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Rethinking the CENTULUI education curriculum

OCTOBER 2019

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Dental



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Will Peakin editor@sdmag.co.uk
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School's out. Well, changing for sure

magine an educational institution
with no courses. No subjects. No
classrooms. No timetable.
Sounds a bit out there, doesn't it?
Ten years ago, two graduates of the
Massachusetts Institute of Technology (MIT)
founded NuVu, a "full-time innovation school
for middle and high school students. NuVu's pedagogy is
based on the architectural Studio model and geared around
multi-disciplinary, collaborative projects. We teach students
how to navigate the messiness of the creative process, from
inception to completion by prototyping and testing".

Couldn't imagine that in a Scottish school, could you? "At Kelvinside Academy in Glasgow, instead of becoming

a member of the vast ranks who are quick to label the

traditional UK education system as 'antiquated', 'unfit of purpose' or 'broken' – but do nothing about it – we united behind a common goal; to re-imagine and transform education for the better," wrote Ian Munro, the head teacher, in a 2018 blog post. Since then, not only has Kelvinside imported NuVu's approach, it has built its own physical 'innovation school'.

"It is important to note that I don't think anyone at Kelvinside subscribes to the belief that the UK education system is fundamentally broken," added Munro. "Fantastic life-defining things happen in our schools every day and our pupils go

on to do great things across all spheres of life.

However, given that the UK education system does not

look too different to how it did 100 years ago, evolution is required."

Scientific laws may not allow for such a 'creative' approach to education in professions based on the sciences, such as dentistry. However, it could reasonably be argued that learning by doing – in controlled conditions – instead of learning simply by

listening to someone else, will result in

a more accomplished practioner. It is an approach that the University of Dundee's Dental School is pursuing with its new curriculum, now in its second year.

"At its heart, the curriculum integrates clinical science with clinical practice. That means a dental student will carry out clinical practice from week one; that's huge," says Dr Andrew Mason in an interview in this edition (p30). "It makes them feel like a dentist, it's what they want to do.

"By the end of the first module, one of the key endpoints is the ability to carry out a simple dental and oral examination and to take a history from a 'patient'. And we have structured the learning around that endpoint. What do you need to know to examine the mouth? You need to know what it looks like. You need to know what's underneath the surface, and to be able to chart the dentition; identify

what's present and what's missing."

Anatomy, physiology, biochemistry, oral biology, cell biology, microbiology, pathology – the science is still core, obviously. But from week one, students are introduced to the clinical environment. They learn about cross-infection control, about posture and how to position themselves, and learn to take a patient history. "It might sound radical, but it's what our colleagues in hygiene and therapy have done for years," observes Mason.

Where Dundee's outlook does definitely coincide with NuVu's is in the area of 'the real world'. By working as a team to solve a problem or overcome a challenge, NuVu's pupils gain skills that can't be learned from a book and will serve them well in their adult life. "We set them tasks," says Mason, "and they get used to researching,

assessing, and presenting. There are team-based learning sessions where students have a series of cases that they explore throughout the year, supported by practical and clinical activity, culminating in a presentation or a poster."

With the General Dental Council embarking soon on the first of its planned revisions of learning outcomes which, from 2021, will form the basis of the curriculum at Scotland's dental schools, the fruits of Dundee's radical step will be interesting to observe.





Arthur Dent is a practising NHS dentist in Scotland Got a comment or question for Arthur? Email arthurdent@sdmag.co.uk

Time to get real

Students with super high grades will strive to be specialists in lucrative and 'niche' treatments at the cutting edge. What about run of the mill dentistry?

he world of academia has a huge effect on the profession and practice of dentistry. Of course it does, I hear you say. We all went to university to allow us to become dentists. What's new about that? Well, the way it's producing young professionals and the skills they are being taught.

There is a widespread feeling that the students currently produced by dental schools are lacking in the skills required for working in general practice. I think this is true. They simply don't get enough practice to be as effective in general dentistry when they graduate as those trained a couple of decades ago. There are not enough patients going through dental schools or outreach programmes to get them the experience. Is it as simple as that? I don't think so. I think there are many more obstacles to the production of experienced and suitable professionals. There are wider considerations about the type of students being recruited; the philosophy of the teaching; the desires of the GDC; what patients need and expect and what government will allow and pay for.

Let's start with government. No CDO, no cash, no control of dentistry and no real, clear idea of what they want to do in terms of dentistry. They keep saying they want NHS dentistry but don't have money to fund it. They like to be able to quote the massive registration figures but ignore the fact that only 65 per cent of people go 'regularly' (they think 'regularly' is at least once every two years). They want to address health inequalities but don't know how to adapt their structures to do this. That includes who and how many dentists they are recruiting or allowing the universities to recruit. Last year's graduate class was significantly reduced and remains at that level.

The GDC has stated that schools should review their curriculum every three to four years and should be producing life-long learners. What does this mean? I would argue every day is a school day. I still learn every day and reflect on my own performance. I attend courses and much prefer to do it in person rather than online. I suspect that is different from the newly qualified. The massive integration of technology into courses and the digital age of dentistry is upon us. However, are these things better for dentistry and more importantly the patients? Does the course curriculum make people interested in CPD? I think it's a more personal thing.

Potential dental students now need to be fantastically well qualified. The entrance requirements for dentistry are exceptionally high. It's simply supply and demand. Few places for loads of applicants. The universities want to pick very bright students. They are easy to teach. However, they may not be the best dentist. Even if they

are the best dentist, it's very likely they are female. This is a problem for workforce planning in terms of the longterm whole-time equivalents.

Moreover, are the educated elite what the profession really needs? Students with super high grades will want to reach the pinnacle of their profession. They will strive to be specialists in lucrative and 'niche' treatments at the cutting edge. What about run of the mill dentistry? Who will do that? Dentistry is still, and I think it always will be, a profession which demands exceptional communication skills and practical, hands-on ability. Yet these aren't the kind of things which can be demonstrated by spectacular higher grades. Common sense and the skills to talk to the 'average punter' are not necessarily attributes seen in modern dental students. These are also hard to teach.

However, the universities are trying to change the curriculum to develop modern professionals with these abilities. They are trying to create a more integrated learning experience without lecturing. Based on more practical clinical techniques taught from the very start with more detailed knowledge layered on top as they move through the years. I have to say I struggle to see how this works when students don't have a sound theoretical base. Maybe that's just because I'm unable to see beyond my own experience. Educators want to motivate students to learn by themselves, researching topics as they might have to do when qualified and on their own. This can't be a bad thing, but I do worry that self-directed learning tends to create a narrow focus on things you have to or want to learn rather than a broad spectrum of learning.

So, I think we have an issue with the level of practical experience the students have at the moment. There is a problem in the disconnect between what type of professionals are being produced, the expectations of those professionals and what can actually be achieved when working on real patients, NHS or private. There needs to be a philosophical change in the production process of academia. I really hope the rhetoric about a change in curriculum to enhance practical abilities and problem solving is not hollow. I hope that the talk of working like general practice is achieved but more importantly advised by people who work in practice; not academics or people who used to 20 years ago.

Change is constant, patients' demands are ever higher, and young professionals want to work far fewer hours but achieve higher levels of education and, one would assume, remuneration. The only way this can happen is to change their initial education and manage their expectations. Perhaps a lower bar for entry may allow for greater realism, practical ability and more realistic professional aims? Maybe that is a factor to be considered in conjunction with changes in teaching methodology?



Copied content was detected with software used by universities to check students' work

FIVE dentists in Scotland have been suspended by the General Dental Council (GDC) for sharing or copying Significant Event Analysis Reports (SEAs) submitted to NHS Education for Scotland (NES) as part of their requirement to meet the terms of service for working in the NHS.

A practice owner has been suspended for six months for sharing with four others content from his SEAs covering the 2010-2013 and 2013-2016 audit cycles. He appeared before the GDC's Professional Conduct Committee in July facing nine charges. Three were proved, three were not proved and three were admitted.

In its ruling, the committee said that the sharing of two of the SEAs was "motivated by the potentially devastating financial impact that the prospect of [another registrant's] non-compliance with NHS Education for Scotland's audit cycle requirements would have on your business interests".

It added: "The committee finds that this conduct would be considered by your

fellow practitioners to be deplorable, and that your dishonest conduct is likely to have brought the standing and reputation of the profession into disrepute.

"Your serious misconduct is also likely to have undermined the trust and confidence that the public places in the profession and in the systems intended to regulate the profession. Your conduct constitutes a serious departure from a fundamental tenet of the profession, namely the need to act with honesty

The dentist's reinstatement is subject to review and the committee recommended that he prepares a "reflective statement regarding your conduct and how your dishonesty affects your fitness to practise and public perceptions of the profession. The reviewing committee might also be assisted by evidence of practical steps that you have taken to address and remedy vour dishonesty".

Three of the dentists were suspended for periods of between seven and nine

months, with their reinstatement being subject to review. A fifth dentist was suspended for three months but the committee ruled that it was not necessary to review the suspension before its expiry. None of the dentists was suspended immediately and their suspensions are due to take effect after the appeal period.

NES used the same software that universities employ to check students' work, although it is understood that its use in this context is not currently routine. Helen Kaney, Head of Dental Services, Scotland, at Dental Protection, commented: "Plagiarism poses a great risk to a clinician's career and professional reputation. It is essential to make sure that all work submitted, whatever the type and in whatever capacity, is your own and properly referenced. Dentists must be in no doubt that copying another's work is considered by the regulator to be dishonest conduct."

Analysis, see p26-27

'DIY' orthodontic warning

Profession faces risk by working for direct-to-consumer firms for dental professionals

DENTAL professionals could be referred to their governing bodies if they undertake work for direct-to-consumer orthodontic companies.

The warning from the British Orthodontic Society (BOS) comes in the wake of the UK launch of SmileDirectClub, a US start-up. It has opened 16 'SmileShops' in cities across the country, including Glasgow and Edinburgh. The company is investing \$380 million in its UK operations and plans to employ more than 300 people, including dentists, orthodontists, and dental nurses.

According to a press release accompanying the launch, SmileDirectClub has "pioneered a unique teledentistry platform to connect customers with an affiliated network of UK-based registered dentists or orthodontists who direct all aspects of clinical care using SmileDirectClub's platform".

But the BOS said it would be informing the General Dental Council, the Care Quality Commission, which is responsible for inspecting dental practices in England, and the Advertising Standards Authority of its concerns.

In the US, the American Association of Orthodontists has lodged complaints about SmileDirectClub with dental boards and regulatory authorities in 36 US states. The American Dental Association has also filed complaints with the Federal Trade Commission and Food and Drug Administration.

Speaking at a press conference during the BOS's annual conference in Glasgow last month, its president, Jonathan Sandler, declined to name any specific firm, but said: "We are about to inform the General Dental Council that we



believe illegal dentistry is being undertaken in this country."

He added: "It's too early at the moment to provide a large amount of evidence that patients are being harmed [in the UK]. But it would appear to me self-evident that harm is going to result from this approach to treatment."

As Scottish Dental went to print, a spokesperson for SmileDirectClub said they were unable to comment as the company was still in the 'quiet period', as dictated by US securities law, following its stock market launch last month. However, a page on its website (smiledirectclub. com/doctors/) says the services it offers are not 'do-it-yourself' or 'over the counter' and details the standards adhered to by its products and network of professionals.

A spokesperson for the General Dental Council said: "We are aware of a number of organisations offering services remotely, which could constitute dentistry as defined in the Dentists Act 1984. We are looking into a number of regulatory issues in relation to this and we look forward to sharing our position once that work is complete. While this work is ongoing, should we receive information that could amount to an allegation of impairment, we will of course continue to refer registrants to fitness to practise as appropriate."

BOC 2019 report, see p34-36

complacency, sav dentists **THE** British Dental Association

No room for

Scotland has welcomed progress in combatting tooth decay, as official figures show continued falls in the number of children with fillings and facing extractions.

Since 2000-01, the number of fillings given to children has reduced by 62 per cent from 774.762 to 298.192 in 2018-19 Over the same period, the number of tooth extractions has fallen from 133,000 to 86,000 - a decrease of 35 per cent.

BDA Scotland has been a longstanding supporter of the innovative Childsmile programme. It has, however, called on the Scottish Government to redouble its efforts "given the stark oral health inequalities across Scotland".

The most recent National Dental Inspection Programme Report showed huge variation in decay levels, with the percentage of Primary 1 children free from dental decay in the most deprived areas 30 percentage points worse than in the least deprived areas (56 per cent versus 86 per cent) - and the gap actually increased by 3 percentage points from the previous report. In 2016, that gap had shown signs of narrowing.

Figures also show that the percentage of children free from dental decay in the most deprived areas (56 per cent) is still falling short of the Scottish Government's 2010 target of 60 per cent.

David McColl, Chair of the BDA's Scottish Dental Practice Committee, said: "Scotland is making real progress in the fight against tooth decay, but there is absolutely no room for complacency. A preventable disease remains the number one reason for child hospital admissions, with young patients waiting up to six months for treatment.

'The oral health gap between rich and poor is not inevitable. Ministers need to redouble their efforts to tackle these deep and persistent health inequalities."

GDPs to get new info and jobs resource

THE website scottishdental.org is being given a new focus as a resource for GDPs. NHS National Services Scotland has been tasked with developing the site, which will include direct links to job vacancies, independent reporting, and secure access to occupational therapy resources for

Currently, NHS dental professionals either have a private occupational health provider or access services via their health board, but some practices have expressed the view that the latter are difficult to access. The scottishdental org site will more easily signpost services in the relevant area. The site will feature a link to the Incident Reporting and Investigation Centre (IRIC) page, hosted by Health Facilities Scotland. Specific pages for the dental sector are being developed by IRIC, the safety and risk management unit dealing with medical devices and social care equipment.

The aim will be to allow for and encourage real-time reporting of incidents that may merit investigation and support analysis of trends which could also prompt investigations.

Another page will be developed linking directly to respective health boards' systems for Serious Incident Reporting

Pay collapse continues as patient access worsens, says BDA

Figures say that more than a million new patients have tried and failed to get appointments

THE British Dental Association (BDA) has warned that problems with patient access will endure, as official figures show sustained pressure on pay for NHS dentists across Britain.

Scottish practice owners have seen a 29 per cent real-term fall, and associate dentists a 35 per cent fall. Dentist leaders have said figures show the service has yet to recover from a decade-long collapse in real incomes.

Non practice-owning associate dentists in England and Wales, who make up the overwhelming majority (80 per cent+) of the workforce, have seen their incomes drop from £67,800 in 2008/9 to £59,700 in 2017/18, a 36 per cent fall to less than £47,000 when factoring in inflation. Practice owners in England and Wales have seen their real incomes fall by 30 per cent since 2008/9. Access problems have

worsened in recent years, as recruitment and retention issues have worsened.

More than a million new patients have tried and failed to secure appointments according to BDA analysis of official figures.

BDA surveys also indicate deep recruitment and retention problems, with three out of five dental practitioners saying they intend to reduce their NHS work, or stop entirely, in the next five years.

While dentist leaders have welcomed the latest above inflation pay

awards, they have stressed the need for consistency given the scale of the last decade's pay cuts.

Dave Cottam, Chair of the BDA's General Dental

> Practice Committee said: "NHS dentists have faced unprecedented cuts to real incomes, that have left patients struggling to get an appointment.

> > "Recruitment and retention problems are mounting.

NHS dentistry simply cannot have a future without NHS dentists prepared to work within it."



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SHOP WHERE SERVICE AND VALUE COUNT

Don't be caught by '10 in two rule', says GDC

THE General Dental Council (GDC) is warning dentists to not be caught out by the '10 in two rule'. Dentists are required to complete a minimum of 10 hours of CPD in every rolling two-year period.

The change was introduced in January 2018, meaning the end of the first two-year cycle is approaching.

"We all know that completing the required amount of CPD is a prerequisite for continued registration," said Gurvinder Soomal, GDC executive director for registration and corporate

Soomal added: "We want to make sure that no one falls foul of the 10 hours in two years rule. The way to do that is for all dentists to check their CPD record now.

"If someone finds they have not completed enough, there is still time to put it right. But time is running out which is why we're making this appeal."

The GDC recently closed its consultation on plans for the next three years. Results from

the consultation 'Working with the dental team for public safety and confidence' are expected later this year.

The dental regulator received 79 responses from dental professionals and stakeholder organisations in the three months it was open.

"We are proud of the progress made towards delivering what we set out to achieve through Shifting the balance," said Rebecca Cooper, the GDC's head of policy and research. "But we still have some distance to cover to reach our objective of a better, fairer system of dental regulation. This strategy is about fulfilling that objective."

"I would like to take this opportunity to thank all of those who took the time to tell us their view on our plans. Those views will help us to shape our direction and decision-making for the next three years.

"We look forward to sharing the finalised strategy later this vear."

(*as per NHS Greater

Glasgow guidelines)

Teething products 'could put infants' health at risk'



THE British Dental Association (BDA) has urged parents to be on alert, as new research has revealed that nine of the 14 teething products licensed for use in the UK contain sucrose, alcohol and/or lidocaine, all of which have potential harmful side effects. The BDA also said there is little evidence that the products are actually effective in reducing teething pain.

A paper published in the British Dental

Journal, examined all products currently licenced by the Medicines and Healthcare products Regulatory Agency (MHRA). The MHRA categorises teething powders as homeopathic or herbal products, whereas most teething gels, with the sole exception of Nelson's Teetha Teething Gel, hold full product licences.

Two products containing sucrose (table sugar) leave newly erupted baby teeth

susceptible to decay, particularly as they are applied directly and repeatedly to the teeth. Six contain alcohol. Consumption of relatively low levels through breast milk can be counter-productive, arousing rather than sedating infants, meaning an increased propensity for crying and poor sleeping. Moderate exposure has been related to impaired motor development.

All six teething gels licensed in the UK contained lidocaine, which also poses a risk of overdose at higher concentrations. In the United States, 22 serious adverse reactions, including deaths, have been associated with lidocaine 2 per cent solution. Although none of the UK products contain more than 1 per cent lidocaine, there could potentially be a risk of overdose from incorrect use.

The BDA has backed calls for "no nonsense" guidance to help parents navigate the risks, and guide them away from potentially harmful products, and for changes to licensing arrangements so harmful ingredients cannot make it into licensed products without clear evidence on their effectiveness.

Source: 'Teething products may be harmful to health', Nigel Monaghan, British Dental Journal, Vol 227, No 6, 27 September 2019

Innovative new approach to mouth prop design

RALPH Day BDS (Hons) originally qualified as a dentist. However, after gaining significant clinical experience, he decided to follow his other passion – to explore the world of medical device design which has been his career for more than thirty years.

While working on several related new product development projects, Dr Day began to progress his long-held ideas about the need to re-engineer traditional mouth prop designs. "They have proved an extremely useful tool for maintaining access to the mouth and pharynx during diagnostic and surgical procedures. However, there are a number of clinical and technical problems associated with their use. Most dental

mouth props used in practice today are based on designs dating back as far as 1940.

"Although they are designed as reusable items, their outmoded manufacture makes them very difficult to decontaminate before re-sterilisation. The most commonly used reusable mouth prop is manufactured from a rubber compound which can develop an unpleasant odour after repeated sterilisation cycles. I believe such devices have no place in today's dental

"Current product options are neither comfortable for the patient nor clinician friendly. They are awkward for paediatric procedures and can exacerbate treatment trauma for dentophobic adults. For all these



reasons. I was determined to develop an innovative. alternative product solution." Several years R&D and consultation with clinical and design engineering colleagues has culminated in the launch of a new, single use sterile intraoral mouth prop. the Instrapac Manta®.

'The new mouth prop is the

result of a radical rethink. designed to sweep away previous failings while also creating a unique product full of innovative clinical features that effectively address infection prevention concerns. Because it is a single use medical device the Instrapac Manta is always clean and sterile - meaning no decontamination issues - and is totally odour free".

Instrapac Manta is currently indicated for the following clinical applications; oral surgery; maxillofacial surgery; paediatric and adult restorative dentistry.

For more information, or to request a product sample, visit http://www.robinsonhealthcare. com Registered Community Design and Patents applied for.

PEOPLE NEWS

Medtech finances future

CALCiViS. a medical devices company focused on revolutionising the management of tooth decay and enabling preventive dentistry, announced it had secured £4.5 million in new equity from existing funders Archangel Investors and the Scottish Investment Bank and grant funding from the European Commission under its Horizon 2020 programme.

In August, it closed a £3.15 million equity funding round from Archangel Investors, Julz, and the Scottish Investment Bank. It will be used to support the completion of the FDA's preview process for the CALCiViS Imaging System in the US, the world's largest dentistry market.

Rise in violent patients

The Dental Defence Union has seen an increase in dental professionals wanting advice or support on how to deal with violent or aggressive patients. In the five years 2014-2018, the DDU supported members with 118 cases involving harassment or threatening and aggressive behaviour directed at dental professionals or practice staff.

BDA launches lifeline

The British Dental Association (BDA) has launched a partnership with the award-winning employee assistance programme Health

Assured to provide all BDA members with a 24-7 confidential counselling service.

New app for professionals

An app, the Dental Companion, was launched by the Scottish Dental Clinical Effectiveness Programme (SDCEP), providing mobile access to SDCEP's evidence-based guidance. The app, which is also available as a web-based resource for access from any computer, joins the Dental Prescribing app to support improvements in patient care.

Selfies solve cases

Selfies taken by missing persons before they disappear could prove key for future forensic dental identification, according to an expert at Dundee University. The

Dental Identification Record Checklist, the first of its kind, was developed by Dr Claire Sallis and her supervisor Dr Scheila Mânica from the university's School of Dentistry.

'GP at hand' app warning

The British Dental Association (BDA) has expressed scepticism over the role of tele consultations in dentistry, following the launch of the app Tooth Fairy. The BDA recognises the potential for this technology in areas including triaging cases for NHS 111, but said it does not see how it is possible to conduct a full and thorough examination remotely on the basis of current technology.

Dentist leaders have expressed concern over the facility to provide 'prescriptions on demand'. potentially for painkillers and antibiotics without the benefit of a full diagnosis.



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Giulia Ragazzini Specialist Orthodontist GDC No. 251974

We are delighted to introduce Giulia Ragazzini to our team of specialists, Originally from Italy, Giulia graduated from the University of Genova in 2008 and completed her

Postgraduate Specialisation in Orthodontics at University of Cagliari in 2013. In 2014 she completed a post graduate Masters.

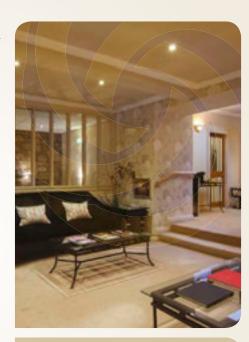
She worked as an Orthodontist in a paediatric hospital in Genova, teaching undergraduates and was involved in clinical research to identify new therapeutic approaches for patients affected by rare genetic syndromes.

Giulia has published several articles in international journals, collaborating with the Seton Hill University in USA.

She moved to the UK in 2015 and has since worked in practice in Edinburgh and London. She is now settled in Edinburgh with a young family.

TREATMENTS OFFERED:

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DATES FOR YOUR DIARY

II OCTOBER

FGDP(UK) National Study Day: Strategies for the Future

Dental Patient Etihad Stadium, Manchester

17-19 OCTOBER

BDIA Dental Showcase

Birmingham

I NOVEMBER

Core topic study day for DCPs

Royal College of Surgeons of Edinburgh (RCSEd), Edinburgh**

1-2 NOVEMBER

Annual Scientific Meeting of the Faculty of Dentistry of the RCSI RCSI St Stephen's Green Campus,

Dublin 2 ***

6 NOVEMBER

Informed Consent: Sharing the **Decision ICONS**

RCSEd, Edinburgh**

9 NOVEMBER

Clinical digital photography for dental professionals

BDA, London****

9 NOVEMBER

BDA North of Scotland - Dinner and ceilidh

More information at: www.bda.org/ events/all-events

12 NOVEMBER

Emergency Dental Patient

RCPSG - Glasgow*

14 NOVEMBER

Dental webinars - Periodontal surgery

RCPSG*

18-19 NOVEMBER

Training the Clinical Trainer

RCPSG - Glasgow*

21 NOVEMBER

Human Factors conference

RCPSG - Glasgow*

21-22 NOVEMBER

Royal College Advanced Certificate in Clinical Education,

RCPSG London*

22 NOVEMBER

Scottish Dental Study Club

Pollokshields Burgh Hall

22 NOVEMBER

Record keeping and monitoring in NHS practice

BDA, London****

23 NOVEMBER

ADI Members' National Forum 2019

Royal College of Physicians, London

6 DECEMBER

FGDP (Scotland) Study Day

Glasgow Science Centre fgdpscotland.org.uk/glasgowstudv-dav

5 DECEMBER

BDIA midwinter meeting

BDIA, London****

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Sheena Macfarlane GDC No. 53199



Paul Mooney GDC No. 178517

"What's going on? You don't see that on a dental course"

In the run-up to Restart a Heart Day, here is one dentist's story of how CPR training was a lifesaver

IT was 8am and Declan Cairns, who qualified as a dentist from Glasgow in 2016, was starting a shift at MyDentist in the Tesco Superstore at Maryhill. "Someone came in and said there had been an incident outside," he said. "Then, a second person came in who was actually a dentist and knew there would be a defib in the dental practice. She said someone had had a suspected cardiac arrest in the car park."

Declan, 26, grabbed the defib and the practice nurse took the medical bag and the pair, joined by a third dentist colleague, rushed to the scene. "As we got there, the ambulance crew arrived almost simultaneously - and we just slotted in and around what was going on," recalled Declan. He and his colleagues took it in turns to carry out chest compressions, use a bag valve mask, and apply the defibrillator.

"Out of the corner of my eye, I saw the paramedics drilling into man's knee and

thought, 'Woah! What's going on?'. You don't see that on any dental course," said Declan. In the absence of an accessible vein for injection, the ambulance crew were preparing for an intraosseous infusion of drugs into the bone.

For Declan, events took a slightly surreal turn when he realised the victim was a patient; it meant he could race back to the surgery and retrieve his up-to-date medical history.

After about eight to ten minutes, the man began breathing and he was taken to hospital. "But we didn't hear anything after that, and it wasn't until one day I looked at a name in the appointments book, looked out into the waiting area - and there he was. It was the nearest I've come to seeing a ghost!

"I asked him how he was, and he said, 'I've been better!' He'd been in intensive care for a month and had a pacemaker fitted. Until this point, he hadn't realised I had been there. And, with typical Glasgow humour, he said, 'Were you the bastard who gave me a doin'?', because of the pain he felt in his ribs for days afterwards. It bought back the memory of someone in dental school asking in the CPR class, 'What if we break someone's ribs?' And the lecturer replying, 'A person who's alive will thank you; a dead person can't."

The Scottish Government began a roll-out of defibrillators to NHS dentists in 2014. "We're hearing more and more stories of dental teams delivering CPR, but mostly they don't get to hear the outcome," said Lezley Ann Walker, a tutor at Glasgow Dental School. "In this instance, we have the full journey; student receives training... becomes a dentist...delivers CPR...patient survives."

Restart a Heart Day, 16 October: resus.org.uk/ events/rsah/

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Taking a QI approach to dental safety

Embedding a systematic approach to analysing quality across the team

WORDS WILL PEAKIN

ow safe are we? Each of us will have an idea about our own individual performance, but what's the culture like across our teams? It's easy to recognise issues after they arise, but how can we identify risks before they materialise?

Safety has always been a priority for dentists and their teams, but in recent years there has been more and more emphasis on the overall safety culture in the practice. Now, following the recent intervention of the interim Chief Dental Officer*, there's a new drive to embed not just individual good practice but a systematic approach to analysing safety and quality across the dental team.

Under the new approach, all dental team members are expected to take the new Healthcare Improvement Scotland (HIS) Safety Climate Survey to take a snapshot of where they are currently at, and also take four Quality Improvement (QI) eLearning modules to enable them to apply a systematic QI approach in their practice.

The modules, developed by NHS Education for Scotland (NES), and available on the Turas digital platform, cover:

- Measurement for Improvement
- Understanding your system.
- Developing your aims and change Ideas
- Testing your change ideas

SADA MANGALAMPALLI

"Evidence suggests that one of the underpinning requirements to enable quality improvement activity in any healthcare setting is the safety culture within that organisation," said David Felix, NES Postgraduate Dental Dean and Director of Dentistry.

"Identifying what the culture in an organisation looks or feels like can be difficult and may only become apparent when something goes wrong. Being able to identify if there are negative aspects within that culture potentially reduces the risk of the event occurring at all.

"Over the next few years, we're going to be reviewing all aspects of the current system and exploring ways to improve this to benefit both patients and the whole dental teams. That's going to be complex and will take some time to work through. But in the short term, we believe that dentists can benefit from some immediate self-assessment using the HIS Survey and in using the QI modules to refresh their skills and awareness."

Jill Gillies, Healthcare Improvement Scotland's Portfolio Lead for Primary Care Improvement, added: "I'm delighted dentists are getting the opportunity to complete the Safety Climate Survey, which has been used extensively in other primary care settings to help teams understand their practice and identify where improvements can be made. The survey can be used to start a quality improvement planning conversation in dental practices which will lead to providing safer dental care for patients in Scotland."

Sada Mangalampalli, the principal at Girvan Dental Practice, was involved in a pilot of the survey. "It was a very positive experience," he said. "The questions were focussed and easy to engage with, and the results allowed us as a team to sit down, discuss both the positives and negatives that emerged and agree on concrete actions. So, for example, issues like workload and how effectively information is communicated can be perceived differently depending on your role in the team and this allowed us to agree on changes in the way we worked.

"With some audits or appraisals, the outcomes are very subject or person-centric. But this confidential, whole practice survey provides both a 'big picture' sense of how we are performing as well as detail on specific areas that perhaps we need to discuss further and take concrete actions. I think that as clinicians, you tend to view everything from a clinical perspective, but you can get a different view of the patient journey from the nurses and reception staff."

* www.scottishdental.org/wp-content/uploads/2019/07/ PCA2019D10.pdf



Building a quality improvement culture

dental care

Interim Chief Dental Officer Tom Ferris places the safety climate survey in its wider context

entists have been undertaking clinical audit for many years and recently have had access to a wider range of quality improvement (OI) activities. They are required under their NHS terms of service to individually undertake QI activities over a three-year cycle.

Willingness to participate with QI by dentists has covered a wide engagement spectrum ranging from the QI enthusiast to the noncompliant. Initiatives to improve engagement have had limited success despite the range of sanctions for noncompliance. Recently, some dentists have been referred by NHS Boards to the General Dental Council due to concerns about 2013-16 QI activities while others have been referred to the NHS Tribunal. Additionally, towards the end of each cycle there is a high volume of last-minute projects submitted to ensure compliance, which seems to point to a system being in need of change.

Primary care dentists in Scotland will be aware that it is my intention to make use of the current QI cycle (2019-22) to redesign and implement improved QI that is relevant and beneficial to patients and practice teams. The discussion about this redesign started at an event on 6 September, which was attended by a wide range of key stakeholders.

However, the existing NHS terms of service remain in place and dentists still have a requirement to undertake QI activity. Therefore, I have decided that the 2019/22 cycle will provide opportunities for dentists to engage in a series of national activities in each of the three years of the cycle. The theme of the cycle will be 'Building a Quality Improvement Culture'.

Year one (2019/20) will comprise an online Safety Climate Survey (SCS) at dental practice team level, which follows a similar process that has been used by our general medical practice and pharmacy colleagues. The SCS is a partnership between Healthcare Improvement Scotland (HIS) and NHS Education for Scotland (NES) and I am delighted to say that it is supported by the Scottish Dental Practice Committee and Scottish Public Dental Service Committee of the BDA.

It is important to note that the 'safety climate' within the practice is team-focused and not just for the dentist. Completion of this survey will result in a report being generated by HIS which should be the focus of reflection at a subsequent practice team meeting. The practice should, through discussion, develop a Practice Action Plan which can be used to implement improvement; the detailed action plan belongs to the practice and will remain with each practice.

The activities for years two (2020/21) and three (2021/22) will be communicated in due course.

During the QI redesign process the Scottish Government will work with practice teams and partners in HIS, NES, NHS Boards and the BDA to design a process for improved QI in primary care dentistry. This will streamline the administrative process and incorporate a productive QI suite of activity for dentists and their teams. The intention is that the new system should come into force from the 2022-25 QI cycle. An important aspect in supporting the whole team approach to QI will be to ensure that practices have access to dedicated learning opportunities and the time to develop informed planning.

I am looking forward to engaging with the dental profession and wider teams as we look to improve the QI process for primary dental care for the longer term. I am clear about the importance of developing reflective clinicians who are keen to improve the service they deliver and to make sure that any learning is shared widely within the profession.

This is an exciting QI redesign journey. The end result should be a system that practice teams will learn from, enjoy participating in and find it easy to navigate through.

Saving children's teeth in Sudan – without anaesthetic or drills

The Hall technique, developed in Scotland, is transforming dental care at a clinic in Khartoum

ooth decay is the most common chronic dental disease in the world. affecting 60-90 per cent of children around the world, according to the World Dental Federation. It is 20 times more common than diabetes and five times more common than asthma.

The usual way to treat the decay is to drill out the rot and then cover the tooth with a thin stainless-steel cap. It requires a local anaesthetic, lots of time, specialist skills and, for the dentist, the patience of a saint. If the child is anxious they often have to be admitted to hospital to have the work carried out under a general anaesthetic.

But consider a child living in poverty in East Africa with no running water or electricity, and the nearest dentist a day or two's walk away. I work as a dentist in Sudan providing care for children with these exact circumstances. By the age of 12, almost all children in Sudan know what it is like to have had a tooth extracted. For a country of 40 million people, we have just eight children's dentists.

But what if we ignore the rot, seal it by gluing a cap on the bad tooth and do nothing else? A 2006 analysis of primary care records, showed that this simple technique, known as the Hall technique, was effective in treating children in Scotland*. It works by starving the toothrotting germs of oxygen.

Even though this technique is supported by scientific evidence, it has been shunned by many dentists around the world as there was no randomised controlled trial proving its effectiveness compared with accepted conventional techniques. So, with colleagues at Queen Mary University of London, we set out to conduct just such a trial**. We randomly assigned 164 children to receive one of two treatments. One group received the gold standard of care. The child received a local anaesthetic and the bad tooth was then drilled to remove the decay. The cap was fitted after adjusting it to the right shape and size of the tooth -

which is fiddly - and then glued. The other group received the Hall technique. We pushed the metal cap gently on to the tooth and glued it on without any injections or drilling. Capping and gluing are common to both techniques but requires a considerable adjustment in the conventional technique. None is required for the Hall technique.

The study was done at a time in Sudan when Omar al-Bashir's brutal regime was coming to an end. Daily life was, and still is, tough. The situation affected the project on many levels. While most scientists take the internet for granted, we don't. Blackouts are common and can last for weeks or months, so a high level of organisation is needed. Even in the capital, Khartoum, electricity and water supplies are not guaranteed.

The results of our study, published in open access journal PLOS ONE, prove that the Hall technique performs as well as the gold standard in all clinical aspects, such as the survival of the tooth, gum health, occlusion, and abscess formation, even when done by less experienced operators.

In addition to saving teeth, the technique performed as well as the gold standard in terms of the caps remaining in place over a two-year follow-up. And the children were much happier just before the treatment, just after it, and a year later. In fact, some children were demanding the caps to be fitted on their brothers and sisters. The only crying we heard in the clinic was when a child's sibling got a cap and they didn't.



Keeping costs low is very important for maintaining public health systems around the world, and this technique proved to be much cheaper than conventional techniques of drilling and capping. But changes in healthcare policy must be supported by evidence, and our study goes some way to providing that.

The Hall technique, if widely adopted, could have a big impact on many overstretched public health services around the world, particularly those in developing countries and those with little access to dental services, giving children a better chance of keeping their teeth.

Fadil Elamin is Honorary Senior Research Fellow, Dentistry, at Queen Mary University of London. This article first appeared at the conversation.com

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Plagiarisn AND HOW TO AVOID BEING

accusea

A recent GDC FTP case involving five Scottish dentists has highlighted an issue regarding audits and SAEs





WORDS HELEN

Helen Kaney BDS LLB Dip LP MBA FFGDP (UK) FFFLM

ental Protection has occasionally come across a request for advice from a member regarding whether or not an article or other piece of written work can be used as part of a post-graduate thesis or dissertation. Recent activity in Scotland suggests that it is vitally important to understand what constitutes plagiarism and what steps are taken by universities and other organisations to detect it.

A recent General Dental Council (GDC) fitness to practise case saw five dentists found to be dishonest, and they were subsequently suspended from the dental register for varying periods of time after sharing their own or copying another individual's Significant Event Analysis Reports (SEAs). We also know of other dentists who are receiving letters from their health board asking questions about their audit reports and SEAs which they submitted a number of years ago.

There is no doubt that plagiarism is considered to be a dishonest conduct.

What is plagiarism?

Plagiarism is defined by the Online Oxford Dictionaries



as "the practice of taking someone else's work or ideas and passing them off as one's own". It is considered a very serious matter and further research reveals that "to plagiarise" means:

- to steal and pass off (the ideas or words of another) as one's own
- to use (another's production) without crediting the source
- to commit literary theft
- to present as new and original an idea or product derived from an existing source

In other words, plagiarism is an act of fraud. It involves both stealing someone else's work and lying about it afterward.

The University of Glasgow states: "The incorporation of material without formal and proper acknowledgment (even with no deliberate attempt to cheat) can constitute plagiarism. Work may be considered to be plagiarised if it consists of: a direct quotation; a close paraphrase; an unacknowledged summary of a source; direct copying or transcription."

In academia, universities use anti-plagiarism software to check the students' coursework to determine if the

coursework truly belongs to them. Academics regard plagiarism as dishonest and fraudulent and it can result in the ending of someone's career. Although plagiarism is a clear danger to anyone's reputation and regarded as dishonest, some Scottish dentists are failing to understand the seriousness of the issue - NHS Education for Scotland (NES) makes thorough checks on works submitted to fulfil the QI requirements of the Terms of Service for dentists working in the NHS. The same anti-plagiarism software that has been used by universities for some years has recently been used by NES to check the validity of QI project reports and SEAs being submitted via the portal.

Students and teachers

The most common form of plagiarism is using another's words or work without appropriate referencing. However, what readers might not be aware of is that in the case of co-authored work, if one of the authors has plagiarised any of the chapters or sections, both authors of the document will be considered to have acted dishonestly and could be accused of plagiarism.

For academic staff trying to prevent plagiarism, there are a variety of resources now available online to check the content of submitted work, which means that the chances

→

of being discovered, if tempted, are high.

Students are not exempt from a GDC Fitness to Practise hearing. In October 2016, the GDC produced two new guidance documents on this topic - one for student dental professionals, which applies to all student dental care professionals and not just to dental students. The other guidance document produced is aimed at all providers delivering training programmes which lead to registration with the GDC. This latter guidance provides help for academic institutions in running fitness to practise hearings against students, the most serious sanction following such a hearing being expulsion from the course, depending on the severity of the offence. Plagiarism is included in the list of issues which could indicate that a student's fitness to practise may be impaired and may be considered as a threshold matter for implementation of an institution's fitness to practise procedures.

Academic staff

For academic staff tempted to take short cuts, the message is: please don't. While there may be readily available guidance for students on the subject, regulations for academic staff apply on an institution by institution basis. The concept of peer review before submission of papers to journals is intended to highlight and prevent the problem, although this may not necessarily be completely effective.

The risks to academic staff tempted to take shortcuts are loss of professional credibility and indeed loss of employment. Plagiarism is not a crime as we understand that word in common parlance. Instead it is a civil law matter. However, that does not prevent the General Medical Council (GMC) or General Dental Council (GDC) from bringing charges of plagiarism or dishonesty against a clinician

Dentists, clinical audit, SAEs and dishonesty

Dentists in Scotland on a health board dental list are required to do at least 15 hours of QI activity during each three-year period. Several Scottish dentists have recently contacted Dental Protection for advice in relation to concerns raised about the sharing of clinical audits and final audit reports with other clinicians. In some cases, the sharing of the audits has resulted in other dentists claiming the audits as their own work. Such a situation can, as explained above, result in allegations of dishonest conduct against all parties.

It is important to understand that any allegation that a dental registrant has acted in a way that would be considered to be misleading or dishonest is taken very seriously by the GDC. The recent case of Ivey v Genting Casinos (UK) Ltd has changed the legal test for dishonesty that is applicable before the regulators. In this case, the UK Supreme Court confirmed that the previously used two-stage 'Ghosh' test is no longer applicable. The Ghosh test had both an objective and a subjective part to the two-stage test, which the courts and regulators used when considering whether conduct was dishonest. The Ivey case arguably makes it easier for dishonesty to be established as "it will no longer be necessary to prove that a professional subjectively understood that he or she was acting dishonestly".

Regulatory bodies - GMC and GDC

In 2008, a well-known UK psychiatrist admitted inadvertent plagiarism in a hearing before the GMC, resulting in a three-month suspension and his resignation

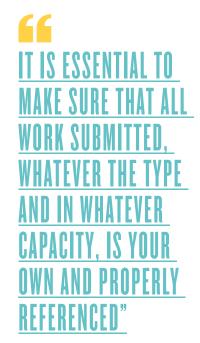
as an NHS consultant. The individual concerned apparently explained at the time that a 'copy and paste error' meant that references had not been included in his work. That is how easily plagiarism can happen.

All students and members of the dental team are aware of the GDC's Standards for the Dental Team. Principal nine sets out the guiding principle that would cover an allegation of plagiarism, particularly the requirement that registrants should "ensure that your conduct, both at work and in your personal life, justifies patients' trust in you and the public's trust in the dental profession".

Summary

Plagiarism poses a great risk to a clinician's career and professional reputation. It is essential to make sure that all work submitted, whatever the type and in whatever capacity, is your own and properly referenced.

Not even one sentence should be copied from another person's work without the required references. In sharing your work with others, you are taking a risk that some of your exact wording will be used, which also carries the risk of an allegation of dishonest conduct.



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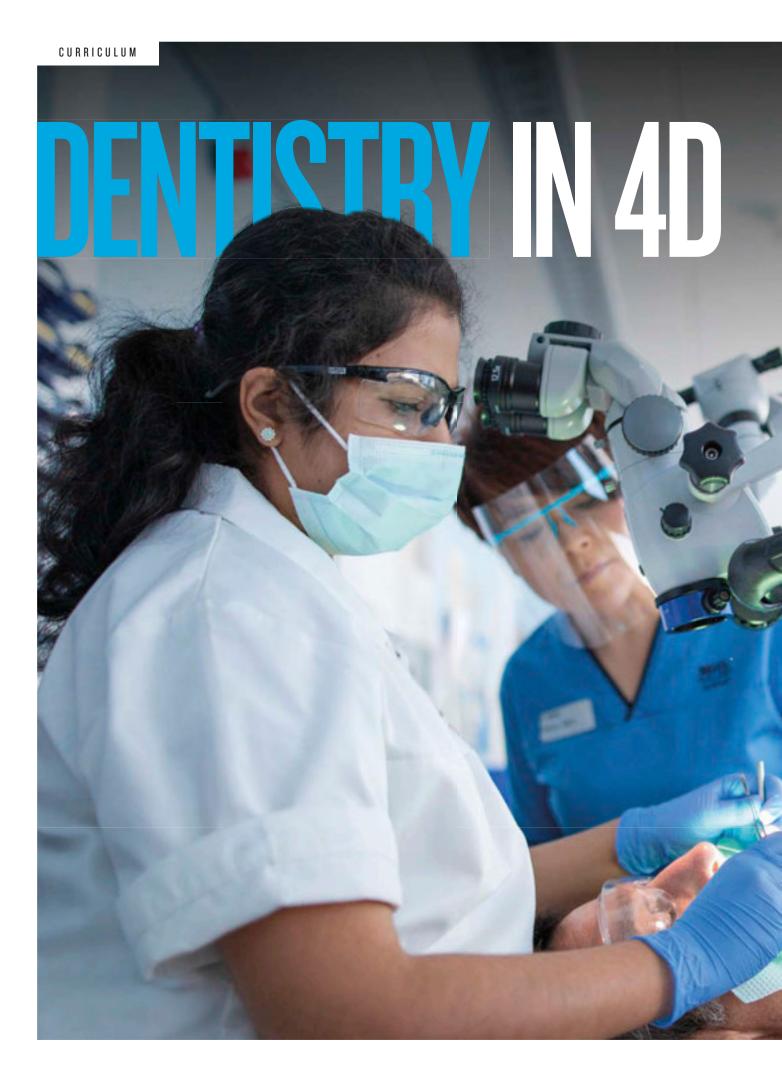
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"Regard your good name as the richest jewel you can possibly be possessed of for credit is like fire; when once you have kindled it you may easily preserve it, but if you once extinguish it, you will find it an arduous task to rekindle it again. The way to a good reputation is to endeavour to be what you desire to appear."

Socrates





Dundee University has taken what it believes to be the most radical step in modernising the way dental students learn



t its heart, the curriculum integrates clinical science with clinical practice.

That means, at Dundee, a dental student will carry out clinical practice from week one; that's huge."

Mason, Clinical Senior Lecturer

Dr Andrew Mason, Clinical Senior Lecturer at Dundee University's School of Dentistry, is explaining its new curriculum. Relatively new, that is; the first students to embark on it are entering their second year and the second cohort of first years started last month.

Mason emphasises that students don't practise on patients in week one, but every Friday afternoon in first year they are on a clinic. "It makes them feel like a dentist, it's what they want to do," he said. "So, by the end of the first module, up to Christmas, one of the key endpoints is the ability to carry out a simple dental and oral examination and to take a history from a 'patient'.

"And we have structured the learning around that endpoint. What do you need to know to examine the mouth? You need to know what it looks like. You need to know what's underneath the surface, and to be able to chart the dentition; identify what's present and what's missing. To take a history you need to understand the information the patient might give you, and to know something of cardiovascular disease and respiratory disease. And we use spiral teaching, where a student learns more about a subject each time the topic is reviewed or encountered."

With the existing five-year curriculum, the first two years are largely about science; anatomy, physiology and biochemistry, oral biology, cell biology, microbiology, pathology, and dental materials. Towards the end of the second year, there is an introduction to clinical skills – in preparation for entering the clinical phase of the curriculum in the third year. "It has been a very successful curriculum, producing

good graduates throughout," notes Mason.

The new programme, however, reflects both changes in what the General Dental Council (GDC) expects from a curriculum and a wider recognition of how pre-university education generally has changed in the past 30 years. "I came to Dundee in 1985," said Mason. "The education system today is quite different to what it was then, but we hadn't made changes in higher education to reflect this.

"One of the issues with the curriculum prior to 2018 was the content and how it was structured, and the other was how the learning was delivered and what the students did," he said. "It is a good course, no question, and well taught – but it is lecture driven. Students learn important anatomy and physiology in the first year which is very relevant to clinical practice, but out of a clinical context. They are examined and progress. But when they come to use that knowledge in the third, fourth, and fifth years it might not be as fresh in the mind."

In addition, observed Mason, the GDC wants dental students to be lifelong learners, "team workers, problem solvers, ethical lifelong learners – and we were concerned that a lecture-based course wasn't supporting that ambition." Change did not happen overnight; it's a challenging process, said Mason. The curriculum review began in 2011, restructuring in 2013, and in 2016 – preparations for its rollout. The ability to assess information and make changes in practice based on evidence, as well as management, mentoring, and communication skills; they are all to the fore.

"In my day, the dentist was the team," laughs Mason, "nowadays, the team is much broader than that and possesses a much wider range of skills."

The new programme has been dubbed '4D'; Dentistry @ Dundee, Driven by Discovery. "We are supporting students to discover for themselves and be motivated, self-directed







CURRICULUM INTEGRATES CLINICAL

DR ANDREW MASON



learners. It's not a curriculum where the student is just a passive sponge," said Mason. "Traditionally, the curriculum was driven by the medical curriculum. When I was a student, we shared the physiology class with the medics. In terms of the physiology of the heart and circulation, we were getting the same as the medics. Do dentists need to know as much?

"So, some things we have taken out, where they are perceived to be not as relevant to a practising dentist and there have been some things that have been strengthened. We want students to see the wood for the trees. The aim of current curriculum is to identify what a student needs to know, and what skills they need. We looked at relevance and we made sure all the foundation science is clearly linked to clinical practice. We are integrating clinical science with the practice. For example, we link physiology to disease and clinical presentation, rather than doing it at separate stages."

From week one, students are introduced to the clinical environment. They learn about cross-infection control, about posture and how to position themselves, and learn to take a patient history. Once they have passed their assessments, in the second half of the first year some of the clinical sessions will involve seeing patients and developing clinical skills, such as hand instrumentation, scaling, and rotary instrumentation. "It might sound radical, but it's what our colleagues in hygiene and therapy have done for years," said Mason. "But we are

careful to make sure students are able to properly apply their skills and are tested before they move to the next stage.'

"In terms of the element of discovery, with lectures students are passive. We want students to have drive and a passion to learn, to develop skills so we have reduced lecture component. We are trying to make each class one where a student will engage. We're using the term iClass, for interactive class, instead of a lecture. Rather than me standing up and talking about occlusion, we steer the students on the need to classify occlusion and they research it.

"We have a new facility here which is an integrated learning suite designed for group-based learning and with screens to which they can connect their devices. We set them tasks and they get used to researching, assessing, and presenting. There are team-based learning sessions where students have a series of cases that they explore throughout the year, supported by practical and clinical activity, culminating in a presentation or a poster."

An overarching theme of students' time at Dundee is 'transition'. "We have three transitions," explains Mason. "From school to university life. In the past, we didn't do that great; we're much better now on wellbeing. The second transition is into clinical practice. And the third is from dental school into the real world.

"So, for the first two or three weeks we discuss what it means to be a dentist - rather than membrane physiology! What the dental team is about, what's your role, what does it mean to be a professional, to be a lifelong learner? We get them to use the learning resources from day one. And resilience; the importance of looking after themselves.

"The transition into clinical practice is smoother and more logical. Previously, it was two years non-clinical and then - bang! Every day in the clinic, and that could be stressful for students; speak to a patient, give anaesthetic, drill tooth, fill it - and then be in a fit state to talk to the patient afterwards.

"Now, as I have said, we roll skills out gradually. Get them used to the clinical environment. Next, some patient work alongside lab work, for example managing caries. Then simple restorative work, and so on. Finally, the transition into vocational training with the clinical and life skills they need, clinical practice, and experience of the dental practice environment.

"I think we have taken a radical step, perhaps the most radical in the UK."

Looking ahead to 2021

The process for developing a revised set of learning outcomes is about to begin

he General Dental Council is embarking on the first of its planned revisions of learning outcomes which, from 2021, will form the basis of the curriculum at Scotland's dental schools. The GDC will begin the process with a call for evidence towards the end of the year, followed by a consultation on its proposals – ahead of the publication of a revised set of learning outcomes at the end of 2020, to be in place at schools the following academic year.

It is the start of a new cycle of reviews which will occur every three to four years. Currently, learning outcomes are based on the GDC's document *Preparing for Practice*, published in 2011 and revised in 2015. The aim of these, it says, is to develop a "rounded professional who, in addition to being a competent clinician and/or technician, will have the range of professional, communication, management and leadership skills required to begin working as part of a dental team and be well prepared for independent practice".

Until now, however, there has been no official process for the regular review of learning outcomes, or specific plans for their future review. Following a public consultation, the GDC published its new process in August this year. "The three- to four-year review period reflects the need to keep the learning outcomes up to date with current and anticipated future dental practice," it said. "This also acknowledges that major changes have resource implications for providers and can require a lengthy implementation process, therefore any shorter regular review period would be impractical."

The GDC will conduct continuous evidence gathering to inform potential changes to the learning outcomes. This will include evidence on the performance of the extant learning outcomes, and analysis of the current and future state of dentistry, and national oral health need, suggesting the need for changes to the learning outcomes. Proposed changes to the learning outcomes will be developed with the assistance of an advisory expert reference group, which the GDC will consult at least once a year.

Three years into the review period, the GDC, with the aid of the reference group, will decide whether the evidence gathered is sufficient in itself to warrant consultation on proposed changes to learning outcomes. The alternative will be to postpone any changes for another year, which will allow further evidence gathering to take place. The GDC will make an exception to certain elements of the process if it considers that urgent changes to the learning outcomes, with clear implications to patient safety, must be made.

The reviews will not look solely at the learning outcomes that exist, but consider broader questions and trends, such as the population's oral health need, public expectations of dental professionals, and any implications from data on complaints about dental professionals. The GDC already carries out research into, and analysis of, these broader policy areas, and it says this is key to the success of the regular reviews that it is coordinated and engaged with this work.

THE THREE-TO FOUR-YEAR REVIEW PERIOD REFLECTS THE NEED TO KEEP LEARNING OUTCOMES UP TO DATE WITH CURRENT AND ANTICIPATED FUTURE DENTAL PRACTICE"

GENERAL DENTAL COUNCIL

When proposing and consulting on changes to the learning outcomes, the GDC will distinguish between 'major' and 'minor' changes. A major change might alter the meaning of a learning outcome, add or delete an outcome, introduce new skills or requirements, or have implications for a registrant's scope of practice. The GDC will consult on major changes only once every three-to-four years and it expects providers to implement major changes from the commencement of the next programme cohort.

A minor change might be to amend the language or emphasis of an outcome, but not its substantial meaning. The GDC will consult on minor changes at its discretion, i.e. more frequently than every three-to-four years. As minor changes should not affect the delivery of a programme, the GDC considers such changes should be proposed and published as and when they become relevant. It will expect providers to implement minor changes as soon as possible. Share your views: a dedicated inbox is open now at learningoutcomes@gdc-uk.org





BOC 2019: CAMPAIGN Lord Wins science i

etween a conference-eve dinner for keynote speakers at The Clydeside Distillery and a gala reception for delegates the following evening, there was plenty to absorb on the first day of the British Orthodontic Society's 2019 Conference in Glasgow last month.

Lord Winston, the IVF pioneer - and Professor of Science and Society and Emeritus Professor of Fertility Studies at Imperial College London - began proceedings by examining the role of brain imaging, hormone study, sexuality, child development, pharmacology, and psychological research in understanding how science may help us be happier.

It was a typically insightful and thought-provoking start to the three-day international gathering.

Greg Huang, who delivered the Northcroft Lecture (see Scottish Dental, August 2019), in which he presented the results from an adult anterior open bite study conducted by the National Dental Practice-Based Research Network, and former MP Lembit Öpik, who joined Dr Michael

The conference featured, among others, Professor

Millwaters. the oral and maxillofacial surgeon, to discuss his own orthognathic treatment and experience.

Dr Jay Bowman, the clinician and orthodontic device inventor from Michigan, spoke about improving the predictability of clear aligners and treatments involving the use of mini-screw anchorage.

It was Dr Bowman who led the presentation of what the British Orthodontic Society (BOS) intends to be a campaign engaging the wider dental profession and, ultimately, the public. At the conference, the BOS and the Oral Health Foundation announced their plans for a national campaign to warn patients about the risks of direct to consumer orthodontics, also known as DIY orthodontics.

The joint campaign, supported by a dedicated website launching in December, will advise patients in all circumstances to visit a trained clinician ensuring that they have the various options open to them explained so they can make an informed decision. The website is to be launched in December. The campaign comes as statistics from BOS reveal adult orthodontics continues to rise with three quarters (75 per cent) of orthodontists reporting an increase in adult private patients.

The BOS leadership said it was delighted to announce their partnership with the Oral Health Foundation. Both organisations provide patients with expert information that relates to their oral, orthodontic and overall health. By bringing the expertise of the two organisations together on this issue it will empower patients to make the right choices, they said.

"In my professional opinion," said Jonathan Sandler, BOS President, "if you embark on any orthodontic treatment without a suitably trained clinician taking the time to examine you and make appropriate recommendations, you could be in danger of having serious conditions missed, as well as inappropriate and dangerous treatment carried out.

"For me, one of the issues with 'DIY orthodontics' is that it offers just one narrow solution when there may be a more appropriate one for the patient. The value of

Delegates being piped across the Clyde to the conference's gala reception





informed choice cannot be over-estimated." Dr Nigel Carter, Chief Executive of the Oral Health Foundation, added: "As the demand for adult orthodontics increases, so do the options for patients. We are seeing a growth in online companies offering orthodontic treatments at significantly reduced prices. For many patients, it will feel like a sensible consumer-savvy choice. But this may not

"My clinical view is that orthodontics should always involve face-to-face contact with a trained clinical professional. This is to ensure patient safety and the most effective treatment. When carried out correctly, orthodontic treatment can give patients the straight and confident smile they have always dreamed about.

We want to make sure that patients are given the very best advice about the safest and most effective way to have orthodontic treatment. This new campaign will make sure patients have a trusted space where they can see the most independent and impartial information available."

The American Association of Orthodontics' long-held position mirrors that of the BOS and the Oral Health Foundation. It states that orthodontic treatment is a complex medical process and that it is in the best, and safest, interest of the public to have that treatment conducted under the direct and ongoing supervision of a licensed orthodontist.

At BOC 2019, Dr Bowman briefed the media on the prevalence of DIY orthodontics in the US. He said: "I share many of the same concerns about directto-consumer treatments as have been voiced by the American Association of Orthodontists, the American Dental Association, and many US state dental boards and legislators."

Dr Bowman added: "It is my opinion that comprehensive diagnostic records and an in-person examination should be performed prior to embarking

<u>ASK YOURSELF, WHAT OTHER TRANSFORMING</u> <u>undergo without an in-person evaluat</u> OR SUPERVISION BY A MEDICAL PROFESSIONAL?"

DR JAY BOWMAN

upon treatment. I am also not convinced that orthodontic progress follow-up and resolution of patient concerns can be handled only by so-called teledentistry.

"In other words, ask yourself, what other transforming dental or medical treatment would you undergo without an in-person evaluation or supervision by a medical professional?"

The BOS and the Oral Health Foundation will jointly develop the website aimed at anyone seeking information about orthodontic treatment. The site will be updated regularly and will be designed to be engaging and informative, said the organisations. It will include testimonials from various experts alongside patients who will talk about their experiences to "bring the issues to life," said a spokesperson.

In addition to the campaign, the BOS is exploring regulatory options and it said it hopes that the appropriate bodies will take a "patient safety-led approach" to decision-making.

Billionaire founders' firm begins rapid UK expansion

Start-up plans to employ more than 300 dentists, orthodontists and dental nurses



ews of the British Orthodontic Society and Oral Health Foundation campaign came just two weeks after the leading direct-toconsumer orthodontics company, SmileDirectClub, floated on the Nasdaq stock exchange.

The Nashville-based company priced its shares at \$23 each, implying a market capitalisation of \$8.9bn, but they closed at \$16.67, valuing the company at less than \$6.5bn, though that was still twice the \$3.2bn SmileDirectClub achieved in private markets. Although it reported a loss of \$75m last year, revenues had almost tripled to \$423m.

Floating on the stock exchange also made co-founders Alex Fenkell and Jordan Katzman billionaires.

According to the company's website: "Evervone deserves a smile they love. We are the industry pioneer and the first direct-toconsumer medtech platform for transforming smiles. Through our cutting-edge teledentistry technology and vertically integrated model, we are revolutionising the oral care industry. The company's regulatory filing to the Stock Exchange Commission ahead of its initial public offering describes the process by which someone can bypass seeing a clinician. "Our member journey starts with two convenient options,' it says. "A member books an appointment to take a free, in-person 3D oral image at any of our over 300 SmileShops across the US, Puerto Rico, Canada, Australia, and the UK, or orders an easy-to-use doctor prescribed impression kit online, which we mail directly to their door.

"Using the image or impression, we create a draft custom treatment plan that demonstrates how the member's teeth will move during treatment, Next, via SmileCheck. a state licensed doctor within our network reviews and approves the member's clinical information and treatment plan.

"If the member is a good candidate for clear aligners, the treating doctor then prescribes custommade clear aligners, the member has the opportunity to review a 3D rendering of how their teeth will move over time and, if the member decides to purchase, we then manufacture and ship the aligners directly to the member. SmileCheck is also used by the treating doctor to monitor the member's progress and enables seamless communication with the member over the course of treatment. Upon completion of treatment, a majority of our members purchase retainers every six months to prevent their teeth from relapsing to their original position.

"We also offer a growing suite of ancillary oral care products, such as whitening kits, to maintain a perfect smile," it says. The company claims that "because of this innovative model" it is able to charge \$1,895 for its services and "high-quality clear aligners versus the \$5,000 to \$8,000 that a dentist may charge"

However, the company has faced pushback from the American Association of Orthodontists, which has claimed in complaints to state attorneys-general and dental boards that the service is "illegal and creates medical risks". The company denies those suggestions.

SmileDirectClub launched in the UK in July at 16 locations, including Glasgow and Edinburgh. It is investing \$380m in its UK operations and plans to employ more than 300 people, including dentists, orthodontists, and dental nurses.

According to a press release

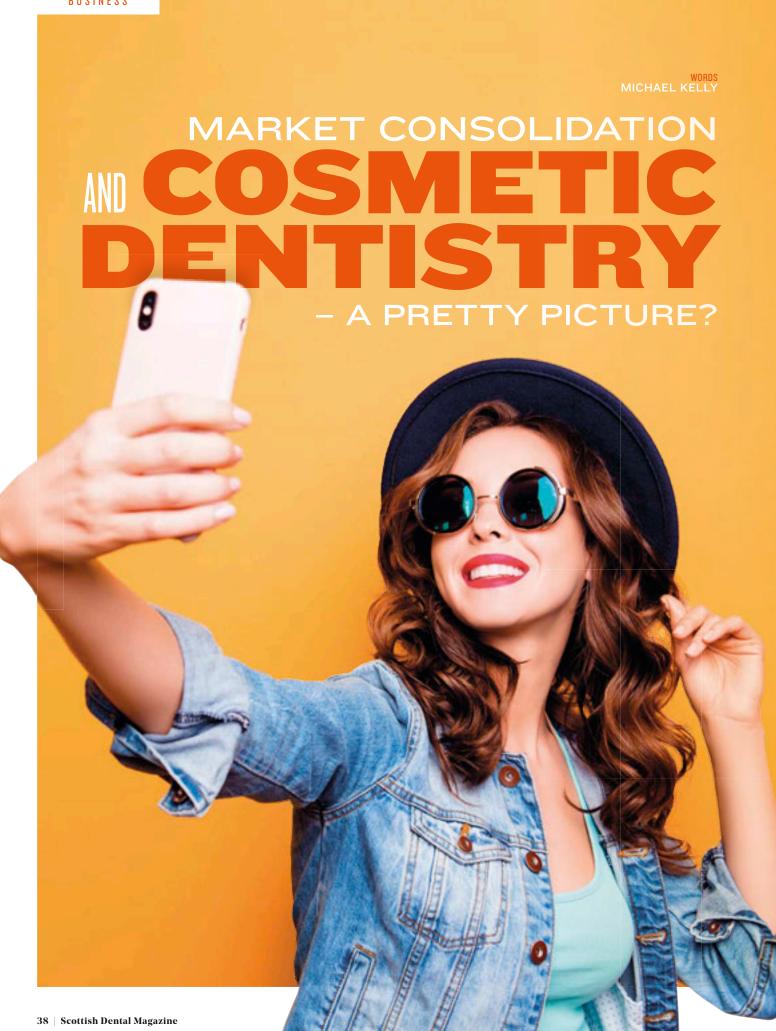


companying the launch, the company has "pioneered a unique teledentistry platform to connect customers with an affiliated network of UK-based registered dentists or orthodontists who direct all aspects of clinical care using SmileDirectClub's platform.

"These licensed dentists and orthodontists customise each patient's treatment plan and manage their patients' care from initial diagnosis through the conclusion of treatment, monitoring care along the way with remote check-ins every 90 days to allow patients to avoid the hassle of scheduling frequent visits to a doctor's office." It says the clear aligners are "doctor-prescribed and custom-made from BPA-free plastic thermo-formed on to personalised 3D-printed mouth molds, powered by a ground-breaking fleet of industrial 3D printers.



SMILEDIRECTCLUB



of different IT systems and the task of engaging with numerous management teams who will likely be unversed

ESTORS SEE OPPORTUNITIES TO AC R OWN SUPPLY CHA



The anxious patient:

Empathy, planning and a team-approach

Ilyaas Rehman, BDS (Glas)

Introduction

This case report documents the treatment provided for a very anxious patient at APCO Dental Care, Lanark. The case demonstrates the importance of some fundamental basics of dentistry: effective communication and empathy, anxiety management, treatment planning and a team-approach. I was honoured to win the VDP case presentation prize for the West 6 scheme and I would like to thank those who aided along the way.

Background

A 41-year-old anxious female patient attended the practice for an examination in February 2019; the first time in nine years. She complained of a broken tooth in the lower right side, which was presently asymptomatic but felt sharp to the tongue. In addition to this, the patient was aware of the poor condition of her remaining dentition, stating that she was unable to eat or socialise confidently. She alerted us to using Superglue to hold her remaining crowns in, and teeth together.

The patient was now keen to try to rehabilitate her dentition and therefore, the motivating factors for her attendance were:

- 1. Embarrassment: unable to socialise confidently, unable to smile without covering her mouth.
- 2. Function: unable to eat hard or crunchy foods, insufficient posterior teeth to chew with.
- 3. Poor quality of life.

In addition to this, the famous Lanark Lanimer week was approaching. This traditional celebration is highly anticipated among locals and provided a realistic timeframe for treatment.

Medical, dental and social history

The patient informed us of having multiple sclerosis and hypertension, which were being controlled by Interferon and Amlodipine respectively. She reported previous asthma, for which medication was no longer required. She also reported taking Fluoxetine, Lansoprazole, Thyroxine

and Dihydrocodeine. The patient could not remember the last time she attended the dentist, however, computer records confirmed this to be nine years ago.

She reported having several bad experiences in the past which have amounted to severe general dental anxiety. She brushed twice daily with a manual toothbrush and was not presently using any interdental aids or mouthwashes.

She worked full-time as a veterinary nurse. She quit smoking six to seven years ago after smoking roughly 20 cigarettes a day for 20 years (20 pack years) and reported zero alcohol consumption.

Examination

No abnormalities were detected on extra-oral examination.

Intra-orally, the patient's soft tissues showed no abnormalities. The patient was partially dentate with a heavily restored remaining dentition, including failing crowns. The occlusal relationship was class 1 and there was lack of posterior occlusal support. Oral hygiene



E/O frontal view



I/O maxillary view



E/O lateral view



I/O mandibular view





E/O retracted frontal view

Periapical upper right

was poor, with evidence of generalised gingivitis and plaque. Despite this, the present BPE scores did not exceed 2s. A fractured 44 amalgam was observed, and a temporary filling was placed here prior to further radiographic and clinical assessment.

There was also evidence of excess material across the upper anterior teeth, which the patient informed us of being Superglue to hold in the crowns. Application of firm digit pressure to the upper anterior teeth caused mobility of 2-3mm of the entire sextant. Caries was recorded clinically in teeth 13, 11, 21, 44, 31 and 33. There was also presence of several retained roots.

Due to the clinical findings, periapical radiographs and clinical photographs were taken.

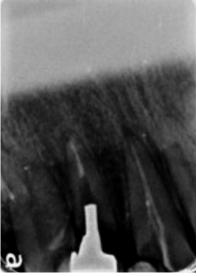
A list of diagnoses was subsequently established:

- Generalised gingivitis.
- Generalised Periodontitis Stage II Grade B – currently stable – risk(s): ex-smoker.
- Primary caries: 13, 31.
- Secondary caries: 11, 21, 44, 33.
- Defective restorations: UR2, UL2.
- UR1 previously RCT with asymptomatic
- UR4 retained root, previously RCT with asymptomatic PAP.
- LR3 vertical fracture, previously RCT with asymptomatic PAP.
- UL4 retained root with asymptomatic PAP.

Treatment options

Aims of treatment were to restore health, function and aesthetics. Four possible avenues were discussed:

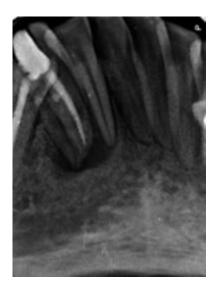
1. Deconstruing the upper anterior segment, reassess and potentially restore: Re-RCT 11 12 22 and



Periapical Upper Anterior i (G2 coned off)



Periapical Upper Anterior ii



Periapical lower anterior



Periapical lower left



CLINICAL



- restore with post-core crowns. - Caries removal and restoration. Extraction of retained roots and LR3. - Provision of upper and lower immediate partial dentures.
- **2.** Extraction of all teeth of poor prognosis - 13, 12, 11, 21, 22 and retained roots. Provision of immediate upper and lower partial dentures Caries removal and restoration.
- **3.** Extraction of all teeth of poor prognosis, implant approach to restoring gaps, caries removal and restoration.
- 4. Referral to specialist service (NHS/ Private).

Each option was discussed in detail. Following this, the patient initially opted to try option one, despite understanding the plethora of risks attached and the poor prognosis of the remaining teeth. However, further probing revealed this was due to a severe anxiety of extractions.

Appropriate evidence-based anxiety management techniques were discussed, including desensitisation, acclimatisation and in-house IV sedation. The patient subsequently made an informed decision to proceed with option two. All items of treatment were to be carried out under the NHS, excluding the LR4 due to lack of mechanical retention for amalgam.

Treatment

A staged treatment plan was proposed as follows:

- 1. Immediate
 - Temporisation of fractured LR4.
- 2. Initial
 - Hygiene Phase Therapy: OHI (tipps), diet advice, supragingival scale.
 - Extractions under IVS: 13, 12, 11, 21, 22, 43 and retained roots 14, 24, 47, 34.
 - Provision of immediate upper and lower partial acrylic dentures.
 - Caries removal and restoration: LR4, LL1, LL3.
- 3. Re-evaluation.
- **4.** Reconstruction
 - Provision of new upper and lower partial dentures.
- Maintenance.

The patient showed exceptional motivation to overcome anxiety and strive towards a healthier oral environment. There were two key problems encountered with treatment. Firstly, extraction of 47, 43 and 34 required a surgical approach. This was carried out in-house on the same appointment with assistance and therefore was rectified accordingly.



Pre-operative



Post operative

Secondly, the patient found that she was unable to tolerate the lower denture. However, rather than this being due to the lower denture fitting poorly and uncomfortably, the patient felt she would prefer to firstly get accustomed to the upper denture alone. In effect, the patient was functioning with a modified shortened dental arch.

Subsequent to completion of the initial treatment, the patient returned with irreversible pulpitis associated with 35 and root canal therapy was carried out.

Pre-operative conclusion

The patient expressed thorough delight with the result of the treatment carried

out and has, as a result, developed trust with the practice and treatment providers. She is now able to interact and socialise confidently, smile freely and eat healthily.

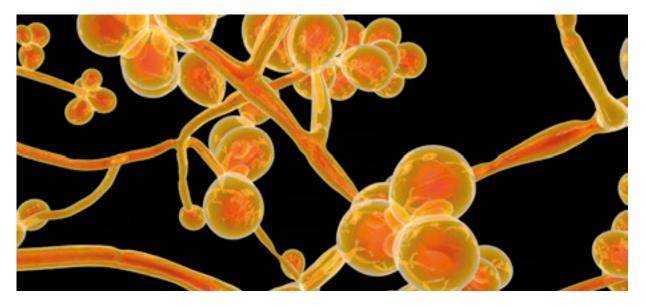
Though arguably no part of this treatment plan is especially complex, this case has been a thorough learning experience in the management of an anxious patient. With the assistance of senior colleagues, I was able to provide the patient with an outcome that we are both very pleased with.

I believe that, as a result of implementing basic principles successfully from the onset, the patient has regained her trust in the profession.



The risk of anti-fungal resistance in dentistry: lessons from a Japanese fungus

Alex Farrow-Hamblen



With antimicrobial resistance remaining a growing threat to public health in the UK, what can the dental profession learn from the emergence of C. auris?

lobally since 2009, Candida auris, a fungal species closely related to Candida albicans, has been responsible for a number of drug-resistant hospital-acquired fungal infections. Though C. auris is vet to be isolated from the human oral microbiome, 10 years since its discovery in Japan, what can the UK dental profession learn about antimicrobial stewardship and the prescription of anti-fungal agents from this lesser known 'superbug'?

Over my last four years as a dental student, the importance of antimicrobial stewardship and best practise when prescribing antimicrobial agents has been a key focus of my clinical training. Where antimicrobial resistance remains a growing threat to public health in the UK1, the Scottish Dental Clinical Effectiveness Programme's (SDCEP) clinical guidance document: 'Drug Prescribing for Dentistry'2, is a valuable resource to General Dental Practitioners (GDPs) in protecting

against the indiscriminate use of antibiotics in the Primary Dental Care. Despite this guidance and the fact that the overprescription of broad-spectrum antibiotics can lead to a reduction in their therapeutic efficacy3, the similar threat of anti-fungal drug resistance in Dentistry is less reported within the dental literature.

Amongst the many microbial species that colonise the oral cavity, C. albicans is the most common of species within its genera4. Though often co-existing as a harmless commensal microbe, acute and chronic episodes of immunosuppression can lead to candidal overgrowth and symptoms of opportunistic oral or systemic candidiasis4. In such cases, GDPs may quickly reach for the prescription pad, prescribing an anti-fungal agent such as the polyene nystatin (oral use) or the azoles miconazole (topical use) or fluconazole (oral & systemic use)5. However, the overuse of antifungal agents, like antibiotics, can similarly confer multidrug resistance^{6,7}. As resistant strains

of candida can have an adverse effects on respiratory and gastrointestinal health upon colonisation of their respective epithelia8,9,10, could drugresistant strains of candida, such as C. auris, pose a threat to the health of susceptible patients in general dental practice?

To date, C. auris is yet to be established as part the human oral microbiome, first isolated from the ear of an elderly patient in Tokyo Metropolitan Geriatric Hospital (Japan) in 200911,12. A close derivative of C. albicans, in the 10 years since its discovery, C. auris has been identified as a global cause of numerous lifethreatening cases of fungaemia in hospital-bound patients^{11,12}; the strain also linked to several hospital infections in the UK13. Interestingly, as global warming and the overuse of azole antifungals in the agricultural industry and global medical setting have been cited as a possible causes for the emergence of this multi-drug resistant fungus^{11,12,14}, similar resistant fungal strains may also develop if

anti-fungal agents are overprescribed, or used prophylactically in dentistry; particularly as the use of azoles in the UK, two of the three licensed antifungals in the Dental Practitioners' Formulary⁵, appear to have grown over recent years15.

So, what lessons can the dental profession learn from the emergence of C. auris as a nosocomial (hospitalacquired) infections? Firstly, ensuring that clinical audit, addressing the appropriateness of antimicrobial prescribing, includes antifungals as well as antibiotics should be encouraged; assessing how far local prescribing habits match SDCEP guidance2. Similarly, as advocated when treating oral bacterial infections, local measures should always be considered before prescribing any antimicrobial agent. For example, as described by SDCEP2, in the case of the candidal infection denture stomatitis, establishing the likely cause of fungal overgrowth and remedying this, e.g. educating patients in the improvement of denture hygiene, should be a first line approach when managing oral fungal infections.

Arguably, the suggestions above should already form part of everyday clinical practise. However, a difficulty faced in promoting antimicrobial stewardship within NHS Dentistry is ensuring that GDPs are best placed to make such changes, i.e. have access to the necessary tools and funds to implement best practise recommendations. For example, the National Institute of Clinical Healthcare Excellence's (NICE) guidance [NG15]: Antimicrobial stewardship: systems and processes for effective antimicrobial medicine16, suggests that in the case of persistent antimicrobial infections, oral microbiological sampling techniques should be encouraged to improve the specificity of diagnoses and thus the appropriateness of an antimicrobial prescription. Though an example of active antimicrobial stewardship that could be useful in identifying drugresistant fungal strains, the likely costs, need for additional training, the lag time between diagnosis and prescription and the storage and transport of microbiological samples to and from a clinical laboratory that has the appropriate facilitates to process such a request, are potential barriers to such a programme.

In the meantime, it seems prudent that dental advisory committees like SDCEP and dental schools should continue to advocate best prescription practise, emphasising the more inclusive term of 'antimicrobial resistance' over

ABOUT

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USEFUL RESOURCES

- Scottish Dental Clinical Effectiveness programme Drug Prescribing for Dentistry Dental Clinical
- · Scottish Antimicrobial Prescribing Group -Antimicrobial companion app
- · National Institute of Health Care Excellence Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use (2015)

'antibiotic resistance' in guidance documents and teaching; ensuring that GDPs and students are well aware that all modes of antimicrobial agents, available for prescription, are sensitive to drug resistance. With this, although available for free, increasing the 'appeal' of NICE's antimicrobial prescribing guidance16 as an opportunity for verifiable CPD or making such information more 'user-friendly' as part of an app or interactive resource for GDPs, the latter pioneered by SDCEP2 and the Scottish Antimicrobial Prescribing Group (SAPG)17, may be of benefit in increasing both readership and compliance with such guidance; especially important since antimicrobial prescribing is not yet recognised by the General Dental Council (GDC) as one of their 'highly recommended CPD topics'18.

Ten years on from the first case of a C. auris infection in Japan, the exact threat of this drug-resistant fungus in primary care dentistry remains unknown. However, research into resistant microbial biofilms is ever increasing, notably the work of Professor Ramage's team at the University of Glasgow who were the first in the UK to demonstrate the ability of C. auris to form a biofilm in vitro19; a feature which may further complicate the management of C.auris infections with anti-fungal agents. Encouraging steps considering the spread of anti-fungal resistance poses a tangible threat to dental and general public health, it is hoped that this article emphasises the importance of evidence-based and appropriate antifungal prescriptions, acknowledging that if Scotland and the rest of the UK want to remain at the forefront of dental antimicrobial stewardship, improving the ease at which the recommendations from clinical guidance documents can be implemented in primary care by UK-based GDPs is a key, and timely, next step.

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THE PROBLEM WITH RECRUITMENT

As a profession we need to up our game to attract a good number of potential candidates [WORDS: SUSIE ANDERSON SHARKEY]

WHEN I STARTED IN THE DENTAL

industry 30 years ago, recruitment was not a problem. Whether you were looking for an associate, a hygienist, or a nurse, there was always an abundance of applicants. Way back in those days it was normal to advertise in the *local papers*. When we advertised for a dental nurse it was not unusual to have at least 35 applicants. Granted, you had to sift through them and go through the elimination process, narrow down to five or six and move forward from there. Things have changed so much over the decades. Does anyone even advertise in the *Evening* Times and Glasgow Herald? In fact, it's no longer called the Glasgow Herald, merely The Herald. Confession time: I haven't looked at either paper for years!

In this age of digital everything, even the way we advertise is now digital. And to be fair, I do believe it is a much easier process. I remember having to phone the newspaper, count the words and lines I had, read it to the person on the other end of the phone then I had to write a cheque (remember those?) and send it to the newspaper so that my ad c<mark>ould be pub</mark>lish<mark>ed the follo</mark>wing week. Did we really do that? Yes, we sure did! However, nowadays you log on to your chosen advertising site, write your ad and, hey presto, you sit back and wait for the applications to role in ... and therein lies the problem(s). Let's say we are advertising a position for a dental nurse, either full time or part time; it doesn't matter. Over the past few years I have noticed the following:

- 1. There are not nearly the same numbers of applicants
- 2. People who do respond clearly don't read the ad as they don't fit the criteria
- **3.** You are pretty well guaranteed that at least one candidate will not turn up for interview
- **4.** When you offer the position, you have the situation where the candidate backs out at the last minute (this actually happened to a colleague of mine in the past month).

So, let's have a look at each point and see if we can understan<mark>d and get an an</mark>swer to why it is so difficult to recruit a dental nurse.

There are not nearly the same numbers of

applicants. I think there are many reasons for this, one being that you don't have the same numbers of people entering the dental nursing profession as you did 30 years ago ... and you will notice I have used the word 'profession' for indeed that's what it is. For many, let's face it, with young ladies 30 years ago there was not the same attitude to dental nursing as there is today. In fact, dental nurses were routinely referred to as DSA's, Dental Surgery Assistants, with no mention of the fact it was in fact a nursing position. Thankfully, the profession has moved on enormously and there are now very clearly defined opportunities for dental nurses to expand their knowledge, professional

qualifications and experience

in their chosen environment. With all the above in mind. the numbers of qualified nurses who stay in the profession long term can seem quite disheartening. I've known of fantastic nurses, with post registration qualifications who decide to leave the profession altogether, and I can't help but feel saddened by the fact we are losing a valuable member of the dental nursing profession. Salary is very often a real factor. Historically, dental nursing has not been a very well-paid profession and to be honest, for the work that a dedicated, qualified nurse carries out, I tend to agree that it is relatively poorly rewarded. A piece of advice to practice owners: Forget the national living wage, or for that matter the real living wage. The national living wage for over 25s currently sits at £8.21 per hour (yes really!) and the real living wage sits at £9.00. Pay your nurses a wage in which they can live reasonably on in the 21st century with equally enticing terms and conditions that mean you won't lose them to working on a shop floor because it pays more! I know this is all pretty controversial, but sadly it's the truth. The nurse is the backbone of your practice, carrying out many different duties, working long hours, and deserves the financial remuneration all that entails. (I can see I'm going to lose a few friends here!)

In regard to point two where applicants

don't fit the criteria ... make sure you have a clear job description and if they don't fit the criteria, move on.

Point three; candidates who don't turn up for interview. This happens in almost every practice that advertises for a nurse. And I'm not sure why it happens so regularly as surely the candidate knows that dentistry is a small pond and dentists talk to each other? Their name will soon get known to wouldbe employers. Do you contact them? Do you

find out why? When I was a practice

manager, and this happened to me, I didn't contact the candidate but I did have a 'no show' list!

And so, to point four - where the successful candidates backs out after accepting the position. This does happen occasionally, normally due to unforeseen changes in circumstances and can't be helped. However, I have

known a dentist to be let down by a successful candidate because they were going for multiple interviews and after having said 'yes' to dentist number one, they decided to then accept another position. Considerable time and effort had been expended by dentist number one who was none too pleased with the outcome and felt he had been 'mucked around'.

Does the above help to answer the question regarding the problem of recruitment? Does it raise more questions than answers? Maybe, maybe not. As a profession we have to dig deep, have a look at our own policies, procedures, the way we implement policy and see if there is anything we need to do to up our game to attract a good number of potential candidates who will be pounding at our door begging us for a job. We're clearly not there yet.

And finally, to quote a colleague: "It doesn't help when they apply and it stipulates they must be GDC reg. Are they GDC reg? No? Don't apply then!"

If you wish to contact Susie about this article or other practice management issues she can be reached at

TIME WAITS FOR NO ONE

Working smarter not harder takes effort, willingness to let go of old ideas and desire to embrace change [WORDS: ALUN K REES]

CONFUCIUS SAID: "WE HAVE TWO

lives; the second begins when we realise, we only have one." This article is about time, how we use it and how we waste it. Successful people use time well. They have the same amount - there are no more minutes, hours or days available – and yet they accomplish more in their allotted span.

Time is the greatest stressor in most dental businesses, yet it should not be. Time requires thought, measurement and planning. Dentistry has '3Es'. It must be ethical, doing the right thing for the right reason; effective, it must work; and economic, it must give value for the patient and provide a profit. I would add to those my '2Es', efficient and ergonomic.

My first job in general practice was in an NHS 'amalgam factory' treating patients with relatively high needs; prevention hadn't been adopted. Quadrants of teeth were filled at a sitting, patient after patient. We worked 'six-handed' with one close support nurse and one 'floater'. I learned a lot, earned a reasonable amount and hated it. Treadmill doesn't do justice. Instead of a professional relationship with patients, I was working on a production line of mouths.

Two things happened. I read Harold Kilpatrick's book Work Simplification in Dental Practice, and I started my own practice – so was free to experiment. Kilpatrick's book was published in 1964 but the lessons remain. I took on board the lessons of Ellis Paul and Martin Amsel about posture and respecting your body.

One change was to say to my nurse when she asked me how long I wanted for a

procedure: "Book as long as you know I will take."

That one, offhand, comment freed me from the huge pressure of my associate vears. The dental mantra, 'fill the book', was left behind and I focussed on my '2Es'.

An efficient system is 'maximum productivity with minimum wasted effort or expense'. An efficient person, 'working in a well-organised and competent way'.

We looked at how I spent my time both in a macro and micro manner. There were large chunks of my days when I was not doing what only I could do, times when I could have been usefully employed not 'waiting' and the times when I was working could have been shortened.

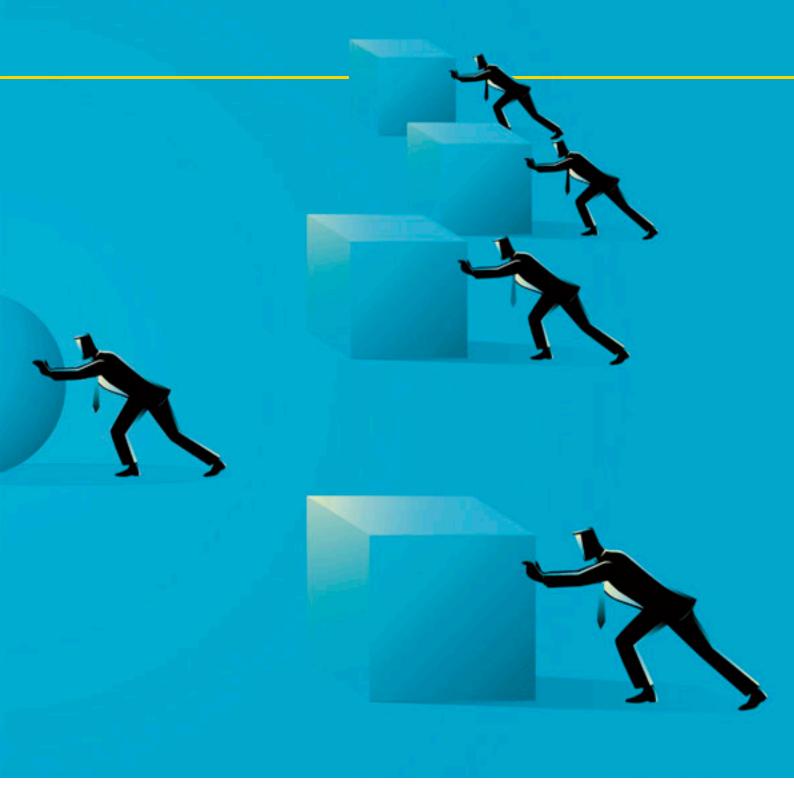
Every stage of every procedure was broken down into its constituent steps and examined. Adopting 'hygiene-led recall' meant that I was free to effectively use two rooms (three when seeing children during their sessions). Having something else to do meant that 'local waiting' time was utilised.

Working with a close support nurse meant that I never looked away when doing restorative dentistry. Using good light and magnification makes working better but moving your eyes hard work.

Great surgeons are fascinating to watch because, like musicians, their hands hardly move. I was not instinctively a great operator and knew I never would be, but I watched and learned.

Our set process for every procedure meant that my nurse always knew what to expect next. Which instrument, bur, material, and procedure. Their life was





easier with no surprises. This did not happen as if by magic, it took practice, practice and more practice until my team and I were like dance partners.

I took inspiration from the chefs whose policy is *mise en place* and prepare dishes and ingredients before the beginning of service.

In the same way that a good chef will know that their knives are sharpened, their surfaces cleared and ingredients ready before the start of a session, my team knew a day ahead what equipment would be needed for each and every procedure and it would be ready when we started. No wandering around searching for instruments, lab work or materials when the patient was ready.

One important tool was a timer; we knew how long materials took to set and how long

each stage should take. Everything from the time for topical anaesthetic to the length of time to give a painless local was known and measured.

Did it suit everyone? No, a couple of nurses during maternity breaks could not cope and would not adapt because they were 'already competent'. There was always another cab on the rank.

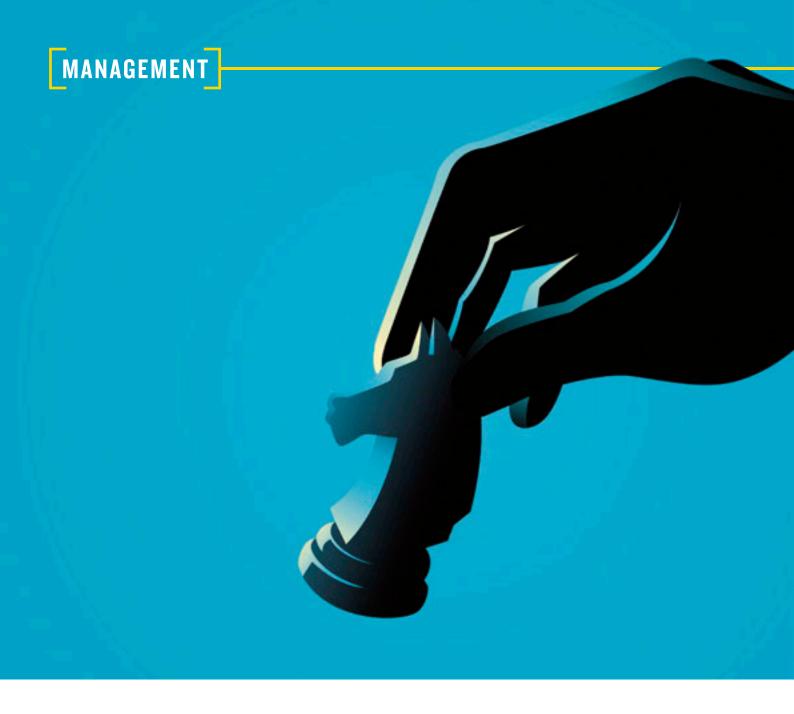
The result made my life easier, the procedures optimal for all concerned and stress levels lower. Was everything perfect every day? Of course not; life is never that easy. Did we keep learning and improving? Definitely. Was the system adaptable for emergencies? Certainly.

I went from a five-day to a four-day clinical week. I was less tired at the end of the day. Operative work was more satisfactory and easier. Appointment lengths worked and we rarely overran. The flexibility in the appointment book worked for us.

The cliché is work smarter not harder. It can happen but it takes effort, willingness to let go of old ideas and desire to embrace change.

Alun K Rees BDS is The Dental
Business Coach. An experienced
dental practice owner who
changed career, he now works as
a coach, consultant, troubleshooter, analyst, speaker, writer
and broadcaster. He brings the
wisdom gained from his and others'
successes to help his clients achieve the rewards
their work and dedication deserve.

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STRATEGY AND TACTICS - OFTEN CONFUSED!

Time spent on developing a clear strategy which management and staff can focus on delivering, would be time well spent

[WORDS: RICHARD PEARCE]

AT ANY ONE TIME THERE MUST

be multiple conversations happening in practices, which confuse/misuse the words 'strategy' and 'tactics'. 'Strategy' is sexy, so that's what people want to talk about. However, to give an example of the difference, sending a recall text rather than an email is NOT a strategy, it's a tactic! The strategy might be 'to increase the 12-month recall rate to 80% plus, by development of patient engagement, utilising text, email, newsletters, patient education events and involvement in at least one community event every three months'.

Being able to fundamentally understand the difference between the two 'concepts' and then developing strategies you can clearly articulate to your managers and your whole team, can give you a big advantage.

Having clear strategies makes running and growing practices or groups much easier, because decision-making becomes easier.

A clear strategy makes selecting the tactics so much simpler that sometimes they are blindingly obvious. Examples will



results briefings are online to peruse), you should be clear on your own strategy. Providing 'caring and compassionate dentistry, in friendly and pleasant surroundings' is not a useful strategy, as that is what every single dental practice thinks they do! Hundreds of practices actually say this on their website.

Strategy guru Michael Porter said: "Competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value." As every business has limited resources, if you do more of one thing, you will have to do less of another.

Most practices still style themselves on the amount of publicly funded care they offer and this in effect provides the 'floor' in terms of charges. After that, we have a very few child-focused practices, specialist/ referral practices, then the vast hinterland of mixed, general practices who are adding as many 'specialist' services as they can find clinicians to deliver them. Most practices suffer from not having a clear strategy, one which differentiates them and makes it easier for potential patients to choose them.

A strategy is normally created to achieve market growth and this can come from one or more of the following:

- 1. Market penetration (sell more of what we currently sell to the same market, i.e. grow market share).
- 2. Market development (find new groups to sell our existing services to, i.e. expand into untapped markets).
- **3.** Product or service development (develop current services to sell into the current market).
- 4. Diversification (sell new services into current and new markets)

Hence, a general practice might bring in a visiting implantologist, orthodontist and aesthetics specialist two days a month each and so they are using growth strategy 3, above. After the initial set-up costs to provide these 'developed' services they can retain 50 per cent of the fees that would otherwise have 'gone' elsewhere. This

is a market growth strategy that we see commonly now.

Some corporates are trying to get brand awareness and go after that middle ground between NHS prices and fully private, with a so-called 'independent' price list. This is a difficult position to occupy and relies on significant cost focus but, due to lack of NHS availability, the market size is significant.

Linked to that is the rise of market development by positioning practices in or near supermarkets and in shopping centres. This will increase as the supermarkets have to cut space but also provide a range of services which can be accessed in one visit to attract customers. A likely future development is practices within medical centres, alongside multiple medical services.

Conclusion

Strategy is different to tactics; this article has focused on strategy whereas most practices spend most of their time on tactics. Time spent on developing a clear strategy which management and staff can focus on delivering would be time well spent. It can be difficult and you might need to seek outside help which can provide a wider perspective of what is currently happening in the dental market.

The provision of dentistry is undergoing huge changes in the UK and Ireland and now more than ever it is crucial to have a strategy which you truly believe in, to guide you through the next five years.

Richard Pearce lives in Northern Ireland. Following a business career in various sectors and an MBA, he joined his dentist wife in dentistry. Richard combines his wide commercial experience with being attuned to what it is like for an associate dentist, a practice owner and a practice manager. His unique perspective ensures he can assist a practice owner with every area of the practice to create a more profitable practice and to achieve their smart objectives.

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come later. First of all, let's define the two words:

STRATEGY – an overall campaign plan/ long-term vision, i.e. it's 'what' will we do.

TACTICS - short-term actions/the actual means to achieve an objective, i.e. 'how' we will do it.

Strategies for success in dentistry

We live in interesting times as the large group practices continue to 'experiment' with finding a highly profitable strategy. One of them continues to divest practices and develop its private offering while its mainstay is the NHS. Another continues to see whether it can grow its 'connection' with patients through a significantly expanded (by acquisition) chain of practices i.e. is dentistry a route to sell the full range of private healthcare?

Although, as an independent or small group of practices, it is worthwhile to keep an eye on the 'big' groups (their quarterly

MDDUS CASE STUDY:

ROOT CANAL TREATMENT

Mr X should have been advised immediately of complications during his treatment [WORDS: AUBREY CRAIG]

MR X ATTENDS HIS LOCAL DENTAL

practice for a routine dental examination. He advises the dentist that he has been working abroad for approximately three years and has not attended for any dental treatment during this time. Ms S, Mr X's dentist, is advised that he has been experiencing some discomfort in the upper left quadrant of his mouth, for approximately three weeks. The discomfort is brought on with hot and cold liquids, as well as eating. The discomfort lasts for a few minutes but then goes away and Mr X has not found it necessary to take any analgesics for this discomfort. Ms S updates Mr X's medical history and carries out a thorough extra-oral and intra-oral examination noting that, in relation to tooth UL5, there is a cavity present in this tooth. She advises Mr X that this tooth is the most likely cause of his symptoms. However, as he has not been for some considerable time, routine radiographs are taken of Mr X's posterior teeth revealing two other cavities that will require restoration.

Mr X attends with Ms S for the required treatment. The cavity present in tooth UL5 is larger than originally expected, although there is no direct pulp involvement. Ms S advises Mr X that further treatment may be required to this tooth including either root canal treatment or extraction should symptoms recur. The other two teeth are restored routinely and Mr X receives a scale and polish in addition to the restorative

Unfortunately, Mr X returns to see Ms S some three weeks later advising her that, initially, there were no issues with the tooth, however, over the past couple of days discomfort has been increasing and he has had his sleep disturbed over the past couple of nights, necessitating him taking analgesics for this discomfort.

Ms S examines the tooth in question and notes that it is slightly tender to percussion, but there is no swelling or mobility associated with the tooth. Ms S advises Mr X that it is highly likely that the pulp within the tooth is dying off and, as warned, additional treatment is required. Mr X advises Ms S that he clearly recalls her advising him that additional treatment would be required and requests that

the tooth is saved if at all possible. Ms S proceeds to take a periapical radiograph of the tooth and discusses her findings with Mr X. The radiograph shows that the tooth appears to have one root with early signs of infection present at the tip of the root and therefore Ms S advises Mr X that root canal treatment would be required to save the tooth. She also advises him that once the root is treated then the tooth should be crowned to protect it and prevent possible fracture and tooth loss.

Mr X is seen the next day by Ms S where, following administration of local anaesthetic and the application of dental dam, tooth UL5 is accessed. The remains of the pulp are removed, the canal irrigated, a working length determined by way of an apex locator and the tooth appropriately dressed.

Mr X returns to see Ms S the following week and reports no symptoms. At his request, local anaesthetic is administered and dental dam applied. Ms S proceeds to prepare the root canal using hand instruments. Following suitable preparation, further irrigation and drying of the canal, it is obturated with gutta-percha and an appropriate sealer. The tooth is restored and Mr X is advised that the tooth should be crowned but this should be delayed for approximately one month to ensure that the tooth remains symptom free and healing begins. Ms S takes a post-root treatment radiograph and notes that the root treatment is approximately 7mm short of the radiographic apex. She does not advise Mr X of her findings but notes in the records that the root treatment is short and this is due to "instrument failure".

Unfortunately, Mr X returns to the surgery some two days later as part of the dressing has come away. Mr X sees another dentist at the practice who reviews the postroot treatment radiograph taken by Ms S. This practitioner is somewhat alarmed in relation to the radiographic findings and discusses these with Mr X. Mr X states that he was not made aware of any issues with the root treatment and was planning to return to see Ms S some

two weeks later for crown preparation. Mr X is advised that the tooth requires re-root treatment. Options are provided in relation to this being carried out at the practice, referral to the local dental hospital or referral to a specialist endodontic practitioner. Mr X requests that he is given some time to think about this and contacts

the practice the next day requesting a specialist endodontic referral. This is duly actioned.

The practice then receives a letter of complaint from Mr X. This is provided to Ms S who seeks support from her indemnity provider. Ms S carefully reflects on the quality of care provided and, with the support of her indemnity provider, arranges

that Mr X would be reimbursed any fees incurred by the specialist endodontist. Mr X is very pleased with this outcome and following successful completion of endodontic treatment returns to the practice to see Ms S for crowning of tooth UL5.

ANALYSIS / OUTCOME

It is accepted that root canal treatment can be challenging. However, as part of the consenting process it is important that pretreatment radiograph is available allowing the practitioner and the patient to discuss any findings and, indeed, any difficulties that might be encountered including curved canals or sclerosed canals. However, it is important that:

- All practitioners comply with relevant regulations.
- The dental records of any patient should be accurate, complete and contemporaneous, reflecting discussions that have taken place between the practitioner and the patient.
- Patients should be advised immediately of any complications of treatment and that this is fully recorded in the dental records.

Aubrey Craig is head of dental division at MDDUS







he Centre for Implant Dentistry in Glasgow is an implant referral service for qualified, open-minded dentists giving you the opportunity to suggest a high quality and cost-effective alternative to your patients' failing crowns, bridges or problem dentures.

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OUR DENTISTS

Dr Gregor MacIntosh Implant, Cosmetic & Restorative Dentist GDC No 209016



Gregor qualified from the University of Dundee in 2011 and shortly after gained his membership to the Royal

College of Surgeons in Edinburgh. He has a special interest in Implant dentistry and has been placing and restoring dental implants since 2015. Gregor is committed to furthering his knowledge and has undergone a number of post graduate courses to ensure he can provide his patients with the smile they desire. As well as Implant surgery he is able to provide patients with Cosmetic Smile Make-Overs, Short Term Orthodontic Solutions and is certified to provide Inman Aligners.

BDS (Dund)) MFDS RCS (Edin)

Dr Verena Toedtling Implant Dentist, Oral Surgeon & Restorative Dentist GDC No 113501



Verena graduated from the University of Dundee and obtained her Membership of the Faculty of Dental Surgery from the Royal College of Surgeons of Edinburgh. Following this she gained a Masters in Oral and Maxillofacial Surgery and became a Fellow of the Higher Education Academy from the University of Manchester. She obtained her Specialist Membership in Oral Surgery from the Dental Faculty of the Royal College of Surgeons of England and registered as a Specialist Oral Surgeon. Verena has great passion for research and has worked with the Scottish Dental Clinical Effectiveness Programme and the

Cochrane Oral Health Group leading to national guideline development and internationally relevant publications.

BDS(Dun), MFDS RCSEd, MSc (OMFS), PG Cert (DPH), MOral Surg RCSEng, FHEA

Dr Tariq Ali Clinical Director & Principal Dentist **GDC No 74600**



Dr Ali is our Principal Dentist. he qualified from the University of Glasgow with a degree in Dental Surgery in 1998. Dr Ali then went on to train in aesthetic and implant dentistry, studying under world renowned experts and completing his training at the Royal College of

Surgeons in London. Dr Ali acts as a mentor to the rest of the team and provides training courses to other implant dentists. Dr Ali is extremely experienced in the field of implantology, and you can rest assured that his is a true expert in

BDS (Glas) MJDF RCS (ENG) DipImpDent MFDS RCPS (Glas)



THE MEDIT i500

Offering unparalleled performance combined with a competitive price

ore than thirty years ago, the first computer practice management systems were introduced with innovators investing in the earliest software in the late 1980s, through to the laggards who stuck with paper records until forced to change. This pattern can now be seen with digital dentistry, in particular intra oral scanners (IOS). CAD/CAM milling was pioneered by CEREC in the mid 1980s and 3D printing has been used in dentistry for a similar period of time. Digital dentistry has now moved from innovators to adoption by mainstream dental practice.

We are at a digital dentistry tipping point. The accuracy of the technology and benefits to patients and dental teams are well documented. So, what are the barriers to change that resist the adoption of IOS in many practices? For a start, dentists tend to be conservative (small "c"). Cost, as so often in life, is a key factor for many dentists. There needs to be a return on investment (ROI) to justify the investment. Dentists working primarily in an NHS practice may question such

expenditure. Digital dentistry is rapidly growing and there has been a huge increase in 3D printers, milling machines, CAD materials and intra oral scanners.

Factors influencing the choice of scanner are detailed in the table below.

Factors influencing the choice of scanner include

Scanning Speed; Scanning Flow

Ease of Use

Intraoral Scanner Price /
Investment Cost

Subscription Requirements or Maintenance Packages

Open or Closed Scan Exporting

Autoclavable Scanning Tips

Touch-Screen

Wireless Scanner

 ${\sf Caries\ Detection}$

CAD Integration

Over the past year, the Medit i500 has made quite an impact on the digital dentistry market. While its parent company has a long record in dental and industrial scanning, the Medit i500 is its first IOS. As a relative newcomer, the Medit i500 has captured a big chunk of the worldwide market and is doing very well compared to other better-known scanners, which have dominated market share for some time.

The Medit i500 is impressively fast and smooth. It provides a scan experience that rivals some of the top scanners on the market and only for a fraction of the price. In fact, Medit i500 is one of the most affordable scanners on the market with absolutely no subscription cost.

The Medit i500 is lightweight with a single button control which allows you to start and stop the scanning process while holding the device easily. Additionally, you are able to monitor captured full colour 3D in-motion images on the screen next to you throughout the task. Another factor for increased convenience is the small intra-oral tip for patient comfort. The i500 has two high-speed cameras for

quick and efficient intra oral scanning. It provides a flexible and open system for integrated CAD/CAM workflow and allows for the export of STL files for easy file transfer and collaboration.

The software is evolving at a rapid rate. The team behind Medit is constantly adding new features. Literally every month something is added, and optimisations are occurring all the time. Its software allows control over the scan and includes an impressive line-up of evaluation tools.

It comes with some of the best support for a scanner on the market. The team behind Medit is always available to help troubleshoot.

The i500 is partnered with Medit Link, an integrated collaboration tool that allows fast and easy transfer of scan data to dental labs, effective communication and seamless workflows. Integrated cloud storage and open data architecture ensure optimised performance.

The Medit i500 offers unparalleled performance combined with a competitive price and delivers exceptionally fast ROI.



EFFICIENT, MINIMALLY INVASIVE TREATMENT FOR **LOCALISED ANTERIOR TOOTH SURFACE LOSS**

Dr Salman Siddigi, from Thornaby Dental Centre, presents a case study detailing the minimally invasive treatment of tooth surface loss using COLTENE BRILLIANT EverGlow™ composite resin

INTRODUCTION

Tooth wear or tooth surface loss (TSL) is defined as 'the pathological non-carious loss of tooth tissue

Pathological wear is suspected if:

- 1. The rate of tooth wear is greater than expected for the patient's age
- 2. The patient presents concerns about their tooth wear
- 3. The prognosis of the affected tooth/ teeth is compromised as a consequence of the wear.

TSL has become increasingly prevalent and presents challenges for the general dental practitioner (GDP) when deciding the best modality of treatment. The latest Adult Dental Health Survey (2009) suggests that around 77 per cent of people in the UK have some tooth surface loss and moderate tooth surface loss (extending into dentine) has increased to around 15 per cent, especially in younger adults.

Current literature and clinical evidence support the use of composite resin for the restoration of localised wear in anterior teeth. This article aims to describe and illustrate the management of one such case.

CASE HISTORY

A young female patient attended for a consultation appointment reporting concerns about the appearance and deteriorating condition of her dentition. She reported generalised cold sensitivity from her upper teeth and being very unhappy with their increasingly worn and discoloured

She was medically fit and well and had had multiple composite restorations placed several years previously to cover the worn surface of her upper teeth.

A diet investigation revealed previous excessive consumption of fizzy beverages and citrus fruits as a teenager, which had led to extensive TSL. She reported the habit was now under control and she was well motivated to seek remedial treatment.

EXAMINATION AND FINDINGS

An extraoral examination of the temporomandibular joints and associated musculature revealed no significant findings. A detailed intraoral clinical examination confirmed the heavily restored dentition, with extensive previous erosive and abrasive wear lesions in the buccal cervical regions from the upper-right second premolar to the upper-left first premolar (UR5-UL4). Multiple extensive Class V composite restorations could be seen with extrinsic staining and plaque accumulation at the margins (Figure 1).

A basic erosive wear examination (BEWE) revealed a high-risk score of 15 given the distinct hard tissue loss in the cervical and buccal regions. The patient was, however, maintaining good oral hygiene despite the poorly adapted restorations.

DIAGNOSIS

A diagnosis was made of:

- 1. Heavily restored dentition
- 2. Moderate caries and perio risk
- 3. Stabilised erosive and abrasive TSL
- 4. Localised mild gingivitis
- 5. Poorly adapted previous composite restorations (UR5, UL4) with marginal leakage.



Salman is an associate dental surgeon at Thornaby Dental Centre and Grace Dental Care. Stockton on Tees. He became a certified provider of the IAS Inman Aligner in 2015 and eniovs providina minimally invasive aesthetic dental treatments, with particular focus on AAO combined with bleaching on bonding.

To find out more visit www.coltene. com, email info.uk@ coltene.com or call 01444 235486

TREATMENT PLAN

On review after initial stabilisation treatment, various options for the restorative management of the worn surfaces on UR5-UL4 were discussed. including their merits and limitations. These included:

- 1. Monitor TSL and topical use of CPP-ACP tooth mousse to manage
- 2. Replacement of defective composite restorations with direct composite restorations.
- a. Advantages: good aesthetics, low cost, minimal tooth prep, easy to repair.
- b. Disadvantages: time consuming, final aesthetic outcome dependant on operator skill, long term risk of staining or fracture.
- 3. Dentine bonded indirect restorations.
- a. Advantages: can be done with minimal prep, higher wear and fracture resistance compared to composite, lower risk of marginal staining.
- b. Disadvantages: higher financial cost, more invasive than direct composite, significant tooth prep on already worn surfaces, repair more difficult than direct composite.

As the patient was motivated to improve



Fig 1 Initial presentation, smile views and upper anterior close up

the aesthetic appearance of her smile and wanted a minimally invasive solution, we opted for treatment using composite resin.

SMILE ANALYSIS USING DIGITAL SMILE DESIGN™

Digital Smile Design $^{\text{TM}}$ tools were used to discuss and communicate the treatment plan with the patient. An average lip line, flat smile line and acceptable level of incisal edge display at rest was noted (Figure 2). After agreeing on the desired tooth shapes, it was agreed to lengthen the incisors, achieving a more harmonious positive smile line (Figure 3).

TREATMENT PATHWAY

Following local anaesthesia, rubber dam isolation was placed on UR5-UL5. Excellent moisture control is imperative to achieve a clean and dry surface, free of blood or salivary contaminants, and reduce the risk of post-operative sensitivity or microleakage.

All previous composite restorations and secondary caries were carefully removed and margins bevelled using a red band fine chamfer bur to help with integration. Sandblasting using 27um AlOx was carried out to remove any remaining biofilm and achieve ideal bonding substrate. After selective enamel etching, One Coat 7 Universal bond (COLTENE) was applied to the required regions using a microbrush and cured for 40 seconds.

COLTENE BRILLIANT EverGlow™ in shade A1/B1 was used in multiple increments to restore all cavities and worn surfaces and a final cure under glycerine air block was carried out for 60 seconds.

FINISHING AND POLISHING

Being a submicron nano-hybrid, BRILLIANT EverGlow[™] has excellent handling properties with a good mix of wear resistance, adaptability and polishability.

Initial finishing was carried out on the first visit using a fine flame red band diamond to remove excess, define outline shapes and transitional line angles (Figure 4).

Final polishing was carried out using a combination of polishing discs and Diatech ShapeGuard Silicone Composite Polishing Plus Kit (COLTENE) at low and high RPM with water cooling.

FINAL OUTCOME

The patient was delighted with the final outcome of the treatment, which took just two visits. Previous overhangs, defective margins and worn surfaces were restored with an excellent lustre and final polish (Figure 5). Only a single shade (A1/B1) was employed in this case which reduced chair time and need for intensive shade matching. Due to its excellent optical and physical properties, COLTENE BRILLIANT $EverGlow^{\mathsf{TM}}$ is an exceptional material for the restoration of localised anterior wear cases.



Fig 2 Lip and smile line

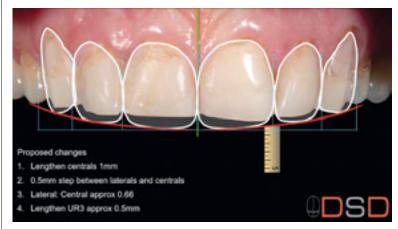


Fig 3 DSD analysis



Fig 4 Initial finishing to define outline shapes and line angles



Fig 5 Final outcome

FIND YOUR IKIGAL

An ancient Japanese philosophy brings inspiration to a new course for dental hygienists and therapists. Successful dental hygiene business coach and trainer Siobhan Kelleher explains how she and fellow hygienist, Gemma O'Callaghan, have found a way to help their colleagues re-connect with their professional 'why' and increase their career satisfaction

t's a rare inspirational moment when you come across an idea which chimes in completely with your way of thinking. This happened to me when I came across the ancient Japanese philosophy of ikigai (pronounced eye-ka-guy).

The word ikigai translates roughly as 'a reason for being'. According to those born on Okinawa, the Japanese island with the most centenarians in the world, our ikigai is the reason we get up in the morning. Those who have studied the inhabitants of Okinawa believe that the key to their longevity is their healthy lifestyle - which includes a natural, healthy diet and a simple life outdoors - and also the ikigai that shapes their lives and keeps them active and fulfilled to the very end. We all have an ikigai hidden inside us and finding it often requires time and patience. It involves identifying and combining four central reasons for doing what you do: what you love; what you are good at; what the world needs; and what you can be paid for. If you can find that one calling which combines all four, you have found your ikigai. It sounds so simple!

MORE THAN A JOB

When fellow hygienist, Gemma O'Callaghan, and I came across the ikigai philosophy, we both felt it chimed remarkably well with the calling that so many of us have to the role of dental hygienist and therapist. It is a vocation and those who practise it are passionate about getting the message of the importance of oral health to

As a profession, we know that patients who have excellent oral hygiene benefit from better overall health and wellbeing. We also know that combining evidence and clinical expertise together with the patients' needs, will result in a healthier, more positive outcome. Taking the time to involve patients in the diagnosis of their oral health can assist in helping transfer ownership of their oral care to the patients themselves.

Knowing that we have something the world needs - the advice and skills to help patients maintain good oral health for life - is incredibly inspiring, but sometimes it is difficult to apply these within the parameters of our roles in UK dental practice.

FINDING MY IKIGAI

Although I didn't call it that at the time, I found my ikigai when I relocated to Ireland about a decade ago in the middle of the

recession. It was then that I founded my business, dentalhygienist, ie, in answer to the lack of hygienist jobs available. I decided to explore attracting patients into my practice by creating dental health workshops that were transferable and delivered in different environments within the community. Considering that at the time, only about half of Irish citizens were attending a dental practice, this service would tap into the other half and bring the message of the importance of oral hygiene to a wider community.

It worked, and I have been running a successful hygiene practice within Smiles & More Dental Practice in Little Island, Ireland, ever since. The aim - to make oral care accessible to all. In addition to my practice, I was also spurred on to develop and run a successful hands-on CPD training company called dentalcpd.expert with partner, Kellie O'Shaughnessy. Together, we are passionate about bringing education opportunities to dental professionals, with particular emphasis on hands-on training and the importance of taking a team approach to patient care.

NSK IKIGAI

Inspired by ikigai and spurred on by our own experiences, Gemma and I, in collaboration with NSK, have put together an oral hygiene programme that has been specifically developed to help our fellow dental hygienists and therapists discover their own ikigai. The NSK Ikigai Oral Hygiene Programme one-day course centres around exploring each delegate's ikigai with a view to helping them develop more confidence, energy and motivation to enhance their career and oral care practice.

After engaging in an interactive ikigai workshop, the morning session will take delegates through a periodontal disease assessment and diagnosis alongside the treatment and management of patients, including the new classification.

From a business aspect, we'll also discuss the importance of communication when striving for practice growth and increased

The afternoon will be a hands-on session looking at sustainability in practice and different modalities such as ultrasonic scaling, powder therapy and air polishing, including live demonstrations. Together, we will bring all the latest evidence for the treatments our profession provides and show delegates how to negotiate for a better working life and



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environment. A large part of both Gemma's and my ikigai is our passion for helping our fellow hygienists and therapists fulfil their potential and lead satisfying careers.

The NSK Ikigai Oral Hygiene Programme is designed to do just that - and specifically to give our delegates the following:

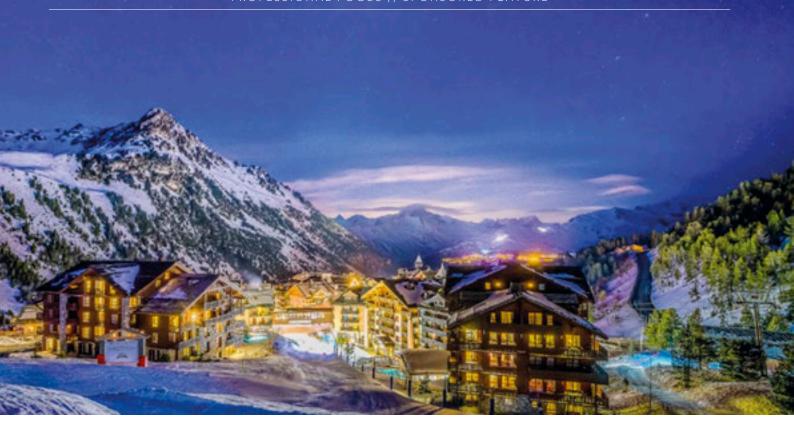
- More confidence, energy and motivation to develop their career and oral care
- A deeper understanding of current oral hygiene principles and how to maximise
- A greater sense of fulfilment by being in control of their daily practice
- An understanding of how to reduce stress and frustration
- Clarity about how to build more effective working relationships.

Ultimately, the programme offers a new way of working which will enable delegates to deliver exceptional oral care and find a deeper level of career satisfaction

The NSK Ikigai Oral Hygiene Programme is being held at NSK's UK Headquarters in Stevenage on Saturday 26th October and Saturday 30 November 2019. To book your place or find out more, visit www.nsk-ikigai. co.uk call 0800 634 1909 or email info@ nsk-uk.com







THE FIRST IMPLANTIUM SKI CONGRESS

t Implantium, we wanted to bring something different to the dental community. As the distributors of Dentium Implants, Versah burs, SMOP and other products in the UK, we are in the unique position to combine our passion of skiing and implant dentistry.

We are bringing together international lecturers and dentists from different backgrounds who want to ski or enjoy the spa facilities alongside learning about the latest developments in implant dentistry.

We have secured a mix of speakers and lecture titles which speak for themselves - a diverse offering. We chose to keep the congress small, around 60 delegates, thus enabling great interaction. The lectures all take place in the late afternoon and evening allowing for maximum time on the slopes.

We have been skiing in Les Arcs for the last 15 years, so we are able to advise the best ski areas, how to hire equipment, ease of getting there and even help set up learn to ski

Les Arcs is part of the world-class

Paradiski ski area high in the French Alps. Les Arcs 1950 is a completely ski in, ski out village and the accommodation is five star. The Paradiski ski area boasts 264 pistes, 160 lifts and a maximum height of 3250 metres. It is a spectacular resort, with hundreds of restaurants, shops and so much more to explore.

We are arranging transfers from Lyon airport for certain flights. Alternatively, you can self-drive or catch the train directly from St Pancras to Bourg St Maurice. For the non-skiers, Les Arcs 1950 offers spa facilities and a beautiful village to explore.

We hope you can join us Sunday 19 – Thursday 23 January, 2020.

CONFIRMED SPEAKERS

Salah Huwais

Dr Huwais is the founder of osseodensification. He maintains a private practice focusing on periodontics and surgical implantology in Jackson, Michigan. Osseodensification: Optimise the site - optimise the outcome

Craig Parker Craig is Past President of the Association of Dental Implantology (UK) where he has been on the national board for more than seven years. He regularly lectures to various study groups and diploma and MSc programmes in the UK and at national and international dental congresses.

Dodging disaster in digital workflow

Mariano Sanz

Professor Sanz received his MD and DDES degree from the Universidad Complutense de Madrid. He then completed his graduate training in Periodontology at the University of California, Los Angeles (UCLA). He is Professor of Periodontology, Dean of the Faculty of Odontology of the University Complutense de Madrid and Director of the Graduate Program. Professor Sanz is the author of more than 200 scientific articles and book chapters and participates extensively in international lectures, courses and seminars in periodontology, implant dentistry and dental education. Modern surgical protocols in implant dentistry: decision making after tooth extraction.

Ignacio Sanz

Collaborating professor of the master in periodontics and dental implants of the Universidad Complutense de Madrid. Improve treatment outcome through open digital implant workflow and the SMOP surgical guide

Internationally renowned lecturer and trainer in the field of 3D radiology, implant planning, and templatequided implant placement. President of the board of Swissmeda AG. Florian will lecture alongside Ignacio.

Ziv Mazor

Ziv is one of Israel's leading periodontists. He graduated from the periodontal department at the Hadassah School for Dental Medicine in Jerusalem, where he served as a clinical instructor and lecturer for undergraduate and postgraduate students. Since 1993, Ziv has been engaged in clinical research in the field of bone augmentation and sinus floor elevation.

RISE IN DEMAND FOR PRIVATE DENTAL PRACTICES

Paul Graham - Head of Dental, Christie & Co

s we enter the second half of 2019, the noticeable shift in demand towards the private dental sector continues

WHAT'S IN DEMAND **AND WHY?**

- While NHS dentistry is still considered highly attractive for many entering the sector, when we segment this in more detail, there is clearly now a greater sensitivity in relation to performance and geography of a practice.
- The private pay market will continue to attract new associates, especially for those with a few years' experience who are seeking to specialise. Evidence suggests this is happening sooner in the career path than previously seen. The growing market and subsequent lack of associates

will continue to place upward pressure on pay scales

- Compared with many other business sectors, dentistry offers a safe haven for banks and other investors. While private dentistry can be considered discretionary, the restriction of treatments on the NHS means that demand for private dental treatment remains robust.
- Larger practices, where income and profits are large enough to support an associate led model, will not only attract independent purchasers but also corporates and a new breed of multiple dental operator, focusing on quality and the excellent returns that running a private dental business can offer.
- The continued lack of supply of quality dental practices has underpinned prices, particularly in the higher price ranges.



To discuss how Christie & Co might help you achieve your future plans, contact Paul Graham, director at Christie & Co on 0131 524 3416.

The growth in the number of smaller dental companies has increased demand for larger practices, where greater economies of scale can be realised.

Recent case study: STAFFORD STREET **DENTAL CARE**

This four surgery practice in the heart of Edinburgh's West End had been owned by Principal owners Mr & Mrs Maidment who had been practising in the West End area of Edinburgh since 1987. By 2006, larger premises were required, and they moved to the Stafford Street location, evolving the business and soon being recognised for delivering high quality private dentistry. The principals were keen to free themselves from practice ownership and we recently completed on the sale to a group operator.

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PRACTICE SALES

VALUATION

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INVESTMENT

FINANCE

INSURANCE



MAKING SENSE OF THE NEW IR35 RULES

he draft legislation detailing the changes to off-payroll working in the private sector, which will be implemented from April 2020, has now been published. The new measures extend the existing rules that have already been implemented in the public sector to both the private sector and third sectors.

First introduced by the UK Government in 2000, IR35 was implemented to ensure that employees, or individuals who provide their services through a limited company (a personal service company, or PSC), incur broadly the same tax and national insurance liabilities as an employee. In addition, the liability to decide whether IR35 applies and to pay any employment taxes rests with the PSC, i.e. the company engaging the services of the contractor.

From 6 April 2020, medium and large

businesses in the private and third sectors will be responsible for determining whether the IR35 rules apply to the PSC, and will also be required to operate PAYE and pay employer's National Insurance contributions (NICs). The new legislation will not apply to small businesses which engage contractors through PSCs.

If a business engages a PSC through an intermediary, i.e. an agency, the agency will be required to operate PAYE and pay NICs if the engaging business determines that IR35 applies. The business will still be required to pass their determination to both the agency and the contractor, and if the agency fails to pay any PAYE or NICs due, the liability will pass back up the supply chain to the engaging business.

With just over six months to go before the reforms are due to be rolled out, we would



information or advice on the new IR35 rules, please contact Louise Grant (louise.grant@ eqaccountants. co.uk) on 01382 312100.

suggest businesses should start reviewing their current workforce, including those engaged through agencies and other intermediaries. This will allow them to identify those individuals who are supplying their services through PSCs and assess the impact of these changes post April 2020 and start the process of discussions with contractors.

There is still a lot of detail to follow, and HMRC have confirmed that guidance will be forthcoming. However, for complicated arrangements, this may take some time to resolve, so taking advice early will be heneficial



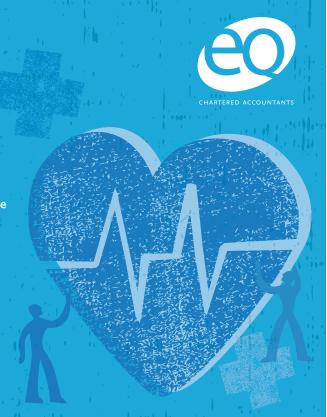
Your Practice. Energised.

At EQ Healthcare, our dedicated team of specialists act for numerous healthcare practices of all shapes and sizes. We enjoy working with clients who view us as part of the team, assisting their practices to grow and develop, to realise their personal ambitions and to make a real difference.

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For further information please contact: Louise Grant 01382 312100 louise.grant@egaccountants.co.uk

Anna Coff 01307 474274 anna.coff@egaccountants.co.uk



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WHOM SHOULD YOU TRUST TO SELL YOUR PRACTICE?

Martyn Bradshaw offers tips for getting the best deal

isconceptions, half-baked advice and hearsay. Everyone and their dog will give you advice freely when you come to sell your practice, but whom can you trust? Through PFM Dental, I handle dozens of sales of every shape and size, year in, year out. Here are my top tips for cutting through the flannel and getting the right deal for you.

1. GET THE BEST PRICE BY GOING TO THE OPEN MARKET

There's a myth that corporates pay the highest prices. Hot on its heels is another misconception – if you want to sell up but stay on as an associate, selling to a corporate is your only option.

Speaking from the agency coalface, I can promise you it's still a seller's market. Corporates are very active but I always advise vendors to go to the open market. Marketing your practice widely is the best way to maximise your price and compare the offers. If your business is just what a private buyer is looking for, they'll often pay more than a corporate to secure the perfect location or set-up.

2. BE WARY ABOUT SPENDING LOTS OF MONEY BEFORE YOU SELL

Everyone wants to get the best price for their practice. As a result, many vendors spend vast amounts of cash upgrading their equipment before they put the business on the market. This can be an unnecessary expense. Today, we value practices using profit multiples. Yes, it's still important for valuations to include a breakdown of the

value of the equipment (for tax purposes) but new equipment doesn't directly boost the value of your practice. Of course, if something is not working properly, you should replace it. And it's true that someone might find a practice with new equipment more attractive. But overall, be careful about splashing out huge sums when you don't need to

3. FORGET TURNOVER - FOCUS ON PROFIT

Historically, dental practices were valued on a percentage of turnover. Today, it's all about multiples of profit. And with a standard 'associate-led' valuation based on, say, six times profit, even a small increase in margin can mean a big rise in the overall valuation. In other words, if you can shave, say, £20k off your costs, you'll see your valuation rise by £120k. A good valuer will look at how your business is run and come up with suggestions to hone your profit margins.

4. BE SAVVY WITH YOUR PROPERTY

Do you own a practice and the property? If so, smart tax advice is a must. As long as you don't hold it through a limited company or own the property within an SIPP (self-invested personal pension), property is classed as an 'associated asset'. If you sell it with the practice, it will generally qualify for Entrepreneurs' Relief (taxed at 10 per cent on the gain). But if you hold on to the property and lease it out, you lose Entrepreneurs' Relief and pay Capital Gains Tax. There are also transitional rules that may apply. This might be a one-time chance to



Martyn Bradshaw is a director of PFM Dental and head of sales and valuations. Martyn undertakes dental practice valuations, sales and consultancy work advising internal buy-ins and buy-outs and structures. Go to: www.pfmdental. co.uk get tax relief on the property sale. Tax rates and rules are subject to change and are complex, so you'll need to liaise with a well-briefed accountant to find out what's best for you.

5. GET AHEAD OR GET HELP WITH DUE DILIGENCE

Picture the scene: you've found your perfect buyer. You're excited about the deal going through and you're already planning the fun you're going to have when those sale proceeds are in your bank account. Then the eight-page business questionnaire drops on to your desk. Swiftly followed by the three-page property questionnaire. You find yourself knee deep in collating all the necessary due diligence information, including accounts, staff contracts, service agreements and inspection certificates. My advice is to avoid delays by starting this process early.

6. DON'T UNDERESTIMATE THE NEED FOR DENTAL SPECIALISTS

You're going to need someone who can get your dental practice valuation right first time. A dental sales agent will be best placed to market your practice to the maximum number of appropriate people who are actively looking to buy in your area.

Dental lawyers understand all the nooks and crannies of due diligence and they're also past masters at making sure all the right warranties and protections are included in your sale agreement, leaving you to stroll away post-sale, knowing you're safe from future claims.

QUALITY AND TIMELY MANAGEMENT INFORMATION

Want to ensure your wealth and value of the business is protected? Here's how...

t is becoming increasingly important for management to have accurate information readily available, to facilitate timely, effective decisions, and dentists are no different. Whether a sole trader, partnership or limited company, owners and managers need to be in a position whereby they have the right information quickly to make key business decisions

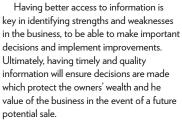
Decisions that require to be made might include; timing of purchasing new clinical equipment for the practice, revising staff salaries or associate agreements, and considering whether the time is right to sell the business.

If you do not have the relevant

information, if it's incorrect, or it's not available quickly, it increases risk and can have a substantial effect on the business if wrong decisions are made.

Using the likes of Xero, an online accounting package, allows you to keep track of expenditure, monitor cashflow and connect wirelessly with your accountants or advisors with your online healthcare accounting software.

These tracking facilities can be run live at work, at home or on mobile via an app, and having live dashboards for example can allow decisions to be made quickly. If information is more readily available practice managers and owners will be more confident in the finances and more aware of what is going on day to day, as opposed to waiting a month for reports to be run.





If you would like more information regarding what tools and reports might be useful for decision-making or how Xero can help, do not hesitate to get in touch with James Pirrie at AAB (james.pirrie@aab.uk)





BREXIT - IS SCOTTISH DENTISTRY PREPARED?

Gurjit Pall, Associate at Thorntons Solicitors, explores the potential impact on the dental profession of the UK leaving the European Union

s the Brexit endgame draws nearer, it is important to accept that this once in a generation event will, one way or another, affect everyone. Dentistry is no different, particularly with around a fifth of the dental profession in the UK made up of dentists who have trained in the European Union (EU).

Given this significant minority number of dentists trained in the EU, it is likely that these dentists would have brought their family members with them to the UK, all of which could suggest immigration issues within families and the potential for dental professionals to be drawn back to their "home" countries if the environment here becomes less welcoming. That might present real difficulties for the profession.

A no-deal Brexit will bring a raft of legal changes. The UK Government has however addressed one of the pressing issues by confirming that those who qualified in the EEA or Switzerland can have their professional qualifications and experience accepted as they do now, guaranteeing their ability to work in the dental profession.

The UK Government has made it clear: all EEA and Swiss nationals as well as their

family members must apply for status under the EU Settlement Scheme. In the event of a no-deal Brexit, those applicable must prove before 1st January 2021 that they have resided in the UK on or before the exit day to be eligible for pre-settled status or settled status depending on their length of continuous residence in the UK; failing which you will need to ensure that you have obtained European temporary leave to remain (Euro TLR) if you wish to reside in the UK beyond 31st December 2020. Otherwise, all EEA and Swiss nationals as well as their family members will be subjected to what has become known as the hostile environment.

In the short term, for all in the dental profession, there should be no real impact on the ability for EEA and Swiss nationals as well as their family members to continue to work, be it in an employed or selfemployed capacity, as their qualifications and right to be in the UK will be unaffected. However, this will be subject to change on 1st January 2021 when the UK Government is expected to introduce a new single immigration system for all foreign nationals.

The UK Government's future skills-based immigration system white paper



For further information please contact Gurjit Pall, Associate at Thorntons Solicitors gpall@thorntons-law co.uk

confirms that dental practices seeking to recruit EEA and Swiss nationals from 1st January 2021 will be expected to hold a sponsor licence. The current cost for a sponsor licence is £1,536 for medium and large businesses and £536 for small business; and although future fees are not yet set, it is expected that these will be similar to the current ones

The relevant dental professionals intending to continue working in the UK after their Euro TLR expires or those who wish to enter the UK to work after 1st January 2021 must hold a valid visa. Currently, this would be applying under the Tier 2 visa route. Importantly, associates would continue to apply as self-employed persons under the Tier 2 visa route.

Leaving the UK in a no-deal Brexit will impact dentistry in a number of ways, particularly as the Operation Yellowhammer documents highlight that significant disruption is expected with the import and export of dental equipment and materials as well as the supply of medicines.

Having said all of this, by the time you read this article, the Brexit machinations are likely to have taken further twists and turns - so watch this space!

MAKING CHANGES

Trends in consolidation leave the dental industry geared up for success - we look at the initial steps when selling your practice

n industry once dominated by independent owners, the dental industry continues to see vast change in the way it operates, and those business-minded dental professionals are able to reap the rewards. Increased consolidation, by both large corporate entities and small independently owned practices within the market, make this a prime time to sell your practice. MacRoberts are accustomed to working through the legal issues that arise in the sale of dental practices, however, before you reach that stage, we realise that there are numerous preliminary steps that need to he taken

SO. YOU'VE DECIDED TO SELL

Selling a practice can be a daunting process, with many facets, each requiring specialist insight and knowledge into how the process works. However, before you get started, it is essential that you have the administrative heart of your practice in order. It is never too early to consider exit planning, and in doing so, you want to consider how your practice looks to a potential buyer. You or your practice manager will have to organise essential documentation such as three years of certified accounts, copies of your NHS schedules and a clear and visible split of your private income, but a purchaser will also rightly demand lists of individual staff pay rates along with their contracts and information on their practice pension scheme. These are just the tip of the iceberg

when it comes to getting your practice ready to handover to your selling agent and solicitor, and clever preparation will stand you in good stead for a smoother acquisition.

KNOW WHAT YOU WANT

There are many options on how you might want the sale to proceed. Are you going to continue to work in the practice postcompletion, or are you making a clean break? If you wish to continue practising, will you be tied in for a fixed period? Will the remuneration rate and terms be favourable, and will you have the kind of clinical freedom which you might have expected? Also, have you consulted an independent financial adviser to advise you on your financial planning options for your future? Further, if you own the property, you should consider whether you wish to retain the property and receive the annual rent along with its potential capital growth over the continued period of ownership. Alternatively, if you are currently leasing the practice premises you may need to account for the extra time it may take for due diligence required by landlords when considering the reassignment of leases to new business entities, especially if the buyer is a new company, or a professional at associate level making their first purchase.

MARKET FOR SALE

Once you have your affairs in order, you will want to get in contact with a selling agent that is well versed in dealing with dental



Michael Kelly Partner Corporate Finance michael.kellv@ macroberts.com 0141 303 1318

practice sales to assist you in the valuation of your practice. They will also advise you on the state of the current market and put you in touch with potential buyers. An experienced selling agent is likely to have a network of preferred bidders which you may want to initially consider, or alternatively you may want to put your practice to the full market with a view to possibly gaining more interest in the purchase. Either way, instructing an experienced selling agent is key and more likely to lead to a better deal.

Once interest has been shown, and you enter into initial discussions with a potential buyer, you should get to know the buyer. The importance of this is perhaps underestimated. While selling to both independent, and corporate entities each have their merit, one may suit the values and visions you of your practice over the other. You will also want to know that the buyer is reliable, and isn't going to surprise you down the line. It may be a useful task to speak to those who have sold to the buyer previously to get an insight into their performance.

Ultimately, the best sales are delivered by being pro-active - a combination of grooming your practice to be sold, knowing what type of deal you want and contacting experienced professionals to assist you in the process, will work to your advantage when the deal gets going. MacRoberts provides innovative, practical advice that can help you from start to finish.



RETIREMENT IS WASTED ON THOSE TOO OLD TO ENJOY IT

Dentist David Row reflects on his career and why selling his practice has let him make the most of life

won't be alone when I say that dentistry is a fast-paced profession, especially when juggling it with a busy life outside of work, time can pass by quicker than you realise.

For me, that realisation is especially pertinent because, as I write this, I'm days away from retiring from the career I've spent the last 40 years building.

At 57, it's come a few years earlier than I'd planned, but a mixture of health and circumstance mean that the time's right for me. What's more I'm thoroughly grateful that my line of work - along with the decisions I've taken within it - has given me the opportunity.

DECIDING ON DENTISTRY

When people ask what inspired me to become a dentist. I tell them it was the dentist I used to visit as a child: he was so bad, that I knew I had to do better!

On a more serious note though, like many of my peers there are three main things that really drew me to the profession.

The first was the appeal of the practical work -I've always been very hands on, so it suited me well. Second was the fact that I got to work with people. I've built up some great relationships through work,

both on a personal and a professional level. Third, dentistry is one of the few professions where - with enough hard work - you can really be your own boss.

BRANCHING OUT

I took my first associate job in 1986 and landed my first partner role in Ashington in 1990. Back then I honestly thought I could work forever. The buzz of being a partner really spurred me on, and when I was given the opportunity to join my current practice, Kelvin Lodge in Newcastle, I jumped at the chance.

Three of us bought in at a similar time and the practice, already well established, went from strength to strength. We all had our own areas of interest - both in terms of dentistry and the practical side of running a business - and I was able to focus on implants and surgery. We maintained



a good reputation both locally and beyond, and to this day we still have patients coming back from as far as Italy, France, Greece and even Russia.

SELLING UP

As we reached our mid-50s though, we all realised that there was more we wanted to do inside and outside of work. This combined with the growing administrative efforts needed to keep the practice running and compliant, meant we started looking for one of the associates to buy in.

The plan fell through but, at the same time, we were contacted by one of the large dental groups asking if we'd consider selling. After exploring it further, we decided this provider wasn't for us as we felt they'd undervalued the practice and were suggesting terms that we didn't want to accept.

Shortly after we were contacted by Bupa Dental Care. Immediately we knew that their offer was different and we were impressed by how much they understood the practice.

They recognised that we were a strong performing practice and so were happy to let us keep running without interference. We sold the practice to them in January 2016.

A FRESH APPROACH

While we've been able to maintain an independent approach to practising, Bupa has provided a huge amount of admin and clinical governance support. Ultimately this has meant we're able to focus on patient care and team development, without being distracted by the paperwork and challenges that comes with IT, HR, overheads and equipment.

It's honestly like being back to when I first started out: I'm back to working 9 to 5 and can leave without the stress hanging over me.

All was going swimmingly until, 18 months ago, I suffered a serious heart attack.

During this time I had the stark realisation that, if I hadn't have sold the practice, there's no way that I would have taken the time needed for a full recovery. Our practice was built on us sharing the workload and - while my colleagues are nothing but supportive - I'd have personally felt I was letting them down by not returning to work.

Instead, Bupa were hugely supportive and were able to give me the time off that I needed - both at the time of the heart attack and surgery itself, and when I had to take time off for back problems. They were able to bring in additional dentists too, who proved such a good fit that they're now staying on at the practice.

LOOKING TO THE FUTURE

After 40 years, I've understandably got mixed emotions about leaving the profession. For all the stress of the CQC inspections and the late nights earlier on in my career, I've also been lucky to work with some brilliant people, and will certainly miss the camaraderie with my colleagues. Likewise I'll miss my patients too, though I know that I'll be bumping into them on the golf course instead, which doesn't seem like such a bad compromise!

On the plus side, I know I'm leaving the practice in good hands. What's more, I'm looking forward to getting some more travelling under my belt, in particular surprising my 85-year-old mother with a trip back to her native Kenya. It'll be a poignant trip but one that makes me feel grateful for the fact that I've got plenty more trips ahead, while young enough to enjoy them.

Bupa Dental Care

If you're considering selling your practice, or just want to hear more about your options for the future:

Call: 01454 771 575 Email: m&a@bupadentalcare.co.uk Visit: bupa.co.uk/selling-practice

Bupa Dental Services are provided by Bupa Dental Services Limited. Registered office: 1 Angel Court, London, EC2R 7HJ. Registered number 479557.





ENVISAGE - FORESEEING A GREAT FUTURE

With a family feel throughout, the Scottish group is bringing its friendly and professional services to more and more communities across the country

or villages in Scotland, having a local dentist is a precious resource. So, it was with delight that residents of Kilmacolm in Inverclyde received the news that the Scottish-based independent dental group EnVisage was opening in the heart of the community.

EnVisage has invested around £300,000 in redeveloping the former Royal Bank of Scotland on Lochwinnoch Road in the village, creating a state-of-the-art practice with disability access, a welcoming reception area, and two high-tech treatment rooms where an experienced team offers NHS and private dental treatments in a friendly and professional setting.

EnVisage Dentistry was founded by Dr Brendan Murphy, principal dentist at Appletree Dental Care in Glasgow, and entrepreneurs Poonam and Puneet Gupta, owners of PG Paper in Greenock. Launched three years ago with its practice in Larbert, the opening of Kilmacolm brings the number of practices to six.

"Our aim is to provide a practice that has the highest standards in dental equipment and technology. Our background encompasses management for over 20 years of successful dental practices in the Glasgow area," said Brendan.

"Our commitment to creating such a practice in Kilmacolm is built on our experience - but is also heightened because as directors we have lived in the local area for many years with our children attending local Kilmacolm schools.

A comprehensive range of treatments is available at EnVisage, from all NHS general dental services, to hygiene treatments and cosmetic dentistry, such as clear braces, tooth whitening, dental implants and porcelain veneers.

EnVisage Kilmacolm will provide patients across Inverclyde and Renfrewshire the highest standard of dental care, employing the latest technology and techniques available. EnVisage also has dentists within the group that have a special interest in

implants and all referrals are welcome.

Joining Ian Lynch, Kilmacolm's dentist of more than 30 years, at the new clinic is Cristina Caldararu, who - as well as general dentistry - will also specialise in cosmetic orthodontics. The family feel that the owners bring to all their practices will be nurtured at Kilmacolm also.

"We care for our team as people and as professionals and they, in turn, really care for their patients," added Brendan, "with each practice focussed on serving the particular needs of their community."

ENVISAGE ALSO HAS DENTISTS WITHIN THE GROUP THAT HAVE A SPECIAL INTEREST IN IMPLANTS AND **ALL REFERRALS WELCOME"**

LIVING UP TO PATIENT **EXPECTATIONS**

Innovation is making people more aware of their part in disease prevention

atisfaction levels regarding UK dental care are very high at 97 per cent. Yet to achieve these outstanding figures, dental professionals must remain constantly aware of what patients expect and value. One may assume that patients want to be treated by a highly competent and experienced dentist that is well versed in the latest dental techniques, but it appears that it takes significantly more than this to keep patients truly happy. According to research carried out by the General Dental Council (GDC), patient expectations are less related to the technical ability of dentists and more about the entire experience; the level of customer service and the quality of care provided by the dental team.

It seems that as well as the cleanliness and hygiene of the dental practice, patients value a caring dedicated dental team that has the skills and knowledge to communicate effectively and deliver patient-centred oral health care. For obvious reasons, patients must feel safe and the dental professional's attitude and manner during appointments is also important. Patients appreciate those that show empathy and understanding, that take steps to develop a rapport and build a trusting relationship. Patients also want to feel supported and reassured during visits and to build confidence, providers should demonstrate the team's commitment to preventive, minimally invasive dentistry.

It is essential to offer individualised care but also to make patients feel involved and to give them choices. They need clear and accurate information that they can understand before, during and after treatment, with details regarding outcomes and any possible risks, so that they can make informed decisions about their oral health. It has been reported that a full explanation of what is required, and why, can help some patients to overcome their fears. Patients should have the opportunity to ask questions about the treatment and discussions should take place to ensure that patients know exactly what to expect and what can realistically be achieved. Certainly, being involved in the decision-making process may help to make the experience more positive and more likely to result in the patient opting for a pathway that is in their best interests, rather than perhaps what the patient desires.

Part of providing high-quality dental health care is to help patients to understand their own health and take responsibility for it. Government programmes and policies to help people to improve their health with food labelling, the 'sugar tax' and the eat well guide, among others, are aimed at encouraging the public to take steps to prevent ill health and disease rather than curing it. In a similar way, by attending regular dental appointments any potential problems, or risks of disease, can be identified and patients can be supported with individualised advice and education to help them to improve and maintain their

Until recently, it has been difficult to identify the very early signs of tooth decay and dental erosion. Of course, there are numerous visual/tactile evaluations that can be made of dentine decay, but early demineralisation is not always accurately detected with radiographs, which presents a significant challenge for dental professionals striving to uphold the principles of minimally invasive dentistry. However, the new CALCIVIS® imaging system supports the preventive approach by capturing images of active demineralisation on tooth surfaces at



information visit www.calcivis.com. call on 0131 658 5152 or email at info@ calcivis.com

its earliest, most reversible stages. This helps dental professionals to detect the signs of disease early, and monitor disease progression but it also enables them to show patients exactly what is happening on the surfaces of their teeth. The evidence-based $CALCiViS^{@}\ images\ provide\ patients\ with$ personalised information that helps them to understand their oral health status and emphasises the importance of complying with measures to protect the teeth from further disease progression.

Although some patients may believe that the dental profession is entirely responsible for their oral health, innovation is making them more aware of their part in disease prevention. It is adding value to dental appointments, increasing the quality of care and helping the profession to meet patient expectations.

AUTHOR INFORMATION

Flo Couper is an enthusiastic dental hygienist and business coach. She has worked in the dental profession for 29 years and has extensive experience in all dental settings. Flo is passionate about preventive dentistry and continually strives to increase understanding and promote its values to both dental professionals and patients. As an NLP coach she likes to explore the use of language and discover ways to encourage better communication and listening. Flo has coached many dental teams and supported them in building preventive programmes into the dental practice. Currently, she is thriving in her role as an Educator and Product Specialist at CALCIVIS®, where she supports dental professionals with the integration of brand-new biotechnology to visualise and advance the management of early caries.



A LEGEND REDEFINED

A-dec introduces its completely redesigned A-dec 500 chair

our dental chair is the heart of your practice; the centre of your daily work and the destination of every patient.

Buying a new dental chair is a big commitment. You'll probably own it longer that you'll own your current car, and almost certainly spend more time using it. Assuming you work a typical 37.5-hour week, 48 weeks of the year, over 10 years (the minimum life expectancy your chair should have), you'll spend 18,000 hours each year working with your chair.

That's why investing in high-quality, reliable and ergonomic dental equipment should be a no-brainer. Your dental chair and delivery system should be comfortable to work with and help to make your work easier and more efficient too. The new A-dec 500 is a dental chair that has been designed to do just that.

The new flagship model is a completely revised and redefined version of the A-dec 500 model – a chair that won many awards globally and became famous for its comfort and reliability.

Practitioner health and ease of use have been key considerations for the development of the new A-dec 500 dental chair. A thin, flexible backrest with slim upholstery and a cut-away baseplate enable users to get in close and work in a comfortable position – legs under the patient, elbows at your side.

A lightweight and smooth delivery system with automatic braking has been introduced

for easy and precise placement. Drift control is also an important consideration; if you are in the middle of a procedure, the last thing you need is your instruments and materials drifting far away from you. Both Continental and Traditional delivery systems on the new A-dec 500 are designed to stay put, to avoid disruptive situations and eliminate excess strain on the spine from repeated reaching and lunging for the delivery system.

Extended reach tubing on the Continental system offers greater range of motion and arms that balance the tubing weight reduce in-procedure resistance and fatigue. As on the Traditional delivery, there's also a positionable touchpad that tilts and rotates for precise viewing from multiple angles and can be adjusted for right- or left-handed operators.

The sleek design with toughened medical-grade glass is easy to clean and displays only what is necessary for the current procedure.

For ease of use, an LED coolant indicator lights up when a handpiece is lifted out of the holder. These individually adjustable water coolant lights identify which handpiece is in the active position, so you can make adjustments without second guessing. A customisable tray holder is also included, enabling you to position everything right where you need it and comfortably within reach, and eliminating the need for any twisting or straining when reaching for instruments or materials.

The new and improved delivery systems



To find out more or to try out the new A-dec 500, call 0800 233 285 or email info@a-dec.co.uk to arrange an appointment at A-dec's Nuneaton or Bracknell showroom.

can also facilitate a brilliant new addition from W&H: Advanced Air – an air-driven, highspeed handpiece with adjustable bur speed, combining the cutting efficiency and control of electric with the tactile feedback of air. This integrated handpiece is compact and lightweight, yet powerful and precise.

Your dental chair is probably the first thing your patient sees when they walk into the surgery, so it needs to look the part, too. The new chair has a revised upholstery design that is both durable and stylish, with a wide range of upholstery colours and contrast stitching to choose from – or a sleek, seamless version for more clinical settings.

The upholstery on the A-dec 500 is moulded to fit the patient like a glove, keeping them comfortable and secure up to a weight capacity of 500lbs (227kg) – although the chair has been successfully tested up to 2000lbs (907kg). A rigid frame absorbs movement and optimises stability, while a powerful hydraulic cylinder guarantees smooth transitions with a 10-year warranty.

New armrests provide increased comfort and support, facilitating an even easier 'in and out' for the patient. A soft start/stop to the chair movement and virtual pivot synchronises chair movements with the patient for ultimate comfort.

Even installations and serviceability have been considered. The new A-dec 500 is more robust and servicing simplified to save dentists from costly downtime.

A-dec products are engineered to last, but technology is ever-changing. With a flexible, forward-thinking design, the A-dec 500 perfects your practice today, and grows with it tomorrow.





JANE GOES ABOVE AND BEYOND

Orascoptic Senior Sales Representative is focused on helping dentists and dental students solve and improve their daily dentistry



Email - Jane. Kilgour@orascoptic.

JANE KILGOUR IS SENIOR Sales Representative for the North of England & Scotland and has more then 10 years' experience working with Orascoptic.

Jane has become a specialist in ergonomics and magnification in dentistry

Prior to joining Orascoptic, Jane spent her career working as dental nurse under Professor Paul Tipton, so she knows a lot about dentistry and how to best serve her customers with the right Loupe Illumination system for them.

Jane is willing to go above and beyond a sale, she is focused on helping dentists and dental students solve and improve their daily dentistry, taking a customer service approach to all her sales, having a detailed understanding of her customers' needs.

Jane focuses on educating all customers and then focusing on the right product according to the dentist's needs.



ADAM IS A DRIVING FORCE



Email: adam.stokes@ acteongroup.com Mobile: +44 (0)7508 245 111

ADAM STOKES IS THE NORTHERN

Territory and Prodont UK Manager at Acteon Group UK. Acteon specialise in the manufacture and supply of minimally invasive innovative technologies for dentists and dental professionals which have been designed to diagnose, treat and educate patients more efficiently.

Joining the UK team in March 2018, Adam's previous experience in healthcare and hospital sales, business development and marketing provided the perfect background for his new role supporting dentists and dealers as Prodont Product Manager

As part of Acteon, Prodont offer a wide range of high quality dental instruments covering diagnostics, restoration, prostheses, periodontics, extraction, surgery, implantology and orthodontics. They are also the manufacturers and suppliers of

PureReflect® mouth mirrors, microscopic mirrors and photographic mirrors, renowned for their authentic colour reflection and luminosity, in fact you might say 'reflection perfection' during examinations and procedures.

With market leading digital imaging units such as Trium XMIND and PRIME, the PSPIX imaging plate scanner, PIEZOTOME CUBE technology for conservative extractions and surgery. gentle prophy solutions form the NEWTRON scaler range and multifunctional intraoral cameras SOPROCARE, SOPRO617, SOPRO717 and SOPROLIFE. Acteon have the products to support their minimally invasive credentials.

Acteon UK and Adam are also leading the way in the fight against periodontal disease with a series of planned events, courses and support for dentists and their teams explaining the links to Alzheimer's cardiovascular disease, pneumonia and diabetes.

And once you have heard all that Adam has to say about Acteon, you could always quiz him on his past life selling Aston Martins and Mercedes to customers in the north



INDEPENDENT CARE **PLANS UK LTD**

Your Dental Care Plan Provider



For more information visit www.ident.co.uk or call 01463 223399

WE HAVE GREAT PLEASURE in introducing Gillian Graham as the newly appointed Business Development Consultant at Independent Care Plans UK Ltd.

Gillian's background is predominantly within the world of Optics, where she worked for a leading laser eye surgery provider for many years.

She began as an Optical Assistant working her way through to Practice Manager, which then led her to travel the whole of the UK as a Business Development Manager sharing her success and knowledge.

This was managed using training, business analytics and swiftly building trusting relationships which resulted in the success and growth throughout.

She has also worked as a Field Sales Executive for a Multi-National Cooperate Company and Senior Account Manager where she carried out presentations, negotiations with clients and the proposing of business deals, undertaking intensive training courses to further enhance her knowledge of today's competitive market.

Gillian is now using her transferable skills where she is very adept at diagnosing organisational needs and collaborating with clients to achieve strategic objectives which will assist in the success of the Dental Plan in Practices throughout the UK.

She is a very passionate and enthusiastic individual who is excited about continuing her successful career in the Dental Market and leading Independent Care Plans further into success of being a leading Dental Care Plan Provider in the UK.

Gillian is looking forward to building new relationships and using her skills to develop and grow your practice.

In her spare time, she enjoys spending time with friends by hosting dinner parties, travelling and exercising.



ALLOWING DENTISTS TO FOCUS ON PATIENT CARE



With an increasing range of finance options available to dental practitioners, the choice of lender becomes ever more critical. Braemar Finance, a direct lender established more than 25 years ago, offers not only competitive rates but industry-leading customer service, evidenced by being crowned Leasing World's 'Professions Champion' of 2018.

Braemar Finance are proud of the long-standing partnerships they have with many dentists both in Scotland and beyond, some of whom rarely use anyone other than Braemar Finance for their personal and business finance requirements.

"When it comes to taking out finance, we know the importance of providing a quick and simple application and approvals process, allowing dentists to focus on patient care," said Gail Cormack, Area Sales Manager at Braemar Finance. "Our clients really do value the personalised service they receive from us, which is tailored to their individual needs and circumstances."

According to Gail, central to providing and maintaining those service levels is Braemar Finance's experienced customer support team based in Dundonald, Ayrshire, who were delighted to be finalists in the customer service category



Gail Cormack Braemar Finance Area Sales Manager for Scotland and Northern Ireland. For more information visit www. braemarfinance. co.uk

at the FMC Dental Industry Awards recently.

THROUGH THE CYCLE

Braemar Finance continues to lend through all economic cycles; for example, during the financial crisis of 2008, when many lenders exited the market, Braemar Finance carried on supporting its clients.

"We know that businesses can feel the strain at times," said Gail. "Often through no fault of their own, business owners can find themselves in need of a supportive lender who can work with them through these tough times. It's our policy to do everything we can to support our customers through both good and bad times, working as a trusted partner."

Gail also reiterates the importance of providing clients with suitable and varied options. "One size definitely does not fit all," she said. "With advancements in technology now meaning that the useful economic life of dental equipment is far longer, something we offer that many others can't is funding terms of up to seven years on both equipment and

FINANCE PRODUCTS

Equipment Finance

We offer tailor-made tax efficient

solutions from our range of Leasing and Hire Purchase finance products. Our experienced team will spend time with you to review the most suitable finance options when you make the decision to invest in new equipment.

Business and Tax Loans

Our unsecured Business, Practice and Tax Loans are available when a practice needs funds to invest in the business or wants to spread the cost of a tax demand into affordable monthly payments.

Personal Loans

We offer personal loans to the dental profession for almost any purpose to include home improvements, school fees, weddings etc. Speak to one of our Area Managers for details.

Patient Finance

Our patient finance facility can be incorporated into a dental practice, offering patients funding for cosmetic procedures or treatment plans at an affordable monthly cost.

The straightforward application can be completed by a patient either in practice or at home, with a decision received in seconds.

FLO COUPER - PRODUCT **SPECIALIST AND EDUCATOR FOR CALCIVIS®**

FLO IS THE CALCIVIS® product specialist and educator for Scotland. She has worked in the dental profession for 29 years and has a wealth of experience as a dental hygienist and business coach. Flo is passionate about preventive dentistry and is an expert at helping dental teams to integrate the $C\overline{A}LCiViS^{\circ}$ technology into all types of dental practices.

As a dedicated member of the CALCiViS® team, Flo is focused on revolutionising the management of dental caries. The CALCiViS® Imaging System provides dental professionals and patients with visual evidence of dental demineralisation at the earliest, most reversible stages. It empowers preventive dentistry and improves patient communication.

To discover how CALCiViS® can benefit the health of your patients as well as your business, contact Flo now.



For more information visit www. calcivis.com call on 07970 541222 or email at info@calcivis.com



DMG HAS MANY YEARS OF INTERNATIONAL SUCCESS

THE DMG BRAND IS

recognised in more than 80 countries and is marked by several innovative milestones, including Luxatemp, now celebrating more than 20 years of international success - quite a remarkable achievement for a temporary crown and bridge material.

Constic self-etching and adhesive flowable composite is a new three-in-one flowable composite that combines etching gel, bonding agent and flowable composite in one single product. Icon, DMG's revolutionary treatment for incipient caries and carious white spot lesions, represents a breakthrough in micro-invasive technology.



For more information call on 07854 725 544 or email rachelm@dmg-dental.co.uk



WORLD-LEADING INNOVATION

Offering treatment solutions beyond standard



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SOUTHERN IMPLANTS IS A

privately-owned osseointegration company founded in South Africa in 1987.

The business is focused on the top-end, specialist sector of the market, offering treatment solutions beyond those offered by standard dental implants.

Working with leading clinicians around the world led to significant product improvements and innovative products and protocols.

Southern uses a special high strength pure titanium (920 MPa) manufactured in the USA, allowing for greater preload at connections, reduced micromovement and stronger, narrow diameter implants.

The proven Southern moderately rough surface was engineered for consistent reproducibility and has remained unchanged for 17 years.



ALLAN'S THE MAN FOR SURGERY SOLUTIONS



Whether you are looking to redesign your surgery, order new upholstery for an existing A-dec chair, or simply would like some advice, you can contact Allan on 07803 627 247 or at allan.wright@a-dec. co.uk.

A-DEC'S TERRITORY

Manager for Scotland is Allan Wright. He joined A-dec in late 2018 but is a dental industry veteran having previously worked for Schülke and Henry Schein.

Allan is passionate about ergonomics and good posture for the whole dental team, as well as best practices when it comes to dental unit waterline maintenance - ensuring the best conditions for both dentist and

In his spare time, Allan enjoys planning his next holiday (usually to a far-flung destination) and seeking the best artisanal ice cream that Scotland has to offer.



JILL JOINS JOURNEY TO SUCCESS

As Patient Plan Direct continues its rapid expansion, the plan provider's latest high-level recruit explains why she is excited about business opportunities in Scotland



Patient Plan Direct provides low-cost plan administration with a personal service. To find out more visit patientplandirect. co.uk or call 0344 848 6888 to arrange a meeting with Jill

THE UK'S MOST COST-EFFECTIVE

major plan provider Patient Plan Direct has expanded with the organisation's first dedicated business development hire based near Glasgow. This news comes after a period of rapid growth, with the last 12 months seeing the provider celebrate its 10th anniversary and the team double in size.

Jill Taylor has joined as Business Development Manager covering Scotland. Jill brings a wealth of industry experience to the business, having had a lengthy career in practice as both a dental nurse and a practice manager.

Jill has had various industry roles and also previously worked as a judge at the Scottish Dental Awards.

We found out a little more about Jill and what she hopes to achieve in her new role:

SDM: WHY DID YOU CHOOSE TO JOIN PATIENT PLAN DIRECT?

Jill: I believe in the Patient Plan Direct business model and motto - your patients, your plan. I thought this was an amazing opportunity to bring this proposition to Scotland, and I wanted to be a part of the journey from the start. I'd previously done some work with practices that were clients too and could see the great service they received for a reasonable cost.

HOW DID YOU GET INTO THE DENTISTRY SECTOR?

I went into the industry pretty much straight after school. I had a chance meeting with a careers officer who recommended I try it, and I also had a friend who was a dental nurse who

thoroughly enjoyed it - it intrigued and excited me, so I thought why not?

WHAT HAVE YOU ENJOYED IN YOUR ROLE SO FAR?

Our admin fees start from £1 per patient per month so nothing beats the look on a client's face when I've calculated the annual savings they could make by working with us. The team has been really welcoming and fantastic to work with too.

WHAT DO YOU HOPE TO ACHIEVE?

Great success, both for the business and for my own career development. I can't wait to spread the Patient Plan Direct word and sign up lots of practices across Scotland – saving these practices lots of money, while also growing their brand's awareness to increase patient numbers.

> WATERPIK

THE WATERPIK® WATER FLOSSER TO HELP MAINTAIN OPTIMAL ORAL HEALTH

The Waterpik® Water Flosser is a safe and effective adjunct. It combines water pressure and pulsations to quickly and easily remove plaque and debris deep between the teeth as well as subgingivally, where string floss and brushes cannot reach.

Since the inception of the first Waterpik® Water Flosser, more than 50 years ago, over 60 clinical trials have been published, and collectively they demonstrate significant plaque removal, reduction of gingival bleeding and reversal of gingivitis.

Why not arrange a
Waterpik® Lunch and Learn
at your practice today?



For more information on Waterpik® products please visit www. waterpik.co.uk. Waterpik® products are available from Amazon, Asda, Costco UK, Boots and Superdrug online and in stores across the UK and Ireland.

> CALCIVIS





TACKLING DENTAL DECAY

Transform the way you manage dental caries with the CALCIVIS® system.

The CALCIVIS system uses a luminescent photoprotein to detect free calcium ions as they are released from actively demineralising tooth surfaces. It displays visual evidence of early demineralisation as a glowing map at the chair side in time to initiate preventive measures and before early carious lesions have a chance to progress to the cavitational stage.

This early detection system is revolutionising preventive dentistry with the visualisation of demineralisation.

Contact CALCIVIS now and join the crusade to decommission dental decay.

CALCIVIS

For more information visit www.calcivis.com, call on 0131 658 5152 or email at info@calcivis.com > W&H UK

PREPARED FOR THE FUTURE

W&H is delighted to offer the new Lara sterilizer. Even in the standard version as it comes, Lara boasts one of the fastest type B sterilization cycles of its performance segment.

Intelligently designed with a unique Activation Code system, Lara provides a cost-efficient way for you to benefit from a wide range of features, including enhanced performance cycles such as Fast Cycle and Eco Dry+. Clinicians can also expand on Lara's documentation capabilities, enabling the unit to trace each cycle back to the user who initiated it.

With the flexibility to customise the sterilizer according to your individual needs and preferences, Lara ensures clinicians are prepared for the future. Contact W&H today for further details. #incredible





To find out more about the full range of products from W&H – including the NEW Lara and Lisa sterilizers – visit www.wh.com/ en_uk, call 01727 874990 or email office. uk@wh.com > DENTAL ELITE



INVALUABLE SUPPORT

"Buying a dental practice was completely new to me so I had no clue about the CQC application process", says Dr Keerthi Kumar from The Cross House Dental Practice. "Helen Craine from Dental Elite helped me throughout the whole process, including the CQC interview. It was the longest interview of my life – without Helen's help I wouldn't have got through it and I can't thank her enough.

"Helen was always a phone call or email away, guiding me throughout with useful tips and advice. The customer service from Dental Elite was excellent; I had direct phone numbers and there was no delay in answering my queries.

"I would definitely recommend Dental Elite for anyone looking for support with the CQC application when buying a practice!"

For more information on Dental Elite visit www.dentalelite.co.uk, email info@dentalelite. co.uk or call 01788 545 900 >CARESTREAM

RESTORE **CHAIRSIDE** WITH THE **CS 3100**

Want to offer your patients more by expanding your chairside restorative options?

With the CS 3100 milling system from Carestream Dental, you can make one-appointment restorations a reality.

Offering three distinct fabrication options (grinding, carving and milling) the system can produce hybrid resin, ceramic and zirconia restorations that are ideal for single crowns, bridges, inlays, onlays, veneers and more.

The system also adapts to new materials with ease, meaning you can expand your restorative options further in the future.

Find out more today.





For more information. contact Carestream Dental on 0800 169 9692 or visit www. carestreamdental.co.uk For the latest news and updates, follow us on Twitter @ CarestreamDentl and Facebook

> UCER EDUCATION



SKILLS. SUPPORT & CONFIDENCE - PG CERT IN **IMPLANT DENTISTRY FROM UCER EDUCATION**

"I found it very useful to be able to start my journey in dental implantology with such a great mentor as Professor Ucer. He and his team provided an interesting and guided insight into the world of dental implantology."

Domingos Mamede, dental implant surgeon and cosmetic dentist from the Advanced Oral Health Centre in St Ives, comments on the PG Cert in Implant Dentistry he previously completed with Ucer Education.

The course offers a good balance of theory and practical learning - it now even enables delegates to start placing implants under supervision in the ICE state-of-the-art facilities.

'The training is also not biased to one implant system or another, giving you the flexibility to choose the system that is genuinely best for you."

For more information on the PG Cert in Implant Dentistry from Ucer Education supported by Geistlich, Megagen, Neoss, TRI Implants and General Medical - please visit www.ucer.education or call 0161 237 1842

> ESCHMANN

AUTOCLAVE YOU CAN RELY ON

Even the smallest interruption to daily schedules can cause inconvenience to your patients.

That's why you need equipment you can truly rely on like the new Little Sister SES 2020N autoclave direct from Eschmann the UK's leading instrument decontamination specialists.

Built to live up to today's uncompromising standards, the autoclave employs tried and tested technologies that have undergone decades of research to ensure that your practice will always be running smoothly.

Discover how the new Little Sister SES 2020N can propel your practice into the future by contacting the team today.



For more information on the highly effective and affordable range of decontamination equipment and products from EschmannDirect, please visit www. eschmann.co.uk. follow us on Twitter at @ LittleSisterSES or call 01903 753322

> COLTENE





GLOWING TRIBUTES

"A superb addition to the restorative line of any cosmetic dentist

Dr Richard Morrison is the owner of Ardara Dental, an award-winning practice in Co. Donegal. He specialises in cosmetic dentistry, using experience from working in world renowned aesthetic dental offices in the USA. He recently trialled COLTENE's BRILLIANT EverGlow™.

"Aesthetic composite technology is reaching the point where we can create natural and seamless restorations in anterior teeth. Shade matching is generally excellent, with the difference in competitors' products lying mainly in polishability, handling and the chameleon effect of light scattering inherent to the material. BRILLIANT EverGlow from COLTENE exhibits superb shade matching, light scattering and class-leading polishability.

"In short, COLTENE BRILLIANT EverGlow $^{\text{TM}}$ is a superb addition to the restorative line of any cosmetic dentist."

To find out more visit www.coltene.com, email info.uk@coltene.com or call 01444 235486

DÜRR DENTAL



SIMPLE STERILE PACKAGING

Hygopac View, from Dürr
Dental, is an intelligent rotary
sealing device, which ensures
instruments can be reliably
packaged, stored and validated in
sterile conditions. Obviously,
there is no room for error when it
comes to reprocessing
instruments that have come into
contact with patients' skin,
mucous membranes or blood.

Every step in the packaging process must be tested, but also simple to operate, bearing in mind the repetitive nature of such a task. Hygopac View has an intuitive touch display, which takes the operator through the step-by-step process, providing the necessary validation once completed. The sealing temperature, contact pressure and sealing speed are continuously recorded, checked and saved to an SD card or to the network via the VistaSoft Monitor software. This allows effortless processing of the data for documentation within a quality management system. In the event of a practice inspection, the information is available immediately

As well as offering great flexibility and reliability in terms of process documentation, HygoPac View also boasts an exceptionally efficient design, which is a bonus as it's often used in areas that have limited space.

> 3M

3M AIMS TO WOW AT THE BDIA DENTAL SHOWCASE

With over 100 years of innovation, 3M Oral Care is proud to be showcasing some of its latest dental care solutions at the BDIA Dental Showcase.

Delegates can stop by stand C50 to learn about the new Filtek Universal Restorative – the innovative new composite material from 3M that offers a simplified shade selection, more streamlined workflow and two new shades to suit more challenging cases (Extra white for bleached dentition and a pink opaquer to mask metal and stained dentition).

3M will also be presenting the new Impregum Super Quick polyether impression material. The world-famous polyether brand is now available with a new faster setting, better tasting impression material.



For more information, exclusive offers and special giveaways be sure to stop by the 3M stand at the show!
For more information, call 0845 873 4066 or visit www.3M.co.uk/dental

3M Filtek and Impregum are trademarks of the 3M Company.

> 3 M



AN IDEAL BLEND

Dr Claire Burgess comments on the use of restorative materials from 3M Oral Care with the Bioclear Method.

"The handling of both Filtek One Bulk Fill restorative and Filtek Supreme XTE Universal restorative composite from 3M is excellent.

"In addition, the aesthetics of 3M Filtek Supreme XTE Universal restorative are superb. Despite only using a single shade, restorations look natural when placed with the Bioclear Method. Filtek One Bulk Fill from 3M also offers a better appearance in posterior restoratives over some alternative composites due to its lower translucency. The blend of Filtek One Bulk Fill and Filtek Supreme XTE Universal restorative from 3M makes composite restorations virtually invisible.

"Further still, I have always found the team from 3M Oral Care to be very friendly and enthusiastic."

For more information about products from 3M Oral Care, call 0800 626 578 or visit www.3M.co.uk/Dental

3M and Filtek are trademarks of the 3M Company.

> 3M

AWARD-WINNING SOLUTIONS FROM 3M ORAL CARE

It makes sense to choose products with renowned reputation and award-winning performance. That's why you should choose solutions by 3M Oral Care

In the 2019 Dental Advisor Awards, a number of products from 3M Oral Care achieved recognition for their innovation and reliability. From RelyX Unicem 2 self-adhesive resin cement which was voted as the 'Best Long-Term Cement' to Scotchbond universal adhesive which gained the top prize in the 'Best Bonding Agent' category, you know you have award-winning excellence on your side when you choose a 3M solution.



To find out more, please contact the team at 3M Oral Care on 0800 626 578 or visit www.3M.co.uk/Dental 3M, Scotchbond and RelyX are trademarks of the 3M Company.

>DÜRR DENTAL



ALL-IN-ONE DIAGNOSTICS

Dürr Dental has developed an extended version of its VistaVox S panoramic machine with six additional programmes for time-saving cephalometric exposure with minimum radiation doses, called VistaVox S Ceph.

As you'd expect from Dürr, exceptional diagnostics and ease of use are guaranteed. Alongside the 17 panoramic programmes, the VistaVox S Ceph has several orthodontic applications, including 'Lateral Head', 'Full Lateral Head', 'PA Head' and 'Waters' View'. The unit is as fast as it is smart - a scan time of just 1.9 seconds results in exceptionally sharp images using the lowest possible radiation dose due to the high-sensitivity CSL sensors. The unit can switch between 3D X-ray and Ceph boom, a process that, until now was often cumbersome

As with the VistaVox S, it has a perfect 3D imaging volume of 130mm (compared to 80x80mm for most), so covers the whole relevant area including rear molars, an essential requirement for diagnosing impacted wisdom teeth. Enhanced visibility does not require a higher radiation dose. Instead, a special curved path, rotating 540°, in combination with a tightly collimated fan beam and a highly sensitive Csl sensor, means a low dose is used.

Similarly to the VistaVox S, this enhanced model offers 50x50mm volumes, for indications that only require part of the jaw region to be shown, e.g. endodontic or implant treatments.

The VistaVox S Ceph offers true all-in-one capabilities for a full range of diagnostics.

>DÜRR DENTAL

SMART TECH IN SURGERY

Many of us are using smart technology within the home, to control our heating, lighting or alarm systems. Now the same pioneering technology is available to make your working life as simple. Dürr Dental has launched its new IoT (internet of things) solution called VistaSoft Monitor, to ensure that the practice runs smoothly and intuitively.

This cloud-based IoT service solution allows all connectable Dürr Dental systems to be integrated into VistaSoft Monitor, providing a clear overview of all products, including compressors, autoclaves and X-ray systems. The software is based on the following principle: monitor-transmit-analyse-act.

The units constantly monitor important operating parameters and transmit them in real time to VistaSoft Monitor, where they are analysed and then presented to the user in a clear format. Operation can be viewed centrally at a reception area PC, or decentralised in every treatment room or on a smartphone/tablet via the corresponding app.

Potential problems are detected in advance, e.g. if the fill level of the amalgam collecting container nears its maximum an alert will be sent to ensure a replacement is ordered in plenty of time. The software also flags issues that require an external response, such as a filter change on a compressor or a routine service of equipment. Operational reliability is ensured as monitoring is done through IoT rather than human assessment, leaving staff free to focus on what's most important - patients.



>DÜRR DENTAL



CLEAN WATER WITHOUT CHEMICALS

Dental treatment systems offer ideal conditions under which biofilm can form and micro-organisms such as Pseudomonas, Legionella and Cryptosporidium can flourish. These microorganisms can be exposed to the patient via the cooling water, mouth rinsing water and aerosol exposure.

Hygowater from Dürr Dental ensures the service water in your practice always meets the same stringent requirements as drinking water (consistent with advice given by the Robert Koch Institute).

Water-carrying systems in treatment units can, however, still harbour microorganisms, which can colonise and form a biofilm which adheres to the inner walls of the unit. To ensure optimal safety, microorganisms must be minimised and biofilm permanently removed from hoses and pipes.

The Hygowater system's safe and reliable processing fulfils all legal requirements for water hygiene, satisfies meticulous standards demanded by the German Drinking Water Ordinance and meets the requirements for a Class I medical device.

The compact unit is so easy to operate and its unique combination of filtration and electrolysis prevents biofilm formation. It's good for the safety of the practice and it's great for the environment, as long-term drinking water quality is ensured without the use of any chemical additives.

DÜRR DENTAL

PARLIAMENT TALKS DENTAL **TECHNOLOGY**

Sir Paul Beresford MP recently held an All-party parliamentary group for dentistry and oral health at the Houses of Parliament. Visitors were encouraged to learn how modern dental technology is making fear of the dentist a thing of the past.

The event was designed to be fun and fully interactive, with members of parliament invited to feel what it's like to perform dental procedures using a realistic virtual reality unit. Those wishing to step back in time could try their hand at pulling teeth with an 18th century tooth key to see if they could get a foot-powered Victorian treadle drill spinning fast enough to get to the top of a leader hoard

One manufacturer invited to attend was Dürr Dental who took along their VistaCam intra-oral camera.

lan Pope, Managing Director, commented, "It was great to see what technology is currently available in UK dentistry. Having worked in the industry for over thirty years, I have seen phenomenal advancements, but none more so than the pace of change in digital dentistry over the last five years. Technology is making dentistry less daunting to the public as it allows dentists to communicate more easily with patients and treat disease less invasively".

