protecting patients, regulating the dental team

INSPECTION REPORT

Awarding Body:	Manchester Metropolitan University
Education Provider:	Manchester Metropolitan University (BSc) The City of Liverpool College (FdSc) Birmingham Metropolitan College (FdSc)
Programme / Award / Qualification:	BSc (Hons) Dental Technology Foundation Degree (FdSc) in Dental Technology
Remit and Purpose:	Full inspection referencing the <i>Standards for</i> <i>Education</i> to determine the continuing sufficiency of the award for the purpose of registration with the GDC as a dental technician
Learning Outcomes:	Preparing for Practice (Dental Technology)
Programme Inspection Dates:	23, 24, 25 & 26 February 2015
Examination Inspection Dates:	7, 8, 12, 13 & 14 May 2015 – Examinations 17 & 18 June 2015 - Examination Board Meeting
Inspection Panel:	Michael McCulley (Chair and Lay Member) Caroline Logan (DCP Member) Christopher Parker (DCP Member) Janine Brooks (Dentist Member)
GDC Staff:	James Marshall (Lead) Luke Melia
Outcome:	Recommended that the BSc (Hons) and FdSc Dental Technology programmes awarded by Manchester Metropolitan University are approved for the cohorts graduating in 2015 only. The GDC should re-inspect in 2016.

Inspection summary

Throughout the inspection of the BSc (Hons) and FdSc in dental technology programmes awarded by Manchester Metropolitan University (MMU) the panel identified a number of concerns. A significant area of concern for the panel was the level of oversight that Manchester Metropolitan University maintained over the City of Liverpool College and Birmingham Metropolitan College, the partner colleges providing the foundation degree programmes. The panel was unable to identify a clear channel of communication between MMU and the partner colleges leading the panel to be concerned that, should any problems arise with the running of the programmes, they would not be appropriately escalated.

The panel was disappointed that a lack of communication from MMU was a common theme in the feedback from the partner colleges. In addition to an unclear hierarchy for raising concerns from the partner colleges, the panel identified there was a limited amount of feedback sought from the programme leads in Liverpool and Birmingham with regards to the general running of the programmes. The panel agreed that the knowledge and experience from staff members at the partner colleges could be better utilised in future developments of the programmes.

The panel was disappointed, through the initial planning and preparation for the inspection visits, that there was a distinct lack of engagement from the programme leads at Manchester Metropolitan University with the GDC. The panel struggled to obtain the relevant preinspection documentation with the final paperwork received by the GDC only three weeks in advance of the inspection. The panel agreed that this was another example of the poor communication from the programme leads.

Another area of concern for the panel was the lack of evidence during the initial programme inspection visit that the students on both BSc and FdSc programmes at MMU and Birmingham Metropolitan College would meet the GDC learning outcomes dedicated to the design and manufacture of dental devices. Due to the lack of evidence, the panel was concerned that the students, on completing the programme, run the risk of manufacturing potentially unsafe dental devices.

As a result of the panel's concerns, the GDC was required to formally write to the Head of School at Manchester Metropolitan University to request additional evidence of the manufacture and assessment of practical work to be completed by the examination inspection. The panel was satisfied that Manchester and Liverpool complied with the GDC's request, however the inspectors were disappointed that the programme leads in Birmingham did not provide this additional evidence until several weeks after the deadline.

The panel was also concerned with the level of marking compensation that has been prevalent during the practical assessments. The panel discussed several specific areas of compensation, firstly the ability for a student to pass an overall practical assessment, despite a dental device not being safe for patient use due to the marking of individual component parts of a device with no global mark for clinical acceptability. Secondly, a student could pass the final practical examination yet fail the practical coursework, allowing a student to pass overall due to the marking compensation used. The panel felt this was a particular concern to both patient safety and the student learning experience. However, the panel was pleased that staff from the Centre for Academic Standards and Quality Enhancement (CASQE) have agreed to review this approach.

The panel also felt there was a varying opportunity for students to obtain practical experience, depending on which institution they were studying at. The panel had no

concerns with the practical experience gained at the City of Liverpool College as all of the students were required to be employed at dental laboratories throughout the duration of the part-time programme. It was the panel's belief that this enabled students to gain valuable, on the job, practical experience outside of the college underpinned by the simulated work undertaken at the college.

Students studying the BSc at Manchester Metropolitan University were also able to gain practical experience while undertaking placements at the Manchester Dental Hospital although this was of a fairly limited duration and scope of practice. The panel was concerned that students studying at Birmingham Metropolitan College could progress through their course without having made a dental device for a patient, due to the lack of placements available. The inspectors were reassured that, following the programme inspection visit, that the programme leads in Birmingham have agreed to review this approach.

The panel wishes to thank the staff, students, and external stakeholders involved with the BSc (Hons) and FdSc in Dental Technology programmes for their co-operation and assistance with the inspection.

Inspection process and purpose of Inspection

- 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 Council of the GDC regarding the 'sufficiency' of the programme for registration as a dental technician in the UK. The GDC's powers are derived under Part II, Section 9 of the Dentists Act 1984 (as amended) to determine sufficiency of the programme.
- 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 BSc (Hons) in Dental Technology awarded and delivered by Manchester Metropolitan University and the Foundation Degree (FdSc) in Dental Technology awarded by Manchester Metropolitan University and delivered by the City of Liverpool College and Birmingham Metropolitan College. The GDC publication *Standards for Education* (version 1.0 November 2012) was used as a framework for the inspection.
- 8. The inspection was comprised of four visits. The first, referred to as the programme inspection, was carried out on 23, 24, 25 and 26 February 2015. This involved a series of meetings with programme staff involved in the management, delivery and assessment of the programme and a selection of the students across the three education institutes delivering the programmes. The second visit took place on the 7 and 8 May 2015 during which the panel attended the student practical examinations at Manchester Metropolitan University. The third visit took place on 12, 13 and 14 May 2015 during which the panel attended the student practical examinations at the City of Liverpool College and Birmingham Metropolitan College. The final visit took place on 17 and 18 June at Manchester Metropolitan University during which the panel attended the examination board meeting.
- 9. The report contains the findings of the inspection panel across the four visits and with consideration to supporting documentation prepared by the School to evidence how the individual Requirements under the *Standards for Education* have been met.

Overview of Qualification

- 10. The BSc (Hons) in Dental Technology programme sits within the Manchester Metropolitan University School of Healthcare Science. The programme has an annual current and projected intake of 60 students. The duration of the programme is three years full time teaching and assessment. The FdSc in Dental Technology is awarded by Manchester Metropolitan University and delivered by the City of Liverpool College and Birmingham Metropolitan College. The duration of the FdSc programme is either two years full time teaching and assessment or three years part time teaching and assessment. The City of Liverpool College has a current intake of 13 part time students and Birmingham Metropolitan College has a current intake of 28 full time students and 7 part time students.
- 11. The BSc (Hons) in Dental Technology programme is taught over three years. During the first year students are taught the units Introduction to Dental Technology, Dental Biosciences and Quantitative Methods, Introduction to Dental Materials Science and Introductory to Dental Laboratory Techniques. In the second year students are taught

the units Principles of Dental Technology, Dental Biosciences and Professionalism, Dental Materials Science and Applied Dental Laboratory Techniques. In year three students are taught the units Further Studies in Dental Technology, Research and Professional Practice, Further Studies in Dental Materials and Case Based Learning.

- 12. The FdSc in Dental Technology programme, taught over either two or three years, covers the following units: Introduction to Dental Technology, Dental Biosciences and Quantitative Methods, Introduction to Dental Materials Science, Introductory Dental Laboratory Techniques, Principles of Dental Technology, Dental Biosciences and Professionalism, Dental Materials Science, Applied Dental Laboratory Techniques and Work Based Learning.
- 13. The programme had been designed to meet the learning outcomes in GDC curriculum document, *Preparing for Practice*, which was published in late 2011.

Evaluation of Qualification against the *Standards for Education*

- 14. As stated above, the *Standards for Education* were used as a framework for this inspection.
- 15. 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.
- 16. The inspection panel used the following descriptors to reach a decision on the extent to which the BSc (Hons) in Dental Technology and the FdSc in Dental Technology awarded by Manchester Metropolitan University 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				
-	quirements	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	\checkmark		
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.		\checkmark	
5.	Supervisors must be appropriately qualified and trained. Clinical supervisors must have appropriate general or specialist registration with a regulatory body	\checkmark		
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	\checkmark		
7.	Should a patient safety issue arise, appropriate action must be taken by the provider	\checkmark		
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.	V		
G	OC comments			
ad as en	quirement 1: Students will provide patient care only when they equate knowledge and skills. For clinical procedures, the stude sessed as competent in the relevant skills at the levels required vironments prior to treating patients (<i>Requirement Partly Met</i>) e panel acknowledged that the students, as trainee dental technician	nt shou in the	ld be pre-clini	cal

The panel acknowledged that the students, as trainee dental technicians, are not permitted to directly treat patients and any devices that are made by a dental technician are required to be biomechanically sound and subsequently must be reviewed and approved as clinically acceptable by a registered dentist.

However, the inspectors were concerned that, on numerous occasions, they identified students who had failed elements of practical work, thus rendering the device unfit for patient

use, but had ultimately passed the assessment by marking aggregation from other elements of the unit assessment. The panel agreed that, while a dentist will be ultimately responsible for ensuring the device is clinically acceptable, this approach to providing patient care could lead to an unfair learning experience, resulting in a student assuming they are making appropriate dental devices, when on balance this is not the case.

The panel was reassured that, on meeting representatives from the Manchester Metropolitan University (MMU) Centre for Academic Standards and Quality Enhancement (CASQE) team, the assurances given to require students to pass all elements of an assessment where clinical acceptability of a dental device and patient safety is concerned, would ensure patient safety is at the forefront of the programmes being delivered. The panel agreed that MMU must ensure all students are aware of their responsibilities to patient safety and review the assessment of a student's practical work, when marking aggregation is utilised, to ensure unsafe devices are not passed as clinically acceptable.

The panel was provided with evidence that during the first year of both the BSc and FdSc programmes, students are required to undertake modules including Introduction to Dental Technology, Introduction to Dental Materials Science and Introduction to Dental Laboratory Techniques. The panel agreed that on successful completion of these modules, students would have gained a basic knowledge and understanding of the key themes and techniques of the role of a dental technician.

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

The panel was informed that only students on the MMU BSc in dental technology programme come into contact with patients during their placement at the Manchester Dental Hospital. Students on the FdSc programmes in Liverpool and Birmingham do not have the opportunity to gain experience in a similar setting.

The BSc students from MMU act as observers whilst undergraduate dental students carry out clinical treatments at Manchester Dental Hospital. The students are then given the opportunity to undertake the laboratory work, as part of the patients' treatment programme. All patients receiving treatment at the dental hospital are required to give consent that they are being treated by students and the panel was provided with evidence from Manchester Dental Hospital that this takes place.

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*)

The panel was satisfied that the facilities for students to undertake their practical experience at MMU, the City of Liverpool College and Birmingham Metropolitan College meet this requirement. In addition to this, students on the BSc programme who undertake their practice placement at the Manchester Dental Hospital are provided with an induction prior to attending the placement.

The panel understands that the use of practice placements at Birmingham Metropolitan College is still in its infancy and was pleased to see, during the examination inspection, that the programme leads were making progress with providing placements for students in future cohorts. Manchester Metropolitan University and Birmingham Metropolitan College must ensure that all practice placements for students on the FdSc programme are undertaken in a safe and appropriate environment and keep an accurate and contemporaneous record of this.

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*)

The panel was satisfied that the supervision the students receive in the on-site facilities at MMU, Birmingham Metropolitan College and the City of Liverpool College was appropriate at the time of the inspections. During the inspections the panel were given the opportunity to meet students at all three providers who confirmed that help and support was readily available when needed. In addition to this, when the BSc students undertake their placements at the Manchester Dental Hospital, supervision is provided by the BDS and hospital clinical and technical staff, should any issues arise.

The panel agreed, as noted in Requirement 3, that as the programme leads at Birmingham Metropolitan College further develop their use of practice placements, due attention should be given to ensuring an appropriate level of supervision is provided to students. Manchester Metropolitan University and Birmingham Metropolitan College must ensure that the supervision of students during their placements is of an appropriate level according to the student's stage of development.

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

The panel was provided with, and satisfied by, the evidence provided from Manchester Metropolitan University, that all supervisory staff members involved in the BSc and FdSc programmes who are required to teach practical aspects of the courses have appropriate GDC registration.

In addition to this, the panel was satisfied that when the BSc students undertake their practice placements at the Manchester Dental Hospital they are supervised by registered NHS or University of Manchester staff members.

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 Met)*

When students start either the BSc or FdSc programmes, they are provided with a pack of information, which includes details on the GDC's 'Principles of Raising Concerns' document. In addition to this, the student handbook provides details of where to find fitness to practice information on the GDC's website.

The panel was also informed that as part of the modules Principles of Dental Technology and Dental Biosciences and Professionalism, which both the BSc and FdSc students are required to complete, students are taught about the importance of raising concerns. This information is also made available on the Moodle website, which students have access to.

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

As noted above in Requirement 1, the panel acknowledged that the students, as trainee dental technicians, are not permitted to directly treat patients and any devices that are made by a dental technician are required to be biomechanically sound and subsequently must be reviewed and approved as clinically acceptable by a dentist. The panel, therefore, appreciates that it is highly unlikely that the education providers would be required to manage a patient safety issue relating to the dental technology programmes.

The panel was reassured that, in the event of a patient safety issue arising while a BSc student is undertaking their practice placement at the Manchester Dental Hospital, there were appropriate mechanisms of communication to ensure that the programme leads at Manchester Metropolitan University would be informed of any issues.

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 panel was provided with evidence of the providers' fitness to practise policy in the form of the Institutional Policy of Professional Suitability. The panel was satisfied that this policy would ensure any student fitness to practise issue would be managed appropriately. In addition to this, all students are provided with details of the GDC's Student Fitness to Practise Guidance in the student handbook and on the online Moodle system.

Actions		
Req. Number	Actions for the provider	Due date (if applicable)
1	Manchester Metropolitan University must ensure all students are aware of their responsibilities to patient safety and review the assessment of a student's practical work, when marking aggregation is utilised, to ensure unsafe devices are not passed as clinically acceptable.	Update to be provided during the 2016 programme re-inspection
3	Manchester Metropolitan University and Birmingham Metropolitan College must ensure that all practice placements for students on the BSc and FdSc programme are undertaken in a safe and appropriate environment and keep an accurate and contemporaneous record of this.	Update to be provided during the 2016 programme re-inspection
4	Manchester Metropolitan University and Birmingham Metropolitan College must ensure that the supervision of students during their placements is of an appropriate level according to the student's stage of development.	Update to be provided during the 2016 programme re-inspection

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 Not met 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	✓	
 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		
 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 panel had significant concerns that the framework that is currently in place at Manchester Metropolitan University, as the awarding body, to manage the franchise FdSc dental technology programmes at the City of Liverpool College and Birmingham Metropolitan College was inadequate. The panel was concerned that, historically and at the time of the programme inspection, there was a severe lack of clarity as to how any issues or problems relating to the delivery of the programme in Liverpool or Birmingham would be reported to the programme leads at Manchester Metropolitan University. The panel noted that not only was there a lack of evidence provided to the panel as to how quality management concerns at the franchise colleges would be escalated, this sentiment was echoed by the programme leads in both Liverpool and Birmingham. The panel agreed that this hands-off approach to quality management of the partner colleges was not viable and Manchester Metropolitan University must review the quality management framework for its foundation degree programmes to ensure there is a clear and workable mechanism for managing these programmes.

One main area of concern among the panel members was the near complete lack of communication between the programme leads at Manchester Metropolitan University and the partner colleges in Liverpool and Birmingham. The panel was informed by the staff in Liverpool and Birmingham that there can be significant lapses of time between any communications from MMU, raising the concern that if there were areas of concern regarding the running of the programmes, MMU, as the awarding body, would not be aware of them. The panel was pleased to be informed by the franchise colleges that since the initial GDC programme inspection at the start of 2015, there has been an improvement in communication, however the panel agreed that Manchester Metropolitan University must continue to develop communication between the providers to ensure there is an open channel of communication for the prompt resolution of any issues or concerns.

The panel was satisfied that the quality management framework and processes that are currently in place at Manchester Metropolitan University to manage its own BSc dental technology programme were appropriate and would ensure that the School is able to act on any concerns with the running of the programme in a timely fashion. The panel agreed that from the evidence provided, there were sufficient processes in place to manage both major and minor changes to the programme. The panel also agreed that the Centre for Academic Standards and Quality Enhancement (CASQE) provides a good tool for the School to use to ensure its policies and procedures are accurate and work efficiently. However, the panel felt that Manchester Metropolitan University should make better use of the resources it has to hand in the form of CASQE, to review the quality management framework concerns regarding the partner colleges, as noted above.

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

The panel was provided with evidence of a number of policies and procedures, maintained by Manchester Metropolitan University that ensures there is a quality management framework for practice placements that are run by the university. The panel was provided with copies of the Institute Code of Practice on Placement Learning, Placement Health and Safety Assessment and guidance for employers providing the practice placement. In addition to this, the panel was given examples of letters that are sent to employers and record logs of the placement, which the student must complete as part of the programme. The panel was satisfied that the quality assurance of placements for the BSc dental technology students at MMU was sufficient.

The panel appreciates that practice placements for FdSc students at Birmingham Metropolitan College are a recent addition to the programme, following the initial GDC inspection visits and the panel is pleased that the School is making progress in developing practice placements to ensure students get sufficient practical experience during the programme. However, the panel was concerned that was limited quality assurance of the current placements and the quality assurance that currently takes place appeared to be on an informal basis. The panel agreed that both Manchester Metropolitan University and Birmingham Metropolitan College must ensure that there is a formal and rigorous system in place to quality assure placements for the foundation degree students.

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

The panel was reassured, as noted above in Requirement 9, that there are sufficient quality management processes in place at Manchester Metropolitan University to ensure that any problems that are identified with the running of the BSc in dental technology programme would be addressed in a timely fashion. The panel acknowledged that the oversight and guidance provided by the Centre for Academic Standards and Quality Enhancement (CASQE) ensured that the quality management framework would be followed.

However, as noted above, the panel was concerned that, at present, the quality management framework does not appear to sufficiently encompass the FdSc dental technology programmes that are provided at the City of Liverpool College and Birmingham Metropolitan College. The panel was also concerned that the poor communication between MMU and the partner colleges renders any quality management framework ineffective. The panel agreed that the programme leads could utilise the resources available at CASQE to ensure guidance and best practice on managing quality management issues are dealt with in an appropriate timeframe. Manchester Metropolitan University, the City of Liverpool College and Birmingham Metropolitan College must ensure there is an appropriate quality management framework in place to insure problems are addressed as soon as possible.

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 panel acknowledged that Manchester Metropolitan University has not yet been required to inform the GDC due to a serious threat to students achieving the learning outcomes through the programme and agreed that in the event of such a situation, CASQE would be in a position to provide advice on any next steps.

The panel also agreed with the School's acknowledgement that it would be appropriate to develop a process and guidelines for use at a local level, should a serious threat to the programme be identified. In addition to this, the panel agreed that the Manchester Metropolitan University must ensure that a process and guidance is developed for use at a local level and for the foundation degree programmes, to enable the GDC to be informed of any serious threats to students achieving the learning outcomes.

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

The panel was informed that there are a number of mechanisms through which both internal and external quality assurance at Manchester Metropolitan University is provided. At a programme level, the School is required to comply with the Continuous Improvement Plan, which is discussed at each Programme Committee meeting and monitors the performance of the programme. The panel was provided with a copy of the latest Continuous Improvement Plan from January 2015. At a unit level, unit leaders are required to complete a CMI4 form at the end of each academic year. This form contains unit performance data, a summary of feedback from institutional surveys, any identified good practice, as well as reporting issues that have arisen, which can then be included in the Continuous Improvement Plan.

Feedback on the programmes is also provided via the Staff Student Liaison Committee, which meets each term. The panel was pleased to be informed that there are student representatives from the BSc dental technology programme and FdSc programmes, however the panel was unclear how much influence the students at the City of Liverpool College and Birmingham Metropolitan College would have, with consideration to the lack of communication between programme leads at the three institutions. In future, the panel agreed that

Manchester Metropolitan University must actively seek student feedback from the BSc and FdSc dental technology programmes.

The panel was informed that, in addition to the internal quality assurance procedures, the School utilises External Examiners, with whom the panel had an opportunity to interview during the inspection process.

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 Met*)

During the inspection process the panel was provided with evidence of Manchester Metropolitan University's Institutional Code of Practice on External Examining, the External Examiner Handbook and were given an overview of External Examining at MMU. The university code of practice details the roles and responsibilities of an External Examiner and is in line with QAA guidelines.

The panel noted that External Examiners of the BSc and FdSc programmes moderate examination papers, interview students, review practical assessment work and provide feedback at the examination board. External Examiners are also required to provide written reports, of which the panel was provided examples. The panel was pleased to be informed that, in terms of transparency, all External Examiner reports are made available on the Moodle website for students to review.

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

As noted in Requirement 13, Manchester Metropolitan University utilises a Student Staff Liaison Committee, where concerns from student representatives can be raised. The panel was provided with minutes of recent Staff Student Liaison Committee meetings to evidence this.

As discussed further in Standard 3 of this report, during the course of the inspection of the dental technology programmes at MMU, the City of Liverpool College and Birmingham Metropolitan College, the GDC was required to write to the programme leads to request that the students provide evidence of additional practical work to demonstrate the attainment of practical experience in manufacturing fixed, removable and orthodontic dental devices. The panel was satisfied that both Manchester Metropolitan University and the City of Liverpool complied with the GDC's request for additional practical work.

However, the panel was sincerely disappointed that staff at Birmingham Metropolitan College failed to grasp the importance of this request and did not provide the requested additional practical work during the examination inspection visit. The panel was required to wait until the Examination Board meeting to see this work. The panel agreed that this approach from Birmingham Metropolitan College evidenced both a lack of appreciation to act upon concerns raised on the quality of education and assessment and a lack of oversight from Manchester Metropolitan University to ensure that all providers of the dental technology programmes complied with the request from the GDC. The panel agreed that Birmingham Metropolitan College must develop processes to ensure that all concerns raised on the quality of education and assessment and a lack of the dental technology of education and assessment are acted upon. Additionally, Manchester Metropolitan University must ensure that they have oversight of, and act upon, concerns raised at the providers of the FdSc dental technology programmes.

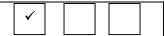
Actions			
Req. Number	Actions for the provider	Due date (if applicable)	
9	Manchester Metropolitan University must review the quality management framework for its foundation degree programmes to ensure there is a clear and workable mechanism for managing these programmes.	Update to be provided during the 2016 programme re- inspection	
9	Manchester Metropolitan University must continue to develop communication between the colleges to ensure there is an open channel of communication for the prompt resolution of any issues or concerns.	Update to be provided during the 2016 programme re- inspection	
9	Manchester Metropolitan University should make better use of the resources it has to hand in the form of CASQE, to review the quality management framework concerns regarding the partner colleges	Update to be provided during the 2016 programme re- inspection	
10	Manchester Metropolitan University and Birmingham Metropolitan College must ensure that there is a formal and rigorous system in place to quality assure placements for the foundation degree students.	Update to be provided during the 2016 programme re- inspection	
11	Manchester Metropolitan University, the City of Liverpool College and Birmingham Metropolitan College must ensure there is an appropriate quality management framework in place to insure problems are addressed as soon as possible.	Update to be provided during the 2016 programme re- inspection	
12	Manchester Metropolitan University must ensure that a process and guidance is developed for use at a local level and for the foundation degree programmes, to enable the GDC to be informed of any serious threats to students achieving the learning outcomes.	Update to be provided during the 2016 programme re- inspection	
13	Manchester Metropolitan University must actively seek student feedback from the BSc and FdSc dental technology programmes.	Update to be provided during the 2016 programme re- inspection	

15	Birmingham Metropolitan College must develop processes to ensure that all concerns raised on the quality of education and assessment are acted upon	Update to be provided during the 2016 programme re- inspection
15	Manchester Metropolitan University must ensure that they have oversight of, and act upon, concerns raised at the providers of the FdSc dental technology programmes.	Update to be provided during the 2016 programme re- inspection

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		\checkmark	
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 .		\checkmark	
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		\checkmark	
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		\checkmark	
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		\checkmark	

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*)

During the course of the programme inspection, the panel became increasingly concerned by the lack of evidence to show that students on the BSc and FdSc programmes at Manchester Metropolitan University and Birmingham Metropolitan College would adequately meet the GDC learning outcomes, specifically relating to their practical work and the manufacture of dental devices. The panel was not provided with sufficient evidence from Manchester and Birmingham that the students had produced or had been assessed at a level sufficient to indicate they were safe beginners, under the Manufacture of Custom Made Dental Devices learning outcomes section of *Preparing for Practice*. In addition to this, the panel was informed by several student groups across the MMU and Birmingham programmes that they had concerns throughout the duration of their courses that there was not enough practical teaching, leading to a significant lack of confidence amongst the student body and a general feeling that there was a risk that a number of students would not reach the threshold of a safe beginner by the time they graduate.

Further to the discussions held between staff members and students, the panel had specific concerns regarding the following learning outcomes being suitably assessed:

- 1.14.1 Design, manufacture, assess and provide biomechanically sound removable devices
- 1.14.2 Design, manufacture, assess and provide biomechanically sound fixed prostheses
- 1.14.3 Design, manufacture, assess and provide biomechanically sound orthodontic appliances

And:

1.15.1 Repair custom made dental devices to meet the needs of the patient

1.15.2 Repair and modify custom made dental devices

As a consequence of these concerns, the GDC wrote to the Head of School at Manchester Metropolitan University on 6th March 2015 to request that, during the examination inspection visits, the panel would be provided with evidence that all final year students, from the BSc and FdSc programmes, had produced the following:

- One full denture made and assessed to a clinically acceptable standard with supporting documents
- One partial denture made and assessed to a clinically acceptable standard with supporting documents
- One crown or bridge made and assessed to a clinically acceptable standard with supporting documents
- One orthodontic appliance made and assessed to a clinically acceptable standard with supporting documents

As noted in Requirement 15, both Manchester Metropolitan University and the City of Liverpool College were able to provide this additional evidence of student performance during the examination inspection visits, enabling the panel to be satisfied that the students at these providers had produced and gained practical experience in the above areas of dental technology. The panel was, however, disappointed that Birmingham Metropolitan College failed to provide the additional evidence for the examination inspection visit, with no clear explanation for the delay. The panel was concerned that, as noted previously, this demonstrates a lack of communication and management from Manchester Metropolitan University, as the awarding body, to ensure each of the partner colleges complies with regulatory body. The panel agreed that in future, Manchester Metropolitan University are able to demonstrate attainment across the full range of learning outcomes and this must be evidenced.

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 acknowledged by programme staff at Manchester Metropolitan University in their preinspection documentation, the School currently utilises an informal method for planning the assessment strategy for each unit at the beginning of the academic year. As part of the current process, a discussion is held amongst curriculum staff before the academic year begins, during which the assessments for the unit are planned and in the event that any changes are required following the previous year's assessments, these are submitted in line with the minor change process, as noted in Requirement 9. The panel was informed that when assessment dates have been finalised they are published on the Moodle website for students to access. The panel agreed that Manchester Metropolitan University must continue to develop a formal process for the planning and management of assessments on the BSc and FdSc dental technology programmes.

On completion of an assessment or when a piece of coursework has been submitted, the marks are uploaded onto Moodle and also the university's QLS database, which is the management software that records student marks and generates data for the exam boards. The panel was informed that MMU has a commitment to mark assessments and return feedback within four weeks.

The panel did, however, have concerns regarding the timing of practical coursework submissions. During the examination inspection at Birmingham Metropolitan College, the inspectors were informed that elements of the practical coursework were not due to be submitted until after the final practical examination had taken place. The panel felt that this was an unfair approach as students were not able to learn from any mistakes they had made through their coursework in order to remedy this for the final assessment. The panel agreed that Manchester Metropolitan University must review the process for setting coursework and practical examination dates across all its dental technology programmes.

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 Met)*

During the inspection the panel was provided with evidence of the range of assessments that are currently utilised for both the BSc and FdSc dental technology programmes at Manchester Metropolitan University, the City of Liverpool College and Birmingham Metropolitan College. The panel agreed that the range of methods of assessments used were appropriate to the learning outcomes. The panel was satisfied that the oversight from the Centre for Academic

Standards and Quality Enhancement would ensure that assessments are routinely monitored, quality assured and developed.

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*)

The panel was concerned that across Manchester Metropolitan University, the City of Liverpool College and Birmingham Metropolitan College, there was a distinct difference in the exposure a student would have when undertaking practical work. The panel was impressed with the approach taken in Liverpool during the part-time FdSc programme where all students are required to be employed in a dental laboratory during their studies. This method of learning enabled the students to learn new skills during their time at the college and then have the opportunity to practice these skills in their work placement. The view of the panel was reinforced during meetings with the students in Liverpool, who were, overall, satisfied with the amount of practical work they were undertaking on the course.

The panel was more concerned with the experience students were gaining in Manchester and, more acutely, Birmingham. The inspectors agreed that enabling students at MMU to undertake a work placement at the Manchester Dental Hospital not only ensured the students had a practical hands-on experience preparing dental devices for patients attending the hospital, but it also helped foster better team working between the trainee dental technicians and other members of the dental team.

The panel also had concerns with the approach taken in Birmingham, where the inspectors were informed that it is possible for a student to go through the entire programme without making a dental device for a patient and only having used simulated patient models. The panel was pleased to be informed during the examination inspection in Birmingham that the programme leads had started researching practice placements for their students for future cohorts. The panel agreed that Manchester Metropolitan University must ensure all students have an equal opportunity to gain practical experience, regardless of the education provider. In addition to this the panel agreed that Birmingham Metropolitan College must continue to work towards implementing practical placements for their foundation degree students.

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

The panel understands that Manchester Metropolitan University has a commitment to provide feedback to students following submission of summative work within four weeks. In addition to this, the university also has an Institutional Code of Practice on Feedback, a copy of which was made available to the panel.

While the panel agreed that the university has made a positive step by producing the commitment and code of practice, the inspectors felt that in light of the average rating from students on feedback in the latest internal student survey, coupled with a lack of evidence provided to the panel to show the School is complying with their commitment and code of practice, this requirement can only be partly met. The panel also considered the lack of reference to student reflection as a concern. The panel agreed that enabling students to formally reflect on their performance would be of benefit. Manchester Metropolitan University must ensure feedback is provided in a timely fashion and ensure students on both the BSc and FdSc programmes have an opportunity to reflect on their performance.

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 Partly Met*)

The panel was satisfied that all members of staff who have a role in teaching practical elements of the BSc and FdSc programmes across the three education providers were registered with the GDC.

The inspectors were concerned, however, with the lack of evidence detailing how examiners and assessors were trained and calibrated in advance of the practical assessments. The panel agreed that Manchester Metropolitan University must ensure all staff members involved in the assessment of students receive training and undertake calibration in advance of practical assessments.

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 Met*)

The panel was provided with copies of recent reports from the two External Examiners who were responsible for the BSc and FdSc dental technology programmes awarded by Manchester Metropolitan University. The panel was satisfied that the External Examiners are given the opportunity to review examination papers, review examination scripts and coursework and subsequently provide a verbal report to the examination board and a written annual report, containing their findings. The panel agreed that the School and External Examiners followed the university's guidelines appropriately.

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

The panel was concerned to see during the assessment of practical work that it is was possible for a student to produce a potentially unsafe dental device, however pass overall due to the marking aggregation that was involved. The panel was informed that, when producing a dental device, each individual part of the manufacturing process was given a mark, with no overall global score to determine whether or not the piece of work that had been produced was of a biomechanically sound nature or fit for patient use. The panel was concerned that this approach to marking could lead a student to believe, as they had passed the assessment, that the dental device was fit for use. The panel considered this to be an unfair and potentially unsafe approach to the marking of assessments.

Following the discovery of this area of concern, the panel met representatives from the university's Centre for Academic Standards and Quality Enhancement (CASQE), who reassured the inspectors that for future assessments of practical work where patient safety is of concern, an overall mark of clinical suitability will be awarded. In the event that a student produces a device that does not meet this new criteria, the student will fail the assessment. The panel agreed with this approach and that Manchester Metropolitan University must ensure that the marking aggregation on its BSc and FdSc programmes is not used to the detriment of patient safety.

Despite the concerns raised above, that panel was pleased to see the developments that had been made with the marking criteria used in the final practical assessments. The panel felt that, providing the issue of ensuring a global clinical suitability mark was addressed and adequate training is provided in the use of the documentation, the marking criteria was of a good quality and ensured clarity for all assessors.

Requirement 24: Where appropriate, patient/peer/customer feedback should contribute to the assessment process (*Requirement Partly Met*)

The panel understands that external stakeholders do not currently have a direct involvement in the assessment process, however Manchester Metropolitan University does gain general feedback from dental laboratory employers via the Dental Advisory Committee, of which the panel was provided with minutes from recent meetings. While the panel acknowledged that dental technicians have a limited involvement with patients, they agreed that in future, Manchester Metropolitan University must work to ensure peer and customer feedback contributes to the assessment process for students on the BSc and FdSc programmes.

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

The panel agreed that while multiple samples of a student's performance were being taken, they were concerned about the reliability of some assessment conclusions, as noted above in Requirement 23. As an example, a student has the ability to undertake a practical assessment and potentially manufacture a dental device which is not fit for patient use. However, because of the making aggregation system that is currently employed by Manchester Metropolitan University, a student may eventually pass this assessment, despite producing an unfit device.

The panel felt that there was a risk that if multiple samples of a student's performance were taken, while using a marking criteria that could mislead a student regarding the safety or viability of the devices they have produced, the culmination could be an invalid or unreliable assessment conclusion, not reflecting the true performance of the student. The panel agreed that Manchester Metropolitan University must ensure that all assessment decisions are reliable by reviewing the assessment marking criteria currently used.

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 Met)*

During the programme inspection the panel was provided with a copy of the School of Healthcare Science Assessment Criteria, of which all students and staff members are provided copies of at the beginning of each academic year. The panel was satisfied that the criteria provided in this document clearly demonstrates to both students and staff what standard is required.

The panel was also provided with copies of the programme handbook in addition to each of the unit handbooks. The panel was satisfied that this additional information would ensure students are aware of what is required during each unit and what the end of unit assessments will consist of.

Actions			
Req. Number	Actions for the provider	Due date (if applicable)	
16	Manchester Metropolitan University must ensure that students on all dental technology programmes awarded by the University are able to demonstrate attainment across the full range of learning outcomes and this must be evidenced.	Update to be provided during the 2016 programme re- inspection	

17	Manchester Metropolitan University must continue to develop a formal process for the planning and management of assessments on the BSc and FdSc dental technology programmes.	Update to be provided during the 2016 programme re- inspection
17	Manchester Metropolitan University must review the process for setting coursework and practical examination dates across all its dental technology programmes.	Update to be provided during the 2016 programme re- inspection
19	Manchester Metropolitan University must ensure all students have an equal opportunity to gain practical experience, regardless of the education provider.	Update to be provided during the 2016 programme re- inspection
19	Birmingham Metropolitan College must continue to work towards implementing practical placements for their foundation degree students.	Update to be provided during the 2016 programme re- inspection
20	Manchester Metropolitan University must ensure feedback is provided in a timely fashion and ensure students on both the BSc and FdSc programmes have an opportunity to reflect on their performance.	Update to be provided during the 2016 programme re- inspection
21	Manchester Metropolitan University must ensure all staff members involved in the assessment of students receive training and undertake calibration in advance of practical assessments.	Update to be provided during the 2016 programme re- inspection
23	Manchester Metropolitan University must ensure that the marking aggregation on its BSc and FdSc programmes is not used to the detriment of patient safety.	Update to be provided during the 2016 programme re- inspection
24	Manchester Metropolitan University must work to ensure peer and customer feedback contributes to the assessment process for students on the BSc and FdSc programmes.	Update to be provided during the 2016

		programme re- inspection
25	Manchester Metropolitan University must ensure that all assessment decisions are reliable by reviewing the assessment marking criteria currently used.	Update to be provided during the 2016 programme re- inspection

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	_	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 b guidance relating to equality and diversity (<i>Requirement Partly Met</i>	t)			
The panel was provided with evidence of the Equality and Diversity Polic Manchester Metropolitan University. In addition to this the panel was pro the 2013 MMU Equality and Diversity Report.				
During meetings with staff members responsible for equality and diversit of Liverpool College and Birmingham Metropolitan College, the panel wa college has local policies and procedures to ensure current legislation ar guidance are followed.	as infoi	rmed that e		
While the panel was reassured that, on discussion with the franchise coll equality and diversity policies in place, they remained concerned that the lack of oversight from MMU, as the awarding body, that each franchise is remain abreast and up-to-date with current legislation and best practice. that Manchester Metropolitan University must ensure that all franchise in qualifications for adhere to current legislation and best practice relating to diversity.	ere wa nstituti The p nstitutio	s a distinct on would banel agre ons it awar	t ed	
Requirement 28: Staff will receive training on equality and diversity appraisal mechanisms will include this (<i>Requirement Partly Met</i>)	, deve	lopment a	and	
The panel was pleased to be informed, during meetings in Manchester, Birmingham that staff members at the three education providers deliver technology programmes are all provided with equality and diversity train provided by the home education institution, rather than an overarching tr is delivered and monitored by MMU, the awarding body.	ng the ing. T	dental his training		
While the panel was pleased that this is currently taking place, the panel noted above, that there has been a lack of oversight from MMU with reg the programmes, resulting in the risk that in the event that the equality a provided by the franchise colleges is insufficient, the awarding body will	ards to nd dive	the runnii ersity traini	ng of ing	

The panel agreed that Manchester Metropolitan University must ensure that all franchise institutions it awards qualifications for provides adequate training on equality and diversity.

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 Met*)

During the course of both the FdSc in dental technology and the BSc in dental technology, all students are required to undertake the module Dental Biosciences and Professionalism.

As part of this module, students are taught about ethics in dental, medical and scientific practice discrimination acts, confidentiality, data protection, professional indemnity, liability and responsibility. Students are assessed via both coursework and an online assessment for this module. The panel agreed that on completion of this module students would understand the importance of compliance with equality and diversity law and principles.

Actions		
Req. Number	Actions for the provider	Due date (if applicable)
27	Manchester Metropolitan University must ensure that all franchise institutions it awards qualifications for adhere to current legislation and best practice relating to equality and diversity.	Update to be provided during the 2016 programme re- inspection
28	Manchester Metropolitan University must ensure that all franchise institutions it awards qualifications for provides adequate training on equality and diversity.	Update to be provided during the 2016 programme re- inspection

Summary of Actions

Req.	Actions for the provider	Observations Response from the Provider	Due date (if applicable)
		Provider to record observations in response to actions here	
1	Manchester Metropolitan University must ensure all students are aware of their responsibilities to patient safety and review the assessment of a student's practical work, when marking aggregation is utilised, to ensure unsafe devices are not passed as clinically acceptable.	Variation to regulations sought and approved to ensure all sub-elements of practical work in the final practical unit are passed. Only students achieving this outcome PLUS successful completion of all other aspects of the programme will be forwarded to the GDC for consideration of registration.	Update to be provided during the 2016 programme re- inspection
3	Manchester Metropolitan University and Birmingham Metropolitan College must ensure that all practice placements for students on the BSc and FdSc programme are undertaken in a safe and appropriate environment and keep an accurate and contemporaneous record of this.	BMET using locally developed protocol and the MMU H&S Tripartite agreement forms and risk management action plan forms for students undertaking the work based learning unit 6H5Z1023 in 2015/2016. MMU to update records for Manchester Dental School placements.	Update to be provided during the 2016 programme re- inspection
4	Manchester Metropolitan University and Birmingham Metropolitan College must ensure that the supervision of students during their placements is of an appropriate level according to the student's stage of development.	BMET to produce a document defining minimum levels of supervision.	Update to be provided during the 2016 programme re- inspection
9	Manchester Metropolitan University must review the quality management framework for its foundation	CASQE to undertake a review of the programmes documented system in summer 2016.	Update to be provided during

9	 degree programmes to ensure there is a clear and workable mechanism for managing these programmes. Manchester Metropolitan University must continue to develop communication between the colleges to ensure there is an open channel of communication for 	Protocol established for lines of communication to be developed. Regular meetings between MMU and partner colleges established.	the 2016 programme re- inspection Update to be provided during the 2016
	the prompt resolution of any issues or concerns.	and partner colleges established.	programme re- inspection
9	Manchester Metropolitan University should make better use of the resources it has to hand in the form of CASQE, to review the quality management framework concerns regarding the partner colleges	CASQE to undertake review as described above. Meetings have taken place with CASQE in relation to development of action plan in response to last GDC inspection.	Update to be provided during the 2016 programme re- inspection
10	Manchester Metropolitan University and Birmingham Metropolitan College must ensure that there is a formal and rigorous system in place to quality assure placements for the foundation degree students.	BMET to establish and implement protocol to QA placements. BMET to update MMU with details of placements.	Update to be provided during the 2016 programme re- inspection
11	Manchester Metropolitan University, the City of Liverpool College and Birmingham Metropolitan College must ensure there is an appropriate quality management framework in place to insure problems are addressed as soon as possible.	Partner colleges to submit UIPs and CIPs in accordance with MMU quality management framework. These will be approved at the relevant Programme Committee meeting. Link tutors to act on student issues from their staff student liaison committees and where applicable resolve prior to the next scheduled Programme Committee. Report to School Programme Committee. Outcomes to be fed back to students to confirm closure of loop.	Update to be provided during the 2016 programme re- inspection
12	Manchester Metropolitan University must ensure that a process and guidance is developed for use at a local level and for the foundation degree programmes, to enable the GDC to be informed of any serious threats to students achieving the learning outcomes.	Review information from SSLC's, unit improvement plans, continuous improvement plans and NSS to provide data regards threats to students meeting learning outcomes. Next review point is School Programme Committee. Alongside this there will be the development of a protocol for	Update to be provided during the 2016 programme re- inspection

		communication to the GDC in these circumstances.	
13	Manchester Metropolitan University must actively seek student feedback from the BSc and FdSc dental technology programmes.	AT MMU recruitment of student representatives begins at induction week. Training is provided by the Student Union. Student's reps attend the SSLC and elect a representative to attend the programme committee. Partner colleges will provide documentation as to the processes involved at their institutes re. obtaining the student voice. An opportunity will be made available for students at all institutions to meet with the External Examiners.	Update to be provided during the 2016 programme re- inspection
15	Birmingham Metropolitan College must develop processes to ensure that all concerns raised on the quality of education and assessment are acted upon	BMET are developing protocols of their processes of raising concerns on the quality of education and assessment.	Update to be provided during the 2016 programme re- inspection
15	Manchester Metropolitan University must ensure that they have oversight of, and act upon, concerns raised at the providers of the FdSc dental technology programmes.	See 15 above. Additionally, a protocol establishing lines of communication between partner colleges and MMU has been developed. Finally, partner colleges to submit UIPs and CIPs to MMU for approval.	Update to be provided during the 2016 programme re- inspection
16	Manchester Metropolitan University must ensure that students on all dental technology programmes awarded by the University are able to demonstrate attainment across the full range of learning outcomes and this must be evidenced.	 Attainment of full range of learning outcomes will be demonstrated by the combination of the programmes' dental laboratory practical units and work based learning opportunities. In addition to the programmes' practical units: (a) BMET FdSc students will undertake the work based learning unit 6H5Z1023 delivered by placements offered by BMET. 	Update to be provided during the 2016 programme re- inspection

		 (b) CoLC FdSc students study part-time mode and undertake the work based learning unit 6H5Z1023 working in their employer's laboratory. (c) MMU BSc students in-house practical unit is supported by undertaking patient work at the Manchester dental school and a 'preparing for practice' module at MMU. 	
17	Manchester Metropolitan University must continue to develop a formal process for the planning and management of assessments on the BSc and FdSc dental technology programmes.	A flowchart has been produced to illustrate the planning and management of assessments.	Update to be provided during the 2016 programme re- inspection
17	Manchester Metropolitan University must review the process for setting coursework and practical examination dates across all its dental technology programmes.	Dates for submission of CW are decided prior to the start of the academic year ensuring no bunching wherever possible. Exam dates are set centrally but with the proviso that there are no clashes between theory and practical exams. Partner colleges adopt MMU theory exam dates. Some variation in CoLC practical exam dates due to p/t students.	Update to be provided during the 2016 programme re- inspection
19	Manchester Metropolitan University must ensure all students have an equal opportunity to gain practical experience, regardless of the education provider.	Please see requirement 16 above.	Update to be provided during the 2016 programme re- inspection
19	Birmingham Metropolitan College must continue to work towards implementing practical placements for their foundation degree students.	BMET have arranged placements for students.	Update to be provided during the 2016 programme re- inspection
20	Manchester Metropolitan University must ensure feedback is provided in a timely fashion and ensure	At both MMU and partner colleges evidence will be provided that provision of feedback complies with institutional policies. With reference to practical	Update to be provided during the 2016

	students on both the BSc and FdSc programmes	work, each institution offers continual verbal	programme re-
	have an opportunity to reflect on their performance.	feedback on formative tasks prior to submission of summative coursework.	inspection
21	Manchester Metropolitan University must ensure all staff members involved in the assessment of students receive training and undertake calibration in advance of practical assessments.	A calibration meeting took place on the 15/2/16. Training has commenced as well.	Update to be provided during the 2016 programme re- inspection
23	Manchester Metropolitan University must ensure that the marking aggregation on its BSc and FdSc programmes is not used to the detriment of patient safety.	A variation to regulations of assessment now ensures that all sub elements of coursework and exams must be passed in the final practical unit.	Update to be provided during the 2016 programme re- inspection
24	Manchester Metropolitan University must work to ensure peer and customer feedback contributes to the assessment process for students on the BSc and FdSc programmes.	Placement providers (for BMET and CoLC) to be invited to join dental advisory panel to be held 16/3/16. Agenda will include 'Assessment Planning' and 'Feedback on Student performance in the Workplace	Update to be provided during the 2016 programme re- inspection
25	Manchester Metropolitan University must ensure that all assessment decisions are reliable by reviewing the assessment marking criteria currently used.	A review session involving all partners was held on 11/1/16 and marking criteria further discussed at a triangulation meeting held on the 15/2/16.	Update to be provided during the 2016 programme re- inspection
27	Manchester Metropolitan University must ensure that all franchise institutions it awards qualifications for adhere to current legislation and best practice relating to equality and diversity.	Partner institutions have provided evidence regarding institutional policies on E&D training procedures.	Update to be provided during the 2016 programme re- inspection
28	Manchester Metropolitan University must ensure that all franchise institutions it awards qualifications for provides adequate training on equality and diversity.	See above. Additionally, it will be investigated whether MMU E&D team can verify that training at partner institutions is adequate.	Update to be provided during the 2016 programme re- inspection

Observations from the provider on content of report

Thank you for the final report of the above inspection. The university are pleased to see that all Standards are met or partially met. Equally, the university are pleased that matters of accuracy as identified in response to your draft report have been rectified. The summary of the report highlights a number of areas that require improvement – I am pleased to confirm that initiatives have been put into place that will mitigate the concerns raised as described below.

Lack of oversight/communication with partner colleges

The School of Healthcare Science has instigated monthly meetings with our partner colleges to ensure that there is sustained communication between them and ourselves. These meetings are minuted and appropriate actions identified and addressed. Furthermore, we have developed a protocol that has been shared with our partner colleges. This details how programme related issues should be reported, and if necessary, escalated.

Assessment of practical activities

The inspection team were concerned about the degree of compensation offered to students on the programme. The School are disappointed regarding the use of the term compensation – we consider the term aggregation of marks to be more appropriate. However, we accept the concerns raised and we have sought and obtained a variation to university assessment regulations that now require students to pass all elements of practical work within the appropriate unit for both Manchester students and those of our partner colleges.

Opportunities for practical experience

The School were pleased to read that the inspection team had no concerns regarding the practical experience of students at the City of Liverpool College. Similarly, the practical experience gained by Manchester students was identified as a valuable experience. In relation to

our second partner college – Birmingham Metropolitan College – we can confirm that appropriate work-placed learning is being sought for students.

In conclusion, the School would like to thank the inspectorate team for their observations and their accreditation of our 2015 cohort of graduates. The Programme Team look forward to subsequent inspections where the robustness of our interventions will be seen to further strengthen the quality of graduates emerging from this programme.

Recommendation to the GDC

The inspectors recommend that this qualification is sufficient for holders to apply for registration as a dental technician with the General Dental Council for this cohort only.