

No, says **Caroline Holland**, who finds out how dental teams are making use of new technology which showcases their value to the practice and to patients.

heories that robots will make humans redundant have been circulating for a very long time. It's a topic of endless fascination, not least because it is so difficult to predict how artificial intelligence (AI) will evolve.

Research published in 2015¹ suggested dental nurses were vulnerable to being replaced by robots. Developments of the last five years, however, show the reality today is very different and far more interesting, especially in the field of orthodontics.

One of the presentations at the 2021

British Orthodontic Conference lifted the lid on the transformation that is underway. Anshu Sood, Director of Clinical Practice at the British Orthodontic Society, described how she introduced virtual technology into her practice, Helix House Orthodontics, in Nottingham, in 2020.

Anshu had already investigated the Dental Monitoring platform and when NHS England announced dental practices had to close indefinitely, decided that it was time to take the plunge. Dental Monitoring combines an app, which is free for patients to download, with ScanBox, a device which

is given to patients to take home and enables them to scan and upload images of their occlusion onto the practice website, on a weekly basis. Anshu also looked into other dental technology, Chairsyde and SmileMate, as initial lead-generating tools as well as Calendly for online scheduling and Zoom for virtual consultations.

Most of Anshu's patients now find Helix via SmileMate. An online assessment plug-in, it gives patients access to the clinic website where they can generate a smile simulation, an oral health report or organise a video consultation.

Anshu says that the new technology, monitored by her treatment co-ordinator, resulted in 73 patients signed up and ready to start treatment by the time lockdown had ended less than 12 weeks later. All they needed was an initial face-to-face appointment with her in order to make a start. Together, SmileMate and Dental Monitoring provide a virtual experience throughout the treatment with face-to-face appointments only when necessary.

She adds: 'I was worried the technology would be too automated and impersonal but the reverse is true.

Because we are seeing the scans weekly, there is more contact with patients and everyone in the practice is involved in their care. For instance, the orthodontic therapist will look at all the scans weekly and speak to the patient if anything needs acting upon. If more elastics need

sending out or the patient needs a chat, the treatment co-ordinator will respond to them.

Carly O'Mahony with Faiza Lewis

the woman patient with sectional (fixed) orthodontic treatment which will deliver the bite stability she needs at less than the cost of a course of Invisalign. Carly feels very satisfied to have ensured the patient got the right treatment to fit her needs and budget.

Carly says: 'I love my job. The technology is really helpful to the workflow and it makes us so much more involved. The patients like having someone to turn to and having time with me allows them to ask lots of questions

> that they don't like to ask the orthodontist. In my opinion, it's so important that the treatment coordinator has a nursing or therapy background'.

> This revolution is not limited to specialist practice. There are dental practice owners who have been working with treatment



Andy Toy

Tracie Barnett

The Team at Helix House Orthodontics

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All my staff would say that the technology has enabled them to take a more active role in the patient journey.'

Carly O'Mahony worked as a dental nurse for 30 years both in the community and in mixed practice before moving to work at Ewell Orthodontics three years ago and immediately found her feet as an orthodontic nurse. In May, Faiza Lewis, one of her two principals, asked her if she would like the role of treatment co-ordinator.

Carly says: 'I think she could see I was friendly with patients. She said I had the right knowledge and skills and she asked me to give the role a try'.

Carly has initial contact with patients

featuring an informal appointment where they can chat through what they want and ask lots of questions. Once the patients are booked in with Faiza or her business partner Richard Williams, she will provide a briefing on what the patients' expectations and needs

Just recently, says Carly, a woman in her seventies contacted Ewell Orthodontics through SmileMate. When Carly reached out to her she was adamant she wanted Invisalign, but she thought it was too expensive and was on the brink of giving up.

Following her consultation with Faiza, Carly talked through all the pros and cons of fixed braces and aligners.

The upshot was that Faiza is now providing

coordinators (TCs) for some time. Tracie Barnett is a perfect example of an experienced dental nurse who has not only made the transition to TC but is now mentoring others who want to develop her skills.

Tracie was recruited to The Dental Studio in Wakefield by practice principal Martina Hodgson, a Diamond Invisalign provider and a Key Opinion Leader for Dental Monitoring. Tracie has succeeded so well in the TC role that she now has a dedicated assistant and her own suite with an iTero scanner with which she can provide a simulation of aligner treatment. Many of the patients who see Tracie will pay a deposit for treatment at the end of the session with her, without having met Martina.

Tracie says: 'I used to think that dental nursing was my passion but now I know it is helping patients and supporting dentists as a TC that is my passion. This is my dream job.

She is now working with Andy Toy, the founder of the Dental Business Academy,2 which he established to provide training for dentists

and dental care professionals (DCPs). It was Andy who trained and mentored Martina and provided Tracie with her TC training.

Andy has always strongly believed in DCPs and their ability to build a rapport with patients. As far back as the 1980s he trained and employed care nurses in his NHS practice to deliver prevention. In the last five years he has developed TC training for dental nurses working for dentists offering Invisalign.

Andy says: 'I could see the fantastic potential for the TC to be part of the consent process. The patient needs to understand the treatment they are embarking on and the TC can talk through the pros and cons. This is not about getting a sale; this is about helping the patient to make the right decision for them. It really does come down to trust'.

Robots are very unlikely to acquire the skills that dental team members have, he says. In a hospital, a robot could possibly be used to fetch medicine or dispose of clinical waste but in a dental practice, the dental nurse who is empowered to chat to patients about their treatment is irreplaceable.

A report from McKinsey³ in 2017 already reached this conclusion: jobs requiring critical thinking, decision-making and planning and, above all, human empathy, are the least likely to be replaced.

Dr Rayan Skafi, Clinical Education Supervisor with Dental Monitoring, Paris, speaking in a YouTube video⁴ for clinicians, makes exactly this point. Speaking of AI he says: 'This technological monster has an Achilles' heel and this is emotion and

'Rather than taking away jobs [the technology has] helped enhance existing roles, allowing treatment coordinators to lead on communications'

Recently, Andy has established the Aligner TCO Network to provide a free community hub for TCs and he has recruited Tracie to work with him, teaching dental team members how to become TCs.

He explains: 'It's a big step for a dental nurse to move out of the background in the dental surgery and into the foreground, managing communications with patients. I decided to set up the network as an information and support hub'.

Like Anshu, Andy can see that the pandemic has helped bed in the technology that was already in development. Suddenly, being able to communicate virtually with patients has been a massive bonus for everyone involved. Rather than taking away jobs, it's helped enhance existing roles, allowing TCs to lead on communications while dentists and orthodontists can focus on diagnosis and treatment.

He says the cost of dental monitoring is a set-up fee of about £50 for a scan box, which can be re-used and about £10 for retractors, which are given to the patient and a monthly £10 for the monitoring.

'I'd say that's a small price to pay for the surgery time we save, the quality of the patient experience and the confidence it creates in our service,' says Andy. common sense. How ironic and wonderful that AI is not replacing team members, but helping to enhance their value.

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