

Royal College of Obstetricians and Gynaecologists

# National Undergraduate Curriculum in Obstetrics and Gynaecology

Report of a Working Party



Royal College of Obstetricians and Gynaecologists

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# The Working Group

A working group was established under the auspices of the Academic Committee of the Royal College of Obstetrics and Gynaecology (RCOG) to devise a National Undergraduate Curriculum in Obstetrics and Gynaecology (NUCOG). The members had particular experience in curriculum management and medical education.

## Remit

The remit of the Group was to:

- review current practice
- determine the core elements of a NUCOG
- highlight alignment and continuity of undergraduate and post-graduate curricula
- produce a generic NUCOG that could be used by medical schools throughout Great Britain and Ireland.

## Membership

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Mr Nazar Amso, Cardiff

Dr Colin Duncan, Edinburgh

Professor Jenny Higham, Imperial College, London

Professor David James, Nottingham

Dr Naomi Low-Ber, Imperial College, London

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Professor Anne Garden (Lancaster) and Professor Peter McCrorie (St George's, University of London) provided written advice and comment.

# Executive summary and recommendations

## Definition

The National Undergraduate Curriculum in Obstetrics and Gynaecology (NUCOG) is designed to provide medical students with the relevant competencies needed to practise as a Foundation Year doctor.

## Rationale

- Women's health impacts on all areas of medicine.
- Obstetrics and gynaecology (O&G) provides an ideal opportunity to cover key topics in *Tomorrow's Doctors*.
- NUCOG facilitates the teaching of topics that are difficult to teach in other specialties.
- NUCOG promotes standards for curriculum content in medical schools.

## Content

NUCOG:

- is blueprinted against the competencies required of a Foundation Year doctor as defined by the General Medical Council
- describes competencies that are exclusive to O&G and those which are generic but optimally delivered in O&G
- recognises the importance of continuity in lifelong learning by being aligned with specialty training in O&G
- provides a flexible framework suitable for adaptation by all medical schools irrespective of course design
- will facilitate the development of national learning resources.

## Recommendations

NUCOG:

- should be considered by all medical schools in their ongoing curricular review and development
- should be used as a guide for those delivering an O&G course
- should be used to emphasise to teachers in O&G the importance of core generic as well as subject specific competencies.

The National Undergraduate Curriculum in Obstetrics and Gynaecology takes a fresh look at the subject with the aim of demonstrating how many topics are useful learning opportunities for students who wish to train appropriately to practise medicine, regardless of their speciality choice. It does not aim to provide comprehensive coverage of the subject area.

All the population are affected in some way by women's health, which is also of significance to all practising doctors. Women's health provides unrivalled opportunities to explore ways of approaching ethical and legal issues, the impact of screening and intimate examination, as well as the impact of life events on the woman and her immediate family and friends, thus covering topics that are required of a Foundation Year doctor but which maybe difficult to cover in other specialties. Much of the topic involves women who are not ill and the student is able to learn that not all medicine is aimed at curing disease.

The curriculum is aimed at both those who are not interested in O&G as well as those who have an interest either as a student or a teacher. It explores ways of ensuring that the learning opportunities provide knowledge and skills appropriate for all doctors, as well as giving excellent opportunities to appreciate professional behaviour. For those who wish to explore the subject in greater depth, there is a more detailed curriculum at the end of the document that will also enable the students to see how it has been devised to provide a continuum from the first day of a student attachment, through Foundation and Specialist training into life as a consultant.

Although *Tomorrow's Doctors* will be updated, the qualities required of a doctor are constant and professional practice continues to be of paramount importance. We feel that the National Undergraduate Curriculum in Obstetrics and Gynaecology provides excellent examples of this and exploiting this opportunity will enable the students to become better doctors of the future.

Professor Sabaratnam Arulkumaran FRCOG  
*President, Royal College of Obstetricians and Gynaecologists*

# 1 Background

## 1.1 Rationale

The General Medical Council (GMC) requires an undergraduate student to acquire certain core competences prior to qualification and starting work as a Foundation Year doctor. These are outlined in *Tomorrow's Doctors*.<sup>1</sup> The competencies cover knowledge, skills and attitudes and emphasise the importance of the patient as the central focus for the practice of medicine. Issues such as the 'right thing to do', consideration of the patient's views and communication skills are given considerable prominence. As well as considering clinical conditions, students must understand the influence of social factors on health and disease: there are few areas of medicine where this is more important than in women's health, particularly in the context of the relationship between mother and fetus. A Foundation Year doctor must be able to identify abnormality and, thus, must have a thorough understanding of what constitutes normality as well as the impact of ageing and disease.

Part of the purpose of *Tomorrow's Doctors* is to lessen the knowledge burden placed upon students. Consequently, many of the traditional subject areas have become less prominent and the emphasis is now on attaining core competencies. Thus, it is important to identify subject-specific knowledge, skills and attitudes that will enhance this process. Determining what is important to include in their training at undergraduate level not only enables the student to identify major abnormalities and clinical conditions but also to manage their patients more appropriately with due respect and understanding.

It is essential to formulate a common curriculum that will: (i) ensure that Foundation Year doctors have core knowledge and appropriate skills in obstetrics and gynaecology (O&G) and (ii) kindle interest in O&G as a future career for some to ensure high-quality care for women. The NUCOG can continue to develop the doctors' knowledge and skills seamlessly for future clinical practice.

## 1.2 Survey of current practice

To discover and understand the spectrum of O&G practical experience that medical schools include in their curricula, a survey was sent out to all medical schools in the autumn of 2006, seeking information concerning their individual courses. The results of this survey provided background information on what was happening throughout the UK in relation to teaching of undergraduate O&G. A clear majority of those contacted thought that a national undergraduate curriculum in obstetrics and gynaecology would be beneficial. Details of the survey are provided as Appendix 1.

The survey highlighted the following:

- There has been a decrease in delivery suite experience over recent years.
- The ability to perform a vaginal examination is very important for all practising doctors, whatever their specialty.
- Exploring a common curriculum would be of value with particular reference to core training needs. This is likely to include the enhancement of clinical skills.

## 1.3 The process

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**The first part of the document is aimed particularly at all those involved in curriculum planning as well as those teaching obstetrics and gynaecology.**

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The GMC competencies required for the Foundation Years and described in *Tomorrow's Doctors*<sup>1</sup> were mapped to the O&G curricula of the individual institutions represented within the working group. A final composite version was constructed and is included in Section 2.3.

Topics of importance in O&G that mirror the RCOG specialty training programme were identified (Appendix 2). Each topic was mapped back to the GMC core competencies and the knowledge, clinical skills and professional attitudes required for each were agreed to produce the NUCOG (Appendix 3). Modules can be selected to cover particular competencies allowing flexibility for the educators and students according to local needs.

Competencies were then classified (and colour coded for ease of use) as:

- those exclusive and specific to O&G and not acquired elsewhere in undergraduate training [No colour].
- Those that offer particularly good opportunities in O&G for the acquisition of generic skills (such as ethical decision making, screening) [Blue].
- Generic competencies not exclusive to O&G (such as taking a blood pressure or catheterisation) [Yellow].

The knowledge, skills, attitudes and behaviour for specific topic areas as well as specific examples will enable those with lead responsibility for organisation and quality assurance of the undergraduate curriculum to identify easily how each area can be covered (Section 2.3).

No guidance is given as to where the NUCOG might best be included in the medical course, as courses vary between medical schools.



## 2.1 NUCOG and GMC Foundation Year core competencies

The three components of the curriculum reflect the profile of a Foundation Year doctor as defined by *Tomorrow's Doctors*.<sup>1</sup> That document described the characteristics of these three main categories as:

- what the doctor should know (knowledge and understanding)
- what the doctor should be able to do (skills)
- how the doctor should behave (attitude and behaviour).

In turn, these three categories have a variable number of sections, each of which has a different number of objectives (Table 1).

**Table 1.** Competencies required by a Foundation Year doctor

Objectives	Competencies
Knowledge	Scientific basis of practice Treatment Working environment Health of the public The individual in society
Skills	General generic graduate skills Intellectual attributes Clinical and practical skills Communication skills Teaching skills
How the doctor should behave (attitudes and behaviour)	Medico-legal and ethical issues Disability and rehabilitation Professional attitudes and competencies

## 2.2 GMC Tomorrow's Doctors objectives and the O&G curriculum

When the NUCOG is mapped to the GMC core competencies, it is evident that the study of obstetrics and gynaecology allows students to cover many of these Foundation Year competencies.

The study of obstetrics and gynaecology provides particular opportunities to acquire generic skills such as counselling, breaking bad news, dealing with acute illness and the




impact of social factors. Table 2 highlights where the objectives of the GMC and the NUCOG are shared and where they differ. An example of continuity across the undergraduate and Foundation Year curricula is included in Section 2.3. This document demonstrates how more competencies, such as teaching professional behaviour, can also be covered. Although covered in some courses, this is not standard practice.

**Table 2.** GMC *Tomorrow's Doctors* (TD) objectives<sup>1</sup> and proportion that are currently addressed in many obstetrics and gynaecology curricula

Category	Topic	TD objectives (n)	O&G matched objectives (n)
Knowledge	Science/disease	12	12 (100%)
	Treatment	13	11 (85%)
	Environment	3	2 (67%)
	Public health	3	3 (100%)
	Society	13	8 (62%)
Skills	General/generic	19	3 (16%)
	Intellectual	14	8 (57%)
	Clinical and practical	19	15 (79%)
	Communication	7	5 (71%)
	Teaching	5	0 (0%)
Attitudes	Medico-legal/ethical	2	2 (100%)
	Disability/resuscitation	4	0 (0%)
	Professional attitudes	25	7 (28%)

### 2.3 Obstetrics and gynaecology and GMC core requirements

The table in this section demonstrates areas where obstetrics and gynaecology covers GMC core competencies and how these can be used to aid the practice of medicine for the Foundation Year doctor. There are three sections for Knowledge, Skills and Attitudes, with detailed content. The colour code indicates that the student should be able to:

- 1 Observe 
- 2 Demonstrate 
- 3 Do 

## KU Knowledge

	GMC objectives (Tomorrow's Doctors)		Examples from O&G curriculum	Examples from foundation curriculum
<b>KU1: The scientific basis of practice</b>				
a) Core knowledge	Clinical and basic sciences		Core topics in O&G	
	Relevant parts of behavioural and social sciences			
	Ability to integrate and critically evaluate knowledge		Recognise deviation from normal and implications	
	Principles of medical education (from <b>SK5 Teaching skills</b> below)			Learner-centred adult learning; effective presentation
b) Disease	Normal and abnormal structure and function		Pelvic anatomy, menstrual cycle and pregnancy physiology	
	Natural history of human diseases		Natural history; impact of reproductive age and pregnancy	
	Body's defence mechanisms		Pyrexia (infections); bleeding	
	Body's responses to illness		Pyrexia; bleeding; puerperal problems	
	Disease presentation		Bleeding in pregnancy, benign and malignant gynaecology	Alarm symptoms; patterns; priorities
	Effects of genetic, social and environmental factors and treatment		Fetal abnormality, drugs, smoking, alcohol, domestic violence	
c) Epidemiology	Demography and biological variability		Impact of class, weight and ethnicity, childbirth, infections, fertility	
	Scientific methods relevant to medicine		Screening; maternal and perinatal mortality; infections	Audit cycle; data; confidentiality; surveillance and screening
Foundation-specific	Foundation-specific knowledge: acute illness		Bleeding in pregnancy; complications of pregnancy and puerperium	Presentation; causes; management; results; resuscitation
	Foundation-specific knowledge: resuscitation		Bleeding and pain in early and late pregnancy	Immediate life support and advanced life-threatening events recognition and treatment; legal and ethical

	GMC objectives (Tomorrow's Doctors)	Examples from O&G curriculum	Examples from foundation curriculum
	Foundation-specific knowledge: investigations	Investigations in pregnancy, neonate, infertility, gynaecological cancer, infections	Bloods, ECG, referral on, chest X-ray, microbiology, urgency
	Foundation-specific knowledge: working as a F1 doctor		On-take management; team work; discharge; primary care
<b>KU2: Treatment</b>			
a) Conventional	Evaluation of effectiveness and evidence	Apply to all treatments; use of evidence-based guidelines	Evidence-based prescribing; clinical trials; limitations
	Consideration of patients' views	All treatments, particularly: screening, mode of delivery, termination of pregnancy	Cultural and religious beliefs
	Effective and safe use of medicines	Drugs in pregnancy and lactation	Complications, interactions and adverse effects of treatments
	Surgical and perioperative care	Caesarean section; gynaecological procedures	
	Initial management of certain emergencies	Bleeding and pain in pregnancy; Eclampsia; acute fetal compromise	
	Management of acute illness	Bleeding; ectopic pregnancy; eclampsia; fetal distress; infection	Safe prescribing of oxygen and blood products
	Management of recurrent and chronic illness and disability	Medical disease in pregnancy; many gynaecological problems	
	Rehabilitation and care in institutions and the community		
	Relief of pain and distress	Labour; dysmenorrhoea; postoperative	
	Palliative care	Gynaecological cancer	Protocols for 'do not attempt resuscitation', legal and ethical
b) Behavioural	Lifestyle in health and disease	Drugs, alcohol and diet in pregnancy screening and family planning	
c) Other therapies	Other non-pharmacological therapies	Analgesia; menstrual and menopausal problems; contraception	
	Alternative and complementary therapies and their interactions	Menstrual and menopausal problems; urological problems	

	GMC objectives (Tomorrow's Doctors)		Examples from O&G curriculum	Examples from foundation curriculum
<b>KU3: The working environment</b>				
a) The NHS	Health care in the UK		Antenatal and gynaecological care in the community and hospital; genitourinary medicine; interaction between midwives/O&G/paediatric staff	Multidisciplinary working; communication; primary care
	Structures and functions of the NHS		Patterns of antenatal care	Organ donation; complaints; continuing professional development; appraisal
	Awareness of developments and guiding principles in the NHS		Health economics; management of gynaecological problems	Case records; letters; medical records; audit; welfare
<b>KU4: The health of the public</b>				
a) Public health	Assessing community needs in relation to service provision		Relationship between GP and hospital; community and benign gynaecology	
	Genetic, environmental and social factors influencing disease		Cervical cancer; domestic violence; smoking, drugs etc. in pregnancy	Risk factors for disease; smoking; drug addiction; alcohol; support
	Promotion of health and preventing disease, surveillance and screening		Antenatal screening; cervical screening	Natural history; investigation, alternatives; infection control
<b>KU5: The individual in society</b>				
a) Core knowledge	Social and cultural environment of medical practice in UK			The Royal Colleges; GMC; postgraduate dean; defence
	Human development		Problems of multiple pregnancy, subfertility	
	Areas of psychology and sociology relevant to medicine		Puerperium and postnatal illness	Legal; death certificate; coroner; mental health; agencies
b) Society and disease	Behaviour and relationships between patients and others		Therapeutic abortion	Confidentiality; Caldecott guardians; Data Protection Act
	Diversity of social and cultural values		Impact on screening; therapeutic abortion	
	Differing views of health care and illness		Intrapartum care; screening	
	Specific issues (e.g. alcohol and drug abuse, domestic violence)		Impact on mother and fetus	

	GMC objectives (Tomorrow's Doctors)	Examples from O&G curriculum	Examples from foundation curriculum
	Avoiding prejudice	Termination of pregnancy; infertility	
c) The ill patient	Patients' understanding and experience of their condition	Understanding of what to expect in pregnancy and labour	Patient interview; expectations; understanding; acceptance
	Explore patients' fears and concerns	Miscarriage; fetal death and stillbirth	Normal bereavement process and behaviour
	Help patients understand their condition		
	Help patients take active role in treatment decisions	Antenatal care and mode of delivery	Understand the use of open/closed questions
	Consent	Particularly caesarean section in labour	Informed consent; legal; children's rights; HIV testing

### SK Skills

#### SK1: General, generic and transferable graduate skills [Transferable/key skills]

a) Organisational skills	Time and resource management		
	Task prioritisation	Care of women on the labour ward	Efficiency; recognise problems; prioritise; call for help
	Team work	Midwives and doctors in antenatal and intrapartum care; cancer networks	Hand over; planning; liaison; cover; delegate; communicate
b) Personal skills	Reflection and being self-critical (including response to mistakes)		Limitations and seek help; coping mechanisms; recognition
	Lifelong learning	Learning opportunities in women's health	Learning opportunities; study; personal learning plan
	Retrieving, managing and manipulating information	Use of internet; searching the literature; use of databases	Databases; the library and the internet
	Ability to integrate and critically evaluate evidence	Labour ward guidelines	Implement the available evidence base
	Presentation and communication of information	Small-group teaching in obstetrics and gynaecology	Communicate effectively; continuity; informed patients
	Application of the principles of scientific research and audit	Personal learning of evidence base in obstetrics and gynaecology	Be involved in ongoing audit

	GMC objectives (Tomorrow's Doctors)		Examples from O&G curriculum	Examples from foundation curriculum
	Studying topics in depth		Obstetric and gynaecological conditions	
	Effective teaching			
	Mentoring others			
c) Interactional skills	Working in a changing environment		Intrapartum care; early pregnancy unit	Manage change
	Flexibility			
	Risk management		Pregnancy is a good example of risk identification and response	Critical incident analysis; prevent a complaint occurring
	Ethical decision making (consent)		Termination of pregnancy; mode of delivery; fertility treatment; consent for surgery	Give information; obtain consent; leaflets; understanding
<b>SK2: Intellectual attributes [Intellectual skills]</b>				
a) Attitude	Reflective and inquisitive attitude			
	Application of rational processes		Infertility; reproductive endocrinology	
	Impact of value judgements		Screening; abortion	
b) Analytical skills	Problem recognition, definition and prioritisation		Antenatal and intrapartum care	Identify and respond appropriately to patients
	Information analysis, interpretation, evaluation and prioritisation		Labour ward	
	Limitations of medical knowledge; professional judgement		Antenatal care; intrapartum care	
c) Audit and research skills	Research and scientific methodology		Audit; maternal and perinatal mortality and morbidity	
	Formulating pertinent research questions			
	Use of appropriate quantitative and qualitative methodologies			
	Rigour in collecting, analysing and interpreting data			

	GMC objectives (Tomorrow's Doctors)	Examples from O&G curriculum	Examples from foundation curriculum
	Evidence, audit, and observed variation in clinical practice	Local and national audits; confidential enquiries into maternal and perinatal mortality; guidelines	
	Use of research skills to understand and influence practice		
d) Uncertainty	Ability to recognise inevitability of uncertainty in medicine	Prenatal diagnosis; pregnancy outcome; fertility treatment	
	Use of appropriate strategies to deal with uncertainty	Observation of clinical situations, e.g. intrapartum care	

### SK3: Clinical and practical skills [Professional practical skills–1]

a) Clinical skills	Take a history	Obstetric (including in labour) and gynaecological histories, including menstrual and sexual	Identify and synthesise problems; difficult circumstances
	Perform a physical and mental-state examination	Abdominal (pregnant and non-pregnant); pelvic examination	Explain; minimise discomfort; instruments; children
	Define problems and interpret findings to give differential diagnosis	Earliest signs of deviation from normal	Assess an individual patient's risk factors
	Interpret commonly used investigations	Diagnose pregnancy; use of ultrasound; endocrine investigations	
	Make clinical decisions based on the evidence gathered	Early pregnancy unit	Manage; involve patients and other professionals
	Assess problems and form plans to manage these	Intrapartum problems	Apply local guidelines and protocols in context
	Write safe prescriptions and record effects of treatment	Differences in prescribing for pregnant, fertile, breastfeeding women	Drug history; British National Formulary; prescribe; liaise; explain; monitor; blood levels
	Accurate and comprehensive record keeping	Observation in acute situations; labour suite drills; postpartum bleed	Update records; each entry accurate, timed, identifiable
	Use relevant technology	Ultrasound scanning; hysteroscopy; cardiotocography training packages	Appropriate IT skills
	Advise on health promotion and disease prevention	Very important in pregnancy, community gynaecology, smears	Appropriate disease prevention or screening programmes



	GMC objectives (Tomorrow's Doctors)		Examples from O&G curriculum	Examples from foundation curriculum
b) Practical skills	Venepuncture; intravenous cannulation; intravenous, intramuscular and subcutaneous injection		Antenatal and postoperative care	Venepuncture; cannulation and venesection; injection
	Arterial blood sampling			Arterial blood sampling
	Suturing			
	Cardiopulmonary resuscitation and advanced life support skills			
	Basic respiratory function tests			
	Oxygen therapy			
	Nebuliser use			
	Nasogastric tube insertion			Nasogastric tube insertion
	Catheterisation		Perioperative	Urethral catheterisation: male and female
			Passing a speculum and being able to take swabs	Blood cultures; electrocardiogram; intravenous infusion; airway care
Foundation-specific	Foundation-specific skills: acute illness			Identify; assess; treat; monitor; resuscitate; communicate
	Foundation-specific skills: resuscitation		Bleeding and pain in pregnancy	Immediate life support and advanced life-threatening events recognition and treatment; support patients
	Foundation-specific skills: investigations		Diagnosis of pregnancy	Bloods; record; electrocardiogram; imaging; communicate; interpret
	Foundation-specific skills: working as a PRHO/F1 doctor			On call; prioritise; communicate; discharge; liaison; notes
<b>SK4: Communication skills [Professional practical skills–2]</b>				
a) Communication skills	Communicate with patients and relatives (listening, explaining, mediating and negotiating, handling complaints and liaising with other professionals)		Labour ward and on gynaecology/obstetrics wards post operatively	Complications; adverse effects; give information and feedback; reassure; listen; setting; confirm understanding; other professionals; dissatisfaction; lifestyle advice

	GMC objectives (Tomorrow's Doctors)	Examples from O&G curriculum	Examples from foundation curriculum
	Confidentiality	Termination of pregnancy, Contraception	Use and share all information appropriately; ensure privacy
	Awareness of other methods of communication		
	Communicate effectively irrespective of background and disability	Dealing with well and young women	Avoid unnecessary comments; discussion; examination
	Communicate using interpreters	Dealing with young patients from abroad	Use interpreters appropriately
	Practise communicating in different ways		Telephone skills
	Communicate in difficult circumstances	Pregnant women, particularly in labour	Inappropriate behaviour in patients; death; agencies

#### SK5: Teaching skills [Professional practical skills–3]

a) Teaching skills	Principles of medical education		Use opportunities for teaching; seek feedback
	Identify differing learning needs		
	Use varied techniques for documentation		
	Use varied teaching techniques		Give presentations in different presentation media
	Exhibit creativity and resourcefulness		

#### AT Attitudes

##### AT1: Medico-legal and ethical issues

a) Core knowledge	The main ethical and legal issues affecting medical practice	Screening; termination of pregnancy; cancer screening; fertility	
b) GMC standards	GMC's principles of good practice	Observation	Epidemiology of clinical presentation in primary care

	GMC objectives (Tomorrow's Doctors)		Examples from O&G curriculum	Examples from foundation curriculum
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**AT2: Disability and rehabilitation**

a) Disability	Rights of people with mental or physical disabilities		Contraception and sterilisation	
	Opportunities for disabled can be affected by society's view			
	Potential strengths and contributions of such individuals		Screening in antenatal care	
b) Rehabilitation	Importance of responses to illness; managing recovery, chronic disease and relapse; reducing or managing impairments and disabilities		Chronic pelvic pain	Physical problems on psychological and social wellbeing; physical illness presenting with psychiatric symptoms; psychiatric/social illness presenting with physical symptoms

**AT3: Professional attitudes and competencies (to function as FY1 doctor)**

a) GMC standards	Adhere to the GMC-defined professional standards			Accept professional regulation
	Behaviour and attitudes consistent with GMC's <i>Duties of a Doctor</i>			Professional considerate manner; honesty and sensitivity
b) General standards	Apply the principles of confidentiality; consent; honesty and integrity		Contraception and sterilisation	Empathy, honesty and sensitivity; behave with probity
	Deal effectively with complaints			
	Be aware and complying with legal and professional responsibilities			Understand the security and safety issues with prescriptions
	Consider the rights of patients		Examination; abortion; contraception; caesarean or hysterectomy	Patient dignity; prevention; confidentiality; autonomy
	Understand and comply with requirements of clinical governance			Audit; clinical governance; risk management
c) Doctor–patient relationship	Be aware of the importance of the patient–doctor relationship		Fetal abnormality; mode of delivery; cancer management; fertility	Patients' expectations around individual doctors
	Adopt an empathetic and holistic approach to patients		Gynaecological cancer; impact of pregnancy; subfertility	Empathy, form constructive therapeutic relationships

	<b>GMC objectives (Tomorrow's Doctors)</b>	<b>Examples from O&amp;G curriculum</b>	<b>Examples from foundation curriculum</b>
	Respect patient autonomy and involve patients in management	Delivery; screening; birth planning	Involvement; choices; respect; support; senior help
	Respect different cultures, values, views and beliefs	Screening; fertility; contraception; termination; transfusion	Religious and cultural beliefs; explain treatments and adverse effects
	Respect patients who choose alternative medical practices	Birth planning; analgesia; fertility	
	Remain non-judgmental in all work and avoid stigmatising patients	Screening and termination	Non-discriminatory attitude; living wills; non-judgemental attitude
d) Team work	Promote effective interprofessional activity, including learning	Gynaecological malignancy; antenatal and intrapartum care	Tolerant, flexible, respectful; recognise own limitations
	Work within the limits of responsibility and capability		
	Make decisions in partnership with colleagues and patients	Options with fetal abnormality; delivery; cancer management; fertility	Individualise when using guidelines and protocols
e) Personal practice	Prioritise the care of ill patients	Gynaecological, antepartum and intrapartum emergencies	Place need of patients above own convenience
	Prioritise personal time	Realistic expectations, consult, punctuality; availability	
	Keep effective medical records		Notes accessible; effective communication; coding; information technology
	Demonstrate self-awareness and reflection		Be flexible and willing to change
	Keep up-to-date with current medical practice	In obstetrics and gynaecology as well as generic areas	Keen to use evidence to support patient care
	Maintain learning with continuing professional development		Motivated, willing to learn; evaluate, consider criticism
	Undertake reflective practice, audit and appraisal		
	Recognise the pressures on themselves and colleagues	Intrapartum care	Recognise the manifestations of stress in self and others

	<b>GMC objectives (Tomorrow's Doctors)</b>		<b>Examples from O&amp;G curriculum</b>	<b>Examples from foundation curriculum</b>
Others in Foundation	Teaching			Willingness, enthusiasm and patience to teach; confidence
	Infection control		Surgery; labour ward; neonatology	Infection control education programme, when to involve

## 3 Alignment and continuity of undergraduate and postgraduate curricula

### 3.1 Transition from undergraduate to postgraduate training

With the introduction of skills-based postgraduate training, newly qualified doctors can clearly see both what is expected of them and, if they deliver on their part, the path their career will take. However, in an atmosphere of lifelong learning, it is both logical and essential to include undergraduate students in this process, starting with an agreed national curriculum and running seamlessly into Foundation Year 1 and continuing through to Specialty Training Year 5. During undergraduate training, the foundations of learning in this specialty are laid and they should marry simply, logically and seamlessly with postgraduate training. This has the advantages of making the course clinically focused and relevant and also acting as, in effect, a ‘taster module’ for the specialty. Not only will they be given a sense of belonging by working from a curriculum that is similar in structure to that of their postgraduate colleagues but this will also help to engender an understanding of what is involved in the specialty and, it is hoped, some practical experience to whet their appetites, even at undergraduate level.

### 3.2 Content of the Specialty Training curriculum

The Specialty Training Curriculum of the RCOG is divided into 18 modules, as shown in Appendix 2a. Appendix 2b summarises areas where the GMC core competencies are covered within the different modules and highlights examples of topics in undergraduate teaching for which there are particularly good opportunities within the O&G curriculum.

# 4 National Undergraduate Curriculum for Obstetrics and Gynaecology

The detailed content of the NUCOG is available as Appendix 3.

The NUCOG is a modular curriculum that enables teacher and student to identify and define the competencies (knowledge, skills and attitudes) required of a Foundation Year doctor in the context of women's health. Each module describes both generic and specific competencies that will enable the Foundation Year doctor to practise more safely.

The specific skills unique to O&G that were identified in the survey of current practice (Appendix 1) as areas of particular concern were 'female pelvic examination' and 'participation in labour and delivery'. The NUCOG addresses this by emphasising the opportunity these offer to acquire generic skills.

## Delivering a baby

All undergraduate students should have delivery suite experience. Witnessing the birth of a baby gives students exposure to a unique event, where they will learn the importance of patient-focused care, including communication skills, dealing with pain, team working and the importance of patient choice. They will also gain experience through watching others dealing with emergencies where prioritisation and timely, systematic and logical decisions are key skills in the delivery suite.

## Vaginal examination

All doctors should be able to perform an appropriate pelvic examination. As well as the technical skills, such as being able to recognise normal features and identify abnormality, they will learn communication skills in a sensitive area, dealing with a woman's fears and concerns regarding such intimate examinations. They will gain experience in obtaining informed consent.

# 5 Conclusions and recommendations

## 5.1 Conclusions

- Many of the competencies required of a Foundation Year doctor can be achieved during an undergraduate attachment in O&G.
- A modular curriculum has been produced which reflects the needs of a student to achieve the GMC competencies required of a Foundation Year doctor.
- Medical educationalists can use the NUCOG to identify how they can cover many of those areas of the undergraduate curriculum that would be otherwise difficult to teach.
- O&G affords excellent opportunities to cover generic topics, including communication skills, ethical issues, intimate examination and patient respect.

## 5.2 Recommendations

- The NUCOG should be considered by all medical schools in their ongoing curricular review and development.
- The NUCOG should be used as a guide for those developing and delivering the O&G course.
- The NUCOG should be used to emphasise to teachers in O&G the importance of ‘core generic’ as well as ‘subject specific’ competencies.
- Adoption of the NUCOG will be facilitated by communication between those in charge of the undergraduate curriculum in each medical school (development and quality assurance) and those particularly involved in the delivery of the O&G curriculum itself.
- The use and the successful adoption of the NUCOG will be determined by conducting a survey in 2010; that is, after it has been in existence for 2 years.

## Reference

1. General Medical Council. *Tomorrow's Doctors*. London: GMC; 2002.



## Survey of current medical school teaching in obstetrics and gynaecology to determine the need for a national undergraduate curriculum

The primary aim of this survey was to determine whether individual medical schools thought that a common curriculum would have any value in improving the student experience in obstetrics and gynaecology (O&G). If a common curriculum were to improve student experience overall and reduce the variability found between one medical school and another, this could enhance recruitment into our specialty. The student experience is often influenced by the 'hands on' components of the course and so a further aim of the questionnaire was to gather information on the practical skills included in each curriculum that might be relevant.

To determine the type of practical experience that medical schools include in their undergraduate O&G curricula, a brief survey was sent out to medical schools in the autumn of 2006. All but four schools responded, although information from a further one was obtained at a later date by informal discussion. The questionnaire was sent to the person who was nominated as being responsible for teaching in O&G although, in the new universities in particular, this person was not always easy to identify. In two schools, the lead was not a specialist in O&G. Increasingly, O&G is being taught with other subjects such as primary care, genitourinary medicine or child health.

### Results

An overwhelming majority of medical schools thought that a common curriculum would be a good idea. Most thought that it would be most appropriate in relation to knowledge and skills, although there was more debate over professional attitudes (attitudes in this context refers to the covering of ethical issues, breaking bad news, and so on, specifically in the context of O&G).

#### *Labour ward experience*

In some medical schools, it is no longer compulsory to observe a delivery and, where one has to be observed, it may not necessarily be a vaginal delivery. A minority now stipulate that actually delivering a baby is a core part of the curriculum.

#### *Vaginal examination*

Vaginal examination is mandatory in a majority of medical schools. However, this is often not on a conscious woman and it may be assessed using a benchtop model or a simulated patient.

### *Examining the pregnant uterus*

Examining a pregnant uterus was a component of all the curricula but, in the vast majority, the assessment was by course work rather than in final examinations.

### *Attitudes*

Results were very variable. Most medical schools discussed topics such as congenital abnormality, contraception and infertility treatment.

### Discussion

The results of the survey were presented at the meeting of the Academic Association of Obstetricians and Gynaecologists in December 2006. The conclusion of the discussion was that a common curriculum was a popular idea, although reservations were expressed, given the diversity of courses offered in the medical schools surveyed. It was thought that a national undergraduate curriculum for O&G would:

- improve the student experience
- be an aid to negotiation with medical schools to maintain O&G in the undergraduate curriculum
- align O&G with Modernising Medical Careers, teaching the basic skills necessary of Foundation Years 1 and 2
- facilitate vertical integration through undergraduate training into postgraduate training and medical practice
- facilitate competency-based assessment.

Those who were against the idea of a common curriculum thought that it would:

- reduce flexibility
- decrease integration within the curriculum as a whole
- lead to a shortening of the longer attachments in O&G
- decrease the diversity of the courses.

Agreement was reached on two critical points:

- Experience of the practical aspects of O&G, such as attachment to labour ward or theatre, appears to increase student interest in the specialty. Therefore, this should be encouraged to aid recruitment.<sup>1</sup>
- Vaginal examination is a core skill for any practising doctor, whatever their specialty, not only for those going into O&G. It is particularly important for those going into general practice. Students should be competent in vaginal examination at the time of qualification and it must be included in the core skills essential for qualification.

### Conclusion

Exploring a common curriculum would be of value, with particular reference to areas important to either recruitment or core training needs. This is likely to include the enhancement of clinical skills.

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1. Higham J. How can we make our medical students enthusiastic about a future in obstetrics and gynaecology? *BJOG* 2006;113:499–501.

The table below summarises the type of question asked in the survey and the responses obtained. Data from one new medical school were obtained by telephone and were incomplete. Data from two older and one new medical school were not obtained, despite repeated requests.

Question	Yes	No
<b>The common curriculum</b>		
Is a common curriculum a good idea?	20	5
In which domains might this be possible?		
Knowledge	24	1
Clinical Skills	23	2
Professional attitudes	21	4
<b>Deliveries on labour suite</b>		
Level of involvement of students:		
i) Observe a delivery	20	5
ii) Observe a vaginal delivery	17	6
iii) Observe more than one delivery	12	11
Perform a delivery?	9	13
If 'yes' how many	Median 3, range 1–5	
<b>Vaginal examination (VE)</b>		
Requirement for learning VE:		
Do students need to perform a VE?	22	1
If 'yes', on a patient?	15	9
Do you specify a number?	10	13
If 'yes' how many?	Median 5	
VE in summative assessment:		
Is vaginal examination part of summative assessment?	18	5
Is it performed:		
on conscious patient?	10	8
on a simulated patient?	5	13
on an anaesthetised patient?	7	11
on a mannequin?	10	8
<b>Examination of the pregnant uterus</b>		
Is this a requirement?	25	0
Part of course work?	25	0
Part of final examinations?	14	11
<b>Professional attitudes</b>		
Is discussion of professional attitudes part of the curriculum?	25	0
Are the following areas covered:		
Infertility treatment/assisted conception?	21	4
Contraception?	23	1
Therapeutic termination?	16	6
Screening for congenital abnormality?	21	2
Care of the very preterm infant?	11	11

## Appendix 2a

### Topics of importance in O&G (RCOG Specialty Training Curriculum)

These topics are taken from the Specialty Training Curriculum (STC) set by the RCOG to guide the teaching of all specialty trainees in O&G. It has been used as a basis for the specialist teaching within the NUCOG. All areas of O&G are covered, to allow the undergraduate students to see how their NUCOG leads seamlessly into the STC.

Module 1	Basic Clinical Skills
Module 2	Teaching, Appraisal and Assessment
Module 3	Information Technology, Clinical Governance and Research
Module 4	Ethical and Legal Issues
Module 5	Core Surgical Skills
Module 6	Postoperative Care
Module 7	Surgical Procedures
Module 8	Antenatal Care
Module 9	Maternal Medicine
Module 10	Management of Labour
Module 11	Management of Delivery
Module 12	Postpartum Problems (the Puerperium)
Module 13	Gynaecological Problems
Module 14	Subfertility
Module 15	Women's Sexual and Reproductive Health
Module 16	Early Pregnancy Care
Module 17	Gynaecological Oncology
Module 18	Urogynaecology and Pelvic Floor Problems

# Appendix 2b

## GMC *Tomorrow's Doctors* objectives compared with O&G module coverage

The table overleaf allows course coordinators to identify areas of the NUCOG where a particular topic, that might be difficult to cover elsewhere in the undergraduate medical curriculum, can be taught. The modules are based on the Specialty Training Curriculum of the RCOG. This appendix, together with **Section 2.3**, will allow teachers and students to identify how they can cover the various GMC competencies required for the Foundation Years.

		National Undergraduate Curriculum Modules																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
KNOWLEDGE AND UNDERSTANDING	KU1 The scientific basis of practice	Core knowledge						X	X	X	X	X	X	X	X	X	X	X	X
		Disease						X	X	X	X	X	X	X	X	X	X	X	X
		Epidemiology						X	X	X	X	X	X	X	X	X	X	X	X
	KU2 Treatment	Conventional				X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Behavioural				X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Other therapies				X	X	X	X	X	X	X	X	X	X	X	X	X	X
	KU3 The working environment	The NHS						X					X			X	X	X	X
		Public health						X					X			X	X	X	X
		Core knowledge				X			X				X			X			
	KU4 The health of the public	Core knowledge				X			X				X			X			
Society and disease					X			X				X			X				
KU5 The individual in society	Society and disease				X			X				X			X				
	The ill patient					X					X	X						X	
SKILLS	SK1 General, generic and transferable graduate skills	Organisational skills						X		X			X					X	X
		Personal skills	X	X				X									X	X	
		Interpersonal skills						X	X		X				X				
		Attitude													X	X			
		Analytical skills	X	X				X		X	X								
	SK2 Intellectual attributes	Audit and research skills				X				X									
		Uncertainty						X		X					X				
		Clinical skills	X					X	X					X	X	X	X	X	X
		Practical skills	X				X			X			X						
		Communication skills							X	X	X	X	X	X	X	X	X	X	X
	SK3 Clinical and practice skills	Teaching skills	X																
		Core knowledge				X									X	X			X
		GMC standards				X									X	X			X
		Disability									X				X	X			X
		Rehabilitation					X							X	X				X
SK4 Communication skills	GMC standards	X																	
	General standards	X							X	X					X				
	Doctor-patient				X			X		X				X				X	
	Team work							X	X	X							X	X	
	Personal practice									X	X								
SK5 Teaching skills	Teaching skills	X																	
	Core knowledge				X									X	X			X	
	GMC standards				X									X	X			X	
	Disability									X				X	X			X	
	Rehabilitation					X							X	X				X	
ATTITUDES	AT1 Medico-legal and ethical issues	GMC standards												X	X				
		Disability									X			X	X			X	
		Rehabilitation					X							X	X			X	
	AT2 Disability and rehabilitation	GMC standards	X																
		General standards	X							X	X					X			
AT3 Professional attitudes and competencies	Doctor-patient				X			X		X				X				X	
	Team work							X	X	X							X	X	
	Personal practice									X	X								

X = Trainees should achieve competency upon satisfactory completion of module

# Appendix 3

## National Undergraduate Curriculum in Obstetrics and Gynaecology

### Notes

The Tables on the following pages define the content of the National Undergraduate Curriculum. Each table has a summary of Knowledge, Clinical Skills and Professional Skills and Attitudes that should be covered. This is then followed by details of further knowledge that might be covered during the medical course.

**Green text:** indicates generic knowledge, skills and attitudes that should be covered during the course in obstetrics and gynaecology (O&G).

**Blue text:** indicates areas that are specific to O&G but attention to them maybe a particularly good way of covering generic skills. Examples of these are early pregnancy screening, cervical screening, impact of ethnicity/religion on contraception/abortion/treatments, vaginal examination, and so on. These are likely to be areas that may be difficult to cover elsewhere in the undergraduate curriculum and will assist those involved in curriculum management in 'ticking the boxes' of the GMC competencies required.