

Project for Achieving Consensus in Training

by

***the European Board and College of Obstetrics
and Gynaecology***



*Fionnuala McAuliffe SCTA Chair, SCTA Committee Members, Fedde Scheele,
Jessica van der Aa, Angelique Goverde (eds.)*

Created with funding from



Erasmus+



Co-funded by
the European Union



GESEAEU

Standardising Gynaecological
Endoscopy Training



Table of contents

Preface	3
Chapter 1: Curriculum content – core curriculum	9
Chapter 2: Curriculum content – electives curriculum	33
Chapter 3: Human Factors and Non-Technical Skills	53
Chapter 4: Clinical Leadership in Obstetrics & Gynaecology	55
Chapter 5: Communication and Psycho-Social Skills Training	58
Chapter 6: Simulation Training of Gynaecological Skills	60
Chapter 7: Simulation Training of Obstetrical Skills	66
Chapter 8: Ultrasound Skills Training	72
Chapter 9: Entrustment and Portfolio	74
Addendum 1: Assessment forms examples	80
Addendum 2: Portfolio example	88
Chapter 10: Quality management and training recognition	106
Chapter 11: Faculty Development	108
Addendum: GESEA Programme	109
Glossary	112
Contributors	116
Appendix	122

Preface to the second edition

Comprehensive robust training in Obstetrics & Gynaecology is essential for delivery of high-quality care for women across Europe. Project for Achieving Consensus in training (PACT) represents a collaborative and comprehensive five-year training programme. The revision of PACT is the result of a three-year programme of work and with considerable input from our trainees, trainers, professional colleges and our affiliated European specialty societies.

We have updated the section on human factors and non-technical skills, to include a section on professional leadership, person leadership and development, teamwork, situation awareness, decision making and task management.

Clinical leadership has been added to core and elective sections which incorporates sections on managing with a systems-based approach, delivering person centered care, and consideration for quality improvement and patient safety. Clinic audit or a quality improvement project is suggested for trainees as part of the assessment of clinical leadership. Other additions are the importance of patient centered debriefing after obstetrical and gynaecological complications, addition of clinical genetics to core curriculum to reflect the central role genetics now plays in Obstetrics and Gynaecology and the enhancement of medical disorders in pregnancy and drug safety in pregnancy and breastfeeding sections.

For the electives we developed separate fetal medicine elective and maternal medicine electives, and an enhanced section on Menopause has been added to benign gynaecology core and elective sections.

The simulation sections have been revised and improved and incorporate the outputs from GESEA4EU programme for simulation in gynaecological endoscopy.

Entrustment of a professional activity remains at the core of trainee assessment and evidence is gathered in the trainee's portfolio which includes learning experiences, assessment, and evaluation of competence by the Trainer.

The revision process commenced with a Europe wide survey of trainees, trainers, professional colleges and subspecialty societies in 2022 on how PACT could be improved. The findings and proposed changes were approved by EBCOG council in November 2022. From 2023-2024 the SCTA committee undertook bimonthly meetings to revise PACT taking account of comments received. The revised 2025 version was approved by EBCOG executive in September 2024 and by EBCOG council in December 2024.

The revision process has been an exemplar of collaboration between all members of the SCTA, ENTOG, Trainees, Trainers, EBCOG Council and our affiliated subspecialty societies (EAPM, ESGO, ESHRE, EUGA), for which I am very grateful. I look forward to continued engagement and implementation of this comprehensive training programme.

Fionnuala M McAuliffe

2025 Chair of EBCOG Standing Committee on Training and Assessment

A letter from the President

Changes in demographics, and advances in science and health policies have had a vast impact in health care delivery across the globe. These changes had a major influence in educating and training specialists and health care professionals. We have now truly entered the new digital world with the rise in digital behaviour such as remote working, teleconferencing, running digital courses and even delivering services. The future of work has arrived faster not only due to technological advances but also of considerations of health and safety, and perhaps the effect of global warming. This will clearly have an impact on training and education.

The structure, content and delivery of postgraduate medical education continues to be refined as medicine improves, new challenges emerge, the science and art of teaching and learning are appreciated. Educators strive to create a responsive curriculum to equip specialist to respond to an ever-changing environment.

The European Board of Obstetrics and Gynaecology (EBCOG) had been in the forefront in improving standards of care for women and their babies in Europe and beyond. It has streamlined standards of training in obstetrics and gynaecology through hospital visitations, introduction of the logbook and the introduction of the Fellowship exam (EFOG).

Europe with its diversity poses a significant challenge in delivery of training in obstetrics and gynaecology. EBCOG is committed to define standards of training by defining the level of competencies of certified specialists. Defining core competencies of specialists across a wide geographical area with varied socio-demographic factors is a huge yet challenging task. The Project for Achieving Consensus in Training (PACT) had been able to define core competencies to be acquired by all and elective competencies as optional within the main curriculum. Since its launch in 2018 it has been an integral tool in hospital recognition to assure quality of training. We soon realised that the time has come to update the core curriculum in line with changes in education and training.

We are fortunate to work with our partners to receive an EU grant to incorporate simulation in the PACT. The new PACT has a fresh look with validated simulation techniques incorporated in the curriculum. The curriculum incorporates e-learning in keeping with the digital age.

I am grateful to the Chair of the SCTA, the committee members, and subspeciality representatives who have given their valuable time to update this important document. In fullness of time, this will become the European Training Requirement as we are working with the UEMS to publish the ETR in obstetrics and gynaecology later this year.

I strongly believe the new PACT with the simulation incorporated will go a long way to harmonize training in Europe across the borders.

Professor Frank Louwen
President, European Board and College of Obstetrics and Gynaecology

Preface to the first edition

The EBCOG PACT training curriculum: the new standard of postgraduate training in Obstetrics and Gynaecology

With the realization of the EBCOG PACT training curriculum for Obstetrics and Gynaecology a longstanding wish has come true. EBCOG has always recognized the importance of training as the driving force behind realizing optimal health care for women and their babies in Europe. With the EBCOG PACT training curriculum we now take position as the medical specialty that implements state of the art training in Europe.

In succession of the Standards of Care for Women's Health in Europe published by EBCOG in 2014, the EBCOG PACT training curriculum defines standards for postgraduate training in Obstetrics and Gynaecology in Europe. These standards address endpoints in the medical and professional domains but also provide guidance in training methods, entrustment, faculty development and quality management of training. By the process of seeking consensus on the competencies at the level of independent practice for all trainees in Obstetrics and Gynaecology by the end of their training, EBCOG PACT has laid down the foundation for the implementation of the training standards throughout Europe.

This project is based on the spirit of collaboration within EBCOG. Funded by the European Union Erasmus+ programme, delegates, both medical specialists and trainees, from all over Europe have shared ideas and work.

I would like to thank all who contributed to the EBCOG PACT, in particular:

Project chair Fedde Scheele and project manager Jessica van der Aa, both from the Netherlands;

Chair for medical curriculum content Chiara Benedetto, supported by her staff member Annalisa Tancredi, both from Italy, in close collaboration with Jaroslav Feyereisl and Petr Velebil from Czech Republic;

Chair for the framework for general competencies and soft skills Peter Hornnes, supported by his staff members Betina Ristorp Andersen and Annette Settnes from Denmark. They received input about stakeholders views from patient organisations, represented by Joyce Hoek-Pula and Britt Myren, European Nurses represented by Petra Kunkeler, European midwives represented by Noortje Jonker and Hospital administrators represented by Hans van der Schoot and Fedde Scheele;

Chair for gynaecological skills training and simulation Rudi Campo from Belgium and his collaborators Yves van Belle (Belgium) and Helder Ferreira (Portugal);

Chair for obstetric skills training and simulation Jette Led Sørensen from Denmark and her collaborators Ruta Nadisauskiene (Lithuania), Diogo-Ayres-de-Campos (Portugal);

Chair for communication and psychosocial skills training Sibil Tschudin from Switzerland;

Rolf Kirschner (Norway) for bridging EBCOG PACT and the EBCOG exam;

Portfolio and entrustment were described under supervision of Fedde Scheele, who is an internationally recognized expert in this particular field;

Chair for quality management and training recognition Juriy Wladimiroff (the Netherlands), who also chaired the group on Ultrasound skills training, with collaboration of Piotr Sieroszewski (Poland);

My collaborators Fedde Scheele and Živa Novak Antolič (Slovenia) in the project on faculty development;

Anna Aabakke (Denmark) and Laura Spinnewijn (the Netherlands), who on behalf of the European Network of Trainees in Obstetrics and Gynaecology (ENTOG) made valuable contributions to the entrustment and assessment project;

The members of the steering committee Jacky Nizard and Tahir Mahmood, Officers of the Executive Committee of EBCOG, and Anna Aabakke, past President of ENTOG for monitoring the process and giving constructive feedback throughout the project;

The members of the external advisory board for their support;

The members of the Standing Committee on Training and Assessment, including representatives from the European Association of Paediatric and Adolescent Gynaecology (EURAPAG), ISPOG, the European Society of Contraception and Reproductive Health (ESC), European Society of Gynaecological Endoscopy (ESGE), for the valuable discussions about various parts of the curriculum;

The members of the Executive committee of EBCOG and the national delegates in EBCOG Council for their trust and valuable feedback.

The EBCOG PACT curriculum is the result of an exemplary piece of collaboration. For the coming years it is our challenge to ensure that this curriculum on paper becomes the curriculum in action throughout Europe.

Dr Angelique J. Goverde

2018 Chair EBCOG Standing Committee on Training and Assessment

EBCOG has made an important contribution to European health care by formulating the Standards of Care for Women's Health in Europe. As a result, there is now a common vision on the provision of optimal health care. However, the road from vision to reality may be challenging, and we should use all the available means to facilitate and implement optimal health care. To do this, it is desirable to increase the mobility of gynaecologists and trainees in Europe, as this will enable us to learn from each other's systems of health care delivery and exchange best practices. For this reason, a common approach to the training of Obstetrician- Gynaecologists is essential for those trainees who pursue the status of being trained according to the best European practice.

In EBCOG-PACT, the knowledge, skills and attitudes required of every European gynaecologist have been defined (the 'core'). Additionally, 'electives' have been described, which are positioned between the core and the subspecialties. Each trainee should be trained in at least one elective. The core and electives have been developed with the use of formal consensus techniques and discussions within EBCOG and its subspecialty organizations. In addition to the medical competencies, we have defined the required general competencies and soft skills. With the support of European patients, nurses, midwives, and hospital administrators, a competency framework was created that is tailored to the European Obstetrician-Gynaecologists. The general competencies and soft skills address issues that may be seen as universal human rights for women and they connect well to the EBCOG standards of care. This curriculum contains agreements about both medical and general competencies for new European Obstetrician-Gynaecologists.

These endterms are not set in stone. In the coming years, refinement of the core will likely become necessary, and it is expected that additional electives will be defined. Discussion already emerged around the question whether colposcopy should be part of core or an elective and whether sexology with diseases like vestibulodynia should have a more prominent place in the core. A curriculum is a dynamic document, but at this moment, PACT is state of the art for Europe.

Besides defining outcomes of training, PACT also delivers guidance for training at the tactical level, while leaving space for differences in operationalization, which may be dependent on local context and vision. At the tactical level, various items are addressed:

- Simulation training as an important pillar of the training system;
- Entrustment of professional activities based on a portfolio of learning experiences, assessments and evaluation by a competence committee; Depending on local regulations and laws, granted entrustment means that the trainee is being declared proficient and allowed to practice the concerning professional activity without supervision.
- Quality management of the training institution and recognition by an external accreditor.

With the present document, EBCOG has delivered a curriculum that has been thoroughly discussed within the community and among its stakeholders. The word curriculum is derived from the Latin word for cart or trolley.

Its function is to generate movement in the right direction. The next step is bring the curriculum into action in all the training sites that desire to train the European way. To achieve this, we have to embrace the complexity of change processes. European Obstetrician-Gynaecologists may become leading in training and mobility throughout Europe, compared to other medical specialties. If we succeed in implementing PACT, it will facilitate the provision of optimal health care for European women. We need your leadership to accomplish this challenge!

Prof Dr Fedde Scheele

Project leader EBCOG-PACT

2018

Curriculum content

Core curriculum

Introduction

The postgraduate training in Obstetrics and Gynaecology follows a programme of at least five years. It consists of a core and an elective programme.

This document describes the medical core content of the pan-European postgraduate training curriculum in Obstetrics & Gynaecology. The content of the core has been determined through a consensus procedure amongst European gynaecologists and trainees [1,2]. It integrates the knowledge and skills that should be acquired during training to develop the core competencies of the European gynaecologist.

In the pan-European curriculum, a clear distinction is being made between core training and elective modules:

Core

- Common trunk being mandatory for all trainees in Obstetrics & Gynaecology.
- Minimum duration of three years, depending on national or local governance.
- Minimum standards of training.
- Content clearly defined by European consensus.
- Minimum numbers for several procedures are recommended for adequate training.
- Endterms refer to the level of independent practice, meaning that the trainee is able to perform without supervision.

Elective

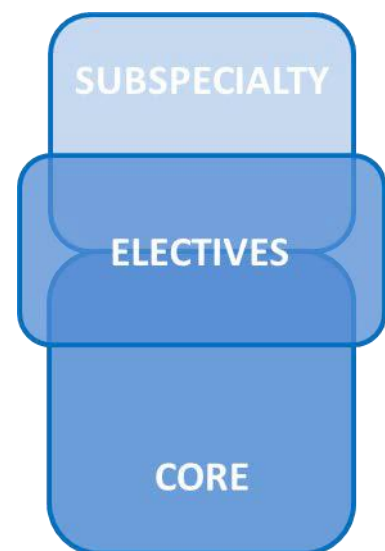
- Minimum of at least one elective is mandatory for all trainees.
- Includes more intensified training than the core, with addition of new knowledge and skills, more in-depth analysis of pathology and further treatment.
- Determines a trainee's personal professional profile with areas of special interest.
- The content of an elective is a 'shifting window'; it is situated between core and subspecialty.
- An elective may be included in mandatory training in specific countries (e.g. for Breast Disease).

Subspecialty

- Subspecialty training is beyond the scope of the curriculum for postgraduate training in Obstetrics and Gynaecology.
- Content standardised and recognised by subspecialty societies.

Reading instructions

- The content (core and electives) of the pan-European curriculum must be reasonable and feasible for implementation in all European countries.
- The 'EBCOG standards of care' determine conditions under which care is delivered and procedures are performed; these were developed in concordance with the subspecialty societies. Trainees must adhere to these conditions.



- The content of the curriculum (core and electives) is in line with current standards of care and training. Since developments within the disciplines of Obstetrics & Gynaecology occur frequently, the content may not in all cases reflect the most recent recommendations, although the training standards will be updated intermittently.
- Training to the level of independent practice means that a trainee will have to be able to deliver care or perform a procedure without interference of supervision. National legislation determines whether supervision must be present (without interference) while a trainee delivers care or performs a procedure.
- For some procedures described (e.g. surgeries), consensus was reached for the number of performances that is needed for training. These numbers represent the minimal number of times that a trainee has to have performed a procedure as the first surgeon. The numbers are guidelines, since throughout Europe there will be variation in incidence as well as variation in best practices.
- The procedure abdominal hysterectomy is included in core training, according to European consensus. It is acknowledged that the incidence of this procedure may vary regionally, which renders it unrealistic to require *in vivo* training to the level of independent practice from all trainees. Therefore, the procedure may be trained in simulation to the level of independent practice when hysterectomy is imperative due to severe postpartum haemorrhage.

The knowledge and skills in the field of Obstetrics & Gynaecology have been grouped into ten major themes. For every theme this document describes what should be trained in the core part of the curriculum.

1. General Medical Knowledge & Skills
2. Prenatal Care
3. Intrapartum & Postpartum Care
4. Benign Gynaecology
5. Reproductive Medicine
6. Urogynaecology
7. Premalignancy and Gynaecological Oncology
8. Paediatric and Adolescent Gynaecology
9. Sexual Health and contraception
10. Breast Disease

Per theme, outcomes of training are described. They have been structured into the phases of the clinical process. Each phase requires a more advanced integration of knowledge and skills concerning an outcome than the previous phase. When the training is completed, the trainee will have acquired the knowledge and skills for all phases and for all the outcomes at the level of independent practice.



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.



Diagnosis; to diagnose without performance of a specific skill.



Diagnosis; to diagnose with performance of a specific skill.



Information; to provide information and advice regarding the diagnosis and its implications.



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

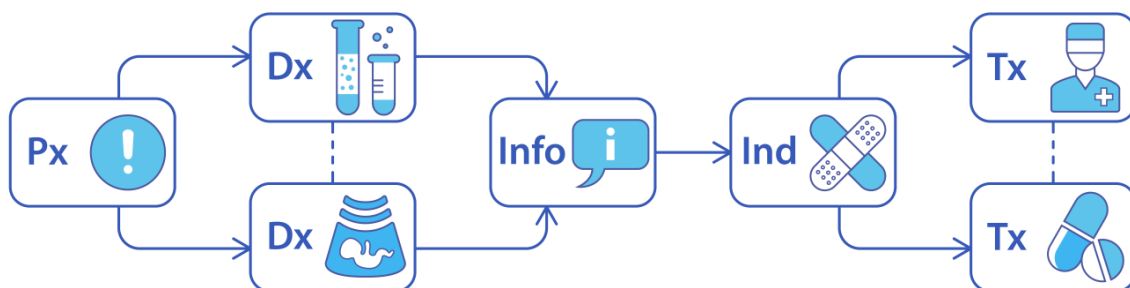


Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

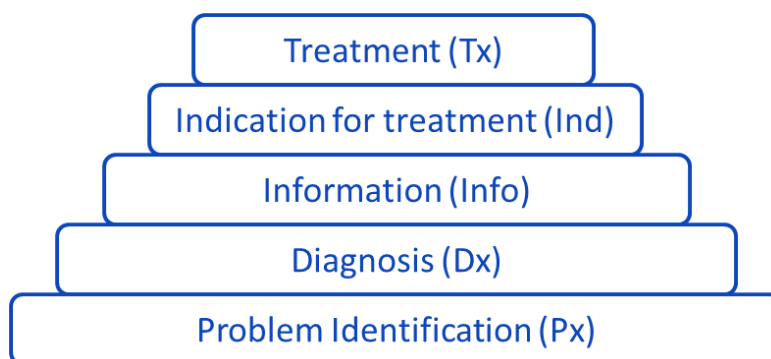


Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

The phases are integrated in the clinical process as follows:



If a trainee can provide a treatment (Tx) for a condition, it is assumed that the trainee is also able to determine the indications for the treatment (Ind), provide information regarding the diagnosis (Info), diagnose the condition (Dx) and identify a problem that requires diagnostic evaluation (Px).



References:

1. Van der Aa JE, Goverde AJ, Teunissen PW, Scheele F. Paving the road for a European postgraduate training curriculum. Eur J Obstet Gynaecol Reprod Biol 2016;203:229-31.
2. Van der Aa JE, Tancredi A, Goverde AJ, Velebil P, Feyereisl J, Benedetto C, Teunissen PW, Scheele F. What European gynaecologists need to master: Consensus on medical expertise outcomes of pan-European postgraduate training in obstetrics & gynaecology. Eur J Obstet Gynaecol Reprod Biol 2017;216:143-53.

1. General Medical Knowledge & Skills

The trainee can provide obstetrical and gynaecological care at the level of independent practice in the outpatient department, the delivery room and the emergency room.

In all situations, the trainee:



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- Has specific knowledge about embryology, anatomy and the physiology of female genital organs and breasts.
- Obtains patient and family history including social issues, performs accurate clinical examination of vital signs, the internal and external genitalia and the abdomen, and interprets the findings adequately.
- Understands how gynaecological conditions influence sexual function, enquires about sexual function and possible negative sexual experiences, and understands consequences of sexual violence on gynaecological conditions and behaviour.
- Understands bio-psychosocial aspects of obstetrical and gynaecological conditions.



Diagnosis; to diagnose without performance of a specific skill.



Diagnosis; to diagnose with performance of a specific skill.

- Is able to diagnose, assess, investigate, monitor and interpret data considering the most common obstetrical and gynaecological conditions (conditions to be clarified per theme).
- Undertakes timely and appropriate investigations, such as examining microbiological samples, laboratory investigations, and radiology imaging, and interprets results in liaison with colleagues (e.g. radiologists) in relation to clinical findings to form a differential diagnosis.



Information; to provide information and advice regarding the diagnosis and its implications

- Maintains effective communication with patients and relatives, according to the principles of shared decision making and informed consent, documents this communication accurately and performs team work with effective communication within the multi-disciplinary health care teams.
- Participation in clinical morbidity meetings
Patient centered debriefing after obstetric and gynaecological complications.



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- Is able to recognise and triage acutely ill patients and initiate adequate management, including septic patients, patients with peripartum complications and patients requiring resuscitation.
- Leads a ward round with a multidisciplinary input, manages the admission and discharge of patients at the ward and the delivery room, and manages handover to another practice.
- Has specific knowledge about peri-operative care, including ASA classification, indications and contraindications of surgeries, risks of surgeries, indications for blood transfusion, postsurgical complications and indications for admission to the Intensive Care.



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance

- Is able to provide basic therapeutic interventions, including safe and appropriate prescription and administration of oxygen, drugs and therapies, blood products, circulation support and urinary catheterisation.
- Manages the assessment, prevention and treatment of pain.

2. Prenatal Care



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

See next section



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- o Embryonic & foetal viability
- o Pregnancy location (intra or extra uterine)
- o Pregnancy age
- o Singleton or multiple gestation pregnancy
- o Cervical length
- o Chorionicity
- o Foetal biometry
- o Foetal presentation
- o Placental site
- o Amniotic fluid volume
- o Umbilical artery Doppler assessment

Skill

- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Transvaginal & transabdominal ultrasound
- o Doppler flow measurement



Information; to provide information and advice regarding the diagnosis and its implications.

- o Teen pregnancy, Advanced maternal age pregnancies
- o Pregnancy and obesity
- o Pregnancy and diabetes
- o Pregnancy and pre-existing hypertension
- o Cervical incompetence
- o Multiple gestation pregnancy
- o Cholestasis of pregnancy
 - Use of medication, indications and safety in pregnancy and breastfeeding (e.g. for psychiatric and medical conditions)
 - Breastfeeding
- o Consequences of complicated delivery for a following pregnancy and delivery
 - o Complications of prematurity
- o Chromosomal abnormalities by interpreting nuchal translucency / double test / triple test /

- o Pregnancy of unknown location
- o Hyperemesis
- o (Recurrent) miscarriage
- o Vaginal blood loss in first trimester
- o Vaginal blood loss in second and third trimester
- o amniocentesis / chorionic villus sampling / NIPT



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

See next section



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without

- o Second trimester pregnancy termination
- o Blood group incompatibility
- o Group B streptococcus carrier status
- o Abdominal complaints
- o (Minor) abdominal trauma in pregnancy
- o Malpresentation
- o Gestational diabetes
- o Oligohydramnios
- o Polyhydramnios
- o Hypertensive disorders of pregnancy (pregnancy-induced hypertension, pre-eclampsia, eclampsia, HELLP)
- o Reduced foetal activity
- o Foetal growth restriction
- o Premature rupture of membranes
- o Intrauterine foetal death
- o Postdate pregnancy
- o Perinatal infections (Toxoplasmosis, syphilis, varicella-zoster, parvovirus B19, rubella, cytomegalovirus, herpes)



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance

As covered in above section.

3. Intrapartum & Postpartum Care



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

See next section



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- o Feasibility of labour

Skill

- o Physical examination
- o Intrapartum ultrasound
- o CTG interpretation
- o Interpretation and use of partogram



Information; to provide information and advice regarding the diagnosis and its implications

See next section



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- o Post-partum haemorrhage; arterial embolization



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

Intrapartum

- o Induction of pulmonary maturation
- o Premature contractions
- o Cervical insufficiency
- o Failure of progression of labour
- o Intrapartum fever
- o Meconium-stained amniotic fluid
- o Medical history of caesarean section
- o Peripartum pain
- o Hypertensive crisis / severe preeclampsia / HELLP
- o Placenta previa

Post partum

- o Postpartum mastitis (with abscess)
- o Postpartum urinary retention
- o Thrombo-embolic process
- o Postpartum haemorrhage
- o Medication safety during lactation
- o Thrombotic risk assessment



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

<u>Diagnosis</u>	<u>Skill</u>	<u>Numbers</u>
o Uncomplicated delivery	o Assistance of uncomplicated delivery	50
o Complicated delivery	o Assistance of preterm delivery	
	o Vacuum-assisted vaginal delivery	10-20
	o Forceps-assisted delivery*	0-10
	o Breech delivery*	5
	o Assistance of vaginal delivery of multiple pregnancy	
	o Caesarean section	20
	o Repeat caesarean section	10-15
	o Caesarean section in patient with high BMI	0-10
o Twin delivery	o Vaginal delivery of twins	
o Foetal distress	o CTG monitoring	
	o Foetal scalp blood sampling*	
	o Episiotomy	
	o Emergency caesarean section	10-15
o Placental abruption		
o Uterine rupture		
o Shoulder dystocia	o All dystocia management manoeuvres*	
o Post-partum haemorrhage	o Intrauterine balloon tamponade	
	o Surgical compression of atonic uterus (B-Lynch suturing)*	
	o Abdominal hysterectomy*	
o Retained placenta	o Manual and surgical removal of placenta	
o Uterine inversion	o Manual uterine reversion*	
o Genital tract trauma	o Repair of genital tract trauma	
o Vulvar hematoma	o Evacuation of vulvar hematoma	
o Episiotomy wound	o Suturing of episiotomy wound	
o 1 st /2 nd /3 rd degree perineal tear	o Suturing of 1 st /2 nd /3 rd degree perineal tear	
o 4 th degree perineal tear	o Suturing of 4 th degree perineal tear*	

- o Neonatal support

- o Supporting the initial care of the healthy/preterm new-born (with low Apgar scores)
- o Accurate resuscitation of the new-born in the first 10 minutes after delivery (when awaiting the arrival of the paediatrician)*

**= performance of skill at least in simulation setting*

4. Benign Gynaecology



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- o Acute gynaecological emergencies
- o Abnormal uterine bleeding
- o Chronic pelvic pain
- o Menopause
- o Abnormal vaginal bleeding in menopause



Diagnosis; to diagnose without performance of a specific skill.

- o Vaginal discharge



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis	Skill	Numbers*
o Vulvar abnormalities	o Punch biopsy under local anaesthesia	10
o Intrauterine abnormalities	o Endometrial sampling (aspiration/office biopsy)	10
o Abnormalities of uterus and adnexa	o Diagnostic ultrasound	
o Abnormalities of the ovary	o Diagnostic hysteroscopy	10



Information; to provide information and advice regarding the diagnosis and its implications

- o Cervical screening
- o Breast screening
- o Osteopenia/osteoporosis screening
- o Weight management



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- o Endometriosis
- o Tubo-ovarian abscess
- o Abnormal uterine bleeding
- o Uterine myoma
- o Vaginal septum



Treatment; to discuss all treatment options, determine the indication for a specific treatment,

counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- O Pelvic inflammatory disease/salpingitis
- o Abdominal/pelvic pain
- o Premenstrual syndrome
- o Dysmenorrhoea
- o Abnormal uterine bleeding
- o Menopausal complaints (See figure 1 and 2 in appendix)
- o Abnormal vaginal discharge
- o Vulvovaginitis
- o Uterine fibroids
- o Adnexal pathology
- o Endometriosis
- o Vulvar condylomas
- o First trimester miscarriage
- o Ectopic pregnancy



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance

<u>Diagnosis</u>	<u>Skill</u>	<u>Numbers*</u>
o Abnormal uterine bleeding	o Placement of Intra Uterine Device o Endometrial ablation o Total laparoscopic hysterectomy	15
o Ectopic pregnancy	o Laparoscopic removal of ectopic pregnancy (salpingostomy) or salpingectomy	10
o Early miscarriage / First trimester termination of pregnancy	Dilatation and curettage by suction or blunt curette*	15
o Bartholin's cyst	o Surgical marsupialisation of cyst	5
o Vulvar abscess	o Surgical excision of abscess	
o Ovarian cyst	o o	
	o Simple laparoscopic ovarian cystectomy	5
o Adnexal pathology	o Laparoscopic salpingo-oophorectomy	5
	o Salpingo-oophorectomy via laparotomy	5
o Intracavitary polyp	o Hysteroscopic polyp resection	5
o Uterine myoma	o Hysteroscopic myoma resection type 0-1 (< 4cm)	3
	Myomectomy of subserous myoma via laparotomy	3
o Pelvic adhesions	o Simple laparoscopic adhesiolysis	3
	o Laparotomy with minimal adhesiolysis	3

**=according to local and national protocols and legislation and may include performance of skill at least in simulation setting*

5. Reproductive Medicine



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- Male and female subfertility and fertility assessment
- Basic reproductive endocrinology and endocrine abnormalities that could lead to cycle disorders (primary amenorrhoea, secondary amenorrhoea, oligomenorrhoea, galactorrhoea, hyperprolactinemia, and hirsutism)
Assessment of female primary and secondary amenorrhea (CNS abnormalities, pituitary dysfunction, ovarian and ovulatory abnormalities, genital tract abnormalities)
- Assessment of recurrent pregnancy loss
- Techniques for assisted conception
- Fertility preservation techniques



Diagnosis; to diagnose without performance of a specific skill.

- Investigation of amenorrhoea
- Hormonal dysfunction
- Pituitary dysfunction
- PCOS and its differential diagnosis
- Hirsutism and Virilism



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis	Skill	Numbers
○ Genital tract abnormalities	○ Transvaginal ultrasound, transvaginal 3D ultrasound is preferred	50
○ Subfertility; tubal patency	○ Diagnostic laparoscopy with tubal testing	
	○ Diagnostic hysteroscopy with tubal testing	
○ Response to fertility treatment	○ Transvaginal ultrasound with follicle count and follicle measurements	
○ Ovarian Hyperstimulation Syndrome	○ Transvaginal ultrasound with evaluation of follicles and intraperitoneal fluid	



Information; to provide information and advice regarding the diagnosis and its implications.

- General prognostic factors for pregnancy
- Probability of on-going pregnancy, spontaneous abortion and ectopic pregnancy associated with various fertility treatments
- Legal and ethical issues in medical assisted reproduction



Indication for treatment; to determine the indication for a specific treatment, taking all

treatment options into consideration.

Treatment

- o Assisted reproduction techniques

Skill

- o Intrauterine insemination



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- o WHO-II cycle disorders; ovulation induction with clomiphene citrate
- o OHSS initial / emergency treatment



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance

See above

6. Urogynaecology & Pelvic Floor



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- Recognise need for referral to pelvic floor physiotherapist or other medical specialist for stress and/or urge incontinence.



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- Apical compartment prolapse
- Anterior compartment prolapse
- Posterior compartment prolapse
- Stress urinary incontinence
- Overactive bladder
- Urinary retention

Skill

- Assessment of pelvic organ prolapse
- Interpretation of bladder diary
 - O Measure residual urine volume



Information; to provide information and advice regarding the diagnosis and its implications

- Lifestyle advice



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- Vaginal prolapse
- Urinary incontinence



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without

- Pelvic floor exercises
- Bladder retraining



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

<u>Diagnosis</u>	<u>Skill*</u>	<u>Numbers</u>
o Uterine / vaginal vault prolapse	o Pessary fitting and on-going care	10
o Cystocele / urethrocele	o Simple anterior vaginal repair	10
o Enterocele / rectocele	o Simple posterior vaginal repair	10

*= performance of skill at least in simulation setting

5. Premalignancy and Gynaecological Oncology



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- Pre-malignant conditions of the vulva in frail women with multiple comorbidities.
- Advanced-Stage Gynaecological Malignancies
- Atypical Grief Reactions



Diagnosis; to diagnose without performance of a specific skill.

- Vulval and cervical carcinoma by evaluation of pathology results.



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- HPV-related genital disease
- Endometrial Hyperplasia
- Gestational Trophoblastic Disease
- Endometrial Malignancy

Skill

- Vulvoscopy with biopsy
- Colposcopy with biopsy
- TVS & endometrial biopsy
- TVS
- Endometrial Biopsy



Information; to provide information and advice regarding the diagnosis and its implications.

- Vulval Carcinoma
- Cervical Carcinoma
- Endometrial Carcinoma
- Ovarian Carcinoma
- Recurrence or progression of gynaecological oncological disease.

Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.



Covered in sections above.

Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without the performance of a specific skill (e.g. conservative treatment).

- Covered in sections above.



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

<u>Diagnosis</u>	<u>Skill</u>	<u>Numbers*</u>
o Premalignant conditions of the cervix	o Conisation of the cervix	5
o Cervical Intra-Epithelial neoplasia	o Cervical LLETZ	10
o Stage I low-grade endometrial carcinoma	o Laparoscopic hysterectomy*	
	o Abdominal Hysterectomy*	
o Genetic conditions, including mutations with indication for risk-reducing salpingectomy	o Laparoscopic salpingo-oophorectomy	5
	o Salpingo-oophorectomy via laparotomy	5

* performance of skill at least in simulation setting

7. Paediatric and Adolescent Gynaecology



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- ☐ Sexual dysfunction
- ☐ Sexual abuse
- ☐ Genital mutilation
- ☐ Vaginal discharge in a child
- ☐ Acute abdominal pain in a child
- ☐ Sexually transmitted disease in a child
- ☐ Trauma of the vulva, vagina, perineum and/or rectum in a child
- ☐ Suspicion of domestic violence or child abuse



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- ☐ Gynaecological conditions in children*

Skill

- ☐ Adapting communication to the level of the child
- ☐ Accurate gynaecological examination of the child*



Information; to provide information and advice regarding the diagnosis and its implications

See next section



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- ☐ Contraception in healthy adolescents



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- ☐ Sexually transmitted diseases in adults, adolescents and prepubertal and peripubertal children



Treatment; to discuss all treatment options, determine the indication for a specific treatment,

counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

- o Trauma of the vulva/vagina/perineum/rectum in a child*

**= prepubertal and peripubertal children*

Skill

- o Emergency care of vulva/vagina/perineum/rectum

8. Sexual Health and Contraception



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- To obtain a full sexual history including information about sexual health, form of used contraception sexual transmitted infections
- Understand the physiological mechanism and pathways of female sexual response
- Understand the impact of gynaecological, endocrine and obstetrical conditions on female sexual health / response



Diagnosis; to diagnose without performance of a specific skill.

Diagnosis

- Sexual dysfunction (pain disorders, orgasmic disorders, sexual desire disorders, lubrication)
- Sexual abuse
- Domestic violence
- Genital mutilation

Skill

- Communication skills



Diagnosis; to diagnose with performance of a specific skill.

See next section



Information; to provide information and advice regarding the diagnosis and its implications.

- Provide information on prevention of sexual transmitted infections and unintended pregnancy, lifestyle advice
- Provide information on possibilities of specific psychological/psychotherapeutic interventions
- Provide information on psychosocial aspects of genital mutilation



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- Unintended pregnancy, family planning
- Sexual transmitted infections
- Dyspareunia



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- Contraception, emergency contraception
- Hormonal therapy (systematic/local)
- Local therapy (lubricants, moisturizers, topical anesthetics)



Treatment; to discuss all treatment options, determine the indication for a specific treatment,

counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

- Sexual pain disorders
- Contraception

Skill

- Surgical techniques depending of the pain type
- Placement of diaphragm /cervical cap
- Placement of Intra Uterine Device
- Placement of contraceptive implants
- Laparoscopic sterilisation
- Medical and surgical termination of pregnancy

9. Breast disease



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- o Malignant breast disease
- o Genetic risks in malignant breast disease
- o Screening methods for breast disease



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- o Galactorrhoea
- o Mastalgia

Skill

- o Accurate examination of the breasts



Information; to provide information and advice regarding the diagnosis and its implications

Covered in sections above



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

Covered in sections above



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without

Covered in sections above



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance

Covered in sections above

Curriculum content

Electives curriculum

Authors: Fedde Scheele, Angelique Goverde, Jessica van der Aa, Chiara Benedetto, Annalisa Tancredi, Jaroslav Feyereisl, Petr Velebil, Anna Aabakke

Introduction

The postgraduate training in Obstetrics and Gynaecology follows a programme of at least five years. It consists of a core and an elective programme.

This document describes the medical content of the elective modules of the pan-European postgraduate training curriculum in Obstetrics & Gynaecology. The content of the elective modules has been determined through a consensus procedure amongst European gynaecologists and trainees [1,2]. It integrates the knowledge and skills that should be acquired to develop the competencies of the European gynaecologist in additional training.

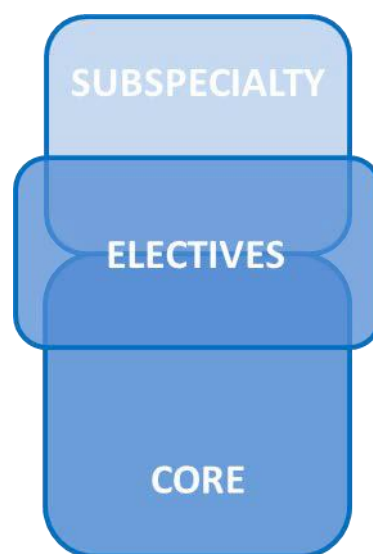
In the pan-European curriculum, a clear distinction is being made between core training and elective modules:

Core

- Common trunk being mandatory for all trainees in Obstetrics & Gynaecology.
- Minimum duration of three years, depending on national or local governance.
- Minimum standards of training.
- Content clearly defined by European consensus.
- Minimum numbers for several procedures are recommended for adequate training.
- Endterms refer to the level of independent practice, meaning that the trainee can perform without supervision.

Elective

- Minimum of at least one elective is mandatory for all trainees.
- Includes more intensified training than the core, with addition of new knowledge and skills, more in-depth analysis of pathology and further treatment.
- Determines a trainee's personal professional profile with areas of special interest.
- The content of an elective is a 'shifting window'; it is situated between core and subspecialty.
- An elective may be included in mandatory training in specific countries (e.g. for Breast Disease).



Subspecialty

- Subspecialty training is beyond the scope of the curriculum for postgraduate training in Obstetrics and Gynaecology.
- Content standardised and recognised by subspecialty societies.

Reading instructions

- The content (core and electives) of the pan-European curriculum must be reasonable and feasible for implementation in all European countries.
- The 'EBCOG standards of care' determine conditions under which care is delivered and procedures are performed; these were developed in concordance with the subspecialty societies. Trainees must adhere to these conditions.

- The content of the curriculum (core and electives) is in line with current standards of care and training. Since developments within the disciplines of Obstetrics & Gynaecology occur frequently, the content may not in all cases reflect the most recent recommendations, although the training standards will be updated intermittently.
- Training to the level of independent practice means that a trainee will have to be able to deliver care or perform a procedure without interference of supervision. National legislation determines whether supervision must be present (without interference) while a trainee delivers care or performs a procedure.

Nine electives have been identified, covering:

1. Fetal Medicine
2. Maternal Medicine
3. Benign Gynaecology
4. Reproductive Medicine
5. Urogynaecology & Pelvic Floor
6. Low Genital Tract Disease & Sexual health
7. Paediatric & Adolescent Gynaecology
8. Gynaecological Oncology
9. Breast Disease

Per elective, outcomes of training are described. They have been structured into the phases of the clinical process. Each phase requires a more advanced integration of knowledge and skills concerning an outcome than the previous phase. When training is completed, the trainee will have acquired the knowledge and skills for all phases and for all the outcomes at the level of independent practice.

Phases:



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.



Diagnosis; to diagnose without performance of a specific skill.



Diagnosis; to diagnose with performance of a specific skill.



Information; to provide information and advice regarding the diagnosis and its implications.



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

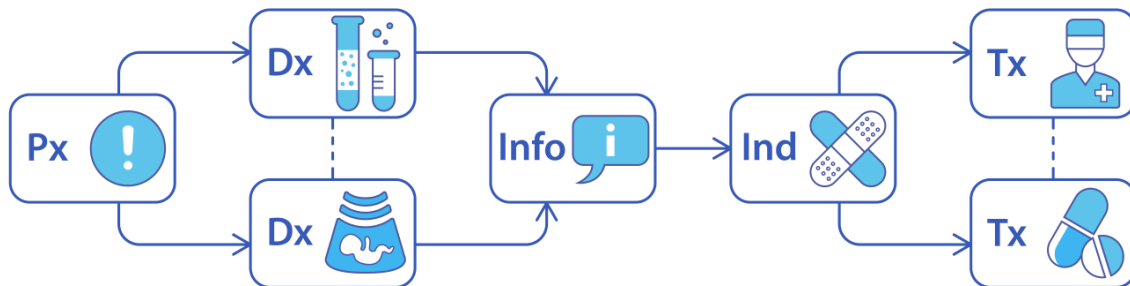


Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

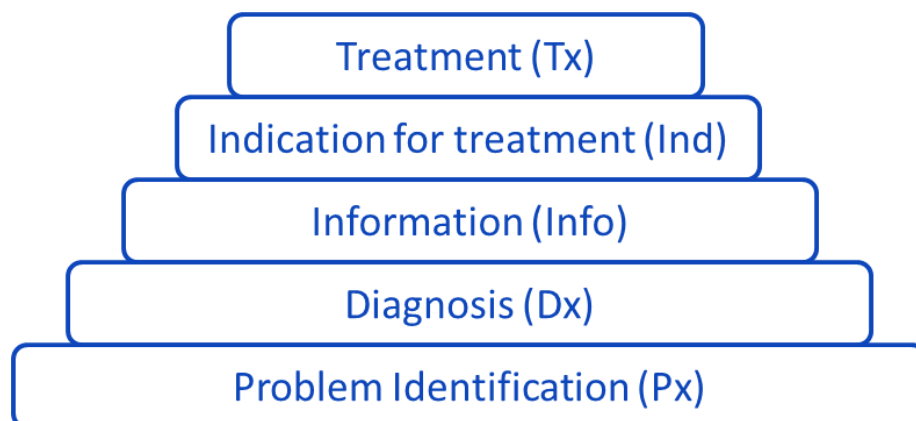


Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

The phases are integrated in the clinical process as follows:



If a trainee is able to provide a treatment (Tx) for a condition, it is assumed that the trainee is also able to determine the indications for the treatment (Ind), provide information regarding the diagnosis (Info), diagnose the condition (Dx) and identify a problem that requires diagnostic evaluation (Px).



References:

1. Van der Aa JE, Goverde AJ, Teunissen PW, Scheele F. Paving the road for a European postgraduate training curriculum. Eur J Obstet Gynaecol Reprod Biol 2016;203:229-31.
2. Van der Aa JE, Tancredi A, Goverde AJ, Velebil P, Feyereisl J, Benedetto C, Teunissen PW, Scheele F. What European gynaecologists need to master: Consensus on medical expertise outcomes of pan-European postgraduate training in obstetrics & gynaecology. Eur J Obstet Gynaecol Reprod Biol 2017;216:143-53.

1. Fetal Medicine



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- Referral to genetic services for families at risk of or with a diagnosis of fetal structural defect



Diagnosis; to diagnose without performance of a specific skill.

- Included in next phases of the clinical pathway



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- o Abnormal flow of the umbilical artery
- o Abnormal flow of the middle cerebral artery
- o Abnormal flow of the ductus venosus
- o Congenital anomalies
- o Chromosomal abnormalities
- o Diagnosis of placenta accreta spectrum
- o Fetal growth restriction

Skill

- o Doppler flow ultrasound uterine arteries
- o Doppler flow ultrasound arteria cerebri media
- o Doppler flow ultrasound ductus venosus
- o Advanced ultrasound screening
- o Amniocentesis
- o Transabdominal and transvaginal ultrasound



Information; to provide information and advice regarding the diagnosis and its implications.

- o Communication of risks for all obstetric procedures.
- o Leading an interdisciplinary meeting on complex psychosocial problems during pregnancy.



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- Included in next phases of the clinical pathway



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without

Pregnancy and delivery planning for pregnancies with fetal anomaly
Termination of pregnancy for fetal anomaly

Complex twin pregnancy, eg TTTS, MCDA



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance

Operative delivery offetus with complex congenital anomalies

2. Maternal Medicine



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- o Psychiatric problems requiring referral to a mental health specialist, social worker or addiction centre
- o Women with genetic disorders



Diagnosis; to diagnose without performance of a specific skill.

- o Psychiatric disorders in pregnancy and postpartum
- o Preconceptional counselling for cases of complex maternal medical history
- o Fear of childbirth and posttraumatic stress disorder following childbirth
- o Complex psychosocial problems during pregnancy
- o Substance abuse
- o Management of grief



Diagnosis; to diagnose with performance of a specific skill.

See next section



Information; to provide information and advice regarding the diagnosis and its implications.

- o Communication of risks communication for all obstetric procedures.
- o Leading an interdisciplinary meeting on complex psychosocial problems during pregnancy.
- o Leading postpartum debriefing



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

See next section



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- o Complex hypertensive disorders of pregnancy
- o Pre-existent diabetes
- o Multiple gestation pregnancy

- o Pre-existing maternal disease
- o Postpartum depression
- o Medication safety in pregnancy
- o Women with substance abuse



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

Cervical insufficiency

Skill

- o Insertion of cervical cerclage

3. Benign Gynaecology



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

See next section



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

See next section



Information; to provide information and advice regarding the diagnosis and its implications

See next section



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- o Psychosocial aspects of chronic pelvic pain.



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without

- o Postmenopausal hormonal therapy in patients with comorbidities
- o Osteoporosis management



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

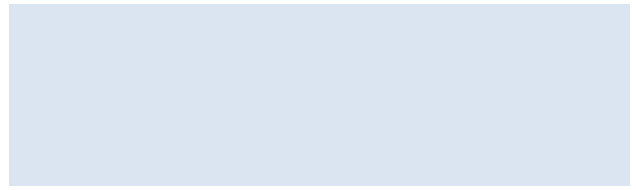
- o Uterine myoma type 2 (<3cm)
- o Uterine myoma (which is unresponsive to conservative treatment)
- o Hypermenorrhoea
- o Endometriosis (< stage 2)
- o Tubo-ovarian abscess
 - o Pelvic adhesions

Skill

- o Hysteroscopic myoma resection type 2 (<3cm)
- o Laparoscopic and open myomectomy
- o Laparoscopic and open hysterectomy
- o Hysteroscopic endometrial ablation or resection
- o Laparoscopic and open hysterectomy
- o Laparoscopic treatment of endometriosis
- o Laparoscopic management of tubo-ovarian abscess
- o Laparoscopic adhesiolysis

o

Genitourinary syndrome of menopause
management



4. Reproductive Medicine



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- o Micro/percutaneous semen aspiration
- o Testicular semen extraction
- o Genetic disorders
- o Pre-implantation diagnosis



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

See next section



Information; to provide information and advice regarding the diagnosis and its implications

See next section



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- o Psychosocial situation of couples in fertility treatments (shared decision making)



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- o Advanced ovulation-induction techniques
- o IUI stimulation
- o Galactorrhoea
- o Hyperprolactinemia
- o Pituitary adenoma



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

- o Subfertility
- o Ovarian Hyper Stimulation Syndrome

Skill

- o Intra Uterine Insemination
- o Paracentesis

5. Urogynaecology & Pelvic Floor



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- o Neurological disorders (spina bifida, multiple sclerosis, Parkinson's, spinal damage, neuropathy)



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- o Abnormalities in strength and motility of the pelvic floor and levator ani
- o Abnormalities in urinary tract disorders

Skill

- o Manual palpation measurement of strength and motility of the pelvic floor and levator ani muscle
- o Transperineal & endo-anal ultrasound
- o Interpretation of urodynamic investigations



Information; to provide information and advice regarding the diagnosis and its implications

- o Working with a urogynaecology multidisciplinary team



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- o Psychosocial aspects of prolapse and incontinence



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without

- o Prescribing anticholinergics and anti-muscarinic medications



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

- o Stress and urge incontinence
- o Uterine / vaginal vault prolapse

Skill

- o Placement of midurethral sling
- o Vaginal hysterectomy
- o Sacrospinous fixation

- o Colpocleisis

6. Low Genital Tract Disease & Sexual health



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

- Physiology and pathology of female low genital tract
- Understand the pathological mechanism and pathways of female sexual response
- Gender dysphoria – theoretical knowledge



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- Premalignant and malignant vulvar conditions
- Sexual problems
- Genito Pelvic Pain and Penetration Disorder
- Primary vaginismus

Skill

- Vulvoscopy with biopsy
- PLISSIT model of sexual counselling
- Educational Gynaecological Examination
- Communication skills



Information; to provide information and advice regarding the diagnosis and its implications

- Inform about the life-style changes, possibilities of sexual life due to above mentioned diagnoses
- Inform about the fertility possibilities by sexual problems (primary vaginismus), gender dysphoria, by premalignant and malignant vulvar conditions
- Psychosocial aspects of vulvovaginal disease
- Psychosocial aspects of gender dysphoria (theoretical knowledge, consultation with psychiatrist/sexuologist)
- Psychosocial aspects of sexual assault



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- Diagnoses mentioned above in diagnoses process



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- o Vulvar dermatosis
- o Lack of sexual desire
- o Medical aspects of sexual assault
- o Primary vaginismus



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

- o Genital condylomata
- o Genital mutilation type III
- o Gender dysphoria

Skill

- o Laser evaporation
- o Surgical excision of lesions
- o Reconstructive surgery of infibulated scar
- o Depending from type:
FtM – hysterectomy, adnexectomy

7. Paediatric & Adolescent Gynaecology



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

See next section



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- o Persistence of vulvar and/or urinary problems

Skill

- o Cystoscopy / vaginostomy



Information; to provide information and advice regarding the diagnosis and its implications.

- o Prepubertal vaginal bleeding
- o Adnexal mass



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- o Trauma of vulva / vagina / perineum / rectum



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- o Contraception in adolescents with health problems
- o Vulvovaginal pain
- o Vaginal discharge
- o Acute abdominal pain
- o Chronic abdominal pain
- o Premature puberty
- o Pubertal delay
- o Menstrual abnormalities (e.g. primary amenorrhoea)
- o Developmental disorders of the genital tract

- o Vulvovaginal pathology (e.g. lichen sclerosus)



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

- o Vulvar or vaginal foreign body

Skill

- o Vaginoscopy with removal of foreign body

All accounts for the prepubertal and peripubertal child and the adolescent.

8. Gynaecological Oncology



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

See next section



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- o Premalignant and malignant vulvar conditions
- o Ovarian malignancy

Skill

- o Vulvoscopy with biopsy
- o Malignancy Risk Index (RMI) calculation



Information; to provide information and advice regarding the diagnosis and its implications

See next section



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

See next section



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without

See next section



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

- o Premalignant conditions of the cervix
- o Stage I, low-grade endometrial carcinoma
- o Genetic conditions, including mutations with indication for risk-reducing salpingo-oophorectomy

Skill

- o Conisation of the cervix
- o Laparoscopic hysterectomy
- o Abdominal hysterectomy
- o Laparoscopic salpingo-oophorectomy
- o Salpingo-oophorectomy via laparotomy

9. Breast Disease



Problem identification; to determine the need for diagnostic evaluation or to recognise pathology.

See next section



Diagnosis; to diagnose without performance of a specific skill.

See next section



Diagnosis; to diagnose with performance of a specific skill.

Diagnosis

- o Breast (pre)malignancy

Skill

- o Fine needle aspiration*
- o Breast biopsy³

**This does not apply to countries where this is performed by radiologists.*



Information; to provide information and advice regarding the diagnosis and its implications.

- o Recurrence or progression of breast malignancy
- o Borderline breast pathology
- o Genetics in breast malignancy



Indication for treatment; to determine the indication for a specific treatment, taking all treatment options into consideration.

- o Breast premalignancy
- o Breast malignancy



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment without performance of a specific skill (e.g. conservative treatment).

- o Galactorrhoea
- o Mastalgia
- o Postpartum mastitis



Treatment; to discuss all treatment options, determine the indication for a specific treatment, counsel about the treatment, as well as provide the treatment with performance of a specific skill (e.g. surgical treatment).

Diagnosis

- o Borderline lesions of the breast
- o Postpartum breast abscess

Skill

- o Surgical excision of breast lesion
- o Puncture and drainage of abscess

Human factors and non-technical skills

Authors: Anabela Serranito, Anna Aabakke, Fedde Scheele, Alexandra Krisuftova, Goknur Topcu, Sofia Tsiapakidou, Helena Bartels, Mark Formosa, Angelique Goverde, Karen Rose, AnnaLisa Tancredi, Ursula Catena, Fionnuala McAuliffe

Human Factors studies how individuals interact within their job environment. It includes organizational and job factors, as well as individual characteristics. Non-technical skills are included in the individual factors and are cognitive, social and personal resource skills that do not relate directly to the clinical job but are complementary to the technical skills and crucial to delivery of safe and effective patient care.

This section describes the human factors, more specifically non-technical skills, that are relevant in the pan-European postgraduate training curriculum in Obstetrics & Gynaecology. These competencies and skills have been determined through scientific research amongst societal stakeholders from all over Europe. These skills should be acquired during training, in addition to the medical expertise outcomes, to answer to the needs of society and of the stakeholders of the specialist in Obstetrics and Gynaecology. The application of human factors training has the potential to improve efficiency and quality of care delivered and enhance patient safety

Suggestions for the assessment of these skills are provided in the 'Entrustment and Portfolio' section of the curriculum. The assessment forms address the non-technical skills and describes specific competencies to be developed. Communication and Leadership are considered individually in the following sections due to their relevance in training Obstetrics and Gynaecology

Personal Leadership and development

- o Be a lifelong learner and a good role model
- o Mindfulness to obtain an equilibrium between work/life balance
- o Developing self-awareness and be able to recognize personal competencies and limitations
- o Give, seek and accept feedback, reflect upon it and use it for improvement
- o Use a reflective practice approach for self-improvement
- o Continuously improve empathetic listening as well as effective and clear communication

Professional leadership

- o Manage workload and resources
- o Maintain standards of care delivered
- o Contribute to the progress of health care via research, quality improvement projects, education and by facilitating the implementation of innovations
- o Understand the importance of planning and prioritizing within various levels of healthcare systems
- o Have knowledge of different leadership styles and be able to adapt leadership style according to situations

Teamwork

- o Collaborate respectfully with other professionals, such as nurses, midwives and healthcare providers from other disciplines, and contribute to a safe and constructive working environment
- o Facilitate inter-professional shared decision making, recognizing and relying on the expertise of others
- o Focus on team performance while acknowledging standards of care and legal aspects
- o Display leadership, particularly in critical situations

Situation awareness

- Understand the importance of situation awareness, especially in the context of labour ward management and obstetric emergencies.
- Comprehend the relevance of information gathering and interpretation for the creation of a good

situational awareness.

- Project plans and anticipate future actions for the development of individual and team situational awareness

Decision making and task management

- Develop capacities to access clinical situations, define problems and generate different management plans accordingly.
- Be able to select a management option, implement decision and review outcomes
- Recognize the importance of planning and preparation in a complex clinical system
- Adapt and respond in timely manner to change

The following Authors contributed to the 2018 version of this section:

Betina Ristorp Andersen, Annette Settnes, Peter Hornnes, Anna Aabakke, Joyce Hoek-Pula, Britt Myren, Noortje Jonker, Petra Kunkeler, Fedde Scheele, Chiara Benedetto, Jessica van der Aa

References:

1. Flin R, Kumar M. Human factors: The science behind non-technical skills. Enhancing Surgical Performance. 2015 Jul 13;17.
2. Gordon M, Darbyshire D, Baker P. Non-technical skills training to enhance patient safety: a systematic review. Medical education. 2012 Nov;46(11):1042-54.
3. Mastrangelo A, Eddy ER, Lorenzet SJ. The importance of personal and professional leadership. Leadership & Organization Development Journal. 2004 Jul 1;25(5):435-51.
4. Wacker J, Kolbe M. Leadership and teamwork in anesthesia—making use of human factors to improve clinical performance. Trends in anaesthesia and critical care. 2014 Dec 1;4(6):200-5.

Clinical leadership in Obstetrics and Gynaecology

Authors: Anabela Serranito, Anna Aabakke, Fedde Scheele, Alexandra Krisuftova, Goknur Topcu, Sofia Tsiapakidou, Helena Bartels, Mark Formosa, Angelique Goverde, Karen Rose, AnnaLisa Tancredi, Ursula Catena, Fionnuala McAuliffe

Effective Clinical Leadership is crucial to the delivery of excellence in healthcare and has been demonstrated to improve patient outcomes. Over the last decades, the increasing complexity in the delivery of healthcare and growing societal demands for accountability, transparency and quality of care have brought new responsibilities for doctors. Daily clinical practice demands not only robust medical knowledge and skills, but complementary proficiencies in areas such as service management and development, aiming to maintain high standards of care and to generate continuous quality improvement.

Healthcare systems across Europe are facing common challenges such as evolving patient demographics (e.g. ageing population, high disease burden), scientific advances (e.g. artificial intelligence, innovation in healthcare services and delivery) and increasing healthcare costs. Additional challenges are felt in the human resources sector where shortage of skilled healthcare workers, due to difficulties in retaining staff and poor projections on growing needs, causes challenges at an organizational level because staff shortages lead to longer working hours, stress and staff burnout causing further difficulties in retaining staff.

Traditionally, clinical leadership has not been formally taught as doctors are seen as innate leaders within their local systems. The increasing demands from healthcare systems and change in the requirements on how clinical care is delivered has made leadership development and training an integral part of Doctor's training. Leadership knowledge has an important role in formal leadership roles (ex: Clinical directors, governance structures, clinical leads), but is equally important in non-formal leadership roles e.g. in obstetric emergencies and when working in multidisciplinary teams. Leadership requirements may also change over time and formal leadership training will allow for better resilience and adaptability, thus obtaining the best healthcare outcomes in high reliability organisations.

For the assessment of these skills the trainee should complete or audit or quality improvement project during developing core competencies. It is further recommended that the trainee also complete an audit/quality improvement project whilst completing elective competencies. To further develop leadership skills trainees may undertake an elective in Clinical leadership.

The following section aims to outline general leadership competencies in postgraduate training in Obstetrics & Gynaecology

➤ **Managing with a system-based approach**

- Understand how the different components of the healthcare system come together to form a complex system (including local and national policies, laws relevant to the delivery of woman's care).
- Understand and adapt to diversity, development, and innovation within individual systems.
- Perform triage and prioritise tasks considering the available resources
- Balance patient-related outcomes and costs
- Ensure respectful care, privacy and patient comfort in care provision, setting, and context

➤ **Delivering person-centered care**

- View the patient in a holistic perspective, respect diversity and give individualized care

- Communicate respectfully and empathetically and use active listening fostering mutual confidence and trust
- Facilitate the balance between evidence-based recommendations and patient's preferences in shared decision-making processes, ensuring patient empowerment and informed consent
- Work according to ethical standards and the universal human rights of mothers and babies
- Advocate for patients, community, and health professionals rights

➤ **Quality improvement (QI) and patient safety**

- Recognize the importance of establishing a local "just culture", that promotes patient safety and is conducive to quality improvement environment
- Contribute actively to the evaluation of service standards
- Recognise quality issues and identify system dynamics that enable/hinder service improvement
- Enable the introduction of new services, systems and processes within a QI perspective
- Measure impact of developed QI projects
- Collaborate with other health professional team members in quality improvement and patient safety initiatives

Definitions:

Quality Improvement within healthcare is the effort made to improve patient outcomes, delivery of care and professional development within a complex and dynamic system that is in constant evolution. It implies the diagnosis of problems within a healthcare system, with an aim to treat the issues identified using change management and subsequently measure improvement

Clinical audit is a cyclic quality improvement tool that is aimed at reviewing clinical practice against explicit evidence-based standards and introducing change with aim to improve patient care and outcomes when standards are not met. Follow-up audit cycles can be used to confirm an incremental improvement in clinical practice.

Just Culture takes a systems approach to incidents, where within there is a shared accountability to maintain patient safety, enabling healthcare professional to learn without fear of retribution

References:

1. Daly J, Jackson D, Mannix J, Davidson PM, Hutchinson M. The importance of clinical leadership in the hospital setting. *Journal of Healthcare Leadership*. 2014 Nov 21:75-83.
2. Health Foundation (Great Britain). *Quality improvement made simple: what everyone should know about healthcare quality improvement: quick guide*. Health Foundation, 2013.
3. Keijser WA, Handgraaf HJ, Isfordink LM, Janmaat VT, Vergroesen PP, Verkade JM, Wieringa S, Wilderom CP. Development of a national medical leadership competency framework: the Dutch approach. *BMC medical education*. 2019 Dec;19:1-9.
4. Murray JS, Lee J, Larson S, Range A, Scott D, Clifford J. Requirements for implementing a 'just culture' within healthcare organisations: an integrative review. *BMJ Open Quality*. 2023 May 1;12(2):e002237.
5. Silver SA, Harel Z, McQuillan R, Weizman AV, Thomas A, Chertow GM, Nesrallah G, Bell CM, Chan CT.

How to begin a quality improvement project. Clinical Journal of the American Society of Nephrology. 2016 May 1;11(5):893-900.

Communication & Psycho-Social Skills Training

Authors: Sibil Tschudin, Marieke Paarlberg, Heather Rowe, Angelique Goverde

Introduction

Effective communication is an essential skill in the patient-doctor interaction as stipulated in the general competencies of the core curriculum. It has been shown to improve health outcomes as well as patient satisfaction. Furthermore, teamwork performance depends on communication skills. Finally, skills in written communication are important in keeping medical records and reporting health care information. Albeit communicative competency is in part a personal quality, communicative skills can be (further) developed by focused training, feedback and assessment.

This document presents a tentative guideline for training in communication and psycho-social skills which allow the trainee to develop an effective personal communication style with respect of patient's autonomy, to cover bio-psycho-social aspects adequately and to consider sexuality in the context of obstetrical and gynecological conditions.

Communication & Psycho-Social Skills

Communication is the very core of every doctor interaction with patients and their relatives. It is the doctor's responsibility to create a secure setting in which both patient and doctor feel comfortable to talk. Training in communication skills will enable the trainee and patient to exchange information effectively and to establish a therapeutic doctor-patient relationship in various clinical situations. Effective communication is based on the principles of biomedical ethics (beneficence, non-maleficence, respect and autonomy) [1], aims at informed decision-making and applies a patient-centred approach. The patient-centred approach is characterised by an authentic, congruent and transparent attitude, consists of active-listening [2] i.e. waiting, checking, mirroring and summarizing and of adapted individualized information-giving based on the elicit – provide – elicit method [3]. For particularly demanding situations, such as breaking bad news, addressing sexual (dys)function (including enquiring about sexual abuse) and chronic pelvic or vulvar pain syndromes, more specific skills are recommended, such as

- The 6 steps SPIKES (Setting / Perception / Invitation / Knowledge / Emotions / Strategy) protocol [4].
- NURSE (Naming / Understanding / Respecting / Supporting / Exploring) [5].
- PEARLS (Partnership / Empathy / Apology / Respect / Legitimation / Support) [6].

Another aspect of communication concerns the role of the doctor within the health care team. Collaboration and shared responsibility for health care delivery pose additional demands on doctors, especially in the domain of sharing (medical) information. Documentation of medical information at various instances, such as the patient's clinical file, operation report, discharge or consultation letter, does not only serve the purpose of health care delivery but also is a medico-legal requirement.

It is necessary that the trainee develops:

- Skills for effective patient handover, e.g. with use of the SBAR (Situation / Background / Assessment / Recommendation) method [7]).
- Skills for record keeping and writing medical reports.

Training and assessment of communication and Psycho-social skills

Like other skills in Obstetrics and Gynaecology, learning and improving communication skills is a continuous process based on combining theoretical knowledge, experience from simulation situations and practice on the job under direct (and later indirect) supervision. Use of a structured communication skills framework or model is recommended. This framework describes the various elements of the doctor-patient encounter and specific skills to be trained. Feedback and stimulation of self-reflection are the cornerstones of formative assessment to direct further training.

Training verbal communication and bio-psycho-social skills

Theoretical knowledge is learned from textbooks (e.g. Bio-Psycho-Social Obstetrics and Gynecology; a competency-oriented approach by Paarlberg KM and Van de Wiel HB) and/or e-learning either on an individual basis or in specifically designed courses on a local, national or international level (for instance, by the International Society of Psychosomatic Obstetrics and Gynaecology (ISPOG)).

Role-playing or simulation patients offer a “dry lab” practice for both doctor-patient situations and team training and may complement practicing under live conditions with direct and indirect (case discussion) supervision. In these trainings the different aspects of communication, such as empathy, structure, verbal and non-verbal expression as well as the overall impression should be considered. It is essential that feedback is provided in a structured way and considers the personality of the trainee.

Assessment of communication and bio-psycho-social skills

Direct observation is the best method for teaching and assessing communication skills. Both verbal and non-verbal communication can be addressed. Furthermore, other (para-)medical staff and even patients may provide input for assessment through multisource feedback. If direct observation is not possible, videotaping trainee-patient encounters may be helpful.

A portfolio should be kept with multi-source feedback and OSCE assessments but may also include brief written reflections by the trainee.

Training communication skills in teamwork setting

Specific simulation courses for patient handover and complex situations are organised locally, nationally or internationally. For communication in teams, the SBAR method is recommended.

Training and assessment of written communication

Depending on the specific document and the local and/or national setting, criteria for medical documentation should be clearly stated and passed on to the trainee. Discussion of the medical documents prepared by the trainees will demonstrate in how far the trainee is fulfilling these criteria.

References:

1. Beauchamp TL, Childress JF. Principles biomedical ethics. 5th ed. Oxford: Oxford University Press; 2001.
2. Rogers C, Farson R. Active listening: In: Kolb D, Rubin I, MacIntyre J, editors. Organizational psychology. 3rd ed. Englewood: Prentice Hall; 1979.
3. Miller WR, Rollnick S. Motivational interviewing: preparing people for change. New York: Guilford Press; 2000.
4. Baile WF, Buckman R, Lenzi R, Glober G, Beale EA, Kudelka AP. SPIKES-A six-step protocol for delivering bad news: application to the patient with cancer. *Oncologist*. 2000;5(4):302-11.
5. Back AL et al. Efficacy of communications skills training for giving bad news and discussing transitions to palliative care. *Arch Intern Med* 2007; 167: 453—460
6. Clark W, Hewson M, Fry M, Shorey J. Communication skills reference card. St. Louis, MO: American Academy on Communication in Healthcare; 1998.
7. Institute for Healthcare improvement: www.ihl.org/resources/Pages/Tools/SBARToolkit.aspx

Simulation Training of Gynaecological Skills

Authors: Ursula Catena, Federica Campolo, Sofia Tsiapakidou, Helder Ferreira, Attilio Di Spiezio Sardo, Giovanni Scambia, Grigoris Grimbizis, Benoît Rabischong, Vasilios Tanos, Rudi Campo

Introduction

In 2014, EBCOG signed the Joint European-American Recommendation which established that, in order to improve resident training and to reduce patient morbidity and mortality rate, every teaching hospital should have a “**Gynaecological simulation lab**” available.

The rationale behind this recommendation is that all gynaecological diagnostic and surgical acts demands psychomotor skills. It is vital that these psychomotor skills are trained and tested in a safe environment prior to implementing the maneuvers on a patient.

For surgery it has been clearly proven that training in the operating room without prior skill lab training significantly increases patients’ morbidity and mortality rates. Moreover, with the introduction of modern technologies, surgery is becoming increasingly more digital and requires adaptations to the educational model to address the demands for new skills as needed not only by surgeons but also by healthcare professionals in general. The increase in complexity that these developments bring, demands a well-oiled machine in the operating room, where surgeons, nurses and other supportive staff can operate in synergy and with increased efficiency.

Simulating is a great way not only to learn, but also to do it safely, with no harm done to yourself or to others and offering the possibility to personally apply problem-solving strategies [1].

Gynaecological simulation lab

The Gynaecological simulation lab must be designed to develop and enhance the necessary skills critical to the success of future Ob/Gyn physicians. Ob/Gyn residents at all levels of training participate in the simulation curriculum and graduate better equipped to perform complex procedures and to improve healthcare quality and safety.

1. Gynaecological procedures

Model: Gynaecological Phantom

Skills: Gynaecological examination

Speculum insertion

Taking cervical cytology/HPV swab

Intra Uterine Device placement/removal

Colposcopy (with cervical biopsy)

2. Gynaecological Surgery

Model: Surgical simulations with inanimate models, suturing pads

Skills: Suturing with different techniques and different material

Exercises of different surgical procedures (vaginal cuff closure, treatment of ectopic pregnancy, removal or marsupialization of cysts)

3. Endoscopy (Laparoscopy and Hysteroscopy)

All stakeholders, including specialists, trainees, and healthcare professionals recognize the importance of gynaecologic endoscopic skills. These skills require extensive practice before being performed on live patients. Simulation-based training in gynaecological endoscopic procedures is generally well received and appreciated. Existing bibliographies emphasize the effectiveness of simulation training in enhancing learning. Benefits include the opportunity for feedback and repetitive practice. Research shows that longer

duration of simulator practice is linked to greater learning gains. In surgery, technical skills have a direct impact on clinical outcomes, with 2,5 times more readmissions, 3 times more complications and up to 5 times more deaths after surgeries completed by poor performers vs. the top performers.

Clinicians who perform endoscopic surgery without proper training in specific psychomotor skills, are a higher risk to increased patient morbidity and mortality. The apprentice-tutor model was useful for many years, but the complexity of modern surgical technology requires specific skills to be also taught outside the operating theatre.

In the wake of the spread of minimally invasive surgery and continuous technological evolution, but above all in response to the request for an appropriate and necessary training program, several and numerous training systems have been designed and implemented. The different training systems can be separated into physical systems and virtual systems. **Physical simulators** are for example the box trainer and laparoscopic instrumentation, while **virtual simulators** are those computer-based systems that involve the use of virtual reality software.

Laparoscopic Box Trainers

This type of surgical simulator uses real surgical instruments and video equipment generally used in the operating room. It typically consists of a box-like structure with ports where trocars and surgical instruments can be inserted. Inside the box, there are various simulated anatomical models with tasks that mimic real surgical procedures. The simulations models inside the box are manipulated and managed under the visual information created by a video source and a monitor. In this training mode, practitioners practice skills such as instrument handling, suturing, and tissue manipulation in a controlled, low-risk environment.

Hysteroscopic Box Trainers

This type of surgical simulator uses real hysteroscopic instruments and video equipment generally used in hysteroscopic surgery. It typically consists of a female genital model containing an inanimate model representing the spatial distribution and orientation of the different planes and angles of a normal uterus.

Home Trainers

Home trainers provide the advantage that they are independent of the quite expensive standard endoscopic set up.

In the frame of working hours regulation, the trainee can perform training at home with eventually hybrid support or, in the future, support through AI programmes.

For external specialized training centers:

Animal Models

This type of simulators uses live, anesthetized animals, offering the most realistic endoscopic training without involving patients. However, using animals raised ethical and economic concerns.

Cadaver training

This type of training permits a 3-dimensional observation and dissection of human anatomy and opportunity to consolidate and see first-hand the different structures of the pelvic anatomy. However, using cadavers raised ethical and economic concerns.

Virtual reality and surgical procedure simulators





Both virtual reality and surgical procedure simulators are quite expensive and therefore it is not feasible to recommend it today as a necessary and obligatory part of a hospital Gynaecological Simulation room. Specific training institutions can provide today this kind of training for each individual.

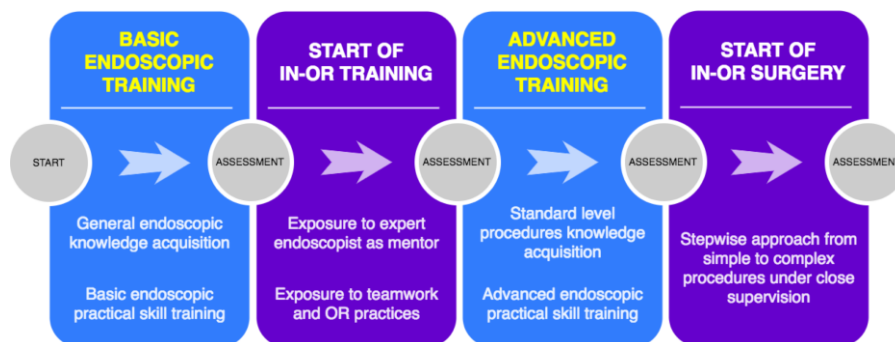
Virtual reality surgical simulators represent the latest advancement in surgical training. Sophisticated software can reproduce endoscopic surgical procedures, allowing trainees to record their training sessions. This opportunity facilitates result evaluation and comparison with others. Additionally, there is the possibility of updating the software to create more complex tasks and procedures.

Surgical procedure simulators are advanced training tools designed to replicate real-life surgical procedures. They use various technologies, such as virtual reality, augmented reality, and physical models, to create realistic practice environments for surgeons. The advantage of using these simulators is clear: the person concerned can acquire a more complete training, which involves the anatomy, the manual skills of the surgical act in all its nuances in an environment where any error does not lead to complications or consequences.

Training Curriculum

A structured gynaecological training programme should fully embrace this approach and encompass a series of well-defined steps, combining dry lab training with in-OR training [2-7]. At each phase, an assessment should take place to validate whether the trainee can proceed to the next level. The following steps can be defined in this approach:

-  **Basic endoscopic training (dry lab):** Knowledge acquisition of general endoscopic principles and techniques combined with basic practical endoscopic skill training.
-  **Start of in-OR training:** After the trainee has proven to be in possession of the necessary basic endoscopic knowledge and practical skills, the in-OR training can be started. In this phase the trainee can assist an expert endoscopic surgeon, who acts as a mentor, and is exposed to basic OR practices and teamwork.
-  **Advanced endoscopic training (dry lab):** Knowledge acquisition of standard level procedures and training of advanced practical skills.
-  **Start of in-OR surgery:** Once the skills laboratory phase is past, live surgery may be undertaken, according to a stepwise approach starting with close supervision and simple procedures and step by step expanding to less supervision for simple procedures and moving on to more complex ones.



This approach aims to train and assess the necessary endoscopic skills as much as possible in a dry lab setting, before moving on to live patients in the OR [8,9]. The benefit of this is threefold:

- Trainees are much more self-assured when they enter the OR, confident that they have acquired the necessary knowledge and skills.
- Expert mentors save time by not teaching basic skills, can receive proper assistance from trainees, and can focus more on the procedures at hand.
- The patient receives better care due to properly trained trainees and is much less exposed to unskilled trainees.

Example of a simulation training programme in endoscopic skills

The savant societies ESGE and ESHRE under the auspices of EBCOG and accepted as an EU4Health programme, has elaborated a well-balanced diploma curriculum: the Gynaecological Endoscopic Surgical

Education and Assessment (GESEA) programme [10-16], which is based on a structured approach similar to what is proposed in this document - see appendix for details.

Gynaecological skills to be trained (core curriculum)

Skills in outpatient clinic:

- o Gynaecological examination
- o Speculum insertion
- o Pap Smear execution
- o Placement/Removal of Intra Uterine Device
- o Colposcopy (with biopsy)
- o LLETZ of the cervix
- o Placement/Removal of subcutaneous implants

Basic conventional surgical skills:

- o Punch biopsy under local anaesthesia
- o Surgical removal and marsupialization of cyst
- o Dilation & Curettage

Advanced conventional surgical skills

- o Laparotomy with minimal adhesiolysis
- o Salpingo-oophorectomy via laparotomy
- o Anterior vaginal repair
- o Posterior vaginal repair
- o Myomectomy of subserous myoma via laparotomy
- o Colpocleisis (at least in simulation setting)

Basic endoscopic skills:

Laparoscopy:

- o Diagnostic laparoscopy
- o Diagnostic laparoscopy with tubal testing
- o Simple laparoscopic adhesiolysis
- o Laparoscopic sterilization

Hysteroscopy:

- o Diagnostic hysteroscopy
- o Diagnostic hysteroscopy with endometrial biopsy
- o Visual D&C [17]

Advanced endoscopic skills:

Laparoscopy:

- o Laparoscopic removal of ectopic pregnancy (salpingostomy) or salpingectomy
- o Laparoscopic needle aspiration of simple cysts
- o Laparoscopic electrocoagulation of the ovary
- o Simple laparoscopic ovarian cystectomy
- o Laparoscopic salpingo-oophorectomy

Hysteroscopy:

- o Hysteroscopic polyp resection
- o Hysteroscopic myoma resection type 0-1 (< 2cm)
- o Hysteroscopic endometrial ablation

References:

1. Campo R, Wattiez A, Tanos V, Di Spiezio Sardo A, Grimbizis G, Wallwiener D, et al. Gynaecological endoscopic surgical education and assessment. A diploma programme in gynaecological endoscopic surgery. *Gynecol Surg*. 2016;13:133-7.
2. Diesen DL, Erhunmwunsee L, Bennett KM, Ben-David K, Yurcisin B, Ceppa EP, et al. Effectiveness of laparoscopic computer simulator versus usage of box trainer for endoscopic surgery training of novices. *J Surg Educ*. 2011;68(4):282-9.
3. Escamirosa FP, Flores RM, Garcia IO, Vidal CR, Martinez AM. Face, content, and construct validity of the EndoViS training system for objective assessment of psychomotor skills of laparoscopic surgeons. *Surg Endosc*. 2015;29(11):3392-403.
4. Hofstad EF, Vapenstad C, Chmarra MK, Lango T, Kuhry E, Marvik R. A study of psychomotor skills in minimally invasive surgery: what differentiates expert and nonexpert performance. *Surg Endosc*. 2013;27(3):854-63.
5. Munro MG. Surgical simulation: where have we come from? Where are we now? Where are we going? *J Minim Invasive Gynecol*. 2012;19(3):272-83.
6. Mulla M, Sharma D, Moghul M, Kailani O, Dockery J, Ayis S, et al. Learning basic laparoscopic skills: a randomized controlled study comparing box trainer, virtual reality simulator, and mental training. *J Surg Educ*. 2012;69(2):190-5.
7. Sroka G, Feldman LS, Vassiliou MC, Kaneva PA, Fayez R, Fried GM. Fundamentals of laparoscopic surgery simulator training to proficiency improves laparoscopic performance in the operating room-a randomized controlled trial. *Am J Surg*. 2010;199(1):115-20.
8. Molinas CR, Binda MM, Campo R. Dominant hand, non-dominant hand, or both? The effect of pre-training in hand-eye coordination upon the learning curve of laparoscopic intra-corporeal knot tying. *Gynecol Surg*. 2017;14(1):12.
9. Campo R, Wattiez A, Wallwiener D, et al. Training and education in endoscopic surgery: is there a future for endoscopy in OB&GYN training? *Gynecol Surg*. 2005; 2:57–65.
10. Campo R, Wattiez A, Tanos V, Di Spiezio SA, Grimbizis G, Wallwiener D, Brucker S, Puga M, Molinas R, O'Donovan P, Deprest J, Van BY, Lissens A, Herrmann A, Tahir M, Benedetto C, Siebert I, Rabischong B, De Wilde RL (2016) Gynaecological endoscopic surgical education and assessment. A diploma programme in gynaecological endoscopic surgery. *Eur J Obstet Gynecol Reprod Biol* 199:183– 186
11. Campo R, Reising C, Van Belle Y, Nassif J, O'Donovan P, Molinas CR (2010) A valid model for testing and training laparoscopic psychomotor skills. *Gynecol Surg* 7:133–141
12. Molinas CR, Campo R (2010) Defining a structured training program for acquiring basic and advanced laparoscopic psychomotor skills in a simulator. *Gynecol Surg* 7:427–435
13. Molinas CR, De Win G, Ritter O, Keckstein J, Miserez M, Campo R (2008) Feasibility and construct validity of a novel laparoscopic skills testing and training model. *Gynecol Surg* 5:281–290
14. Campo R, Wattiez A, Tanos V, Di Spiezio SA, Grimbizis G, Wallwiener D, Brucker S, Puga M, Molinas CR, O'Donovan P, Deprest J, Van Belle Y, Lissens A, Herrmann A, Tahir M, Benedetto C, Siebert I, Rabischong B, De Wilde RL (2016) Gynaecological endoscopic surgical education and assessment. A diploma programme in gynaecological endoscopic surgery. *Gynecol Surg* 13:133–137
15. Campo R, Molinas CR, De Wilde RL, Brolmann H, Brucker S, Mencaglia L, Odonovan P, Wallwiener D, Wattiez A (2012) Are you good enough for your patients? The European certification model in laparoscopic surgery. *Facts Views Vis Obgyn* 4:95–101
16. Campo R, Wattiez A, De Wilde RL, Molinas CR (2012) Training in laparoscopic surgery: from the lab to the OR. *Zdrav Var* 51:285–298
17. Casadio P, Raffone A, Salucci P, Raimondo D, Seracchioli R, Carugno J, Di Spiezio Sardo A (2023). Visual dilation and curettage for the fertility-sparing treatment of atypical endometrial hyperplasia/endometrial intra-epithelial neoplasia: an easy to perform in-office technique. *Int J Gynecol Cancer*. 1;33(5):837-838

Simulation Training of Obstetrical Skills

Authors: Sofia Tsiapakidou, Fedde Scheele, Fionnuala McAuliffe

Introduction

Simulation training is recommended as a key part in the Obstetrics & Gynaecology curriculum to acquire the necessary skills, such as delivery by vacuum extractor or forceps, before these skills are used in clinical practice.

Equipment

Potential equipment for training may be very diverse and can definitely be inexpensive. Some examples of equipment, tools, models, trainers or mannequins are given below, ranging from inexpensive to expensive (and thus more advanced) options: basic birthing mannequins, basic gynaecological training models modified for vacuum extractor / ventouse, Kiwi, forceps, CTG monitoring, foetal blood sampling, B-Lynch (foam rubber), neonatal/adult mannequins for basic resuscitation, advanced birth mannequins, perineal repair trainer, caesarean section skills trainer, emergency hysterectomy / intra partum hysterectomy trainer, advanced full-scale birthing simulator etc.

- Hybrid simulator: can be a combination of a patient (actor) and a simulator, or a combination of several different simulators.
- Gaming technologies: All sorts of computer-based simulators and games and virtual and augmented reality platforms are available for medical training.
- Presentations, videos and implementation tools, including management algorithms, including virtual reality training.

All departments of obstetrics and gynaecology are required to provide basic birthing mannequins for individual technical skills training and hybrid simulators for interprofessional team training.

- Basic birthing mannequins



Courtesy of Jette Led Sørensen, Denmark

- Basic gynaecological training models modified for vacuum extractor / ventouse, Kiwi, forceps, CTG monitoring, foetal blood sampling, B-Lynch (foam rubber) etc.

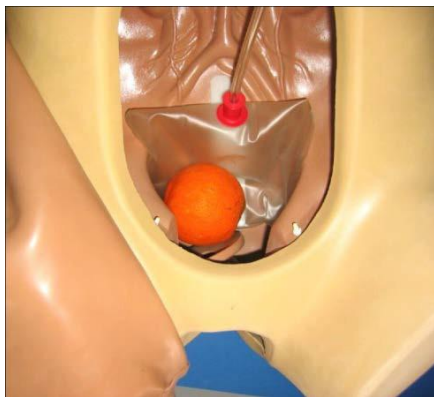


Courtesy of Jette Led Sørensen, Denmark



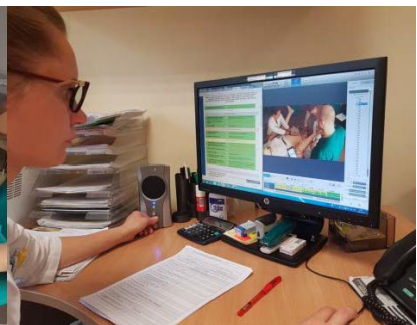
Courtesy of Diogo Ayres-de-Campos, Portugal

- Advanced full-scale birthing simulator



Courtesy of Diogo Ayres-de-Campos, Portugal

- Hybrid simulator: can be a combination of a patient (actor) and a simulator, or a combination of several different simulators. For instance, this may involve a patient (actor) with a birthing mannequin between the legs, or an adult mannequin for basic resuscitation combined with a basic birthing mannequin.



Hydralab® courtesy of Ruta Nadisauckiene, Lithuania



Virtual reality training courtesy of Fionnuala McAuliffe, Ireland

Types of simulation training and examples

Individual technical skills training

- Basic level with basic skills training (basic birth mannequins)
- Complex level of skills training (more advanced mannequins)

Interprofessional team training

- Basic team training with hybrid simulator
- High fidelity simulation with advanced full-scale birthing simulator

Simulation in obstetrics (minimal requirements)

- Basic birthing mannequins
- Basic training models modified for vacuum extractor / ventouse, Kiwi, forceps, CTG monitoring, foetal blood sampling, B-Lynch (foam rubber) etc.

Interprofessional team training

- Hybrid simulators
- Patients (actors)



Courtesy of Tim Draycott & Cathy Winter, PROMPT, UK

Courtesy of Jette Led Sørensen, Denmark

Simulation Setting

There are three types of simulation settings, all of which have advantages and disadvantages [8]:

- Simulation centre (off-site simulation); away from the actual patient care unit.
- In-house elsewhere in the department (off-site simulation); training room(s) specifically set up for simulation training away from the patient care unit, but within the hospital. In-house training facilities may be part of hospital departments.
- In situ simulation; a blend of simulation and actual working environments, for training under working conditions. These situations may be announced (staff is informed beforehand about the simulation event) or unannounced (staff is not informed beforehand).

To determine the preferred simulation setting for a particular institution, it may be helpful to consider the overall objectives of simulation-based education as well as specific local factors, such as feasibility.

Obstetrical skills (core curriculum)

General Medical Knowledge & Skills

- *Lead a ward round with a multidisciplinary view, manages admittance and discharge of patients at the ward and the delivery room and manages handover to another practice*
- *Recognise and triage acutely ill patients, septic patients, patients with peripartum complications and patients requiring resuscitation, and initiate adequate management.*

Basic obstetric skills

- Assistance of uncomplicated delivery
- Vacuum-assisted vaginal delivery
- Forceps-assisted delivery
- Breech delivery
- Assistance during vaginal delivery of multiple pregnancy
- Foetal blood sampling
- All dystocia management manoeuvres
- Postpartum bleeding
- Intrauterine balloon tamponade
- Surgical compression of atonic uterus
- B-Lynch suturing

Skills in perineal repair

- Episiotomy
- Repair of genital tract trauma
- Suturing of episiotomy wound
- Suturing of 1st/2nd/3rd degree perineal tears
- Suturing of 4th degree perineal tear

Advanced obstetric surgery

- Caesarean section
- Repeat caesarean section
- Caesarean section in high BMI patient
- Emergency caesarean section
- Abdominal hysterectomy (at least in simulation or through alternative learning strategies)
- Manual and surgical removal of placenta
- Manual uterine reversion (at least in simulation or through alternative learning strategies)
- Evacuation of vulvar hematoma

Neonatal mannequins for basic resuscitation

- Support the initial care of the healthy/preterm new-born (with low Apgar scores)
- Resuscitate the new-born accurately in the first 10 minutes after delivery

The following Authors contributed to the 2018 version of this section:

Jette Led Sørensen, Ruta Nadisauskiene, Tim Draycott, Diogo Ayres-de-Campos, Guid Oei, Fedde Scheele, Jessica van der Aa

References:

1. Sørensen JL, Ostergaard D, LeBlanc V, Ottesen B, Konge L, Dieckmann P, van der Vleuten C, et al. Design of simulation-based medical education and advantages and disadvantages of in situ simulation versus off-site simulation. BMC medical education. 2017;17(1):20.
2. Kneebone R, Nestel D, Wetzell C, Black S, Jacklin R, Aggarwal R, Yadollahi F, Wolfe J, Vincent C, Darzi A. The human face of simulation: patient-focused simulation training. Academic medicine : journal of the

- Association of American Medical Colleges. 2006;81(10):919- 24.
3. Harden RM. Ten questions to ask when planning a course or curriculum. *MedEduc*. 1986;20(4):356-65.
 4. Kern DE, Thomas PA, Howard DM, Bass EB. Curriculum development for medical education. A six step approach. London: The John Hopkins University Press; 2009.
 5. McEvoy A, Kane D, Hokey E, Mangina E, Higgins S, McAuliffe FM. Virtual reality training for postpartum uterine balloon insertion - a multi-center randomized controlled trial. *Am J Obstet Gynecol MFM*. 2024 Jul 15:101429. doi: 10.1016/j.ajogmf.2024.101429.
 6. Ryan GV, Callaghan S, Rafferty A, Higgins MF, Mangina E, McAuliffe F Learning Outcomes of Immersive Technologies in Health Care Student Education: Systematic Review of the Literature. *J Med Internet Res*. 2022 Feb 1;24(2):e30082.
 7. Dunlop K, Dillon G, McEvoy A, Kane D, Higgins S, Mangina E, McAuliffe FM. The virtual reality classroom: a randomized control trial of medical student knowledge of postpartum haemorrhage emergency management. *Front Med (Lausanne)*. 2024 Mar 19;11:1371075. doi: 10.3389/fmed.2024.1371075
 8. Kane D, Ryan G, Mangina E, McAuliffe FM A randomized control trial of a virtual reality learning environment in obstetric medical student teaching. *Int J Med Inform*. 2022 Dec;168:104899. doi: 10.1016/j.ijmedinf.2022.104899
 9. Ryan G, Rafferty A, Murphy J, Higgins MF, Mangina E, McAuliffe FM. Virtual reality learning: A randomized controlled trial assessing medical student knowledge of fetal development. *Int J Gynaecol Obstet*. 2023 Mar 8. doi: 10.1002/ijgo.14684.
 10. McEvoy A, Kane D, Hokey E, Mangina E, Higgins S, McAuliffe FM. [Virtual reality training for postpartum uterine balloon insertion - a multi-center randomized controlled trial](#). *Am J Obstet Gynecol MFM*. 2024 Jul 15:101429. doi: 10.1016/j.ajogmf.2024.101429.
 - 11.

Ultrasound Skills Training

Authors: Juriy Wladimiroff, Piotr Sieroszewski, Angelique Goverde

Introduction

Ultrasonography has been established as an important diagnostic tool in the daily practice of obstetrics and gynaecology. It is of paramount importance that trainees receive a structured and supervised training in ultrasonography because ultimately it is the skill of the ultrasonographer, i.e. the gynaecologist, that determines the quality of the images and thus the added clinical value of this form of investigation.

The curriculum for the core and electives in postgraduate training in obstetrics and gynaecology relies on independent practice of ultrasonography skills by the gynaecologist. This section provides a concise description of the training curriculum for ultrasonography skills in terms of

- The knowledge and skills in ultrasonography that the trainee will have reached at the endpoint of training to the level of competence as described in the EBCOG Core curriculum;
- Methods for learning these skills;
- Tools for quality assessment of these skills.

The specific items were extracted from the core curriculum and grouped according to their common denominator or subject heading. Suggestions for training and assessment were derived from the ISUOG Education Committee recommendations for basic training in obstetric and gynaecological ultrasound [1].

General outlay of ultrasonography training

A three step programme is recommended:

1. Theoretical training: technical aspects of equipment, imaging and reporting.
2. Practical training: under supervision in a clinical setting until the level of independence has been reached.
3. Assessment of the trainee's performance: logbook or collection of pictures as an illustration of the trainee's ability to produce quality images and to recognize pathologies.

Ultrasonography Training Curriculum

A. General principles of ultrasound scanning

1. Basic physical principles of ultrasound, including safety;
2. Transducer, image production, knobs, scanning planes (TA & TV) , measurements;
3. Basic principles of Doppler ultrasound and umbilical artery Doppler;
4. Infusion scanning (gel or saline infusion): safety and indication;
5. Documentation of findings.

The general principles will be learnt via textbook and/or e-learning modules and will be discussed with a dedicated supervisor.

Practical skills of handling the transducers and scanning apparatus as well as infusion scanning will be practiced under direct supervision of a trained ultrasonographer until full proficiency has been achieved.

Assessment: knowledge-based assessment (exam), direct clinical observation

B. Ultrasonography in gynaecology

Assessing normal and abnormal appearances of the endometrium, myometrium, and adnexae; application of ultrasound criteria to discriminate between normal and abnormal findings (e.g. RMI [2], IOTA [3]).

This part will be learnt in a stepwise process:

1. Orientation via textbook and/or e-learning modules
 2. Practical experience under direct supervision; supervision will diminish while experience is building up
- Assessment: knowledge-based assessment (exam), direct clinical observation, portfolio of at least 50 cases (variety of uterine (myometrium and endometrium) and adnexal pathology)

C. Ultrasonography of pregnancy

- a. First trimester
 1. Assessing normal and abnormal findings between 4 and 10 weeks in singleton and twin pregnancies (including ectopic pregnancy);
 2. Assessing normal and abnormal findings between 10 and 14 weeks in singleton and twin pregnancies (chorionicity);
 3. Dating of pregnancy
- b. Second trimester and third trimester
 1. Foetal presentation
 2. Foetal biometry: dating, assessing size and estimating foetal weight
 3. Assessing the placenta and amniotic fluid volume
 4. Distinguish between normal and abnormal foetal size and growth patterns, use of Doppler flow of umbilical artery
 5. Assessing cervical length

This part will be learnt in a stepwise process:

1. orientation via textbook and/or e-learning modules
 2. practical experience under direct supervision; with increased experience, less supervision will be needed.
- Assessment: knowledge-based assessment (exam), direct clinical observation, portfolio of at least 50 cases (variety of first, second and third trimester cases).

References:

1. ISUOG Education Committee recommendations for basic training in obstetric and gynaecological ultrasound. Ultrasound Obstet Gynaecol 2013; DOI 10.1002/uog.13208
2. Jacobs I, Oram D, Fairbanks J et al A risk of malignancy index incorporating Ca125, ultrasound and menopausal status for the accurate preoperative diagnosis of ovarian cancer. Br J Obstet Gynaecol 1990;97:922-929
3. Timmerman DV, Bourne TH, Collins WP et al. Terms, definitions and measurements to describe the sonographic features of adnexal tumors: a consensus opinion from the International Ovarian Tumor Analysis (IOTA) group. Ultrasound Obstet Gynecol 2000; 16:500- 505.

Entrustment and Portfolio

Authors: Fedde Scheele, Angelique Goverde, Jessica van der Aa, Laura Spinnewijn

Introduction

This section describes the means within the pan-European postgraduate training curriculum in Obstetrics & Gynaecology through which a trainee's progress in competence is determined. The curriculum consists of 10 themes that comprise various professional activities. Once a trainee has reached full competence in the performance of a specific professional activity, i.e. at the level of independent practice, the trainee will be granted entrustment for that specific professional activity and eventually for the entire theme. Depending on local regulations and laws, granted entrustment means that the trainee is being declared proficient and allowed to practice the concerning professional activity without supervision. When training according to entrustment decisions, trainees should always be aware of the possibility of requesting supervision, even if entrustment for independent practice was granted for a specific activity. This demands reflective practice of the trainee. In high-risk situations, it is expected that the trainee recognises this risk and demands supervision if patient safety is at stake. In some countries independent practice is restricted by law, therefore the execution of entrustment may be tailored to local or regional legislation.

Throughout the years, the trainee will collect entrustment for the various professional activities; entrustment is therefore not limited to the last day of training. The actual scheme of entrustment will be determined by and adapted to local or regional infrastructure.

Entrustment, as will be described below, entails more than assessment, and is documented in the personal portfolio of the trainee. This document describes the steps to be taken in the process of training in order to reach entrustment. It provides the guidelines for portfolio evaluation and entrustment decisions, including tools of assessment.

Entrustment of Professional Activities

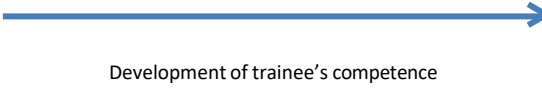
A professional activity includes all tasks and aspects needed to execute such an activity in the context of patient care. For example, the professional activity 'caesarean section' entails not only the technical skill to perform the surgery but also other skills such as the decision-making process prior to the operation, patient communication, team work in the operating theatre, and post-operative care. Entrustment of a professional activity to the trainee means that the trainee is considered competent on all aspects of the professional activity in such a way that they can perform the activity independently. Entrustment may concern a small domain of practice like the caesarean section, or a larger domain like 'Intrapartum & Postpartum Care' as part of maternal care.

The learning process of a trainee, aimed at reaching the level of independent practice, is based on active engagement in delivery of care, provision of formative feedback by clinical supervisors and reflection on progress by the trainee. In time, these clinical activities will lead to increasing competence, and supervision is adapted accordingly. In the initial stages of training, supervision will be strict, and clinical supervisors will need to be present while the trainee is performing a specific activity in order to talk the trainee through the process or to intervene when necessary. As the trainee gradually gains experience and competence, supervision will evolve towards a more guiding and supporting role with decreasing need of intervention. This allows the trainee to experience a higher degree of autonomy. When the trainee has achieved competence, the activity can be delegated to the trainee, and supervision may occur indirectly (not being present in the same room) and at the discretion of the supervisor. Once clinical supervisors, informed by both the portfolio and their own judgement, are convinced that the trainee can perform the activity without interference of a supervisor, the trainee will be granted **entrustment** for this specific activity following the process described below. The strategy of entrustment

is based on international literature [1-4].

Development of competence moves through five levels: from the trainee observing the supervisor performing the activity (level 1), to the trainee performing the activity fully independently ('supervisor does not need to be present'). This is shown in table 1.

Table 1: Five levels of competence in achieving entrustment of an activity.

Levels of competence:	1 Supervisor performs the activity, the trainee observes	2 Supervisor talks trainee through activity	3 Supervisor intervenes incidentally	4 Supervisor may be present just in case	5 Supervisor does not need to be present
Trainee:					Entrustment (to be achieved after formal decision)

Portfolio

In the portfolio, the trainee keeps a record of all the activities and perspectives related to his/her development to support the request for a higher level of competence and, finally, for entrustment. For the decisions on level of competence and achievement of entrustment, data are collected from three sources (triple source entrustment):

A) Learning experiences: depicting the learning achievements of the trainee

- Logbook summarizing clinical experience, including specific diagnoses and treatments.
- Courses; e.g. laparoscopic skills training course, management course etc.
- Academic experience, scholarly work, presentations, peer-reviewed scientific articles.
- Personal development plan, with regular updates of progress in training, reflective reports and reports of discussions with the tutor.

B) Assessment for entrustment: depicting the assessment achievements of the trainee

- Structured feedback from supervisors, colleagues and patients; e.g. 360 degree feedback (see addendum 1)
- Workplace-based assessments; e.g. mini-CEX, OSATS¹ See addendum 1 for examples of formal assessment tools in the clinical workplace.
- Knowledge and skills assessments; e.g. exam results

C) The competence committee adds professional impressions: depicting the 'master-apprentice' image

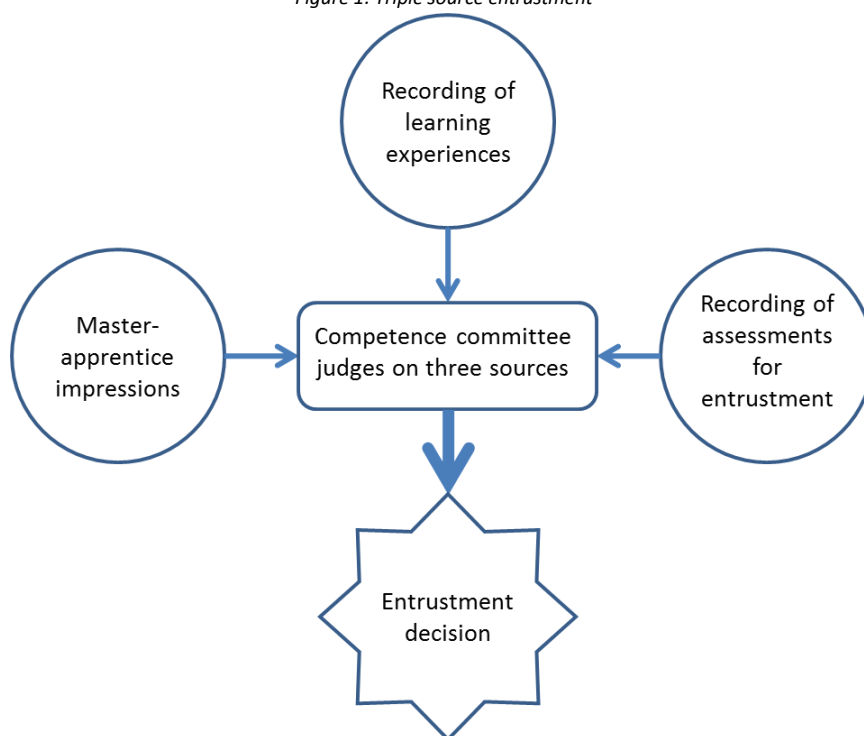
- Brief minutes of the competence committee meeting describing the professional impressions, which are added to the portfolio.

Entrustment process and decision

In the formalisation of entrustment, the trainee should play an active role in the initiation of entrustment decisions. However, the actual decision on entrustment for an activity lies with the competence committee. It is recommended that the competence committee is comprised of at least 2 members that know the trainee's performance well and preferably at least 2 other clinical faculty members.

Once every 3 to 6 months, the trainee is expected to write a clear and concise request to the competence committee in which he/she suggests to move up to a higher level of competence for a particular activity. The request should be supported by information in the portfolio. Based on the three sources information, the competence committee determines the level of competence and thus the degree of supervision required for the professional activities specified in the request. This process may be particularly important in the transition from level of competence 3 to 4, as well as the transition from level 4 to 5 (entrustment decision). For the transitions in the lower levels, the competence committee may mandate the decision to clinical supervisors, to prevent excessive administrative processes.

Figure 1: Triple source entrustment



There are two possible outcomes of this process:

1. If the competence committee is indecisive about the level of competence that is achieved, more information about the trainee's performance is gathered and the decision is postponed.
2. If the competence committee has reached agreement on the level of competence, the decision is briefly motivated in writing (to be recorded in the portfolio) and the activity is signed off.

Once the trainee has reached the highest level of competence, the competence committee grants entrustment for this particular professional activity.

In some jurisdictions, it is legally impossible for a trainee to perform a clinical activity completely without supervision. In these cases, when the competence committee judges that the trainee is competent for independent practice but is not allowed to act accordingly for formal reasons, the trainee can be granted entrustment on paper, with the provision that this entrustment will be effectuated by the end of training.

The competence and entrustment decisions by the competence committee are recorded in the portfolio, so that the trainee, the clinical faculty and the competence committee may verify at any time which level of competence has been reached and whether entrustment has been granted.

The assessment image

It is vital to stress that assessment for entrustment is only one of the sources to base the entrustment decision upon.

Regarding assessment for entrustment, please consider:

- The process of assessment of entrustment can be seen as a picture made up of more or less pixels. The higher the number of assessments, the more pixels are present in the assessment image.
- Diversity of assessment tools (see addendum 1 for examples) creates diversity in the colour scheme of the assessment image and, therefore, a clearer picture.
- Taking many assessments for entrustment requires great investments of time, effort, and finances. Assessment for entrustment should be useful, and resources for assessment should be used economically. Only when necessary, e.g. in case of doubt about trainee performance, the number of assessments for entrustment may be increased to get a more detailed picture of the trainee's performance (sequential assessment).
- Throughout training, assessment may shift from more knowledge-based assessment to more skills-based assessment in the clinical setting with observations in the workplace, as independence in practice is increasing.

Assessment information as pixels



Courtesy of C van der Vleuten

Assessment and feedback may be used for entrustment, as well as for learning. Regarding assessment and feedback for learning, please consider:

In the learning process, it is necessary for clinical faculty to have information about the trainee's level of professional performance to provide optimal feedback to the trainee and to coach the trainee to improve his/her competence. The trainee will perceive feedback for learning differently than assessment for entrustment, since it is low-stake. Assessment and feedback for learning are extremely important for optimal 'master-apprentice' learning and tutoring of the trainee. It is therefore recommended to create a learning environment that is as safe as possible and to leave low-stake assessment and feedback for learning unrecorded in the portfolio. The portfolio is directed at high-stake information for entrustment.

Low-stake assessment and feedback for learning should be given separately from high-stake assessment for entrustment; since if the two are combined, trainees may experience assessment and feedback for learning as high-stake (a hurdle to pass instead of something to learn from).

Figure 2: Assessment for entrustment versus assessment for learning

Assessment for entrustment

- Recorded in portfolio
- Adds to entrustment decision
- Consider frequency of assessment; too high versus too low for clear assessment image

Assessment for learning

- Not recorded in portfolio
- Focuses on trainee's development
- Aimed at supporting the learning process
- Frequency is tailored to the needs of the trainee

Determining the training time schedule and the trainee's progress

Each training institution may determine the targets for entrusting their trainees over time in a training time schedule (see table 2 for an example). The trainee and the competence committee should repeatedly evaluate the trainee's progress over time, aiming to comply with the schedule. In the table, X indicates the year in which full entrustment of the professional activity should be awarded.

Table 2: Example of training time schedule of entrustments over time.

Nested EPA's within one theme (overarching EPA)	Year 1	Year 2	Year 3	Year 4
Treat premature contractions and induce pulmonary maturation	x			
Assist preterm delivery	x			
Assist uncomplicated delivery	x			
Manage a delivery with a medical history of caesarean section or peri-partum pain	x			
Assist breech delivery <u>at least in simulation</u>			x	
Assist vaginal delivery of multiple pregnancy			x	
All dystocia management manoeuvres including shoulder dystocia		x		
Perform vacuum assisted vaginal delivery		x		
Perform forceps assisted delivery <u>at least in simulation</u>		x		
Perform elective caesarean section		x		
Perform emergency caesarean section		x		
Perform repeat caesarean section or caesarean section in high BMI patient			x	
Perform manual removal of placenta			x	

Diploma

When all EPAs have been signed off and thus training has been completed, the well-documented portfolio may be presented to the Standard Committee for Training and Assessment (SCTA) of EBCOG to receive a diploma issued by EBCOG. The diploma will state that the gynaecologist has been trained and entrusted according to European standards and will be signed by the chair of the SCTA and president of EBCOG.

References:

1. Viewpoint: Competency-Based Postgraduate Training: Can We Bridge the Gap between Theory and Clinical Practice? O ten Cate, F Scheele. Academic Medicine 2007;82 (6), 542-547
2. The assessment of professional competence: building blocks for theory development. CPM Van der Vleuten, LWT Schuwirth, F Scheele, EW Driessen, B Hodges. Best Practice & Research Clinical Obstetrics & Gynaecology 2010;24 (6), 703-719
3. Billett, S. (2010). Learning through practice: models, traditions, orientations and approaches [Electronic version]. In S. Billett (Ed.), *Professional and practice-based learning* (pp. 1–20). Dordrecht: Springer. Retrieved December 20, 2013
4. Managing risks and benefits: key issues in entrustment decisions. Ten Cate O. Med Educ. 2017 Sep; 51(9):879-881.
5. From aggregation to interpretation: how assessors judge complex data in a competency-based portfolio. Oudkerk Pool A, Govaerts MJB, Jaarsma DADC, Driessen EW. Adv Health Sci Educ Theory Pract. 2017 Oct 14. doi: 10.1007/s10459-017-9793-y. [Epub ahead of print]
6. Do portfolios have a future? Driessen E. Adv Health Sci Educ Theory Pract. 2017 Mar;22(1):221-228.
7. Assessment of competence and progressive independence in postgraduate clinical training. MGK Dijksterhuis, M Voorhuis, PW Teunissen, LWT Schuwirth, OTJ Ten Cate, DDM Braat, F Scheele. Medical education 2009;43 (12), 1156-1165

Addendum 1: examples of formal assessment tools in the clinical workplace

The assessment forms presented are suggestions, other forms with comparable items may also serve the purpose.

1. Direct observation in clinical practice form
2. Multisource feedback / 360 degree observation form
3. OSAT form
4. Mini-CEX

Direct observation in clinical practice

Name trainee:
Name supervisor:
Professional activity:

Date:
Signature supervisor:
Signature trainee:

The trainee showed medical expertise in such a way that:

1	2	3	4	5
<i>Supervisor performs the activity, the trainee observes</i>	<i>Supervisor talks trainee through activity</i>	<i>Supervisor intervenes incidentally</i>	<i>Supervisor may be present just in case</i>	<i>Supervisor does not need to be present</i>

Strengths:	
Points of improvement:	

Focusing on one or two items per observation is sufficient

Patient-centred care

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
----------------------------	-----------------	-----------------

 expectations

Strengths:	
Points of improvement:	

Teamwork

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
----------------------------	-----------------	-----------------

 expectations

Strengths:	
Points of improvement:	

System-based practice

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Strengths:	
Points of improvement:	

Personal and professional development

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Strengths:	
Points of improvement:	

Reference to the 'General Competencies and Soft Skills' of the curriculum for specific feedback:

Patient-centred care

- See the patient in a holistic perspective, respect diversity and give individualized care
- Communicate respectfully and empathetically, active listening fostering mutual confidence and trust
- Ensure patient empowerment and informed consent facilitating the balance between evidence-based recommendations and patient's preferences in the shared decision-making process
- Demonstrate leadership to provide safety and continuity in patient care
- Work according to ethical standards and the universal human rights of women

Teamwork

- Collaborate respectfully with other professionals, such as nurses and midwives, and contribute to a safe and constructive working environment
- Facilitate inter-professional shared decision making, recognizing and relying on the expertise of others
- Focus on team performance while acknowledging standards of care and legal aspects
- Display leadership, particularly in critical situations

System-based practice

- Understand and work effectively in the healthcare organization, including its legal system
- Understand and adapt to diversity, development, and innovation
- Work according to guidelines and standards of care and apply patient safety systems
- Balance patient-related outcomes and costs
- Perform triage and prioritize tasks considering the available resources
- Ensure privacy and patient comfort in care provider, setting, and context

Personal and professional development

- Be a lifelong learner and a good role model
- Balance work and life
- Recognize personal competencies and limitations
- Give, seek and accept feedback, reflect upon it and use it for improvement
- Continuously improve empathetic listening as well as effective and clear communication
- Contribute to the progress of health care via research, education and facilitating the implementation of innovation

**As described in the section General Competencies and Soft Skills' of the curriculum*

360 degree observation (multisource feedback)

Gather under the supervision of the competence committee at least 10 forms from medical staff, midwives, nurses and administrative staff and integrate the information.

Name trainee:
Name supervisor:
Professional activity:

Date:
Signature supervisor:
Signature trainee:

Please, give your opinion about this trainee. Don't answer an item if you don't know the answer. Feel free to add explanations.

The trainee shows medical expertise:

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Strengths:	
Points of improvement:	

The trainee's performance of 'Patient-centered care' was observed

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Strengths:	
Points of improvement:	

This trainee's 'Teamwork' was observed

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Strengths:	
Points of improvement:	

The trainee's 'System-based practice' was observed

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Strengths:	
Points of improvement:	

This trainee's 'Personal and professional development' were observed

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Strengths:	
Points of improvement:	

Reference to the 'General Competencies and Soft Skills' of the curriculum for specific feedback:

Patient-centred care

- See the patient in a holistic perspective, respect diversity and give individualized care
- Communicate respectfully and empathetically, active listening fostering mutual confidence and trust
- Ensure patient empowerment and informed consent facilitating the balance between evidence-based recommendations and patient's preferences in the shared decision making process
- Demonstrate leadership to provide safety and continuity in patient care
- Work according to ethical standards and the universal human rights of women

Teamwork

- Collaborate respectfully with other professionals, such as nurses and midwives, and contribute to a safe and constructive working environment
- Facilitate inter-professional shared decision making, recognizing and relying on the expertise of others
- Focus on team performance while acknowledging standards of care and legal aspects
- Display leadership, particularly in critical situations

System-based practice

- Understand and work effectively in the healthcare organization, including its legal system
- Understand and adapt to diversity, development, and innovation
- Work according to guidelines and standards of care and apply patient safety systems
- Balance patient-related outcomes and costs
- Perform triage and prioritize tasks considering the available resources
- Ensure privacy and patient comfort in care provider, setting, and context

Personal and professional development

- Be a lifelong learner and a good role model
- Balance work and life
- Recognize personal competencies and limitations
- Give, seek and accept feedback, reflect upon it and use it for improvement
- Continuously improve empathetic listening as well as effective and clear communication
- Contribute to the progress of health care via research, education and facilitating the implementation of innovation

OSAT of surgical procedure

Name trainee:
Name supervisor:
Professional activity:

Date:
Signature supervisor:
Signature trainee:

Objective Structured Assessment of Technical Skills (OSATS): global rating scale of surgical performance¹

Please circle the number that matches the trainee's performance in each category, irrespective of training level

	1	2	3	4	5
Respect for tissue	Frequently used unnecessary force on tissue or caused damage by inappropriate use of instruments		Careful handling of tissue but occasionally caused inadvertent damage		Consistently handled tissues appropriately with minimal damage
	1	2	3	4	5
Time and motion	Many unnecessary movements		Efficient use of time/motion but some unnecessary movements		Clear economy of movement and maximum efficiency
	1	2	3	4	5
Knowledge and handling of instruments	Lack of knowledge of instruments		Competent use of instruments but occasionally appeared stiff or awkward		Obvious familiarity with instruments
	1	2	3	4	5
Flow of operation	Frequently stopped procedure and seemed unsure of next move		Demonstrated some forward planning with reasonable progression of procedure		Obviously planned course of procedure and seemed to flow effortlessly from one movement to the next
	1	2	3	4	5
Use of assistants	Consistently placed assistants poorly or failed to use assistants		Appropriate use of assistants most of the time		Strategically used assistants to the best advantage at all times
	1	2	3	4	5
Knowledge of specific procedure	Deficient knowledge. Needed specific instructions at most steps		Knew all the important steps of the procedure		Demonstrated familiarity with all aspects of the operation

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Strengths:	
Points of improvement:	

¹ adapted from Hiemstra et al. J Can Chir 201

Mini clinical evaluation exercise of a patient consultation (mini-CEX)

Name trainee:
Name supervisor:
Professional activity:

Date:
Signature supervisor:
Signature trainee:

The mini-CEX reports on a Clinical Evaluation Exercise, in which the supervisor observes the trainee in a situation with direct patient contact. The supervisor gives feedback on the trainee's interaction with the patient, gives a global assessment of the trainee's functioning in several domains (a subset of domains can be chosen) and describes the adjustments that are necessary for an adequate execution of the task.

Feedback is only provided for the observed domains. The supervisor and trainee discuss beforehand on which domains feedback will be given in that particular situation.

History taking/medical interviewing

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Pay attention to general competencies and soft skills:*

- *See the patient from a holistic perspective, respect diversity and give individualized care.*
- *Communicate respectfully and empathetically, listening actively while fostering mutual confidence and trust.*

Strengths:	
Points of improvement:	

Physical examination

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Pay attention to general competencies and soft skills:*

- *Communicate respectfully and empathetically*
- *Ensure privacy and patient comfort in provision of care, regarding the care provider, the setting, and the context.*

Strengths:	
Points of improvement:	

Informed decision making/counselling

The performance

<i>did <u>not</u> meet</i>	<i>did meet</i>	<i>exceeded</i>
-----------------------------------	------------------------	------------------------

 expectations

Pay attention to general competencies and soft skills:*

- *Communicate respectfully and empathetically, listening actively while fostering mutual confidence and trust.*
- *Ensure patient empowerment and informed consent facilitating the balance between evidence-based recommendations and patient's preferences in the shared decision making process.*

Strengths:	
Points of improvement:	

Clinical judgement / reasoning

The performance

did <u>not</u> meet	did meet	exceeded
----------------------------	-----------------	-----------------

 expectations

Pay attention to general competencies and soft skills:*

- *See the patient from a holistic perspective, respect diversity and give individualized care.*
- *Facilitate inter-professional shared decision making, recognizing and relying on the expertise of others.*
- *Work according to guidelines and standards of care and apply patient safety systems.*

Strengths:	
Points of improvement:	

Professionalism

The performance

did <u>not</u> meet	did meet	exceeded
----------------------------	-----------------	-----------------

 expectations

Pay attention to general competencies and soft skills:*

- *Demonstrate leadership to provide safety and continuity in patient care, also in critical situations.*
- *Work according to ethical standards and the universal human rights of women.*
- *Ensure privacy and patient comfort in provision of care, regarding the care provider, the setting, and the context.*
- *Recognize personal competencies and limitations.*
- *Balance patient-related outcomes and costs.*

Strengths:	
Points of improvement:	

Organisation / efficiency

The performance

did <u>not</u> meet	did meet	exceeded
----------------------------	-----------------	-----------------

 expectations

Pay attention to general competencies and soft skills:*

- *Collaborate respectfully with other professionals such as nurses and midwives, and contribute to a safe and constructive working environment.*
- *Perform triage and prioritize tasks considering the available resources.*

Strengths:	
Points of improvement:	

**As described in the section General Competencies and Soft Skills' of the curriculum*

Addendum 2: example of a portfolio

The portfolio mainly serves to record the process of entrustment of professional activities for each trainee. It provides accountability of the trainee's achievements, both for the institution that provides the training and for other institutions, possibly in other countries, that might consider hiring the trainee later on. Hence the portfolio should be a globally recognized document.

Entrustment decisions in the portfolio

While the portfolio is compiled by the trainee, the entrustment decisions are made by the competence committee. For each Entrustment of a Professional Activity (EPA), the portfolio should reflect three sources that lead to the entrustment decision:

- A. Learning experiences
- B. Assessment for entrustment
- C. Competence committee's professional impressions

These three sources are explained more extensively in the entrustment section of the EBCOG-PACT curriculum.

Themes

The core curriculum consists of ten themes. Each theme represents one overarching EPA and consists of multiple smaller professional activities, called 'nested EPAs'.

1. General Medical Knowledge & Skills
2. Prenatal Care
3. Intrapartum & Postpartum Care
4. Benign Gynaecology
5. Reproductive Medicine
6. Urogynaecology
7. Premalignancy and Gynaecological Oncology
8. Paediatric and Adolescent Gynaecology
9. Sexual Health and Contraception
10. Breast Disease

For each theme, changes in all three sources should be recorded in the portfolio, as well as changes in the levels of competence. The portfolio is owned by the trainee, and the trainee should keep it up to date. However, the competence committee may keep track of each trainee's progress in competence in a training time schedule for that particular trainee. The programme director and clinical faculty are responsible for optimal facilitation of training opportunities, assessments, discussion and evaluation of the personal development plan, and finally entrustment decisions.

How to achieve entrustment based on the portfolio:

1. The trainee applies for entrustment of a specific activity and prepares the portfolio.
2. The application of the trainee is discussed by the competence committee
3.
 - a. If the competence committee is indecisive about the level of competence that is achieved, more information about the trainee's performance is gathered and the decision is postponed.
 - b. If the competence committee has reached agreement, the decision is briefly motivated in writing (to be recorded in the portfolio) and the activity is signed off.

On the following pages, an example of a portfolio is presented, describing the three training sources per theme (thus EPA). The example complies with the minimum requirements for a portfolio; actual portfolios may be expanded as desired or as local circumstances require.

General Medical Knowledge & Skills – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1</i> <i>Supervisor performs the activity, the trainee observes</i>	<i>2</i> <i>Supervisor talks trainee through activity</i>	<i>3</i> <i>Supervisor intervenes incidentally</i>	<i>4</i> <i>Supervisor may be present just in case</i>	<i>5</i> <i>Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Perform history taking and physical examination					
Order appropriate additional tests					
Lead a ward round					
Provide basic therapeutic interventions					
Perform pain management					
Recognise and triage acutely ill patient					
Communicate appropriately and use shared decision making and informed consent					
Document patient data appropriately					
Manage basic perioperative care					
Show understanding of sexology					
Show understanding of biopsychosocial aspects of obstetrics and gynaecology					
Show understanding of the frail elderly woman with multiple co-morbidities and poly-pharmacy					

Sign off EPA

<i>Name</i>	
<i>Hospital</i>	
<i>Address</i>	
<i>Telephone number</i>	
<i>E-mail address</i>	
<i>Signature</i>	

Prenatal Care – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1</i> <i>Supervisor performs the activity, the trainee observes</i>	<i>2</i> <i>Supervisor talks trainee through activity</i>	<i>3</i> <i>Supervisor intervenes incidentally</i>	<i>4</i> <i>Supervisor may be present just in case</i>	<i>5</i> <i>Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Perform vaginal ultrasound to determine embryonic/foetal viability, age and location of the pregnancy					
Perform vaginal ultrasound to determine singleton or multiple pregnancy and chorionicity					
Perform vaginal ultrasound for cervical length					
Perform ultrasound to diagnose malpresentation					
Perform fetal biometry and amniotic fluid measurement					
Perform doppler examination of umbilical artery					
Provide information and advice regarding the diagnosis and its implications regarding the most important problems around pregnancy					
Treat most complications of early pregnancy					
Treat most complications of mid and late pregnancy					

Sign off EPA

<i>Name</i>	
<i>Hospital</i>	
<i>Address</i>	
<i>Telephone number</i>	
<i>E-mail address</i>	
<i>Signature</i>	

Intrapartum & Postpartum Care – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1</i> <i>Supervisor performs the activity, the trainee observes</i>	<i>2</i> <i>Supervisor talks trainee through activity</i>	<i>3</i> <i>Supervisor intervenes incidentally</i>	<i>4</i> <i>Supervisor may be present just in case</i>	<i>5</i> <i>Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Treat premature contractions and induction of pulmonary maturation					
Assist preterm delivery					
Assist uncomplicated delivery					
Determine feasibility of labour					
Perform CTG monitoring					
Perform fetal scalp sampling <u>at least in simulation</u>					
Manage failure of progression of labour					
Manage a case with meconium-stained amniotic fluid					
Manage a case with intrapartum fever					
Manage a delivery with a medical history of caesarean section or peri-partum pain					
Assist breech delivery <u>at least in simulation</u>					
Assist vaginal delivery of multiple pregnancy					
All dystocia management manoeuvres including shoulder dystocia					
Perform vacuum-assisted vaginal delivery					
Perform forceps-assisted delivery <u>at least in</u>					

<u>simulation</u>					
Perform elective caesarean section					
Perform emergency caesarean section					
Perform repeat caesarean section or caesarean section in high BMI patient					
Treat post-partum mastitis (with abscess), urinary retention and thrombo-embolic process					
Treat post-partum haemorrhage (PPH) with medication					
Perform manual removal of placenta					
Perform intrauterine balloon tamponade and, <u>at least in simulation</u> , surgical compression of atonic uterus (B-Lynch suturing), uterine reversion and abdominal hysterectomy					
Set indication for arterial embolization for PPH					
Suturing of episiotomy wound and 1 st and 2 nd degree perineal tear					
Suturing of 3rd degree perineal tear and, <u>at least in simulation</u> , 4th degree perineal tear					
Perform evacuation of vulvar hematoma					
Resuscitate the new-born accurately in the first 10 minutes after delivery (while awaiting the arrival of the paediatrician), <u>at least in simulation</u>					

Sign off EPA

<i>Name</i>	
<i>Hospital</i>	
<i>Address</i>	
<i>Telephone number</i>	
<i>E-mail address</i>	
<i>Signature</i>	

Benign Gynaecology – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1 Supervisor performs the activity, the trainee observes</i>	<i>2 Supervisor talks trainee through activity</i>	<i>3 Supervisor intervenes incidentally</i>	<i>4 Supervisor may be present just in case</i>	<i>5 Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Perform punch biopsy under local anaesthesia					
Perform vaginal ultrasound for general picture of uterus and adnexa					
Perform vaginal ultrasound to diagnose intrauterine abnormalities					
Perform vaginal ultrasound to diagnose adnexal abnormalities					
Provide contraception in healthy adult, including IUD insertion					
Provide contraception in patient with a health problem or concomitant disease					
Counsel condylomas					
Counsel and treat endometriosis					
Counsel and treat fibroids					
Counsel and treat adnexal pathology					
Counsel tubo-ovarian abscess					
Counsel and treat menorrhagia and dysmenorrhea with medication					
Counsel and treat abnormal uterine bleeding					

Counsel and treat sexually transmitted disease and pelvic inflammatory disease					
Counsel and treat vaginal discharge and vulvovaginitis					
Counsel and treat abdominal/pelvic pain					
Counsel and treat menopausal complaints					
Counsel and treat premenstrual syndrome					
Counsel and treat Bartholin cyst and vulvar abscess					
Perform laparoscopic sterilisation					
Perform dilatation and curettage by suction or blunt curette for miscarriage and know how to evacuate a midterm pregnancy					
Perform laparoscopic needle aspiration of simple cyst					
Perform laparoscopic electrocoagulation of the ovary					
Perform simple laparoscopic ovarian cystectomy					
Perform laparoscopic salpingo-oophorectomy					
Perform simple laparoscopic adhesiolysis					
Perform hysteroscopic polyp resection					
Perform hysteroscopic myoma resection type 0-1 (< 4cm)					
Perform salpingo-oophorectomy via laparotomy					
Perform myomectomy of subserous myoma via laparotomy					
Perform laparotomy with minimal adhesiolysis					

Sign off EPA

<i>Name</i>	
<i>Hospital</i>	
<i>Address</i>	
<i>Telephone number</i>	
<i>E-mail address</i>	
<i>Signature</i>	

Reproductive Medicine – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1 Supervisor performs the activity, the trainee observes</i>	<i>2 Supervisor talks trainee through activity</i>	<i>3 Supervisor intervenes incidentally</i>	<i>4 Supervisor may be present just in case</i>	<i>5 Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Assess male and female (sub)fertility					
Counsel prognostic factors for pregnancy in general					
Counsel probability of on-going pregnancy, spontaneous abortion and ectopic pregnancy with the different fertility treatments					
Counsel assisted reproduction techniques (IUI, IVF, ICSI)					
Treat WHO-II cycle disorders / ovulation induction					
Treat OHSS initial (emergency treatment)					
Perform diagnostic laparoscopy with tubal testing					
Perform diagnostic hysteroscopy with tubal testing					
Perform transvaginal ultrasound with follicle count and follicle measurements					
Perform transvaginal ultrasound with evaluation of follicles and intraperitoneal fluid					

Sign off EPA

<i>Name</i>	
<i>Hospital</i>	
<i>Address</i>	
<i>Telephone number</i>	
<i>E-mail address</i>	
<i>Signature</i>	

Urogynaecology– portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1 Supervisor performs the activity, the trainee observes</i>	<i>2 Supervisor talks trainee through activity</i>	<i>3 Supervisor intervenes incidentally</i>	<i>4 Supervisor may be present just in case</i>	<i>5 Supervisor does not need to be present</i>
Activity (core curriculum)					
Refer patients with stress and/or urge incontinence to pelvic floor physiotherapist or other medical specialist					
Diagnose rectovaginal fistula					
Counsel apical, anterior and posterior vaginal repair					
Perform pessary fitting and on-going care					
Perform colpocleisis					
Perform simple anterior and posterior vaginal repair					

Sign off EPA

Name	
Hospital	
Address	
Telephone number	
E-mail address	
Signature	

Premalignancy – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Formal assessments

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1</i> <i>Supervisor performs the activity, the trainee observes</i>	<i>2</i> <i>Supervisor talks trainee through activity</i>	<i>3</i> <i>Supervisor intervenes incidentally</i>	<i>4</i> <i>Supervisor may be present just in case</i>	<i>5</i> <i>Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Perform cervical screening (PAP smear)					
Perform colposcopy					
Perform large-loop excision of the cervical transformation zone					

Sign off EPA

Name	
Hospital	
Address	
Telephone number	
E-mail address	
Signature	

Gynaecological Oncology – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1 Supervisor performs the activity, the trainee observes</i>	<i>2 Supervisor talks trainee through activity</i>	<i>3 Supervisor intervenes incidentally</i>	<i>4 Supervisor may be present just in case</i>	<i>5 Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Perform transvaginal ultrasound to diagnose gestational trophoblastic disease					
Perform endometrial biopsy					
Counsel for gynaecological malignancy diagnoses and their implications					

Sign off EPA

Name	
Hospital	
Address	
Telephone number	
E-mail address	
Signature	

Paediatric and Adolescent Gynaecology– portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1 Supervisor performs the activity, the trainee observes</i>	<i>2 Supervisor talks trainee through activity</i>	<i>3 Supervisor intervenes incidentally</i>	<i>4 Supervisor may be present just in case</i>	<i>5 Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Adapt communication to the level of a child					
Perform accurate gynaecological examination of a child and adolescent					
Perform emergency care of vulva/vagina/perineum/rectum in the child and adolescent					

Sign off EPA

Name	
Hospital	
Address	
Telephone number	
E-mail address	
Signature	

Sexual health and contraception – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	<i>1</i> <i>Supervisor performs the activity, the trainee observes</i>	<i>2</i> <i>Supervisor talks trainee through activity</i>	<i>3</i> <i>Supervisor intervenes incidentally</i>	<i>4</i> <i>Supervisor may be present just in case</i>	<i>5</i> <i>Supervisor does not need to be present</i>
Activity (core curriculum)					
Take a focused sexual history					
Take a history focusing on sexual dysfunction					
Provide information and advice on investigation and management of sexually transmitted infections					
Provide information and advice on contraception, including use of emergency contraception					
Placement of an intrauterine device					
Placement of subcutaneous contraception implants					
Competent in laparoscopic sterilization					
Competency in counselling and performance in medical and surgical termination of pregnancy					

Sign off EPA

Name	
Hospital	
Address	

<i>Telephone number</i>	
<i>E-mail address</i>	
<i>Signature</i>	

Breast disease – portfolio example

A. Learning experiences

- Wards
- Outpatient clinics
- Courses
- Simulations, e.g. for communication skills
- Reflection on progress of training
- Personal development plan

B. Assessment for entrustment

- Knowledge tests: European Exam (or National exam)
- Simulation exam
- Direct observation in practice
- Multisource feedback
- OSATS

C. Competence committee

- The competence committee includes their workplace-based master-apprentice impressions of the trainee in the entrustment decision process.
- The competence committee determines the level of competence that has been achieved by the trainee.
- The competence committee determines whether the trainee's progress is as expected, in relation to the training schedule (see table 2).
- The competence committee writes a brief response to the trainee's entrustment request combined with the trainee's reflection, which is recorded in the trainee's portfolio.
- When a trainee has achieved the highest level of competence for all nested EPA's in one theme-EPA, the competence committee may grant entrustment for the entire theme-EPA.

Step in achievement of EPA:	In progress	In progress	In progress	Achieved	Achieved
<i>Level of competence:</i>	1 <i>Supervisor performs the activity, the trainee observes</i>	2 <i>Supervisor talks trainee through activity</i>	3 <i>Supervisor intervenes incidentally</i>	4 <i>Supervisor may be present just in case</i>	5 <i>Supervisor does not need to be present</i>
<u>Activity (core curriculum)</u>					
Perform accurate examination of the breasts					

Sign off EPA

Name	
Hospital	
Address	
Telephone number	
E-mail address	
Signature	

Quality management and training recognition

Authors: Juriy Wladimiroff, Angelique Goverde, Fedde Scheele

Introduction

To ensure optimal training in general obstetrics and gynaecology, a robust internal quality management system and external training recognition are needed. Both systems should be closely related.

The combination of internal quality management and external training recognition pairs continuous quality improvement within a short cycle with checks for meeting the standards, which should be repeated every 5 years.

Internal quality management

For internal quality management a clear governance structure with properly defined responsibilities for the training programme is mandatory. Internal quality management regards the measures taken from within the training institute and is aimed at continuous improvement of training, according to a plan-do-check-act cycle. This internal quality cycle addresses several aspects:

- Description of a local training plan based on PACT, which is tailored to the local context: the local curriculum.
- Monitoring of how the local training plan is translated into daily work: the curriculum in action. Interviews with trainees who are finalising their rotation, may provide useful information to gain feedback for this purpose.
- Monitoring of the educational climate, which can be measured with the D-RECT questionnaire [1].
- Monitoring and discussion of didactic performance of staff, which can be measured with the EFFECT system [2].
- Developing plans for improvement and follow-up of the training issues that have come up.

The internal quality management system is adaptable and may operate on a short term basis. It provides useful information for an external accrediting body, which makes it a transparent system.

External Training Recognition

External training recognition is performed either by national accrediting bodies or by the accreditation & visitation committee of EBCOG.

This external training recognition aims are as follows:

- Harmonisation of training throughout Europe.
- Quality assurance: every new obstetrician and gynaecologist in Europe is adequately trained for the core and their field of interest, and is able to practice safely and independently.
- An advising authority: provide advice on issues arising within the training programme.

The external training recognition uses:

- Documentation as required by the National system or by EBCOG. The documentation should give insight into:
 - o Number of trainees in relation to number of supervising staff
 - o Number of procedures in relation to number of trainees
 - o Training facilities
 - o Organisation of simulation training
 - o Faculty development, training the trainers
 - o Individual training programmes for trainees; core as well as elective subjects
 - o Position of general competencies and soft skills in the training
 - o Organisation and quality of assessment to sign off entrusted professional activities

- Trainees' portfolios
- Participation of trainees in research programmes and clinical audits
- trainees' responsibilities and roles in teaching within the health care team
- Reports of a system aimed at continuous improvement of the training programme.
- Recognition visits in a 5-year cycle (or by approximation), in which trainees play an active role.

References:

1. Boor K, Van Der Vleuten C, Teunissen P, Scherpbier A, Scheele F. Development and analysis of D-RECT, an instrument measuring residents' learning climate. *Med Teach*. 2011;33(10):820-7.
2. Fluit C, Bolhuis S, Grol R, Ham M, Feskens R, Laan R, Wensing M. Evaluation and feedback for effective clinical teaching in postgraduate medical education: validation of an assessment instrument incorporating the CanMEDS roles. *Med Teach*. 2012;34(11):893-901
3. Vaižgėlienė E, Padaiga Ž, Rastenytė D, Tamelis A, Petrikonis K, Kregždytė R, Fluit C. Validation of the EFFECT questionnaire for competence-based clinical teaching in residency training in Lithuania. *Medicina (Kaunas)*. 2017;53(3):173-178.

Faculty Development

Authors: Angelique Goverde, Živa Novak Antolič, Fedde Scheele

Introduction

Faculty development is regarded as an essential instrument for providing high quality postgraduate training. Development of knowledge, skills and attitudes in adult education will allow medical specialists to become clinical trainers who will be able to deliver effective and efficient postgraduate training.

Roles and responsibilities of clinical trainers

Since postgraduate training is primarily a “training on the job”, clinical trainers face several challenges. The clinical trainer has the following responsibilities and roles:

- safe patient care
- creating a stimulating learning environment
- applying educational tools, such as feedback, to enhance reflective practice by the trainee
- monitoring and assessment of the trainee’s learning process
- continuing professional development as an educator

Continuing professional development for trainers

Trainers should receive formal training in postgraduate teaching and assessment. As a minimum, this should include the following information or training:

- How to teach on the job (e.g. in the clinic, on wards)
- How to teach individuals, in small groups and in didactic lecture formats
- How to give effective feedback
- How to use formative assessment methods to support trainees
- How to identify and support trainees in difficulty
- How to use and document workplace-based assessments

Clinical trainers are required to update their clinical competencies as well as their training competencies. Depending on the specific role of the medical specialist in the educational team, a minimum of two days training once every five years is advised.

In those countries that have a system of summative assessment during or at the end of training (e.g. local or national examination), clinical trainers who participate in the examination committee should be trained in how to write examination questions and how to design a validated exam.

For ‘programme directors’, specific courses are warranted that focus on the management of postgraduate medical education.

EBCOG may provide support for Faculty Development courses.

Addendum:

GESEA an example of a structured and validated educational and assessment programme in gynaecological endoscopic and robotic surgery



The Gynaecological Endoscopic Surgical Education and Assessment (GESEA) programme

With the introduction of endoscopy, advanced imaging techniques and robotics, modern surgery is becoming increasingly more digital and requires adaptations to the educational model to address the demands for new skills as needed not only by surgeons but also by healthcare professionals in general. The increase in complexity that these developments bring, demands a well-oiled machine in the operating room, where surgeons, nurses and other supportive staff can operate in synergy and with increased efficiency.

The GESEA Educational Programme has been well established and provides certification to gynaecological surgeons with more than 16000 e Learning members and more than 5000 certificates issued to date.

GESEA is a structured training and assessment programme in Gynaecological endoscopic and robotic surgery in which theoretical knowledge psychomotor skills and surgical skills are learned and validated and certified. It is vital that the **psychomotor skills** are trained and tested in a safe environment prior to training in the OR. It improves patient care and greatly increases **educational efficiency** and **surgical competence** of the surgeon.

GESEA has integrated Laparoscopy, Hysteroscopy and Robotics in a unique educational and validation programme. It is based on certification of knowledge and psychomotor skills before entering the clinical pathway to a diploma of Minimal Invasive Gynaecological Surgery or Reproductive Surgery. The third level of the programme provides the different subspeciality or special interest domains of high level surgery with their proper validated diploma.

Today certification and diploma modules of the GESEA's Educational Programme for gynaecological surgeons are standardized and implemented in Diploma Centres across Europe and beyond.

EU4Health is the largest of the EU health programmes and provides funding through the GESEA4EU programme to standardize Gynaecological Endoscopy and Robotic Training.

GESEA4EU is a two-year project built on GESEA which began in February 2023. This innovative cross-border project brings together 16 partners from 8 European countries. It will standardise the GESEA training offer already provided to surgeons in the existing 12 GESEA centres and expand it to meet the training needs of other healthcare professionals including nurses and supporting non-clinical staff.

During the project lifetime, 27 learning modules will be developed and trials are taking place in 12 centres within the existing network. Furthermore, 9 new centres are being identified in EU countries where the learning modules will be piloted.

These modules will be taken up in the GESEA programme to be implemented across Europe and will be promoted through the European Board & College of Obstetrics and Gynaecology.

Figure 1: The principles of the GESEA programme.

*The Gynaecological Endoscopic Surgical Education and Assessment (GESEA) programme is a structured educational programme for Gynaecological Endoscopy. It trains and certifies **knowledge and practical skills** prior to surgical*

competence.

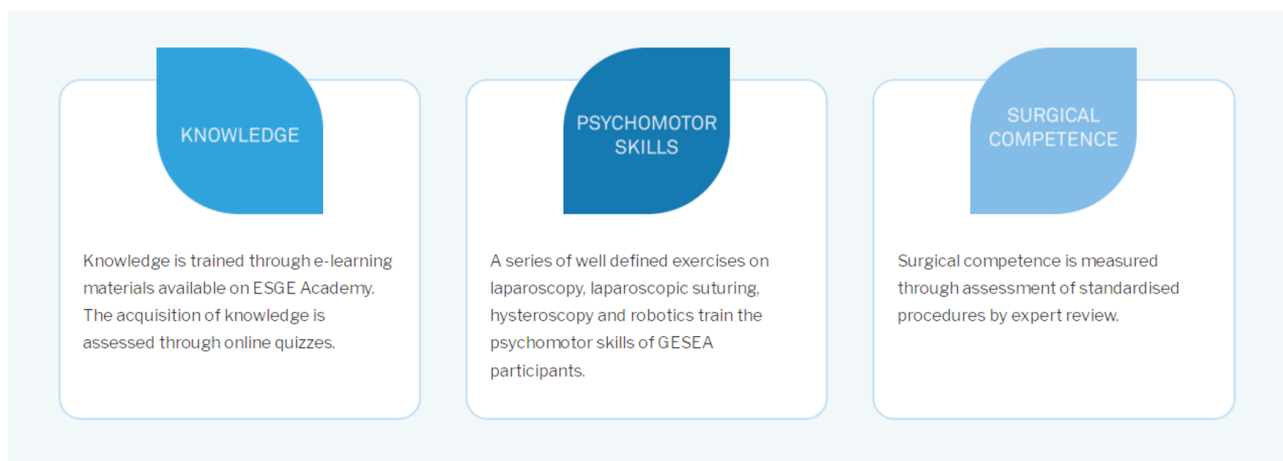


Figure 2: Different levels of the GESEA programme

Level 1 is the universal entry gate, then we have 2 main pathways. In level 2, it teaches and assesses the knowledges and surgical skills needed for minimal invasive gynaecological surgeon (MIGS) or for reproductive endoscopic surgeons (ECRES). For both pathways a Robotics dimension is provided (Robotics).

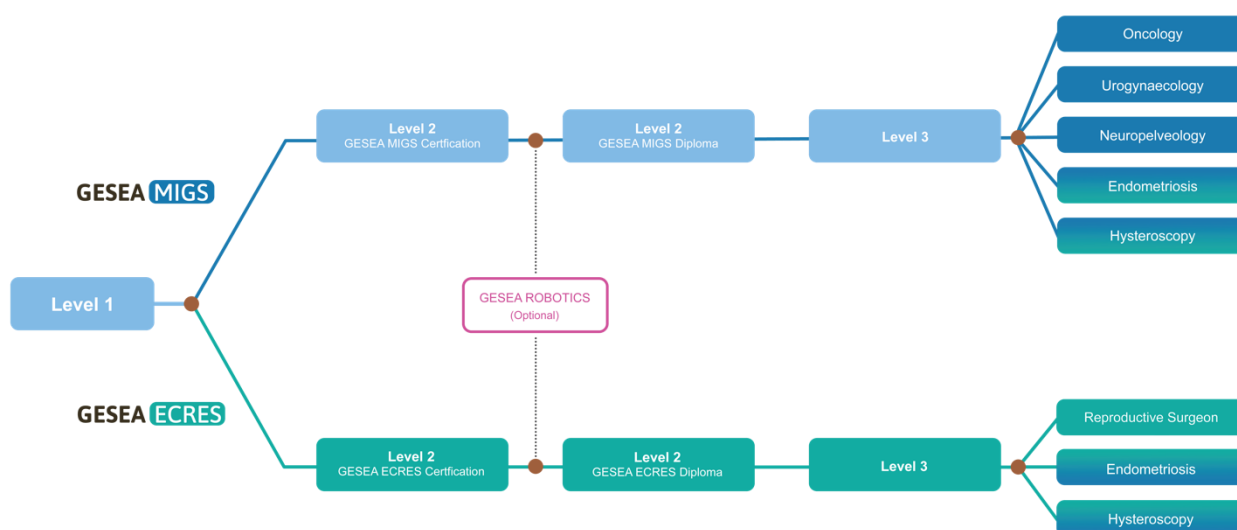


Figure 3: The different learning path for the 3 levels of expertise

	E-learning	Psychomotor skills	Certification	Experience	Diploma
LEVEL 1					
GESEA Universal Entry Gate Basic Endoscopy Training	✓	✓	Level 1 Certification		
LEVEL 2					
GESEA MIGS	✓	✓	Level 2 MIGS Certification	✓	Level 2 MIGS Diploma
GESEA ECRES	✓	✓	Level 2 ECRES Certification	✓	Level 2 ECRES Diploma
GESEA ROBOTICS	✓	✓	Level 2 Robotics Certification	✓	Level 2 Robotics Diploma
LEVEL 3					
MIGS – Oncology	✓			✓	Level 3 Oncology Diploma
MIGS – Urogynaecology	✓			✓	Level 3 Urogynaecology Diploma
MIGS – Neuropelvicology	✓			✓	Level 3 Neuropelvicology Diploma
MIGS & ECRES – Endometriosis	✓			✓	Level 3 Endometriosis Diploma
MIGS & ECRES – Hysteroscopy	✓			✓	Level 3 Hysteroscopy Diploma
ECRES – Reproductive surgeon	✓			✓	Level 3 Reproductive Surgeon Diploma

The GESEA Educational Programme is structured in three proficiency levels which progressively build on each other. One must fulfil the criteria for each level before gaining access and progressing to the next level.

The **first level** is the GESEA universal entry gate for the basic training of endoscopy psychomotor skills. The GESEA Educational Programme is fully focused on providing doctors with the necessary knowledge and skills to start their training in the operating room. The Level 1 Certificate is the same for each of the two pathways.

The **second level** of the GESEA Educational Programme prepares doctors, for either MIGS or ECRES level 2 endoscopic procedures in the operating room. The two pathways have both shared and pathway-specific learning modules, with separate certifications and diplomas. For both pathways the Robotic certificate/diploma is optional.

The **third level** of the GESEA Educational Programme is the expert level and it will focus on sub-specialties such as oncology, difficult endometriosis surgery, advanced reproductive surgery as well as expert-level hysteroscopy.

Glossary

Assessment

The process of making a judgment of a trainee's performance of a professional activity. A distinction should be made between 'assessment for learning' (also known as formative assessment, i.e. guiding future learning, providing reassurance and promoting reflection) and assessment for entrustment (also known as summative assessment, i.e. making a judgment about competence or ability for advancement to higher levels of responsibility).

Forms of assessment include clinical assessments (such as OSATS, direct observation in clinical practice), exams, simulation, multisource (360-degree) assessments and reflective self-assessments.

Assessor

The person who makes a judgment of a trainee's performance of a professional activity.

Clinical audit

This is a cyclic quality improvement tool that is aimed at reviewing clinical practice against explicit evidence-based standards and introducing change with aim to improve patient care and outcomes when standards are not met. Follow-up audit cycles can be used to confirm an incremental improvement in clinical practice.

Clinical faculty, clinical supervisor, clinical trainer

The group of medical specialists (or medical specialist) who guide the clinical work of a trainee. A member of the clinical faculty may take the role of tutor.

Common trunk

The part of a curriculum which is mandatory in the training programme of all trainees.

Competency

The ability to integrate knowledge, skills, attitudes and behaviours for application in specific situations (professional activities) in the workplace.

Competence committee

Group of persons within a training institution or department that determines the level of competence of a trainee for a specific professional activity and that grants entrustment for professional activities. A competence committee is comprised of at least two members of the faculty that know the trainee's performance well and at least two other clinical faculty members.

Core curriculum

The core curriculum is the common trunk of the EBCOG-PACT curriculum that is mandatory for all trainees. It describes the end terms of training, which have been determined by European consensus.

See also curriculum and Elective/Elective curriculum.

Curriculum

Educational programme.

Elective curriculum

The elective curriculum describes training outcomes for specific areas of interest within the specialty of Obstetrics and Gynaecology; these training outcomes are at a more in-depth level than those in the core curriculum. Therefore, training in an elective is aiming to a higher level of competence in that specific area of interest.

See also curriculum, and Core/Core curriculum.

Educational supervisor

See: tutor

Educator

Professional role aiming at training and education, or a person with a special interest in training and education, who has developed knowledge and insights in education through specific training.

Entrusted professional activity, EPA

The professional activity (either stand alone or overarching) for which the trainee may reach the competence level of independent practice, formalised by the competence committee.

See also entrustment, nested entrusted professional activity and professional activity.

Entrustment

The formal approval that the trainee has reached the competence level of independent practice, and is allowed to perform an activity without supervision.

In some countries the formal entrustment is only granted at the end of training for legislative reasons.

Faculty

The group of medical specialists of a department involved in training.

See also clinical faculty.

Faculty development

Structured training in the educational domain of the clinical staff/supervisors/trainers involved in delivering medical training. Also known as training the trainers.

Feedback

Reflection on performance, identifying strengths and weaknesses.

Formative assessment

See: assessment

Independent practice

Execution of medical care in its specific context without (direct or indirect) supervision, where the person delivering the care carries main responsibility.

Just Culture

This takes a systems approach to incidents, where within there is a shared accountability to maintain patient safety, enabling healthcare professional to learn without fear of retribution

Logbook

The document in which the trainee keeps record of his/her activities during training, such as number of procedures *et cetera*.

See also portfolio.

Master-apprentice model

Working situation in which an unexperienced medical doctor (apprentice, *i.e.* trainee) is working and gaining experience under close scrutiny and supervision of an experienced medical (sub)specialist (master, *i.e.* trainer, tutor, clinical supervisor), based on the concepts of learning by imitation and mentoring.

Medical specialist

A medical specialist is a medical doctor who has completed a postgraduate training programme in a specific medical specialty.

Mentor

Person who provides support, direction and an objective view on how the trainee can develop and progress in his/her working environment, often using questioning to help the trainee to find his/her own solution. Mentors do not need to have specialist knowledge of the doctor's area of practice.

Multisource (360-degree) assessment/feedback:

Tool used to collect colleagues' opinions on a person's clinical performance and professional behaviour. Trainees are encouraged to get opinions from as many different colleagues as possible (*e.g.* specialists, trainees, nurses, midwives, secretaries *et cetera*).

Nested professional activity, nested EPA

A specific, well-defined activity, described by tasks and aspects needed for its execution in the context of patient care, as part of an overarching (entrusted) professional activity.

See also theme.

Portfolio

The document in which the trainee keeps record of his/her development and progress through training. The portfolio contains documentation of learning experience (amongst which the logbook and personal development plan), assessment forms, minutes of the competence committee describing the professional impressions, and the entrustment decisions.

See also logbook.

Professional activity

A specific activity, described by medical tasks and general competencies needed for its execution in the context of patient care. The professional activity as an overarching theme describes a group of smaller specific professional activities, so called 'nested professional activity'.

See also entrusted professional activity, nested professional activity.

Programme director

The program director is responsible for the co-ordination, monitoring and evaluation of the training programme delivered within his/her department.

Also known as programme co-ordinator.

Quality Improvement

Within healthcare quality improvement is the effort made to improve patient outcomes, delivery of care and professional development within a complex and dynamic system that is in constant evolution. It implies the diagnosis of problems within a healthcare system, with an aim to treat the issues identified using change management and subsequently measure improvement

Simulation

Any educational activity that utilises aids to replicate/imitate a clinical scenario. Examples include laparoscopic simulators, pelvic or abdominal mannequins and obstetric skills drills.

Subspeciality

A specific area within the medical specialty for which a standardised training programme in a centre officially accredited for these purposes is defined. The professional activities of a subspecialty represent the most complex and in depth activities within the specialty. Medical doctors who have satisfactorily completed such a

standardised training programme are called subspecialists.

Summative assessment

See: assessment

Supervisor, or clinical supervisor

Medical specialist overseeing the work of a trainee.

Supervision

Overseeing the work of a trainee.

Theme

The name for an overarching entrusted professional activity (EPA), describing specific subjects related to patient care in the field of a medical specialty.

Trainee

A trainee is a medical doctor who is enrolled in an official postgraduate training program to obtain a specialist qualification.

Also called resident.

Trainer

Person, not necessarily a medical specialist, supervising a specific teaching moment for the trainee.

Training recognition

The outcome of the process of external audit of the quality of a medical training programme of a department.

Tutor

Medical specialist guiding the learning process of individual trainees. A tutor is responsible for the overall supervision and management of a trainee's educational progress. A tutor offers educational supervision and career advice, undertakes appraisal and provides regular, ongoing feedback (every 3 - 6 months).

Also called educational supervisor.

Contributors to the 2025 revision

Members of the SCTA under the leadership of Chair Fionnuala McAuliffe:

Karen Rose, Anna Aabakke, Angelique Goverde, Fedde Scheele, Alexandra Kristufkova, Sofia Tsiapakidou, Helena Bartels, Mark Formosa, Anabela Serranito, Annalisa Tancredi, Ursula Catena, Goknur Topcu

Officers and Executive Members EBCOG & UEMS Section Ob/Gyn (as of January 2025)

President

Professor Frank Louwen

Secretary-General

Professor Helle Karro

President-Elect

Assoc. Professor (Hon.) Sambit Mukhopadhyay

Treasurer

Professor Piotr Sieroszewski

EBCOG Executive Members

Ass. Professor Anna Aabakke

Dr Ferry Boekhorst

Assoc. Professor Alexandra Kristufkova

Professor Luigi Nappi

Professor Fionnuala McAuliffe

Chair Standing Committee on Training and Assessment (SCTA)

Professor Fionnuala McAuliffe

Chair Standing Committee on Training Recognition (SCTR)

Dr Petr Velebil

Chair of the Examination Standing Committee/ Director of Examinations

Professor Ioannis E. Messinis

Chair Standing Committee on Standards of Care and Position Statements (SCSCPS)

Dr Tahir Mahmood

European Network of Trainees in Obstetrics and Gynaecology (ENTOG)

Dr Sofia Tsiapakidou

European Urogynaecology Association (EUGA)

Professor Stavros Athanasiou

European Association of Perinatal-Medicine (EAPM)

Professor Diogo Ayres-de-Campos

European Society of Gynaecological Oncology (ESGO)

Dr Maja Pakiz

European Society of Human Reproduction and Embryology (ESHRE)

Dr Tatjana Motrenko Simic; Professor Antonios Makrigiannakis

Dr Borut Kovacic (Embryology)

European Association of Paediatric and Adolescent Gynaecology (EURAPAG)

Professor Zoran Stankovic

European Society for Gynaecological Endoscopy (ESGE)

Dr Ursula Catena

European Federation for Colposcopy (EFC)

Professor Jana Zozzika

European Society of Contraception and Reproductive Health (ESCRH)

Professor Johannes Bitzer

International Society of Psychosomatic Obstetrics and Gynaecology (ISPOG)

Professor Sibil Tschudin

International Society for the Study of Vulvovaginal Disease (ISSVD)

Dr Pedro Vieira Baptista

European Midwives Association

Prof Victoria Vivilaki

Webmaster

Dr Jure Klanjšček

Chair Frankfurt Congress Scientific Committee

Dr Nuno Nogueira Martins

Central Office

Kate Thorman

Examination Secretariat

Alexandros Peristeropoulos

EBCOG & UEMS Section Ob/Gyn National Delegates

Austria

Professor Wolfgang Umek

Dr Philipp Foessleitner

Belgium

Dr Femke Delporte

Dr Mathieu Luyckx

Bulgaria

Professor Emil Kovachev

Professor Ivan Kostov

Croatia

Professor Miroslav Kopjar

Cyprus

Dr Afrodite Elisseou
Professor Gabriel Kalakoutis

Czech Republic

Professor Marian Kacerovský
Professor Vladimir Dvorak

Denmark

Ass. Professor Anna Aabakke
Assoc. Professor Hanne Brix Westergaard

Estonia

Professor Helle Karro
Dr Piret Veerus

Finland

Professor Marjo Tuppurainen
Professor Paivi Polo

France

Professor Joelle Belaisch Allart
Professor Philippe Descamps

Germany

Professor Dr med. Dr h.c. Frank Louwen
Dr Klaus Doubek

Greece

Dr Nicolas Linardos
Professor Alexandros Rodolakis

Hungary

Professor Nandor Acs

Iceland

Dr Matthildur Sigurdardottir

Ireland

Dr Michael Robson
Professor Fionnuala McAuliffe

Israel (Observer)

Professor Ron Maymon

Italy

Professor Luigi Nappi
Dr Giuseppe Trojano
Dr Annalisa Tancredi

Latvia

Dr Lasma Lidaka
Professor Dace Rezeberga

Lithuania

Professor Zana Bumbuliene
Professor Diana Ramasauskaite

Malta

Mrs Isabelle Saliba

The Netherlands

Professor Fedde Scheele
Dr Angelique J. Goverde

Republic of North Macedonia

Professor Gligor Tofoski

Norway

Dr Ragnar Kvie Sande
Dr Birgitte Sanda

Poland

Professor Sebastian Kwiatkowski
Professor nadzw. Piotr Sieroszewski

Portugal

Professor Teresa Almeida Santos
Professor Helder Ferreira

Romania

Professor Daniel Muresan
Professor Radu Vladareanu

Slovak Republic

Assoc. Professor Alexandra Kristufkova
Dr Mikulas Redecha

Slovenia

Professor Borut Kobul
Professor Lili Steblovnik

Sweden

Dr Kristin Andre
Assoc. Professor Mehreen Zaigham

Switzerland

Professor Johannes Bitzer
Professor Gabriele Merki

Turkey

Professor Cansun Demir

Ukraine

Professor Vyacheslav Kaminskyy
Dr Dmytro Ledin

United Kingdom

Dr Ranee Thakar
Professor Stergios K. Doumouchtsis

Contributors to the 2018 version

This project has been realised with the contribution of many parties and individuals:

Project Management

Fedde Scheele
Jessica van der Aa

Project Board

Angelique Goverde
Tahir Mahmood
Jacky Nizard
Anna Aabakke

Skills & knowledge

Chiara Benedetto
Annalisa Tancredi
Jaroslav Feyereisl
Petr Velebil

Societal input

Peter Hornnes
Annette Settnes
Anna Aabakke
Betina Ristorp Andersen
Joyce Hoek-Pula
Britt Myren
Noortje Jonker
Petra Kunkeler
Hans van der Schoot

Educational strategy & assessment

Rudi Campo
Yves van Belle
Helder Ferreira
Jette Led Sørensen
Sibil Tschudin
Juriy Wladimiroff

Exam

Rolf Kirschner

European Network for Trainees in Obstetrics and Gynaecology

Anna Aabakke

Agnieszka Horała (Poland)

Goknar Topçu (Turkey)

Laura Spinnewijn (Netherlands)

Jure Klanjšček (Slovenia)

Vladimír Dvořák (Slovak Republic)

QUICK GUIDE TO **KEY MENOPAUSE TERMS**

MENOPAUSE

the permanent cessation of menstruation
resulting from loss of ovarian follicular
activity: may be natural or induced

TYPES OF MENOPAUSE

NATURAL

recognized to have occurred when a woman has had 12 consecutive months without periods (amenorrhea) due loss of ovarian follicular activity for which no other obvious pathological or physiological cause is present and occurs on average at the age of 51 years. Menopause occurs with the final menstrual period and thus is known with certainty only in retrospect one year after the event.

INDUCED

the cessation of menstruation which follows either surgical removal of both ovaries (with or without hysterectomy) or iatrogenic ablation of ovarian function (e.g. by chemotherapy or radiation). Surgical menopause can be timed precisely.

PREMATURE OR EARLY

menopause occurring much earlier than the average age of 51 years. Thus, menopause before the age of 40 is commonly referred to as premature menopause, although primary ovarian insufficiency (POI) is currently considered to be a better term to denote the loss of ovarian function, as it does not specify definitive failure. Menopause that occurs between 40 and 45 years is termed early menopause.

STAGES OF MENOPAUSE

PREMENOPAUSE

the entire reproductive period from menarche to the final menstrual period

PERIMENOPAUSE

includes the period of time beginning with the first clinical, biological and endocrinological features of the approaching menopause, including vasomotor symptoms and menstrual irregularity, and ends 12 months after the last menstrual period

MENOPAUSAL TRANSITION

the time before the final menstrual period, when variability in the menstrual cycle usually is increased



POSTMENOPAUSE

the time dating from the menopause

Infographic designed by Dr Margaret Rees & Dr Claire Hardy



MENOPAUSE CURRICULUM FOR HEALTHCARE PROFESSIONALS

A European Menopause and Andropause Society (EMAS) position statement



Highlights

Managing perimenopausal and postmenopausal health is a key issue for all areas of healthcare, not just gynecology.

Training programs for healthcare professionals worldwide should include menopause and postmenopausal health in their curriculum.

The curriculum should include assessment, diagnosis and evidence-based management strategies.

MENOPAUSE

the permanent cessation of menstruation resulting from loss of ovarian follicular activity: may be natural or induced



Curriculum content

There are several key areas training should include:

- Menopause terminologies
- Menopause symptoms
- Clinical assessment and screening
- Staying healthy in the menopause
- Menopause symptom treatment options
- Long-term health and treatments
- Delivering menopause healthcare

Delivery

Ideally covered by:

Lectures



E-learning



Placements



Accredited menopause experts



Healthcare professionals should provide an evidence-based approach for assessment and management and refer to specialist services as required.



Summary

Women should have access to accurate information, and be able to seek advice on how to optimize the management of their natural or induced menopause and the years beyond.



Some people require additional attention, with involvement of specialist services. These include women with chronic disease, premature ovarian insufficiency or early menopause or pre-existing disability, as well as transgender and gender-nonconforming people.

Infographic designed by Dr Claire Hardy



