

**INSPECTION OF THE SOUTH WALES
ORTHODONTIC THERAPY PROGRAMME**

**ROYAL COLLEGE OF SURGEONS OF
ENGLAND**

17 APRIL 2009

REPORT OF THE INSPECTORS

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OVERVIEW

This report describes the General Dental Council (GDC) inspection of the South Wales Orthodontic Therapy programme.

There are many areas of strength across the programme and we were particularly impressed by the enthusiasm and commitment of both the students and the course directors. There are excellent links with the Royal College of Surgeons of England (RCS Eng) and with Orthodontic Therapy programmes in Yorkshire and Bristol. The course directors work well in a collaborative way with the directors on these companion programmes and benefit from their experience and expertise. We found the documentation, which was concise and helpful, demonstrated that the learning outcomes in *Developing the Dental Team* were covered by the programme. We noted that the RCS Eng diploma examination provides a tested summative check at point of entry to register. The students benefit from excellent, modern clinical facilities at the Parkway Clinic in Swansea, and throughout the programme the students train with patients in a real world setting. There were a good number of applications for the programme and the course directors were thorough in the selection of the students and trainers. At the time of the inspection, the informal systems of student support were working well.

Due to the vital role that workplace trainers play in the programme, we had concerns about the level of quality assurance and monitoring they were subject to after the interview process and training day. We observed discrepancies in the way that student log books were updated by the workplace trainers, and updated and used by the students. From the log books we noted that there was some inconsistency in the way that the workplace trainers applied the 'traffic light' marking scheme. The issue of the sufficiency of training for the trainers warrants further consideration. We also felt that there was a risk that the students' continuous records are only held in each student's paper log books and that there is no central record of their progress. We believed that there should be consideration given to developing a central repository for this information. Further consideration should be given to developing and documenting formal student support and student and staff feedback systems. The current informal administrative arrangements make verification of the processes and systems difficult. We felt that there should be a more regular assessment of a student's clinical progress undertaken by someone other than a workplace trainer.

We considered that all learning outcomes in *Developing the Dental Team* (DDT) will be met and assessed by this programme and the final examination.

Purpose and GDC process

1. As part of its duty to protect patients and promote high standards, the General Dental Council (GDC) monitors the education of dental students and dental care professionals (DCPs) at institutions whose qualifications are approved by the GDC. The aim is to ensure that these institutions provide high-quality learning opportunities and experiences and that students who obtain a dental qualification are safe to practise.
2. The purpose of the inspection was to assess whether the South Wales Orthodontic Therapy programme conforms to the GDC's requirements for the training of orthodontic therapists and whether, on qualification, students would be suitable for registration with the GDC.

3. This report sets out the findings of a one-day inspection of the programme using the assessment principles and guidelines set out in *Developing the Dental Team (DDT)* as a benchmark. The report highlights the many areas of good practice, but also draws attention to areas where issues of improvement and development need to be addressed. The report is based on the findings of the inspection and on a consideration of supporting documents prepared prior to the inspection and made available during the inspection. The programme providers will be given the opportunity to correct any factual errors and then submit their observations. The report will be considered by the Education Committee of the GDC and will be published on the GDC website.
4. The students sit the RCS Eng Diploma in Orthodontic Therapy. This examination was previously inspected in 2008 for the Yorkshire Orthodontic Therapy Course (YOTC). This examination was found to be sufficient by the GDC. An inspection of the final examination for this programme will therefore not take place.

Introduction

5. We met the two course directors, all of the students on the course, as well as two teachers responsible for delivery of small sections of the programme. We also met two of the workplace trainers (one of whom was also a course director); the majority of the other workplace trainers had completed detailed questionnaires about the programme.
6. There were 14 students in the first cohort of the one-year programme. There are no plans to change the annual intake of students. The programme is a national course and the students in the first cohort were based throughout the United Kingdom.
7. The programme runs for 46 weeks and begins with an intensive 3.5 week core course based at the Parkway Clinic in Swansea. There are 10 study days, 8 of which are in Swansea and 2 are at the RCS in London. At the 2 study days in London, students have the opportunity to network with the students on the Yorkshire Orthodontic Therapy Course. For the remainder of the time, the students are based at their workplaces around the UK.
8. The Parkway Clinic is newly built with dedicated classroom facilities and an excellent clinical area for the students to use. Phantom head, technical laboratory and library facilities at the nearby Morrision Hospital were available for use on the programme, but the course directors informed us that little use of these facilities was made in the first year. There was a collection of relevant books and journals at Morrision to which we were assured the students had access
9. In the workplace, students are taught and supervised by a registered orthodontist. This workplace trainer is interviewed on the same day as the student and is subject to an inspection of their workplace by the NHS Business Services Authority. Acceptance on the programme is dependant on a successful interview of the prospective student, their workplace trainer and the practice inspection.

Curriculum

10. The foundation of the curriculum is taught in the core course and supplemented by the study days. Both the core course and study days include practical components and clinical teaching with live patients. We noted that the vast majority of clinical teaching is done by the course directors and after the core course the responsibility for a student's clinical progress rests with the workplace trainers.

11. The programme is similar in content to the Yorkshire course. These two programmes are seen as “sister” courses by the course directors and much of the course content and delivery is the same. The course directors praised the help and support given by the directors at Yorkshire. We noted that the strong relationships with the RCS Eng, YOTC and the Bristol OT programme were real benefits to this programme.
12. The course directors were both new to delivering orthodontic therapy education and have spent time revising the programme after the core course and the study days. We were impressed by their commitment and attention to detail.
13. For the second cohort the course directors, in conjunction with the RCS Eng and the Yorkshire programme, intend to develop an orthodontic therapy website with chatroom facilities. They hope to use this virtual learning environment (VLE) to deliver online tutorials.

Addressing the Learning Outcomes in DDT

14. We felt that the learning outcomes of DDT will be covered by this programme and are adequately tested by the RCS Eng final examination in conjunction with the programme.

Core Course and Study Days

15. The core course aims to deliver the knowledge to underpin clinical practice. Students are taught by didactic and problem based learning methods. The teachers told us that they try to break up sessions so that they are not just lectures, as they felt that the students are likely not to be used to studying this way. They try to bring practical elements into the lectures.
16. The students begin their clinical experience on the core course. To progress to treating patients, students first practise on typodonts before progressing to undertaking exercises, such as taking impressions and fitting separators, on each other. Once they pass an examination, which tests their clinical and communication skills and applied knowledge, students are allowed to treat patients who have been carefully selected by the course directors.
17. We were told that the study days were being reduced from ten to eight for the 2009 intake (which is also being done for the Yorkshire programme). The course directors felt that the proposed VLE would help with this reduction and that their efforts would be better served by concentrating on structuring the workplace training.

Workplace Training

18. Students spend the majority of the programme in workplace training. The workplace training is normally based in the practice, clinic or hospital where they worked prior to commencing the programme.
19. The course directors informed us that they had concerns that the students’ service commitments in the workplace would conflict with the education on the programme. When interviewing prospective trainers, they asked them to outline how the student would work in the practice in terms of the number of sessions treating patients per week and the time allocated for reflective study and tutorials. They felt that this helped to identify suitable trainers. Students commented that they felt supported by having their study and work time relating to the programme protected.
20. We had concerns about students getting similar exposure to procedures in different workplace environments. We were told that if they do not get exposure to specific

procedures, they can supplement this by undertaking these procedures on each other in the study days.

21. Workplace trainers see each patient before and after treatment. They then sign off the procedure, giving it a grade of red, amber or green in a 'traffic light' grading scheme. Comments should always be made if a grade of red or amber is given; however, we were disappointed to find out that this was not always the case and occasionally trainers would sign off many procedures with a single signature and/or not provide a comment.

Quality Assurance systems

22. All of the workplace trainers undertake a one day course run by the RCS Eng called "Training the Trainers". The majority of trainers felt that this training was adequate for their roles on the programme. We noted that some workplace trainers had substantially less prior experience of training students than others, which is an issue that we believe should be given further consideration.
23. There was little guidance provided for trainers about the topics to concentrate on at specific times in the programme or the number of patients students should be seeing on a particular day. We were informed that some trainers had asked for this and the course directors plan to introduce this for the next cohort.
24. We saw that trainers play an absolutely vital role in the programme and had concerns that there was very little regular and formal communication with them. We were also concerned that there was very little focus on how they trained, monitored and assessed the student; this being especially relevant as it appears that it is the trainers rather than the course directors who monitor the clinical progress of individual students. This lack of quality assurance and quality control was also identified as a weakness by the course directors.
25. The course directors do not visit the majority of workplaces, but they intend to make a video camera available to record procedures undertaken by students in the workplace. They felt that it was not logistically possible for them to visit the practices. We were unconvinced that this would be enough quality control for the course directors to undertake. As the role of the workplace trainer is so central to the student's development which, combined with the likelihood that the majority of the trainers will change with each cohort of students, we felt that it is essential that better quality control mechanisms are put in place. We were pleased that on one of the study days, students are appraised by people outside the course the Course Director from the Bristol Orthodontic Therapy course; from the Bristol course or the YOTC.
26. The course directors rely on informal feedback from students to monitor how the workplace trainers are training the students. When a student commented that they needed greater support from their trainer, the course directors contacted the RCS Eng who wrote to all trainers re-confirming their obligations to the students and the programme. The course directors confirmed that this made a great improvement to the student's situation.
27. Students record all their procedures in their personal logbooks. These are available to the course directors at each study day. We had some concerns about how consistently the log books were used. There appeared to be a notable difference in the application of the 'traffic light' grading scheme. We doubted that this difference would be caused entirely by the variability in the standard of the students, but rather by the application of the grading scheme by trainers. There was also inconsistency in the amount and detail of comments from the trainers in the logbooks.

28. We noted that there were differences in how diligent the students were at recording information in their logbooks for their own record and for reflection. Some seemed to have stopped recording notes with any detail about what they had done while on training, whereas others had used the logbooks consistently and recorded a lot of information about their development. Although this may in part be due to different learning styles, we felt that the course leaders should pay extra attention to how the logbooks are used by the student, the workplace trainer and themselves.
29. There should be a centrally held system for collating student experience and particular consideration might be given to developing an electronic logbook system. This would provide the benefit that the course directors could view this information at any point in the programme. This should make it easier for data to be collated and analysed, which would be very useful in identifying issues and areas for further study or practice. It would also negate the risk of the records being lost or tampered with.

Assessment

30. The final summative assessment is the RCS Eng diploma in orthodontic therapy examination, which has been inspected and approved. Students are also given a summative assessment at the end of the third week of the core course to ensure that they are safe to begin practising on patients at the beginning of the fourth week and onwards. There were no formal plans in place that adequately explained what measures would be taken should a student fail this assessment.
31. At the mid-point of the programme, the students take an OSCE which provides an objective assessment their applied knowledge, clinical competence and communication skills.
32. Continuous assessment rests with the workplace trainer and is recorded in the student's logbook.

Staffing issues

33. We met the two course directors, one of whom was a workplace trainer. We also met another workplace trainer and two teachers responsible for delivering small elements of the programme. We were impressed by the commitment of the course directors and the positivity towards the programme of all involved.
34. The course directors undertake the vast majority of sessions in the core course and study days. They felt that a benefit of this is that it is easy to keep track of what has been done on the programme and what should be done in the future.
35. Whilst we felt that the programme was running well with the current staffing complement, consideration should be given to what would happen should one of the course directors leave the programme or one of the workplace trainers withdraws or found not to be suitable.
36. There need to be formal arrangements in place should one or more students fail the first summative assessment of the core course, or if they were struggling with clinical work during the course.
37. We believe that it would be a worthwhile exercise for the course directors and the RCS Eng to undertake a risk assessment for the scenarios mentioned in this report and to put in place and document contingency arrangements for each of them.

Student issues

38. The students all stated that they were happy with the programme, and we found them to be a very enthusiastic group. Although they felt that the programme was challenging, they felt privileged to be on it. They informed us that they were well supported in their transition from assistant to clinician.
39. They commented that they felt the structure of the programme works well, but many said that they would have welcomed more time in Swansea and suggested that a study and revision week be included toward the end of the programme. They stated they would have found it more difficult had they not taken the orthodontic nursing certificate prior to commencing the programme.
40. They keep in contact with each other when they are in placements by phone and email and by utilising social network websites. None of the students said that they felt isolated when in workplace training. They also praised the support provided by the course directors, who they will contact with any issues they have. They also have weekly tutorials with their trainers and nursing support at all times. We noted that whilst in workplace training their time dedicated to orthodontic therapy has not been encroached on with dental nursing duties. The informal student support systems appeared to be working well, though consideration should be given to development of further, more formal support systems

Requirements

To the South Wales Orthodontic Therapy Programme

- There should be further development of formal procedures for quality assuring the training students receive in the workplace throughout the programme, which should include closer scrutiny of the workplace trainers and the sufficiency of their training for this role. This could also include course directors visiting the students in their workplace. (22, 24, 25, 27)
- A standard proforma enabling students and workplace trainers to give formal feedback to the course directors should be developed. (26)
- That the course directors need to develop formal, consistent processes for checking and analysing log books. These processes should include firmer guidelines for students and workplace trainers on the way log books should be completed as well as guidelines on the use of the logbooks as a tool for reflective learning. (28)
- Development of detailed contingency plans for the scenarios outlined in paragraphs 29, 30 and 35 should be undertaken.
- A centrally held system for recording the students' continuous experience should be developed. (29)

To the Royal College of Surgeons of England

- The RCS Eng must inform the GDC of any significant changes, to orthodontic therapy training programmes for which it provides the final examination. This will be undertaken through the GDC's annual monitoring process.

To the GDC

- During the annual monitoring exercise the recommendations and requirements should be followed up. The changes made to all orthodontic therapy programmes should be monitored through this exercise.

**Response to GDC Report following the Visitation 17th April 2009
from the South Wales Orthodontic Therapy Course Directors**

**Dr Charlotte Eckhardt
Professor Jeremy Knox**

14th June 2009

We would like to thank the GDC inspectors for their helpful report from the Inspection of The South Wales Orthodontic Therapy Course. We found the report, along with the visitation itself, useful and positive. We have some minor points to make:

In paragraph 3 page 1 "Due to the vital role that workplace trainers play in the programme, we had concerns about the level of quality assurance and monitoring they were subject to after the interview process and training day."

Point 22: All of the workplace trainers undertake a one day course run by the RCS Eng called "Training the Trainers". The majority of trainers felt that this training was adequate for their roles on the programme. We noted that some workplace trainers had substantially less prior experience of training students than others which is an issue that we believe, should be given further consideration.

All trainers are carefully selected and are required to go through an interview process which includes a questionnaire for discussion on the day. If they are successful at this stage they then have a practice visit from the NHS Businesses Authority who then report back to the course directors. It is then compulsory for all the trainers to attend a 'Training the Trainers' course at the Royal College of Surgeons which is dedicated to trainers of the South Wales and Yorkshire Orthodontic Therapy Courses.

The points raised during the GDC visit and highlighted in the subsequent report have been taken on board and time was allocated in the Training the Trainers Course held this month, to focus on the issues raised to ensure a deep understanding of the requirements of being a trainer and on calibrating individuals so that assessments are carried out in a more uniform manner across all trainers. In addition break out groups were used to allow new trainers to mix with the directors, previous successful orthodontic therapy students and more experienced trainers to discuss pertinent topics and learn from the varied experiences of the group. In addition to this, one of the study days in 2010 has been designed to teach and observe additional training skills through practical sessions, observed teaching and examining.

During the course the assessment and appraisal programme is used to monitor workplace training. If and when any problems are identified, action is taken by the Directors to ensure that all trainers are reminded of their obligations. The Royal College of Surgeons has a Quality Control Committee to whom we may refer any issues which we fail to resolve locally.

Point 24: We saw that trainers play an absolutely vital role in the programme and had concerns that there was very little regular and formal communication with them. We were also concerned that there was very little focus on how they trained, monitored and assessed the student; this being especially relevant as it appears that it is the trainers rather than the course directors who monitor the clinical progress of individual students. This lack of quality assurance and quality control was also identified as a weakness by the course directors.

Point 25: The course directors do not visit the majority of workplaces, but they intend to make a video camera available to record procedures undertaken by students in the workplace. They felt that it was not logistically possible for them to visit the practices. We were unconvinced that this would be enough quality control for the course directors to undertake. As the role of the workplace trainer is so central to the student's development which, combined with the likelihood that the majority of the trainers will change with each cohort of students, we felt that it is essential that better quality control

mechanisms are put in place. We were pleased that on one of the study days, students are appraised by people outside the course the Course Director from the Bristol Orthodontic Therapy course; from the Bristol course or the YOTC.

Point 26: The course directors rely on informal feedback from students to monitor how the workplace trainers are training the students. When a student commented that they needed greater support from their trainer, the course directors contacted the RCS Eng who wrote to all trainers re-confirming their obligations to the students and the programme. The course directors confirmed that this made a great improvement to the student's situation.

As stated in the section above the Training the Trainers course has already been restructured to reflect the needs highlighted by the Inspectors. In addition a tutorial programme has been made available for the Trainers to follow through out the year which complements the Core Course and the Study Days.

Assessing the workplace teaching directly is logistically, very difficult. We aim to overcome this problem by incorporating additional OSCE assessments into the course which will enable us to assess the clinical competence of each individual. In addition we have purchased a video camera so that the trainees can video clinical procedures which may then be viewed on study days. This would be beneficial in two ways: 1. It allows the individual to critique their performance with the directors and 2. It would enable the Directors to assess if the manner by which the trainer is assessing the trainee is appropriate. Any trainers/trainees that were cause for concern could then be visit in their practices.

Point 27: Students record all their procedures in their personal logbooks. These are available to the course directors at each study day. We had some concerns about how consistently the log books were used. There appeared to be a notable difference in the application of the 'traffic light' grading scheme. We doubted that this difference would be caused entirely by the variability in the standard of the students, but rather by the application of the grading scheme by trainers. There was also inconsistency in the amount and detail of comments from the trainers in the logbooks.

Point 28: We noted that there were differences in how diligent the students were at recording information in their logbooks for their own record and for reflection. Some seemed to have stopped recording notes with any detail about what they had done while on training, whereas others had used the logbooks consistently and recorded a lot of information about their development. Although this may in part be due to different learning styles, we felt that the course leaders should pay extra attention to how the logbooks are used by the student, the workplace trainer and themselves.

As stated above time was allocated in the Training the Trainers Course held this month to focus on calibrating individuals so that assessments are carried out in a more uniform manner across all trainers.

In addition to this there will be more emphasis in the core course to teach the trainee how the assessments should be carried out. Each study day there will be time allocated on a more formal basis to assess the logbooks and advise the trainees of any issues that need to be addressed and to ensure that the requirements are reinforced through out the year.

Point 29: There should be a centrally held system for collating student experience and particular consideration might be given to developing an electronic logbook system. This would provide the benefit that the course directors could view this information at any point in the programme. This should make it easier for data to be collated and analysed, which would be very useful in identifying issues and areas for further study or practice. It would also negate the risk of the records being lost or tampered with.

We felt this was a very useful comment and a very valid observation. Since receiving the report, together with the Yorkshire Orthodontic Therapy Course we have arranged for a database of all the logbooks to be held at the RCS. The trainees will e-mail there logbooks on a monthly basis to be uploaded. We envisage that once the Orthodontic Therapy Course website and chat room have developed and up and running later this year this recourse will be managed through here.

Point 30: The final summative assessment is the RCS Eng diploma in orthodontic therapy examination, which has been inspected and approved. Students are also given a summative assessment at the end of the third week of the core course to ensure that they are safe to begin practising on patients at the beginning of the fourth week and onwards. There were no formal plans in place that adequately explained what measures would be taken should a student fail this assessment.

During the core course the trainees undergo formative assessments regularly. This is helpful for both the trainees so they can gauge how they are doing and for the course directors so that they can tailor the teaching to their needs. These formative assessments also include carrying out treatments on each other. Any problems are, therefore, addressed during the course.

The summative assessment has to be passed to progress on to treating patients. If an individual failed the summative assessment, the individual would have to resit this before they could proceed leading to an extension of the course until the end of the 4 week.

Point 35: Whilst we felt that the programme was running well with the current staffing complement, consideration should be given to what would happen should one of the course directors leave the programme or one of the workplace trainers withdraws or found not to be suitable.

This year we plan to employ a course tutor who will have a more formal role in teaching on the course and would be in a position to shadow the directors if one was planning to leave to enable them to seamlessly take over their position.

Point 40: They keep in contact with each other when they are in placements by phone and email and by utilising social network websites. None of the students said that they felt isolated when in workplace training. They also praised the support provided by the course directors, who they will contact with any issues they have. They also have weekly tutorials with their trainers and nursing support at all times. We noted that whilst in workplace training their time dedicated to orthodontic therapy has not been encroached on with dental nursing duties. The informal student support systems appeared to be working well, though consideration should be given to development of further, more formal support systems

We felt that although the directors are contactable by phone and e-mail it would be beneficial to appoint a qualified orthodontic therapist to take over the role as mentor. We felt that the trainees would find her more approachable and she would have greater empathy for them having had first hand experience of the course.