

INSPECTION REPORT

Education Provider / Awarding Body :	Liverpool University
Programme / Award / Qualification:	Bachelor in Dental Surgery (BDS)
Remit and Purpose:	Full inspection referencing the <i>Standards for Education</i> to determine continuing sufficiency of the award for the purpose of registration with the General Dental Council (GDC) as a dentist
Learning Outcomes:	<i>The First Five Years (Dentist)</i>
Programme Inspection Dates:	5 & 6 Nov 2012
Examination Inspection Dates:	18 March 2013 22 April 2013 28 & 29 May 2013 7 June 2013
Inspection Panel:	Philip Bunnell (Lay Member and Chair) Peter Heasman (Dentist) James Newton (Dentist) Fizan Tahir (Dentist)
GDC Staff:	Laura Harrison (Lead) Peter Butler
Outcome:	Recommended that the Liverpool University BDS programme remains sufficient for registration as a dentist

Inspection summary

Overall, the inspectors found the Liverpool University BDS to be a robust qualification, which produces graduates who are at the level of a 'safe beginner'. Students gain access to a wide patient mix and range of procedures in hospital, general dental practices and community dental services. The level of exposure to the diverse disciplines of dentistry is to be commended.

The mapping of the curriculum and assessments to the GDC learning outcomes within *The First Five Years* was not evident to the inspectors within the system used to monitor learner development (Longitudinal Integrative Foundation Training Undergraduate to Postgraduate Pathway or LIFTUPP). However, the inspectors had sight of the paper-based mapping and considered there to be appropriate use of a range of assessments and that each learning outcome is assessed in a variety of ways. The LIFTUPP system which is used by clinical staff within the Dental School facilitates well calibrated and triangulated longitudinal assessment of students and there are good levels of supervision in each of the clinics. Regular monitoring and 'progress checks' are effective in identifying students with developmental needs and result in targeted training where necessary.

There is generally sound internal and external quality assurance of the qualification with an effective quality management framework in place. Students reported that they are happy with most aspects of the programme and feel that there are useful mechanisms in place for providing feedback and addressing concerns. There is a strong commitment to ensuring students recognise the importance of patient safety and fitness to practise principles.

The graduate entry students are well integrated into the programme. These students enter the undergraduate programme in Year 2 after having completed an accelerated course which covers some of the areas covered in Year 1. The graduate entry students undertake additional study in Year 2 and by Year 3 both sets of students are at the same stage of learning.

Although the inspectors faced initial challenges in accessing, navigating and understanding LIFTUPP, these were resolved after being provided with various explanations and instructional 'YouTube' videos, which the External Examiners also indicated that they found useful. The inspectors recognised that LIFTUPP is not yet fully functional, however it already provides detailed information and grades relating to multiple treatment episodes for each student in Years 3-5. It is anticipated that once fully operational, LIFTUPP will become a comprehensive mechanism for tutors and students to review progress on both an individual student and cohort-wide basis.

A number of in-course assessments which do not feature on LIFTUPP were not considered at progress meetings or meetings to sign-up students to the final assessment and it was not evident where the marks for these assessments were recorded or reviewed.

The quality assurance of outreach placements was below the expected standard and this was recognised by the School. There was evidence that considerable clinical activity was gained in outreach, some of which appeared to contribute to progression decisions. The inspectors concluded that the School should apply the same rigour to the quality assurance of education and assessment to outreach as is applied within the School. In addition, the inspectors determined that the School should place greater reliance on clinical data gained from activity in outreach when determining students' progression.

The panel wishes to thank the staff, students, and external stakeholders involved with the BDS programme for their co-operation and assistance with the inspection.

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 Council of the GDC regarding the 'sufficiency' of the programme for registration as a dentist 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 Bachelor of Dental Surgery awarded by Liverpool University. The GDC publication *Standards for Education (version 1.0 November 2012)* was used as a framework for this inspection. This inspection forms part of a series of BDS inspections being undertaken by the GDC in 2012-2014.
8. The inspection comprised five visits. The first visit was carried out on 5 and 6 November 2012 and involved meetings with programme staff responsible for the management,

delivery and assessment of the programme and a selection of BDS students. The second and third visits involved attendance at the 'Clinical Assessment Panel' meetings parts 1 and 2, which took place on 18 March 2013 and 22 April 2013. A further visit on 28 and 29 May incorporated attendance at the final OSCE examination and meetings with the Head of School and Director of the BDS programme and on 7 June, members of the inspection panel attended the final Examination Board meeting.

9. The report contains the findings of the inspection panel across the five 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 University of Liverpool delivers and awards the BDS to undergraduate and graduate entry students. The annual intake is 60 to the undergraduate and 15 to the graduate entry programme. The duration of the undergraduate programme is five years and the School also runs a four year postgraduate pathway. The University of Liverpool also offers a Diploma in Dental Hygiene and Therapy. A BSc in Dental Hygiene and Therapy is temporarily 'on hold' whilst changes to the programme are made.
11. The BDS programme is non-modular and based on an integrated spiral structure. The programme has been designed with the focus on preparing the student for foundation training and independent practice. The programme aims to equip the student with the required underpinning knowledge, clinical experience and insight to practise as a 'safe beginner'. This is fundamentally achieved through the 'mapping' of programme aims, objectives, and learning outcomes, which are also mapped to the GDC learning outcomes contained within *The First Five Years*.
12. The teaching and most of the clinical training takes place within the Liverpool Dental School and Liverpool University Dental Hospital. Students attend a range of hospital clinics in Year 1, where they observe treatment and they treat patients in hospital clinics between the final term of Year 2 until the end of the programme. Students also undertake clinical activity outside of Liverpool University Dental Hospital. In Year 1, they deliver oral health education whilst on short community placements. In Years 4 and 5, students treat patients in both a general dental service (GDS) clinic and a community/salaried dental service (CDS/SDS) clinic, spending ten days in each over the course of a term. Students also attend consultant clinics at three other local hospitals. As part of the oral and maxillofacial surgery component, students observe patient treatment at University Hospital Aintree in Year 4 and 5. During their final year, students attend the Accident and Emergency department and the Ultrasound clinics at Royal Liverpool University Hospital and they attend Alder Hey Children's Hospital.
13. Students on the BDS programme are assessed clinically predominantly via longitudinal continuous assessment. Reviews of clinical progress are made via formative 'Clinical Development Monitoring Panel' (CDMP) meetings, which are held at regular intervals and at the summative 'Clinical Assessment Panel' (CAP) meetings. The CAP meetings act as a 'gateway' to the end of year examinations and the CAP in BDS 5 is part of the final year examination. A range of other assessment methods is used during the programme, and end of year examinations include objective structured clinical examinations (OSCEs), written papers consisting of 'extended matching items' (EMIs) 'single best answer questions' (SBAs) and 'short answer questions' (SAQs). Progression from one year to the next is dependent on successful completion of the assessments for any given year.

14. Liverpool Dental School have implemented a new IT programme entitled 'Longitudinal Integrative Foundation Training Undergraduate to Postgraduate Pathway' (LIFTUPP). The aim for the system, once fully operational, is to continuously and longitudinally monitor learner development with easily accessible academic and clinical performance data for both students and tutors. LIFTUPP is designed to map learning outcomes to assessment and delivery, in addition to providing a means by which to centrally record and calibrate the assessment of students' longitudinal clinical activity. LIFTUPP thus supports the delivery of the BDS programme as a central mapping, monitoring and recording system. LIFTUPP also provides students with a portfolio of clinical activity that they can take forward into foundation training.

Evaluation of Qualification against the *Standards for Education*

15. As stated above, the *Standards for Education* were used as a framework for this inspection. Consideration was given to the fact that the *Standards for Education* 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 was fully aware of this and the findings of this report should be read with this in mind.
16. 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.
17. The inspection panel used the following descriptors to reach a decision on the extent to which the BDS of Liverpool 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			
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Patients must be made aware that they are being treated by students and give consent	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. When providing patient care and services, students are to be supervised appropriately according to the activity and the student’s stage of development.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Supervisors must be appropriately qualified and trained. Clinical supervisors must have appropriate general or specialist registration with a regulatory body	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Should a patient safety issue arise, appropriate action must be taken by the provider	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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*)

The panel commend the School for their approach to pre-clinical training and assessment. Evidence obtained during the course of the inspection assured the inspectors that students were only allowed to commence clinical activity once they had demonstrated adequate knowledge and skill. The panel noted there was external oversight of pre-clinical assessment and there appeared to be good record management relating to student assessment data.

There are 'new skills' components in Years 2, 3 and 4, during which students develop their clinical skills in the clinical skills laboratory. Full attendance during these components is compulsory. The largest 'new skills' component is the 'Introduction to Clinical Practice' which is held in Year 2 and culminates in a multi-component and rigorous assessment called the 'Clinical Readiness Exam'. This exam assesses clinical knowledge, skills and professionalism and the inspectors considered this a robust 'gateway' to treating patients. The 'new skills' components in Years 3 and 4 cover subjects such as endodontics and minor oral surgery. In order to progress through the 'new skill' component, students must consistently achieve a satisfactory grade during their training and pass a summative examination at the end of the course. If students do not pass the summative assessment, they must undertake further training in the clinical skills laboratory, re-take and pass the relevant assessment before they are allowed to offer treatment to patients in the new discipline.

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

The Trust policy on consent underpins the actions taken by the Dental School to address this Requirement. Students are required to sign an Annual Student Agreement, which obliges them to ensure all patients they treat are made aware of their status as a student, prior to treatment. Students wear name badges at all times whilst on clinic, which identify them as students and there is signage in the Dental School clinics indicating to patients that students may provide their treatment.

The operational processes used for obtaining and recording patient agreement to be treated by a student were dependant on the Dental School clinic. There seemed to be a clear and well documented process for obtaining patient consent for treatment by a student in the restorative clinic. Patients are referred to the Dental School for restorative treatment by a student via a specific NHS form. The form is explained to, and then signed by the patient. Once the referral has been received, the patient is asked to sign a 'patient agreement form' which confirms they consent to receiving treatment by students under supervision. In other clinics of the Dental School, however, patients are asked to verbally confirm their agreement to be treated by students and a record of this is kept in their patient case notes.

The inspectors encourage the School to adopt the 'patient agreement form' or similar in all clinics, including outreach locations, as this provides clear documentary evidence and reduces the risk of issues arising regarding consent.

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 Met*)

Liverpool Dental Hospital adheres to Trust regulations concerning patient care and there was evidence of very good governance in relation to the oversight of health and safety within the clinics. All clinics and outreach settings are subject to inspections by the Care Quality Commission and there were no concerns relating to any of the locations used by the students.

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 Met*)

The level of supervision provided to students is very good and directly related to the stage they are at within the programme and the discipline they are studying. The highest level of supervision occurs whilst the students are on specialist clinics in Years 4 and 5 and at no point during the course is the staff-to-student ratio greater than 1:8. Students the inspectors spoke to were content with the level of support and supervision they received.

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

All clinical supervisors involved in the programme are registered with the relevant healthcare regulatory body and appropriately trained. There is an annual training day on assessment for clinical teaching staff. Tutors who supervise students in outreach also attend an annual training day during which clinical teaching and updates on the programme structure are covered. The inspectors were pleased to note that any new members of staff are initially mentored and then supervised in their assessment of students and in their use of LIFTUPP.

The School provides opportunities and support for current and new staff to maintain and enhance their educational skills to take account of best practice. There is an annual Personal Development Review, which ensures that members of staff are up to date with their CPD and educational training.

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*)

The inspectors noted that there is a University 'Public Interest Disclosure' policy for raising concerns which the Dental School must adhere to, although this does not relate specifically to patient safety. The Dental School also has to comply with an NHS Trust 'Incident Reporting' policy and the related set of procedures.

An annual student induction informs and reminds students of the need to raise concerns if they identify a risk to patient safety and, as mentioned in Requirement 2, students sign an annual agreement which requires them to raise such a concern, if identified. The inspectors noted that the students they met with confirmed their understanding of this obligation. In addition, the issue of raising concerns relating to patient safety is covered during a component on Law and Ethics, which is taught in the final year of the programme.

The School indicated that clinical teaching staff would be familiar with the patient safety elements of the GDC Standard for Dental Professionals by virtue of the fact they were GDC registrants.

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

The 'Incident Reporting' policy and evidence seen by the inspectors suggested that measures are in place to deal appropriately with patient safety issues, should they arise. The Dental School uses the electronic 'DATIX' system to record and monitor the management of safety issues and the inspectors were provided with a basic incident report for January – December 2011, which contained clear and comprehensive information relating to minor safety issues during that period.

Tutors are able to raise concerns, if a patient safety issue arises during treatment by a student, by the use of a 'clinical alert button'. The inspectors were advised that the action of pressing the clinical alert button would instigate targeted training for the student in question and that a 'red flag' would feature on the student's LIFTUPP records. The inspectors considered this to be a useful mechanism in theory however they were unclear about its use in practice. They could not establish where exactly the button was located and what the criteria for its use were. The inspectors were also unclear about how the School reviewed the incident, instigated remedial action and assessed the consequences of it in terms of the student's on-going clinical activity.

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 University has an appropriate Student Fitness to Practise policy and students are made aware of this during their annual inductions. The principles within the GDC Student Fitness to Practise guidance are contained in the Annual Student Agreement which students are required to sign. Inspectors were informed that members of staff were familiar with the GDC Student Fitness to Practise guidance and that this is relied upon in the curriculum.

The Dental School carefully monitors patterns of behaviour throughout the course of study and the inspectors understood that this was achieved, in part, by the use and interpretation of the 'red flag' referred to in Requirement 7. Although the University threshold for impaired fitness to practise is high, academic judgements are set at School level and where necessary, the School will influence the University in its application of the policy.

Actions

Req. Number	Actions	Due date (if applicable)
2	The School should consider adopting the same form for consent wherever the students are carrying out clinical activity.	n/a
7	<ul style="list-style-type: none"> i. The School should clarify the criteria for the use of the clinical alert button ii. The School should clarify the process to be followed in the event of the clinical alert button being pressed and a 'red flag' appearing on the student's LIFTUPP records. 	n/a

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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The provider will have systems in place to quality assure placements	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Any problems identified through the operation of the quality management framework must be addressed as soon as possible	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Programmes must be subject to rigorous internal and external quality assurance procedures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Providers must consider and, where appropriate, act upon concerns raised or formal reports on the quality of education and assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 Met*)

The Director of the BDS programme assumes ultimate responsibility for ensuring the quality of the programme and this is achieved through the use of a clear and effective quality management framework.

The BDS Curriculum Innovation Group (BDSCIG) is the key forum for the programme to be scrutinised and developed. The BDSCIG, formerly known as the BDS Management Group (BDSMG), meets three times per year. It is chaired by the Director of the programme and attended by senior members of the School, student and NHS representatives and administrative staff. Teaching leads in each of the key subject areas provide written reports about individual courses, which are reviewed by the Committee. The panel was advised that

teaching leads hold regular meetings with the staff in their area to ensure that the views of the wider team are represented. Student feedback on individual courses is also considered at this forum. There is a proactive Staff Student Liaison Committee (SSLC) and those students that the panel spoke to said that it worked well as a mechanism for raising, discussing and where possible resolving issues. The minutes from the SSLC are also considered at the BDSCIG meetings, as are external examiners' reports. The inspectors reviewed minutes of BDSCIG meetings and concluded that issues arising were generally acted on appropriately and promptly.

The inspectors established that there is a clear line of reporting from the BDSCIG to the Board of Studies (BOS), which reports to the Faculty Academic Quality Committee. This body in turn reports to the University Academic Quality Committee.

In addition to these measures, every six years, the University conducts a Periodic Review of the programme, during which the curriculum, learning environment, student support and quality management are assessed.

**Requirement 10: The provider will have systems in place to quality assure placements
(Requirement Not Met)**

The material provided to the inspectors in advance of the inspection suggested that the School assesses the suitability of individuals wishing to act as a tutor in an SDS or GDS placement and a senior clinical tutor from the Dental School inspects the GDS outreach placements. It also indicated that SDS and GDS tutors are required to attend an annual training session aimed at achieving consistency of teaching and providing updates on the programme structure. The pre-inspection material stated that an outreach co-ordinator visits outreach sites on a 'rolling programme' for the purposes of quality assurance and in addition, student and trainer feedback on the placement is collected. There was little information provided about the quality assurance activity undertaken within the hospital placements.

During the inspection, the panel were unable to discern how meaningful the role of the outreach co-ordinator was or how engaged the outreach tutors were with the programme. However, based on the pre-inspection material alone, the inspectors accepted there was likely to be basic oversight and guidance provided to ensure that students' clinical experience in the GDS and SDS placements was appropriate and consistent. The inspectors were not confident that the same could be said of the hospital placements. Monitoring of the placements at the Alder Hey Children's Hospital, the Royal Liverpool University Hospital and the University Hospital Aintree appeared to be limited to feedback received from staff and students and the inspectors were not convinced that this was collected and reviewed in a robust manner.

The School agreed that its quality assurance activity in outreach was limited and stated this was because it did not feel that it could yet robustly assure the quality of student assessment outside of the Dental School. The School suggested this was not in itself a problem, though, as they informed inspectors that clinical activity in outreach did not contribute to decisions relating to clinical competence. The inspection panel was advised that the sole purpose of the placements was to increase student experience and to prepare students for foundation training.

The inspectors were of the opinion that whilst the outreach placements were, according to the School, used for experiential learning only, there does still need to be a level of educational quality assurance in place in all placements to ensure the curriculum is being delivered to the correct standard and by appropriate teachers. This was of particular importance given the relatively high number of patients the students treated in outreach.

Although the School advised that clinical activity in outreach did not influence decisions relating to the sign-up of students to the final examination, comments made to the inspectors by students, as well as data provided by the School, suggested that clinical activity undertaken in outreach placements may be considered as part of the summative review of clinical progress at the CAP meetings. Specifically, students informed inspectors that clinical activity in outreach could be used to “make up the numbers”. The absence of a quality assurance system to standardise the assessment of students in outreach placements therefore took on greater significance for the inspectors. The panel raised the issue with two of the external examiners who also seemed to be unclear as to the status of clinical activity in outreach.

The inspectors considered that the lack of activity to quality assure student assessment within outreach was of real concern given the apparent potential reliance on outreach activity to determine student attainment of learning outcomes and it is for this reason that they considered the Requirement fell below the category of Partly Met, which it would otherwise have reached.

The School is strongly encouraged to reconsider its view on the quality assurance of outreach placements and to clarify its approach to the use of clinical treatment data generated from activity in outreach. The inspectors consider that it would be helpful if clinical activity in outreach formally counted towards assessment decisions, a view which was shared by students present during the inspection.

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

The panel studied the minutes of a variety of BDSMG, BDSCIG and SSLC meetings, external examiner reports and evidence of actions taken to address identified problems. Discussions with two of the Final BDS external examiners supported the view of the inspectors, which was that the School is responsive to issues being raised and takes action to address them in a timely fashion.

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 Met*)

As noted in Requirements 9 and 11, the School has an effective quality management process in place. Whilst there has not been a need to date for the GDC to be notified of serious threats to students achieving learning outcomes, the inspectors felt confident that this course of action would be taken should the need arise.

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

Notwithstanding the findings in Requirement 10, the inspectors considered that there were rigorous internal quality assurance procedures in place, as described in Requirements 9 and 11.

In terms of external quality assurance, the inspectors noted that external examiners were used appropriately and that they were actively involved at various stages of the programme in areas of relevance to their individual disciplines. Both examiners and inspectors felt that it would benefit the programme if each external examiner received an overview of the entire programme and processes used. It was also felt that the involvement of the same external examiner at both CAP meetings, and ideally two examiners at each meeting, would enhance the rigour of the

student progression and sign-up process.

Requirement 14: External examiners must be utilised and must be familiar with the learning outcomes and their context. Providers should follow Quality Assurance Agency (QAA) guidelines on external examining where applicable (*Requirement Met*)

The programme specification clearly sets out the role of the external examiner and in addition there is a comprehensive external examiner training interface on LIFTUPP.

The external examiners were familiar with the learning outcomes, although they did indicate that they would prefer to see the learning outcomes mapped across all five years of the programme when considering sign-up for the final examination rather than Years 4 and 5 only.

The inspectors noted that the external examiners did not examine in the final assessments, and that the external examiner role was in accordance with current QAA guidelines.

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

As mentioned in Requirement 11, there was evidence in the BDSMG/BDSCIG minutes to suggest that this requirement was being met.

Actions for the provider

Req. Number	Actions	Due date (if applicable)
10	<ul style="list-style-type: none"> i. The School must indicate how it proposes to quality assure all outreach placements more rigorously (Also action 13.i) ii. The School must provide a clear policy on the use of clinical activity data gained from outreach placements. (Also action 16 i). If the policy states that these data may influence decisions regarding a student's ability to sit a final examination, the quality assurance of the assessment of students must be sufficiently robust and a relevant policy relating to the quality assurance of assessment in outreach placements must be produced. 	<p>March 2014</p> <p>March 2014</p>
13	<ul style="list-style-type: none"> i. The School must indicate how it proposes to quality assure all outreach placements more rigorously (Also action 10.i) ii. The School should provide to each of the external examiners an overview of the BDS programme, including a mapping of the learning outcomes across all five years iii. The School should consider using the same, and if possible, two external examiners throughout the sign-up process 	<p>March 2014</p> <p>n/a</p> <p>n/a</p>

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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. The provider should seek to improve student performance by encouraging reflection and by providing feedback ¹ .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Assessment must be fair and undertaken against clear criteria. Standard setting must be employed for summative assessments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Where appropriate, patient/peer/customer feedback should contribute to the assessment process	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25. Where possible, multiple samples of performance must be taken to ensure the validity and reliability of the assessment conclusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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)

The inspection panel was advised that the mapping of the BDS qualification to the programme and GDC learning outcomes is achieved electronically via LIFTUPP. Pre-inspection documentation indicated that outcomes are entered into the core LIFTUPP database and linked to each relevant element of the programme both in terms of delivery and assessment. Whilst there may have been evidence available to demonstrate this feature of LIFTUPP, the inspectors did not see it during the course of the inspection.

The inspectors were, however, assured of the learning outcome coverage as they received a detailed paper-based mapping of the programme against the GDC learning outcomes. The GDC document entitled 'BDS Inspection Round 2012-2014 Pre-Inspection Document : Annex Two', requested information on how and when each of the learning outcomes in *The First Five Years* was assessed during the BDS programme. This document suggested that every learning outcome was assessed by a number of different assessment methods and across more than one year of study. Many of the learning outcomes are assessed across most or all of the years of study when clinical activity is undertaken (Years 2-5). The panel was also provided with a document that provided a detailed breakdown of the mapping of the Year 5 assessments to the GDC learning outcomes.

There are two panels which meet during the years of clinical activity (Years 2-5) and their purpose is to review students' progress towards attaining the programme learning outcomes. The Clinical Development Monitoring Panel (CDMP) meets in the first two terms of Years 2-4 and in the first term of Year 5. This panel is formative and feedback is provided to help students focus on particular areas requiring attention. Students are held back from clinical activity by this panel, if necessary, and they are provided with targeted training before being allowed to continue. The Clinical Advisory Panel (CAP) meets in the final term of each year and it is a summative review of students' clinical skills. This summative review must be passed for a student to be allowed to sit the end of year examination. Students must pass each year of the programme in order to progress to the following year.

According to the Year 5 Assessment Handbook, the final year CAP reviews a number of different assessments and on the basis of this, makes a decision about whether students are clinically ready to enter the final examination. In addition to the continuous work-based assessment recorded on LIFTUPP, the handbook states that the CAP will review handbooks in four different disciplines, an outreach CDS report, an orthodontic new patient report, two restorative case reports and one periodontics case report.

The inspectors attended two final year CAP meetings and observed that the clinical data that were reviewed by the CAP were a broad summary of students' competence in different disciplines. At the time of the inspection, there did not appear to be the facility on LIFTUPP to provide a detailed overview of each student's activity across patient case-mix and

different treatment procedures. To access this information it was necessary to view individual student records. The panel understands that LIFTUPP is being developed to provide this type of summary in future. The inspectors were informed that progression decisions were made at a subject level by teaching leads and their clinical colleagues. It was not entirely clear how these decisions were arrived at and the inspectors assumed that the teaching leads cross-referenced individual student's data on LIFTUPP with the sign-up criteria in the handbook.

As alluded to under Requirement 10, the inspectors found evidence to suggest that paediatric treatments provided at Alder Hey Hospital were included in the longitudinal assessment data used by the CAP to determine suitability to progress to the final examination. Some of the students the inspectors spoke with also indicated that restorative treatments provided in outreach placements may be included in assessment data. This came as a surprise because the School had previously indicated that clinical activity undertaken in outreach was for experiential learning and the assessment of it could not be robustly quality assured. The inspectors were advised that Dental School staff (known as in-reach staff) were present at Alder Hey Children's Hospital on a part-time basis but it was unclear whether students were also assessed and supervised by non-Dental School staff during their treatment of paediatric patients at that location.

As mentioned above, the School held two CAP meetings and those students with deficiencies identified in the first CAP meeting were reviewed in the second meeting. All were found competent to sit the final examination. It became apparent that some of those students who appeared to be in need of fairly intensive additional training at the first CAP meeting, were actually in the process of undertaking clinical procedures which were not reflected at that time on LIFTUPP. The inspectors agreed that it is important for 'real time' data to be available for consideration at CAP meetings and understood that the School intends to remedy this as soon as possible.

It was mentioned by a subject lead during the second CAP meeting that one student was yet to meet the necessary orthodontic pre-requisites, however the CAP seemed willing to allow the student to progress to the final examination on the assumption that the work would be carried out between the CAP meeting and the examination. There was no apparent minute of this decision and no requirement for the paperwork relating to the outstanding activity to be forwarded to CAP members once it had been completed. It was not clear as to the impact of not completing the pre-requisites on the final sign-up process and the School is encouraged to tighten up its management of a situation such as this.

The panel felt that some of the pre-requisites for passing the CAP review, stated in the Year 5 Assessment Handbook, appeared to be aspirational. For example, 14 orthodontic procedures are listed but only six or seven procedures, including some of the fundamental procedures, needed to be carried out.

There appeared to be a number of in-course assessments which were not considered by the Year 5 CAP, despite the fact that the Year 5 Assessment Handbook indicated that they would be. The CAP meetings observed by the inspection panel limited their review to the continuous assessment results and data held on LIFTUPP. The School informed the inspectors that a sample of the other in-course assessments was reviewed by external examiners, however it was not clear how or if the marks from these pieces of work fed in to the CAP discussions. The panel felt that the School correctly attached significant importance to the data stored in LIFTUPP relating to continuous assessment however it was unclear what part the other in-course assessments played in the sign-up process, at what stage they were considered and by whom.

The inspectors recommend that a clear set of sign-up criteria would assist students and

ensure a completely equitable approach. At present the Assessment Handbook does not reflect the fact that there are two CAP meetings and the panel felt this ought to be made clear.

The panel considered the factors which underpinned the School's assurance that students demonstrated attainment across the full range of learning outcomes. They concluded that the assessments they saw were valid, reliable and reproducible. Assessment is discussed in more detail in Requirements 18, 23 and 25.

In terms of the School's approach to the triangulation of assessment results, the inspectors felt that LIFTUPP enabled the user to cross-reference the results of every continuous assessment of a student's clinical activity. Continuous assessments appeared to be carried out by a number of different assessors on different occasions and an overall picture of a student's clinical ability in any defined area or procedure type was obtained. The inspectors considered this to be a positive feature of LIFTUPP.

It was less clear to the panel, however, how the School triangulated the results of the continuous assessment recorded on LIFTUPP with other in-course assessments which were not recorded on LIFTUPP. It may well be that this does happen but the panel did not see evidence of it.

The approach to the aggregation of end of year assessments is set out in the Programme Specification and the Assessment Handbooks for each of the years of study and the scheme for arriving at a pass mark for each year was clear.

The Examination Board meeting was the final opportunity for the School to assure itself that the students had attained the range of learning outcomes and the inspectors considered the process by which the pass marks for the OSCE and written paper were achieved was extremely thorough and reliable. An external examiner was present at both the final year CAP meetings and Examination Board meeting to validate the processes.

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 mentioned in Requirement 16, the School provided a detailed mapping of the assessments within the programme to the learning outcomes contained within the GDC document *The First Five Years*.

The integration of the four-year graduate pathway appeared to be very well managed with students on this course following a Special Dental Component a few weeks before the start of Year 2, which enabled them to catch up on practical skills. There is also additional academic work throughout Year 2. The students on the four-year graduate pathway commence Year 3 with the same skill set and knowledge as the undergraduate students.

The panel concluded that LIFTUPP was working well as a means by which to monitor and record the continuous assessment of students' clinical activity and noted that students expressed their satisfaction with the system. LIFTUPP provides assessment data from a number of different assessors on multiple occasions and this generates a reliable picture of a student's ability and skill-set. It also readily identifies areas where a student is need of development and when they are ready for assessment.

At the time of the inspection, LIFTUPP had not been completely populated with clinical data. The inspection panel recognised that this was due to the newness of the system,

which had not yet been integrated across every discipline. The panel was told that this would be rectified for the next cohort of students. In the interim, marks allocated to orthodontic procedures known as the 'LOCEPs' were recorded on a paper spreadsheet in hard copy

Although the panel was not able to see how the clinical data on LIFTUPP correlated with learning outcomes per se, given that nearly every learning outcome was being continuously assessed (albeit from a clinical as opposed to knowledge-based perspective), the panel felt that once fully populated, LIFTUPP data would give an overview of a student's continuous assessment and progress against most learning outcomes.

In addition to the regular monitoring through the LIFTUPP system, clinical data and levels of student exposure to a variety of procedures and patient types were also reviewed by teaching leads and at the CDMP and CAP meetings. The inspectors were impressed that monitoring of case-mix and case numbers via LIFTUPP is undertaken on a monthly basis by a clinical co-ordinator in respect of restorative procedures undertaken within the Dental School. The inspectors assumed that teaching leads review students' completion of other treatment types but there did not appear to be a clearly defined approach as to how frequently this occurred or whether it included treatments undertaken in outreach. The CDMP and CAP reviewed longitudinal data and assisted in the planning of assessments for students who had a shortfall in experience. The inspectors were informed that in the event of deficiencies, an action plan was devised and the student was provided with the additional support where necessary.

As far as the panel could see, the data stored on LIFTUPP related only to the continuous assessment element of the programme. The inspectors found no evidence of the marks for the other in-course assessments, such as the case reports, handbooks, and portfolios. It was not clear where the marks for these pieces of work were recorded and held. The external examiners said they had sight of some of the case reports and portfolios but it was not clear who monitored them within the School and determined how satisfactorily or otherwise they had been completed. The inspectors were also unclear where the results relating to assessments from the previous years of study were recorded. It is for these reasons that the inspectors found this Requirement to be partly met but the programme is well-placed in this area and this Requirement should not be difficult for the School to meet in the future.

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*)

As described above, a central method for assessing clinical skills at Liverpool is continuous work-based assessment. The Dental School staff all seemed to be well versed in the use of LIFTUPP for recording their assessment of students' performance. The assessment data on LIFTUPP visibly identifies outlying assessors and thus acts as a means by which the School can continuously calibrate and standardise the assessment decisions made by individuals. The marking scheme of 1-6 is supported by clear descriptors for each year group and these descriptors can be re-defined, if necessary, to ensure equitable marking. In this way, LIFTUPP acts a reliable and transparent means of recording and quality assuring the assessment of students' clinical activity within the Dental Hospital.

As already mentioned, the panel found evidence to suggest that some activity in outreach was also used to determine students' clinical competence. The assessment of students in outreach was not recorded on LIFTUPP and, as indicated in Requirement 10, it was not clear whether any measures were taken to ensure the standardised assessment of

students in outreach.

In addition to the continuous assessment, the testing of clinical skills also takes place via the initial operative skills examinations (referred to in Requirement 1): Directly Observed Procedures (DOPs) and OSCE examinations. The panel was a little surprised that the final year OSCE examination contained a relatively high percentage of knowledge—based stations. However, the panel considered that the delivery, organisation and quality assurance of the OSCE examinations was exemplary. Whilst the inspectors did not closely scrutinise the DOPs and pre-clinical tests, based on the documentary evidence provided they felt confident that these would be as equally well managed as the OSCEs.

Knowledge-based assessments included written papers containing extended matching items (EMIs), single best answer questions (SBAs) and short answer questions (SAQs). The inspectors sampled these types of assessments and found them to be well constructed and fair. There was a critical writing component in Year 3, which is assessed via an essay and presentation.

The Year 5 Assessment Handbook indicated that students were required to complete a number of handbooks (general anaesthesia observation sessions, maxillofacial surgery, medical accident and emergencies, oral pathology) two restorative and one periodontic case report, an outreach CDS report and an orthodontic new patient report. The panel had sight of a few of these assessments but they did not see the marks allocated or the marking system and therefore could not ascertain the importance of these assessments in the overall progress and sign up process. It was clear, however, from the case reports seen by the panel that the standard of work was high.

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 Met*)

The students that the inspectors spoke to said they liked the structure of the programme in so far as it enabled them to access patients in Year 2, after the Clinical Readiness Examination, with the complexity and breadth of treatments increasing throughout the programme. Students are exposed to patients at the Dental School via the Prevention, Assessment, Treatment Planning and Restorative Consultation Clinics. The School has successfully developed initiatives to increase the number of patients going to the Treatment Planning Clinic via referrals from consultant clinics, local GDS and Community Services. As already mentioned, students also attend a variety of clinical settings in both primary and secondary settings outside of the Dental School.

The inspectors recognise that students have access to a range of patients/ procedures over the course of the programme however they did not find it particularly easy to form a view on this requirement. This was due to the absence of a sufficiently detailed summary of clinical activity for the year group and a lack of clarity on the School's approach to determining when a student was clinically ready to sit the final examination. Having sampled a number of individual students' data on LIFTUPP, the panel concluded that it was likely that all final year students had treated a broad range of patients and were able to undertake the requisite procedure types on sufficient occasions to develop the necessary skills and abilities to meet the learning outcomes. However, the inspectors determined that students' exposure to an appropriate breadth of patients and procedures was facilitated by attendance at a number of outreach placements. It is essential that this element of the programme is quality assured to a high standard if reliance on outreach data as part of the sign-up process is planned for future cohorts.

Requirement 20: The provider should seek to improve student performance by encouraging reflection and by providing feedback² (*Requirement Met*)

The School indicated in the pre-inspection material that case reports, reflective logs and insight forms make provision for students to self-reflect and in addition, students reflect when discussing their progress with tutors.

The panel found evidence of student self-reflection within the case reports. Inspectors also noted from discussions with students that they are actively encouraged to reflect on their own performance. Students indicated that they have to complete insight forms although the panel did not see any completed versions of these. Inspectors also noted that students complete a self-evaluation log book as part of the 'Introduction to Clinical Practice' course, which takes place in Year 2. The School advised that reflective logs are in the process of being incorporated into LIFTUPP but it was unclear whether a paper version was being used in the interim.

Whilst it was evident that students were being encouraged to self-reflect, it was not clear how this self-reflection was assessed and how it contributed to progression within the programme, which was stated by the School in the pre-inspection material.

Students were positive about the feedback they received on their clinical activity. They advised the inspectors that they received verbal feedback on clinic and some written feedback was provided through LIFTUPP. Inspectors noted that written feedback seemed to be provided in the event of under-performance only and they felt it would be useful if the School could provide written feedback across the range of performances. Students received feedback from tutors whilst developing their own personal development plans. The inspectors noted that feedback is also provided to the students after the formative review of their clinical progress in the CDMP meetings.

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*)

All members of teaching clinical staff in the Dental School have GDC registration and the School undertakes an annual training day for all staff which includes a focus on assessment. The inspectors were satisfied that external examiners were appropriately qualified.

There is a staff and external examiner training resource on LIFTUPP and those questioned understood how LIFTUPP was being used for the assessment of students' clinical activity.

In terms of the final year OSCE, examiners were provided with a thorough briefing and a robust calibration exercise took place in advance of the examination.

² Reflective practice should not be part of the assessment process in a way that risks effective student use

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 Dental School follows the University policy on the use of external examiners and it was clear that the external examiners reported on assessment processes in a detailed and constructive manner.

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

The clinical longitudinal assessment on LIFTUPP is criterion referenced. The marking system involves the use of marks on a 1-6 scale and there are clear marking descriptors which are related to the standard expected of each year group. A 1 or 2 signifies the student is under-performing, a 3 or 4 suggests the student is of the standard expected and 5 or 6 suggests they are above standard. For the final year students, the expected standard is that of a 'safe beginner'. The panel felt that the standards set for each year group were appropriate.

Staff and students the panel spoke to were all familiar with the marking criteria and generally it was felt there was consistency in the use of the marking scheme by supervisors. Students reported though that the grades awarded by part-time and sessional tutors tended to be lower than their full time counterparts. The students were, however, aware that any discrepancies in marking were carefully reviewed. The School seeks to achieve the calibration of assessors via feedback and from the multiple assessment data on LIFTUPP. The data recorded about students over a number of different treatments and occasions should identify assessors who are marking too harshly or leniently and this can then be rectified through targeted training or the redefining of descriptors.

The School advised that in respect of written paper assessments, peer review, standard setting and post assessment appraisal takes place. The panel reviewed a sample of written assessments and they considered that these assessments were fair, valid and reliable. The standard setting, calibration of assessors and manner in which the pass mark was established in respect of the final OSCE was excellent.

The inspectors could not establish how the case reports, handbooks and portfolios were assessed and could not therefore conclude whether these were marked against clear criteria.

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

The School stated that they had attempted to gain patient feedback in the past but that they had found it difficult to gather meaningful data. As a result, they would like to use NHS forms in future, which will enable them to gather information about experience and quality of treatment. Minutes of management meetings suggested this issue had been under discussion for some time and the panel encourages the School to take this forward so that patient feedback can be obtained and incorporated into the assessment process at the earliest opportunity.

The inspectors noted that a very small amount of 'patient' feedback obtained via actors in the OSCEs contributes to the assessment process.

Limited peer to peer feedback is provided in the first year 'Problem Based Learning' modules. The panel was informed that during students' clinical training, dental technicians review the quality of instructions to the dental laboratory and dental nurses also provide feedback. It was not clear how formalised this feedback was and if it was used in student assessment.

The panel could not identify that the School was acting on or triangulating the feedback received from the peer groups as part of student assessment and in light of the very limited amount of patient feedback used in the assessment process, they considered this Requirement to be not met.

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

A range of assessments is used to assess students against the learning outcomes on multiple occasions. The mapping of assessments to the GDC learning outcomes provided by the School prior to the inspection provided evidence of this.

In addition, the use of LIFTUPP provides triangulated data regarding students' continuous clinical activity. Core skills are clearly assessed on many occasions and multiple assessors aid assessment, particularly on subjects such as professionalism, where subjective evaluations are made.

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 assessment handbook for each year of study and the LIFTUPP interfaces for students, staff and external examiners provide information about assessments and the marking criteria for the longitudinal continuous assessment.

The assessments listed in the handbooks appear to be comprehensive but the panel noted that a number of the orthodontic procedures named are aspirational. It was also unclear how the case reports, portfolios and handbooks would be assessed and against which standard. The inspectors considered that the School should clarify the approach to assessing these pieces of work as it would seem inappropriate if the students spend considerable time completing them when their contribution to assessment is limited or non-existent.

Actions for the Provider

Req. Number	Actions	Due date (if applicable)
16	<ul style="list-style-type: none"> <li data-bbox="379 1675 1193 1787">i. The School must provide a clear policy on the use of clinical activity data gained from outreach placements (Also action 10.ii) <li data-bbox="379 1854 1193 2011">ii. The School must ensure that decisions on progression are made in accordance with its own policy regarding the use of data for students' clinical activity undertaken at different locations. 	<p data-bbox="1201 1675 1396 1720">March 2014</p> <p data-bbox="1201 1854 1396 2011">Update to be provided through 2014 GDC Annual</p>

	<ul style="list-style-type: none"> iii. The School must ensure that the assessments considered by the CAP correlate with sign-up criteria in the Assessment Handbook iv. The School must ensure that its policy regarding CAP decision-making accounts for situations where a student has not quite completed the required sign-up clinical activity v. The School must clarify how and when the in-course assessments other than the continuous work-based assessments are considered by CAP and how the marks from these pieces of work are triangulated against other marks vi. The School should ensure the Assessment Handbook is up to date and contains clearly defined sign-up criteria and information regarding the number of CAP meetings vii. The School should clarify how clinical activity undertaken after the second CAP meeting is recorded and reviewed, if that activity counts towards the progression decision viii. The School should consider introducing a system whereby the discussions held by subject level tutors, in preparation for the CAP meeting, are recorded. ix. The School should progress with its plans to ensure 'real time' data are available for consideration at CDMP and CAP meetings x. The School should consider using the same external examiner(s) at both of the CAP meetings. 	<p>Monitoring exercise</p> <p>March 2014</p> <p>Update to be provided through 2014 GDC Annual Monitoring exercise</p> <p>Update to be provided through 2014 GDC Annual Monitoring exercise</p> <p>n/a</p> <p>n/a</p> <p>n/a</p> <p>n/a</p> <p>n/a</p>
17	The School must ensure that all assessments on the programme are monitored and that the results are centrally recorded.	Update to be provided through 2014 GDC Annual Monitoring exercise
18	The School should consider the importance and relative contribution of each in-course assessment to the determination of competence, particularly given the	n/a

	considerable effort put into these assessments by the students.	
19	The School should progress with its plans to generate an overview data profile of students against all pre-requisites to sign-up	n/a
20	<ul style="list-style-type: none"> i. The School should clarify how self-reflection in case reports, reflective logs and insight forms are assessed and used to influence progression through the programme. ii. The School should provide written feedback to students covering a range of performances 	n/a n/a
23	The School should clarify how the case reports, portfolios and handbooks are assessed	n/a
24	<ul style="list-style-type: none"> i. The School must confirm how they will gather patient feedback and how this will contribute to student assessment ii. The School must develop a mechanism which enables peer feedback to contribute to student assessment, where appropriate iii. The School should make greater use of patient/actor feedback on a day-to-day basis and in the OSCEs 	<p>March 2014</p> <p>Update to be provided through 2014 GDC Annual Monitoring exercise</p> <p>n/a</p>
26	The School must ensure that the standard expected of students is clear. Students must be informed of the impact/weighting of the in-course assessments and the level of contribution to the sign-up process.	March 2014

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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Staff will receive training on equality and diversity, development and appraisal mechanisms will include this	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
29. Providers will convey to students the importance of compliance with equality and diversity law and principles both during training and after they begin practice	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GDC comments			
<p>Requirement 27: Providers must adhere to current legislation and best practice guidance relating to equality and diversity (<i>Requirement Met</i>)</p> <p>The University fulfils its obligations under the Equality Act 2010 and delegates compliance with it to the Head of School. The University and NHS Trust have relevant policies, to which the School must adhere.</p> <p>Requirement 28: Staff will receive training on equality and diversity, development and appraisal mechanisms will include this (<i>Requirement Partly Met</i>)</p> <p>There is mandatory training for staff holding consultancy positions. The panel was informed that by Easter 2013, all Dental School staff who were due training would have received it. The training may have occurred by the conclusion of the inspection, but the inspectors were not provided with any evidence to demonstrate this.</p> <p>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 (<i>Requirement Met</i>)</p> <p>This is conveyed to students across all years via the Annual Student Agreement, which students are required to sign annually and which includes a requirement to comply with Equality and Diversity law. In addition, there is an Equality and Diversity course in the third year. Inspectors were advised that this subject is central to the community placements which students undertake in Year 1 and within the Problem Based Learning Module in Year 2.</p>			
Actions for the Provider			
Req. Number	Actions		Due Date (if applicable)
28	The School must evidence that the all university staff have received training on Equality and Diversity		March 2014

Summary of Actions

No	Action	Observations Response from Provider	Due date
2	The School should consider adopting the same form for consent wherever the students are carrying out clinical activity.	Use of the same form for consent for student activity will be considered by the School Board of Studies.	n/a
7	<ul style="list-style-type: none"> i. The School should clarify the criteria for the use of the clinical alert button ii. The School should clarify the process to be followed in the event of the clinical alert button being pressed and a 'red flag' appearing on the student's LIFTUPP records 	<ul style="list-style-type: none"> i) The School will clarify this for staff at its annual review day and in future documentation. ii) Upon submission, the system emails the Assistant Head of School that an alert has been submitted and they are able to review the generated report. If that report indicates that further action is needed then the Assistant Head of School interviews the student and an action plan is put in place. LIFTUPP displays all issued alerts to the clinical panels, as observed by the inspectors. Normally each individual alert has already been managed, however, if the panel sees the triangulation of multiple alerts then it may decide that further action over progression is needed. The School would have been happy to clarify this process during the inspection. 	<p>n/a</p> <p>n/a</p>

10	<p>i. The School must indicate how it proposes to quality assure all outreach placements more rigorously (Also action 13.i)</p> <p>ii. The School must provide a clear policy on the use of clinical activity data gained from outreach placements. (Also action 16 i). If the policy states that these data may influence decisions regarding a student's ability to sit a final examination, the quality assurance of the assessment of students must be sufficiently robust and a relevant policy relating to the quality assurance of assessment in outreach placements must be produced.</p>	<p>i) The School recognises that quality assurance of Outreach (which makes up approximately 5% of the total of time spent on clinical placements) is extremely important and has mechanisms in place that differ according to the differing natures of the School's placements. We will endeavour to ensure that these processes are continuously improved using the School and Faculty QA procedures. However, the School did not "...recognise that its quality assurance of outreach was below the expected standard.." as stated within the report. We would note that our outreach quality assurance arrangements are a commonly occurring model used by many Dental Schools, some of which have been praised over their use of the same model in the current inspection round.</p> <p>ii) The School would like to reiterate that its stated policy is not to use outreach data to determine student attainment and this is stated clearly to our students. However we accept that there may be confusion relating to Alder-Hey data alone. Thus the School will redesignate Alder-Hey Paediatric care as 'in-reach' (given the common staffing and assessment processes in each site) to ensure that it is very clear to all that outreach clinical experience is not included in decisions contributing to progression to the Finals examination. The School would like to reassure the GDC that the statement within the report, that poor quality assured data was used to make progression decisions, is incorrect.</p>	<p>March 2014</p> <p>March 2014</p>
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13	<p>i. The School must indicate how it proposes to quality assure all outreach placements more rigorously (Also action 10.i)</p> <p>ii. The School should provide to each of the external examiners an overview of the BDS programme, including a mapping of the learning outcomes across all five years</p> <p>iii. The School should consider using the same and, if possible, two external examiners throughout the sign-up process</p>	<p>i) The School is reviewing the role of each of the outreach placements and the associated quality assurance procedures (please see response to 10. i).</p> <p>ii) The entire programme information, including mapping of the curriculum, is made available to the external examiners on appointment, within the external examiner interface - to which the inspectors had full access. All the relevant documentation is present, along with detailed videos describing processes.</p> <p>iii) The School is happy to consider this for future examinations and we are grateful for the inspectors' recommendation. However, we consider this to be a surprising action point given that a statement regarding a recommended number of external examiners does not appear within The First Five years, Standards for Education or Preparing for Practice. Neither was this identified as an issue within the University's Periodic Review in 2011.</p>	<p>March 2014</p> <p>n/a</p> <p>n/a</p>
16	<p>i. The School must provide a clear policy on the use of clinical activity data gained from outreach placements (Also action 10.ii)</p>	<p>i) Our policy, which we hoped had been stated clearly previously, is that outreach data (other than that gained at Alder-Hey) will not be included in making progression decisions. To improve clarity in the use of Alder-Hey placement data, as noted earlier, this will be redesignated as 'in-reach', alongside the Dental Hospital placement data (see response 10.ii).</p>	<p>March 2014</p>

	<p>ii. The School must ensure that decisions on progression are made in accordance with its own policy regarding the use of data for students' clinical activity undertaken at different locations.</p> <p>iii. The School must ensure that the assessments considered by the CAP correlate with sign-up criteria in the Assessment Handbook</p> <p>iv. The School must ensure that its policy regarding CAP decision-making accounts for situations where a student has not quite completed the required sign-up clinical activity</p> <p>v. The School must clarify how and when the in-course assessments other than the continuous work-based assessments are considered by CAP and how the marks from these pieces of work are triangulated against other marks</p> <p>vi. The School should ensure the Assessment Handbook is up to date and contains clearly</p>	<p>ii) This is already the case and the School will continue to ensure that this is followed.</p> <p>iii) The School would like to take this opportunity to reassure the GDC that this is already carried out and is consistent with documentation that was made available to the inspectors.</p> <p>iv) The School would also like to reassure the GDC that it already follows its policy as outlined within the 5th BDS Handbook: "The panel uses the developmental pattern of the learner to make a longitudinal judgement over the quality and consistency of the domains, against the expected standards achieved at the end of the final year of study".</p> <p>v) The School will be happy to clarify how these assessments are considered by CDMP and CAP.</p> <p>vi) The School reviews and updates its Assessment Handbooks on an annual basis.</p>	<p>Update to be provided through 2014 GDC Annual Monitoring exercise</p> <p>March 2014</p> <p>Update to be provided through 2014 GDC Annual Monitoring exercise</p> <p>Update to be provided through 2014 GDC Annual Monitoring exercise</p> <p>n/a</p>
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	<p>defined sign-up criteria and information regarding the number of CAP meetings</p> <p>vii. The School should clarify how clinical activity undertaken after the second CAP meeting is recorded and reviewed, if that activity counts towards the progression decision</p> <p>viii. The School should consider introducing a system whereby the discussions held by subject level tutors preparation for the CAP meeting, are recorded.</p> <p>ix. The School should progress with its plans to ensure 'real time' data are available for consideration at CDMP and CAP meetings</p> <p>x. The School should consider using the same external examiner(s) at both of the CAP meetings.</p>	<p>This includes reviewing progression criteria and updated timetables of CDMP/CAP meetings.</p> <p>vii) This will be clarified in future Assessment Handbooks.</p> <p>viii) We would reassure the GDC that these systems already exist within the, termly, CDMP processes and are recorded within the School documentation as required by the University.</p> <p>ix) This plan has been progressed.</p> <p>x) This suggestion will be adopted at the next relevant diet, dependent upon external examiner availability.</p>	<p>n/a</p> <p>n/a</p> <p>n/a</p> <p>n/a</p>
17	<p>The School must ensure that all assessments on the programme are monitored and that the results are centrally recorded.</p>	<p>We would like to reassure the GDC that this is already the case, as required by the University, and all marks, not currently handled by LIFTUPP, are stored on the departmental K: drive in a structured manner.</p> <p>We are sorry that this was not made clear to the inspectors however their meetings tended to focus on clinical monitoring. Although we made the point repeatedly that other methods of assessment were used throughout the programme, we did not receive any requests to show records from all</p>	<p>Update to be provided through 2014 GDC Annual Monitoring exercise</p>

		assessments. Therefore we assumed that the inspectors were satisfied with the University processes as considered in our 2011 University Periodic Review, which had been made available to the inspectors.	
18	The School should consider the importance and relative contribution of each in-course assessment to the determination of competence, particularly given the considerable effort put into these assessments by the students.	This will be considered by the School Board of Studies.	n/a
19	The School should progress with its plans to generate an overview data profile of students against all pre-requisites to sign-up	These plans are progressing well.	n/a
20	i. The School should clarify how self-reflection in case reports, reflective logs and Insight forms are assessed and used to influence progression throughout the course.	i) This will be reinforced to staff and students. The School would have been happy to clarify this to the inspectors at the time of the inspection but did not receive a request to do so. The Introduction to Clinical Practice has self reflection components embedded within it which are considered as part of the progression to the CRE, an exam that the inspectors have commended. Insight is part of the professionalism domain and is recorded within LIFTUPP along with self-reflection skills. Professionalism data is considered by CAP. All clinical case reports have a reflective section that must be completed satisfactorily for the overall case report to be considered satisfactory.	n/a
	ii. The School should provide written feedback to students covering a range of performances	ii) Whilst a considerable amount of feedback is already provided, mechanisms are in place to increase this.	n/a

23	The School should clarify how the case reports, portfolios and handbooks are assessed	Criterion referencing, that was made available to the inspectors, is used. However, the School will clarify this further to students within their annual, in-year, induction processes.	n/a
24	<p>i. The School must confirm how they will gather patient feedback and how these will contribute to student assessment</p> <p>ii. The School must develop a mechanism which enables peer feedback to contribute to student assessment, where appropriate</p> <p>iii. The School should make greater use of patient/actor feedback on a day to day basis and in the OSCEs</p>	<p>i) The School already uses systems embedded within LIFTUPP to do this but is expanding this further using (trial) forms of 'PREMS' (Patient Related Experience Measures) that will feed into the School's Clinical Development Monitoring Panel (CDMP).</p> <p>ii) The School is investigating where this can be incorporated most appropriately into the programme.</p> <p>iii) The School is investigating methods by which this feedback can be captured</p>	<p>March 2014</p> <p>Update to be provided through 2014 GDC Annual Monitoring exercise</p> <p>n/a</p>
26	The School must ensure that the standard expected of students is clear. Students must be informed of the impact/weighting of the in-course assessments and the level of contribution to the sign-up process.	The School provides clear standards for each year cohort within their relevant Assessment Handbook but will label these more explicitly in future.	March 2014
28	The School must evidence that the all university staff have received training on Equality and Diversity	The School holds a database showing 100% compliance with this requirement.	March 2014

Observations from the provider on content of report

Provider to record additional observations here

We are grateful that the inspection was carried out courteously, and in a way that interfered as little as reasonably possible with the function of the School and associated Dental Hospital. The School is also grateful for the opportunity to comment on the inspection report.

With reference to requirements which are 'partly met' or 'not met', a number of themes appear to emerge from the report. These tend to be arranged around: Requirements to progress to Finals, Outreach, and mapping of our curriculum.

- In the consideration of progression to Finals, the School is disappointed that the inspectors make a number of points where they did not always seek available information. Furthermore, some criticism of processes occurs where the School has ample evidence that a policy is in place, and adhered to. We feel that, often, evidence was not requested or available evidence appears not to have been considered fully by the inspectors. On a number of occasions during the inspection process we highlighted the need for assessment of quality as well as considering quantity in student progression decisions. Therefore the School does not use numerical requirements but instead applies academic judgement to a body of available evidence including quantity, quality and consistency. Whilst this is less easy for an outside organisation to measure in an inspection, the School considers that a more holistic view, based on a wide range of data, provides better protection for the public.
- With respect to Outreach there is not a standardised system of its use in Schools in the UK and the definition and use of Outreach varies between institutions. In Liverpool there appears to have been confusion regarding the utilisation of Outreach by the School for which we apologise. We did try to clarify things on a number of occasions but appear to have been unsuccessful in this. There also appears to be some confusion within the student body that the School has tried to address previously, but this does not appear to have been yet wholly successful. The confusion arises because activity in one area (Paediatric Dentistry at Alder-Hey Hospital) is supervised and assessed by the same paediatric staff, from the Dental School, who also work at Alder-Hey. This data alone is therefore considered in progression decisions, as we feel it is 'off-site' or 'extended learning' rather than Outreach. In all other situations we define Outreach as a means of solely gaining experiential learning and data from this experience (although recorded for postgraduation portfolio purposes) is not used in progression decisions. Outreach and inreach data was amalgamated for the inspectors' use at their request, which may have led to some confusion within the inspection team regarding the use of the data, but it is not used in this combined form by the School.
- The BDS programme is mapped fully and Annex 2 and the BDS programme specification, provided in the pre-inspection documentation, demonstrate where each outcome is assessed. Furthermore, it is the core mapping in LIFTUPP that enabled the production of the detailed finals exam blueprints, and enables all of the incoming data from the clinics to be sorted into domains within the LIFTUPP interface. Annex 2 was also generated as an output from the core database that lies behind the LIFTUPP interface. It would have been counter intuitive to have a well mapped curriculum and then not utilise this in the LIFTUPP system that the School devised to track its students' progress. However, at no point during the inspection was the School asked to demonstrate item-for-item mapping or to explicitly demonstrate the mapping behind LIFTUPP. The School would have provided the information if requested but, as no request was received, it is surprising that mapping is seen as a potential shortcoming in the School's processes.

The School is very pleased that the Liverpool University BDS programme was found to remain sufficient for registration as a dentist and we are also grateful for the many positive comments made within the report. Unfortunately, there are a large number of areas where the School would dispute the factual accuracy of the statements made. However, the School fully accepts that there are areas where improvements can be made and considers the report to be valuable in further improving its processes.

Recommendations to the GDC

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

Instructions to the School

The School should take note of all the actions in the report and should evidence to the GDC, within stated timescales, that it has addressed the actions which have a specified completion date.