). This is illustrated in the figure below.



### 6.1 Statements of Awarded Responsibilities (STAR)

An essential component of a competency-based training system is a stepwise recognition of increasing responsibility in the care of patients. As a resident progresses, more professional activities can, and should, be entrusted to the resident. A Statement of Awarded Responsibility (STAR) is granted when a trainee is judged by staff to be able to carry out a task with a given amount of supervision. Whereas a first year resident might work on a STAR for *uncomplicated antenatal care* at level three (able to perform this action with limited supervision), a fourth year resident might be prepared for a STAR for a more complex theme such as *Basic Oncology* on level 4 (independently decides whether supervision is necessary and thus treats for the most part independently). This process begins with increasing independence for smaller definable components of care: the indication for, placement and repair of an episiotomy; vacuum extraction (indication, preparation and execution with good communication with the patient and her other caregivers or performance of a caesarean section. These can contribute to a STAR of the theme- *Complicated Childbirth*.

The basis of competence-based assessment is that a suitable sample of the performance of a professional activity is sufficient to assess whether the performance of the activity can be entrusted at a given level of supervision.

### 6.1.1 Competency levels

For each EPA (theme) there is gradient of competence, as shown in the table below, ranging from has knowledge of (but cannot perform) (Level 1) to able to supervise others and teach them (Level 5) . A resident is rated at a level from 1-5 on each theme and can request a STAR for levels 3 and up.

Competency level (1 to 5)	1 Has knowledge of	2 Performs with full supervision	3 Performs with limited supervision	4 Performs without supervision	5 Able to supervise others and teach them
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The training for gynecologist is composed of 20 themes. For each theme, bench marks have been set for expected competency level at two year intervals in training. The basic competencies are in green

Benchmarks for attaining levels of competency (levels 1-5) throughout training	Benchmark I Year 2	Benchmark II Year 4	Benchmark III Year 6 (sub-specialization)
Uncomplicated Antenatal care	5		
Complicated Antenatal Care	3	4	
Intrapartum care	5		
Complicated Childbirth	3	4	
Basic High Risk Childbirth	3	3	
Uncomplicated Postpartum & Newborn Care	5		
Complicated Postpartum & Newborn Care	3	4	
Basic Reproductive Medicine	2	4	
Benign Outpatient Gynecology	3	4	
Basic Surgery	3	4	
Basic Urogynecology & Pelvic floor	2	4	
Sexual Health	3	4	
Basic Oncology	2	4	
Peri – operative care	3	4	
Vulnerable elderly	3	4	
Sub-specialization Perinatology and Obstetrical Management			Separate part
Sub-specialization Benign Gynaecology			Separate part
Sub-specialization Urogynecology			Separate part
Sub-specialization Gynecological Oncology			Separate part
Sub-specialization Reproductive Medicine			Separate part

### 6.1.2 Granting a STAR.

A STAR is a documentation of entrustment for a given EPA. A formal entrustment decision is made when the competence threshold is reached and when the entrustment decision is confirmed by three staff members, a STAR is awarded and this STAR is documented in portfolio and institutional registers, allowing for inter-institutional portability of competence. Joint assessment by at least three staff is used to assess competency using the following factors:

1. Theme-dependent competency in the tasks and procedures needed for the theme. These will have been signed off in the portfolio at the given competence level (Level 3-5).
2. Sufficient clinical experience within the theme
3. Sufficient variety and number of assessments
4. Global assessment of general competencies (CanMEDS roles; communicator, collaborator, manager, scholar, health advocate and professional)
5. Educational activities and scientific activities
6. Judgment of faculty/clinical staff

In practice, once a resident feels they have fulfilled the requirements of the first five factors, he/she will make an electronic portfolio request for a higher competency level of an activity, surgery or theme. The program director assesses the request and makes the decision to grant the STAR in concert with clinical staff (number 6).

STARs render the training program transparent and protect patients, residents and the care team from substandard practice. Obtaining sufficient practical assessments of the resident is essential to the process. It is not so much the number of KPb's or OSATS that are important but how they can be collected and applied for transparent and safe training.

## 6.2 Basic EPAs/themes<sup>4</sup>

The basic themes are described in the next section, according to the seven CanMEDS roles. This is followed by a table that outlines the number of target experiences for a given theme. This number provides an indication for the basis of awarding a STAR for that particular theme. How much experience the resident should actually obtain for a STAR will differ from one resident to another, thus there are no binding numbers, but just an indication in the form of a target.

### 1.1 EPA/Theme: Uncomplicated Antenatal Care

Medical Expert /Communicator /Collaborator /Scholar/ Health Advocate/ Manager/ Professional

<i>Diagnosis and advice</i>	<ul style="list-style-type: none"><li>• Providing preconception advice.</li><li>• Counselling about prenatal diagnostic testing, pregnancy complications, intrapartum analgesia, postpartum care and breastfeeding.</li><li>• Discuss management of malpresentation, fetal growth restriction, polyhydramnios and oligohydramnios and possible rupture of membranes.</li><li>• Is familiar with electronic fetal monitoring and indications for its use.</li><li>• Assess feasibility of induction of labour.</li></ul>
<i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"><li>• Able to conduct a basic obstetrical ultrasound (fetal biometry, umbilical</li></ul>

<sup>4</sup> Gynecology/Obstetrics has chosen to use a limited number of broad Entrustable Professional Activities (15 general and 13 subspecialty), also referred to as Themes. Each of these may include multiple procedures, is mapped to all competency roles and is suitable for formal entrustment decisions, rewarded with a STAR.

	cord pulsatility index, fetal screening for most common anomalies with the exception of NT, detailed anatomical ultrasound and advanced screening for congenital anomalies.
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Obstetrical Counselling,</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Modifies obstetrical care protocols based on the current literature.</li> <li>• Knowledge of teratology.</li> <li>• Applies EBM in the practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Collaboration with primary care healthcare providers.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Participates in the obstetrical care system.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Is compliant with WGBO (Dutch Medical Treatment Contracts Act).</li> <li>• Initiates appropriate maternity care interventions.</li> <li>• Prevention by informing.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Constructive participation in integrated obstetrical care.</li> </ul>

## 1.2 EPA/Theme: Complicated Antenatal Care

<i>Diagnosis and advice &amp; Conservative treatment</i>	<ul style="list-style-type: none"> <li>• Diagnosis of and counselling about abnormal pregnancy, e.g.: hyperemesis, recurrent abortion, ectopic pregnancy, congenital anomalies, hypertensive disorders of pregnancy, intrauterine fetal death, blood loss,, abdominal trauma, diabetes in pregnancy, infection, pre-existing disease complicating pregnancy, cervical incompetence, intrahepatic cholestasis of pregnancy, multiple gestation, postdates pregnancy, pelvic complaints, blood group incompatibility, addiction and psychiatric problems, teen pregnancies and late-maternal age pregnancies.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Counselling about obstetric complications and pathology.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in the practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Participates (as a main practitioner) in multidisciplinary treatment team.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Organize transportation.</li> <li>• Participates in organizing multicentre research.</li> <li>• Assumes control in acute situations.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Management of perinatal mortality and (late) termination of pregnancy</li> <li>• Work with organizations for healthcare for pregnancies complicated by addiction and psychiatric disorders.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Provides extra counselling when necessary.</li> </ul>

## 1.3 EPA/Theme - Intrapartum Care

<i>Medical intervention Diagnosis and advice &amp; Conservative treatment</i>	<ul style="list-style-type: none"> <li>• Managing physiological childbearing including fetal monitoring.</li> <li>• Manage intrapartum fever, intrapartum bleeding, post-partum hemorrhage and meconium.</li> <li>• Understands indications for tocolysis, augmentation of labor and assisted delivery.</li> <li>• Follows the indications for pediatric consultation.</li> <li>• Managing the patient and her partner with handover to general practice.</li> </ul>
<i>Treatment requiring specific Skills</i>	<ul style="list-style-type: none"> <li>• Physical examination during labor and delivery.</li> <li>• Management of labor and delivery, including fetal monitoring.</li> <li>• Management of the third stage.</li> <li>• Repair of episiotomy and 1<sup>st</sup> and 2<sup>nd</sup> degree tears.</li> <li>• Initial care of the newborn, including resuscitation.</li> <li>• Possess adult resuscitation techniques.</li> </ul>



<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Providing patient-specific information to the patient (and her partner) about diagnoses and management.</li> <li>• Handover with team members.</li> <li>• Communicate with obstetrician when transferring a patient from general practice.</li> <li>• Communicate back to referring obstetrician and general practitioners.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Educate maternity care trainees.</li> <li>• Applies EBM in practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Participate in the multidisciplinary obstetric team.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Management of multiple delivery rooms.</li> <li>• Manage antepartum transfers.</li> <li>• Provide leadership to the obstetrical team.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Provide information for pregnant women and their partners.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Reflect on own functioning and that of the team members in the delivery rooms during the debriefing.</li> <li>• Psychiatric counseling in the delivery room.</li> </ul>

#### 1.4 EPA/Theme: Complicated Childbirth

<i>Medical intervention Diagnosis and advice &amp; Conservative treatment</i>	<ul style="list-style-type: none"> <li>• Diagnose obstetrical complications and summarize complex cases.</li> <li>• Discuss consequences for next pregnancy.</li> <li>• Provide pharmacological therapy for haemorrhage.</li> </ul>
<i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Performance of assisted -delivery including caesarean section.</li> <li>• Treat bleeding, shoulder dystocia and uterine inversion.</li> <li>• Repair 3<sup>rd</sup> and 4<sup>th</sup> degree lacerations and cervical lacerations.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Provide patient –specific information to patient (and partner) about diagnosis, management and patient organizations that may be of use.</li> <li>• Inform stakeholders (obstetrical team, obstetrician, general practitioner).</li> <li>• Delivery of bad news and grief counseling.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in the practice.</li> <li>• Educates team members.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Practices teamwork and takes appropriate control in acute situations.</li> <li>• Ensures a suitable role distribution between residents, gynecologist and differentiated gynecologist and other participants in the care network.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Triage and deal with primary, secondary and tertiary care institutions.</li> <li>• Management of multiple delivery rooms.</li> <li>• Organize the aftercare process.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Counsel patient on preventative measure for next pregnancy if applicable.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Support the patient and family during this life event.</li> <li>• Reflect on own management and experiences of events.</li> </ul>

#### 1.5 EPA/Theme Basic High Risk Childbirth

<i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Breech extraction and delivery of twin and higher order multiple gestations.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Consults supervisor appropriately.</li> <li>• Counseling about breech extraction and delivery of multiple gestation.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in the practice.</li> <li>• Participates in consortia.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Adequately distributes tasks to the team and takes control when necessary.</li> </ul>

<i>Manager</i>	<ul style="list-style-type: none"> <li>Ensures availability of adequate infrastructure (e.g. Operating theatre and pediatricians).</li> <li>Emergency skills drills with the team.</li> </ul>
<i>Health Advocate</i>	
<i>Professional</i>	<ul style="list-style-type: none"> <li>Able to maintain an overview.</li> <li>Reflect on complications.</li> </ul>

## 1.6 EPA/Theme: Uncomplicated Postpartum and Newborn Care

<i>Medical intervention Diagnosis and advice &amp; Conservative treatment</i>	<ul style="list-style-type: none"> <li>Management of the physiologic postpartum period (post vaginal birth and caesarean section) and management of the healthy newborn.</li> <li>Recognition of pathology in the postpartum period and in the newborn.</li> <li>Assessment of the immediate neonatal period and appropriate consultation with the pediatrician.</li> <li>Bring to practice, knowledge on breastfeeding and medication. Examination of the newborn.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>Deal with emotionally laden situations.</li> <li>Inform patient and partner.</li> <li>Communicate with primary care obstetrician.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>Applies EBM in the practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>Discuss the management plan with patients, nurses and obstetricians, and other members of the team.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>Arrangement for NICU care for the newborn if needed.</li> </ul>
<i>Health Advocate</i>	
<i>Professional</i>	

## 1.7 ,Theme: Complicated Postpartum and Newborn Care

<i>Medical intervention Diagnosis and advice &amp; Conservative treatment</i>	<ul style="list-style-type: none"> <li>Management of pathology in the postpartum period with e.g.: Abnormal bleeding, infection, urinary retention, suspicion of thrombo-embolic processes, vulvar hematoma, hypertension, preeclampsia and HELLP.</li> <li>Management of pathology in the newborn and appropriate paediatric consultation.</li> </ul>
<i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>Manages retained placenta.</li> <li>Manages hematoma and abscess.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>Informs patients and partner of diagnosis and prognosis.</li> <li>Delivery of bad news and grief counseling.</li> <li>Provides information about patient organizations.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>Applies EBM in the practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>Ensures a suitable role distribution between residents, gynecologist and differentiated gynecologist and other participants in the healthcare network.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>Appropriate use of the NICU-care.</li> <li>Organizes the aftercare process for parturient and newborn.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>Ensures adequate documentation and facilitate interment process.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>Demonstrates responsibility for continuity of care.</li> </ul>

## 2.1 EPA/Theme: Basic Reproductive Medicine

<p><i>Medical intervention Diagnosis and advice</i></p>	<ul style="list-style-type: none"> <li>• Displays knowledge of basic reproductive endocrinology and endocrine abnormalities that could lead to cycle disorders.</li> <li>• Applies knowledge of the causes, diagnosis and treatment of primary and secondary amenorrhea, oligomenorrhea, galactorrhea, hyperprolactinemia and hirsutism.</li> <li>• Understands prognostic factors for pregnancy, the causes and the diagnosis for male and female subfertility, risks and complications of ovulation-induction and assisted reproduction techniques.</li> <li>• Determines indications for fertility assessment and perform tests for fertility assessment and then create an appropriate management plan.</li> <li>• Understands indications for and the value of the diagnostic tests:</li> <li>• Perform a hysterosalpingography and diagnostic laparoscopy with tubal testing and then create an appropriate management plan.</li> <li>• Demonstrates global understanding of probability of on-going pregnancy, spontaneous abortion and ectopic pregnancy with the different fertility treatments.</li> <li>• Counselling of patient and partner.</li> </ul>
<p><i>Conservative treatment Treatment requiring specific skills</i></p>	<ul style="list-style-type: none"> <li>• Ovulation induction with clomiphene citrate.</li> <li>• Gynaecological ultrasound with follicle count and follicle measuring.</li> <li>• Performs HSG.</li> <li>• Hysteroscopy.</li> <li>• Diagnostic laparoscopy with methylene blue.</li> </ul>
<p><i>Communicator</i></p>	<ul style="list-style-type: none"> <li>• Provides information about the possibility of lifestyle changes and treatments.</li> <li>• Recognizes feelings of disappointment, grief or insecurity and if appropriate refer to other healthcare providers.</li> <li>• Reports back to referring provider.</li> </ul>
<p><i>Scholar</i></p>	<ul style="list-style-type: none"> <li>• Inform patients about available patient information and about patient associations.</li> <li>• Applies EBM in the practice.</li> <li>• Remains current with new techniques.</li> </ul>
<p><i>Collaborator</i></p>	<ul style="list-style-type: none"> <li>• Ensures a suitable role distribution between residents, gynecologist and differentiated gynecologist and other participants in the healthcare network</li> <li>• Adapt management to include that of other disciplines.</li> </ul>
<p><i>Manager</i></p>	<ul style="list-style-type: none"> <li>• Handles national transition agreements about treatment by primary and secondary care providers and treatments in specialized secondary and tertiary care centers.</li> </ul>
<p><i>Health Advocate</i></p>	<ul style="list-style-type: none"> <li>• Is adherent to and carries out protocols and guidelines.</li> </ul>
<p><i>Professional</i></p>	<ul style="list-style-type: none"> <li>• Determines on own position with respect to ethical dilemmas.</li> <li>• Protect own boundaries in knowledge and treatments.</li> </ul>

## 3.1 EPA/Theme: Benign Outpatient Gynecology

<p><i>Medical intervention Diagnosis and advice &amp; Conservative treatment</i></p>	<ul style="list-style-type: none"> <li>• Diagnosis and management of general gynaecological outpatient clinic problems e.g. Abnormal uterine bleeding, menopausal complaints, vaginitis/ vaginal discharge, abdominal/pelvic pain, STI screening, cervical screening, contraception, gynaecological</li> </ul>
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<i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>ultrasound and colposcopy.</li> <li>• Diagnosis and conservative therapy of uterine fibroids and assessment for embolization.</li> <li>• Diagnosis of adnexal pathology and appropriate use of MRI.</li> <li>• Diagnosis and conservative therapy of endometriosis.</li> <li>• Management of less common outpatient clinic gynaecological conditions such as breast disease and PMS.</li> <li>• Gynaecological assessment.</li> <li>• Placement of diaphragm/cervical cap, IUD, or subcutaneous contraceptive implants.</li> <li>• Performance of gynaecological ultrasound, including infusion techniques.</li> <li>• Performs colposcopy, cervical biopsy and office hysteroscopy, including treatment of smaller intracavitary lesions.</li> <li>• Treats vulvar condyloma and Bartholin's cysts.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• In the case of suspected psychosomatic components, discuss with primary care provider and patient.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in the practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Ensures a suitable role distribution between residents, gynecologists and differentiated gynecologists and other participants in the healthcare network.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Plan outpatient clinic logistics.</li> <li>• Preside at a patient meeting.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Report on STD's at the National Institute for Public Health.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Reflect on own management and experiences of events.</li> </ul>

### 3.2 EPA/Theme: Basic Surgery

<i>Medical intervention Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Utilises appropriate basic surgery techniques.</li> <li>• Surgeries: small interventions involving vulva/vagina including punch biopsy, marsupialization of Bartholin's cyst, excision of condyloma, cervical cone biopsy, dilatation and curettage by suction or sharp curette, hysteroscopic surgery including be removal of intracavitary mass or polyp, laparoscopic surgery including tubal testing, sterilisation, ectopic pregnancy and salpingostomy, cystectomy and simple adnexectomy.</li> <li>• Laparotomy with minimal adhesiolysis and simple benign adnexal surgery.</li> <li>• Thermal ablation.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Documentation of surgery.</li> <li>• Communicate with patient and relatives.</li> <li>• Pre- and post-operative debriefing with OR team.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> <li>• Remain current with new techniques.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Participate in the OR team and lead in acute situations.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Time management.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Address colleagues about undesirable behavior.</li> <li>• Utilizes, promotes and helps improve protocols and guidelines.</li> <li>• Promotes and improves patient safety.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Keeps a portfolio.</li> <li>• Deals with complications.</li> <li>• Reflects on own actions and those of others.</li> </ul>

#### 4.1 EPA/Theme: Basic Urogynecology and Pelvic Floor

<i>Medical intervention Diagnosis and advice &amp; Conservative treatment</i>	<ul style="list-style-type: none"> <li>• Diagnosis of basic pelvic floor pathology and urogynecological conditions</li> <li>• Takes a thorough history and uses appropriate questionnaires.</li> <li>• Directed physical examination for prolapse and micturition abnormalities, including Q tip test.</li> <li>• Urinalysis.</li> <li>• Provides counselling on the spectrum of treatment options.</li> <li>• Refers for specific diagnostic testing and eventual surgical treatment to colleague with a sub-specialization in urogynecology.</li> <li>• Conservative management including medication and physiotherapy.</li> <li>• Pessary fitting and on-going care.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Sexual health history.</li> <li>• Reflect with patient and partner on psychosocial effects of the problem.</li> <li>• Provide information regarding patient organizations.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in the practice.</li> <li>• Participate in consortia</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Ensures a suitable role distribution between residents, gynecologists and differentiated gynecologists and other participants in the healthcare network.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Optimization of a multidisciplinary approach.</li> </ul>
<i>Health Advocate</i>	
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Reflects on own limits of knowledge and treatment.</li> </ul>

#### 4.2 EPA/Theme: Sexual Health

<i>Medical intervention Diagnosis and advice  Conservative treatment</i>	<ul style="list-style-type: none"> <li>• Has an understanding of gynecological problems in practice that could have a negative influence on sexual function.</li> <li>• Enquires about sexual problems.</li> <li>• Takes a comprehensive sexual history.</li> <li>• Counseling of patient and partner, providing information on therapeutic possibilities.</li> <li>• Enquires about negative sexual experiences of the patient, handles this with appropriate sensitivity and places this in context of the complaints of the patient.</li> <li>• Has an understanding of the consequences of sexual violence on behavior and complaint patterns.</li> <li>• Applies simple treatment of sexual disorders.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Takes a comprehensive sexual history.</li> <li>• Reflects with patient and partner on psychosocial effects of the problem.</li> <li>• Provides information about patient organizations.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in the practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Refers to or consults with a sexologist and psychologist when indicated.</li> </ul>
<i>Manager</i>	
<i>Health Advocate</i>	
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Know how to cope with women who have experienced sexual assault.</li> <li>• Be familiar with procedures and medical examinations after sexual assault.</li> </ul>

## 5.1 EPA/Theme: Basic Oncology

<i>Medical intervention Diagnosis and advice</i>	<ul style="list-style-type: none"> <li>• Diagnoses premalignant gynaecological conditions.</li> <li>• After assessment, determine management and follow-up.</li> <li>• Diagnoses malignancy and knows and is able to apply guidelines for referral.</li> <li>• For complex diagnoses or policy related cases, ensures appropriate consultation with or referral to colleagues with sub-specialization in oncology (GOA).</li> </ul>
<i>Conservative treatment</i>	<ul style="list-style-type: none"> <li>• Provides palliative pain management or refers the patient if indicated.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Provides information about diagnosis and treatment processes of gynecological malignancies.</li> <li>• Conveys bad news, recognize grieving and refer when necessary,</li> <li>• Copes appropriately with grief, fear or insecurity and anger of patients and partner.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Informs patients about available patient information and about patient associations.</li> <li>• Applies EBM in the practice</li> <li>• Participates in consortia.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Participates in multidisciplinary team care including primary care providers. and able to take the role of case manager.</li> <li>• Ensures a suitable role distribution between residents, gynecologists and gynecologists (GOA) and other participants in the healthcare network.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Is familiar with and follow the existing consult structures and agreements with regard to referral.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Deals with requests for euthanasia and palliative sedation.</li> <li>• Deals with different beliefs around sickness and life.</li> <li>• Works with transition care possibilities.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Be able to handle with patients with an oncological deviation.</li> <li>• End of life/terminal care.</li> <li>• Reflect on own actions and experiences.</li> </ul>

## 5.2 EPA/Theme: Peri-operative care

<i>Medical intervention Diagnosis and advice</i>	<p><u>Pre-operative care:</u></p> <p>Puts into practice knowledge about indications- and contra indications, alternatives to surgery, risks and dis- advantages of the gynaecological surgery, and prophylaxis treatments with diverse surgeries.</p> <ul style="list-style-type: none"> <li>• Utilizes the ASA classification for anaesthetic risk.</li> </ul>
<i>Conservative treatment</i>	<p><u>Postsurgical care:</u></p> <ul style="list-style-type: none"> <li>• Puts into practice knowledge of the post-operative fluid balance and gastrointestinal function.</li> <li>• Establishes, in a (multidisciplinary) team discussion, a uniform of policy with regard to postsurgical mobilisation, medication, pain relief, anticoagulation and feeding and ensures it is followed.</li> <li>• Determines discharge policy in concert with postoperative care team.</li> <li>• Visits postsurgical patients.</li> <li>• Recognizes symptoms of postsurgical complications and determines management.</li> <li>• Wound assessment.</li> <li>• Diagnoses and treats an acute abdomen or fever.</li> <li>• Is familiar with and is able to discuss the advantages and disadvantages of blood transfusion.</li> <li>• Is familiar with the indications for admission to Intensive Care.</li> </ul>

<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Provides adequate documentation.</li> <li>• Deals appropriately with different beliefs about blood transfusion.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Engages in a multidisciplinary collaboration with anaesthetists and other consultants.</li> <li>• Ensure multidisciplinary input into rounds</li> <li>• Possesses facilitation skills.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Develops uniform policies with the team and adheres to them.</li> <li>• Efficient organization of healthcare management.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Carries out and adheres to protocols and guidelines.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Deals with complications and complaints.</li> <li>• Reflects on own knowledge and skills and operative limitations.</li> <li>• Ensures time-out and debriefing procedures.</li> </ul>

### 6.1 EPA/Theme: Vulnerable Elderly (component of Themes 4 and 5)

<i>Medical intervention Diagnosis and advice</i>	<ul style="list-style-type: none"> <li>• Is vigilant for multiple co-morbidities and poly pharmacy that may underlie and complicate gynaecological problems.</li> <li>• Is aware of atypical disease presentations and increased vulnerability.</li> <li>• Counsels about balancing treatment options and quality of life taking into account comorbid disease.</li> </ul>
<i>Conservative treatment</i>	<ul style="list-style-type: none"> <li>• Offers conservative treatment, including medication and physiotherapy.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Reaches consensus about treatment limitations with patient and treatment team.</li> <li>• Customizes assessments taking into account comorbidities (impaired hearing, impaired vision, reduced mobility and cognitive decline).</li> <li>• Tailor information to patient and relatives.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> <li>• Participates in consortia.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Participates in multidisciplinary approaches in inpatient and outpatient settings.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Ensures adequate outpatient aftercare.</li> <li>• Provides care to improve the quality of life.</li> </ul>
<i>Health Advocate</i>	<ul style="list-style-type: none"> <li>• Works with relevant disciplines and organizations around elderly care.</li> <li>• Appropriately handles different beliefs around sickness and end of life.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Reflects on own role in elder care.</li> </ul>

### 6.3 EPAs/Themes vs. Targets

EPAs/Themes	Target
<i>Uncomplicated Antenatal Care</i>	20 half days - low risk office hours One week rotation in primary care
<i>Complicated Antenatal Care</i>	20 half days - high risk office hours 150 x biometry/global US screening 100 x at level 4. 10 x prenatal advanced ultrasound screening
<i>Uncomplicated Childbirth</i>	>50 deliveries
<i>Complicated Childbirth</i>	50 caesarean sections + 10 at level 4 30 vacuum extractions + 20 at level 4 15 manual placental removals + 5 at level 4 15 repairs of 3 <sup>rd</sup> /4 <sup>th</sup> degree tears
Basic High Risk Childbirth	25 multiple deliveries 5 vaginal breech births
Uncomplicated Postpartum & Neonatal Care	-
Complicated Postpartum & Neonatal Care	-
Basic Reproductive Medicine	15 half days - indication determination of fertility problems and treatment with clomiphene citrate 50 x ultrasound- follicle count
Benign Outpatient Gynecology	50 half days - outpatient care gynecology 120 x gynecological US. 100 x at level 4
<i>Basic Surgery</i>  <i>Sufficient surgical experience is essential!!</i>  <i>For some rare operations it is advisable to schedule two residents!</i>	40 x diagnostic laparoscopy + 10 x at level 4 10 x laparoscopic adhesiolysis 20 x salpingectomy including ectopic pregnancy 20 x cystectomy + 5 x at level 4 40 x diagnostic hysteroscopy + 10 x at level 4 10 transcervical removal of a polyp + 5 x level 4 10 x transcervical removal of a myoma type 1 10 x transcervical removal of a myoma type 2 10 x Bartholin's gland marsupialization + 5 x at level 4 5 x minor treatment of vulva 15 x prolapse surgery 20 x cone biopsy + 5 x at level 4 20 x dilatation & curettage + 10 x at level 4 5 x participation in myomectomy 40 x any form of hysterectomy - partly done 15 x abdominal incision other than caesarean section
<i>Basic Urogynecology &amp; Pelvic Floor</i>	50 outpatient clinic urogynecology patient encounters
<i>Sexual Health</i>	5 hours of participation in sexual health office hours
<i>Basic Oncology</i>	10 half days gynecological oncology outpatient care
<i>Peri-operative care</i>	-
<i>Vulnerable elderly</i>	-



## 6.4 Structured Formal Education

The NVOG has a tradition of varied theoretical courses. On one hand, there are national courses for residents that cover an important area. These courses are designed and run by enthusiastic members of the NVOG, and most are supported by the relevant groups of the NVOG. The Education Committee requires that these courses should meet 2013 standards. There are six mandatory courses: SAFER (or a comparable course), fetal monitoring, MOET (Managing Obstetric Emergencies and Trauma), performance of ultrasound, basic surgical skills ( $\alpha$ -course) and applied anatomy. In addition to these, courses may be chosen from a recommended package.

On the other hand, there are annual courses in Vught with two identical days for all residents. A variable program is offered here, with fixed parts consisting of communication, consensus conversation on content related subjects and discussion groups. A separate committee (Committee Decourse Education) organizes these national days.

In addition to the national education courses, the cluster offers a variable educational program for an average of one day every two months:

This is an evolving process.

1. For all themes/EPAs it should be determined how the learning process could be optimally facilitated: by personal study, by experience and education in the workplace, by education in the cluster about topics that transcend specialty-specific education or by national or international courses. Where gaps exist, new education should be developed.
2. There should be education offered for all general competencies. Currently, the competency 'medical expert' is privileged and the other competencies are relatively marginalized. Education about general competencies that are not specialty specific should be coordinated with other scientific associations. Initiatives should be undertaken in different forums to offer a broader course selection addressing these transcending general competencies.
3. Courses should, if possible, offer integrated competencies so they may be placed in the context where they will be applied. This is of particular importance for acute situations. During the MOET (managing obstetric emergencies and trauma) course for example, collaboration between colleagues and other disciplines is emphasized in practice and discussions.
4. Thematic education can be supplemented by variable programs to address current developments.
5. E learning offers the possibility of expanding and making more accessible our learning armamentarium. We are currently collaborating with the Education Committee to explore e-learning options.
6. The resident deserves the opportunity to compose a customized education package. Progress of competency in each theme/EPA should be assessed in the portfolio on a regular basis, and courses used to supplement workplace learning to ensure sufficient progress. The courses are of particular importance in the early stages to solidify a theoretical foundation. To reach level 3 of competency (treats with limited supervision) the available related course education should be followed. Resident-specific course selection leading to a higher competency level by intensification of course education or international courses is highly recommended.

## 6.5 Themes of the Sub-Specialization Years (intensify and focus)

The subspecialty themes are described in the next tables, according to the seven CanMEDS roles. Unlike the basic themes there are no target numbers provided; these can be set in consultation with the subspecialty.

### 6.5.1 Subspecialty Theme - Perinatology and Obstetrical Management

#### EPA/Theme: Preconception Advice and Care

<i>Medical intervention Diagnosis and advice Conservative treatment &amp; Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Gives preconception advice based on the most recent literature.</li> <li>• Is a helpful source of medical information for the medical community and maintains the quality of preconception counseling in the group.</li> <li>• Offers treatment when necessary.</li> <li>• Utilizes a multidisciplinary approach to improve the prognosis of future pregnancies.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Counsels adequately about risks and probabilities and provides documentation for the patient and for members of the treatment team.</li> <li>• Makes the patient aware of the existence of patient associations.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> <li>• Plays a regular educational role for the treatment team and partnership.</li> <li>• Contributes to the development of (local) guidelines.</li> <li>• Is cognizant and becomes capable of new (treatment) possibilities.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Takes part in and provides where appropriate a multidisciplinary approach.</li> <li>• Ensures that protocols and checklists are used.</li> <li>• Provides a preconception counseling network.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Organizes patient discussions and patient- centered office hours.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>• Makes optimal use of a network of professionals from the medical sector and other care-sectors that are involved in preconception advice and care.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Knows own limits.</li> <li>• Records competence in the portfolio.</li> </ul>

#### EPA/Theme: Prenatal Screening and Diagnosis

<i>Medical intervention Diagnosis and advise Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Gives advice regarding prenatal diagnosis based on the most recent literature.</li> <li>• Is a helpful source of medical information in the medical community and maintains the quality of prenatal screening counseling in the group.</li> <li>• Evaluation of nuchal translucency, fetal ultrasound screening, advanced ultra-sound and invasive prenatal testing.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Counsels adequately about risks, probabilities and abnormalities.</li> <li>• Pays attention to emotional aspects of bad news and provides documentation for the patient and members of the treatment team.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> <li>• Contributes to the development of (local) guidelines.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Ensures a robust consultation with the Department of Clinical Genetics.</li> <li>• Ensures the use of protocols and checklists.</li> <li>• Has a network for issues about complex cases.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Offers a flexible and patient centered care schedule</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>• Provides expert advice for obstetricians in the region.</li> <li>• Follows developments in the regulations about screening and the termination of pregnancy.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Is cognizant of the ethical discussion and discusses ethical issues in the broader group.</li> </ul>

## EPA/Theme: Obstetrical Management

<i>Medical intervention Diagnosis and advice</i>	<ul style="list-style-type: none"> <li>• Gives advice regarding complex medical issues during pregnancy.</li> <li>• Uses the most recent literature regarding pathological pregnancies.</li> <li>• Is a helpful source of medical information for the medical community</li> <li>• Maintains the quality of prenatal counseling within the group.</li> </ul>
<i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Is able to execute a wide variety of obstetric manoeuvres.</li> <li>• Organizes local drills for their own team, that complement national courses (team includes pediatrics, OR and NICU).</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Communicates effectively and in a timely fashion with members of the treatment team.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> <li>• Contributes to the developments of (local) guidelines.</li> <li>• Contributes to education of regional obstetricians.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Ensures robust consultation between primary, secondary and tertiary providers.</li> <li>• Ensures that protocols and checklists are used.</li> <li>• Shows understanding of 'crew resource management' and provides advice to improve team functioning.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Shows an understanding of the organization of national obstetric care.</li> <li>• Ensures a recognizable case manager for each obstetric patient.</li> <li>• Organizes obstetric care as a transitional continuum with a clear structure.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>• Makes use of audits.</li> <li>• Provides relevant information about the patient to general practitioners and specialists involved in her care.</li> <li>• Fosters an atmosphere of respect and openness between different professionals in the obstetric care continuum.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Maintains careful records of the results of obstetrical care in his/her center and compares these to national and international reports for the purpose of quality improvement.</li> <li>• Reflects on own actions and those of others in the team.</li> </ul>

## 6.5.2 Subspecialty Theme - Reproductive Medicine

### EPA/Theme: Endocrinology and Ovulation Induction

<i>Medical intervention Diagnosis and advice</i>	<ul style="list-style-type: none"> <li>• Investigates complex endocrine disorders of the menstrual cycle, including primary amenorrhea.</li> <li>• Utilizes imaging of the pituitary and/or adrenal regions if necessary.</li> <li>• Provides advice in cases of hirsutism and hyperprolactinemia.</li> <li>• Determines indication for laparoscopic ovarian drilling.</li> <li>• Determines the appropriate type of ovulation induction based on indications.</li> </ul>
<i>Conservative treatment</i>	<ul style="list-style-type: none"> <li>• Is able to perform a variety of types of ovulation induction</li> <li>• Treats ovarian hyperstimulation syndrome (OHSS).</li> <li>• Treats premature ovarian failure</li> <li>• Has an advisory role in the treatment of obesity.</li> <li>• Provides counsel on sexual disorders that impact fertility.</li> <li>• Treats complex peri-menopausal and post-menopausal problems.</li> <li>• Counsels about complex contraceptive issues such as for co-morbidities</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Counsels adequately about probability and risks.</li> <li>• Recognizes and addresses psychosocial problems.</li> <li>• Counsels about lifestyle.</li> </ul>

<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in the practice.</li> <li>• Regularly provides education for the treatment team and partnership.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Leads the treatment team.</li> <li>• Ensures that protocols and checklists are used.</li> <li>• Has a network of reproductive endocrinologists to consult for difficult cases.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Offers a flexible and patient centred care schedule.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>• Disseminates information about cycle disorders to patients.</li> <li>• Contributes to anti-obesity programs.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Knows own limits.</li> <li>• Reports treatment results to (inter-)national bodies.</li> </ul>

### EPA/Theme: Assisted Reproduction

<i>Medical intervention</i> <i>Diagnosis and advice</i>  <i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Determines indications for IUI, IVF or fertility-improving surgery.</li> <li>• Provides counseling on ICSI.</li> <li>• Refers judiciously for micro/percutaneous semen aspiration, testicular semen extraction and pre-implantation genetic diagnosis and testing for genetic disorders</li> <li>• Is able to counsel and refer if needed for utilization of donor gametes, surrogate pregnancy and fertility preservation.</li> <li>• Performs IUI, IVF-cycle stimulation and ovum retrieval.</li> <li>• Treats complications such as OHSS and infections</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Counsels adequately about probabilities and risks.</li> <li>• Discusses ethical aspects of care.</li> <li>• Recognizes psychosocial problems and refers if necessary.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Leads the treatment team.</li> <li>• Ensures that protocols and guidelines are used.</li> <li>• Has a network within the assisted reproduction community and good contacts with at least one center.</li> <li>• Collaborates with the patient's primary care provider.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Offers a flexible and patient centred care schedule.</li> <li>• Takes care of psychological counseling.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>• Disseminates infertility information to couples who wish children and infertility patients.</li> <li>• Contributes to programs that help women exercise their reproductive options in a timely manner.</li> <li>• Remains current about relevant legislation and regulations.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Knows own limits.</li> <li>• Reports treatment results to (inter-)national bodies.</li> </ul>

### EPA/Theme: VPG 'Fertility Improving Surgery'

<i>Medical intervention</i> <i>Diagnosis and advice</i>  <i>Conservative treatment</i>  <i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Determines indications for fertility improving surgery.</li> <li>• Provides counseling on advantages and disadvantages of surgical therapies.</li> <li>• Initiates pharmacological treatment in cases of endometriosis. <b>Performs independently( Level 4)</b></li> <li>• Laparoscopic treatment of grade 1 and 2 endometriosis, removal of minor endometriomas, LEO, salpingectomy for hydrosalpinx. <b>Performs under (limited) supervision' (Level 2-3)</b></li> <li>• Fertility improving tubal surgery, treatment of grade 3 and 4 endometriosis, treatment of leiomyoma.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Obtains informed consent.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> </ul>

<i>Collaborator</i>	<ul style="list-style-type: none"> <li>Collaborates with colleagues with more appropriate surgical skills to optimize quality of care.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>Consults about complex surgery with specialized centers.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>Contributes inform patients information.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>Knows own limits.</li> <li>Maintains a registry of complications.</li> </ul>

### 6.5.3 Subspecialty Theme - Benign Gynecology.

#### EPA/Theme: Office Gynecology

<i>Medical intervention</i>	<ul style="list-style-type: none"> <li>Achieved broad diagnostic expertise during earlier phases of the training, but progresses to level 5 in this field of interest.</li> </ul>
<i>Diagnosis and advice</i>	<ul style="list-style-type: none"> <li>Is a helpful source of medical information the medical community and maintains the quality of diagnosis in the group.</li> </ul>
<i>Conservative treatment</i>	<ul style="list-style-type: none"> <li>Utilizes the latest data on optimal conservative management of uterine bleeding, vaginal discharge, PID, abdominal/pelvic pain, leiomyoma, adnexal pathology, endometriosis, contraceptives, benign and premalignant neoplasms of the vulva, vagina and cervix, abnormalities of early pregnancy and pediatric gynaecology.</li> </ul>
<i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>Achieved these skills this in the earlier phases of the training, but improves them with the addition of more specific techniques such as hysteroscopic sterilization.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>Obtain informed consent.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>Applies EBM in practice.</li> <li>Regularly provides education for the treatment team and partnership.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>Effectively deploys residents in clinic.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>Develops and maintains a clinic for rapid diagnosis of cute problems such as abnormal uterine bleeding.</li> <li>Creates a network of professionals for the treatments of complex issues.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>Ensures adequate patient education.</li> <li>Monitors for, and addresses, unnecessary treatment.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>Knows own limits.</li> </ul>

#### Theme – Sexual Health, Menopause and Psychosomatic Complaints

<i>Medical intervention</i>	<ul style="list-style-type: none"> <li>Achieved broad diagnostic expertise during earlier phases of the training, but progresses to level 5 in this field of interest.</li> </ul>
<i>Diagnosis and advice</i>	<ul style="list-style-type: none"> <li>Is a helpful source of medical information for the medical community and maintains the quality of diagnosis in the group.</li> </ul>
<i>Conservative treatment</i>	
<i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>Sexual dysfunction, climacteric problems, PMS, treatable psychosomatic gynecological complaints.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>Discuss sensitively these poorly -understood and difficult to treat complaints.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>Applies EBM in practice.</li> <li>Provides education within the treatment team and partnership</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>Takes an appropriate role in multidisciplinary meetings with primary and secondary care providers.</li> <li>Ensures a well-functioning chain of care including connection with primary care providers.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>Develops and maintains an outpatient clinic for chronic abdominal/pelvic pain and psychosomatic complaints.</li> </ul>

	<ul style="list-style-type: none"> <li>Creates a network of professionals for the treatment of complex problems.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>Is a strong advocate for patients with poorly-understood or chronically difficult-to-treat complaints.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>Knows own limits.</li> </ul>

### EPA/Theme: Operative Skills

<i>Medical intervention</i>  <i>Diagnosis and advice &amp; treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>Is able to choose the most appropriate surgical option. <b>Performs independently( Level 4)</b></li> <li>Laparoscopic, vaginal and abdominal hysterectomy.</li> <li>Hysteroscopic endometrial resection.</li> <li>Drainage of tuboovarian abscess (TO).</li> <li>Hysteroscopic myoma resection (type 0-1(&lt; 4cm) and type 2(&lt; 3cm)).</li> <li>Myomectomy by laparotomy.</li> <li>Laparoscopic treatment of endometriomas.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>Ensures adequate documentation for patients and the team about risks and success rates of treatment.</li> <li>Oversees the informed consent procedure for complex surgery.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>Applies EBM in practice.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>Makes optimal use of protocols and checklists.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>Ensures a well-functioning chain of care including communication with primary care providers.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>Watches for, and addresses, unnecessary treatment.</li> <li>Supervises carefully the recording of treatments, results and complications.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>Knows the limits of own knowledge and skills.</li> <li>Keeps track of treatments and reflects on these regularly in comparison to national results.</li> </ul>

## 6.5.4 Subspecialty Theme - Urogynecology

### EPA/Theme: Lower Urinary Tract

<i>Medical intervention Diagnosis and advice</i>  <i>Conservative treatment</i>  <i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>Achieved broad diagnostic expertise during earlier phases of the training, but progresses to level 5 in this field of interest.</li> <li>Is a helpful source of medical information to the medical community and maintains the quality of diagnosis in the group.</li> <li>Recognizes vulnerable elderly women and acts according to the principles of geriatric care, consulting with an internist-geriatrician or specialist geriatrician and a general practitioner as necessary.</li> <li>Is a leader in the utilization of questionnaires and checklists in the diagnosis of urogynecological problems in the community.</li> <li>Able to utilize and interpret cystograms, urodynamic studies, transperineal ultrasound and imaging of the upper urinary tract.</li> <li>Can measure strength and motility of the pelvic floor.</li> <li>Considers neurological disorders in the differential diagnosis.</li> <li>Is cognizant of contributing problems such as polypharmacy.</li> <li>Is able to appropriately refer a patient to pelvic floor physiotherapist.</li> <li>Is able to use pharmacological therapy for treatment of incontinence and is a source of information on such treatment for the treating team.</li> </ul> <p><b>Functions at Level 4:</b></p> <ul style="list-style-type: none"> <li>Placement of midurethral sling, anterior vaginal wall repair.</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>Is able to counsel about risks and benefits of complex operations.</li> <li>Able to counsel on probabilities.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>Participates in scientific research locally and in the consortium.</li> <li>Attends at least one internationally accredited urogynecology congress.</li> <li>Presents a poster or oral presentation on urogynecology</li> <li>Regularly provides education within the treatment team and partnership</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>Pays a major role in the urogynecology treatment team.</li> <li>Collaborates with the patient's primary care providers.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>Is part of a network of urogynecologists.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>Is aware of the specific incontinence problems of vulnerable elderly.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>Knows limits of own abilities.</li> <li>Keeps track of treatments and reflects on these regularly in comparison to national results.</li> </ul>

### EPA/Theme: Prolapse

<i>Medical intervention Diagnosis and advice</i>  <i>Conservative treatment</i>  <i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>Achieved broad diagnostic expertise during earlier phases of the training, but progresses to level 5 in this field of interest.</li> <li>Is a source of information for the medical community and maintains the quality of diagnosis in the group.</li> <li>Utilizes questionnaires and checklists in the diagnosis of prolapse problems in the community.</li> <li>Is able to assess pelvic floor strength and motility.</li> <li>Recognizes vulnerable elderly women and acts according to the principles of geriatric care, consulting with an internist-geriatrician or specialist geriatrician and a general practitioner as necessary.</li> <li>Is able to appropriately refer a patient to pelvic floor physiotherapist.</li> </ul> <p><b>Functions at Level 4:</b> Vaginal Hysterectomy, Anterior/posterior vaginal repair. Manchester-Fothergill, ability to manage difficult pessary cases</p> <p><b>Functions at Level 2-3:</b> placement of vaginal mesh, sacrospinous fixation.</p>
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<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Able to counsel about risks and benefits of complex operations</li> <li>• Able to counsel about issues specific to the elderly.</li> <li>• Able to discuss complications.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> <li>• Regularly provides education within the treatment team and partnership</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Plays a major role in the prolapse treatment team.</li> <li>• Collaborates with the patient's primary care providers.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Knows how to establish a care path and ensure it is followed.</li> <li>• Part of a network of pelvic specialists.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>• Advocates for the elderly with multiple co-morbidities.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Knows the limits of own abilities.</li> <li>• Keeps track of treatments and reflects on these regularly in comparison to national results.</li> </ul>

### EPA/Theme: Colorectal

<i>Medical intervention</i> <i>Diagnosis and advice</i>  <i>Conservative treatment</i>  <i>Treatment requiring specific skills</i>	<ul style="list-style-type: none"> <li>• Has readily accessible knowledge of, and experience in the most common diseases that impact passage of stool, fecal continence and rectal prolapse.</li> <li>• Is a source of information for the medical community and maintains the quality of diagnosis in the group.</li> <li>• Utilizes questionnaires and checklists in the diagnosis of colorectal problems.</li> <li>• Recognition and diagnosis of recto-vaginal fistula.</li> <li>• Able to utilize and interpret anorectal function tests, (video) defecography and endoanal ultrasound.</li> <li>• Able to assess the strength and motility</li> <li>• Considers neurological disorders in the differential diagnosis (spina bifida, MS, Parkinson's, spinal damage, neuropathy).</li> <li>• Able to appropriately refer a patient to pelvic floor physiotherapist.</li> <li>• Able to utilize pharmacological therapy and enemas to improve fecal continence.</li> </ul> <p><b>Functions at level 4:</b></p> <ul style="list-style-type: none"> <li>• Repair of fresh 3<sup>rd</sup> and 4<sup>th</sup> degree tears, transvaginal rectocele and enterocele repair.</li> </ul> <p><b>Functions at level 2:</b></p> <ul style="list-style-type: none"> <li>• Abdominal repair of rectocele and enterocele = anterior rectopexia</li> </ul>
<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Able to counsel about risks and benefits of complex operations.</li> <li>• Able to counsel about probabilities.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Applies EBM in practice.</li> <li>• Regularly provides education within the treatment team and partnership</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Plays a major role in the colorectal treatment team.</li> <li>• Collaborates with the patient's primary care providers.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Knows how to establish a multidisciplinary team and how to maintain it.</li> <li>• Part of a network of anorectal practitioners.</li> </ul>
<i>Health advocate</i>	<ul style="list-style-type: none"> <li>• Advocates for the elderly with fecal incontinence problems.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Knows the limits of own abilities.</li> <li>• Keeps track of treatments and reflects on these regularly in comparison to national results.</li> </ul>



### 6.5.5 Subspecialty Theme - Gynecological Oncology (GOA).

<p><i>medical intervention pre-malignancies (CIN/VIN/VIAN and endometrial hyperplasia) Diagnose and advice</i></p>	<ul style="list-style-type: none"> <li>• Diagnoses accurately premalignant gynecological conditions.</li> <li>• Utilizes appropriate pharmaceutical therapy for premalignant gynecological conditions.</li> </ul>
<p><i>Conservative treatment treatment requiring specific skills Endometrial carcinoma Diagnosis and advice</i></p>	<ul style="list-style-type: none"> <li>• Performs both colposcopy and vulvoscopy with biopsy when needed.</li> <li>• Performs not only ablation of the cervical transformation zone but also 'cold knife' conisation.</li> <li>• Diagnoses accurately patients with endometrial carcinoma.</li> <li>• Recognizes patients who may have are at risk of a higher stage disease and consults with the Integraal Kankercentrum Nederland (IKNL).</li> <li>• Refers according to the guidelines for radical surgery or lymphadenectomy.</li> <li>• Reviews pathology of all patients who had an INKL consult for consideration of adjuvant treatment.</li> <li>• Ensures follow up of treated patients.</li> <li>• Offers an open or laparoscopic approach to hysterectomy + BSO according to national guidelines.</li> </ul>
<p><i>Treatment requiring specific skills Vulvar carcinoma Diagnosis and advice</i></p>	<ul style="list-style-type: none"> <li>• Recognizes and diagnoses vulvar carcinoma by biopsies.</li> <li>• Performs initial consultation.</li> <li>• Refers patient to central hospital for treatment after diagnosis.</li> <li>• Ensures follow up of treated patients</li> </ul>
<p><i>Cervical carcinoma Diagnosis and advice Conservative treatment</i></p>	<ul style="list-style-type: none"> <li>• Diagnoses cervical carcinoma then performs the initial counseling and refers to central hospital for staging and treatment after diagnosis.</li> <li>• Performs follow-up with particular attention to psycho-sexual side-effects after treatment.</li> <li>• Refers when appropriate for consideration of radiotherapy or chemotherapy to a regional central hospital.</li> </ul>
<p><i>Ovarian carcinoma Diagnosis and advice Treatment requiring specific skills</i></p>	<ul style="list-style-type: none"> <li>• Investigates possible ovarian carcinoma, including MRI and the consults with a gynecological oncologist from the central hospital for protocol-based treatment recommendations.</li> <li>• Ensures follow up of treated patients</li> <li>• Able to monitor for recurrence or progression.</li> <li>• Able to assess physical as well as psychosexual sequelae of the disease or treatment.</li> <li>• Recognizes atypical grief reactions and refers if necessary.</li> <li>• Shows insight in the opportunities of other medical counselors.</li> <li>• If surgical debulking or staging is required, is able to perform the surgery in the redirecting hospital, in co-operation with the gynecological oncologist.</li> </ul>
<p><i>Gestational Trophoblastic Disease Diagnosis and advice Conservative therapy</i></p>	<ul style="list-style-type: none"> <li>• Diagnoses gestational trophoblastic disease and gives appropriate treatment advice.</li> <li>• Performs thorough follow-up and recognizes risk patterns for recurrence.</li> <li>• Utilizes methotrexate therapy when indicated.</li> <li>• Recognizes the moment of transition from curative treatment to palliative treatment and acts accordingly.</li> <li>• Utilizes palliative pain-medication or refers the patient accordingly.</li> </ul>
<p><i>Palliation Diagnosis and advice</i></p>	

<i>Communicator</i>	<ul style="list-style-type: none"> <li>• Communicates effectively with referring caregivers, co-practitioners and central hospitals.</li> <li>• Provides patients with the correct information about the diagnosis and treatment course for premalignant gynecological disease.</li> <li>• Implements the switch from curative to palliative care smoothly.</li> <li>• Capable of an appropriate bad-news conversation.</li> <li>• Informs patients about available patient information and about patient associations.</li> </ul>
<i>Scholar</i>	<ul style="list-style-type: none"> <li>• Works according to EBM guidelines.</li> <li>• Offers eligible patients enrollment in ongoing studies.</li> </ul>
<i>Collaborator</i>	<ul style="list-style-type: none"> <li>• Applies as much as possible the national or regional protocols of diagnosis, stage classification and treatments.</li> <li>• Takes a central role within the hospital in the diagnosis and treatment of patients with possible premalignant gynecological disease.</li> <li>• Takes the role of the case manager.</li> <li>• Consults for complex diagnosis or management- related cases effectively with Gynecological Oncological consultant at the central hospital.</li> <li>• Participates in regional IKNL meetings.</li> </ul>
<i>Manager</i>	<ul style="list-style-type: none"> <li>• Able to respond to requests for euthanasia and palliative sedation.</li> <li>• Applies transition care possibilities effectively.</li> <li>• Follows the principles of good eldercare.</li> </ul>
<i>Professional</i>	<ul style="list-style-type: none"> <li>• Able to cope with patients with an oncological deviation.</li> <li>• Recognizes substandard treatment.</li> <li>• Responds to grief, fear, insecurity and anger on the part of patients or their partners with professional behavior.</li> <li>• Copes professionally with different beliefs around sickness and the end of life.</li> <li>• Keeps track of treatment outcomes and reflects on these regularly in comparison to national and international results.</li> <li>• Reflects on own treatment and experience.</li> <li>• Knows boundaries and regional limits of treatment possibilities.</li> </ul>

# PART III

*Operationalization in practice*

## 7. Operationalization of BOEG

### 7.1 From a National to a Local Curriculum

The national curriculum BOEG offers an opportunity for local program directors (in coordination with their cluster) to structure their own training. This allows for region-specific adaptation to the locale and number of residents in each given training program which makes local implementation of the curriculum feasible, but places a significant responsibility on the program director and/or training cluster. Variance in training is inevitable, and indeed may be preferable, but there basic rules and guidelines for every training program:

- During the training, all themes will be addressed
- A minimum number of assessments will be completed to ensure the development of the resident is supported by regular feedback.
- Timing, frequency and overall structure of evaluations or discussions must comply with the guidelines (see appendix for the guidelines)
- The portfolio of the resident is the starting point for progress evaluations and final assessments.

The training cluster is responsible for:

- Dividing the training into rotations
  - rotations could be structured as modular or longitudinal learning
    - a module is a demarcated period consisting of a limited number of themes
    - Longitudinal learning is over a longer period, taking place in multiple workplaces and covering multiple themes.
- Connecting themes to rotations
- Deployment of different feedback and assessment instruments at different instances.
- Professional development of the program directors and clinical educators.

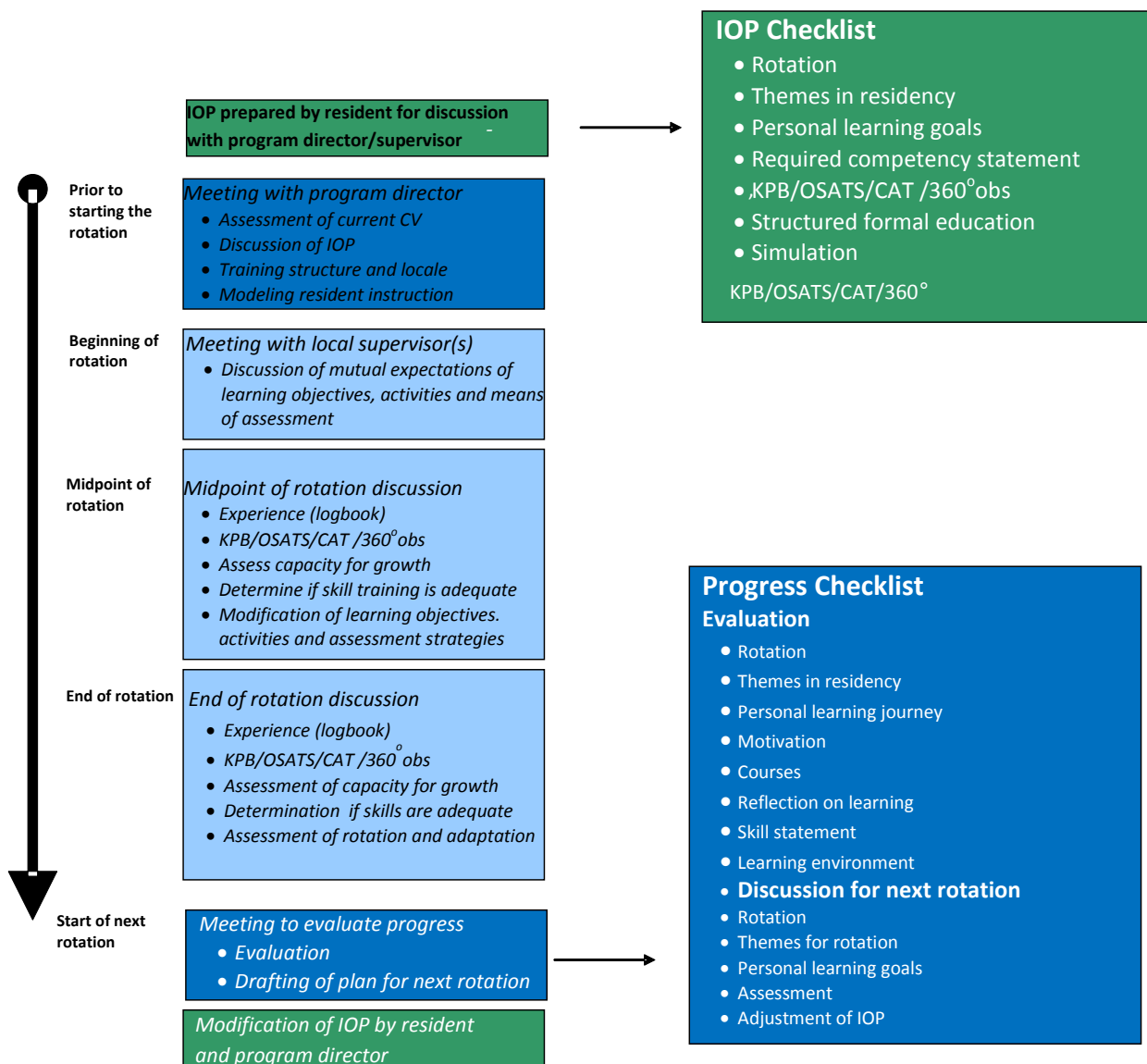
This results in a local/regional training program in which training is described in detail and the national framework is protected and given shape. The training will, of course, comply with minimum requirements, but will have unique content determined by the overview for each year of training (or part of it). This overview will delineate which themes are addressed, which rotations are available, what the goals of each rotation are, the level that should be met and which feedback and assessments will take place. (the test-matrix is shown on page 23). The training program will have local relevance .

### 7.2 From Local Curriculum to Individual Training Program

The local training program forms the basis for the individual training program (in Dutch: **IOP**). The goal of the IOP is to provide a framework and address the content of the training, and is rooted in the needs of the resident (strengths/weaknesses, areas for improvement, hopes and obligations). The training schedule and agreements made between program director and resident are recorded in the IOP, making it a fundamental part of the portfolio.

### 7.3 Resident Evaluation Structure

The figure below represents the overall guidance structure of the individual resident during his/her training, covering the areas to be discussed during progress evaluations and with whom (in dark blue are the evaluations with the program director, in light blue are the evaluations with the faculty primarily responsible for the rotation (supervisor)).



## 7.4 Training in Quality Improvement

In addition to the implementation of the local curriculum, each group of program directors is expected to work with a quality improvement system. This quality improvement cycle begins with systematic evaluation of the quality of the training. Areas for improvement will be identified and action plans will be developed using these areas as a focal point to improve training, much in the same fashion resident development is guided by the IOP.

It is up to the group of program directors to decide which quality improvement instruments to use, depending on the size of the group of residents and the preference of the hospital, cluster and group itself.

On a national level, there must be a distinction between assessment of internal and external quality of care. External quality of care is performed by an external organization and takes place less frequently (accreditation, RGS) than internal quality of care assessment which is focused towards the daily function of a specific organization with reports for internal use only. There are diverse instruments that can be used to measure the internal quality of care. Most curricula are already applying the D-rect as a measure of the training climate. Evaluation of individual staff can be performed by such instruments as EFFECT and Set-Q.

Exit-interviews for leaving residents could provide deeper understanding of the information provided by D-RECT and thus are an important addition to the internal quality system.

The internal quality of the training can be assessed by the 'Scherpbier' instrument. The resident training program for medical specialists has its own national quality system, which can be used to assess the level of quality of the different aspects of the training program for a given discipline and reveal where improvements could be made. This national quality system is compatible with PDC-cycles (Plan, Do, Check), and could be applied annually or biannually to assess each training program and set priorities. Quality improvement guidance for a given staff member should be in response to both trainee and peer evaluation.

## 7.5 Implementation

When adjusting a curriculum like BOEG it is not enough to put to paper the theoretical shape of a new curriculum, concrete steps must be taken to ensure successful implementation, as implementation is an active process that requires commitment and action from the staff and program director. In the case of BOEG we are fortunate that a spontaneous process of change had emerged. Most training clusters have made regional agreements and have commenced implementation of BOEG. This chapter mainly serves as a reference, describing a checklist outlining the important components of the change process. Most training clusters will recognize that they have already taken most of the steps.

Kotter has described several steps that are important for the implementation of change, which we have applied to the context of the advanced training from the perspective of the program director/ staff and the residents:

1. *Communicating the vision of BOEG.*

This vision has been established in the written outline of BOEG. However, not all of the staff and residents will have this available, and it is thus beneficial to communicate the vision within the group. This communication should serve to generate “sense of urgency” within the department.

2. *Creating a sense of urgency*

A sense of urgency is crucial to the initiation of a change process and its maintenance. The stakeholders within the department, as well as the program directors and residents must have instilled this sense of urgency.

3. *Creating a broad base/ Mainstreaming*

It is not only important that the stakeholders of the department are aware of the needed changes and adjustments for the training, but also that other important actors within the organization involved, e.g. the Board of Directors, to provide support for such an innovative process in the established structures. While it should be made clear that such an implementation will cost time and money in the short term, in the long term there will be “profit” over time (improved and less expensive care).

4. *Facilitating action to realize the vision.*

Changes to training not only impact the content, but especially within the context of the advanced training, have administrative and logistical consequences. These should be acknowledged and mapped and agreements should be made to facilitate the implementation of the new program.

5. *Dissemination of existing innovations to ensure short term successes*

Showcasing innovative tools or procedures that are already in use can help the implementation process, by ‘showing’ program directors how they work, what the benefits are, and how to implement them in their own programs.

6. *Faculty and Resident Development*

Program directors should ensure that adequate faculty development is offered to (and taken up by) all members of the department to allow them train the residents according to the new vision and that they are able to provide adequate ongoing support. Also, it should be ensured that the residents are sufficiently equipped to take an active role in acquiring the general competencies. It may be necessary to elicit the help of other professionals in the field of general competencies to improve the training of faculty and residents in these areas.

7. *Regional dispersion*

To maintain a successful training program, it is of great importance that above mentioned principles and activities receive as much strengthening as possible. Since the training often is part of an OOR-broad case it is wise to involve the OOR in the thought process and execution of the vision.

8. *Institutionalizing New Approaches.*

Once the vision is implemented for the most part in the organization, the changes should become part of the organizational culture, and form the basis for any necessary subsequent changes.

In summary, the above-mentioned steps require communication on different levels, networking and training. Attention to these components will facilitate implementation. Although the steps suggest a solid and logical order, in practice this does not seem to be the case. Often steps will be out of order and sometimes a step has to be revisited. Implementation is a dynamic, not an analytical and fixed, process. Flexibility and continual focus on the vision form the foundation of a successful implementation strategy.

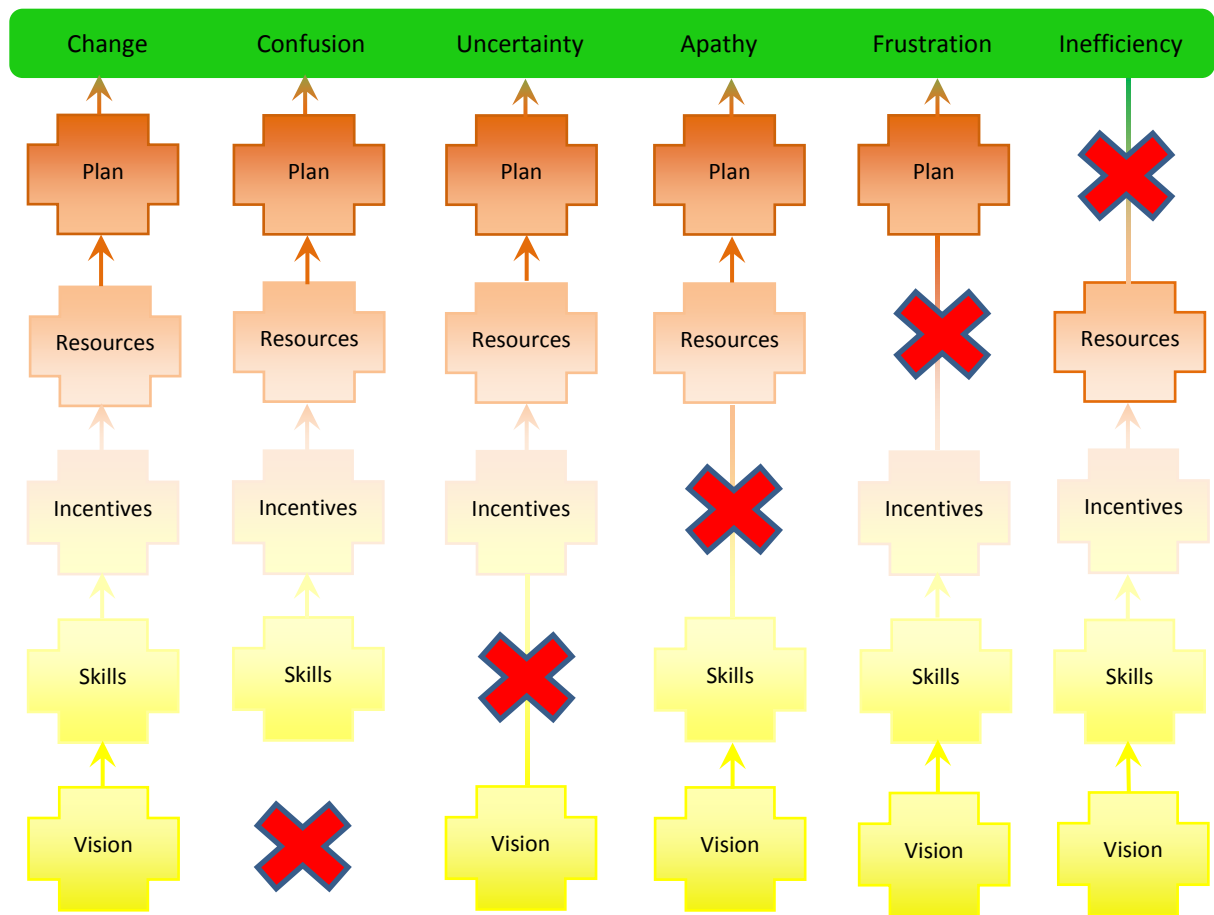
The model below shows the various components of the change process and how attention must be paid to each to allow change to occur successfully. Every component is of value, absence of attention to a component will lead to resistance.

The left column shows all steps for successful implementation of change. To produce change one must start with a vision, then skills need to be developed, incentives provided, resources provided and finally a plan of action delineated. These components are the building blocks of change. When one component is missing, a gap will occur and the move to change will be stalled. Depending on which component is missing, there will be various unintended consequences, delineated in the chart below.

Component	Absence of the Component Leads to:
Vision	<b>Confusion:</b> There is no focus; people are unaware of where the change should lead.
Skill	<b>Insecurity:</b> People will not know how to learn something / to execute a manoeuvre. For example; providing feedback with the help of a KPB.
Incentives	<b>Lack of Motivation:</b> There must be a need to change. i.e. coming accreditation, cost savings, etc.
Resources	<b>Frustration:</b> Time, money, materials, etc. must be made available to avoid frustration.
Plan	<b>Inefficiency:</b> a systematic way of making progress is missing, eg: the who, what, when and where questions cannot be answered

The model is helpful for preparing for the change process but can also be used to assess the cause(s) when change stagnates.





Based on a model created by M. Schouten, M.A.

## Appendix 1

### Genesis of BOEG - Background Information

The genesis of the BOEG curriculum unfolded according to a predetermined action plan based on the following methods to ensure an as-complete-as-possible curriculum.

- Establishment a project-group for BOEG with delegates from a variety of academic centers, both peripheral clinics that engage in training and those that do not, as well as delegates from the resident board (VAGO). See appendix 1.
- Establishment of five groups with representatives of the five basic divisions (obstetrics, benign gynecology, urogynecology, oncology and VPG)
- Survey of a representative sample of NVOG-members on the future vision of our discipline. A formal analysis of the collected answers provided a number of platforms on which to base a curriculum. See details on the NVOG-site under committee BOEG.
- Survey to determine the vision of stakeholders in our profession. Patient organizations, nurses, obstetricians, general practitioners and Boards of Directors were consulted to determine their expectations of the restructuring of gynecology training. The collected recommendations were then formally analyzed to provide a basis for the translation of the seven common competencies (CanMEDS) into gynecological training. See the NVOG-site under committee BOEG for details.
- Literature search for relevant articles.
- Input sought from other disciplines that have experience with sub-specializations within the six year training (including internal medicine and surgery).
- Input from the NVOG-board, the concilium, the residents and delegates of the VAGE.
- A variety of symposia to generate discussion.
- Distribution of documents and video messages on NVOG-site under BOEG
- Members of the project-group BOEG undertook site visits to inform staff about, and discuss the proposed curriculum.
- Feedback questions (thousands of emails) and discussions at diverse national gatherings.
- Feedback discussed with the NVOG-board, the Concilium and the (BBC)(Professional Interests Commission that addresses remuneration and workload).
- Eventual triangulation of all data to provide a foundation for strategic principles.
- Filling in of end points for gynecologists on a tactical level that are based on the principles.
- The use of information from (inter)national developments in education (see details in appendix)

## Appendix 2

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## Appendix 3

### Placing BOEG in an International Perspective.

In North America, many educators have embraced the concept of ‘entrustable professional activities’ (EPA’s, Ten Cate and Scheele, 2008) and look to our system of competency statements with significant interest. The sub competencies that we created as subdivisions in the competency-profile for the gynecologist (see 2.3) for the common competencies (originally the CanMEDS-roles) can be seen as somewhat parallel to ACGME ‘Milestones’ as used in the United States. They are meant to provide a framework in which to coach and assess residents in their functioning throughout their training.

The Dutch use of the CanMEDS roles is roughly similar to how the Canadians use them and how the Americans use their AGME-profiles. There is extensive literature about the CanMEDS framework, which was brought to the Netherlands by the Royal Dutch Medical Association who have recently also generated the so-called “CanBetter”-project which lays out most essential ‘best-practices’ to optimally embed the learning of the intrinsic competencies in daily practice.

When BOEG will be fully embedded in practice, utilizing components of the CanBetter-projects, we hope to include ourselves among world leaders in postgraduate medical training.

## Appendix 4

### Many hands make light work

#### Step 1

After creating a vision of the future (thanks to the effort of many members of the NVOG) and a 'stakeholder'-analysis (thanks to the effort of patients, nurses, obstetricians, general practitioners and Boards of Directors) we continued to refine the curriculum. A large group of colleagues has contributed to the description of the specific aspects of the four basic years and to those of the five focus areas. These focus areas will be fleshed out by discussions within their respective associations and the related divisions of gynecological practice.

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Drs. Fred Milani

Dr. Jacques Hutten

Dr. Anneke Steensma

Dr. Huub van der Vaart

Drs. Anneke van der Leeuw- van Beek (resident)

#### **Oncology**

Prof. dr. Marian Mourits (vz)

Drs. Mirjam Apperloo

Dr. Harm de Haan

Prof. dr. Gemma Kenter

Drs. Anita Wester

Prof. dr. Ate van der Zee

Dr. Stijn Mom (resident)

#### **Obstetrics**

Prof. dr. Jan van Lith (vz)

Dr. Lia Wijnberger

Drs. Eveline Tepe

Prof. dr. Eric Steegers

Dr. Kitty Bloemenkamp

Dr. Mireille Bekker (resident)

#### Step 2

Once the curriculum was roughed out it needed translation to comply with the legal framework from the CGS and allow it to be accepted by the RGS.

Prof. Dr. Fedde Scheele (Directive)

Drs Corry den Rooyen (Educational expert Dutch Medical Post Graduate Training)

Dr. Scheltus van Luijk (Doctor and educational expert Dutch Medical Advanced Training)

Karsten van Loon, MSc (Final assignment master in Education)

Drs Nadine van der Lee (Doctor and secretary project-group BOEG)

Tim Menkveld (student International Business and Management, translator)

Dr. Nicolette Caccia (English review and editing)

## Appendix 5

### Future Directions

The board of the NVOG took the responsibility to oversee this project and guide the decision making around the project.

Once the approval of the final curriculum by the involved parties is judged as being adequate by the board of the NVOG (done in March 2013), the implementation of BOEG, which is in progress, will continue with this document as a reference. The next step was to have it assessed by the National College of Medical Specialties (CGS) -done in August 2013), possibly involving multiple parties, and then have it granted legislative status. The input of the very experienced Corry den Rooyen and Scheltus van Luijk provided a reasonable guarantee that piece would satisfy the legal framework and the norms of the CGS and the Board for Accreditation (RGS) (these were created after completion of HOOG in 2005).

The specific legislative guidelines for the training of Obstetrics and Gynecology needed revision. Such a request has been placed before the CGS since October 2012. With this request, it has been made clear that BOEG is an evolving document in a changing context and that legislation in these times should support a visionary, adaptive and flexible curriculum.