

**Republic of Macedonia
Health Sector Management Project**

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**MODERNIZING LICENSING PROCESS FOR DOCTORS,
DENTISTS AND PHARMACISTS**

REPORT ON SECOND VISIT 14 – 19 May 2006

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Abbreviations

CME	Continuing Medical Education
CPD	Continuing Professional Development
EBM	Evidence based medicine
ECTS	European Credit Transfer System (after Bologna)
EMQ	Extended Matching Question
GOM	Government of the Republic of Macedonia
HIF	Health Insurance Fund
IT	Information technology
MCQ	Multiple Choice Examination
MOH	Ministry of Health
O&G	Obstetrics and Gynaecology
OSCE	Objective Structured Clinical Examination
OSLER	Objective Structured Long case examination
PBL	Problem Based Learning
PC	Personal Computer
PCU.	Project Co-ordination Unit
PDP	Personal/Professional Development Plan
PPD	Personal and Professional Development
TOT	Training of Trainers
WB	World Bank
WG	Working Group for Quality Improvement of Health Services and Licensing

Glossary of terms

This section provides a glossary of some of the educational and other terms that have been used in the development of the training programme in order to facilitate a shared understanding of the 'jargon'. The glossary will be developed further as part of the learning materials provided to participants on the training programmes.

These definitions have been taken from the London Deanery website *Teaching and Learning in clinical contexts: a resource for health professionals* at <http://www.clinicalteaching.nhs.uk/site/HomePage.asp>

Accreditation and licensing

Accreditation has many meanings but is primarily an outcome of evaluation leading to the award of a status, signifying approval, recognition and sometimes a **licence** to operate. It may focus on professional accreditation (eg. in medicine, law) or on an institution, faculty or programme. As a process, accreditation is generally based on the application of pre-defined standards. The status may have consequences for the institution itself (eg. licence to operate) and/or its students (eg. eligibility for grants) and/or its graduates (eg. qualified for certain employment).

Licensing is often used synonymously with accreditation in Europe and refers to the awarding of the permission to operate a new HEI or a new study programme based on an *ex ante* evaluation of appropriate plans. Licensing generally proceeds from predefined

standards. In the UK, licensing often refers to the awarding of a 'licence to practice' to an individual e.g. in medicine.

Problem Based Learning (PBL)

It is best thought of as an educational approach where students are encouraged to take an active role in their learning by discussing a problem (or scenario) centred on a clinical situation, community problem or current scientific debate. In the clinical context this might be a description of events when a patient attends a GP surgery or A & E department. The history, presenting complaint, signs and symptoms, ethical issues, investigations needed (and their outcomes) can all be woven into the case as required. The problem has to be written so that the students can identify the areas that they need to explore in order to be able to resolve satisfactorily gaps in their knowledge and understanding that become apparent during group discussion.

A key point in understanding the nature of problem based learning is to differentiate it from problem solving. In problem solving exercises the basic assumption is that the students have the knowledge and skills required to arrive at a solution (albeit that the application to a specific problem may further stretch them). In PBL the problem is the starting point that enables students to identify for themselves new areas for their learning.

Formative assessment and Summative assessment

Assessment:- the use of a wide range of methods to determine the attainment of a student or trainee

Evaluation:- A determination of how a particular educational input, course or programme (or indeed assessment) has performed

It is important to note that this distinction is not always used the same way in the literature especially from the USA.

Summative assessment. To determine how well a student or trainee has performed at a fixed point in a course or programme.

In healthcare and medicine, as elsewhere this may well result in **accreditation** or **licensing**, for example allowing a healthcare professional to practice, or **revalidation** (e.g. allowing a doctor to continue to practice in a speciality). When this occurs the assessment is termed '**high stakes**' (see box) as so much depends on it. Some of these tests are **minimum competence** (see box) which aim to discriminate between someone who is fit to continue a course of study or enter into specialised training or practice against someone who isn't. It is not only in the interests of fairness and transparency it is important that such a test should have clear criteria against which candidates are judged. All adults but especially professionals need to be aware of their own strengths and weaknesses, their thinking and consequently their learning needs (**metacognitive skills** or "knowing about knowing") and therefore need clear criteria against which they can judge themselves. Unfortunately this has been all too rare in medical examinations which could learn from the example of National Vocational Qualifications (NVQs) (*Jessup, 1991*) and of those in other health professions.

Summative assessments are reported in the form of grades, marks or pass or fail scores.

Formative assessment. Takes place during the course or programme and feeds back into the learning and teaching process with an aim of helping the student learn (and for the teacher to evaluate how to help the student learn). For formative assessment to work well, students need to feel 'safe' to expose deficiencies, while in summative assessment the student tries not to show deficiencies. This limits the use of a summative assessment process for formative use. The nature and timing of the **feedback** is important for this to happen. The feedback needs to take place when the student is ready for it and must consist of executable advice. Pendleton et al. (1984) has given guidelines on how this can be done

Validity and Reliability

"We may isolate ...characteristics that a good examination should possess and which thus merit research attention. The foremost quality of a good examination is **validity**: a valid examination does what it is designed to do. Second comes **reliability**: a reliable examination consistently and accurately measures whatever it is measuring. Thirdly, a good examination should have a **beneficial rather than harmful backwash effect on the curriculum and teaching**" (*Nuttal and Willmot 1972 p.12*)

Criterion referenced assessment and Norm referenced assessment

Assessments were traditionally referenced against all candidates being assessed at the same time to provide a rank order. This is called **normative (or norm-referenced)** referenced assessment and can be useful for example when there are limited places on a programme and thus a need to **discriminate** to find the best students. However, there are problems using normative assessment (see box) especially when applied to adult professionals.

The alternative is to measure a candidates ability against a set of criteria that define the educational outcome that the test assesses. This is called criterion-referenced assessment. It has the advantage that:

- In theory all candidates can pass an assessment
- Candidates can determine what skills and knowledge they still have to acquire before they can pass, or when they fail where they need remedial help.
- In its purest form (such as NVQs) where candidates have to achieve all the criteria to pass, employers and others can be confident that the employee has the knowledge and skills written as criteria.

There is a move towards criterion referenced assessment and there are processes that try and make instruments which are often used for norm-referenced assessment (such as Multiple Choice Questions) more criterion referenced. Some, using experts (such as the Angoff and Ebel technique) have been used, but ultimately unless there are specified criteria, candidates cannot make judgements about why they have reached a particular score.

Acknowledgements

The consultants would like to thank Dr Katerina Venovska, the World Bank, the presidents and other representatives of the Doctors, Dentists and Pharmacists Chambers and of the professional associations; the Deans and other staff members from the Faculties of Medicine, Dentistry and Pharmacy; staff at the Ministry of Health and the PCU, all members of the working group on Quality Improvement of Health Services and Licensing and the translators.

Introduction

This report summarises the outcomes of the second mission to the Republic of Macedonia by Judy McKimm and her assistant, Anita Underwood (the UK Consultants), from 14 – 19 May 2006. This visit was the second of a series of visits planned to take place over a 12 month period from February 2006 until February 2007.

The purpose of the visit was to work with Dr Katerina Venovska (PCU) and the Working Group (WG) which is representative of the three Medical Chambers (Doctors, Dentists and Pharmacists) and the Macedonian Medical Association to carry out a wide ranging stakeholder consultation in order to finalise the syllabus and content of the training programme for educators, examiners and mentors. The consultants would also carry out observations of the three components of the licensing examination for doctors.

Meetings held and issues covered

This section provides a descriptive outline of the key meetings held during the visit, together with a summary of some of the main issues raised by the key stakeholders.

A full schedule of meetings undertaken between 14 – 19 May, together with the names of those participating is provided in Annex 2.

Day One Monday 15 May 2006

Meeting one

This was an observation of the written examination in science and clinical topics for graduate doctors held by the Doctors' Chamber of Macedonia at the Faculty of Medicine. These examinations are held four times per year. The written examination comprises 120 general medical questions in a multiple choice format (MCQ). There are no specialist questions, no trick or negative questions and the students have two minutes allowed for each question. The examination is set four times per year and an average of 35 students sit each time. Professor Duma welcomed the 45 candidates to the examination and put them at their ease with some advice about the examinations, their own capabilities and the structure of the week.

The findings from the observations of the Medicine examinations are reported on page ? below.

Meeting two

This was a meeting with Professor Dr Aleksej Duma, President, Doctors' Chamber of Macedonia. Professor Duma informed the consultants that:

- Students remain as either students or absolvents (in transition) until they take their licensing exams, not all students graduate at the same time but once they have passed all the undergraduate examinations and attended all the lectures they are eligible to take the licensing examinations.
- The Faculty of Medicine has started the transition towards the revised undergraduate programme which will be in line with ECTS and also include more family medicine and more clinical experience. It will be a further three years before the transition is complete and there has been a hiatus in the process which has slowed progress
- The chamber is monitored and held to account if there is a high incidence of poor results. This could mean a financial loss
- There is no financial incentive to taking an educational role and therefore there is little motivation
- Institutions are not yet accredited, although the guidelines are prepared and this might cause problems with the educators and mentors in some places. A set of criteria have been agreed.
- There is an issue with guaranteeing clinical competence and questions to consider are
 - Numbers of patients to be included per student sitting the clinical component of the examination. Currently students see one patient randomly selected from the daily patient list. This can be inequitable.

- General criteria for competencies are not fully developed and examiners are still subjective in their assessments
- There is no system for including the feedback from colleagues in the general assessment of students
- Interns need a wide experience but where there are private providers there are issues around controlling the quality of the experience. The chambers have very little influence in the placement. Currently, there is little in the way of workplace visits.
- Mentors
 - The mentor role is seen as a professional parent and is responsible for the 'sign off' of interns. Each mentor has a maximum of five interns
 - It is recognised that there needs to be a closer working relationship between mentors and educators, educators will sign off clinical competence and so they need to be able to identify when interns are not ready to take the examinations.
- Institutes need more resources for students such as
 - Libraries
 - Computer suites
 - Professional forums
 - Key stakeholder involvement
- The resource issue is mainly due to lack of financial resources. Currently there is financial support from the World Bank but there is a need to secure sustainable funding to develop effective undergraduate and postgraduate learning environments. All those involved in training need to have some reward but identifying where this will come from is difficult.

Meeting three

This was a meeting with Dr Katerina Venovska, Assistant Co-ordinator, Ministry of Health, PCU to agree the specific scope of activities on the visit and to be updated on activities since the last visit. The programme for the stakeholder workshop was discussed as well as the need to ensure that all trainees received background documentation such as relevant Rulebooks, internship programmes and clinical guidelines. The consultants will assume that trainees are knowledgeable about their roles and the structure of internship and licensing for their profession and will provide training on educational aspects to support this.

Meeting four

This was a meeting with the Working group for Quality Improvement of Health Services and Licensing. The purpose of the meeting was to agree the activities to be carried out during the visit (in particular the content and desired outcomes of the workshop to be held on 16th May), to agree the inception report and to receive additional information about licensing and the planned training programme.

Items discussed included:

- For the stakeholder workshop, the group agreed to work in three groups of mixed disciplines with a member of the WG as a facilitator. It was planned that the aim of the workshop was for stakeholders to agree the outline of the syllabus and content of the training programme, including teaching and learning philosophies, professional learning, peer review and teaching skills.

- The WG approved the syllabus and content of the TOT programme with some minor amendments and clarification of some of the terminology through a glossary which will be developed for the trainees.
- The WG agreed that the training delegates on all the TOT programmes in June and September would be issued with standard pack containing core materials with additional materials pertinent to their needs and approved by the chambers. The core programme will include materials on teaching and learning philosophies as well as copies of presentations and ideas for ice breakers and other exercises.
- The training sessions aim to raise the awareness of their roles and of the philosophy of teaching and learning. The activities will include training examples from both clinical audit and Evidence Based Medicine, plus other topics relevant to the health strategy of Macedonia.
- Fitness for accreditation will be assessed by:
 - Attendance
 - Assessment of teaching skills, criteria yet to be developed
 - Reflection, a personal development plan and self appraisal
 - A workplace visit or professional conversation

Day two Tuesday 16 May 2006

Meeting five

This was a workshop for all key high level stakeholders who have an interest in the training programme for educators, examiners and mentors, held at Scala 1, Holiday Inn, Skopje. The purpose of the workshop was to inform stakeholders about the activities being carried out under the project, to consult on the syllabus and content of the training programme and to receive input on issues of concern for the stakeholders. See Annex 2 for agenda.

The workshop was opened by Dr. Nikica Panova (MoH) who is the Assistant to the Head of the sector for hospital care and is also responsible for issues related to postgraduate education and licensing of professionals. She outlined the changes in the medical examination and emphasised the need to focus more on practical skills and lifelong learning to raise the standards in the profession. She noted that the licensing project is a key step in the movement towards European standards.

Professor Dr Vladimir Borozanov, Leader of the WG then welcomed the delegates to this workshop which is the first practical step in the development of the licensing project. He thanked the consultants for their input. He emphasised that this was in not a criticism of the work of the educators, mentors and examiners, their work was valued, but a guide to cascading knowledge in a more efficient and productive way. Educational processes have already improved in recent years and this project will update and improve further

Dr Katerina Venovska added that the outcome of this workshop will be discussed within the Chambers and modifications will made where necessary to the proposed training programme.

Judy McKimm and Anita Underwood then presented the key components of the training programme to delegates (see Annex 3), followed by a question and answer session.

Feedback was very positive with a number of points noted. The President of the Dentists Chamber expressed concern at the timing of the June, 2006 training as it coincided with a dental conference. The consultants and PCU agreed that they would try to accommodate the needs of trainees to attend other events and urged that the PCU be kept informed of events that might potentially clash with the training. The group agreed that the sessions for the Training of the Trainers needed to include very senior people with academic credibility who were in a position to cascade the information.

Professor Dr Vladimir Borozanov said that he felt that the programme meets the needs of the trainers and hopes that there will be opportunities to continue to feedback on the content of the programme so that it could be changed if necessary. A discussion was held about responsibilities for selecting and training the examiners, educators and mentors and it was noted that the current position would remain for the time being with the Chambers and MoH having the authority and remit for these activities, but this would be reviewed after a year or so once the TOT programme had been fully implemented. It might be that an umbrella organisation which was representative of all the bodies involved might be set up to accredit individuals and healthcare institutions. Or the Faculties or professional associations might carry out the training. The consultants were asked to explain briefly how this works in the UK and they agreed to provide a small number of international models on postgraduate training and the supporting management structures. It was also noted that it was vital that the training and the project was sustainable in the longer term and that support for the trainees must be provided and embedded in Macedonian practice.

A delegate asked for further clarification on clinical audit. There is some confusion over the translation of clinical audit and this needs to be clearly defined for training purposes. In translation CA indicates a peer review exercise. For the purpose of the TOT programme Clinical Audit is monitoring and measurement of performance

The programme is designed to increase the confidence of the trainers by building on their teaching skills while keeping in context of the current Macedonian Health Strategy. A suggested exercise is to select two themes from the health strategy and further develop them to include clinical audit (CA) and Evidence Based Medicine (EBM). This would require informing participants about CA and EBM and designing learning activities that can be used with trainees. It must be noted that the purpose of the training programme is not to increase clinical knowledge but to enhance teaching skills by focussing on contemporary themes. By default clinical knowledge will improve. Dr Katerina Venovska informed the group that there will be a workshop to introduce new clinical protocols, planned publication in June. This will involve all three Chambers. Professor Dr Lidija Petrusevska welcomed this suggestion underlining the importance of pharmacists moving towards the 'whole patient' approach. Knowledge, skills and attitudes will be professional with an emphasis on objective criteria and learning will be experiential. It is expected that the first cohort will become the champions of the project. It was noted that mentor role may include supervisory requirements over educators and this needs to be further explored and clarified.

The Delegates then worked in to three groups to comment and feedback on the detail of the TOT programme.

The recorded feedback was:

- Well defined objectives
- Good distribution of sessions

- Provision of safe environment for the educators to practice skills
- There are some technical issues around translation that will need further clarification
- Abbreviations need to be clearly explained, a glossary of terms should be included

Examiners

- Pay attention to assessment methods, standards and norms for objective evaluation
- Development of guidelines is recommended
- Greater emphasis on assessment of practical skills
- Methods need to be in line with WHO standards

Mentors

- Better definition of the learning needs of the intern, some attention needs to be paid to improving communication skills
- Definition of role is needed, including the role as supervisors and the relationship of the roles between educators and mentors
- Mentors should have some management skills training

Educators

- Development of teaching skills
- Learn interactive methods of teaching

The workshop concluded with a general approval and support for the TOT programme from all delegates.

Meetings six, seven and eight

Three short meetings were held with representatives of the Ministry of Health: Dr Nikica Panova, Prof. Dr Vladimir Dimov (Minister of Health) and Gordana Majnova, Co-ordinator of Project. The meetings provided an opportunity for the consultants to meet the Ministry representatives and to update them on activities related to the mission. The consultants were pleased to note the high level support provided by the Ministry for their activities.

Day Three Wednesday 17 May 2006

Meeting nine

This was an observation of the clinical examination for graduate doctors held by the Doctors' Chamber of Macedonia. The examination was held at Health Home Skopje, Gorge Petrov & Bit Pazar for 30 candidates in six panels. The findings from all observations of the Medicine examinations are reported below.

The clinical examinations are designed to examine the knowledge and skills of the candidates. Each student will examine one patient randomly selected from the daily patient list. The patients consent to being examined by a student but are not briefed. Future plans for the clinical examination are to build up to 3-5 patients, giving the examiners a wider assessment of the student's knowledge and skills.

The students are given a booklet prior to the examination outlining the structure of the examination and are expected to take a history from the patient; linking to patient

records; perform a satisfactory physical examination of the patient. offer differential diagnoses; suggest a treatment plan and record findings, including current and past problems, findings from physical examination and suggested treatment.

The examining panel of three examiners per student, are looking for purposeful questioning, a logical sequential technique of physical examination; good communication skills, verbal and non verbal and application of ethical standards.

The consultants observed students with patients, one child, the rest were adults. Some discussion with examiners was held, they noted that one problem with the educators and mentors is that of payment. Professors are paid for their work but for clinicians, they will possibly require additional payments for teaching interns. They were unclear as to whether the Chamber will pay them for their examiner work. They noted also that the undergraduate programme was weak in teaching clinical skills and this was apparent in the quality of candidate's skills in clinical examinations. This needs to be a big focus in the internship programme and all educators and mentors need to help interns practice their clinical skills on patients with common clinical conditions, not esoteric ones found in teaching hospitals. More time in family medicine would help students gain clinical and communication skills and experience, this should be assessed on an ongoing basis. This should be in rural areas as well as in the towns. All educators need minimum equipment so that the interns are used to using this: patella hammer, ophthalmoscope; sphygmomanometer and auroscope. They need to be up to date in treatment and diagnostic techniques. There should be a central information point so that all doctors can receive up to date information on health and disease. Prevention and early detection of disease and health education need to be emphasized, not just focusing on pharmacological and invasive treatments.

Meetings ten, eleven and twelve

These were three working meetings held with the proposed educator, examiner and mentor trainers at the Republic Institute for Health Protection. The purpose of the meeting was to inform the three groups separately of the plans for training including the syllabus and content, to engage the trainers in dialogue and thus involve them in the development process and to provide an opportunity for them to comment on the proposals and identify any issues of concern.

There was support for the programme from all three groups and no major issues or amendments to the planned activities identified.

Educators' meeting

There were 31 attendees. Judy McKimm gave a presentation (see Annex 3) and this was followed by an open plenary session. The educator group want the consultants to build a team of educators that will develop the skills to teach well. They acknowledge that they are experienced teachers and need to build on that experience learning new skills and knowledge. The group were invited to put forward ideas for inclusion into the programme, making it practical for Macedonia. Judy McKimm explained that there were two key messages in the programme, to help participants explore elements of the learning cycle and the relationships between the curriculum, teaching and learning, assessment and review, and also how teachers as individuals impact on student learning. One delegate commented that if this is to be a single event it may too ambitious. Judy McKimm acknowledged that this might be the case and would be kept under ongoing review, also that the programme is not designed to develop clinical knowledge but to build on participants' existing knowledge and experience.

Mentors' meeting

There were eighteen attendees at the meeting which was carried out in the same format as the educators meetings with a presentation followed by a general discussion. In response to questions, Judy McKimm noted that the training will involve dividing Educators, Mentors and Examiners into separate groups but there will be times when it will be advantageous to work in uni-professional groups. Core materials will be developed in advance of the training event and distributed to the groups. It is important that delegates familiarise themselves with the rule books etc before June.

Delegates noted that one of the issues facing all three groups is the structure and format of the examination has evolved but the education has remained the same and there is currently a mismatch. More attention needs to be paid to the rural districts in selection and training of mentors, not all the training should happen in Skopje. There needs to be a forum to ask constructive questions during and after the training. A delegate asked what experiences from other countries helps her to believe that this TOT programme will work in Macedonia. Judy McKimm answered that Macedonia has excellent intra professional relationships and an open attitude. Positive changes have already happened and the groups are ready to take the next step forward. Motivation will be maintained through helping people to focus on the improvements made. Measuring the success of future the candidates will be a reflection on how the whole programme has worked. When preparing interns it is really important to be reactive to programmes when there are weaknesses.

Examiners' meeting

There were eleven attendees at the meeting which was carried out in the same format as the educators meetings with a presentation followed by a general discussion.

Delegates asked for the views of the consultants on the doctors' examination. Judy McKimm commented that they thought that that the practical learning and clinical skills could have been at a higher level, especially in systematic history taking and physical examination skills, however, the candidates' communication skills were very good and they were empathic to patients. The examiners have a very relaxed way of putting the students at ease and this should be protected. Feedback on the performance in the examination would be very helpful for the student's continued learning. An inequity in patient selection was observed, it would be preferable to select patients with common conditions and having more standardization. Judy McKimm was asked for some examples of the use of simulated patients in medical assessments. She explained that many countries use simulated patients in OSCEs, in the form of mannequins or actors very successfully. It is a safe way for the students to practice their examination and communication skills. Real patients with real conditions will often make themselves available for this exercise as well, especially in family medicine where a bank of patients may be available to examiners.

Meeting fourteen

This was the final meeting with the Working Group (WG). The purpose of the meeting was to discuss issues raised during the week, clarify outstanding issues, identify documentation required and agree an action plan and time schedule for the training in June and subsequent visits of the consultants. The consultants fed back their views about the observations of the medicine examinations which in general were very positive, the majority of improvements that need to be made have already been identified by the Chamber but have not yet been set in place.

Day Four Thursday 18 May 2006

Meeting fifteen

This was an observation of the final part of the examination for graduate doctors held by the Doctors' Chamber of Macedonia. The examination was the Ethics examination held in the Forensic Medicine Department of the Faculty of Medicine, Skopje. Five students are examined by a panel of seven or eight examiners. Each is given an ethical dilemma, which is a question selected from a bank of questions (see Annex 4) with the expectation is that the student will put forward a logical discussion that will include all ethical considerations. The findings from all observations of the Medicine examinations are reported below.

Meeting sixteen

This was a workshop led by Tony Fenn (UK consultant) on Clinical Performance Indicators for Macedonia, attended by Judy McKimm as a participant observer. The workshop was designed to provide a discussion forum for a proposed computer based data capture and reporting system, integrated with the current systems used in Macedonia. There was general agreement with the proposals which will be taken forward by the Ministry of Health and in subsequent visits by the consultant.

Meeting seventeen

This was the final wrap up meeting held with Katerina Venovska to agree next steps. It was agreed that Dr Venovska will put together the final lists of educators, mentors and examiners and inform them of the training dates in June and the venue in Skopje. The agendas for each of the programmes will be sent to the PCU by the consultants. The consultants will aim to review the Pharmacy Chamber licensing examinations in the first week of December as discussed with the WG and will arrange to observe the Dentistry examinations on the last visit in January or February 2007.

Additional training needs for the TOT trainees, including training on clinical guidelines will be identified by the PCU.

Monitoring and review of examiner performance will be established and initiated through this project. It is suggested that a trained examiner might head up all the panels as the beginning of cascading expertise.

One of the ways of evaluating the success of the TOT programme will be the improved performance of interns and junior doctors, research should be set up towards the end of this project in order to carry out longer term evaluation.

The training materials for the June TOT programme will be sent to the PCU by 12 June.

Observation of medicine licensing examinations

The consultants observed the three parts of the licensing examination for graduate doctors held by the Doctors' Chamber of Macedonia at the Faculty of Medicine. These comprised a written Multiple Choice examination (MCQ), an assessment of clinical skills and a panel assessment of professional attitude and communications including ethics. The consultants were impressed by the enthusiasm and commitment by all those concerned with the examinations in assessing and developing the skills and competencies of graduate doctors. The assessment methods are appropriate and a helpful comprehensive booklet has been produced with instructions on procedures for all the examiners, including reporting forms which is given to all examiners. This ensures a standardised approach to the examinations.

The use of survey questionnaires completed by students is very helpful in identifying issues, however many of these questions (such as those relating to prior learning, whether the examination tested learning that they had done or introduced new topics, whether they were prepared in terms of clinical skills) will relate to the previous undergraduate and intern programmes and clear mechanisms must be set in place to ensure that the findings are fed back to the Faculties and the educators for the interns. Once the new educator, mentor and examiner programme is fully established, formal mechanisms to relate back the findings to mentors and educators must be initiated.

The written examination (MCQ) appears relevant to the stage of training. It is a combination of basic sciences, clinical sciences and application of knowledge to clinical scenarios. We were unable to consider the question paper during the visit, but through discussion it seems that the design is appropriate and reflects good educational practice. There is no negative marking and each of the 120 questions is a single stem with five choices of response, the pass rate is 60%. It is unclear whether the examination is norm or criterion referenced, the latter would be preferable and in line with current practice in medical assessment. We were unable to compare the level of questions with similar ones for licensing elsewhere in the world and would suggest that ongoing review of the question bank is undertaken against comparable learning outcomes on graduation around the world. The consultants will provide additional reference materials for information on these topics for the Doctors' Chamber which will not form part of the formal reports.

The **clinical assessment** comprises an interview with a patient and a physical examination, this takes place two days after the written examination and lasts about an hour. Three to five examiners (normally a paediatrician, internal medicine doctor and family medicine doctor) form the panel for the student. Once the candidate has taken the history and made a diagnosis and a treatment plan, they have to complete a written report on a standard form which summarises their findings. The examiners also complete a grading sheet on the student and then they make a decision as to whether the candidate has passed or failed.

We observed five candidates at different stages of the examination and the following points were noted:

- The examiners are helpful to and supportive of the candidates without providing them with the answers to questions

- Students had good communication skills and seemed to have a good understanding of clinical and scientific knowledge on questioning
- Students are not provided with a chair and therefore are rarely on the same level as the patient which does not help put the patient at ease during the interview
- Students could be paired with any patient (child adult, acute or chronic), therefore this can be inequitable and the focus on assessment on just one patient who may be atypical leads to a lack of standardization across the examination
- We heard of plans to introduce a more standardized patient encounter and discussed ideas such as simulated patients, selected patients from a bank of patients with common conditions such as bronchitis, heart disease etc. and that it was planned that all candidates would be assessed on their clinical skills on a small number of patients, not just one
- We saw no evidence that the patients were briefed or debriefed after the consultation, some of consultations did not seem to provide the patient with a particularly effective consultation or treatment plan
- None of the students were seen to take notes during their consultations and they hardly referred to the patient's previous case notes or laboratory results prior to commencing the interviews
- Not all examiners use their notes to provide feedback of the consultation, this is an opportunity to provide further learning to the students
- The level of practical skills is somewhat lower than might be expected at this stage of training when compared with other European and North American standards. This was particularly noticeable with regard to a systematic approach to history taking and physical examination
- Students are accustomed to complex cases and therefore look for and assume complexity in their patients
- There seems little feedback or discussion between the educators, mentors and examiners which is a lost opportunity
- The patients we saw were given little or no health management (lifestyle) advice during the examinations seen. It appears that this is not expected
- There could be benefit in making the clinical examination part of an ongoing assessment with feedback outlining areas where the students need additional support

The oral examination is an **ethical interview** and is the final part of the licensing examination. Five candidates are interviewed for an hour in turn in front of a panel of approximately seven examiners. Each candidate selects a case selected from a small bank of clinical scenarios involving ethical or moral issues, see Annex 4 for the list of questions. The topics covered are: basic principles of ethics; general duties of doctors; bio-medical research; specific ethical problems; doctors' error and negligent treatment; quackery; ethical problems within a healthcare institution and the doctor and public media (extracted from the *Manual for examiners*). Students either pass or fail this examination.

The following points were noted:

- Examiners were relaxed throughout the interviews putting the students at their ease, they acted as good professional role models, engaged in debate about the issues amongst themselves showing areas of disagreement within an ethical framework and pointed out where they themselves might recognize a dilemma or where students used inappropriate language when referring to patients

- Involving five candidates together is reassuring for them although the first student is possibly at a disadvantage
- The Examiners commented that this was good way of probing the students for knowledge. They cannot learn by rote to do this exam
- Students seldom fail this element. The examiners put questions to the students guiding and challenging them to explore all potential aspects of the set problem. For example one examiner suggested that the patient in question could have a communication difficulty such as deafness or learning disability and how would this change the consultation
- Students were asked to explore the psychological impacts of the suggested consultation including issues such as informed consent, the impact on a Jehovah's Witness needing a transfusion
- Some students are given the floor for a considerable period and others have just a few minutes. This reflects the mixture of questions, some of which are much more complex with a number of issues, than others
- Some examiners have excellent questioning techniques, others do not always allow the students time to answer before commenting. It might be useful to have allocated roles to each examiner, either allocate a question/candidate to pairs of examiners or ask different examiners to focus on specific questions such as ethical issues, law, clinical topics etc.
- it was not clear what a candidate would have to do to fail the examination, some candidates made errors of fact, others made disrespectful statements and there were no grading criteria for each candidate to evaluate this objectively

It is suggested that:

The aims and outcomes of this examination are clearly defined with associated assessment criteria, covering factual knowledge, awareness of ethical and legal standpoints and issues and the current prevailing professional opinion on this, communication skills and the ability to analyse and think critically about an issue. These are clearly stated and incorporated into a marking scheme for examiners to use for each candidate.

The questions be reviewed and clustered under different core ethical/legal topics, eg. informed consent; end of life issues; truth telling; resource allocation/rationing; breaking bad news; whistle-blowing, the UK core curriculum in medical ethics and law (see table below) provides a framework for these topics.

In medical education a twelve-point core curriculum has already been developed and endorsed within UK medical schools. A summary of the twelve-points is given below.

The core curriculum for medical ethics and law (summary)

Informed consent and refusal of treatment

Why respect for autonomy is so important; adequate information; treatment without consent; competence; battery and negligence.

The clinical relationship; truthfulness, trust and good communication

Ethical limits of paternalism; building trust; honesty; courage and other virtues in clinical practice; narrative and the importance of communication skills.

Confidentiality

Clinical importance of privacy; compulsory and discretionary disclosure; public v private interests.

Medical research

Ethical and legal tensions in doing medical research on patients, human volunteers and animals; the need for effective regulation.

Human reproduction

Ethical and legal status of the embryo/foetus; assisted conception; abortion; including prenatal screening.

The new genetics

Treating the abnormal v improving the normal; debates about the ethical boundaries of and the need to regulate genetic therapy and research.

Children

Ethical and legal significance of age to consent to treatment; dealing with parental/child/clinician conflict; child abuse.

Mental disorders and disabilities

Ethical and legal justifications for detention and treatment without consent; conflicts of interests between patient, family and the community.

Life, death, dying and killing

The duty of care and ethical justifications for non-provision of life prolonging treatment and the provision of potentially life shortening palliatives; transplantation; death certification and the coroner's court.

Vulnerabilities created by the duties of doctors and medical students

Public expectations of medicine; the need for teamwork; the health of doctors and students in relation to professional performance; the General Medical Council and professional regulation; responding appropriately to clinical mistakes; whistleblowing.

Resource allocation

Ethical debates about "rationing" and the fair and just distribution of scarce health care; the relevance of needs, rights, utility, efficiency, desert and autonomy to theories of equitable health care; boundaries of responsibility of individuals for their own health.

Rights

What rights are and their links with moral and professional duties; the importance of the concept of rights, including human rights, for good medical practice.

Consensus group of teachers of medical ethics and law in UK medical schools. "Teaching medical ethics and law within medical education; a model for the UK core curriculum" J Med Ethics 1998;24:188-192

Each of the questions should have a small number of structured questions attached to it which aim to explore candidates' opinions, beliefs and practices around these topics and address the assessment criteria.

The candidates are allocated a question each, ensuring that no two candidates cover the same topic under each panel, this will avoid repetition of issues, discussion and topics and aid equity.

Examiners are each allocated a question to cover or a set of questions on certain topics. The TOT programme for examiners includes a session on questioning techniques.

Each candidate is allotted a set time for the interview, approximately 10 minutes.

Each candidate receives written or oral feedback on his/her performance highlighting strengths and areas for improvement or consideration

The following websites contain useful information about aims and objectives for ethics and law teaching and of different models for assessing ethics within a professional curriculum.

The Higher Education Academy for Philosophical and Religious studies:

<http://prs.heacademy.ac.uk/documents/miscellaneous/ethics-assessment.html>

The Medical Ethics and Law Programme, **ETHOX: UNIVERSITY OF OXFORD**

<http://www.ethox.org.uk/education/teach/confidentiality/print/confidentiality1.pdf>

This also contains a host of references on medical ethics and law teaching and assessment.

Summary of the visit and action points

The visit was helpful in gathering additional information about the current position concerning the internship, licensing examinations, CPD and accreditation relating to doctors, dentists and pharmacists in Macedonia. Having the opportunity to observe the licensing examination in Medicine was invaluable in helping the consultants' understanding of the details of the process. It is acknowledged that these examinations are in the early stages of implementation and it is hoped that the comments and suggestions concerning the examination outlined in this report will prove helpful to the Doctors' Chamber.

The meetings the UK consultants had with key stakeholders were very useful in enabling contact to be made with a wider group of stakeholders and with proposed educators, examiners and mentors. This has been a useful beginning to implementing the training programme in June. It was pleasing to note the high level of support for the proposed programme which, with some minor amendments, was fully endorsed by stakeholders. The amendments have been incorporated in the relevant section of the final inception report held by the PCU. Many helpful comments were received which will improve the programme and make it more relevant to the needs of those involved in the internship and licensing programmes.

It was agreed that the first training modules in June 2006 would be carried out in Skopje (venue to be arranged by Katerina Venovska) as follows:

Tuesday 20 th June	Educators – Module 1: sessions 1 and 2
Wednesday 21 st June	Educators – Module 1: session 3 Examiners – Module 1: session 1
Thursday 22 nd June	Examiners – Module 1: sessions 2 and 3
Friday 23 June	Mentors – Module 1: sessions 1 and 2

A Working Group meeting is planned for Thursday 22nd June after the examiners' training event.

A programme for the training events will be prepared by the consultants and sent to the PCU for distribution to all participants by 25 May. Training materials will be prepared by the consultants and sent to the PCU for translation and copying by 12 June. This will incorporate some changes to the overall syllabus and content of the TOT programme suggested by stakeholders during the consultation process.

The second modules will be delivered in September, specific dates and venue will be agreed in June after the first training events. It may also be possible to develop some additional workshops around core educational topics, depending on identified needs of trainers, such as clinical assessment methods (eg. Objective assessments, using simulated patients) or problem based learning.

It is noted that some participants may not be able to attend the planned training due to other commitments such as conferences. It was agreed that (depending on numbers) an additional event would be offered at the beginning of the September visit to include core topics from the Module 1 training (eg. Principles of teaching, learning and assessment), this would enable individuals to then participate in Module 2 sessions.

It was agreed that the consultants would observe the Pharmacy examinations on a visit at the beginning of December. The Dentistry examination observations are yet to be planned.

List of additional documents required

- Copy of the accreditation procedures for the clinical teaching facilities
- Outline details of Pharmacy Tempus project, including outline of new curriculum and proposed intern arrangements

Annex 1

Updated workplan and key milestones

Dates	Key activities	Deliverable(s)
2006		
March 26 – 31	Inception visit	Inception report Work plan Framework for training programmes
May 14 - 19	Consultation with associations, chambers and selected co-ordinators Mon 15 th - working group meeting 1400 Tues 16 th - am Workshop, time TBC Wed 17 th – briefing meetings with all groups of educators, examiners and mentors Observation of licensing examination (Doctors)	Visit report Finalised training programmes Detailed training materials: workbooks and presentations
June 19 - 23	Round 1 - Training of examiners, educators and mentors Review training and finalise second round of training content and materials	Visit report Educators, examiners and mentors attended first training programme Reviewed set of training materials
September 24 – 30 (possibly -> 2 October, TBC)	Round 2 - Training of examiners, educators and mentors II Observation of licensing assessments Meetings with sample of educators and mentors to assess progress and development needs	Visit report A cohort of trained educators, mentors and examiners
December (6 days, w/b 4 th December, exact dates TBC)	Review of internship programmes Observation of Pharmacy Chamber licensing assessments Meetings with sample of educators and mentors to assess progress and development needs Additional workshops on identified education issues	Visit report
Late January/early February (5 days exact dates TBC)	Final visit Observation of Dentistry licensing assessments (TBC) Hold workshops with examiners (all), educators (three separate groups) and mentors (all)	Final report Includes review of process and recommendations for improvement and ongoing activities

Schedule of meetings and participants

Judy McKimm, Anita Underwood (UK Consultants) and Dr Katerina Venovska attended all meetings.

Day One Monday 15 May 2006

Meeting one

Observation of the written examination for graduate doctors held by the Doctors' Chamber of Macedonia also attended by Professor Dr Aleksej Duma, President, Doctors' Chamber of Macedonia

Meeting two

Professor Dr Aleksej Duma, President, Doctors' Chamber of Macedonia

Meeting three

Dr Katerina Venovska Assistant Co-ordinator, Ministry of Health PCU

Meeting four

Working group for Quality Improvement of Health Services and Licensing:

Professor Dr Vladimir Borozanov WG leader, Clinic of Cardiology, Clinic Centre, Skopje

Dr Klime Kajmakoski Chamber of Dentists of Macedonia

Dr Ivanka Stefanovska Doctors Chamber of Macedonia and Faculty of Medicine

Spec. Dr Zoran Stojanovski Health Home, Skopje

Prof Dr Lidija Tozi-Petrusevska President of the Pharmacy Chamber

Professor Dr. Sonja Peova Clinic of Children's diseases, Skopje

Dr Snezana Stojkovska Clinic of Infectious Diseases, Clinic Centre, Skopje

Day two Tuesday 16 May 2006

Meeting five

A list of participants is held by the PCU

Meetings six, seven and eight

Ministry of Health staff:

Prof. Dr Vladimir Dimov Minister of Health

Gordana Majnova Co-ordinator of Health Sector Management Project

Dr Nikica Panova

Day Three Wednesday 17 May 2006

Meeting nine

Observation of four panels of the clinical examination for graduate doctors held by the Doctors' Chamber of Macedonia

Meetings ten, eleven and twelve

A list of participants is held by the PCU

Meeting fourteen

Working group for Quality Improvement of Health Services and Licensing:

Professor Dr Vladimir Borozanov	WG leader, Clinic of Cardiology, Clinic Centre, Skopje
Dr Klime Kajmakoski	Chamber of Dentists of Macedonia
Dr Ivanka Stefanovska	Doctors Chamber of Macedonia and Faculty of Medicine
Spec. Dr Zoran Stojanovski	Health Home, Skopje
Prof Dr Lidija Tozi-Petrusevska	President of the Pharmacy Chamber

Day Four Thursday 18 May 2006

Meeting fifteen

Observation of three panels of the final Ethics part of the examination for graduate doctors held by the Doctors' Chamber of Macedonia.

Meeting sixteen

Tony Fenn UK consultant

A list of participants in the workshop is held by the PCU

Meeting seventeen

Dr Katerina Venovska

MINISTRY OF HEALTH
Health Sector Management Project
WORKSHOP

**MODERNIZING THE EDUCATION PART OF THE LICENCING OF
DOCTORS, DENTISTS AND PHARMACISTS**

16 May 2006 (Tuesday)

Hotel “Holiday Inn”, Skopje / hall: Skala 1

9.30 - 15.00 h

Testing the draft Programme regarding the proposed subjects and methods of learning and teaching within the frames of the training for educators, mentors and examiners
In the function of going through the internship programme of the graduated students of medicine, dentistry and pharmacy, taking the final exam and getting a licence

PROGRAMME

09.30 - 10.00	Participants registration
10:00 - 10:15	Workshop opening and introduction: Ministry of Health
10:15 - 11:00	Presentation of the Draft Programme discussing the proposed subjects and teaching and learning methods within the frames of the Training of Key Trainers –Educators, Mentors and Examiners MOH Consultant: Judy McKimm & Anita Underwood (assistant)
11:00 - 11:30	Questions and answers about the draft programme and training methodology
11:30 - 11.45	Coffee break
11.45 - 12:45	Group discussion sessions about the context and structure of the proposed training programmes for educators, mentors and examiners MOH Consultant: Judy McKimm & Anita Underwood (assistant)
12:45 - 13:30	Plenary session – presentation of group work and discussion
13:30- 14:00	Discussing the programmes and Action Plan
14:00 - 14:15	Decissions and recommendations: Leadre of the Working Group for Quality Improvement of Health Care Services and Licencing, MOH: prof. D-r Vladimir Borozanov
14:15 - 15:00	Buffet

**MINISTRY OF HEALTH
Health Sector Management Project**

Working Meetings

**MODERNIZING THE EDUCATION PART OF THE LICENCING OF
DOCTORS, DENTISTS AND PHARMACISTS**

17 May 2006 (Wednesday)

Republic Institute of Health Protection

Holding working meetings with the key trainers
EDUCATORS, MENTORS AND EXAMINERS
proposed by Medcial, Stomatological and Pharmaceutical Faculty, Doctors', Dentists'
and Pharmaceutical Chambers and Macedonian Medical Associations
In the presence of the MOH Consultant Judy McKimm and her assistant Anita
Underwood

*In the function of going through the internship programme of the
graduated students of medicine, dentistry and pharmacy,
taking the final exam and getting a licence*

PROGRAMME

Discussing the syllabus regarding the proposed subjects and teaching and learning methods
within the frames of the training for educators, mentors and examiners

Setting the work plan and the dates for the next trainings

SCHEDULE OF WORKING MEETINGS WITH THE KEY TRAINERS

12.00 - 13.15	Meeting with the proposed key trainers - EDUCATORS
13:30 - 14:45	Meeting with the proposed key trainers - MENTORS
15:00 - 16:15	Meeting with the proposed key trainers - EXAMINERS

May 18, 2006

FINAL SCHEDULE OF MEETINGS

Ministry of Health Consultant: Judy McKimm & Anita Underwood (assistant)
14 - 18 May 2006 ⇨ Second Mission

Modernization of Licensing Process for Doctors, Dentists and Pharmacists in the Republic of Macedonia

Meetings are arranged and will be attended by
Dr. Katerina Venovska, Assistant Coordinator, Ministry of Health, Project Coordination Unit

Time	Monday (15 May)	Tuesday (16 May)	Wednesday (17 May)	Thursday (18 May)	Friday (19 May)
8.00 - 8.30					
8.30 - 9.00			Observation of Clinical part of Professional exam for Grad. students of Medicine, (Doctor's Chamber)		
9.00 - 9.30					
9.30 - 10.00	Observation of Professional exam - written test Grad. students of Medicine,	Workshop Review of proposed Outline syllabus and content of TOT programme for Educator, Mentors and Examiners with relevant Stakeholders	<i>Health Home Skopje Gorce Petrov & Bit Pazar</i>	Observation of Ethical part of Professional exam for Graduated students of Medicine (Doctor's Chamber)	Departure
10.00 - 10.30	Prof. Dr. Aleksej Duma (Doctor's Chamber)				
10.30 - 11.00					
11.00 - 11.30	Dr. Katerina Venovska Responsible Ass. Coordinator Ministry of Health, PCU	<i>Modernization of Educational part of Licensing activities for Doctors, Dentists and Pharmacists</i> 9.30-15.00 <i>Hotel Holiday Inn Skala 1</i>	Working Meetings with Core Group of Trainers: Educators: 12.00 - 13.15 Mentors: 13.30 - 14.45 Examiners: 14.45 - 16.15 <i>Venue: Republic Institute for Health Protection</i>	<i>Venue: Forensic Medicine Amphitheater</i>	
11.30 - 12.00					
12.00 - 12.30					
12.30 - 13.00					
13.00 - 13.30					
13.30 - 14.00					
14.00 -14.30	Initial meeting with Working Group for Licensing and Quality Improvement <i>Venue: PCU Meeting Room</i>			Attending Workshop on Key Performance Indicators <i>Anthony Fenn / MOH Consultant</i>	
14.30 - 15.00		Dr. Nikica Panova, MOH Dr. Katerina Kovaceva, MDA			
15.00 - 15.30					
15.30 - 16.00					
16.00 - 16.30		Prof. Dr. Vladimir Dimov, Minister of Health Gordana Majnova, MOH/PCU			
16.30 - 17.00					
17.00 - 17.30		Dr. Katerina Venovska MOH/PCU	Final meeting with the PCU and Working Group for Licensing and Quality Improvement	Conclusions & Action Plan for third visit Dr. Katerina Venovska MOH / PCU	
17.30 - 18.00					
18.00 - 18.30					
18.30 -19.00					