Record Keeping Re-audit for New Patients Assessed on Periodontal Consultant Clinic

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Background:

50 patients are assessed in periodontal consultant clinics (*PerioCC*) at Guy's Hospital weekly, having been referred for assessment/management of periodontal conditions. *PerioCC* is run every day at Guy's Hospital with up to 8 patients per session. These clinics are also used for undergraduate teaching, and often a 3rd or 4th year undergraduate student may examine and assess a new patient under the supervision of a clinical teacher or consultant. In summary, the clinics involve a number of different clinicians at different levels.

SALUD is the software used at Guy's Dental Hospital for the recording of clinical notes. It has a number of different tabs and pages where information can be recorded for each patient. All clinical notes, in order to be valid, are required to be authorised by a qualified clinician on each tab or page where information is entered. This is normally indicated by a tick box on every page which should be ticked after the notes have been reviewed by the supervising clinical teacher or consultant. *(Figure 1)*

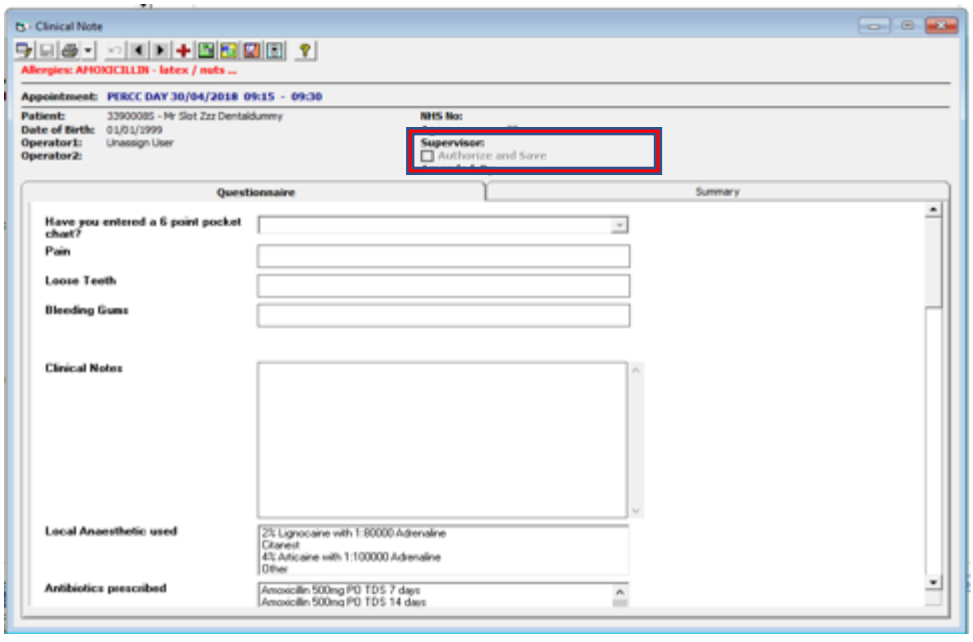

Figure 1: *Example screenshot demonstrating a clinical record on SALUD, with authorisation box highlighted*

As undergraduate students, having been on the clinic for several months, and reflecting on clinical practice, we identified weaknesses in the department's record keeping for new patients. In view of this, in November 2018 we set out to undertake an audit on the quality of record keeping, ultimately to improve our patient care.

In this first cycle, we focussed on two main areas. Firstly, we aimed to ascertain the quality of record-keeping in the department in line with GDC standards. Standard 4.1

of the GDC '*Standards for the Dental Team*' document specifies that the service provider 'must make and keep contemporaneous, complete and accurate patient records' which must be stored in a secure and accessible way. Therefore, we planned to assess individual patient records to see whether these satisfied requirements.

As a secondary aim, we wanted to establish where clinicians were writing their notes most frequently, since *SALUD* has a multitude of different pages and areas where information can be recorded. In doing so, we aimed to establish one single pathway for record-keeping in order to improve efficiency on clinics.

100 new patients seen between 01/08/18 - 01/12/18 were randomly selected. Clinical notes were reviewed on *SALUD* retrospectively. A 28-point checklist *(Figure 2)* was used for each set of clinical notes to evaluate whether information was recorded and if so, where.

In order to determine whether GDP/referrer radiographs were being acknowledged or reported on (as per point 24 in the checklist in *Fig.2*), we also reviewed referral letters sent in for each patient, which are scanned separately on the "*Electronic Patient Record*" *(*or *EPR)* software used at the hospital.

1.	**Notes should be contemporaneous (recorded and authorised on same day as appointment)**
2.	**Patient referrer recorded on history page (Hx page)**
3.	**Patient referrer recorded on clinical notes page**
4.	**Medical history complete on medical history page**
5.	**Authorisation of medical history by staff member**
6.	**Complaint and history of presenting complaint recorded on history page (Hx page)**
7.	**Complaint and history of presenting complaint recorded on clinical notes page**
8.	**Dental history recorded on history page (Hx page)**
9.	**Dental history recorded on clinical notes page**
10.	**Oral hygiene procedures/Diet/Habits recorded on history page (Hx page)**
11.	**Oral hygiene procedures/ Diet/ Habits recorded on clinical notes page**
12.	**Clinical examination recorded on history page (Hx page)**
13.	**Clinical examination recorded on clinical notes page**
14.	**Occlusal features and prosthesis recorded on history page (Hx page)**
15.	**Occlusal features and prosthesis recorded on clinical notes page**
16.	**Radiographic report recorded on history page (Hx page)**
17.	**Radiographic report recorded on clinical notes page**
18.	**Has a radiographic report been recorded on clinical notes page box?**
19.	**6PPC complete or BPE recorded not warranting a 6PPC**
20.	**Periodontal diagnosis recorded on EDR summary page**
21.	**Periodontal diagnosis recorded on clinical notes page**
22.	**Prognosis recorded on clinical notes page**
23.	**Initial treatment plan recorded on clinical notes page**
24.	**GDP Radiographs (If radiographs have been provided by referrer, have they been reported on?)**
25.	**Risks + Complications section completed or included in clinical notes section**
26.	**Outcome box on clinical notes page completed**
27.	**Smoking cessation boxes completed on clinical notes page if appropriate.**
28.	**Treatment plan page completed with items undertaken at the appointment**

Figure 2: *28-point checklist used in initial audit*

The findings of this initial cycle were extremely surprising. It was found that 100% compliance was not present in any of the 28-points above. Areas of particular concern included:

- 17% of notes were not contemporaneous or were not authorised on the same day as the appointment or at all. *(Figure 5)*

- 6% of medical histories were not recorded and 12% were not authorised. *(Figure 5)*
- 2% had no radiographic report recorded, if radiographs were taken. *(Figure 3)*
- 21% had no prognosis recorded. *(Figure 5)*
- 6% had no diagnosis recorded. *(Figure 4)*
- A discussion regarding risks and complications was not recorded in 47% of cases *(Figure 5)*

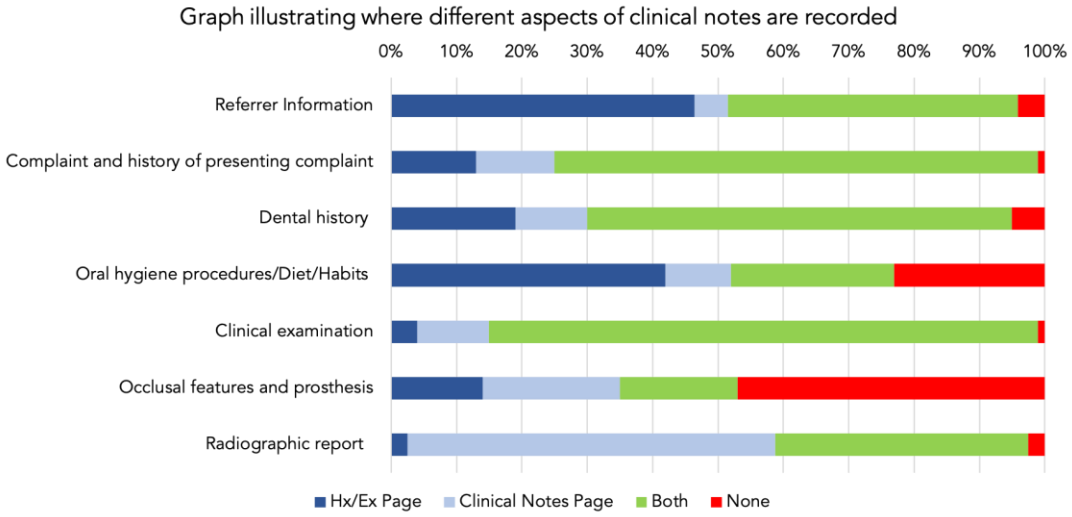

Figure 3: Our results illustrating the disparity in different locations where information is currently recorded on *SALUD*

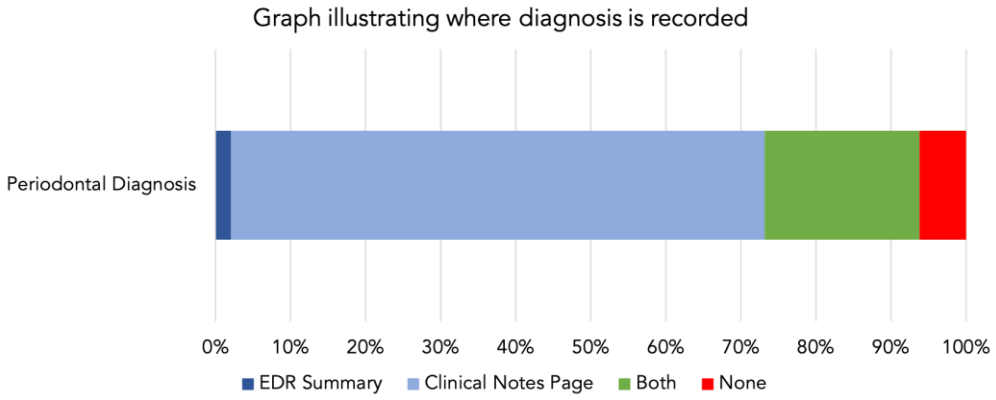

Figure 4: Figure showing how various operators record periodontal diagnosis on the *SALUD* software, and whether this information has been included at all

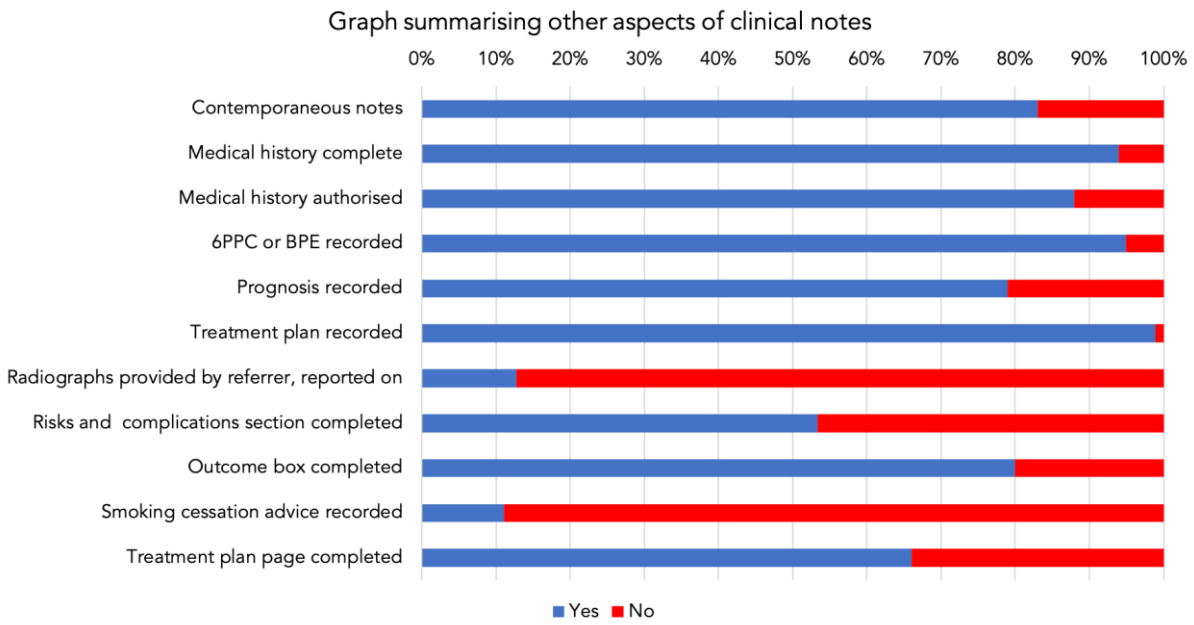

Figure 5: Graph showing compliance in various aspects of record keeping on the whole

Understandably we also found that information was being duplicated within different pages of SALUD and more importantly information was being recorded in different locations, making review of records quite difficult. However, in light of the lower compliance in some key areas, it was concluded that although non-ideal, where information was being recorded was less of a priority than information not being recorded at all.

The findings of this first cycle were presented in a periodontal department meeting on 15th February 2019 and the areas of concern were discussed at length. Although it was decided that none of the findings of the audit were ideal, ensuring that 100% of clinical records at least satisfy the minimum standards for record keeping in line with GDC standard 4.1 was of paramount importance.

In light of this consensus, we aimed to implement changes within the department as a matter of urgency, with view to conduct a re-audit to assess for improvements. Therefore, the aims of the second audit cycle was to improve our clinical record keeping ensuring notes are contemporaneous complete and accurate.

Aims/Objectives of the second audit cycle:

- To ensure that standards are being adhered to with all notes being contemporaneous, complete and accurate on the Periodontal Consultant Clinic (*PerioCC*).

Standard:

GDC Standard (*taken from 'Standards for the Dental Team'*)

- 4.1.1 You must make and keep complete and accurate patient records, including an up-to-date medical history, each time that you treat patients. Radiographs, consent forms,

photographs, models, audio or visual recordings of consultations, laboratory prescriptions, statements of conformity and referral letters all form part of patients records where they are available.

- 4.1.2 You should record as much detail as possible about the discussions you have with your patients, including evidence that valid consent has been obtained. You should also include details of any particular patient's treatment needs where appropriate.

Based on these standards, we proposed 10 key points that should be included in the clinical notes as a minimum

1. Notes must be authorised on same day by staff member
2. Medical history complete AND authorised on same day
3. BPE/6-point pocket chart entered and authorised
4. Radiographic report where radiographs have been taken
5. Diagnosis or Differential Diagnosis
6. Prognosis
7. Treatment plan where treatment is indicated
8. Risks/Complications of treatment where indicated
9. Smoking cessation advice or risk of smoking discussed with patient documented where appropriate
10. Appointment outcome clearly stated

As a gold standard, ***all notes*** should be 100% compliant with the 10 points above. Review of our findings for the first cycle showed that currently only **21%** of records adhere fully to these standards.

Actions taken following findings of 1st audit cycle:

After these 10 key areas were established, we proceeded to create a Periodontal Consultant Clinic Crib Sheet, to act as an aide memoir for both staff and students, in order to improve compliance (*Figure 6*). This crib sheet was presented at a Periodontal Consultant meeting on 28/02/19, and after further modifications, a finalised version was approved with all the Periodontal Consultants.

Figure 6: *The Periodontal Consultant Clinical Notes Crib Sheet*

In order to highlight the findings of our audit and to introduce the crib sheet, we organised 4 lunch and learn sessions where all Periodontal staff and 4th year undergraduate students were invited *(Figure 7)*. These were organised across four separate days (Monday 29th April 2019, Friday 3rd May, Tuesday 7th May, Thursday 9th May) to maximise attendance.

Finally, the crib sheet was emailed to all Periodontal staff.

We also presented the findings of the audit at a recent Trust Audit Half Day on 15/05/2019, in order to further raise awareness of our project to members of different departments.

Figure 7: *Lunch-and-learn sessions hosted on various days*

A key area of weakness in the results of the initial audit was the recording of risks and complications being discussed (only 53% compliance). It was discussed at the periodontal consultant clinic meeting that the sentence on SALUD 'Are you planning or carrying out periodontal treatment?' before the drop down boxes mentioning recession and sensitivity as risks appear may be misleading, as it may be misinterpreted as asking the operator whether they will be carrying out the periodontal treatment themselves. To improve compliance with regards to the recording of risks and complications, a change in the wording was made as shown in Figure 8 below.

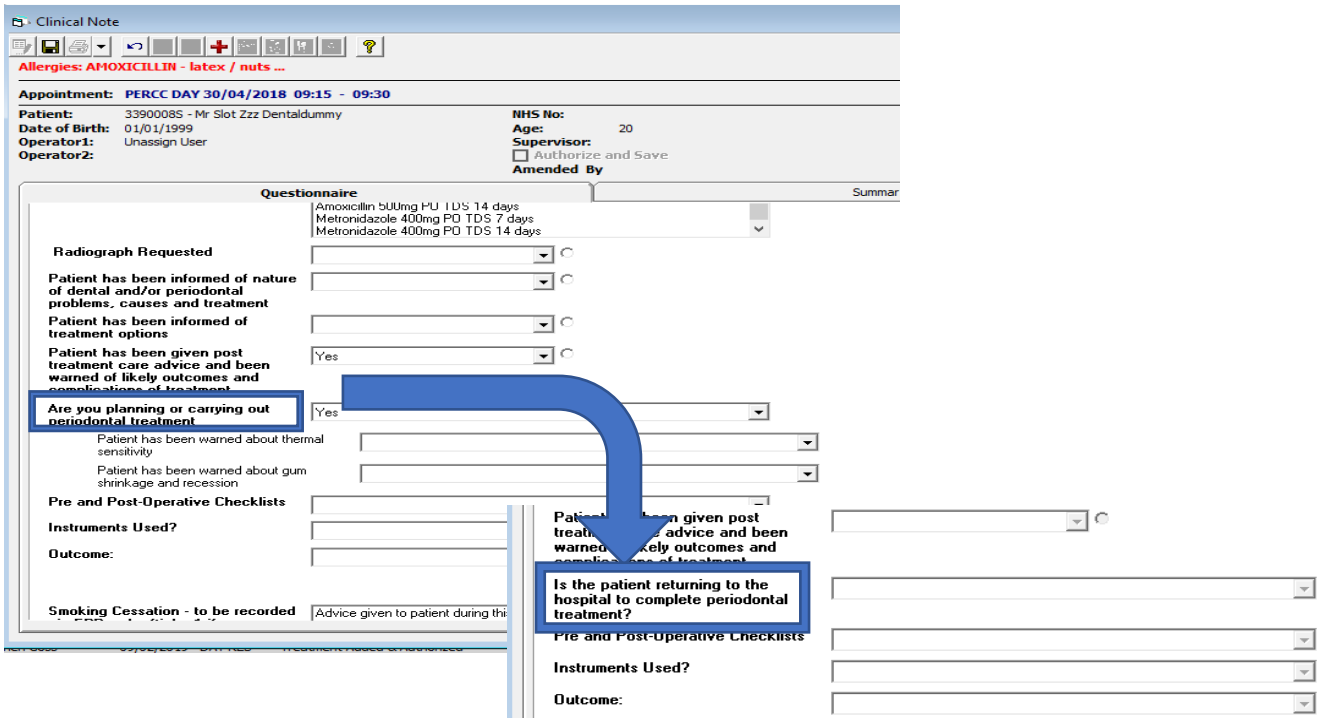

Figure 8: The change made to the SALUD system

As can be seen, this has now been changed to ‘Is the patient returning to the hospital to complete periodontal treatment?’ with the hope of improving compliance in this area.

Re-audit Method:

A re-audit to check compliance with the 10 key points below was subsequently planned and conducted.

100 patients on *PerioCC* new patient/review lists were randomly selected and clinical notes on *SALUD* retrospectively reviewed, using a ***10-point*** checklist detailing the minimum standards to evaluate whether information was recorded. *(Figure 9)*. Review appointments were excluded, and patients that did not complete assessment were not included.

1. Notes must be authorised on same day by staff member
2. Medical history complete AND authorised on same day
3. BPE/6-point pocket chart entered and authorised
4. Radiographic report where radiographs have been taken
5. Diagnosis or Differential Diagnosis
6. Prognosis
7. Treatment plan where treatment is indicated
8. Risks/Complications of treatment where indicated
9. Smoking cessation advice or risk of smoking discussed with patient documented where appropriate
10. Appointment outcome clearly stated

Figure 9: *10-point checklist to be used in second cycle*

We assessed whether each patient record satisfies each one of the 10 points outlined on the checklist, and if not, which points have been missed. In addition, we established what proportion of total records reviewed satisfy all 10 requirements.

We aimed to ensure all clinical records satisfy all 10-points outlined above as a gold standard with 100 percent compliance.

Results following 2nd audit:

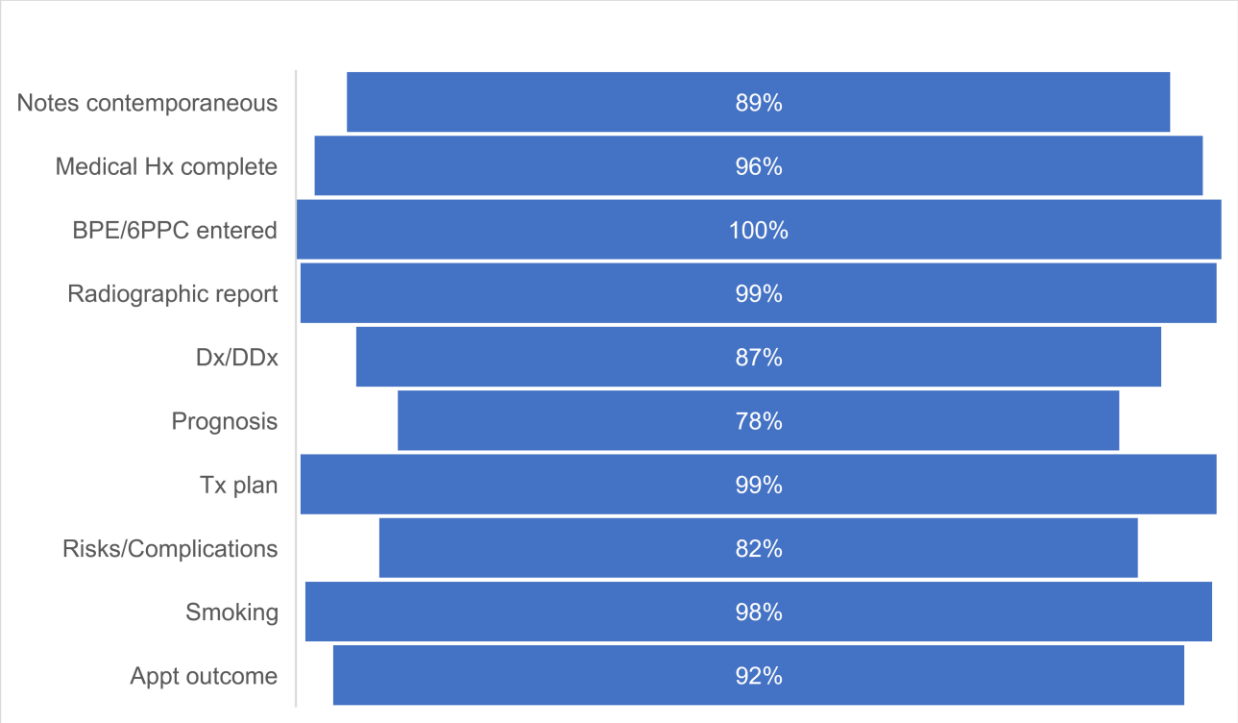

Figure 10: Percentage Compliance in all 10 areas in re-audit

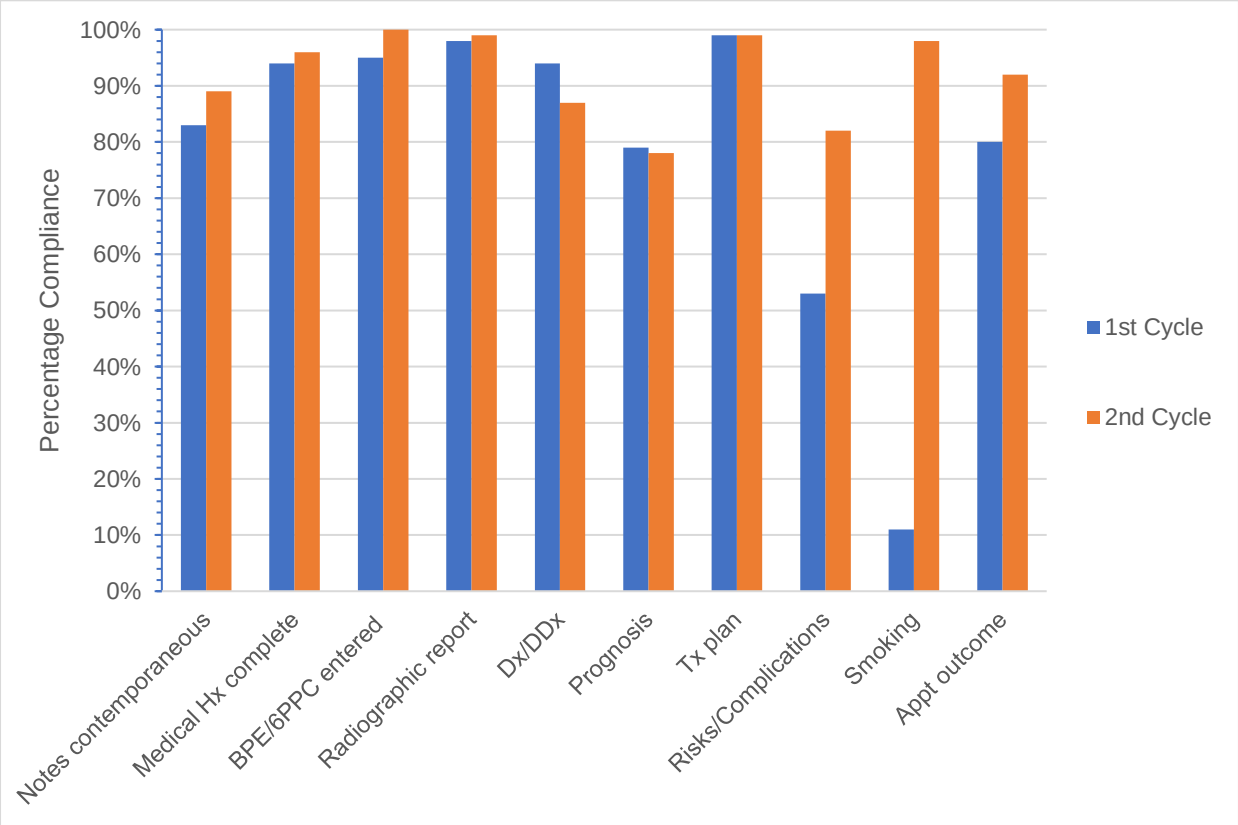

Figure 11: Chart comparing Percentage Compliance with minimum standards in 1st and 2nd Cycle

Discussion:

Some positive areas to note from the results above:

- A large improvement in the recording of the discussion regarding risks and complications, from **53%** in the initial audit to **82%** in the re-audit.
- There has been a large improvement in compliance with the 10 minimum standards, therefore **53%** of records now comply with the 10 minimum standards, compared to only **21%** in the initial audit.
- **100%** Compliance with BPE/6ppc being entered and **99%** compliance with the treatment plan being recorded, as well as **98%** of notes mentioning smoking cessation or risk of smoking where relevant.

However, there remains some areas of concern:

- There was no improvement in the recording of prognosis, with **78%** compliance in the re-audit compared to **79%** in the initial audit.
- There was a reduction in the recording of diagnosis, with **87%** compliance in the re-audit, compared to **94%** in the initial audit.
- Although there has been an improvement in the records being contemporaneous and authorised, with **89%** of records being contemporaneous in the re-audit, compared with **83%** compliance in the initial audit, 100% compliance is essential and has not been achieved.

Actions following findings of re-audit:

A Periodontal Consultant Clinic meeting was held on Tuesday 19th November to present the findings of the re-audit and to gain feedback regarding them and raise key issues. It was emphasised that the reduction in compliance with the recording of diagnosis and prognosis was particularly concerning, as well as postgraduate notes not being authorised as being a key contributor to poor results regarding contemporaneous notes.

It was also mentioned that the crib sheets were not always present on the clinic and could be more visible. It was therefore advised that more copies should be printed out and distributed on clinic which was subsequently accomplished. Additionally, this meeting highlighted the above issues to staff who could then emphasise the importance of complete and accurate records to all other staff as well as students, with diagnosis and prognosis being of vital importance. It was encouraging however to see an overall gross improvement in results following the first audit.

Therefore, going forward, we plan to maintain positive results in areas of improvement by continual reinforcement and planning re-audit to confirm adherence to standards. Also, consideration is being given to including a prompt on SALUD to ensure that operators are entering a diagnosis and prognosis into the clinical records, areas we are currently falling behind on.

Use of Funds:

The BSP's award has gone towards a number of initiatives in order to improve current practice in the periodontal department.

In an effort to encourage more audit activity and raise awareness of clinical governance, we invited Nancy Dixon, an expert on clinical audit and quality improvement from Healthcare Quality Quest, on two occasions, to discuss audit and quality improvement both with the Periodontal department in a lunch and learn, as well as with Undergraduate students in an evening lecture on Thursday 12th December 2019 organised in collaboration with the Dental Society at King's College London. The talk helped to introduce UG students to audit and quality improvement, and to explain the importance of audit, as well as how to come up with an idea for an audit and then how to carry out a quality improvement project. This talk was extremely well-received and helped to equip UG students with vital skills needed for future clinical practice.

Figure 12: Nancy's Dixon's UG Evening Lecture at King's College London

On 11th December, a lunch and learn session was held with all members of the periodontal department where Dr Navidah Chaudhary delivered a seminar highlighting the medico-legal aspects of our audit findings.

In an effort to maintain and improve our performance as a result of our findings from the second audit cycle, we have continued to print and laminate a number of crib sheets for distribution on clinic, to act as an aide memoire for students and staff completing clinical records.