

How to be greener - a guide for dental practices



In the second part of her series on sustainability in dentistry, **Caroline Holland** finds out how dental teams can be inspired to 'leave the smallest possible footprint on the planet'.

How green is your dental clinic or practice? The sustainability status of the dental practice you work in may not yet trip off your tongue, but it soon will: it's predicted that the Care Quality Commission (CQC) will include sustainability as an example of 'notable practice' from as early as next year. Given the dire impact of climate change and the urgent need for eco-friendly dentistry,¹ it is only a matter of time before a green approach becomes mandatory.

There are multiple ways in which you and your practice can start your sustainability journey. Resources, awards and programmes abound. This article sets out some of the options available to dental teams as well as the innovative new products which are coming onto the market.

A good starting point for an evidence-based approach to a green conversion would be the book² by Brett Duane and colleagues, published in 2022. Announcing the book in the *BDJ*³ last year, Brett said the key issue in dentistry is travel, travel, travel. A move towards greater prevention and more virtual appointments is imperative, he suggests, as is the move away from disposable products wherever possible.

Before the book was conceived, Brett created a website⁴ to serve as a one-stop shop for dental teams wanting to take an evidence-based approach to a green conversion. Among the most important documents for dental practices is the 'Clinical guidelines for environmental sustainability in dentistry'⁵ published earlier this year. This was a project supported by NHS

England, Trinity College Dublin, the Office of the Chief Dental Officer and the Faculty of Dental Surgery of the Royal College of Surgeons of England. It sets out clearly the activities which are the most carbon intensive.

The FDI World Dental Federation has developed a toolkit⁶ while guidelines for dental practices⁷ developed by Brett and others can be found on the website of the Centre for Sustainable Healthcare. There will be practices or groups of practices that want more structured support and there are a range of options. Davinder Raju, for instance, a dentist in West Sussex, has developed the Greener Dentistry accreditation scheme.⁸ Davinder became an eco-champion several years ago when carrying out a Masters in Minimal Intervention Dentistry: 'I realised I was trying to have minimal impact on my patients' teeth while not considering the impact of dental care on the environment. It was a light bulb moment as I started questioning my impact. Everything needs to be in harmony.'

He talked to his team about changing the principles on which the practice operated, but at that time, he met resistance. A decision to relocate and open a new practice a few years later brought the opportunity to embrace sustainability. Recruiting for the team at the Dove Holistic Dental Centre in Bognor Regis, he appointed people who shared his values. Since then, no staff have left.

All the interviewees for this article agree that taking a sustainability approach might increase your costs, but it should not be assumed that green products are always more expensive. They also agree that they can attract patients through eco credentials.

Davinder's investment in a building which is as close to zero carbon as he could make it has indeed been offset by many benefits, he says, including the opportunity to enhance the workplace culture.

His accreditation scheme has been developed to be within reach of all dental practices. 'So many things in dentistry come at a price. I wanted to make my programme affordable and transparent.' The scheme has two tiers, both offering access to a toolkit to underpin a conversion to a more sustainable practice, one free while the upper tier levies a monthly £12 charge to support the accreditation process.

Coach Mark Topley has been providing his Corporate Social Responsibility (CSR) programme⁹ to dental teams for the last six years. Sustainability wasn't always a core CSR tenet, he says, but it is now.

It is Mark who suggests that the CQC is planning to increase the sustainability aspect of their assessment. A Fellow of the Institute of Corporate Responsibility and Sustainability, he will have this on good authority.

Mark concedes that if you are in the NHS and margins are tight, running a sustainable business might seem challenging, but could give you competitive advantage. And an improved workplace culture might help with staff recruitment and retention.

His advice to any practice tempted to go down the sustainability route is not to be daunted by how much is involved but implement one change a month. The reason for investing in coaching is clear, he says; being green can't just be a tick box exercise. Sustainability has to be engaged in positively or



Brett Duane

you will miss out on what amounts to a strategic advantage for your business. He says it's not just a 'nice to have' but a 'must have' to stay competitive, and Generation Z employees and patients will actively seek out dental practices with the right values.

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It's depressing for the profession, he agrees, that the pervasive marketing of big brands promoting unhealthy food and drink still seems to dominate. Unpalatable as it is, Mark says, dentists can never win against the manufacturers of bottled carbonated drinks; the best they can do is provide a positive alternative narrative.

Corporate chains of dental practices, now referred to as Dental Service Organisations (DSOs), are likely to lead the way when it comes to procurement, he says, seeking out suppliers who meet high standards.

Significant sized groups going in search of new funding will have to prove their Environmental, Social and Corporate Governance (ESG) credentials. Investors want ESG rated business partly because this illustrates a robust approach to risk management, says Mark. One DSO he knows was awarded a significant discount on its loan thanks to its ESG commitment.

Students Organising for Sustainability (SOS-UK) have also created a scheme¹⁰ offering structured support for dental teams. Partly funded by the NHS Greener Fund, SOS-UK

has developed an online sustainability toolkit. Free to access, the toolkit comprises step by step actions and resources for dental practices to work through and action. At the end of the year, your practice will be audited and once your commitment to sustainability has been verified, you receive an award.

Rachel Soper, SOS-UK green impact senior project manager, said: 'We have tried to make the toolkit fun and engaging rather than a question of reading academic papers. We want to get dental teams on board and using the resources, so they make an impact and get recognised for what they do.' A similar programme for GPs was launched in 2014, she says, and now has 500 practices on board.

Dental supply company Kent Express has played a leading role in championing green products which are featured on a dedicated landing page on their website.¹¹ Their eco range includes evacuators, aspirator tubes, and saliva ejectors made from sugar cane, biodegradable micro-applicators, and bamboo toothbrushes.

Paula Elgar, Sales Manager at Kent Express says: 'Guided by the concepts of "reduce, reuse, recycle and rethink", we are now a "paperless first", hybrid-working distribution company with a comprehensive range of eco-friendly dental products.'

Kent Express is working towards ISO 14001 certification, which follows standards set by the International Organisation for Standardisation (ISO) to identify how organisations can continually improve their environmental performance.

'Our product portfolio as well as the decision to go for the ISO 14001 certification are the foundation of our overall commitment to sustainability. Another important example is our highly engaged team. We recently brought gloves, garbage bags, and the team spirit to Margate, Kent, to help clean up the local beach,' says Paula.

Kent Express is currently collaborating with industry experts to examine every aspect of their business, so that they can understand how they can further improve their green credentials.

Paula adds: 'Making the switch from paper and print to digital, from amalgam to composite



Mark Topley



Davinder Raju



Paula Elgar

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or from traditional chemical-based x-rays to digital are a few of the changes that dental practices can implement. Apart from their own belief in the importance of sustainability, dentists also realise there is a greater demand among patients.’

She confirms that products made from recycled materials can cost less than those that are not. ‘It is also worth factoring in the potential long-term savings that can be made. Some small equipment, such as the W&H Lisa Vacuum Steriliser, now have special eco-friendly features where there may be a larger investment in the initial cost. Over time it optimises energy consumption and saves money.

‘The industry’s responsibility to become more sustainable is obvious. For real change to happen, we at Kent Express think that it is essential that all stakeholders in the manufacturing and supply chain integrate sustainable development goals into daily practice and support a shift to a green economy. This includes the dental sector, and it includes us.’

Innovative green oral hygiene products are coming to the market in greater numbers. For instance, SURI¹² – short for sustainable rituals – is an electric toothbrush designed to have minimal environmental impact.

Mounir Atassi, SURI’s head of dental and professional marketing, says: ‘One of the barriers to an electric brush is the recycling aspect and we have taken that away. Our brush heads are made from plant-based materials – the bristles from castor oil and the head from corn starch. Customers can send their used brush heads back to us and we work with partners who take the heads apart. The SURI has an aluminium handle and is built in a modular way so it can be taken apart easily for repair.’

The two founders of SURI are non-dentists who believed there was a gap in the electric toothbrush market. ‘They found both the existing brushes were big and bulky and focused only on performance. They wanted a product which was lightweight and durable with a chargeable battery with a life of more than 40 days on a single charge.’

Mounir was recruited last year, having worked as a lecturer in oral biology at Dundee

dental school and with pharmaceutical giant GSK. The SURI team carried out research which showed consumers are prepared to pay more for a product which is sustainable, he says. They chose sonic vibration functionality because oscillating brushes are harder to recycle. Despite being a small start-up, SURI has already achieved B corps certification and considerable market penetration.

‘Our priorities are sustainability, performance and design. We have won two design awards and the feedback we get is amazing. Interestingly, a lot of dentists connect with us because their patients have told them about the SURI – and they can see the positive results. We believe “lifetime products” are here to stay,’ says Mounir.

Other oral care success stories are Waken,¹³ a brand which focuses on aesthetics as well as sustainability and Parla,¹⁴ created by three dentists. Parla toothpaste tablets were featured on Dragon’s Den and are already to be found on the shelves at Sainsbury.

New to the market this year and another example of a green innovation is the friendly floss,¹⁵ a stainless steel flossing device. Its creator, Giles Edwards, a non-dentist, chose an oral hygiene product because he recognises the harm that plastic floss picks do to the environment. He said: ‘Sustainability is multi-faceted; my own priority is to promote healthy products whilst halting the loss of biodiversity.’

If you want to know what **you can do** to make a contribution to greener dentistry, I give the final words to Brett Duane who recommends:

- Bring down your footprint by the kilogram by walking or cycling to work instead of using cars or buses – and encourage patients to do the same
- Get solar panels on your building to generate your own energy
- If your practice has a garden, turn the lawn into a wild open space to help build biodiversity.

He says to remember we are all in this together. Working collaboratively will drive up efficiency and, little by little, bring down dentistry’s very heavy carbon footprint.

To read part 1 of this article visit <https://www.nature.com/articles/s41407-023-1949-4>.

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