INSPECTION REPORT

Education Provider / Awarding Body:	The University of Warwick
Programme / Award / Qualification:	Diploma in Orthodontic Therapy
Remit and Purpose:	Full inspection referencing the Standards of Education to determine approval of the award for the purpose of registration with the GDC as an orthodontic therapist.
Learning Outcomes:	*Preparing for Practice*
Programme Inspection Dates:	6 and 7 March 2014
Examination Inspection Dates:	18 July 2014
Inspection Panel:	Cindy Mackie (Lay Member and Chair) Rosemarie Khan (Dental Hygienist) Alison Williams (Dentist)
GDC Staff:	Krutika Patel (Lead) Peter Butler
Outcome:	Recommend that the University of Warwick Diploma in Orthodontic Therapy remains sufficient for registration as an orthodontic therapist.

Inspection summary

The inspection panel agreed that the Diploma in Orthodontic Therapy has a number of strengths, and that the students graduating from this programme are able to be classed as 'safe beginners'.

One of the major strengths of the programme is the thorough induction the students are given in the opening weeks of the course. The induction covers subject areas including patient confidentiality; raising concerns; patient complaints and consent.

From speaking with both the students and their workplace trainers, it was clear that they valued the support and advice provided by the programme staff. The panel was informed that the programme leads were very approachable. The clear documentation in place clearly set out the roles and responsibilities of the student and the workplace trainer, which in-turn enabled the students to attain a valuable learning experience whilst studying on the course.

In addition, the facilities at the Leamington Spa Orthodontic Centre (LSOC) were considered to be exceptionally good by the panel. The fully equipped clinical skills laboratory allowed students to have a hands-on experience in appliance placement and adjustment and it was available to students to access at each stage of the course.

Areas that require development within the programme primarily relate to the experience the students gain in their respective work placements, the equity of that experience, the audit of work placements and the consistent application of assessment methods by individual trainers.

The workplace trainers are required to timetable 'protected time' once a week at the placement, to provide a tutorial to their student. From looking through the students' logbooks it was clear that some of the students were not having a weekly tutorial. One student had missed nine tutorials with their supervisor. This is an unacceptable number given the length of the programme.

The students' logbooks, which are designed to capture evidence of supervision and achievement and to record the assessment of continued learning and development, were another area of concern. The inspectors found that clinical procedures that the students had undertaken at their work placements had not always been signed off as complete in the logbook. Furthermore, when logbooks had been signed, it was not clear who had actually signed them. This lack of quality control needs to be addressed.

Another area identified for improvement concerns the quality assurance of the placement clinics. For the current year, it was found that two placement clinics had not been assessed prior to the course commencing, which was contrary to the established practice in place. The inspectors observed the final examinations, and noted with concern that the OSCE component was a series of short answer questions testing cognitive knowledge, as opposed to a test of a student's clinical ability and the application of their knowledge in practice.

For the viva section of the finals, the inspectors noted there were disparities between the two pairs of examiners in the questions that were asked of the students. One pair of examiners focussed on treatment mechanics whilst the other pair asked questions' relating to diagnosis, which the panel felt was outside the scope of practice of an orthodontic therapist.

A further concern related to the recording of evidence during the viva voce examinations, which should have reflected the performance of students and provided evidence for assessors involved to make a balanced and reliable judgement. In some cases, this evidence lacked detail and failed to reflect specific performance in respect of the student being examined. This issue impacted to some extent on the reliability and validity of this part of the final examination, and the inspectors were concerned that the processes in place to ensure the accurate recording of student's progress may allow weaker students to pass this element of the finals when they should not. However, in respect of the current cohort, the inspectors observed the viva and were confident that all students demonstrated the required standard of knowledge.

The panel was disappointed that issues concerning the logbooks and the OSCE, which had been highlighted at the previous inspection, had not been adequately addressed.

Inspection process and purpose of Inspection

1. As part of its duty to protect patients and promote high standards within the professions it regulates, the General Dental Council (GDC) quality assures the education and training of student dentists and dental care professionals (DCPs) at institutions whose qualifications enable the holder to apply for registration with the GDC and new qualifications where it is intended that the qualification will lead to registration.

2. The aim of this quality assurance activity is to ensure that these institutions produce a new registrant who has demonstrated, on graduation, that he or she has met the outcomes required for registration with the GDC. This is to ensure that students who obtain a qualification leading to registration are fit to practise at the level of a safe beginner.

3. The inspection focuses on four Standards, with a total of 29 underlying Requirements. These are contained in the document *Standards for Education.*

4. The purpose of this inspection was to make a recommendation to the GDC determine whether the programme should be approved as a route for registration as an orthodontic therapist. The GDC's powers are derived under the Dentists Act 1984 (as amended) under The General Dental Council (Professions Complementary to Dentistry) (Qualifications and Supervision of Dental Work) [DCP] Rules Order of Council 2006.

5. Inspection reports may highlight areas of strength and draw attention to areas requiring improvement and development, including actions that are required to be undertaken by the provider. Where an action is needed for a Requirement to be met, the term 'must' is used to describe the obligation on the provider to undertake this action. For these actions the inspectors may stipulate a specific timescale by which the action must be completed or when an update on progress must be provided. In their observations on the content of the report, the provider should confirm the anticipated date by which these actions will be completed. Where an action would improve how a Requirement is met, the term 'should' is used and for these actions there will be no due date stipulated. Providers will be asked to report on the progress in addressing the required actions through the annual monitoring process. Serious concerns about a lack of progress may result in further inspections or other quality assurance activity.

6. The provider of the qualification has the opportunity to provide factual corrections on the draft report. Following the production of the final report the provider is asked to submit

observations on, or objections to, the report and the actions listed. Where the inspection panel have recommended that the programme is sufficient for registration, the Council of the GDC have delegated responsibility to the GDC Registrar to consider the recommendations of the panel. Should an inspection panel not be able to recommend sufficiency, the report and observations would be presented to the Council of the GDC for consideration.

The Inspection

7. This report sets out the findings of an inspection of the Diploma in Orthodontic Therapy awarded by the University of Warwick. The GDC publication Standards for Education *(version 1.0 November 2012)* was used as a framework for this inspection.

8. The inspection comprised two visits. The first, referred to as the programme inspection, was carried out on 6 and 7 March 2014. The second part of the inspection took place on 18 July 2004, when the panel observed the final examination and examination board meeting.

9. The report contains the findings of the inspection panel with consideration to both supporting documentation prepared by the programme leads, as well as meetings with staff and key stakeholders to evidence how the individual Requirements under the *Standards for Education* have been met.

Overview of Qualification

10. The one-year full time Diploma in Orthodontic Therapy has been running since 2008, with the annual intake of students numbering ten. To be eligible to join the course, students must be registered as a dental care professional with the General Dental Council (GDC) and must have the support of specialist orthodontist trainer. This workplace trainer needs to be registered on the GDC's Specialist List for Orthodontics.

11. The current 2013/2014 cohort has one student who is registered as a dental care professional with the Dental Council of Ireland. Their work placement which was based in Ireland, was overseen and signed off by an orthodontist registered with the Dental Council of Ireland. Following discussions between the GDC and the programme leads, it was decided that this student will be conferred a different qualification from the rest of the cohort, reflecting that none of their practical clinical experience with patients was assessed by a UK registrant.

12. The programme follows a modular format, divided into five overlapping modules: Biomedical Science and Oral Biology; The Principles of Orthodontic Therapy; Removable Orthodontic Appliances; Fixed Orthodontic Appliances and Interdisciplinary Orthodontic Care. Students must also complete a practical module, 'Clinical Practice in Orthodontic Therapy' and pass their final examination which includes a viva following a presentation of two clinical cases they have worked on during the course.

13. The theoretical and practical components of the course are delivered at the Leamington Spa Orthodontic Centre, which has a fully equipped clinical skills laboratory, which allows students to gain hands-on experience in appliance placement and adjustment. Lectures, seminars, tutorials and problem-based learning cover the principle aspects of orthodontics. Further training and teaching is delivered by the student's workplace trainer in their respective work placements.

14. The core teaching of the course comprises of 20 days, which all students are required to attend. These are delivered during an 8 week period at the beginning of the course. A further 12 teaching days, approximately 1 day per three weeks, are spread over the 40 week duration of the course. These teaching days allow students to gain experience and extra teaching in their weaker areas and to undergo mock assessments, prior to the final examination.

15. Students are assessed using a variety of methods including objective structured clinical examinations (OSCEs); multiple choice questions (MCQs); extended matching questions (EMQs); and situational judgement tests (SJTs). The final examination consists of a short answer question paper (SAQ), a viva and a series of OSCEs, which are completed on a computer.

Evaluation of Qualification against the *Standards for Education*

16. As stated above, the *Standards for Education* were used as a framework for this inspection. Consideration was given to the fact that these Standards were approved in late 2012 and that it may take time for providers to make amendments to programmes to fully meet all of the Requirements under the Standards and to gather the evidence to demonstrate that each Requirement is being met. The inspection panel were fully aware of this and the findings of this report should be read with this in mind.

17. The provider was requested to undertake a self-evaluation of the programme against the individual Requirements under the *Standards for Education*. This involved stating whether each Requirement is met, partly met or not met and to provide evidence in support of their evaluation. The inspection panel examined this evidence, requested further documentary evidence and gathered further evidence from discussions with staff and students.

18. The inspection panel used the following descriptors to reach a decision on the extent to which the University of Warwick Diploma in Orthodontic Therapy meets each Requirement:

A Requirement is **met** if:

"There is sufficient appropriate evidence derived from the inspection process. This evidence provides the inspectors with broad confidence that the provider demonstrates the Requirement. Information gathered through meetings with staff and students is supportive of documentary evidence and the evidence is robust, consistent and not contradictory. There may be minor deficiencies in the evidence supplied but these are likely to be inconsequential."

A Requirement is **partly met** if:

"Evidence derived from the inspection process is either incomplete or lacks detail and, as such, fails to convince the inspection panel that the provider fully demonstrates the Requirement. Information gathered through meetings with staff and students may not fully support the evidence submitted or there may be contradictory information in the evidence provided. There is, however, some evidence of compliance and it is likely that either (a) the appropriate evidence can be supplied in a short time frame, or, (b) any deficiencies identified can be addressed and evidenced in the annual monitoring process."

A Requirement is **not met** if:

"The provider cannot provide evidence to demonstrate a Requirement or the evidence provided is not convincing. The information gathered at the inspection through meetings

with staff and students does not support the evidence provided or the evidence is inconsistent and/or incompatible with other findings. The deficiencies identified are such as to give rise to serious concern and will require an immediate action plan from the provider. The consequences of not meeting a Requirement in terms of the overall sufficiency of a programme will depend upon the compliance of the provider across the range of Requirements and the possible implications for public protection.

Standard 1 – Protecting patients Providers must be aware of their duty to protect the public. Providers must ensure that patient safety is paramount and care of patients is of an appropriate standard. Any risk to the safety of patients and their care by students must be minimised			
Requirements	**Met**	**Partly met**	**Not met**
1. Students will provide patient care only when they have demonstrated adequate knowledge and skills. For clinical procedures, the student should be assessed as competent in the relevant skills at the levels required in the pre-clinical environments prior to treating patients	✓		
2. Patients must be made aware that they are being treated by students and give consent	✓		
3. Students will only provide patient care in an environment which is safe and appropriate. The provider must comply with relevant legislation and requirements regarding patient care		✓	
4. When providing patient care and services, students are to be supervised appropriately according to the activity and the student's stage of development.		✓	
5. Supervisors must be appropriately qualified and trained. Clinical supervisors must have appropriate general or specialist registration with a regulatory body	✓		
6. Students and those involved in the delivery of education and training must be encouraged to raise concerns if they identify any risks to patient safety		✓	
7. Should a patient safety issue arise, appropriate action must be taken by the provider	✓		
8. Providers must have a student fitness to practise policy and apply as required. The content and significance of the student fitness to practise procedures must be conveyed to students and aligned to GDC student fitness to practise guidance. Staff involved in the delivery of the programme should be familiar with the GDC Student Fitness to Practise Guidance.	✓		
GDC comments			

Requirement 1: Students will provide patient care only when they have demonstrated adequate knowledge and skills. For clinical procedures, the student should be assessed as competent in the relevant skills at the levels required in the pre-clinical environments prior to treating patients *(Requirement Met)*

To be assured that students are competent to provide treatment to patients, they are assessed at the end of each of the five modules. In relation to patient safety, one of the assessments at the end of the first module 'Biomedical Sciences and Oral Biology' is an OSCE where the student has to demonstrate they are able to carry out resuscitation in an emergency.

The inspection panel noted the University policy in relation to the 'Student Remediation

Procedure'. This states that students who fail one of the summative assessments will meet with the course Director to identify the areas of knowledge that they are deficient in. This is then followed up by a structured programme which may include further assessed exercises, if appropriate, to ensure competency in a particular subject area is being achieved by the student.

Competency is also monitored throughout the course via the students' logbooks, where there is a competency column which must be signed off by the workplace trainer to state that the specific procedure was completed safely by the student. To gain additional practice in areas where they felt they were deficient, students are able to book additional clinical sessions at the LSOC with one of the orthodontic therapist mentors.

The panel noted that there was a level of assurance about patient safety provided by the fact that students were registered as a dental care professional (DCP) with the GDC before they commenced the programme and, consequently, would be abiding by the GDC's Standards for the Dental Team. From meeting with the students, it was evident that they clearly understood that they must only carry out treatments on a patient if they felt they had the necessary skill and knowledge to do so safely.

Requirement 2: Patients must be made aware that they are being treated by students and give consent *(Requirement Met)*

The panel was provided with examples of a consent notice, a consent form for use in patient records and a patient information notice to be displayed in work placement practices. These are distributed to all students' practices prior to the programme commencing. The School also runs a pre-course induction day for both practice managers and trainers, where the issue of obtaining valid consent is addressed.

The programme inspection took place at the LSOC, which is also where one of the student's in the current cohort was in training. The inspectors were able to see how the notices and consent forms were being used and were informed how patients who visited the LSOC were made aware that it was a training practice and therefore would reasonably expect to be treated by students.

From the meetings with the students and their workplace trainers, the panel were assured that consent was always obtained from the patient in regard to a student being able to carry out treatment for them.

Requirement 3: Students will only provide patient care in an environment which is safe and appropriate. The provider must comply with relevant legislation and requirements regarding patient care *(Requirement Partly Met)*

To be eligible to apply for the Diploma, students are required to have the support of a GDC registered orthodontist, who will be their workplace trainer for the duration of the programme. As part of the recruitment process, the workplace trainer is required to complete an 'Orthodontic Therapy Self-Audit of Clinical Facilities' on-line form. This document contains questions relating to the practice's decontamination and disinfection protocols, health and safety processes when treating patients, medical emergencies, radiography facilities and complaints procedures. On receipt of this information, members of the programme staff will then visit each of the training practices with a checklist of requirements to ensure that the self-

audit is a true reflection of what is in place in the practice. The inspectors were informed that the inspection by the programme staff was also beneficial because some of the potential workplace trainers do not complete all the questions in the self-audit, so the inspection is an opportunity for programme staff to pick up on these areas. Practices must also have been inspected and passed a CQC inspection.

The panel decided that the programme had partly met this requirement because only eight of the ten training practices had been inspected by members of the programme staff, prior to the programme beginning. This was considered a risk for the two students who were undertaking their placements in the practices which had not been inspected, as they may have been training in practices that were not suitable for this purpose. In addition, the inspectors found no documented policy setting out what the process would be for providing clinical training for a student, if their practice was found to be unsuitable once the programme had begun. The School must ensure in future, that all work placement inspections take place prior to the commencement of student assessment. A policy regarding the process for providing alternative clinical training for a student in the event of their practice being judged to be unsuitable, should also be developed by the Course Directors.

Requirement 4: When providing patient care and services, students are to be supervised appropriately according to the activity and the student's stage of development *(Requirement Partly Met)*

During the core teaching time the students spend training at the LSOC, the Course Directors are supported by three orthodontic therapists who act as mentors for the students. The layout at the LSOC means that staff are able to move freely between the different treatment rooms, ensuring students are being supervised and supported at all times whilst carrying out clinical activities.

Guidance in the workplace trainer's handbook emphasises that appropriate supervision should be available at all times and this supervision should depend on the activity and the competence of the student at that time. The issue of supervision is discussed at the interview and induction, as well as during the first of the trainer training days, so all trainers are aware about what is required in terms of supervising their trainee.

Whilst the inspectors were confident that the supervision protocols at the LSOC were robust, they were less confident about the level of supervision given to students at their work placements. These concerns arose from the lack of detail and opportunity for tutorials evidenced in logbook entries and gaps in the timelines of tutorials for some students. The workplace trainers who met with the panel, stated that when they were absent from the practice they would either get their colleagues at the practice to cover their role or get a locum in. The panel were unclear as to how these 'covering' orthodontists would be able to determine what level of supervision the student required, as they would not have overseen their training or monitored their development. This is likely to increase the risk of a patient safety incident occurring. The inspectors felt that it may be helpful to develop further guidance for the workplace regarding the delegation of supervision of the student to other registrants, and when this is appropriate. The names and sample signatures of all the supervising clinicians should also be collected so that it was clear who had signed off the student's work in their logbooks.

Requirement 5: **Supervisors must be appropriately qualified and trained. Clinical supervisors must have appropriate general or specialist registration with a regulatory**

body *(Requirement Met)*

It is a requirement of the programme that the workplace trainers be registered as a specialist orthodontist with the GDC. Programme staff informed the inspection panel that all of the UK trainers are on the GDC Orthodontics Specialist List, whilst the trainer in Ireland is registered with the Irish Dental Council as an orthodontist.

All workplace trainers must also attend an induction day where topics covered included the support the trainee OT may require, information about tutorials and grading system, and a calibration exercise to ensure all trainees are being marked fairly when in their respective practices.

Requirement 6: Students and those involved in the delivery of education and training must be encouraged to raise concerns if they identify any risks to patient safety *(Requirement Partly Met)*

The programme has a clear policy setting out how any concerns raised will be handled. In the first instance, the concern is passed to the Programme Director, who discusses this concern with the Postgraduate Personal Tutor. If it is decided a student is unfit to practise, they will be suspended from the course and referred to the Warwick Medical School Fitness to Practise Committee, or where appropriate, to the GDC.

If the student's fitness to practice is not considered to be impaired, but further action is considered necessary, the student will meet with the Postgraduate Personal Tutor and another member of the academic teaching staff, to discuss the concern and determine what action should be taken. All records of any meetings are documented by the programme Director and held on the student's file.

In terms of the Diploma, the topic of raising concerns is embedded within the programme. In their induction week, students are given a presentation setting out when and how to raise concerns. The subject is again covered under Module 5, 'Interdisciplinary Care', and the students are assessed on their understanding by a means of a series of situational judgement tests.

Principally, the students on the course are registered with the GDC, and therefore should be familiar with their responsibility to raise any concerns that might put patients at risk, as per the registrant guidance set out in the GDC document, *'Standards for the Dental Team'*. From speaking with the students, it was clear that they understood this responsibility and would raise concerns if a patient was at risk.

However, in relation to raising concerns, the panel felt there were risks that had not been addressed by the Programme Directors. While students are supported and encouraged to raise concerns whilst training at the LSOC, students may not feel comfortable doing the same in their work placements, as in many cases their workplace trainer was also their employer. The Programme Directors need to find ways to mitigate this potential conflict of interest.

In addition, the LSOC is a 'protected' learning environment where the students practise procedures on each other and not on patients; were always supervised and practise under the direction of orthodontic therapist mentors. Due to this lack of patient exposure, the panel felt that some of the students may not be able to identify certain patient risks, and therefore these

risks would not be reported. Moving forward, the panel agreed it would be beneficial to provide students with a more detailed guide to patient safety risks earlier on in the programme, so that students are better prepared before training in their work placements.

Requirement 7: Should a patient safety issue arise, appropriate action must be taken by the provider *(Requirement Met)*

The programme staff maintain a 'Day Report Log' which is updated on a weekly basis throughout the duration of the course. This log notes all incidents that have occurred including IT problems, feedback received from students on the clinical sessions and lectures, and staff absences. At the time of the programme inspection, the panel was informed there had been no patient safety incidents but, had there been, they would have been recorded in this log. Patient safety incidents are also recorded in the 'Accident and Incident book' held at the LSOC.

In terms of how patient safety incidents are dealt with in the individual placements, from speaking with the workplace trainers, there did not seem to be a specific procedure followed by each of the practices. There is guidance provided in the workplace trainer handbook, which emphasises the importance of developing a corrective action plan to stop any future incidents and to limit any adverse consequences, which is broadly followed by the trainers.

If a patient safety incident were to occur, the student would be immediately removed from the patient and notes of the incident would be recorded in the patient notes. The workplace trainers stated that depending on the severity of the incident, they would contact and seek advice from one of the Programme Directors, and this whole process would be recorded in the student's log book as well. Generally it was agreed, that any patient safety incident would be used as a learning experience, in that the student would be asked to reflect on what had happened, why it had happened and how this could be avoided in the future. In addition, all the students have their own indemnity, which would ensure a patient would receive compensation should they suffer any harm. The workplace trainers who were spoken to, confirmed that there had not been any patient safety incidents in their practices.

Requirement 8: Providers must have a student fitness to practise policy and apply as required. The content and significance of the student fitness to practise procedures must be conveyed to students and aligned to GDC student fitness to practise guidance. Staff involved in the delivery of the programme should be familiar with the GDC Student Fitness to Practise Guidance *(Requirement Met)*

The programme follows the University's Fitness to Practise procedures. The document 'Fitness to Practise Committee Operational Procedures' sets out what constitutes a fitness to practise issue; the investigative procedure; the proceedings of a full hearing of the fitness to practise committee and the different outcomes following the committee meetings. This information is available on the University's website.

Section 18 of the course handbook informs students that behaviour which questions their fitness to practise may jeopardise their future registration with the GDC, and advises students to familiarise themselves with the GDC 'Student Fitness to Practice' document.

There is further information on the importance of fitness to practise in all the students' logbooks, with three days in the first core week of teaching, spent covering the role of the GDC, and topics such as professionalism. The panel was pleased to note this focus on the

topic. It was also evident from discussions with students, that fitness to practise is referred to throughout the course by mentors at the LSOC

The modular structure of the course means that students must demonstrate competence by passing the end of module assessments, and these assessments would help to identify if any student did have fitness to practise concerns that required additional support.

Actions

Req. Number	Actions for the provider	Due date (if applicable)
3.	All practice inspections must take place prior to the commencement of the programme.	GDC annual monitoring 2014/2015
3.	The School must develop a policy regarding unsuitable practices, how a student's clinical training would be continued if their placement was found to be unsuitable and what could be done to assist/support a student in these circumstances.	GDC annual monitoring 2014/2015
4.	Further guidance for the workplace trainers on delegating supervision of the student to other members of the dental team, and when this is and is not appropriate. This should consider skills level, understanding and delivery of feedback, knowledge of learning outcomes, raising concerns and equality and diversity best practice.	GDC annual monitoring 2014/2015
4.	The names and sample signatures for all clinicians involved in training students should be recorded	GDC annual monitoring 2014/2015
6.	Students may feel unable to raise concerns identified in their training practice, as it may compromise their training placement. The Programme Directors need to identify ways in which to mitigate this conflict of interest.	GDC annual monitoring 2014/2015
6.	Students be provided with a detailed guide to patient safety risks earlier on in the programme, to enable students to be better prepared when they begin their training in practice.	GDC annual monitoring 2014/2015

Standard 2 – Quality evaluation and review of the programme The provider must have in place effective policy and procedures for the monitoring and review of the programme			
Requirements	**Met**	**Partly met**	**Not met**
9. The provider will have a framework in place that details how it manages the quality of the programme which includes making appropriate changes to ensure the curriculum continues to map across to the latest GDC outcomes and adapts to changing legislation and external guidance. There must be a clear statement about where responsibility lies for this function		✓	
10. The provider will have systems in place to quality assure placements		✓	
11. Any problems identified through the operation of the quality management framework must be addressed as soon as possible		✓	
12. Should quality evaluation of the programme identify any serious threats to the students achieving learning outcomes through the programme, the GDC must be notified at the earliest possible opportunity		✓	
13. Programmes must be subject to rigorous internal and external quality assurance procedures		✓	
14. External examiners must be utilised and must be familiar with the learning outcomes and their context. Providers should follow QAA guidelines on external examining where applicable		✓	
15. Providers must consider and, where appropriate, act upon concerns raised or formal reports on the quality of education and assessment	✓		
GDC comments			

Requirement 9: The provider will have a framework in place that details how it manages the quality of the programme which includes making appropriate changes to ensure the curriculum continues to map across to the latest GDC outcomes and adapts to changing legislation and external guidance. There must be a clear statement about where responsibility lies for this function *(Requirement Partly Met)*

The University has an 'Expertise Availability Process' policy, which is adapted by the individual Programme Directors to ensure that adequate amount of teaching expertise is available, so that the programme's stated learning outcomes are met. Using this process, the programme staff map the course timetable against the experience and qualifications of the teaching staff, taking into account every aspect of the course and the needs of the students. Staff training needs are also reviewed, with staff provided with on-going in-house training, including calibration in assessment.

There are a number of committees responsible for assuring the quality management of the programme beginning with the Course Development Group (CDG). This group meets at least six times during the academic year to discuss the quality of the programme; review any resource requirements and discussing planning for any new developments that may need to be implemented. Feedback from the Staff Student Liaison Committee (SSLC) is also discussed at CDG meetings. It is not a formal committee of the University, but is a working group approved by the University to specifically review and develop the programme.

The minutes of the CDG meetings are then fed into the Orthodontic Course Committee (OCC). In addition, the Diploma undergoes an annual review, and this review along with the External Examiner reports are discussed at the Undergraduate Studies Committee (USC), which then reports to both the Quality Assurance and Enhancement Group (QAEG) and the Academic Quality and Standards Committee. The USC also reports into the Board of Undergraduate Studies Committee, which in-turn reports to the Board of the Faculty of Medicine. Of all these committees, the QAEG seems to be the only committee with oversight across the School, as it role is to co-ordinate quality assurance activities, as well as liaise with the University and external agencies to compile information to meet their specific requirements.

Minutes from some of these committee meetings demonstrated how issues relating to the quality management of the programme are discussed and addressed. This was particularly evident from the minutes from the CDG, where it was clear to see how concerns raised by students in the SSLC meetings were considered and reported back, thereby showing a closing of a feedback 'loop'. There were clear action points following the end of each of these meetings, with indicators specifying if actions were completed or needed to be followed up, and which team or member of staff were responsible.

Whilst the panel felt the School should be commended on the efforts made to collate feedback from students, teaching staff and clinical trainers, it was not always clear how some of this information fed into the overall development of the course. The panel did note there had been changes made to the individual modules in terms of teaching methods and in some cases, the methods of assessment. However, the complex committee reporting structure, did not convey where issues relating to external guidance and changes in legislation would be raised, discussed, acted upon, and followed up. Essentially, committee activity seemed to concentrate on the details of how the programme is delivered, but the inspectors were not assured that any of the committees has sufficient oversight over the entire programme to effect changes as a result of external factors.

Requirement 10: The provider will have systems in place to quality assure placements *(Requirement Partly Met)*

As discussed in Requirement 3, it is a requirement of the course that all students seek the support of an identified orthodontist, who will act as their workplace trainer throughout the duration of the course. Programme staff request that this orthodontist complete an on-line self-audit to demonstrate that their practice is a suitable training practice. On receipt of a completed audit, programme staff will then arrange to a visit to the practice, to meet with the orthodontist and in most case, the practice manager as well. It is also a prerequisite that the training practice in question has undergone and passed a CQC inspection.

Incomplete audits are followed up at the practice inspections. Any issues in the practice would

be monitored by the programme staff. The panel was informed that, to date, there has not been a practice inspected that has been deemed inappropriate to be designated a training practice. Issues that do arise are normally related to the trainer or student not committing themselves fully to the programme.

The panel accepted that the on-line audit was a thorough review of any potential training practice, as the questions asked covered all the essential areas relating to clinical practice. However, the inspectors were concerned that prior to the course commencing, two out of the ten practices had not been inspected by programme staff, and two students were placed in training practices which had not been quality assured at the first stage of the process. The inspectors felt the on-line audit must have an administrative checking process alongside it, to ensure all training practices are suitable for training.

Requirement 11: Any problems identified through the operation of the quality management framework must be addressed as soon as possible *(Requirement Partly Met)*

Any issues relating to the programme are discussed at the CDG in the first instance. The remit of this group is to review all aspects of the programme, including opportunities for the development of the programme. The group also reviews the minutes from the SSLC, and where appropriate, acts on any relevant actions.

Prior to the inspection, the panel was provided with minutes from the CDG, and it is clear from these that problems affecting the programme are discussed and acted upon, with changes being made to modules, teaching sessions and assessment methods. The inspectors were generally content the quality management framework relating to the programme operated efficiently with problems being identified through a number of avenues including the SSLC; 'Significant Analysis Reports' which document both good and bad unusual events; and the QEAG.

However, the panel were concerned at the over-reliance on the Programme Directors to resolve any problems quickly and the fact there was not a policy or nominated person, should one of the Directors be absent from the School for any length of time. The inspectors also felt that, given the programme is one year in duration, the absence of a Director to make decisions could significantly affect the quality of the teaching and delivery of the Diploma. The programme may benefit from having additional senior management support.

Requirement 12: Should quality evaluation of the programme identify any serious threats to the students achieving learning outcomes through the programme, the GDC must be notified at the earliest possible opportunity *(Requirement Partly Met)*

The School maintain a programme-specific risk register. This register includes information such as a list of potential risks to the programme; a probability scale denoting how likely each of these risk are likely to occur; and an impact scale to indicate how each of these risks occurring would affect the delivery of the programme.

The University have a 'Risk Analysis and Significant Events Policy', which is in place to help staff identify incidents which could adversely affect any qualification offered by the University. This policy also sets out how incidents could be prevented or how the impact of adverse incidents could be mitigated; the importance of always having a contingency plan in place; and

how such incidents should be managed.

Additionally, the panel was provided with a copy of the University's 'Whistleblowing Policy', which discusses the importance of raising concerns and reassures those that whistle-blow, that they will not suffer any detriment, such as job loss or victimisation.

The panel felt there were sufficient processes and policies in place to identify threats that would prevent students from achieving the stated learning outcomes, and were assured that the School would inform the GDC if any threat would prevent the delivery of the programme. However, the panel was less assured that the School had completed a thorough risk analysis of all the risks relating to the training clinics. For example, the workplace trainer being absent from the practice for long periods due to sickness, or the student not being able to treat a sufficient range of patients due to the location of their training practice. The inspectors understood that any shortfalls in experience could be made up at the LSOC, but felt that shortfalls may not always be identified quickly and the students could therefore be at risk of not meeting the learning outcomes of the programme. Logbook evidence also indicated a potential threat to students achieving the learning outcomes, when continued tutorials had not taken place and this directly indicated a lack of thorough risk analysis.

Requirement 13: Programmes must be subject to rigorous internal and external quality assurance procedures *(Requirement Partly Met)*

As described under Requirement 9, the programme relates to a number of committees responsible for maintaining quality management. Of these, the CDG is the committee where issues in relation to quality assurance are initially discussed, and this committee also considers information from the SSLC which helps in assessing and developing the course from the students' viewpoint.

The programme is also subject to an annual review, and the Course Director is responsible for compiling a full report. The panel was given copies of the 2011-12 and 2012-13 reports and felt the reports covered the necessary areas of the course such as admissions, the external examiner feedback, changes and developments to the programme and feedback from the students, which seems to be a major contributor in instigating changes to the programme. What both annual reports lacked was a response from the School, which has oversight of all the programmes related to dentistry, about what they feel is positive, negative and needs further development. The panel believe this sort of feedback would be beneficial in developing the programme for future cohorts.

From the evidence provided, the panel concluded that the only external quality assurance procedure seemed to be the feedback provided in the annual external examiner reports. Whilst the panel was pleased that the external examiner was very positive about how the exams and programme were being delivered, there was concern that their reports were too brief and generic to be helpful in identifying any potential weak areas that could be disadvantageous to the students learning. The panel was concerned in particular, at the lack of specific and measurable data in the report, which could have assisted the School in linking information directly into learning outcomes, and audit of assessment formats, delivery and processes.

Requirement 14: External examiners must be utilised and must be familiar with the learning outcomes and their context. Providers should follow QAA guidelines on

external examining where applicable *(Requirement Partly Met)*

The University has specific guidance for all external examiners for undergraduate and taught postgraduate courses. This guidance includes the expectations the University has from someone in this role and refers to the QAA guidance 'QAA Code of Practice on External Examining'.

The external examiner was able to have sight of all the written papers prior to the students sitting them, to make any comments for improvement. They were also able to review all the marked papers and view all the case presentations for the viva component of the final examinations, to ensure they were all suitable to be presented by the students.

The panel had an opportunity to meet with the external during the exam inspection, and from this meeting were confident that the external examiner had the necessary knowledge of the learning outcomes of the programme, and how they were being tested through the assessments. However, the panel considered this Requirement to be partly met, because, in previous years, the external examiner had been observing all the vivas taking place, and this year had chosen to examine a group of students instead. Whilst there is nothing in the guidelines to prevent an external examiner from examining students, the panel felt they were not able to have oversight of key activities in terms of two operational panel discussions on grades, recording of evidence, equity of student/assessor interactions, outcomes and general viva operational administration, as the examiner was confined to one room personally assessing the students' vivas.

Requirement 15: Providers must consider and, where appropriate, act upon concerns raised or formal reports on the quality of education and assessment *(Requirement Met)*

Via the committee structure, there was evidence in the form of meeting minutes that any concerns raised at committee meetings were considered by the Course Directors and addressed. The same was true of any concerns raised by the external examiner, such as the quality of images for the finals viva, which was then addressed for the following cohort.

The programme's annual report has a section relating to student feedback, which lists student feedback for that particular year with a short narrative explaining how the raised issue has been addressed.

Due to the size of the course, the inspectors found that any areas of the concern thought to be present by the students and workplace trainers would, in a majority of cases, be raised with one of the Course Directors, who would then seek to resolve any issues. Whilst the inspectors were pleased in one respect, that there were no barriers in contacting the Course Directors directly, they were concerned that many of the issues were not formally documented and felt there could be a risk of concerns not being fully addressed, or being addressed appropriately.

Actions

Req. Number	Actions for the provider	Due date (if applicable)
13.	Improve the guidance given to external examiners on how to complete the report, to ensure the feedback given is specific, measurable and detailed enough to identify	GDC annual monitoring 2014/2015

	all areas of good and bad practise.	
13.	Consider the oversight required for examination processes to ensure reliability and validity	GDC annual monitoring 2014/2015

Standard 3– Student assessment			
Assessment must be reliable and valid. The choice of assessment method must be appropriate to demonstrate achievement of the GDC learning outcomes. Assessors must be fit to perform the assessment task			
Requirements	**Met**	**Partly met**	**Not met**
16. To award the qualification, providers must be assured that students have demonstrated attainment across the full range of learning outcomes, at a level sufficient to indicate they are safe to begin practice. This assurance should be underpinned by a coherent approach to aggregation and triangulation, as well as the principles of assessment referred to in these standards.		✓	
17. The provider will have in place management systems to plan, monitor and record the assessment of students throughout the programme against each of the learning outcomes		✓	
18. Assessment must involve a range of methods appropriate to the learning outcomes and these should be in line with current practice and routinely monitored, quality assured and developed		✓	
19. Students will have exposure to an appropriate breadth of patients/procedures and will undertake each activity relating to patient care on sufficient occasions to enable them to develop the skills and the level of competency to achieve the relevant GDC learning outcomes		✓	
20. The provider should seek to improve student performance by encouraging reflection and by providing feedback[1].	✓		
21. Examiners/assessors must have appropriate skills, experience and training to undertake the task of assessment, appropriate general or specialist registration with a regulatory body	✓		
22. Providers must ask external examiners to report on the extent to which assessment processes are rigorous, set at the correct standard, ensure equity of treatment for students and have been fairly conducted		✓	
23. Assessment must be fair and undertaken against clear criteria. Standard setting must be employed for summative assessments		✓	
24. Where appropriate, patient/peer/customer feedback should contribute to the assessment process			✓
25. Where possible, multiple samples of performance must be taken to ensure the validity and reliability of the assessment conclusion	✓		

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[1] Reflective practice should not be part of the assessment process in a way that risks effective student use

26. The standard expected of students in each area to be assessed must be clear and students and staff involved in assessment must be aware of this standard		✓	

GDC comments

Requirement 16: To award the qualification, providers must be assured that students have demonstrated attainment across the full range of learning outcomes, at a level sufficient to indicate they are safe to begin practice. This assurance should be underpinned by a coherent approach to aggregation and triangulation, as well as the principles of assessment referred to in these standards *(Requirement Partly Met)*

To be entered for the final examinations, students must pass each of the summative assessments at the end of each of the five modules. The pass mark is 50%, and the assessments consist of a mixture of multiple choice questions (MCQs), extended matching questions (EMQs), situational judgement tests (SJTs) and, where appropriate, an OSCE. Students who fail any of the summative assessments, are able to progress through the course, but will have a specifically tailored programme designed for them, to ensure they gain the requisite knowledge and skill to pass any previously failed assessments. Students are permitted one re-sit for each failed assessment. The panel was informed that standard setting for all papers was achieved using the Ebel method.

In conjunction with studying these five modules, there is a sixth practical module 'Clinical Practice in Orthodontic Therapy'. Students are set a number of competency tasks, which must be completed in their work placements, under the supervision of their workplace trainer. Both the student and the trainer are responsible for maintaining a logbook record and guidance on how the workplace trainers can assist the student in developing these specific competency tasks, is provided during the induction day. The logbook also contains performance descriptors to aid grading and the subject of grading and calibration is again covered during the induction day. Once a student has completed a competency, they are able to scan and email the signed page of their logbook to the programme staff, who use this information to ensure all students are completing the required number of competency tasks. Any shortfalls in this area can be addressed through extra sessions at the LSOC.

The final examinations include a viva in which the student must present at least two clinical cases they have been involved with during the duration of the course, as well as answering some general questions on orthodontic therapy; 20 OSCE type exercises completed electronically and a paper made up of short answer questions (SAQs).

The panel was not present for the pre-examination board meeting (or sign-up meeting), which was held on 9 May, but minutes from this meeting were made available. These minutes explained that a number of factors were considered to assess whether a student was eligible to take their final examinations. Eligibility was dependent on whether the student had:

- Satisfactorily completed all modular assessments;
- Achieved the appropriate clinical experience;
- a satisfactory attendance record;
- Satisfactorily completed two clinical case presentations.

On this basis, eight students had met the criteria, and two remaining students were given

provisional approval to sit the exams if they completed two clinical case presentations.

The panel felt the summative assessments held at the end of every module were appropriate in measuring how the students were progressing, and a good method of identifying areas of weakness that may require additional teaching support. The programme demonstrated that students are tested on a number of the learning outcomes at multiple times during the course.

The duration of the programme means that it would be impractical to prevent students from moving onto the next module if they failed the previous assessment. The panel agreed with the approach of providing a tailored programme for the student to follow within an appropriate timeframe to prepare them for a re-sit. The panel also felt that it was appropriate that students be given only one further opportunity to re-sit any failed modules, thereby preventing the scenario where a student could progress through the course continually re-taking assessments, which would ultimately impact on the student's learning experience and development, and could impact on patient safety.

The panel was also provided with the 'Question Banks' for all five modules and felt the range of 'easy, 'moderate' and 'difficult' questions available, were robust in testing any student studying for a diploma in orthodontic therapy.

Although the assessment methods are vigorous in assuring the School that the students are meeting the programme objectives and graduating to be 'safe beginners' in orthodontic therapy, the inspectors were concerned about the application of assessment methods by those tasked with the assessment role, particularly the recording of information in the students' logbooks, and the over-reliance on the LSOC, to remedy any of the students' clinical deficiencies. The training practice is the only opportunity the student has to practise on actual patients, as any practise at the LSOC is carried out on fellow students or phantom heads. The logbooks were examined by the panel during the programme inspection and a number of anomalies were noted including it not being clear who in the practice had signed off on the clinical competencies, and the variation in the actual number of procedures completed. The panel felt a key at the front of the logbook to explain who other than their designated trainer will be assessing the student, would ensure that the clinical competencies were being signed off by a qualified member of staff. The panel also believed it would be beneficial for all members of staff who may be assessing the student in the training clinics, to also attend the induction days held at the University.

There were also concerns about the lack of variety in the cases and treatment mechanics displayed by students in the two cases that they presented for their final viva. Although the panel appreciate that this is a short course and the patients treated by students may not have progressed far in their orthodontic treatment, students should be encouraged to present patients at different stages of treatment and extraction, and non-extraction cases so that more of their knowledge can be tested.

The panel considered a coherent approach to assessment was required in the understanding and recording of performance evidence during the continuous assessment process, from the initial stages and throughout the course. In particular, the logbook evidence whereby a signature was appended each time a competency was completed, and in records in the viva stage of the final examinations. The lack of response specific data recorded during the viva based on the student's performance, requires attention from the Course Directors prior to any

future examinations. The panel felt greater rigour in the assessment evidence gathered and utilised for grading purposes was required to ensure standard setting and equity for students. The panel considered any potential appeal or complaint by a student may be difficult for both the School to respond to and the student to gain transparency, due to the lack of performance related data at the viva stage and the inconsistency in the signing of the logbooks.

Requirement 17: The provider will have in place management systems to plan, monitor and record the assessment of students throughout the programme against each of the learning outcomes *(Requirement Partly Met)*

As explained in Requirement 16, all students are required to undertake a number of summative assessments, which are mapped against the learning outcomes, throughout the programme. Results from these assessments are recorded in a database, managed by the Course Co-ordinator.

In relation to this requirement, the inspectors were concerned about the accuracy and quality of recording in the students' logbooks. The programme requires students to complete a number of clinical competencies in their work placements, under their supervision of their workplace trainer. It is both the responsibility of the clinical trainer and the student to ensure that logbooks are updated and signed off each time a competency is completed.

The programme also necessitates that students and their workplace trainers have a tutorial of at least one hour, once a week. The topic of this session is left up to the student and their trainer to decide. Following this session, students and their trainers are required to provide their comments and reflections on the tutorial and sign to confirm their entries in the logbook.

The course handbook states that the logbook 'is an important document (which) must be completed contemporaneously to provide a record of all student activity.' However, from reviewing all the logbooks during the programme inspection, the panel found this not to be the case. A number of students seemed not to be having regular tutorial sessions with their workplace trainers, with one student having missed nine tutorials, which the panel felt was a significant shortfall and could have been disadvantageous to that student. Another area of concern was the signing off process when a student had completed a competency. The logbooks had no place to indicate who in the practice was signing to confirm that the student was now competent in a particular procedure. Furthermore, the signature did not always match the name of their trainer, and there is therefore a danger that non-qualified practice staff with no specific training in assessment, may be signing off to say a student is competent when they are not. This undermines the reliability and the validity of the signing off process, which in-turn undermines the integrity of the assessment.

The panel was informed that logbooks are not reviewed during the course. Students are able to send scanned copies of the relevant pages of their logbooks once they have completed a competency, to the Programme Co-ordinator, who has a spreadsheet monitoring what has been completed. However, logbooks are not formally assessed until the end of the course by the external examiner, to ensure they are being completed properly and that tutorials are taking place regularly. The inspectors felt that by waiting until the end of the course to assess logbooks, the Programme Directors were missing an opportunity to intervene if a student was having difficulty achieving their competencies or was receiving inadequate tutorial time with their workplace trainer.

Workplace trainers are asked to keep their own record of completed clinical competencies, in case the logbook goes missing, but the inspectors felt this was an inadequate measure in safeguarding each student's assessment information. The panel was informed that the School do plan to introduce electronic logbooks, which would address issues concerning the safeguarding of information and the accurate recording of assessment.

Requirement 18: Assessment must involve a range of methods appropriate to the learning outcomes and these should be in line with current practice and routinely monitored, quality assured and developed *(Requirement Partly Met)*

Completion of the five core modules covering Biomedical Sciences and Oral Biology; The Principles of Orthodontics; Removable appliances; Fixed Appliances and Interdisciplinary Care are assessed using a range of MCQs, EMQs, SJTs and where appropriate OSCEs. As discussed in Requirement 16, the panel was assured that the range of questions being posed, were robust in testing the knowledge of a student in orthodontic therapy. The panel was also provided with documentation setting out the development of an OSCE for the module 'Fixed Appliances', and noted how feedback from the students was used to improve the delivery of the OSCE for future cohorts.

It is aspects of the final examinations that have contributed to this Requirement being 'partly met'. The panel felt that answering 20 sets of questions on a computer did not constitute an OSCE, and felt it was more of a series of SAQs. In addition, there was a lack of explanation over why it was necessary to check the answers again manually for 'accuracy of interpretation', once they had already been marked using Perception software. The panel felt if there was a flaw in the computer software, there should be consideration given to having it replaced with something more reliable to ensure the integrity of the assessment.

The other component of the finals which gave concern were the viva case presentations. The criteria on how students make a judgement on which cases to present was not clear. The panel felt that some of the students presented two very similar case presentations, which did not demonstrate a range of their skills and knowledge. This view was echoed by the external examiner.

There were two panels examining the students on their presentations. The first panel was made up of two orthodontists, including the external examiner. The second panel was made up of an orthodontic therapist and the Course Director. From observing both panels, the inspectors felt there was a disparity in type of questions being asked by both the panels, with the first panel focussing their questions on diagnosis and treatment planning, and the second panel asking questions relating to the treatment the student actually provided. The inspectors thought these two different approaches may be disadvantageous to some students, as treatment planning and diagnosis does not fall within the scope of practice of an orthodontic therapist. In terms of consistency, the School may wish to consider having set standardised questions relating to the case presentations defined and agreed with assessors.

The panel was also concerned about the lack of transparency or consistency as to how the final mark for the clinical vivas was determined by the examiners. The final grade awarded seemed to be based on a subjective judgement of the candidate's performance, which would not stand up to scrutiny if the candidate challenged the outcome of the examination.

The panel noted the roles of the CDG and the SSLG in generating and discussing feedback to

develop and improve the course, and saw evidence of changes being made to the assessments as a result. However, the panel were of the view that there was little or no evidence to demonstrate how the final exams had developed over the lifetime of the programme. One of the issues may be that, feedback on suggested improvements comes from teaching staff or the students. Moving forward, a review of the exams by an external staff member unrelated to the course or an educationalist, may provide a better overview of the issues and thus result in improved final examinations. The panel did review the external examiners report but considered it not detailed enough to be of any use in facilitating specific measurable change.

Requirement 19: Students will have exposure to an appropriate breadth of patients/procedures and will undertake each activity relating to patient care on sufficient occasions to enable them to develop the skills and the level of competency to achieve the relevant GDC learning outcomes *(Requirement Partly Met)*

There was no evidence to demonstrate how the School assures that all students have exposure to an appropriate breadth of patients, whilst in their outplacement clinics. Although there is provision to ensure have the necessary breadth of experience in order to graduate from the programme, with students having additional training sessions at the LSOC. This still does not guarantee patient care to a breadth of patients, as students practise on each other in this setting. Furthermore, since there is no formal review of the logbooks until the end of the course, a lack of variety in a student's caseload may not be identified early enough in the course for adjustments to be made.

The panel understood that the duration of the programme may be a barrier to achieving or having access to a breath of patients. However, it may be beneficial for future cohorts to have formal guidance on the types of patient they would be expected to treat during the programme. This would go some way in ensuring students do not only carry out one type of procedure, on one type of patient whilst they are training.

Requirement 20: The provider should seek to improve student performance by encouraging reflection and by providing feedback *(Requirement Met)*

There is a section in all the students' logbooks where they are able to note down reflections following the completion of clinical competencies and at the end of each their tutorial with their workplace trainer. These reflections are then be reviewed and discussed with their workplace trainer.

Providing feedback to students is seen by the School as a positive way to aid development. Students themselves stated to the panel that they were 'overwhelmed' with feedback that was constructive in helping them improve. Feedback is given following every assessment and every session at the LSOC. Students also have a termly meeting with one of the course tutors, where clinical and academic progress is discussed and well as any problem issues that may need to be addressed. These meetings generate action points that are followed up at the next meeting.

As a development point, some of the workplace trainers who met with the panel, felt it would be useful to have prescriptive guidance on providing feedback to their trainees, particularly when the student had not achieved the required standard for a task.

Requirement 21: Examiners/assessors must have appropriate skills, experience and training to undertake the task of assessment, appropriate general or specialist

registration with a regulatory body *(Requirement Met)*

The Course Director is responsible for appointing all of the examiners on the programme and expectations of the role, are defined in the University's 'Examiner/Assessor/Moderator Terms of Appointment'

In respect of the final examinations, the panel did enquire about any specific training that the examiners were required to undergo before being allowed to assess. The panel was informed that both the external examiner and Course Director had a considerable amount of experience as examiners at other institutions, and in the training of examiners.

Furthermore, the panel was told that it is a requirement for any new member of staff who will be acting as an internal examiner for the case presentations to have acted as an observer at the finals for the previous cohort of students. They are also required to assess each student and then given feedback on their assessment scores. In light of the concern already discussed in the previous Requirements under this Standard relating to the actual recording of specific assessment data during the final vivas, the panel suggest it may be helpful for all examiners to undergo additional training in this area, to ensure fair and informed judgements are made about each of the students undertaking the assessments.

In relation to the workplace trainers, it is a requirement that they be registered as a Specialist Orthodontist with the GDC. At their induction day, they are taken through a calibration exercise to enable them to grade students once a clinical competency has been completed. The workplace trainers who were present during the programme inspection, felt this exercise was helpful and the clear marking criteria gave them the confidence to assess their trainees accurately. The panel was concerned however, that in some placements, clinicians who had not gone through the calibration exercise were signing off the student's competencies if their trainer was away.

Requirement 22: Providers must ask external examiners to report on the extent to which assessment processes are rigorous, set at the correct standard, ensure equity of treatment for students and have been fairly conducted *(Requirement Partly Met)*

The programme employs one external examiner, which is sufficient given the size of the cohort. The School send all written papers to the external examiner in advance of the examination for their comments. The external examiner also reviews the case presentations prior to the students being assessed, to ensure they are suitable. The external examiner reviews all the marked papers and logbooks and is able to comment on the grading and other issues relating to assessment. The School state they would also consult the external examiner about any proposed changes to the course, for example, changes in any of the learning outcomes. The external examiner's feedback on these changes would be considered by the CDG.

The external examiner is also required to complete a report following the end of finals. The panel was concerned that the 2011-2012 external examiner's report related to other MSc courses, not just the Diploma was therefore not programme specific. The panel failed to see how such a report could constructively seek to ensure assessment processes were appropriate when generic comments such as 'the level of qualifications are at least as good if not better than other institution I have examined for' and 'All students were given the chance through the course to develop in a mature and innovative way and have taken full advantage of this

opportunity.', do not really provide any background explanation and are not detailed enough to be of any use. The external examiner's report improved the following year, when a report solely for the Diploma course was submitted, but the lack of robust, specific and measurable feedback continued to be a concern for the inspectors. In addition, the amount of feedback provided in the report may have been affected by the lack of oversight the external examiner had over the final examinations, as they were examining.

The inspectors also felt that the questions the external examiner is required to comment on could be refined and be made more detailed to encourage a detailed response with reference to specific examples relevant to the Diploma.

Requirement 23: Assessment must be fair and undertaken against clear criteria. Standard setting must be employed for summative assessments *(Requirement Partly Met)*

In relation to standard setting, the panel was confused as to how the programme used the Ebel Method, when all summative assessment pass marks were set at 50%. The School informed the panel that the pass mark was set higher than the University pass mark of 40%, as passing the qualification is accepted for registration by the GDC.

For the finals, the OSCE was completed on and marked by computer, using Perception Software. The marks were then checked again manually for 'accuracy of interpretation'. The inspectors did not have sight of this second marking criterion so were unsure what this accuracy test checked and how or if marks were subsequently amended. However, if there is an issue with reliability of software, the panel felt it should be replaced to ensure the integrity of the exam.

For the viva element of the finals, the examiners used a 1 to 4 grade scheme, which the panel was informed was adapted from both criteria set by the Royal Colleges and the University of Warwick. A failure was 45%, a pass 50% and a good pass determined at 75% or above. There were two panels of examiners taking the vivas, and during the briefing prior to the exams commencing, examiners were informed they would mark each student individually, then discuss with their fellow examiner an overall mark. The panel observed both sets of vivas, and was unclear about how the overall mark was agreed as they did not observe either pair of examiners having detailed discussions based on performance data, collected during the process about the student's performance. The panel therefore requested that the examiners mark/discussion sheets be made available at the end of the exams. Unfortunately, these documents offered no further clarity, as the comments recorded were all too brief to explain how the final mark was achieved. The panel felt the marking scheme required some refinement as it was felt not to be discriminatory enough to distinguish between average and good students.

Another area of concern was the assessing of the clinical competencies of the students, whose marks are recorded in their logbooks. During the workplace trainer induction day, there is a calibration exercise designed to encourage standardised marking practice amongst the trainers. The workplace trainers are also provided with clear criteria to aid them in their assessment responsibilities. Although detailed guidance is provided, there is absence of random checks of the logbooks to establish if the marks given are being awarded correctly. The inspectors also noted that the workplace trainer may delegate responsibility of the trainee to other members of their team who may not be familiar with the marking criteria, or have

undertaken training in assessment and therefore there is a risk, that the grades awarded may not be accurate.

Requirement 24: Where appropriate, patient/peer/customer feedback should contribute to the assessment process *(Requirement Not Met)*

Opportunities for peer feedback are limited to sessions at the University and the LSOC, as the students training practices are located throughout the UK. From meeting with the students, it was clear that feedback was exchanged between students but this information was not recorded formally. Similarly, there was some evidence that some practices collected feedback from patients, but this tended not to be based solely on the performance of the trainee orthodontic therapist. The panel found no evidence to suggest that either patient or peer feedback was being used to contribute to the assessment process.

The School are advised to formalise a process to capture peer feedback and make it requirement that all trainer practices seek feedback from patients treated by the trainee orthodontic therapist. The School will then need to consider how this information is considered by the CDG, when discussing the development of assessments.

Requirement 25: Where possible, multiple samples of performance must be taken to ensure the validity and reliability of the assessment conclusion *(Requirement Met)*

In considering eligibility for the final examinations, multiple samples of the students' performance throughout the course is considered. This includes the students' performance at each of the end of module assessments and the grades achieved for each of the clinical competencies completed at their training clinics. Students are also monitored during the teaching sessions at the LSOC, and are given feedback on their performance at the end of every lesson. The reflective entries at the end of each of their weekly tutorials is also reviewed to ensure the student understands what they are doing, why and how they can improve.

The final examinations look at multiple samples of the student's performance in the form of written assessments, case presentations, clinical vivas and short answer papers. Despite gaps in some of the students' logbooks, missed tutorials and the recording of assessment data in the final vivas, the panel was assured that the varied and frequent assessments throughout the programme, were sufficiently robust to ensure the final results were reliable.

Requirement 26: The standard expected of students in each area to be assessed must be clear and students and staff involved in assessment must be aware of this standard *(Requirement Partly Met)*

The programme does have an assessment strategy documenting the criteria for assessment; methods of assessment and standard setting; marking schemes; what competencies are tested by each of the different assessment; and the advantages and disadvantages of utilising certain assessment methods to establish competence. Although not confirmed at the inspection, the panel assumed this document would have been produced in conjunction with input from the programme staff and if this is the case, the panel was assured that staff would indeed be clear on what areas were being assessed and why.

The panel were provided with no clear blueprint, to demonstrate clearly how the assessments matched the learning outcomes, but noted that the programme staff were heavily involved in

developing the assessments for the programme, they would be more than aware of what is to be expected from the students.

From a student perspective, they are provided with a handbook setting out all the aims and objectives for each module, and during their induction period, all the assessment processes are clear so all students are familiar with when assessments are planned and what type of assessment they will undertake. Students also have mock assessments so they are familiar with what to expect.

Req. Number	Actions for the provider	Due date (if applicable)
16.	A key at the front of the student logbook to identify which members of staff at their training practice will be signing off on their competencies. Clinicians who are involved in signing off student's competencies must have undergone calibration in the use of the grading system.	GDC annual monitoring 2014/2015
18.	To develop a list of set questions for the viva case presentations, to ensure all students are being tested equitably. An addition to the examination briefing note should also be made to incorporate specific direction with regard to the steps to be taken in the recording of performance and viva evidence to ensure specific data is collected, which can then be benchmarked against standards.	GDC annual monitoring 2014/2015
24.	Develop a policy to capture peer feedback and it make it a requirement that all trainer practices seek specific measurable feedback, benchmarked against the learning outcomes/standards from patients treated by the trainee orthodontic therapist.	GDC annual monitoring 2014/2015
24.	Consider how patient feedback can play a role in the future development of student assessments.	GDC annual monitoring 2014/2015

Standard 4 – Equality and diversity			
The provider must comply with equal opportunities and discrimination legislation and practice. They must also advocate this practice to students			
Requirements	**Met**	**Partly met**	**Not met**
27. Providers must adhere to current legislation and best practice guidance relating to equality and diversity	✓		
28. Staff will receive training on equality and diversity, development and appraisal mechanisms will include this		✓	
29. Providers will convey to students the importance of compliance with equality and diversity law and principles of the four UK nations both during training and after they begin practice		✓	

GDC comments

Requirement 27: Providers must adhere to current legislation and best practice guidance relating to equality and diversity *(Requirement Met)*

The University has a specific policy on equality and diversity, which is compliant with the Equality Act (2010). The policy also provides guidance for students who feel they have been the subject of discrimination or harassment.

The University also has an advice sheet titled 'Equality and Diversity Complaints Issues', which again, provides guidance for students who feel they may have been treated unfairly. It is not clear when this document was produced, but it does state that no complaints, in relation to equality and diversity have been received by the Warwick Medical School. Senior staff provided some insight into daily diversity best practice for students which was encouraging.

Requirement 28: Staff will receive training on equality and diversity, development and appraisal mechanisms will include this *(Requirement Partly Met)*

All staff are provided with internal training on the protected characteristics, although the programme staff are considering equality diversity training to be provided in the future by an external body, such as Skills for Health. The course leads have completed online training on this subject as part of their CPD requirements.

An appraisal system is also presently being considered by the Course Directors and this should include focus on equality and diversity, together with other continuous professional development aspects.

The programme staff stated that the programme had never received a complaint in relation to an equality and diversity issue, and it would be a 'learning curve' if such an issue were to present itself. The inspectors through general discussion, learned of some diversity best practice followed within the School, regarding cultural and faith matters and were pleased to see the way these had been addressed. They also observed discussion in a classroom

session addressing issues around gender and age and were encouraged by the approach taken. The panel would therefore encourage staff to continue to develop this aspect towards all areas of diversity for participating students. The inspectors felt that the School should have an equality and diversity training programme in place, which all staff, including the clinical trainers (for that year) were required to undergo annually.

Requirement 29: Providers will convey to students the importance of compliance with equality and diversity law and principles of the four UK nations both during training and after they begin practice *(Requirement Partly Met)*

During the induction week of the course, students are given a presentation on Equality and Diversity, with the aim of ensuring that students understand the Equality Act (2010) and how it applies to the dental team; and to understand what is meant by harassment, victimisation and discrimination. Students are then tested on their understanding by a series of SJTs.

From speaking with the students, it was clear that they felt that they had the appropriate amount of knowledge on this subject area. They were also confident about determining indirect and direct discrimination.

This requirement has been decided as a partly met as there was no evidence to show that students are given an overview of the differences in equality and diversity legislation in all four countries of the UK.

Actions		
Req. Number	**Actions for the provider**	**Due date (if applicable)**
28.	The School should have an equality and diversity training programme in place, which all staff, including the workplace trainers (for each cohort), should be required to undergo annually. This should be linked in to the internal appraisal system which is being developed presently.	GDC annual monitoring 2014/2015
29.	Include information about the differences in equality and diversity legislation in the four countries of the UK, in the presentation given to students during their induction week.	GDC annual monitoring 2014/2015

Summary of Actions

Req.	Actions for the provider	Observations Response from the Provider	Due date (if applicable)
3	All practice inspections must take place prior to the commencement of the programme.	*This process has now been actioned. All placement practices for the next and subsequent cohorts of students will be inspected prior to students commencing the programme. This process will take place between induction day and the commencement of the course.*	GDC annual monitoring 2014/2015
3	The School must develop a policy regarding unsuitable work placements, how a student's clinical training would be continued if their placement was found to be unsuitable and what could be done to assist/support a student in these circumstances.	*A document has been prepared that clearly defines how the student's continuing clinical training will be supported should a placement be found to be unsuitable or in a situation where the trainer is unable, such as through long term illness, to continue to provide clinical supervision.*	GDC annual monitoring 2014/2015
4	Further guidance for the workplace trainers on delegating supervision of the student to other members of the dental team, and when this is and is not appropriate. This should consider skills level, understanding and delivery of feedback, knowledge of learning outcomes, raising concerns and equality and diversity best practice.	*A document has been prepared which will address these issues and will be sent to all potential trainers prior to interview and will also form part of the induction day material.*	GDC annual monitoring 2014/2015
4	The names and sample signatures for all clinicians involved in training students should be recorded.	*Trainers are now required to complete a document recording names and signatures of all appropriately qualified registrants involved in the supervision of the student. For the next and subsequent student cohorts this document will form part of the preface to the student logbook and a copy will be held*	GDC annual monitoring 2014/2015

		centrally.	
6	Students may feel unable to raise concerns identified in their training practice as it may compromise their training placement. The Programme Directors need to identify ways in which to mitigate this conflict of interest.	*Documentation is now included in the Course guide (section 17.8) indicating that where students wish to raise a concern relating to any aspect of their placement, trainer or employer and where this may raise a conflict of interest then they should raise it with a Course tutor, the Course Director or a senior member of the University academic staff.*	GDC annual monitoring 2014/2015
6	Students be provided with a detailed guide to patient safety risks earlier on in the programme, to enable students to be better prepared when they begin their training in practice.	*Although some aspects of patient safety are covered in the pre-clinical part of the course, this part of the training programme will be strengthened by moving additional aspects to be delivered prior to entry to clinical practice.*	GDC annual monitoring 2014/2015
13	Improve the guidance given to external examiners on how to complete the external examiner report, to ensure feedback given is specific, measurable and detailed enough to identify all areas of good and bad practice.	*This has been discussed at a meeting with the External Examiner on 20/11/14 and at a meeting of the University of Warwick's Undergraduate Studies Committee on 2/12/14. There will be a quality assurance review of all educational programmes delivered within Warwick Medical School during 2015 which will engage with all course directors and External examiners and will include guidance on External examiner feedback.*	GDC annual monitoring 2014/2015
13	Consider the oversight required for examination processes to ensure reliability and validity.	*The role of the External examiner in relation to the Finals examinations was discussed at a meeting of the Course Development Group on 28/11/14 and at a meeting of the University of Warwick's Undergraduate Studies Committee on 2/12/14 (see paragraph above).*	GDC annual monitoring 2014/2015
16	A key at the front of the student logbook to identify which members of staff at their training practice will be signing off their competences. Clinicians who are	*This Key will be inserted into the logbooks of students in future cohorts. All registrants involved in signing off students' competencies will be required*	GDC annual monitoring 2014/2015

	involved in signing off student's competencies must have undergone calibration in the use of the grading system.	*to attend the induction day for trainers, students and practice managers which currently includes a calibration exercise.*	
18	To develop a list of set questions for the viva case presentations, to ensure all students are being tested equitably. An addition to the examination briefing note should also be made to incorporate specific direction with regard to the steps to be taken in the recording of performance and viva evidence to ensure specific data is collected, which can then be benchmarked against standards.	*Examiners currently use a question script which will be further refined and mapped against the GDC learning outcomes for the next diet of the Finals examinations Vivas. The structure of the summative assessment strategy of the Course will be reviewed by an educationalist external to the Course*	GDC annual monitoring 2014/2015
24	Develop a policy to capture peer feedback and make it a requirement that all trainer practices seek specific measurable feedback, benchmarked against the learning outcomes/standards from patients treated by the trainee orthodontic therapist.	*It would be helpful to have some clarification of this proposed policy as it is unclear as to how it is expected that peer feedback should be captured and how this is linked to patient feedback. A patient feedback form will be designed and will be piloted in all trainer practices in 2015 to sample patient feedback benchmarked against the learning outcomes.*	GDC annual monitoring 2014/2015
24	Consider how patient feedback can play a role in the future development of student assessments.	*Patient feedback will be a requirement of all trainer practices and this will be used for formative assessment of each individual student as part of the 1 to 1 review process with the Course director. The feedback will be reported back to CDG and recommendations from CDG will be reported to the OCC and where this might lead to a proposed significant change in the summative assessment process, it will be brought to the Undergraduate Studies Committee (USC).*	GDC annual monitoring 2014/2015
28	The School should have an equality and diversity training programme in place, which all staff, including the work placement trainers (for each cohort), should be required to undergo annually. This should be	*An equality & diversity training module is available online to all University staff holding substantive or honorary appointments and it will be a requirement for all teaching staff involved in the Diploma in*	GDC annual monitoring 2014/2015

		linked in to the internal appraisal system which is being developed presently.	*Orthodontic Therapy to have satisfactorily completed this module on an annual basis. The University generate certificates on satisfactory completion of the module which will be retained as evidence.*	
29		Include information about the differences in equality and diversity legislation in the four countries of the UK, in the presentation given to students during the induction week.	*This has now been included in the presentations to both students and staff.*	GDC annual monitoring 2014/2015

Observations from the provider on content of report

We would like to thank the visitors for their comprehensive review of the Diploma in Orthodontic Therapy Programme and the courteous and considerate way that both visits were undertaken. We have noted that they have identified a number of strengths particularly with respect to the valuable learning experience gained by the students, the exceptionally good facilities provided at the Leamington Spa Orthodontic Centre, the thorough induction process at the commencement of the Course and the clear documentation provided for both students and trainers.

As is apparent from our responses above, we have addressed those areas identified as requiring either attention or further development particularly with respect to the supervision and assessment provided by the placement trainers which has been and continues to be challenging. Some of these issues will require further ongoing discussion within the University.

The visitors commented that they were disappointed that issues concerning the logbooks mentioned in the annual course monitoring report of 2010/11 (item 9) had not been addressed. Considerable time and effort has been given since the last GDC visitation to trying to translate the logbooks into an e-format to provide real-time monitoring and appraisal but the process of doing this raises a number of complex issues which need to be addressed before any change is instituted e.g. software development, electronic data transfer, reliability, cost etc. This process of review is ongoing and we are optimistic that ongoing technological development will provide a solution. Since the GDC visitation, a considerable amount of the logbook content has been moved to the e-portfolio allowing students to fill out their reflective comments online. This has reduced the size of the hard-copy log book by 50%. This development has been successfully introduced for the 2014/15 cohort of students.

It is proposed that the OSCE descriptor for part of the Finals Examinations assessment will be reviewed to make the descriptor more appropriate to the current form of assessment. It is not intended however to change the method of assessment which the University considers appropriate, subject however to external review of examination processes within Warwick Medical School planned for 2015.

We consider that some of the issues raised by the visitors would merit further discussion and to this end we feel that it would be valuable to establish a more informal dialogue between us as educational providers and the GDC as the Regulator. It would be an opportunity to explore aspects of educational development particularly with respect to assessment strategies where the feedback from the visitors would benefit from further clarification (e.g. requirement 24). It would also be helpful in defining and developing future models of education such as the further development of inter-professional education which we consider to be one of the current strengths of the Warwick programme.

Recommendation to the GDC

The inspectors recommend that this qualification is sufficient for holders to apply for registration as an orthodontic therapist with the General Dental Council