



From survival to revival: Life after Coronavirus

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Scouts everywhere will know the motto 'Be prepared' but, as a former scout myself, the wording has always seemed worryingly incomplete – particularly if you only had a compass, a whistle and a triangular scarf to mount a response. Fortunately, back then, problems rarely arose for which one of those items didn't provide a solution. The troop would practice responding to a list of common emergencies so that we all knew what was expected, if the need arose.

When the bottom falls out of your world

Dealing with the unexpected is a lot more difficult because, by definition, you are confronted with an unfamiliar situation for which there has been no preparation. You may also be frightened, particularly if it involves large numbers of people dying unexpectedly. Indeed, when you first learnt about the extent of the COVID-19 pandemic it might well have seemed as if your world was falling apart.

Although you can't control the pandemic that caused dental surgeries to close, you can control your response to the situation rather than simply reacting to it – indeed there is a huge difference between these two choices. By taking the time to review what is happening, you start to remove some of the emotion that arises whenever your 'primitive brain' triggers a reactive response. The time taken before making a controlled response can be used to collect information and consider the options.

The way forward for all practitioners

Whilst NHS practices must follow the relevant guidance from the four Chief Dental Officers, those in private practice are free to develop their own modified protocols to ensure the safety of their patients and the dental team as we recover from the national lockdown response to COVID-19. Whichever path is chosen, the same evolving scientific evidence is accessible to us all. There is plenty of information on the Internet about mitigating the risks of providing dental treatment whilst COVID-19 persists and it is important to take a moment to distinguish between personal opinion and the consensus view of a recognised body of opinion.

If you want to achieve a good result from the present situation, keep abreast of

developments. Three of the four CDO's have set out roadmaps and told practitioners to be ready for the phased return to work. Even these change along the way, there are indications that the eye of the storm may be passing as we move into a recovery phase.

Take a look at what dental colleagues are doing and saying in different parts of the world where the pandemic peaked earlier and life is slowly embracing the new normality. Ask yourself what strategies might work for your own situation to create a working environment that is 'Covid-secure' and compliant with the prevailing public health guidelines. In addition to patient safety, practice owners have a responsibility to follow current HSE guidance to ensure the health and safety of their employees.

Because dentists work in so many different ways in a variety of settings, every dental team needs to develop a plan that can be implemented in their own particular situation. Nobody has a monopoly on good ideas and by asking the whole team to engage in making the practice 'Covid-secure', you will help them to take ownership of the new protocols and promote their level of confidence when speaking to patients. After all, the patients may have their own fears about booking an appointment and may need

reassurance that it is safe to do so.

Collaborative working is the easiest way for your practice to get back on its feet. Equally important will be a united front when it comes to costing and contracting to provide dental services. For that reason alone, every dentist should consider renewing their BDA membership as well as encouraging others to join.

What's occurring?

When it comes to modifying protocols to ensure the safety of both patients and the dental team, we can learn from the adjustments that were made by the profession when HIV/AIDS first appeared almost 40 years ago. An equally pragmatic resourcefulness to mitigate risk when providing dental treatment, is at work today. Here are just some of the ideas you might want to keep in mind when thinking about the preparations needed to open up your surgery ahead of any mass COVID-19 vaccination becoming available.

Identifying risk

Whilst treatment is still restricted, dental appointments can be pre-booked by telephone so that the needs of the patients are triaged to match the available resources. Patient appointment software can be adapted to facilitate triage and generate emails or texts to explain to patients what they should expect when requesting an appointment.

Before deciding on any treatment, there are two basic risks to assess; the risk presented by the patient together with the risk associated with any treatment you might want to provide. Decide which procedures are aerosol generating and the level of personal protective equipment (PPE) required for such procedures. Public Health England will periodically update the protocols and guidance needed to reduce transmission of COVID-19 and CQC will continue to monitor the compliance of individual practices.

Unless your contract requires you to follow the NHS operating instructions prevailing at the time, private dentists will need to achieve the same standards of risk mitigation or indeed exceed them. Either way, a written protocol should be prepared by every practice and a record kept of the reasons for any deviation from the published NHS protocol,

Sort patients free of COVID-19 from those who might carry the disease

When permitted, treatment could be provided for those with a lower risk and delayed for

those posing a higher risk, unless urgent treatment is needed. Referral to an urgent care centre may be required for patients with an elevated risk who have an acute dental problem. Following telephone triage and risk assessment, low risk patients can be given an appointment and checked again on arrival in the dental setting to confirm that no COVID-19 symptoms have developed since the appointment was booked.

When attending for treatment, a no-touch infra-red thermometer can help identify potential COVID-19 patients with a fever until a reliable rapid blood test or saliva test is available to provide a result on site.

The GDC will recognise testing as part of the practise of dentistry, thereby allowing the existing indemnity arrangements to cover the dental team for the procedure. The same test can be used to screen members of the dental team.

Reducing the aerosol risk

The oropharynx and nasopharynx are sites of replication for the corona virus with the result that saliva contains a high viral load of COVID-19 with up to 1.2×10^8 infective copies/ml. This makes any dental procedure that generates an aerosol, extremely high risk. Two recent papers published online have suggested that the use of Povidone-iodine (PVP) as a Nasal Spray and Mouthwash might reduce cross infection and protect healthcare workers. Chlorhexidine is not effective against COVID-19.^{1,2}

Other methods of risk reduction include, high-velocity air evacuation, rubber dam, personal protective equipment (PPE), air purification and decontamination systems as well as adequate ventilation and changes of air between patients.

The air we breath

Filtration systems have long been used to improve the air quality in confined spaces. Patients will already be aware of the principle of using a face covering to reduce contamination of the air when they breathe of cough. It is unfortunate that the surgical masks, in short supply, used to protect healthcare workers are often confused with other more plentiful methods of filtration (e.g. a piece of cotton fabric to cover the nose and mouth) that could reduce transmission of the virus when social distancing is compromised e.g. public transport.

Adequate surgery ventilation has to be considered in order to stop transmission of the virus between patients. Natural

Be prepared

Keep abreast of the latest developments for dentistry as the UK moves towards a relaxing of 'the stay at home' restrictions by following the live updates from the BDA which may vary according to the region of the country in which you practise at www.bda.org/coronavirus

ventilation may be enhanced by the use of negative pressure rooms and units designed to filter and purify the air to eliminate viral particles.³

The risk to the dental team working with patients throughout the working day needs special consideration. Until vaccination makes aerosols less of a risk to the dental team, the use of a respirator will be part of the solution whenever the required dental procedure presents an elevated level of risk. But respirators need to be comfortable if they are not to distract the clinician during extended procedures. If you can also eliminate the need to have them test fitted by a technician then that would be an added bonus.

The waiting room

The government's 'Covid-secure' advice makes clear the sort of modifications that might be required in your own waiting area. Not intended as a complete list, here are some examples of the modifications you might have to make:

- Patients should disinfect their hands upon entering
- Automatic doors or doors left open help to eliminate cross contamination
- Limit the number of patients in the waiting area and don't overbook
- To maintain social distancing patients should enter the practice alone. Additional patients and companions are asked to stay outside unless required to provide consent.

References

1. Kirk-Bayley J, Challacombe S, Sunkaraneni V and Combes J. The Use of Povidone Iodine Nasal Spray and Mouthwash During the Current COVID-19 Pandemic May Protect Healthcare Workers and Reduce Cross Infection. SSRN Elect J 2020; 10.2139/ssrn.3563092.
2. Valerie B, O'Donnell *et al.* Potential role of oral rinses targeting the viral lipid envelope in SARS-CoV-2 infection. *Function* 2020; 10.1093/function/zqaa002.
3. Proffitt, E. What will be the new normal for the dental industry? *Br Dent J* 2020; **228**: 678-680.

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