Programme Title: PG Diploma/Master of Science in Endodontic Practice

Programme Specification

Awarding Body/Institution: Queen Mary, University of London
Teaching Institution: Queen Mary, University of London
Name of Final Award and Programme Title: PG Diploma/Master of Science in Endodontic Practice
Duration of Study / Period of Registration: 24/36 months (part-time)
QM Programme Code / UCAS Code(s): A4D4 (MSc) / A4D3 (PgDip)
QAA Benchmark Group: N/A
FHEQ Level of Award: Level 7
Programme Accredited by: Queen Mary, University of London
Date Programme Specification Approved: 31 Mar 2011
Responsible School / Institute: Barts and The London SMD/Institute of Dentistry

Schools also involved in teaching part of the programme

Programme Rationale

As people live longer they also expect to be able to retain their teeth for longer. Current practice is to save teeth by endodontic (advanced restorative) treatment wherever possible. There is limited experience in endodontic practice provided in most dental undergraduate courses which is often insufficient to deal with the many advanced restorative problems encountered in general dental practice. As a result, a large number of cases that could be treated in the General Dental Services are referred to the Barts and The London Dental Institute, leading to unnecessarily long waiting times and a delayed delivery of service. In addition, the high referral rate for such treatment has given rise to a need for dentists with a special interest in endodontics to provide the relevant treatment. The course will not only fit within the existing taught postgraduate portfolio of the Institute of Dentistry, emphasising its role as a leading educational provider of postgraduate training in the region, but also help to expand and diversify the recruitment base of the school. The number of applications from current dentists for the Diploma level course indicates the demand for advanced education and training whilst feedback from current students supports the need to offer the opportunity for the Diploma to be upgraded to Masters level.

This two year Diploma or three year Masters part-time programme is uniquely structured to allow practising dental practitioners to enhance their knowledge and clinical ability in this field, thus offering an appropriate response to national trends. The programme will provide an in-depth approach for exploring current concepts in clinical endodontics, offering deeper knowledge and understanding of the subject, improving clinical skills and leading to increased job satisfaction. It will also facilitate the exposure of each dental practitioner to their peers, encouraging a synergistic exchange of ideas and experience and contribute to and enhance participants’ career options by allowing them access to current endodontic concepts and research. It can be part of a dentist’s Personal Development Plan.

Educational Aims of the Programme

This programme aims to:
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• meet the local, regional and national need for more dentists with a special interest in endodontics
• enhance students' knowledge of advanced aspects of endodontics and enable them to apply it to their clinical work
• foster appropriate advanced clinical skills in endodontic practice
• promote a critical approach to evaluating relevant literature so as to be able to establish evidence-based practice in clinical endodontics
• enhance understanding and the impact of clinical governance and clinical effectiveness
• encourage the pursuit of independent study and audit.

Learning Outcomes
The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas. The programme outcomes are referenced to the relevant QAA benchmark statement(s) (see above) and the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008), and relate to the typical student. Additionally, the SEEC Credit Level Descriptors for Further and Higher Education 2003 and Queen Mary Statement of Graduate Attributes have been used as a guiding framework for curriculum design.

<table>
<thead>
<tr>
<th>Knowledge and understanding of:</th>
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<tbody>
<tr>
<td>A1 The critical review and analysis of aspects of endodontic disease and its management</td>
</tr>
<tr>
<td>A2 The methods of measuring clinical outcomes</td>
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<tr>
<td>A3 The process of undertaking, with critical awareness, analysis of complex, incomplete, 'cutting edge' or contradictory areas of clinical and scientific knowledge</td>
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<table>
<thead>
<tr>
<th>Intellectual skills - able to:</th>
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<tbody>
<tr>
<td>B1 Self-reflect on endodontic outcome and analysis of research</td>
</tr>
<tr>
<td>B2 Evaluate advanced scholarship critically in evidence based endodontic disease, make a case for alternative approaches and explore scientific clinical research in order to be able to audit current practice</td>
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<tr>
<td>B3 Critique and evaluate the different approaches to collecting and analysing data, and communicate it coherently</td>
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<tr>
<th>Transferable skills - able to:</th>
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<tbody>
<tr>
<td>C1 Appraise and investigate cases and literature so that an evidence-based approach is undertaken</td>
</tr>
<tr>
<td>C2 Recognise cases when referral to tertiary care is required</td>
</tr>
<tr>
<td>C3 Promote endodontic treatment as part of comprehensive oral care</td>
</tr>
</tbody>
</table>
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Practical skills - able to:

D1  Perform non-surgical endodontic treatment on all teeth
D2  Manage endodontic emergencies and dental trauma
D3  Manage the endodontic aspect of multi-disciplinary dental cases

Teaching, Learning and Assessment Strategies

A variety of teaching and learning methods will be employed including:
• Formal 3-hour seminars given by experts in their field on topics relevant to the study of Endodontics
• Pre-clinical laboratory practice sessions: demonstrations, “hands-on” practical exercises, discussion of outcomes
• Clinical practice sessions: treating patients under supervision, discussion of outcomes
• Self-directed learning: critical review of at least two scientific papers nominated by the programme organisers and at least two more papers selected by the students themselves
• One-to-one tutorials with those students needing additional guidance
• Case presentations: discussion on what was carried out, how, and why it was carried out, reflecting on shortcomings and how it could be improved the next time
• reading lists of books and journal papers

Assessment strategies:
• Formative assessment: regular informal verbal feedback to individual students regarding their performance and achievement of the learning objectives.
• Assessment of competency: There will be a competency-based Practical Test at the end of the Pre-clinical Laboratory-based Practice Module. The student must pass this “Gateway Test” before being allowed to progress to the Clinical Practice sessions treating patients. Those who fail will be required to undertake additional practical sessions before taking the “Gateway Test” again.
• Summative assessment: assessment of each module by written papers, practical skills tests, essay questions, viva voce, clinical case reports, literature review report and audit presentation.

Programme Structure(s) and Requirements, Levels and Modules

The course will be offered on a part-time basis only, either as a two year postgraduate diploma or a three year MSc. The postgraduate diploma will consist of four Level 7 credit modules listed below:
• Module 1 Applied Science of Endodontology: 27 seminars, each of 3 hours’ duration (30 credits)
• Module 2 Advanced Applied Science of Endodontology: 25 seminars, each of 3 hours’ duration (30 credits)
• Module 3 Laboratory Endodontic Skills: 20 pre-clinical laboratory practice sessions of up to 4 hours each on simulators (30 credits)
• Module 4 Clinical Skills in Endodontics: 18 clinical practice sessions of up to 5 hours each for patient treatment (30 credits)

Students seeking to upgrade their Diploma to an MSc will complete two further Level 7 modules listed below:
• Module 5: Audit Project in Endodontic Practice (15 credits)
• Module 6: Literature review in relation to Endodontic Practice (45 credits)

Requirements:
• Attendance at all sessions is compulsory.
• Students will need to read and critically review at least 5 essential research papers and 5 additional papers of relevance, as suggested by the course organisers.
• Students will need to demonstrate a satisfactory level of ability by passing a practical test of competence (Gateway Test) before being allowed to do clinical practice.
• During clinical sessions the student is expected to treat 5 - 7 patients in total, to a satisfactory standard.

The progression threshold mark from the Diploma to the Masters will normally be an average of 60% achieved across Modules.
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1-4, with no individual module mark being less than 50%.

<table>
<thead>
<tr>
<th>Module Title</th>
<th>Module Code</th>
<th>Credits</th>
<th>Level</th>
<th>Module Selection Status</th>
<th>Academic Year of Study</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Science of Endodontology</td>
<td>30</td>
<td>7</td>
<td>Core</td>
<td>1</td>
<td>Semesters 1-3</td>
<td></td>
</tr>
<tr>
<td>Advanced Applied Science of Endodontology</td>
<td>30</td>
<td>7</td>
<td>Core</td>
<td>1</td>
<td>Semesters 1-3</td>
<td></td>
</tr>
<tr>
<td>Laboratory endodontic skills</td>
<td>30</td>
<td>7</td>
<td>Core</td>
<td>2</td>
<td>Semesters 1-3</td>
<td></td>
</tr>
<tr>
<td>Clinical skills in endodontics</td>
<td>30</td>
<td>7</td>
<td>Core</td>
<td>2</td>
<td>Semesters 1-3</td>
<td></td>
</tr>
<tr>
<td>Literature Review in relation to Endodontic Practice</td>
<td>45</td>
<td>7</td>
<td>Core</td>
<td>3</td>
<td>Semesters 1-3</td>
<td></td>
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<td>Audit Project in Endodontic Practice</td>
<td>15</td>
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Criteria for Admission to the Programme

- BDS degree or equivalent
- Full registration with the General Dental Council, UK
- Minimum of 2 years relevant post-qualification experience.

Quality Assurance Mechanism

Include details of: SSLC meetings, student feedback mechanisms, personal tutor arrangements, programme induction, programme review and monitoring.

Taught postgraduate programmes in the Institute are co-ordinated through the Masters Course Organisers Group which takes an overview of all taught postgraduate programmes and any issues impacting upon their quality. Progression will be managed through the Subject Examination Board.
- Staff-Student Liaison Committee meetings: There are periodic meetings of the Staff-Student Liaison Committee to give the students ample opportunity to raise issues concerning the programme.
- Student feedback mechanisms: Clinical programmes facilitate the provision of two way informal feedback. This process will be adopted and developed throughout the course. Formal feedback will be sought twice-yearly via a standard questionnaire adopted for use by the Institute's postgraduate programmes, based on NSS content.
- Personal tutor arrangements: The programme organisers will act as personal tutors to the students.
- Programme induction: There will be a formal induction to the programme at the start with the programme organisers and the tutors present, to welcome the students and to introduce the various components of the programme. There will also be a tour of the facilities.
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Programme review: the programme coordinators will participate in the annual review and monitoring process. The programme will be reviewed in the Annual Report on Teaching in Dentistry.

Programme-specific Assessment Regulations (if applicable)
In the case of programmes that deviate / do not comply with the Academic Regulations further information regarding the nature of any difference and/or deviation should be stipulated in detail.

Employers Links
Please provide details of any links with employers e.g.

- Details of advisory panels that include current or potential employers;
- Organisations that regularly employ graduates from this programme and the roles that graduates undertake.
- Student prizes donated by organisations that may offer employment to graduates from this programme.

If there are no links with employers consider the learning outcomes and transferable skills and explain how these might be used to inform employers about the qualities and skills a graduate from this programme might be expected to have.

The programme is jointly hosted by the Institute of Dentistry, Barts and The London School of Medicine & Dentistry, and the Dental Teaching Hospital, Barts & The London NHS Trust. The students will be General Dental Practitioners (GDPs) working within the NHS on a full- or part-time basis. Many of these GDPs are providers of clinical service (including Endodontics) to local Primary Care Trusts on a contracted basis. This programme will enable GDPs (i.e. the students) to gain the advanced skills necessary to treat complex endodontic cases without having to refer them to the nearest dental hospital. There are also corporate bodies providing a range of dental services to the public for a fee. They are constantly seeking to recruit dentists with advanced endodontic skills as the demand for endodontic services is increasing. Thus this programme will cater to this sector as well.

There is an increasing emphasis on primary care and on weaning away those cases that are currently referred to the secondary and tertiary care centres inappropriately, to be treated in the primary care sector. With this in mind, the employability of GDPs with Special Interests to improve access to ‘specialist’ care will be enhanced. Endodontics is one area where much headway can be made, provided the GDPs can gain the necessary knowledge and skills to practise the specialty in a primary care setting.

Programme Specification Approval

Person completing Programme Specification  
S K Sidhu, N Polycarpou

Person responsible for management of programme  
N Polycarpou, R Tomson, S K Sidhu

Date Programme Specification produced/amended by School or teaching and learning committee  

Date Programme Specification approved by Programme and Module approval Board  
31 Mar 2011