DSC
Dental Schools Council

Implications for Undergraduate Dental Education and Clinical Training as a consequence of the COVID-19 Public Health Emergency

The purpose of this summary document is to present to key stakeholders:

- the possible effects of the COVID-19 (SARS-CoV-2) pandemic on dental undergraduate education that may result in students unable to transition into the workforce in summer 2021;
- the mitigating actions dental schools have taken and are introducing;
- the outline options identified to limit the adverse impact;
- the potential risks to workforce development, reputation, finance and ultimately, patient care.

The document has been developed by Dental Schools Council and represents the consensus view of all dental schools.

The issues

Over 1,250 dental and dental hygiene / dental therapy graduates enter the workforce every year, from UK and Irish dental schools.

Most clinical training occurs in dental hospitals or purpose-built primary care teaching facilities, although some models of educational delivery vary. At most dental schools undergraduate dental and dental hygiene/therapy students in the clinical years of their course (most commonly years 2-5, and 1-3, respectively) provide extensive clinical care for volunteer patients drawn from the general public accounting for over 400,000 patient episodes per annum. Many of these attendances, particularly in restorative dentistry, involve aerosol generating procedures (AGPs). Personal protective equipment (PPE) mitigates the risk of such aerosols to operators. However, concerns about the possibility of transmission of SARS-CoV-2 within the dental setting, or the wider community, prompted dental schools to discontinue elective clinical care as the pandemic developed.

All dental schools then rapidly adopted a primarily online approach to the delivery of academic teaching and assessment. However, hands-on clinical experience cannot be delivered remotely or online.

Currently public health advice is to avoid or minimise the number of AGPs if possible and, if they must be carried out, full PPE must be worn. There is also a need for a fallow period between patients of up to one hour.

For nearly all dental schools the majority of clinical placements occur in closely associated NHS dental hospitals. In order to ensure safe and appropriate staff supervision, much of the treatment is provided in open multi-chair clinics rather than in single chair closed surgeries. This presents a substantial challenge to recommencing clinical teaching with a need to clearly identify and mitigate any risk posed by the open multi-chair environment. Hospitals are currently restricting AGPs to closed single chair surgeries, with significant downtime between patients to allow air changes and subsequent cleaning to take place. Closed surgeries, in dental hospitals, are mainly used for the delivery of highly specialised NHS service provision and not for student patient treatment. As a result, there are relatively few closed surgeries compared with the number of large open plan, multi-chair clinics.

The ongoing need for social/physical distancing limits how many staff, students and patients can be present in a particular space at any one time. In addition, if open plan clinics are used it is likely that they will only be able to be used in a reduced fashion both due to social/physical distancing, but more likely due to concerns about aerosol transit across chairs. Taken together both social/physical distancing and open plan clinics mean that dental school/hospital facilities will potentially be used at considerably reduced capacity for the foreseeable future.

The overall effect of the current restrictions is a significant reduction in the opportunity for clinical training, particularly that involving face-to-face engagement or AGPs.

Future planning

As a sector, dental schools across the UK and Ireland continue to make strenuous efforts to explore all opportunities to enable the clinical teaching of their students to take place during the 2020/21 academic year. Mitigations include the enhanced use of simulation and clinical teaching which minimises/avoids the generation of AGPs in open plan clinical environments. Furthermore, the COVID-19 pandemic has

stimulated significant research in many Schools - shared across the sector – which will inform resumption of teaching of all dental procedures through, for example, the use of adjustable speed electric motor hand pieces, adjustment of chair usage and or air handling/ventilation in an open plan environment and appropriate use of screening.

Students in all year cohorts have experienced a reduction in clinical experience since March 2020 and may well continue to acquire clinical experience at a reduced rate for some time to come. This is particularly acute for students entering the final two years of their programme (Years 4 and 5 for dentistry, 2 and 3 Dental Hygiene/ Dental Therapy) and increasing the opportunity for additional clinical exposure, as discussed below, is a key priority.

To support the potential for increasing clinical exposure it will be essential to ensure a sufficient supply of PPE to meet the combined requirements of training and the NHS clinical service, particularly once AGPs become more routine across the entire sector.

The integrity of the university award and the standards of the professional regulator remain paramount. The following section on approaches to mitigation describes our current planning and our proposal for a collaborative approach between the Schools, the General Dental Council (GDC) and the Committee of Postgraduate Dental Deans and Directors (COPDEND) in order to reassure all parties.

Approaches to mitigation

Assuming that there is no significant and sustained reduction in the community prevalence of COVID-19 infection and the R number, or the development of a vaccine to permit a return to pre-March 2020 approach to dental clinical teaching in the short to medium term, dental schools are considering the following approaches:

- Triage and risk assessment of all dental student patients.
- Regular testing of dental students and dental teaching staff.
- The reconfiguration, where viable, or adapted usage of clinical teaching space to facilitate safe working.
- Greater use of clinical skills simulation training.
- Reduction or alteration of allocation of group size in simulation and clinical areas.

- Measures to facilitate the opportunity for additional clinical experience for all students:
    - » Extending or altering the sessions within the normal working day for dental students and dental teaching staff.
    - » A reduction of the “nice to have” elements of the course such as electives.
    - » Delay final exams in the Spring/Summer of 2021 towards the end of the academic year to allow greater clinical exposure for all students.

It should be noted that there will be significant financial implications to the Schools and NHS partners to enable these mitigations. They will also need to take account of staff and student wellbeing and the overall student experience.

On collective consideration Dental Schools Council is of the view that there are three viable ways forward:

1. Return to clinics and qualify their final year cohorts before the start of Dental Foundation Training in September 2021. This requires an extension of the Tripartite Agreement between the dental schools, the Statutory Education Bodies of the four nations (HEE, NES, NIMDTA and HEIW) and the GDC. This agreement enables qualification with a Personal Development Plan, for those students who had met the GDC learning outcomes, but in the opinion of the dental school would benefit from further targeted experience. Flexibility would also be sought to allow our students the maximum time to graduate up until entering the workforce in September. This is all applicable to Dental Therapists who enter Foundation training. For Dental Hygienists/Dental Therapists who do not enter Foundation Training, a Personal Development Plan (if required) would be supervised by a suitable registrant within their first position of employment.

This is the preferred option but will only be achieved with additional resource.

2. As in option 1 but with an extension (e.g. 6 to 12 months) to the period of training and an associated delayed entry into the workforce. This is the worst-case scenario and would have significant implications for resource. It would be unreasonable to expect students to self-fund this additional clinical training time and discussions with the relevant funders in all four devolved nations would be required, as dental schools would not have the resources to address this cost. Extra NHS educational resource would also need to be provided via appropriate SIFT / ACT / SUMDE funding to NHS partners for this extra period. In addition, this delay in graduation will have consequences for the future dental workforce, dental foundation training, the primary care dental workforce and the future provision of dental specialists.

3. Provisional registration with the General Dental Council, which would change to full registration when all elements have been completed as assessed by a joint COPDEND/ Higher Education panel. This option requires a change in legislation. The lack of a mandatory foundation training year for Dental Hygiene/ Dental Therapy graduates restricts this option for this group. The rollout of additional and mandatory foundation schemes for Dental Hygienists/ Dental Therapists should therefore also be considered. While the majority of dental students do undertake Dental Foundation Training this option does not provide a solution for overseas students returning to their country at the end of their undergraduate course. The number of overseas students may be such that it might be possible to allocate them to schools with appropriate further central funding in order to complete further training. This is difficult to determine accurately at this stage.

In summary, there are significant complexities to delivering the necessary clinical experience for students to graduate as “safe beginners” and join the dental workforce in 2021.

The financial, regulatory and organisational implications of these proposals for all stakeholders in dental education require urgent considerations to ensure a successful outcome.