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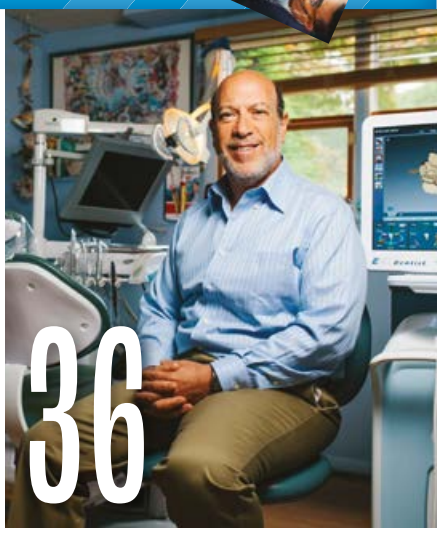

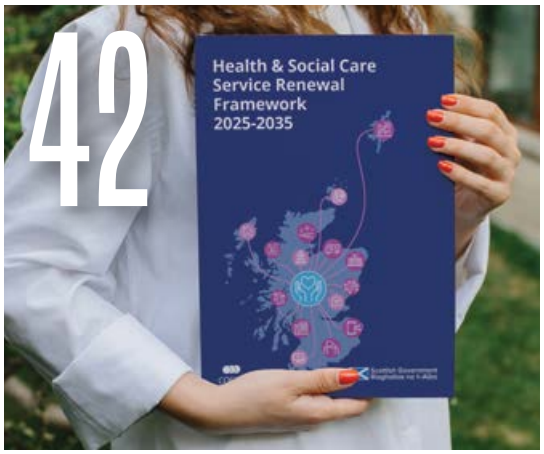

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The road ahead

Det 1 was a first step but the determination for change is gaining momentum

In July 2023, Tom Ferris, Scotland's Chief Dental Officer (CDO), wrote to NHS dentists about the Scottish Government's commitment to implement reform of NHS payment. The intention of Determination 1 of the Statement of Dental Remuneration, he said, was to provide a "modernised approach which will enable dentists to have greater clinical freedom in a high trust, low bureaucracy model."

Det 1, as it came to be known, had been developed through engagement with the dental profession, the CDO Advisory Group and key stakeholders. In particular, the items of payment for general dentistry were reduced from more than 700 to just 45.

Based on NICE guidance, dentists could now determine recall intervals based on individual patient needs rather than a standard schedule. Patients with good oral health could be seen less frequently (12 months or more), while those with more complex needs might require more frequent check-ups.

At the time, the CDO said: "We have taken full cognisance of relevant guidance to ensure that it will support dentists moving forward to provide high quality NHS dental care for their patients which meets clinical best practice standards."

In its *NHS Dental Payment Reform Equality Impact Assessment Record* in November 2023, the Scottish Government stated: "The new model reduces bureaucracy, provides greater clinical freedom to NHS dental teams and reflects modern dentistry.

"It is intended as the first step towards a truly modern NHS dental service which appropriately assesses, responds to and supports the oral health needs of every patient in Scotland."

It is intended as the first step...this detail was echoed some months later by David McColl, Chair of the British Dental Association's Scottish Dental Practice Committee, when he told the annual conference of Scottish Local Dental Committees that reform had brought some positive changes but added that "this must be the first step on the road to reform, rather than the final destination".

The campaign for continued change is gaining momentum. In this edition (see page 42), Professor Peter Mossey restates his view, originally shared in this magazine *l* last year, that: "A new model for appropriate remuneration of the workforce in primary dental care, that rewards the integrated and prevention-oriented agenda that the Scottish Government already aspires to, would transform the health service, improve population health and wellbeing and ensure long-term sustainability."

In doing so, he places this view in the context of recent health service transformation declarations made by both the UK and Scottish Governments.

Professor Mossey writes: "Through dental caries and periodontal disease, we preside over the most prevalent non-communicable diseases that have remained consistently high for the past 30 years.

"Clearly the current systems for the delivery of dental care worldwide have failed and, without a change in the approach, will continue to fail.

"The fundamental problem is that in clinical dentistry we channel all of our energies into the diagnosis of dental and oral diseases and dealing with the consequences through ever more complex and expensive interventions with spiralling expenditure, while ignoring the fact that dental and oral diseases are largely preventable."

Professor Mossey's analysis of where we have gone wrong – and how we might make things right – is a compelling read.

When you have finished and paused to reflect on his analysis, you should read the following feature (and make a note in your diary – for Friday 3 October and The Vermilion Biennial Symposium 2025 at the Royal College of Physicians of Edinburgh) in which Dr David Offord, Practice Principal of referral clinic Vermilion – The Smile Experts, states: "Scotland needs a comprehensive, fully-funded dental workforce plan that addresses recruitment, retention and training across all levels of care.

"[The] symposium provides a neutral forum where innovative ideas for both primary and secondary NHS dentistry can be discussed.

"It is a unique opportunity to lobby senior politicians, who may have the levers of power come May 2026, with positive solutions to the crisis in Scottish dentistry."

Det 1 was a first step. The road ahead might be long, but some milestones are coming into view.

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Sounds like a plan

But what lessons can be learned from the UK Government's 10-year plan for the NHS?

The UK Government has recently published a 10-year plan for the NHS. We know healthcare is devolved and that the Scottish Government likes to do things differently. However, not that differently. What can we learn from said 10-year plan?

Overall, the document's focus is threefold: hospital to community; analogue to digital; sickness to prevention. These are reasonable aims on the face of it. They are also applicable to dentistry. In fact, I would suggest that the first is essentially the way dentistry works and always has. Patients access community-based GDPs and only secondary care if required, whether that is hospital, the Public Dental Service or private, specialist clinics.

Dentistry is in the process of a huge shift in analogue to digital. Our records are virtually all digital: I don't know anyone still working on paper. Referrals are via the SCI Gateway. Radiographs are digital. There is a growing trend towards AI-based assessment of radiographs. Digital scanning and lab processes are normal and heading towards ubiquitous.

With respect to 'sickness to prevention', I would argue that dentistry is the only medical specialty which has a process that allows this to happen and be maintained. If we meet someone new, we aim to solve their problems, cure or manage their disease and move them to reasonable and personalised maintenance schedules with longitudinal interaction and care.

In addition, dentistry has developed this largely on its own without governmental direction or targeted funding. Generally, individual small businesses or corporates have understood that this direction is beneficial and profitable. It is true that the NHS contract in England has never been good. I hope that any change to that in England would be assessed before there is any further change in Scotland. I cannot see any benefit in changing our contractual or payment processes in the near future.

So, if all this is what we do already, what do I have to speak about? I think the aims are reasonable. They are trying to introduce a concept of Neighbourhood Health Communities. This sounds like a broadened rebrand of the Health and Social Care Partnerships we have had in Scotland for many years. This also seems like a good idea if smaller boards had direct access to a range of specialist services dedicated to that area. Consultants you know and who are able to communicate directly with, rather than through a large health board bureaucratic admin process.

Unfortunately, I struggle to believe the health service at large is capable of managing change like this. There are suggestions that technology, in particular 'AI', can help clinical staff free up their time from administrative tasks and use it to help improve patient outcomes. I believe this can happen, I believe there will be improvements but huge institutions and governments move slowly. They do not have the agility of small businesses in terms of decision-making, nor do they have budgetary control at local levels to allow access to new and emerging technologies and processes. Rightly, those changes should be assessed for clinical and financial benefit. None of that is swift.

We still need people. Vast numbers of people. Younger (dental) professionals are much less likely to work five days, evenings, weekends or on call. There is a greater drive towards professional balance, which inevitably pushes people towards private care. Yet we still see news articles daily about DIY dentistry and lack of access. The 'plan' wishes to address the deficit in urgent care. It suggests students would be tied into NHS dentistry for three years. Perhaps this should be longer for Scottish graduates without any tuition fees? How will prospective healthcare students feel about this? Will it affect student numbers?

How can the Government deliver change and increased services when the coffers are short? The budget is even more stretched in Scotland. Resident (formerly Junior) doctors in England are looking to strike over a 5.4% pay increase. It looks like we will get 4% in Scotland, as per the Review Body on Doctors' and Dentists' Remuneration's (DDRB) suggestion. If younger professionals are willing to strike again over 5.4%, how will further negotiations be with changes to contracts?

Taxes will go up. They are already higher in Scotland and unlikely to be lowered. National Insurance hikes have hit small businesses hard and it appears the DDRB ignored that. These increased taxes are likely to suppress activity rather than promote it. Older professionals may choose to retire earlier rather than being penalised for their efforts.

The proposed changes are, in my opinion, laudable and laughable in equal measure. Particularly for dentistry, where those basic changes are already in place. The profession will develop; we adapt to changes in clinical evidence and technology and invest in our own futures for the betterment of our patients and profits. Unfortunately, the NHS is unlikely to have that agility or drive. We probably will not have the option or ability to recruit or retain enough professionals to staff it. I am certain that we will struggle to pay for this change without dramatic increases in taxation, which will, in turn, drive the general economy in a downward spiral and stretch the viability of the service. Thereby, increasing health inequalities.

On the defensive

New study reveals perceptions and experiences of GDPs

FEAR of patients complaining or, more seriously, taking legal action has prompted some dentists to adopt 'defensive dentistry'.

The authors of a new study[1] say that although the term is documented, little is understood about dentists' perceptions and their lived experiences of practising in a defensive way.

The concept of 'defensive medicine' originated in America in the early seventies and has been defined as "medical treatment that may involve more tests, operations, etc., than a person really needs because a doctor is worried that a claim or complaint may be made against them".

This is echoed in dentistry, where Stephen Hancocks, a former editor-in-chief of the *British Dental Journal* (BDJ), described it as "providing dentistry which presents as few risks as possible to the practitioner from a patient complaining, or more seriously taking up a legal case as a result of an action or omission by the practitioner".

A study published in the BDJ aims to explore how defensive dentistry is understood and experienced by GDPs working in primary care.

An interpretive mixed-methods approach was adopted using an online questionnaire followed by semi-structured interviews. In total, 25 participants completed the questionnaire and six follow-up interviews were completed.

Three main themes were identified: the sense of fear; practising the 'act of avoidance' with certain patients and/or procedures; and the overall impact on the profession.

GDPs unanimously identified the negative aspects of defensive practice as actions carried out for self-protection rather than the interests of patients.

The reasoning for such practices included fear of litigation and/or investigation by the General Dental Council, heightened in recent years due to increased public awareness of litigation, and loss of public trust.

Participants reported stress, low morale and de-skilling as outcomes for practising defensively.

The researchers said that the study was inconclusive when exploring what actions could be taken to improve support for dentists and reduce the level of defensive dental practice.

"Clearly, this issue is complex and further research is recommended to explore systemic improvement strategies in the framework of dentistry within the UK," they said.

[1] *www.nature.com/articles/s41415-025-8603-9*

Ditch vague language during workplace conflicts

REPLACING vague phrases with clearer language is essential to informally resolving workplace conflicts, says Acas. Research, carried out by The Social Agency for Acas, found that some language used in workplaces was misleading.

Phrases such as "nipping it in the bud" are vague and confusing, it said, while phrases such as "open and honest conversation" and "facilitated discussion" avoided the language of conflict and described resolution neutrally.

The research said that using clear language helped to create a trusting environment, enabled constructive dialogue by helping people express their feelings and avoided unnecessary escalation of issues.

Kevin Rowan, Acas Director of Dispute Resolution, said: "Language matters when it comes to informal and early resolution. Some words like 'dispute' and 'grievance' provoke defensiveness and make people think the conversation is about conflict and sanction rather than support or problem-solving.

"Conversations for informal resolution should be different from formal processes. Whereas formal investigations are about ascertaining facts, informal conversations should be about identifying concerns and differing points of view."

The study highlighted the value of using informal resolution where appropriate as a potentially less stressful, more efficient way of managing conflict, preserving relationships and maintaining a positive working environment.

"When the annual cost of workplace conflict to UK employers is estimated to stand at £28.5 billion, there is a strong argument for managing workplace disagreements better," said Rowan.

Stirling dentist wins prestigious regional award

A DENTIST based at a Stirling practice has triumphed in an end-of-course presentation round organised by NHS Education for Scotland (NES), recognising his delivery of a complex NHS treatment.

Dr Andrew El-Miligy, a vocational dental practitioner (VDP) at Platt & Common Dental Clinic, prevailed over eight other VDPs to win the 'West 2' scheme final of the BDA's case presentation.

The accolade now sees him progress to the College of General Dentistry's national final, set to showcase the UK's most promising early-career dentists.

Dr El-Miligy said: "It has been an incredibly rewarding process to take a complex case from the initial consultation through to a confident, happy patient outcome, and to receive professional recognition for the work adds to the sense of pride I already feel."

The extensive NHS treatment included caries management, periodontal stabilisation and the delivery of three monolithic zirconia crowns. The case, which spanned seven months, was part of Dr El-Miligy's vocational training year.

The practice trainers, John Denham and Thomas Slack, have now mentored two successive winners of the NES scheme award; last year, Dr Caleb Lai, now an associate at the clinic, also took first place.

John Denham, Lead Clinician at Platt & Common Dental Clinic, said: "What Andrew has accomplished proves that when enthusiasm, clinical skill and the right support are aligned, patients receive exceptional NHS care and young clinicians develop the confidence to excel."

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Dental specialty exams offer wider access to recognition

New framework broadens access and provides more opportunities for dentists

THE Dental Faculty Deans of the UK's three surgical Royal Colleges have published the eligibility criteria for the new Dental Specialty Fellowship Examinations.

Publication follows extensive discussion and collaboration with stakeholders across the UK and Ireland.

The new examinations offer multiple entry routes, accommodating dentists in formal UK specialty training, those undertaking postgraduate university clinical programmes and practitioners who have trained overseas or have been working within a UK dental specialty for some time.

The new framework broadens access and provides more opportunities for dentists to have their specialist knowledge, skills and experience formally recognised through the award of a Fellowship in their chosen specialty by one of the UK's surgical Royal Colleges.

In addition to the eligibility criteria, transitional considerations have been published for those who are already on, or will shortly begin, a training or educational pathway.

Professor Christine Goodall, Vice President (Dental) and Dean of the Faculty of Dental Surgery at the Royal College of Physicians and Surgeons of Glasgow, said: "This initiative represents a joint effort by the colleges to streamline and align the diverse landscape of dental specialty examinations.

"The catalyst for this work was the introduction of the new General Dental Council (GDC)-approved curricula across 10 dental specialties, which presented a rare, perhaps once-in-a-generation, opportunity to redesign our assessments and make them more accessible, particularly through the newly established open access route.

"With the release of the eligibility criteria today, we hope to enable many highly skilled professionals within the dental workforce to pursue formal recognition of their expertise.

"While a Fellowship alone does not guarantee inclusion on the GDC's specialist lists, it can play a significant role in a portfolio application, providing strong evidence of specialist-level competence and knowledge."

The eligibility criteria and transitional arrangements are available on the Dental Specialty Fellowship Examinations website: dsfe.org.uk

Scottish DCPs win Royal College of Surgeons of England awards

TWO Scottish DCPs have won Faculty Dental Surgery Royal College of Surgeons of England research awards.

A spokesperson said: "This year's pump-priming grants have been presented to a group of exceptional applicants, and we are proud to support their proposed research."

Among the 11 awardees are:

› **Dr Kitty Guo**, Clinical Lecturer in Restorative Dentistry at the University of Dundee (Does periodontal disease status impact the carriage of the pathobiont Fusobacterium nucleatum and what are the implications of this on systemic disease?).

› **Dr Colin Ritchie**, University of Dundee (Development and validation of an analytical model for the orthodontic treatment of anterior open bite correction by molar tooth intrusion using clinical observations, engineering testing and predictive engineering modelling).

Professor Sondos Albadri, Chair of the FDS Research Committee, said: "It's always a highlight for me to see the high standard of applications we receive for our pump priming grants.

"Once again, the sheer quality and passion from early career researchers across all specialties have been inspiring. Our ongoing collaboration with the specialist societies continues to be a real strength, and it's something I deeply value."

New dental nursing qualification launched

THE National Examining Board for Dental Nurses (NEBDN) has released a newly regulated qualification – the Level 3 Diploma in Dental Nursing.

It is designed to prepare trainee dental nurses in the foundation of dental nursing so they can demonstrate the required standards in terms of knowledge, skills and professional attitudes. Upon achievement of the qualification, they can apply to register with the General Dental Council (GDC) as a dental nurse.

The qualification is regulated by the Council for the Curriculum, Examinations & Assessment (CCEA), and covers all the learning outcomes in the GDC Safe Practitioner Framework for Dental Nurses.

Offering a regulated diploma enables the qualification to be used in apprenticeship training in the UK and Northern Ireland, with additional benefits such as potential funding avenues, attracting UCAS points and being recognised by CCEA. Kate Kerslake, the Chief Executive of NEBDN, said: "This is a huge milestone for NEBDN and we're very proud as a team to reach this point."

NEBDN is a registered charity and a leading Awarding Organisation for Dental Nurses in the UK, delivering awards in Diploma, Apprenticeship, and seven Specialised Post-Registration areas. It works with 100-plus training providers across England, Scotland, Northern Ireland and Wales, to ensure that learners' knowledge, understanding and practical skills are assessed by highly experienced practitioners.

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Dentist may have solved da Vinci's mystery

Discovery suggests the image reflects the same design blueprint found in nature

A DENTIST may have solved a centuries-old mathematics puzzle hidden in one of the most famous anatomical drawings in the world – Leonardo da Vinci's Vitruvian Man. His discovery suggests the iconic image reflects the same design blueprint frequently found in nature.

The pen-and-ink drawing of a nude male figure in two superimposed poses, with arms and legs enclosed within a circle and a square, was created by the Renaissance polymath around 1490.

It is a study of the ideal human form, partly influenced by the writings of Roman architect Marcus Vitruvius Pollio, who believed the human body has harmonious proportions, like a well-designed temple.

He proposed that a human figure could fit perfectly inside a circle and a square, but provided no mathematical framework for this geometric relationship. Da Vinci solved this but did not explicitly explain how. For more than 500 years, how he achieved this perfect fit in one of the world's most analyzed drawings has remained a mystery.

A study[1] by London-based dentist Dr Rory Mac Sweeney, published in the Journal of Mathematics and the Arts, has shed new light on da Vinci's geometric method.

The paper describes a hidden detail in the Vitruvian Man, namely an equilateral triangle between the man's

legs referenced in da Vinci's notes for the drawing. Analysis revealed that this shape corresponds to Bonwill's triangle, an imaginary equilateral triangle in dental anatomy that governs the optimal performance of the human jaw.

The use of the triangle in the artwork helped produce a ratio of 1.64 to 1.65 between the square's side and the circle's radius; very close to the blueprint number of 1.633, which is found throughout nature for building the most efficient structures.

"Leonardo's geometric construction successfully encoded fundamental spatial relationships in human form, demonstrating the remarkable precision of his Renaissance vision of mathematical unity between the human figure and natural order," said Mac Sweeny.

"The implications for dental science are particularly profound. While Vitruvian Man has long been questioned as a credible anatomical diagram, this research reveals that Leonardo encoded the precise mathematical relationships that govern optimal human craniofacial function.

"The correspondence between Leonardo's 1.64-1.65 ratios and the tetrahedral ratio of 1.633 – the same ratio that defines optimal sphere packing and appears in human cranial architecture exclusively – suggests Vitruvian Man represents legitimate anatomical optimisation rather than idealised artistic proportion.

"This mathematical validation opens new possibilities for dental science. If human craniofacial systems have indeed evolved according to the same geometric principles that govern optimal spatial organisation throughout nature, our understanding of dental function, treatment planning and prosthetic design could be fundamentally transformed.

"Rather than viewing dental anatomy as an arbitrary biological form, we might approach it as an expression of universal mathematical principles of optimal spatial efficiency – principles that Leonardo intuited centuries before modern science could validate them."

> "THE IMPLICATIONS FOR DENTAL SCIENCE ARE PARTICULARLY PROFOUND. WHILE VITRUVIAN MAN HAS LONG BEEN QUESTIONED AS A CREDIBLE ANATOMICAL DIAGRAM, THIS RESEARCH REVEALS THAT LEONARDO ENCODED THE PRECISE MATHEMATICAL RELATIONSHIPS THAT GOVERN OPTIMAL HUMAN CRANIOFACIAL FUNCTION"

[1] *www.tandfonline.com/doi/full/10.1080/17513472.2025.2507568#graphical-abstract*

Ian Dunn and Jim McCaul to lead study day

THE College of General Dentistry has announced Dr Ian Dunn FCGDent and Professor Jim McCaul as the speakers at its next annual study day in Glasgow.

Dr Dunn will deliver Passionate Perio for the Dental Team, a series of sessions covering all aspects of contemporary periodontal management from the latest concepts of aetiology to assessment, diagnosis and treatment planning, including the S3 Treatment Guidelines and minimally invasive periodontics such as non-surgical regeneration and MINST.

Professor McCaul will then deliver the annual Caldwell Memorial Lecture, titled Oral Cancer: What you need to know, what you need to do!

The annual study day, organised by CGDent Scotland, takes place at Glasgow Science Centre on Friday 5 December.

With six hours of CPD, the day is attended by up to 400 dental professionals from across the UK, and finishes with a drinks reception which marks the start of the festive season for its many regular attendees.

Secure your place here: cgdentscot.org.uk/book-glasgow-study-day/

A review of the 2024 study day can be read here: cgdent.uk/2025/01/21/cgdent-scotland-study-day-2024-a-review

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GDC reports record registrations

Regulator has also launched a refreshed set of values

THE General Dental Council (GDC) has published its Annual Report and Accounts for 2024 which, it says, shows a record registration performance and improvements to fitness to practise (FtP) processes.

The GDC processed a record 12,978 applications, up from 11,476 in 2023, resulting in 2,164 new dentists and 9,728 new dental care professionals joining the register. The regulator also launched a refreshed set of values, aspiring to be "respectful, transparent, inclusive and purposeful."

The regulator said that key developments last year included:

› Enhanced workforce insights: More than 24,000 dentists (55%) and 44,000 DCPs (58%) provided working patterns data to inform the debate about the dental workforce.

› Improved access to the Overseas Registration Examination (ORE): Increased capacity of Part One examinations by 50%, and Part Two by 33%, compared with 2023. Other improvements included the development of a new policy that gives priority access to the ORE booking system for dental professionals with refugee status.

› FtP improvements: The GDC reduced casework queues and cleared the backlog from 2023. Adopting a new way of investigating single-patient clinical concerns halved the average time to assess the concern from 30 weeks to 15 weeks.

› Sector leadership: The GDC used its convening role to bring the sector together to highlight the challenges facing patients and the professions through three Dental Leadership Network events. The regulator attended more than 400 stakeholder meetings, six industry events and launched a programme for its chief executive to visit dental settings and listen to the issues and challenges facing dental professionals.

› The report highlights the GDC's desire to improve its digital capability and improve the experience for dental professionals accessing online services such as registration and renewal.

Lord Toby Harris, Chair of the GDC, and Tom Whiting, Chief Executive at the GDC, said in a joint statement: "2025 will see updated guidance on the Standards for Education and Scope of Practice, both after extensive and invaluable stakeholder engagement.

"We will be bold in our plans to improve fitness to practise, improving guidance on decision making to ensure fairness and consistency, providing more support for dental professionals, through training our staff and signposting to help, and looking to address and reduce fear."

The GDC met 16 of 18 Professional Standards Authority (PSA) Standards of Good Regulation, achieving the standards in registration, and updated its Equality, Diversity and Inclusion (EDI) strategy in 2024. The consultation on the GDC's new Corporate Strategy 2026-2028 closes on 21 August.

Immigration rules change will worsen access to care crisis

THE British Dental Association (BDA) has warned that proposed changes to immigration rules will have a direct impact on patient access to care UK-wide, affecting key members of the dental team and the future pipeline of dentists.

In an open letter[1] to Yvette Cooper, the UK Government's Home Secretary, and Wes Streeting, Health and Social Care Secretary, the BDA says that the "abrupt removal of key roles" – both medical and dental technicians (code 3213) and dental nurses (6113) – from eligibility for the skilled worker visa from 22 July, will exacerbate shortages in a wide range of roles including dental therapists, dental hygienists, orthodontic therapists and dental nurses.

The BDA said this will also have knock-on effects on the supply of dentists, given these codes are often used by overseas qualified dentists to work in other dental roles while waiting to sit the professional registration exams which are highly oversubscribed and can take years to complete.

The BDA said that both occupational codes 3213 and 6613 should be retained in the Immigration Rules without changes, so that individuals currently applying for visas will receive them. "Changes to immigration rules for skilled dental team members risks deepening an access crisis already felt by millions," said Eddie Crouch, the BDA's Chair.

"Everyone agrees we should be focused on building home grown talent, but this cliff-edge approach is careless and will be felt by patients the length and breadth of this country."

[1] *www.bda.org/media/aqlh2aqm/letter-to-yvette-cooper-and-west-streeting-15th-july-2025.pdf*

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Herbal mouthwash lets helpful bacteria flourish

The natural rinse could avoid downside of conventional products

A NATUROPATHIC mouthwash containing herbal ingredients could selectively target disease-causing bacteria while preserving the protective microbes that help maintain healthy gums and teeth, a study[1] by the Rutgers School of Dental Medicine has found.

The researchers tested a natural mouthwash called StellaLife VEGA Oral Care rinse against two conventional products: the prescription mouthwash chlorhexidine and Listerine Cool Mint. They exposed various oral bacteria to each rinse and monitored their growth over several days.

The natural rinse significantly reduced populations of harmful bacteria such as *Fusobacterium nucleatum* and *Porphyromonas gingivalis*, while allowing beneficial species such as *Streptococcus oralis* and *Veillonella parvula* to survive.

Chlorhexidine and Listerine showed no such selectivity, eliminating beneficial and harmful bacteria alike. Chlorhexidine was particularly aggressive, reducing some beneficial bacteria populations by a million-fold.

"It's a paradigm shift," said Georgios Kotsakis, the dental school's assistant dean for clinical research and senior author of the study. "We're moving from eradicating all bacteria to focusing on selectivity. We want to keep the good bacteria alive while targeting the bad."

But the researchers said that petri-dish results do not necessarily translate to mouths full of teeth, saliva and dietary sugars. The study, funded by StellaLife, did not measure cavity formation or bleeding gums in people. "Randomised clinical trials are the next step," Kotsakis said.

[1] *pmc.ncbi.nlm.nih.gov/articles/PMC12127372/*

GDC extends initial inquiries process

THE General Dental Council (GDC) has announced a further extension to its initial inquiries process — to include "isolated cases of perceived unprofessional behaviour", as part of its "ongoing efforts to improve timeliness and proportionality in fitness to practise investigations".

> "THE GDC IS NOW INCLUDING CASES THAT INVOLVE ISOLATED REPORTS OF ALLEGED LOW-LEVEL MISCONDUCT"

The GDC is now including cases that involve isolated reports of alleged low-level misconduct, such as perceived rudeness or abruptness, in the process. Complaints from a single patient about low-level misconduct that include a low-level clinical practice issue will also be included.

The extension follows the implementation of the initial inquiries process for single patient clinical practice concerns, adopted in November 2024 after a successful pilot.

Theresa Thorp, Executive Director of Regulation at the GDC, said: "This new approach seeks to maintain public confidence in the professions while reducing the negative impact that lengthy investigations can have on the health and wellbeing of participants."

The GDC's ongoing efforts to improve the fitness to practise process and plans for the next three years are detailed in its consultation on the Corporate Strategy 2026-2028.

"We are particularly keen to receive feedback and ideas on how the fitness to practise process could be improved to ensure investigations are concluded in a timely way so we can minimise the stress on all parties," Thorp added.

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SCAN TO REFER

Midsummer jamboree for Malawi

A great success and hats off to Smileawi and Bridge2Aid

THE charities Smileawi and Bridge2Aid are two of the strongest partners of The MalDent Project (themaldentproject.com/).

One of the areas of activity in which they are collaborating is the training of Oral Health Promoters in Malawi, particularly in the more rural areas of the country. The initial proof of concept trial has been undertaken in Northern Malawi and work is now under way to roll out the project in Central and Southern regions.

In order to raise additional funding to support this Oral Health Promoter expansion, Smileawi and Bridge2Aid decided to run a collaborative fundraising event on Friday 20 June to coincide with the 2025 Scottish Dental Show.

With its strong commitment to global health, the Royal College of Physicians and Surgeons of Glasgow (RCPSG) has been a great supporter of Smileawi and The MalDent Project, and its beautiful building,

together with the hospitality function delivered through 1599, made it the perfect venue for the event.

Each table setting included a baobab tree, wooden elephant and Malawi flag to reflect the focus of the fundraising. These items, made and purchased in Malawi, were kindly provided by Ruthie Markus, chief executive of the charity AMECA, one of MalDent's other partners. Each table was named after a Malawian town or village. Once seated, Professor Christine Goodall, Vice President (Dental) of the RCPSG, welcomed guests and underlined the college's support of the ongoing oral health developments in Malawi as part of its global health mission.

Following Christine, Shaenna Loughnane, chief executive of Bridge2Aid, spoke about the ongoing partnership with Smileawi and the purpose of the Oral Health Promoter training initiative in Malawi.

Nigel Milne, trustee and cofounder of Smileawi, then gave a vote of thanks to the various individuals and organisations who had helped to make the event possible.

As well as dinner, there were a number of fun competitions throughout the evening along with a band and dancing – and, thanks to the guests' generosity, the event raised £3,825.

tinyurl.com/2m9z3j9e

Renfrewshire practitioner named among the UK's best new dentists

Cara Marcuccilli impressed judges with a detailed restorative case

CARA MARCUCCILLI, a vocational dental practitioner (VDP) at Scottish Dental Care's Bishopton Dental Clinic, has been named as one of the 18 winners of the CGDent and GC Award for Foundation Trainees.

Cara, who is currently completing her vocational training at the clinic under the mentorship of Craig MacDougall, impressed judges with a detailed restorative case that demonstrated both technical ability and patient-centred care.

The award included a funded place at a two-day course on advanced composite bonding techniques at the College of General Dentistry European Education Campus in Leuven, Belgium.

Cara said: "I feel incredibly grateful to be selected as one of the award winners. The opportunity to take part in advanced training with peers from across Europe is a huge privilege.

"I'm thankful to my patients, colleagues and mentors who supported me throughout the casework process."

The assessment panel scored each case based on the overall improvement in the patient's oral health, the standard of aesthetic treatment, the complexity of the case, and the quality of the entrant's reflection.

Craig MacDougall said: "Cara has shown real dedication to both her patients and her development as a clinician. This recognition is thoroughly deserved and reflects the high standards she set herself from day one. It has been a pleasure to support her through her training year."

SDC co-founder and director of dentistry, Philip Friel, added: "It is hugely encouraging to see one of our early-career clinicians receive such a significant accolade.

"Cara's success reinforces the value of a supportive environment and high-quality mentoring, and highlights how the next generation of dentists can thrive when given the tools to do so."

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Dr Helen Phillips appointed new chair of GDC

Experienced leader brings vision for trusted, collaborative regulation

DR Helen Phillips has been appointed as the new chair of the General Dental Council (GDC) from 1 October, following the completion of Lord Toby Harris's four-year term in September.

Dr Phillips brings a wealth of senior experience across a 30-year career in sectors including insurance, legal, social care and further education.

A former senior environmental regulator, she has held numerous non-executive roles since 2015. With expertise in professional standards, she currently chairs the Chartered Insurance Institute and NHS Professionals.

Dr Phillips has also chaired the Legal Services Board and Chesterfield Royal Hospital NHS Foundation Trust, where she served during the pandemic, and is an independent Commissioner at the Gambling Commission.

She said: "My ambition is that dental care professionals feel a sense of pride – never fear – in being regulated by a trusted, effective, proportionate regulator that embodies our values of being respectful, transparent, inclusive and purposeful."

Dr Phillips emphasised her commitment to working with the dental professions to address systemic challenges: "We must work collaboratively with the dental sector to make meaningful progress in addressing health inequalities and the growing problem of equitable access to dental services for all."

Her appointment comes as the GDC consults on its new Corporate Strategy 2026-2028, which focuses on building trust with the profession, moving away from a climate of fear and adopting more supportive approaches to regulation that prioritise learning and professional development over punitive measures.

Dr Phillips added: "I look forward to working with my fellow Council Members, the Chief Executive and the whole GDC team as we gear up to deliver the Corporate Strategy, ensuring we remain an effective regulator that puts public protection at its heart while empowering dental professionals to flourish."

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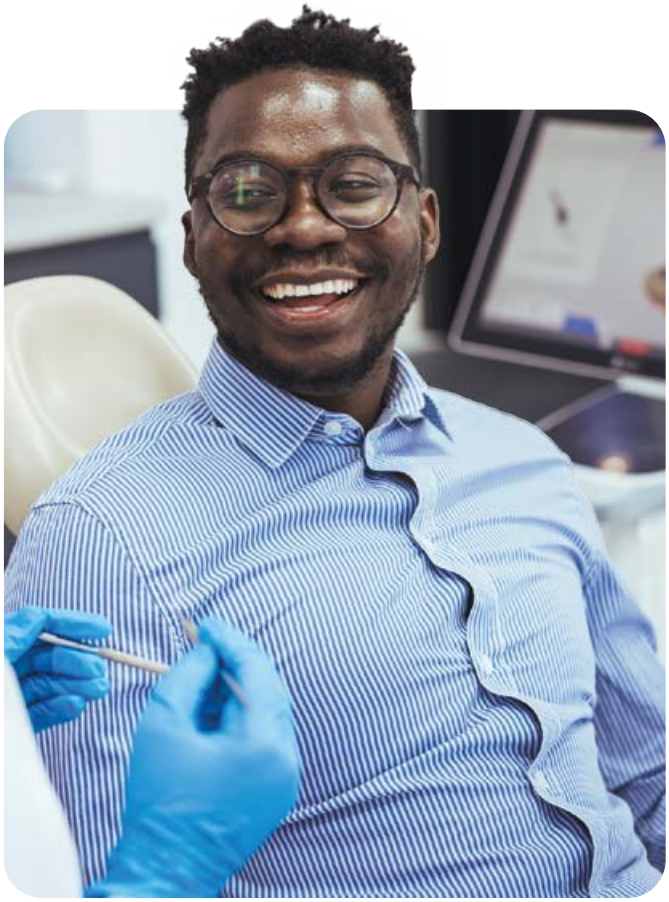

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Hundreds of DCPs fail to meet CPD requirement

GDC emphasises requirement is essential for maintaining registration

NEARLY 500 dental care professionals (DCPs) failed to meet the minimum 10-hour CPD requirement over two years to September 2024, the General Dental Council has disclosed.

While this represents a decrease on 2023, the GDC emphasised that meeting CPD requirements remains essential for maintaining registration.

At the beginning of June, the regulator opened its annual renewal period for DCPs.

To complete their annual renewal, they must have completed three essential steps by the respective deadlines:

- Have paid the Annual Retention Fee (ARF) of £96 by 31 July. DCPs can pay online via eGDC or by Direct Debit.
- Have made an indemnity declaration by 31 July – confirming they have the appropriate indemnity or insurance cover in place by the time they start practising.
- Submit a CPD statement by 28 August. The CPD year runs from 1 August to 31 July.

Following some changes introduced in March, the GDC has simplified several aspects of the CPD scheme to reduce the administrative burden for dental care professionals. Key changes include:

- Simplified documentation requirements, with GDC registration numbers no longer mandatory on CPD certificates.
- Electronic confirmations now accepted for CPD mapping documents.
- More flexible approaches to quality assurance verification, allowing digital confirmations alongside traditional signatures.
- Clearer guidance on grace periods and restoration processes.

DCPs in the final year of their five-year CPD cycle who need additional time can apply for a grace period via their eGDC account.

For DCPs who registered within the last 12 months, they began their first CPD cycle on 1 August this year.

Anthony McNally, Head of Customer Services at the GDC, said: "We've listened to feedback from the dental professions and made significant improvements to our CPD processes, while maintaining professional standards."

Dundee graduates among CGDent and GC Award winners

TWO graduates of the School of Dentistry, University of Dundee, have been names as winners of this year's CGDent and GC Award for Foundation Trainees.

Dr Yaa Agyei-Akwa and Dr Cara Marcuccilli were among the 18 winners who are now completing their Dental Foundation Training or Dental Vocational Training.

To enter the award, participants each submitted a restorative case which included at least one anterior tooth and composite restoration. Cases entered featured a range of restorative treatments including those for midline diastema, dental trauma, tooth wear, and peg shaped laterals.

The award, which was expanded to include dental therapists as well as dentists this year, was open to those who graduated in 2024 in the UK and Ireland or who were undergoing Dental Foundation Training, Dental Vocational Training or Joint Dental Foundation Core Training.

The successful candidates are each awarded a funded place on a two-day composite layering course which is taking place on 10-11 July at GC's European Education Campus in Leuven, Belgium. The prize includes international travel and hotel costs and is worth around £1,400 per place.

Professor Sir Nairn Wilson CBE FCGDent, President Emeritus of the College, said: "I am delighted for all the winning candidates announced today and by the success of the 2024/25 CGDent and GC Award for Foundation Trainees, all made possible through the generosity of the Tom Bereznicki Charitable Educational Foundation, with the complementary support of GC.

"I anticipate the hands-on course provided at the world-renowned GC Education Campus will have a lasting, and possibly career-determining, impact on the participants, including the first Dental Therapist winner of the competition. The winners of this year's competition can be justifiably proud of being on their way to Leuven."

cgdent.uk/2025/06/02/cgdent-gc-award-2024-25-winners/

Exercise and omega-3 reduce periodontitis

PHYSICAL exercise combined with omega-3 supplementation considerably improves the immune response and reduces the severity of chronic apical periodontitis, according to a study[1] published in the journal *Scientific Reports*.

Inflammation at the apex of the tooth – the tip of the root – and in the surrounding area is primarily caused by caries. If left untreated, the bacteria can reach the root canal and pass through it to the apex, causing apical periodontitis. This condition leads to bone loss in the area.

The study is the first to demonstrate that a combination of moderate physical exercise and omega-3 supplementation significantly improves the inflammatory condition caused by apical periodontitis. This combination limited bacterial progression, reduced bone tissue loss, regulated the release of pro-inflammatory cytokines and stimulated the activity of fibroblasts, the cells that create and maintain tissue.

The researchers induced apical periodontitis in 30 rats and divided them into three groups. The first group received no intervention. The second and third groups underwent a 30-day swimming regimen. The third group also received dietary supplementation of omega-3, a polyunsaturated fatty acid known for its therapeutic effects on chronic inflammatory diseases. The group that only swam had better outcomes than the untreated control group. However, omega-3 supplementation combined with physical exercise regulated the immune response and infection control even more.

"To know if the same would be true for humans, we'd need a clinical study with a significant number of patients," said Ana Paula Fernandes Ribeiro, one of the authors. "However, in addition to the many proven benefits of physical exercise and omega-3 consumption, this is yet another important piece of evidence."

[1] *www.nature.com/articles/s41598-025-90029-9*

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Less diverse oral microbiome linked to depression

Finding could help in improving mental health

A LOWER diversity of microbes in the mouth is associated with depression, a study[1] published in the journal *BMC Oral Health* has found.

The mouth is home to between 500 billion and one trillion bacteria – the second-largest community of microorganisms in our bodies, after the gut.

"Having a better understanding of the relationship between the oral microbiome and depression could not only help us learn about the mechanisms underlying depression, but could contribute to the development of new biomarkers or treatments for mood disorders," said Bei Wu, vice-dean for research at NYU Rory Meyers College of Nursing and the senior author of the study.

Using data from more than 15,000 US adults aged 18 and older collected between 2009 and 2012, the researchers compared questionnaires measuring symptoms of depression with saliva samples. Gene sequencing was used to identify the microbes in the saliva and measure the diversity of the oral microbiome.

The researchers found that people with less diversity in their oral microbiomes were more likely to have symptoms of depression. Additional analyses showed that smoking, drinking and dental care – all of which can change the make-up of bacteria in the mouth – influenced the relationship between the oral microbiome and depression.

The findings suggest that, with more research, the oral microbiome could potentially be used to diagnose or treat depression. However, based on this study, it is not clear whether the diversity of microbes in the mouth influences depression or if depression leads to changes in the oral microbiome – or if there's a bidirectional relationship between the two.

"We need more research to understand the direction and underlying pathways of this relationship," said Wu. "This work is part of a broader effort to understand how the oral microbiome influences not only mental health, but also cognitive decline and the onset of dementia."

[1] *bmcoralhealth.biomedcentral.com/articles/10.1186/s12903-025-06274-x*

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Chewing veg can damage teeth

The cause – microscopic, silica particles within plant tissue

WHILE plant-based foods are an essential part of a healthy diet, an international team of researchers has found that microscopic plant stones, known as phytoliths, could contribute to dental wear.

Previous studies have looked into enamel wear caused by plant phytoliths but the results were often conflicting. The studies also failed to realistically simulate how multiple phytoliths, embedded within soft plant matter, interact with tooth enamel during chewing.

For this study, the scientists designed artificial leaves made from a polydimethylsiloxane (PDMS)-based matrix with embedded opaline phytoliths obtained from wheat stems and leaves.

The resulting leaf, with a thickness and stiffness similar to that of a real leaf, was then fixed to a holder and brought into controlled, repeated contact with healthy human wisdom teeth samples, to simulate the sliding and pressure of chewing.

The physical and chemical changes in the leaf and the dental enamel were analysed using high-resolution microscopy and spectroscopic techniques.

According to the results[1] published in the *Journal of the Royal Society Interface*, soft plant tissues can cause permanent damage and mineral loss upon interaction with enamel.

[1] *royalsocietypublishing.org/doi/10.1098/rsif.2025.0175*

DATES FOR YOUR DIARY

2025

24-26 SEPTEMBER
British Orthodontic Conference
ICC Wales, Newport
bos.org.uk/boc2025

3 OCTOBER
Vermilion Biennial Symposium 2025
Royal College of Physicians Edinburgh
tinyurl.com/yc77578e

27-29 NOVEMBER
BSP Oral Health Summit
EICC, Edinburgh
profile.eventsair.com/oral-health-summit-2025/registration

5 DECEMBER
CGDent Scotland Study Day
Glasgow Science Centre
cgdentscot.org.uk/book-glasgow-study-day

2026

4-7 SEPTEMBER
FDI World Dental Congress
Prague
2026.world-dental-congress.org

12-13 JUNE
The Scottish Dental Show
Braehead Arena, Glasgow
sdshow.co.uk

Note: Where possible this list includes rescheduled events, but some dates may still be subject to change.

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About Us /

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Dr David Offord
Practice Principal and Specialist in Oral Surgery

Dr Steve Siovas
Practice limited to Prosthodontics and Implant Based Therapy

Dr Photini Papacharalambous
Specialist in Prosthodontics

Dr Noland Naidoo
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Dr Martin Morley
Implant Dentist

Dr Fiona Wright
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SAVE THE DATE: FRIDAY 3RD OCTOBER 2025 - VERMILION SYMPOSIUM
Anas Sarwar and the Future of Scottish Dentistry, Career Pathways in Primary Care'.
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ANOTHER BRILLIANT SHOW

SDS 2025 was a huge hit with delegates and exhibitors

WORDS
WILL PEAKIN

More than 2,000 people attended the Scottish Dental Show with delegates gaining up to 10 free CPD hours, as well as having the opportunity to meet representatives from more than 120 dental supply and advisory companies and network with colleagues.

The education programme featured all of the GDC's recommended and highly recommended topics as well as lectures and workshops on clinical expertise, wellbeing, sustainability and the business of dentistry.

Adele Johnston, who delivered a lecture on understanding menopause and oral health said: "I was really struck by how engaged the audience was and the follow-up discussions were incredible."

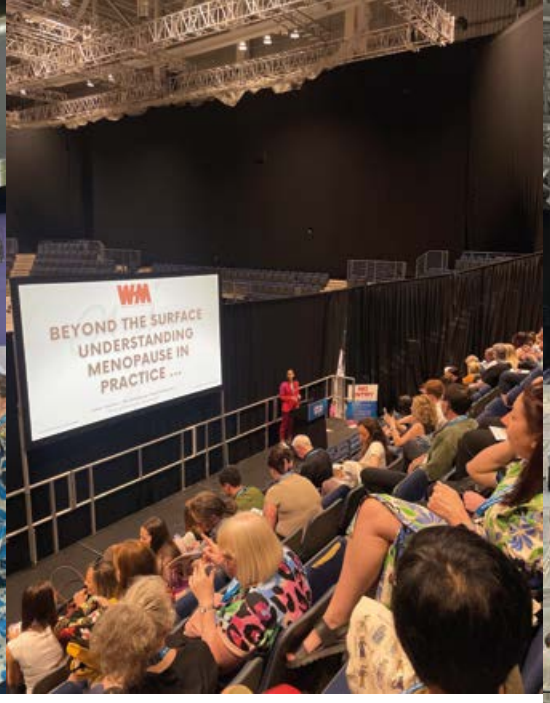
Many thanks to our Scottish Dental Show Platinum Sponsor NSK, our Gold Sponsors Barclays Bank and Wrights – the Dental Supply Company, Silver Sponsors A-dec, Real Good Dental, Kalyani Dental Lounge and Bronze Sponsor Scrubs UK.

"It was great to see so many people catching up with colleagues, meeting suppliers and advisers and benefitting from a world-class education programme," said Ann Craib, Sales & Events Manager for *Scottish Dental*. "A huge thank you to the delegates, to our exhibitors and to the programme speakers who delivered such high quality CPD content."

Among this year's speakers were Laura Wilson, NHS Education for Scotland, Dr Christine Park, University of Glasgow, Professor Paul Tipton, Tipton Training, Andrew Hince, NHS Highland, Dr Barry Oulton, The Confident Dentist Academy, and Professor Mark Greenwood, University of Manchester.

Plus James Elliot, Clark Dental, Dr Henri Diederich, Cortically Fixed Academy, Ashley Latter, Ashley Latter Dental Sales Training, Professor Marie Therese Hosey, King's College Dental Institute, Morna Beattie, Carly Millan Page, Wesleyan Financial Services, Nick Beacher, University of Glasgow, Natalie Cook, NHS Education Scotland, Professor Mike Lewis, Cardiff University, Professor John Gibson, The Canmore Trust, Dr Tariq Ali, The Centre for Implant Dentistry, and Professor Brian Millar, King's College London.

Workshops were hosted by Dr Audrey Kershaw, Oral Surgery Scotland, Dr Philip Friel, Scottish Dental Care, Jordan Gilmour, Our Crown Dental, Tracy Doole, Marlborough Clinic, Belfast, and Shelly Smith, Dürr Dental, Joycee Rebelo, Orthodontic National Group Committee, Dr Michael Tang, Kalyani Dental Lounge, Kenny McKay, Succession Wealth, Andrew McAllister and Kirstie Walker, NHS Greater Glasgow and Clyde, Dr Heather Cassie, University of Dundee Dental School, and Dr Leanne Branton, Diamond Smiles Foundation.



NEXT YEAR'S SHOW IS ON 12-13 JUNE AT BRAEHEAD ARENA, GLASGOW. WE ARE WORKING HARD ON ANOTHER GREAT EDUCATION PROGRAMME"

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The show also featured NSK sessions with Siobhan Kelleher, Lauren Long and Jenny Walker, as well as live whitening sessions with BlancOne hosted by the Scottish regional group of the British Society of Dental Hygiene and Therapy.

Next year's show is on 12-13 June at Brasehead Arena, Glasgow. To enquire about speaking contact will@connectcommunications.co.uk and about exhibiting contact ann@connectcommunications.co.uk

A STUDENT'S PERSPECTIVE

WORDS
HANNAH KHAN AND NUHA IRSHAD

On a bright Saturday morning in June, we stepped into the bustling Braehead Shopping Centre to attend the Scottish Dental Show for the first time.

As two eager, third year dental students at the University of Dundee we were unsure what to expect. The bright lights, the high stadium ceilings and the enclosed skating ring (minus the ice) formed the setting for the numerous dental practices, companies and welcoming exhibitors showcasing their products and services. Throughout the day, we browsed the stalls, listened to informative lectures and attended practical workshops.

Clinicians of different specialties from all over the UK presented at the show and we attended various talks and workshops throughout the day. It was particularly interesting to see the variation in lecture content and teaching style across dental hospitals and practices.

With each lecture, we were acutely aware of differences in clinical practice compared to our controlled undergraduate clinic setting. Despite these differences, a common theme was an appreciation of the guidelines published by SDCEP. Conceived in Dundee, they are thorough, methodical and form the core of patient care.

We were also introduced to many great resources throughout the talks, including one developed by KCL to prepare paediatric patients for general anaesthetic. We think this could be of particular use in dental hospitals[1]. Furthermore, it was nice to see the collaborative nature of clinicians, which has contributed to some fantastic research initiatives.

We also appreciated the experienced viewpoints of clinicians and the interactive nature of many of the workshops. We enjoyed trialling loupes, dental chairs, dental materials and technologies that are commonly used in practice. It is a continuously evolving field with many options to choose from! We enjoyed the opportunity to explore topics that are not always stressed within the formal curriculum, and it was a rare opportunity for undergraduate students to field new interests.

Another aspect of the Scottish Dental Show was networking. It was a unique experience to chat to all manner of dental companies and representatives. In particular, the financial aspect was something we had never considered. It was somewhat surprising to learn about income protection, working as a self-employed associate and pension schemes – especially at such an early stage in our career!

Everyone was keen to talk and answer any questions we had, and many said we were welcome to contact them in the future. It was also interesting to discuss career paths and where dentistry can take you – a topic which is not often covered in everyday clinics and lectures. Finally, the show would not be complete without the freebies. People were very generous, and we received everything from free toothpaste to stress balls to flowable composite.

In conclusion, the Scottish Dental Show exceeded our expectations. It allowed us to engage with leading professionals and explore dentistry outside our defined curriculum – what a great day it was! Pencilled in our calendar for 2026, we cannot wait to see you all again next year!

> **THE SCOTTISH DENTAL SHOW EXCEEDED OUR EXPECTATIONS. IT ALLOWED US TO ENGAGE WITH LEADING PROFESSIONALS AND EXPLORE DENTISTRY OUTSIDE OUR DEFINED CURRICULUM**

Hannah Khan and Nuha Irshad are students at the University of Dundee.

Reference

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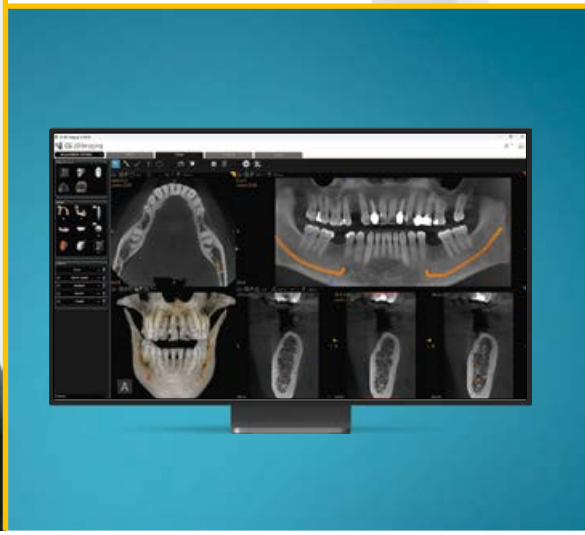

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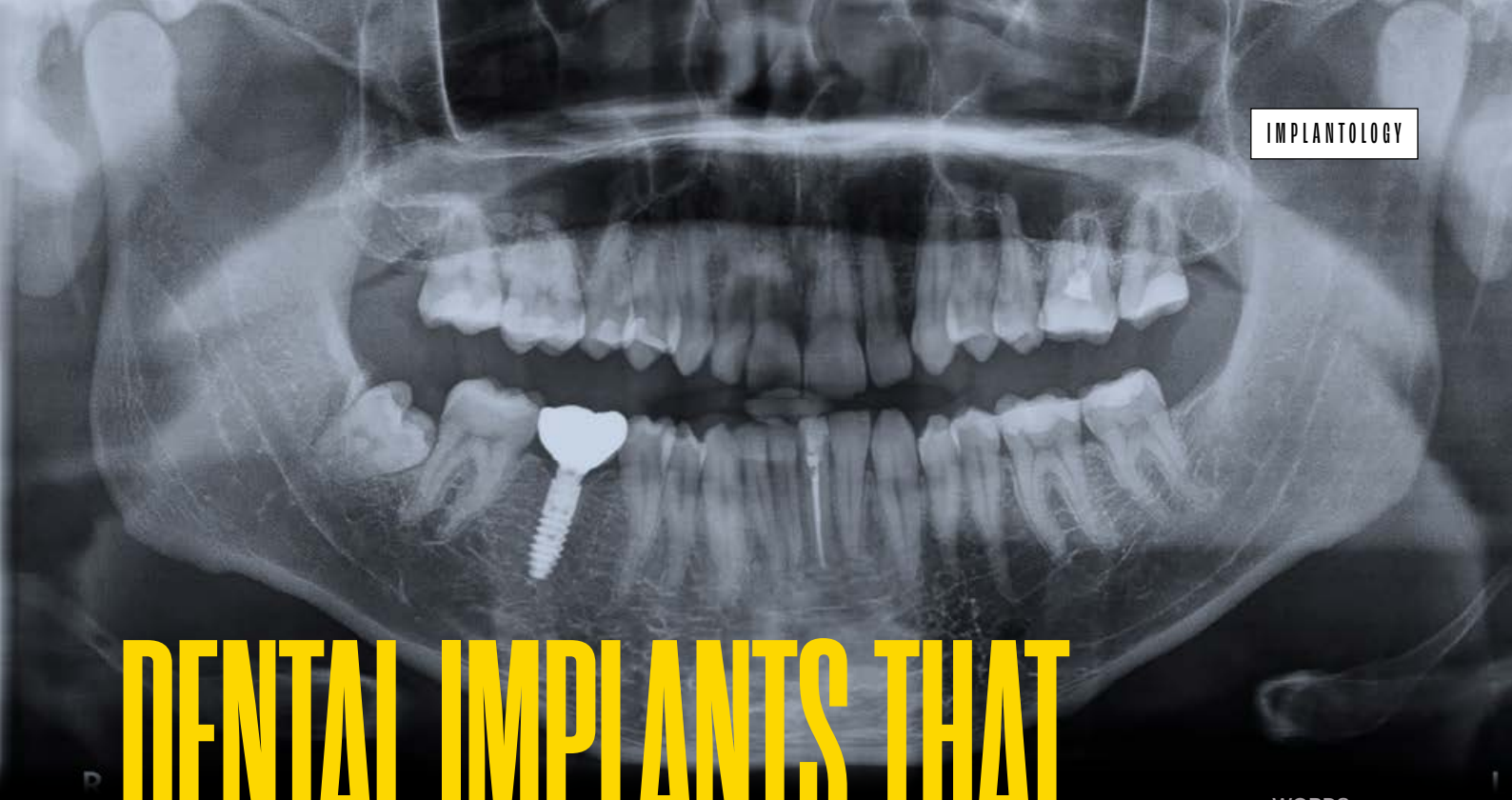

DENTAL IMPLANTS THAT FUNCTION LIKE NATURAL TEETH

WORDS
WILL PEAKIN

Minimally invasive procedure preserves nerve endings in tissue around the 'smart' implant

A new approach to dental implants that could better replicate how natural teeth feel and function has been developed by researchers from Tufts University School of Dental Medicine and Tufts University School of Medicine.

The procedure, published in *Scientific Reports*, has shown early success in rodents, with both a 'smart' implant and a new, gentler surgical technique.

"Natural teeth connect to the jawbone through soft tissue rich in nerves, which help sense pressure and texture and guide how we chew and speak. Implants lack that sensory feedback," said Dr Jake Jinkun Chen, a professor of periodontology and director of the Division of Oral Biology at the School of Dental Medicine at Tufts University and the senior author on the study. Traditional dental implants use a titanium post that fuses directly to the jawbone to support a ceramic crown. The surgery often cuts or damages nerves.

To tie these inert pieces of metal into the body's sensory system, the Tufts team developed an implant wrapped in an innovative biodegradable coating. This coating contains stem cells and a special protein that helps them multiply and turn into nerve tissue. As the coating dissolves during the healing process, it releases the stem cells and protein, fuelling the growth of new nerve tissue around the implant.

The coating also contains tiny, rubbery particles that act like memory foam. Compressed so that the implant is smaller than the missing tooth when it is first inserted, these nanofibres gently expand once in place until the implant snugly fits the socket. This allows for a new, minimally invasive procedure that preserves existing nerve endings in the tissue around the implant.

"This new implant and minimally invasive technique should help reconnect nerves, allowing the implant to 'talk' to the brain, much like a real tooth," Chen said.

Six weeks after surgery, the implants stayed firmly in place in rats, with no signs of inflammation or rejection.

"Imaging revealed a distinct space between the implant and bone, suggesting the implant had been integrated through soft tissue rather than the traditional fusion with the bone," Chen said. This may restore the nerves around it, he added.

More studies – for example, research in larger animal models to look at outcomes such as safety and efficacy – are needed before any trials in human volunteers.

The next step would be a preclinical study to see if brain activity confirms that the new nerves surrounding the prototype implant do relay sensory information.

> "THIS NEW IMPLANT AND MINIMALLY INVASIVE TECHNIQUE SHOULD HELP RECONNECT NERVES, ALLOWING THE IMPLANT TO 'TALK' TO THE BRAIN, MUCH LIKE A REAL TOOTH

www.nature.com/articles/s41598-025-99923-8

REDUCING UNWARRANTED VARIATION

WORDS
EMMA O'KEEFE

One of the first steps is recognising where the issues are

The people we treat are unique, with varying needs, preferences and beliefs. Some variation in care is therefore expected and appropriate. We want to avoid unwarranted variation – that is, variation in healthcare that cannot be explained by need, or by explicit patient or population preferences. It can mean too much or too little care, both of which can lead to harm, waste and ultimately low-value health outcomes[1].

Variation in dental care

Examples of unwarranted variation exist within dentistry. Difficulties accessing routine dental care in certain areas or patient groups can lead to individuals missing out on key preventive and restorative care, resulting in greater levels of dental disease. In the case of paediatric dentistry, this can lead to increased demand for general anaesthetic procedures, which carry more individual risk and more cost than alternative modes of care. One of the first steps in tackling unwarranted variation is recognising where the issues are[2]. The recently published *Scottish Atlas of Healthcare Variation* on paediatric dental extractions highlights the wide geographical variations in the provision of general anaesthetic and outlines some actions to help tackle variation in this area[3].

Inappropriate prescribing practices can also lead to unwarranted variation. The prescription of antibiotics for toothache, or for viral infections, is an example of overuse. As well as the cost incurred and the contribution to antimicrobial resistance, it is ineffective – it will not provide value to people. Globally, dental antibiotic prescribing represents 10% of prescriptions, and evidence suggests up to 90% of antibiotic prescribing by dentists in the UK is inappropriate[4]. This principle can be extended to the prescription of high-strength fluoride toothpastes for the management of caries. Ensuring the correct dose of fluoride toothpaste is prescribed according to unique patient factors helps to reduce unwarranted variation, as well as reducing healthcare costs and waste.

Many of our patients will require onward referral for a variety of reasons. The first stage in the impactful use of resources is in knowing what can be managed within your scope of practice without the need for onward referral. With practitioners being comfortable in managing certain types of temporomandibular disorder, knowing which oral medicine conditions can be monitored in practice, or at which phase of periodontal care to refer, we can work to lessen pressure on our secondary and tertiary care services. This can help deliver value to people and potentially frees up resources for those who really need it.

Being familiar with national guidelines on the management of numerous oral conditions as well as local referral pathways and processes can also help us to reduce unwarranted variation by ensuring referrals are appropriate and likely to provide value to patients.

It is acknowledged that the lack of clear guidelines, because of limited evidence available, can lead to unwarranted variation.

Recent surveys from colleagues in Oral Surgery have highlighted the variation in the management of patients taking immunosuppressant medication and targeted therapies[5] and also in the management and reviews following coronectomy[6]. It is encouraging to see the link to the pillars of Realistic Medicine mentioned in the papers.

Variation can and should be expected in complex healthcare systems, especially in local service organisations and structures according to rurality and distance from referral centres.

It can be warranted if it provides outcomes that matter to people while minimising waste and protecting resources. At the individual level, we can discover what matters to people through meaningful conversations. By practising Shared Decision Making with patients[7], we can understand their preferences and give them space to express them.

By knowing what will provide value, we can be more confident that the treatment we provide meets explicit patient needs.

Together, by personalising care, while being diligent with clinical guidelines and evidence-based practice, we can provide all patients the opportunity to receive care that is right for them.

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[7]www.sdmag.co.uk/2024/12/05/the-principles-in-practice-series-part-2/

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INTERVIEW

META DENTISTRY

Dr Edward Zuckerberg on Facebook and the future of dentistry

How did you come to be in the dental profession and what was your progression after qualifying?

I started Dental School in 1975 after identifying it as a career fit based on my love for science, enjoyment working with and helping people, and possessing superior hand-eye coordination as determined by an aptitude test.

I graduated from NYU Dental School in 1978, completed a one-year general practice residency from the Brooklyn, NY Veteran's Administration Hospital in 1979 and started in private practice later that year. Ultimately, I owned and managed my own practice from 1979-2013 in Brooklyn and later Dobbs Ferry, New York, until I sold my practice and moved to California in 2013 to be with my family.

Describe your transition from full-time practice into advising practices on their use of social media.

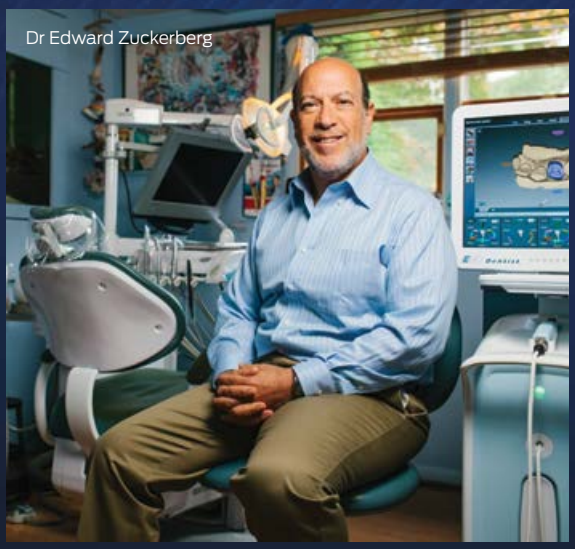
In 2010, I was approached by a well-known dentist and founder of Dentaltown (www.dentaltown.com), Dr Howard Farran for help with his Facebook page.

Dr Farran was having an issue and found out that 'Mark Zuckerberg's dad' was a dentist. After I helped Howard with his issue, he convinced me to write an article *Does My Office Really Need a Facebook Page?* which appeared in print in the September 2010 issue of *Dentaltown* (tinyurl.com/a72fvyxx).

When asked to write a follow up article a few months later, I wrote an article about integrating technology into the dental practice (tinyurl.com/mw6xus6p). I was an extreme early adopter of technologies, including having the first IBM computer in my office in 1985, intraoral cameras in the late 1980s, air abrasion and lasers to replace the dental drill in some cases in the early 1990s, digital radiography and imaging in 1998, electronic health records in 2007, CAD/CAM technology for same day crowns, inlays and veneers in 2008, and so on.

I had already done some lecturing and consulting on my early adoption of technology but after these articles appeared I was inundated with requests to speak at conventions, dental schools, study clubs and was also asked to consult with and advise startup companies in the oral healthcare field.

I started integrating this teaching and consulting work into my activities in 2011 and, after selling my practice in 2013, it became my full professional endeavour. From 2011 to 2021 my topics for teaching mostly focused on technology integration and advanced social media marketing techniques for dentists – but I also discussed many of the companies I was advising that would make a future impact in oral healthcare.


Dr Edward Zuckerberg

> "I WAS APPROACHED BY A WELL-KNOWN DENTIST FOR HELP WITH HIS FACEBOOK PAGE. HE WAS HAVING AN ISSUE AND FOUND OUT THAT 'MARK ZUCKERBERG'S DAD' WAS A DENTIST"

Starting in 2021, my focus shifted as I became heavily invested in the correlation between periodontal disease and poor oral health and general systemic diseases including dementia, heart disease, diabetes, cancer and many others. For the last four years, I have focused on advising and doing diligence for an oral healthcare

> I THINK IT IS ONLY A MATTER OF TIME BEFORE SALIVARY DIAGNOSTIC TESTING FOR EVERY PATIENT BECOMES THE ACCEPTED STANDARD OF CARE"

exclusive venture capital company, Revere Partners (www.reverepartnersvc.com), and while I still lecture my main topic is now creating understanding of the oral-systemic connection with secondary emphasis on upcoming dental technologies under development.

Looking forward, how do you see the integration of oral-systemic knowledge reshaping the practice model – especially in terms of diagnostics, preventive care and collaboration with medical professionals?

There are many challenges to moving forward with the necessary steps to achieve this goal. Initially, I am most focused on just creating awareness, both to the lay public as well as dental and medical professionals and the insurance industry.

Ultimately, the insurance industry can either be a partner or can slow the growth of achieving this goal. Creating greater public awareness of the importance of good oral health on their overall wellness is critical, but if the testing and treatments are not being reimbursed by insurance carriers this will be a barrier to adoption.

I think it is only a matter of time before salivary diagnostic testing for every patient becomes the accepted standard of care.

We have salivary testing available now that can not only screen for oral and throat cancer at earlier than ever stages, even before lesions are visible, but can also give deep insights on the salivary microbiome and recommend professional and at-home regimens necessary to rehabilitate an unhealthy salivary microbiome.

For years, our physician brethren have included annual bloodwork as an essential tool as part of a patient's complete physical examination and now saliva is every bit as important a tool for the dentist, not just as a tool for oral health but it follows that it will benefit the patient's overall wellness.

Physicians are totally uneducated when it comes to oral health and my goal for the future would be to have them view dentists as primary care partners in treating patients and will make sure all their patients are in good oral health as a requisite for overall wellness.

We live in a world where most view dentistry as a siloed profession, separate from medicine, and upgrading the world view of dentists to primary care specialists, who are simply physicians who specialise in oral healthcare, will also promote this paradigm shift in treatment philosophy.

In recent years, you've been involved in supporting and advising companies that are innovating within the oral health space. Can you share some of the technologies or initiatives that have stood out to you?

Prior to 2021, when I was more technology focused, the biggest innovations I saw were in artificial intelligence (AI), especially using the tool to interpret images, robotics to enhance the placement of implants and preparation of crowns and restorations, smarter toothbrushes and advances in tooth straightening with clear aligners.

Since 2021, I've been more focused on technologies in the oral-systemic space, so therapies and technologies targeting the elimination of unhealthy periodontal bacteria have been my focus and what I see as the most impactful technologies that will play a key role in the future.

Companies like Oral BioLife (www.oralbiolife.com) which is developing a gel that is placed under the gums, after a professional periodontal visit, to continue the anti-microbial benefits and to promote regeneration of bone lost in gum disease. They will play a huge role in promoting optimal oral health and overall wellness.

Anything else you would like to add?

Change is typically slow, but we live in a generation where positive technological advances have the potential to be rapidly adopted. Look at how fast AI has become part of all our lives in a relatively short time.

The changes we need to have a real impact on our patients' lives are something I'd love to see occur overnight, but the reality is that it will be a slow but steady movement starting with educationat many levels.

Hopefully the audience reading this can help share the information and have a positive impact to move this needed change into a reality and to have a positive impact in our in our near lifetime.

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Special Interest in Restorative Dentistry and Implantology

GDC No. 75815 | BDS (Glas, 1999) | MFDS RCS (Edin, 2002) | MSc MedSci (Glas, 2003) | Dip Imp Dent (RCS Edin, 2011)

Abid is a graduate of the Glasgow Dental School. He has a master's degree at Glasgow University and a Diploma in Implant Dentistry from The Royal College of Surgeons in Edinburgh. He is a member of their Faculty of Dental Surgery, and he is the immediate past president of the Association of Dental Implantology. Abid limits his practice to implants and the management of complex restorative cases with a special focus on immediate loading – having placed in excess of 5,000 implants. He utilises digital dentistry, implants and smile design for the management of complex restorative cases.

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LIFT OFF!

University of Glasgow

WORDS
WILL PEAKIN

Research hub for effective solutions to oral and dental health challenges is launched

The University of Glasgow's Dental School has launched the Oral Health Research Hub.

It brings together research groups across the school in an ambitious new initiative to generate effective solutions to the big oral and dental health challenges facing our communities locally and globally.

The launch of the hub marks the bringing together of multi-disciplinary research groups across the school, and it will be a platform to foster innovation and collaboration with the NHS, policymakers, industry, patients and the public.

THE VISION

1. The hub aims to generate effective solutions to the big oral/dental clinical and public health challenges.
2. Its multidisciplinary team works in partnership with the NHS, policymakers, patients/public, and industry, and in collaboration with international groups and networks.
3. The Oral Health Research Hub is a platform to foster an inclusive research culture of collaboration and innovation.
4. Delivering ambitious, high-quality, world-leading, original and impactful research to improve dental care, oral health and associated multimorbidity.

Professor David Conway, Director of the new initiative, said: "We have a clear vision with the launch of the new Oral Health Research Hub.

"The oral health challenges we face are significant. Currently, tooth extractions under general anaesthetic are the most common reason children have an elective hospital admission in Scotland and oral diseases are the most prevalent disease in the world.

"We aim for our interdisciplinary team of researchers to work together and in national and international collaborations, to deliver high-quality research to improve dental care and address inequalities in oral health both locally and globally."

www.gla.ac.uk/schools/medicine/dental/research

The launch event on 11 June showcased the new Oral Health Research Hub logo, designed by Laurie Rowan, a PhD student in the Dental School.

The logo represents the three working areas of the hub:

- Oral Health Sciences – laboratory analyses of infection biology of complex microbial communities (biofilms) and immunopathogenesis of oral diseases, including the inter-relationship with and impacts on systemic diseases.
- Community Oral Health – epidemiological-based analyses aiming to understand and reduce oral health inequalities across the life course both locally and globally, focused on child oral health, and head and neck cancer.
- Dental Clinical Research Facility

Oral Health Research Hub

– a partnership between NHS Greater Glasgow and Clyde Oral Health Directorate / Research and Innovation with the University of Glasgow to develop and implement oral and dental clinical trials.

These research areas map on to the strategic priorities of the University of Glasgow College of Medical, Veterinary and Life Sciences:

- Fundamentals of life.
- Advancing diagnostics and therapeutics.
- Health inequalities.
- Planetary health.

The Oral Health Research Hub brings together a talented and diverse team with multidisciplinary skills and expertise, including in public health, epidemiology and data linkage or large routine administrative data, behavioural sciences, clinical trials, clinical dentistry and research, periodontology, immunology, endodontics, microbiology and bioinformatics.

The hub will foster and support a vibrant group of early career researchers and PhD students. The Dental School is the first in the UK to support dental students undertaking intercalated PhD students.

Examples of the work already underway and presented at the launch event included work in:

- Oral sciences on cellular responses and host-pathogen interactions in the oral cavity and beyond, molecular technologies, oral biofilms and antibiotic stewardship (Professor Will McLean).
- Community oral health data labs in child oral health and the evaluation of Childsmile, the national child oral health improvement programme, and in head and neck cancer with the International Agency for Research on Cancer (Professor Andrea Sherriff).
- The development and successes of the Clinical Dental Research Facility (Professor Shauna Culshaw) and important partnership with NHS Greater Glasgow and Clyde Oral Health Directorate (Dr Hannah Bradley).

Examples of research projects from the hub's early career researchers were also presented, including immunopathogenesis of periodontal oral bacteria infection and rheumatoid arthritis (Dr Jennifer Malcolm) and health systems factors associated with delays related to advanced-stage head and neck cancer diagnosis (Dr Grant Creaney).

The University of Glasgow maintained an overall ranking of 12th in the world in the 2025 Times Higher Education Impact Rankings, out of 2,318 universities

LET'S MAKE HEALTH TRANSFORMATION A REALITY IN SCOTLAND

The current systems for the delivery of dental care have failed and, without change, will continue to fail

WORDS
PETER MOSSEY

In August 2024, I shared my *Reflections on the future of Dentistry in Scotland* (tinyurl.com/4nr8rvsv) and my headline comments were that in terms of the Statement of Dental Remuneration (SDR): "Determination 1 continues to have fundamental flaws" and that "a paradigm shift to address primary prevention" is required.

I also provided a summary statement that elaborated on this: "A new model for appropriate remuneration of the workforce in primary dental care, that rewards the integrated and prevention-oriented agenda that the Scottish Government already aspires to, would transform the health service, improve population health and wellbeing and ensure long-term sustainability."

It is important that we define briefly what the challenge facing the dental profession is in our role as custodians of the health of the oral cavity. Through dental caries and periodontal disease, we preside over the most prevalent non-communicable diseases that have remained consistently high for the past 30 years[1]. Clearly the current systems for the delivery of dental care worldwide have failed and, without a change in the approach, will continue to fail.

The fundamental problem is that in clinical dentistry we channel all of our energies into the diagnosis of dental and oral diseases and dealing with the consequences through ever more complex and expensive interventions with spiralling expenditure, while ignoring the fact that dental and oral diseases are largely preventable.

The main purpose of this article is to look at where we have gone astray in our approach to dental and oral care, and to suggest solutions, some of which are staring us in the face but our silo mentality and obsession with intervention has occluded our vision. The solutions must embrace the following principles:

- Prevention: what we do and teach in dental curricula globally is how to diagnose and manage dental diseases. In effect we let dental disease happen and we then intervene – an approach that is becoming increasingly expensive and unsustainable. Why, when we fully understand the causes of dental diseases and know how to prevent these, are we not doing it?
- Integration: we are firmly stuck in our own dental silo despite the fact that we know the value of oral health in overall health and well-being. We also know that oral diseases share common risk factors with other noncommunicable diseases such as cardiovascular disease, diabetes, obesity, cancers and respiratory disorders with a continuously growing evidence base for bi-directional relationships in causation. If we are convinced of the

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Clive Schmulian | Special Interest in Restorative Dentistry and Implantology | BDS, DGDP (UK), MGDS, FFGDP (UK), DIP CON SED, DIP IMP DENT RCS, FDS | GDC NO. 68815

Endodontics

Lyall Dominick | Dentist with Special Interest in Endodontics | BDS MFDS RCPSG MSc GDC no. 243639

Aesthetic, restorative dentistry, and clear aligners

Ian Cumming | Special Interest in Aesthetic Dentistry and Implantology | BDS MJDF RCS (ENG) DIPCONSED DIPRESTDENT GDC NO. 191060

Oral surgery

Clive Schmulian | Special Interest in Restorative Dentistry and Implantology | BDS, DGDP (UK), MGDS, FFGDP (UK), DIP CON SED, DIP IMP DENT RCS, FDS | GDC NO. 68815

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value of integration with medicine and other health professions in improving overall health and well-being, why are we not doing it?

- Access to care: unlike medicine, attendance at the dentist throughout the world is characterised by unique access to the healthy population as regular recalls are encouraged. This presents opportunities for screening and diagnosis of problems such as hypertension, diabetes, cardiac arrhythmia, cancers and many other conditions before they present as symptoms of disease. Early intervention is beneficial from both mortality and morbidity perspectives (e.g. in cardiac conditions and cancers), mitigates expensive interventions and improves outcomes and so makes sense from a humanitarian and financial viewpoint.
- Embrace social society: in spite of the unique access dentists have to the general public, at least in some parts of the world, and the opportunities to influence and utilise the power of the public voice – we have generally not done so. We could do much more to encourage the general population to be advocates for dental and oral health and utilise this to influence policy and prevention.
- Address inequalities: dental disease is characterised by a social gradient whereby those who are most deprived suffer the highest prevalence of dental disease. For the sake of equity and basic human rights we should embrace the principle of proportionate universalism whereby greater resources are provided for those in greatest need. This principle is encompassed in the UN resolution on universal health coverage, a component of the sustainable development goals (SDG3).

The transformative health agenda in Scotland and England

Understanding these principles forms the basis of strategic planning to address the problem using a transformative approach based on integration, community orientation, person centred primary preventive approach that would be fairer, more cost effective and more sustainable. Circumstances will differ from country to country and from health system to health system and so the detail of exactly how this might be implemented will vary accordingly. This article will look at how the National Health Service (NHS) in the UK and Scotland in particular might adopt a transformative approach towards the current oral health crisis with projected benefits for overall health and wellbeing.

On 17 June, the Scottish Government published its Health and Social Care Service Renewal Framework (www.gov.scot/publications/health-social-care-service-renewal-framework) as part of its transformative health agenda, followed on 3 July by Sir Keir Starmer's *10 Year Health Plan for England: fit for the future* (www.gov.uk/government/publications/10-year-health-plan-for-england-fit-for-the-future). The latter focuses on transforming the NHS to better meet the needs of the population over the next decade. It outlines a vision for a more proactive, community-based, and digitally enabled healthcare system. The plan emphasises three key shifts: prioritising prevention over treatment, moving care from hospitals to the community and transitioning from analogue to digital systems.

For dentistry there is a consultation document, NHS dentistry contract: quality and payment reforms (www.gov.uk/government/consultations/nhs-dentistry-contract-quality-and-payment-reforms), and this is an opportunity – on both sides of the border in the UK – to ensure that the voice of the dental profession will be heard around embedding oral health in the holistic care agenda. In the *10 Year Health Plan for England* the Department of Health and Social Care has acknowledged that the current NHS England dental contract is not fit for purpose. With the crisis in access to dental care in Scotland, and with NHS dentistry being devolved there is the real opportunity for Scotland to develop its own agenda.

NHS Education for Scotland (NES) has embraced the agenda on health transformation and the adoption of an approach that begins with widespread consultation.

The transformation of health and care services is long overdue and has been an element on the global health agenda in recent years, culminating in the May 2021 World Health Assembly (WHA74.5) where a landmark resolution calling for integration of oral diseases into the noncommunicable diseases (NCDs) family places oral health in a new elevated platform alongside the other major NCDs, cardiovascular disease, diabetes, cancers and respiratory disorders.

Since then, the publication of the World Health Organization Global Oral Health Action Plan (GOHAP) in May 2024[2], with significant contributions from the World Dental Federation (FDI) Vision 2030[3], the Lancet Commission on Oral Health (tinyurl.com/2s4e8j7j) and, more recently, the Bangkok Declaration (tinyurl.com/3ym9h4yb) ensures there is a united voice from leaders in dentistry and oral health.

The rationale for this integration agenda is strongly endorsed by an increasingly robust evidence base for the mutual benefits of integration of oral health with medicine and with other health professions from a range of perspectives, such as the influence of common risk factors such as diet, nutrition, sugars, cigarettes and vapes, alcohol consumption, air pollution, hygiene, stress and sedentary activity (or lack of exercise). Many of these are in turn influenced by so called social and commercial determinants of health. The mutual benefits in terms of social capital, quality of life, eradication of social inequalities and health economics[4] are also emerging, facilitated by the good research work of many organisations, institutions and researchers around the world, channelled via the International Association for Oral, Dental and Craniofacial Research (IADR). The overall conclusion is that oral health has been grossly undervalued in the past, and the integration of oral health with general health and the integration of health *and* social care have been very significant omissions in health policy over many years.

What is the fundamental change in 2025 that can make this happen?

This 'integration for health and wellbeing' agenda with our colleagues in medicine, pharmacy, physio, mental health and social care is now a major global priority since WHA74.5 in 2021. However, this has been in the public domain for many years through the Alma-Ata Declaration in 1978 (tinyurl.com/3wf6vwks) and Ottawa Charter in 1986 (tinyurl.com/3bnnjb6c) both of which pledged to address the social determinants of health in primary care and empower individuals and communities to take control of their oral health. So, what is different now – and in the context of this article – is that in 2025 an unprecedented opportunity presents itself via political declarations on transformative action in both England and Scotland, fuelled by the realisation that continuing with a failed system will exacerbate the current NHS crisis and unprecedented lack of access to dental care.

> "THIS ARTICLE OFFERS A PERSPECTIVE ON HOW SCOTLAND, IN THE HEALTH TRANSFORMATION SPACE GLOBALLY, CAN PLAY A LEADING ROLE"

The political declaration of intent to adopt a transformational agenda for the delivery of health services is welcome, as we look to the future, as it represents a shift in attitude on governmental policy at an upstream level. However, for implementation of change in the delivery of dentistry in primary care a complete overhaul of the Statement of Dental Remuneration (SDR) in Scotland, as outlined in Determination 1[5], is needed. Simultaneously, integration of health and social care, a stated Scottish Government priority, must be matched by actions beyond lip service to changes in the delivery of preventive services "from hospitals to community". And with their long established access to the healthy population via regular recalls, dentists are well poised to facilitate the transition of healthcare from hospitals to communities. During the COVID-19 pandemic, dentists were frontline workers and the possibility that visits for dental checkups can also serve as opportunities for preventive vaccinations or other health screening for a range of other diseases, such as cardiovascular disease and diabetes and various other NCDs, has been successfully piloted[6]. Changes to the systems for remuneration should be used to influence behaviour change among dental professionals which will lead to the modifications of the 'what, where and how' of primary care delivery.

Is there now an actionable agenda?

The next step will be to get it right, with a plan that can be implementable, affordable and sustainable. Implementation of change can only be achieved through a combination of healthcare workforce reforms, supported by education, training and research. This article offers a perspective on how Scotland, in the health transformation space globally, can play a leading role. In the Scottish context, I would like to draw attention to a range of ongoing activities that can constructively feed into this agenda with practical, implementable steps in collaboration with a range of key stakeholders, with education (NES) and research (academic institutions). It is important to note that Scotland is well poised to lead on this with the Scottish Government's oral health improvement programme (www.scottishdental.nhs.scot/oral-health-improvement/) and the Childsmile programme[7]; examples of ongoing initiatives that align nicely with the WHO Global Oral Health Action Plan (www.who.int/publications/i/item/9789240090538).

Scotland is well equipped to introduce a prevention-based agenda through the structures in place that address the social determinants, social prescribing and health coaching[8]. Scotland is a leader in the development of evidence for introducing change in clinical practice exemplified by the series of multi-million pound clinical trials being conducted (many in collaboration with UK collaborators to increase sample size). This evidence base extends to the flagship ChildSmile programme where recent evaluation highlights the tremendous benefits in terms of improved oral health, alongside a health economics evaluation which has shown impressive cost-effectiveness. This provides evidence for the significant financial savings through the prevention of dental disease, and this is not taking account of the other general health and wellbeing benefits that will accrue from better dental and oral health.

Childsmile is transportable to other settings

The Scottish Government supported project and strategy for oral health in Malawi (The MalDent Project – Oral Health for All) heralds a new

era in oral health in Sub-Saharan Africa with the building of a new dental school and developing a new curriculum that is geared towards the social determinants of health and primary prevention. This will use the principles of the Childsmile programme of early intervention for oral health and, through the common risk factor approach with a suitable workforce model, can address overall health and wellbeing. Childsmile is being adopted and/or adapted in many other parts of the world, and this is in alignment with the WHO call for universal health coverage (UHC) that can be applied across all NCDs in low socioeconomic status/ rural settings across the world.

Pathway to implementation: the need for changes to the dental workforce

Following up the political declarations on the English and Scottish agendas for change, significant adjustment within the dental workforce in particular will be required. There is still a significant burden of untreated dental disease that will need restorative dental expertise. However, in parallel, it will be absolutely essential for dental care professionals (DCPs), such as dental nurses, hygienists and therapists, to be facilitated in their scope of practice in being able to undertake an increasing amount of restorative and preventive healthcare. The FDI Vision 2030 document[3] highlights how the revision of our ideas on an expanded workforce within (via DCPs) and beyond the dental profession provides the solution worldwide, and both England and Scotland need to ensure this is addressed to meet their needs.

There will be a requirement for expanded training programmes for therapists and hygienists – and alongside this there is the current shortage of dentists in Scotland. This remains a very significant political issue, as overseas dentists face significant challenges when trying to move to the UK (and Scotland) due to a combination of regulatory, bureaucratic and practical barriers. Scotland does not have its own dental licensing body and is therefore unable to independently approve non-UK dentists to practise here, while the Overseas Registration Exam (ORE), visa issues, VT equivalence and mandatory training before NHS registration are challenges that limit the scope and speed of improving access to care.

In November 2023, WHO hosted a workshop, *Integrating the social determinants of health into health workforce education and training*, which informs the transformative agenda. The leaderships of the European and American Associations for Dental Education (ADEE and ADEA respectively) came together to explore a globally coordinated and regionally delivered response from Oral Health Professionals Education (OHPE) associations across the world. They issued a statement that "oral health leaders and educators need to help empower our students with a new vocabulary, passion for public health, and a reinforced understanding of the central role of oral health research in the healthcare professions".[9] All this needs to be reinforced by educational institutions being proactive in the revision of their curricula and the changes made recently by the GDC in launching the 'safe practitioner framework', which are helpful towards achieving this objective. Interactions with colleagues in medicine are critical and the undergraduate medical curriculum could be enhanced by ensuring future doctors can work alongside their dental colleagues.

In terms of training, a fundamentally important issue in the vision for the health transformation agenda is that health professionals should have expertise in behaviour change using motivational interviewing or health coaching. In Scotland there is ongoing training in a number of health boards to introduce the 'motivation, action and prompts' (MAP)[8] behaviour change approach for the empowerment of patients to take ownership of, and responsibility for, their own health and wellbeing. This applies to NCDs such as diabetes, obesity, cardiovascular disease as well as oral health – where there are amendable behaviours such as hygiene, dietary, recreational, exercise and stress-related lifestyle factors that influence risk and respond to longitudinal follow up. This health coaching model is evidence-based, requires regular contact and importantly can be facilitated by mobile technology, making remote monitoring possible.

Alignment with transformative healthcare research

The above mentioned WHO GOHAP[2] also contains a strategic objective that points to the need for research to inform policy and clinical practice. It is highly relevant in this context to mention that UK Research and Innovation (UKRI) has funded a trans-sectoral cross-Scotland inequalities focused project, entitled REALITIES[10], a project which aims to use community assets, arts, music, sport and outdoor activities in the context of 'social prescribing' to address health and wellbeing – and this fits extremely well with this transformative health agenda in that it aims to generate evidence and health economics data to inform government and policymakers for the transition of health care from hospitals to communities. This would fulfil what was reported in *Scottish Dental* magazine in August 2024 as "a new model for appropriate remuneration of the workforce in primary dental care that rewards the integrated and prevention-oriented agenda to transform the health service, improve population health and well-being and ensure long-term sustainability."

THERE WILL BE A NEED FOR EXPANDED TRAINING PROGRAMMES FOR THE THERAPISTS AND HYGIENISTS – AND ALONGSIDE THIS THERE IS THE CURRENT SHORTAGE OF DENTISTS IN SCOTLAND"

Peter Mossey is Professor of Craniofacial Development and Associate Dean for Internationalisation at Dundee University Dental School.

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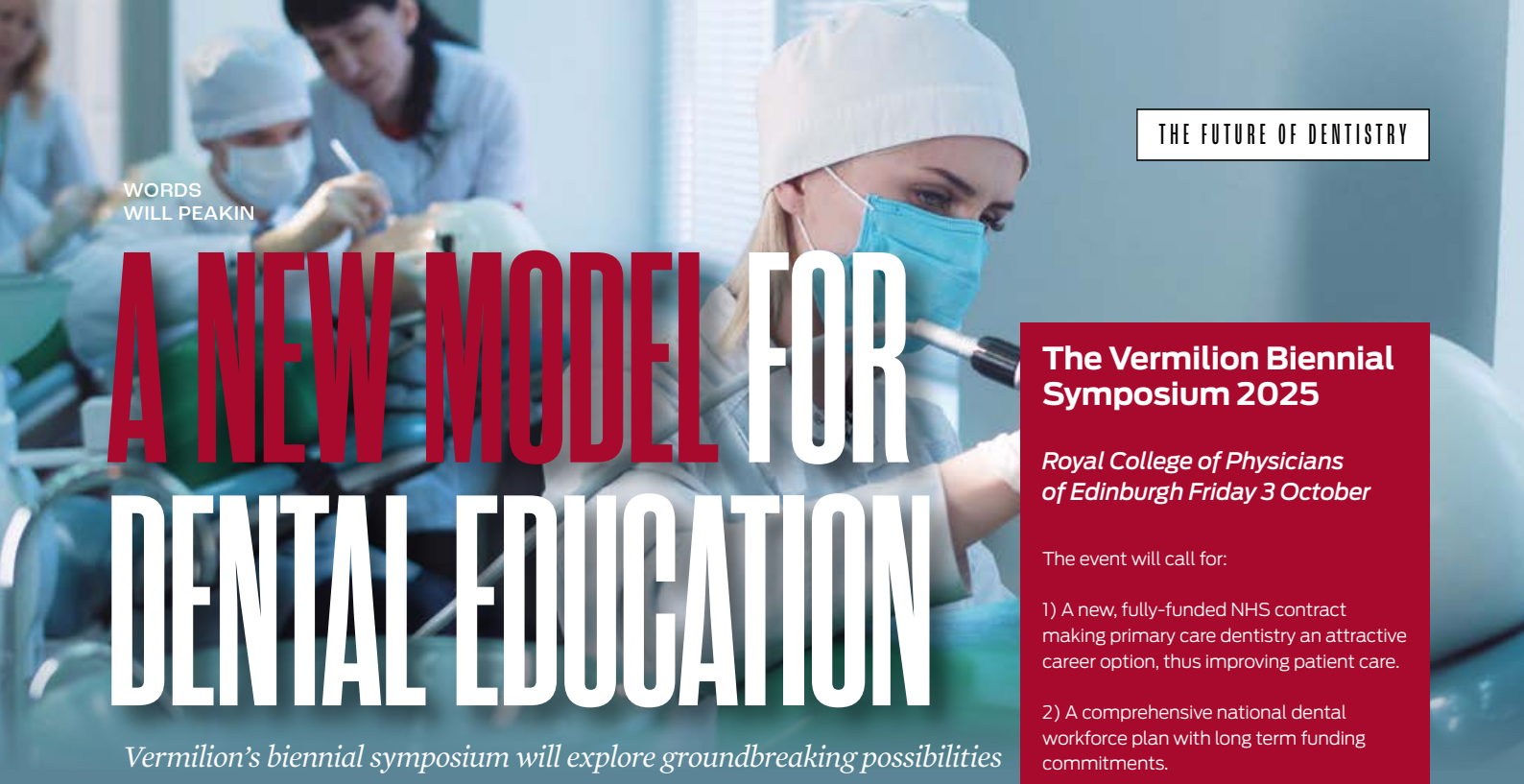

WORDS
WILL PEAKIN

A NEW MODEL FOR DENTAL EDUCATION

Vermilion's biennial symposium will explore groundbreaking possibilities

In the middle of the 19th century, the practice of dentistry in Scotland was completely unregulated. As *A Short History of Dentistry in Edinburgh*[1] notes: "For the man in the street it was difficult to know who was a skilled operator and who was not.

"There were several grades of practitioners; surgeons who practised dentistry as a speciality, rightly named surgeon-dentists, and others who greatly outnumbered them, including chemists and druggists, the mechanically trained and a high percentage of blatant charlatans."

In 1856 Dr John Smith, a surgeon-dentist and later President of the Royal College of Surgeons of Edinburgh, was the first person in Scotland to conduct a course on dentistry with clinical instruction for medical students at the Royal College.

Concerned about the poor dental health of Edinburgh's population, Dr Smith, with his friends Francis B. Imlach, Peter Orphoot and Robert Nasmyth, founded the Edinburgh Dental Dispensary in 1860, at 1 Drummond Street, to provide for those in need of dental care and to give clinical instruction in dentistry.

The name was changed in 1880 to the Edinburgh Dental Hospital and School and, after occupying various premises, in 1894 it moved to 31 Chambers Street. One hundred years later, the last undergraduate students qualified from the school and in 1997 the Edinburgh Dental Institute (EDI) for postgraduate education was opened in Lauriston Place.

"This," said the *Short History*, "symbolises the commitment of the profession to furthering dental education and to the provision of dental care for the people of Edinburgh."

There is no doubt that commitment within the profession remains, but today a question mark hangs over the EDI. The University of Edinburgh is facing a £140m black hole that demands "radical action", according to Professor Peter Mathieson, its Vice-Chancellor. The university's funding of places at the EDI has been halted, though it is understood the NHS is, at this time, continuing its funding.

Among those last students to graduate from the school in 1994 was Dr David Offord, Practice Principal of referral clinic Vermilion – The Smile Experts in Edinburgh and Kelso. Dr Offord is now calling for the reestablishment of an Edinburgh Dental Hospital and School. Vermilion has hosted an autumn Symposium alternate years since 2015. This year's guest speaker will be Anas Sarwar MSP, leader of Scottish Labour and a former dentist. The event will specifically call for: 1) A new, fully-funded NHS contract making primary care dentistry an attractive career option, thus improving patient care. 2) A comprehensive national dental workforce plan with long term funding commitments. 3) The establishment of a new Edinburgh Dental Hospital and School to provide integrated training of dentists, specialists and dental care professionals.

The symposium will hear from, among others, Professor Ewen McColl, Director of the University of Plymouth's Peninsula Dental School, former head of the EDI Professor Richard Ibbetson, speakers from general practice and from the College of General Dentistry. There will also be eight mini TED-style talks by Vermilion clincians.

"Scotland needs a comprehensive, fully-funded dental workforce plan that addresses recruitment, retention and training across all levels of care," said Dr Offord.

"This symposium provides a neutral forum where innovative ideas for primary and secondary NHS dentistry can be discussed. It is a unique opportunity to lobby senior politicians, who may have the levers of power come May 2026, with positive solutions to the crisis in Scottish dentistry."

The symposium takes place on Friday 3 October at the Royal College of Physicians of Edinburgh. Registration is £50 and is open to all dentists from across Scotland.

The Vermilion Biennial Symposium 2025

Royal College of Physicians of Edinburgh Friday 3 October

The event will call for:

1) A new, fully-funded NHS contract making primary care dentistry an attractive career option, thus improving patient care.

2) A comprehensive national dental workforce plan with long term funding commitments.

3) The establishment of a new Edinburgh Dental Hospital and School to provide integrated training of dentists, specialists and dental care professionals

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Speakers from general practice and from the College of General Dentistry.

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"This symposium provides a neutral forum where innovative ideas for both primary and secondary NHS dentistry can be discussed.

"It is a unique opportunity to lobby senior politicians, who may have the levers of power come May 2026, with positive solutions to the crisis in Scottish dentistry." - Dr David Offord.

Symposium website: vermilion.co.uk/https-vermilion-co-uk-vermilion-symposium-2025-the-future-of-scottish-dentistry-career-pathways-in-primary-care/

Register here: www.eventbrite.co.uk/e/the-future-of-scottish-dentistry-career-pathways-in-primary-care-tickets-1289583150919

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- GDC NO 81960

CHARLIE MARAN
Specialist Periodontist
BDS MSc (Restorative Dentistry)
- GDC NO 63897

ADRIAN PACE-BALZAN
Specialist Endodontist
BChD MFDS RCPS (Glasg)
MPhil MClinDent (Prosthodontics)
FDS(Rest Dent)
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KATHY HARLEY
Specialist in Paediatrics
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FDSRCS (England)
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MAs offer over 16s in paid employment the opportunity to train and work towards a vocational qualification

NEW DENTAL NURSING MODERN APPRENTICESHIP

To ensure all new trainees meet the updated professional standards required for registration

Scotland has launched a refreshed Modern Apprenticeship (MA) in Dental Nursing at SCQF Level 7, aligned with the General Dental Council's (GDC's) Safe Practitioner Framework (SPF). This is a critical milestone for the dental sector that ensures all new trainee dental nurses in Scotland from meet the updated professional standards required for registration.

Background

The GDC's Safe Practitioner Framework consists of learning outcomes and behaviours specific to the scope of practice of each professional group and enables education providers to prepare new dental professionals for the sector they are joining.

The Scottish Qualifications Authority (SQA), Scottish Vocational Qualification (SVQ) and Professional Development Award (PDA) in Dental Nursing are the approved dental nurse qualifications that lead to registration with the GDC and these will formulate the Modern Apprenticeship in Dental Nursing.

The launch of the SPF triggered a review of the existing National Occupational Standards (NOS) for Dental Nurses. The standards are used across all four nations within the United Kingdom. They describe the knowledge, skills, and understanding needed to do a particular job to a nationally recognised level of competence and form the basis of SVQ qualifications and training programmes.

The NOS Strategy 2022 aims to refine and modernise NOS and ensure its continued relevance and effectiveness in creating a skilled workforce, for now and the future. The standards underpin all apprenticeships and vocational qualifications in Scotland.

The Modern Apprenticeship in Dental Nursing is awarded by Skills Development Scotland (SDS). Modern Apprenticeships offer those aged over 16 in paid employment the opportunity to train and work towards a vocational qualification.

Trainee dental nurses undertaking the Modern Apprenticeship in Dental Nursing undertake the SVQ and PDA in Dental Nursing qualifications. In addition, trainees evidence the five SQA Core Skills Units as they progress through the Modern Apprenticeship programme:

- Communication
- Working with others
- Problem solving
- Information and communication technology
- Numeracy

Industry-backed and future-focused review

Skills for Health (SfH) was commissioned to review and update the Dental Nursing NOS and SVQ in Dental Nursing, while SDS led the review of the MA in Dental Nursing framework.

To progress these reviews, a UK NOS Steering Group and a Scottish Technical Expert Group (TEG) was created and chaired by Caroline Taylor, Associate Postgraduate Dental Dean (NHS Education for Scotland).

SDS also conducted a dental nurse apprentice survey in October 2024 which captured feedback from 81 trainee dental nurses across Scotland. The data gathered informed the revised standards and supported the development of a new meta-skills profile for dental nursing.

Collaboration at the core

The Scottish TEG had a broad cross-section representation of the Scottish dental workforce, including employers, dental nurse training providers, SQA, regulators, professional bodies and a trade union. The group met virtually over a six-month period to ensure national reach and inclusion. This group also formulated a 'Scottish Voice' in the UK-wide review of the NOS.

Employers and key stakeholders from across the dental sector have helped to identify the key knowledge, skills, and behaviours that trainee dental nurses need to develop. Consultations were also conducted to allow wider review and feedback from the profession and stakeholders.

More than 100 responses were received during consultation on the Dental Nursing NOS and 66 responses for the review of the MA and SVQ in Dental Nursing qualifications. This wide engagement provided strong endorsement for the new framework, with 96% supporting the updated SVQ structure and 100% agreeing that the PDA in Dental Nursing should be mandatory within the dental nursing apprenticeship framework.

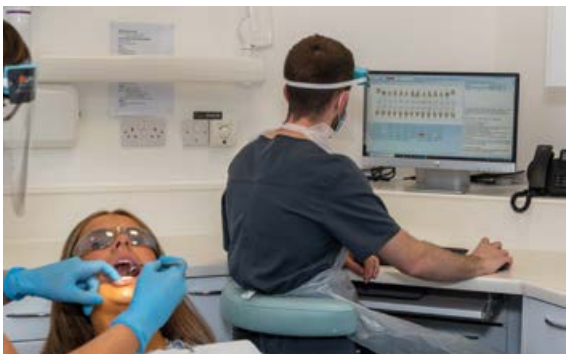
The dental nursing workforce across the UK is predominantly female. As part of the review and towards creating a sustainable future workforce, the TEG also considered opportunities and a commitment to widening participation and reducing gender imbalance.

Caroline Taylor, Associate Postgraduate Dental Dean at NHS Education for Scotland, said "The launch of the Safe Practitioner Framework presented an exciting opportunity to contribute to the review of dental nurse training qualifications.

"Collaborative efforts have ensured that the qualifications for trainee dental nurses in Scotland are not only fit for purpose but support positive learning experiences, enabling the future workforce to make a valued contribution in the provision of high-quality safe and effective patient care."

Key enhancements and outcomes

- The NOS for Dental Nursing and SVQ and PDA in Dental Nursing qualifications have been updated and are fully aligned to SPF. The qualifications are ready for delivery by SQA approved training providers from August 2025. This meets the GDC timelines set for implementation for all education and training providers of pre-registration training programmes.
- A new unit has been created for the SVQ: 'Maintain personal and professional practice for dental care professionals'. The unit aims to introduce trainees to the professional standards of conduct, performance and ethics and the regulatory requirements that govern dental professionals and to use reflection and feedback to maintain personal and professional development.
- Following a sector consultation, Workplace Core Skills have been embedded into the SVQ in Dental Nursing to enable trainees to achieve these through 'naturally occurring activities' and removing unnecessary barriers to success (e.g. Communication at SCQF Level 5, Numeracy at Level 3).



The SDS Apprenticeship Approval Group (AAG) formally approved the new MA in Dental Nursing framework in June 2025, describing it as "a wonderful example of system-wide collaboration".

Angela Watkins, Quality Assurance Manager at the GDC, said: "It has been great to see such a collaborative approach to this work from across the wide range of stakeholders. It has helped the GDC understand and manage the Safe Practitioner Framework implementation efficiently and with a better understanding of the changes being implemented to achieve the Safe Practitioner Framework."

Shellie Montgomery, Apprenticeship Development Manager at SDS said: "Created in collaboration with industry, Scottish apprenticeships help employers build a skilled and diverse workforce. Designed by employers, apprenticeships foster innovation, economic growth, and new opportunities.

"Over the past eight months I've met some incredible individuals who are unbelievably passionate about dental nursing, and have given so much of their time, expertise and knowledge to redesign the apprenticeship."

All new trainee dental nurses embarking upon their pre-registration training from 1 August 2025 will undertake these revised qualifications. There are several training providers across Scotland who provide dental nurse training and the Modern Apprenticeship in dental nursing and further information can be found below:

Modern Apprenticeship in Dental Nursing Providers in Scotland

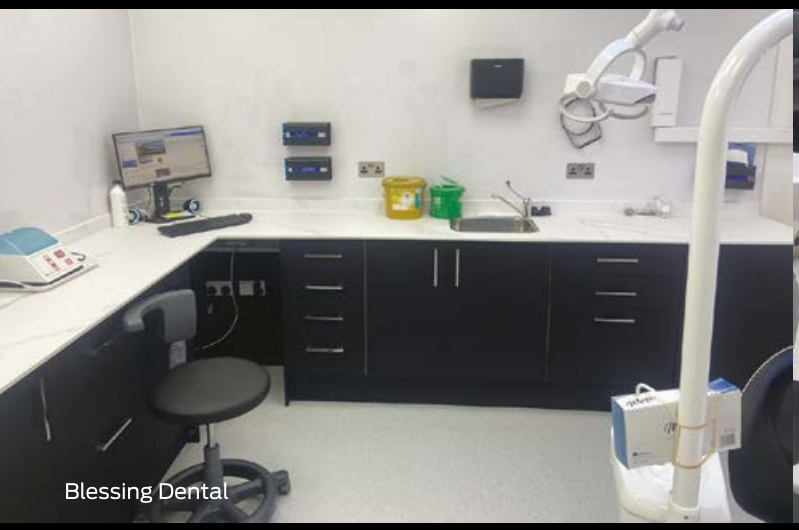
Edinburgh College	www.edinburghcollege.ac.uk
Ident Training	www.identtraining.com
Mentor Training Centre	www.mentortrainingcentre.co.uk
NHS Education for Scotland: Aberdeen, Dundee, Edinburgh, Glasgow, and Inverness	https://learn.nes.nhs.scot/33932
NHS Ayrshire & Arran	Email: aa-uhb.dentalnurseeducation@aapct.scot.nhs.uk
New College Lanarkshire	www.nclanarkshire.ac.uk
West College Scotland	www.westcollegescotland.ac.uk

Further information can be found by scanning this QR code

ONE CALL DENTAL

OCD

BESPOKE FIT-OUT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Blessing Dental

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AI PREDICTS EARLY CHILDHOOD CAVITIES WITH HIGH ACCURACY

At the heart of the discovery is a remarkable anterior-to-posterior microbial gradient in healthy mouths

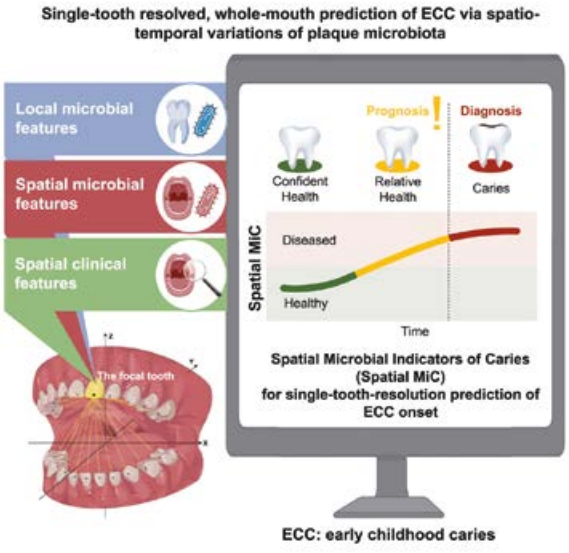
WORDS
WILL PEAKIN

An artificial intelligence (AI) system capable of predicting early childhood caries risk for individual teeth based on microbial characteristics – achieving an accuracy rate of more than 90% – has been developed by researchers.

The collaborative research team, from the Faculty of Dentistry of the University of Hong Kong (HKU), Chinese Academy of Sciences (CAS-QIBEBT), Qingdao Stomatological Hospital, and Qingdao Women and Children's Hospital, say it could revolutionise the prevention of childhood tooth decay.

Early childhood caries (ECC) – the world's most prevalent chronic childhood disease – disproportionately targets specific teeth; a mystery that has until now remained unresolved.

Early childhood caries risk for individual teeth based on microbial characteristics



The team has developed the world's first artificial intelligence system capable of predicting early childhood caries risk for individual teeth based on microbial characteristics, achieving an accuracy rate of more than 90%. The study was published in the journal *Cell Host & Microbe*.

The team conducted an analysis of tooth-specific microbial communities in young children aged three-to-five years, using an approach that combined 16S rRNA sequencing with shotgun metagenomics for microbial compositional and functional analysis. By tracking 2,504 individual tooth plaque samples from 89 pre-school children over a year, they uncovered distinct patterns that foretell dental decay.

At the heart of the discovery is a remarkable anterior-to-posterior microbial gradient in healthy mouths. The study found that incisors naturally harbour different bacterial communities than back teeth molars, creating a predictable spatial pattern across the mouth.

This gradient, maintained by factors like saliva flow and tooth anatomy, becomes disrupted when cavities begin to form. The researchers identified specific bacterial shifts that occur well before visible decay, including the migration of incisor-associated microbes to molar sites and vice versa.

The team developed Spatial-MiC, the world's first AI system that predicts cavity risks in individual teeth based on complex microbial communities. The system analyses these microbial patterns to assess cavity risk.

By combining data from a tooth's microbial community with information from its neighbours, Spatial-MiC achieved 98% accuracy in detecting existing cavities and 93% accuracy in predicting cavities two months before they became clinically apparent. This represents a major improvement over current whole-mouth assessment methods, which often miss early warning signs.

> "WE'VE MOVED FROM SEEING CAVITIES AS INEVITABLE TO BEING ABLE TO PREVENT THEM AT THE MICROBIAL LEVEL"

"These findings fundamentally change how we understand tooth decay," said Professor Shi Huang, Assistant Professor in Microbiology from the Division of Applied Oral Sciences and Community Dental Care at the HKU Faculty of Dentistry.

"We've moved from seeing cavities as inevitable to being able to predict and prevent them at the microbial level, tooth by tooth."

The team envisions a future where the system could be expanded to validate the approach in diverse populations. The ultimate goal is to develop clinical tests that bring the technology into dental offices worldwide.

www.cell.com/cell-host-microbe/abstract/S1931-3128(25)00185-4

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CONNECTING THE ISSUES

WORDS
DR CHRISTOPHER SILVESTER

Raising awareness about EDS can change patients' lives and enhance their dental care

Dr Audrey Kershaw, a specialist oral surgeon working across the length and breadth of Scotland, was introduced to readers in an article[1] in 2023 about her work with Hereditary Connective Tissue Disorders (HCTD), including Ehlers-Danlos Syndromes (EDS).

Since then, her peripatetic service (Oral Surgery Scotland) has continued to identify patients with connective tissue disorders across Scotland. Dr Kershaw picked up 120 cases in 2024 alone. Current research suggests that EDS has a much higher prevalence than previously thought and Dr Kershaw's findings match this changing perspective.

Dr Kershaw with Dr Ruth Penman and Ms Nida Navin on the Oral Surgery Scotland stand

For most of the patients she sees this is the first time their signs and symptoms have been connected. This quote from a patient gives an insight into the life-changing impact this can have: "My whole life (34 years) I have been back and forth to the doctors for so many things that I believed to be wrong with me. I was in constant pain or constantly unwell. I was always told it was either 'just me' or was just being passed from one person to the next and never getting an answer.

"I gave up hope of ever knowing what was wrong with me, even though I knew deep down something was wrong – until I met Audrey. Who knew that by visiting an oral surgeon, I would have got that answer that I had been looking for all my life."

Raising awareness at the Scottish Dental Show

We have seen two Scottish Dental Shows (SDS) come and go which were very successful in spreading the word on HCTD/EDS. We have been told time and again that the slogan: "If you can't connect the issues think connective tissues" has really hit home with some of our colleagues. Jacqui Armstrong, a hygienist with Ohh!, said she was thankful for Audrey's work and now has been able to "signpost many patients in the direction of holistic care".

Dr Roger Marsh, who helped us on our stand at this year's Scottish Dental Show, said: "Since working with Audrey my eyes have been opened to connective tissue disorders and the profound effect these often undiagnosed conditions can have on a person's life.

"As a General Dental Practitioner in Glasgow, this understanding has allowed me to provide comfortable and effective dental care for this group of patients who often struggle with routine dental treatments."

Dr Kershaw's 2024 lecture with Corrie Crompton, now a dental therapy student in the Highlands and Islands, and 2025 seminar, with myself and Ms Nida Navin, a Dundee dental student, generated great audience engagement. Dr Kershaw and myself could see the looks on colleagues' faces when they were struck with the sudden realisation that patients that had not made sense before, now did.

Dr Kershaw would like to offer a special thank you to Emma Porteous, a patient representative, who attended the stand and openly shared her journey with delegates. After her initial appointment with Dr Kershaw, Emma was quick to offer to spread the word about EDS and share the empowering effect her diagnosis has had for understanding her own health.

Lectures and podcasts

It has been a busy nine months for Dr Kershaw. In December last year, Dr Kershaw gave a lecture at the request of Professor Tara Renton. She was joined by Dr Linda Bluestein, a USA-based physician with a specialist interest in hypermobility disorders. This talk is available on YouTube (https://youtu.be/cO9z0o2oFJg) and gives an excellent introduction for clinicians interested in learning more about EDS. Another talk in 2024 covered dental care in the context of HCTD with Dr Christine Park and Dr Mary Gonzalez and was given to the Hypermobility Syndromes Associations.

Two podcasts followed, one exploring the dental impacts of EDS on Dr Bluestein's 'Bendy Bodies' podcast (www.youtube.com/watch?v=PBj20YrfEO4) and a second on Jaz Gulati's 'Protrusive Dental Podcast' (www.youtube.com/watch?v=gaoJKPTV_Z0). Jaz very openly discussed with Dr Kershaw how he now thinks he might have EDS after suffering a spontaneous pneumothorax (his specialists told him it was a chance occurrence). Before learning about EDS, Jaz had wondered why regularly throughout his life he had suffered shoulder dislocations and many other ailments; if you can't connect the issues, think connective tissues!

Upcoming events

We have a BDA lecture planned for 26 November with Dr Linda Bluestein and Dr Alan Hakim, Chief Medical Officer of the Ehlers-Danlos Society (EDS). In 2021, Dr Kershaw really enjoyed and benefited from attending the Society's ECHO course. Dr Hakim has asked Dr Kershaw to be involved with a dental and oral specific course planned for North America and Europe. We are taking names of those wanting to sign up (contact hello@oralsurgery.scot).

Getting involved and going forward

Dr Kershaw has put together an EDS PACK (tinyurl.com/3kmu73by), which will continue to be updated, to enable other dental professionals to know what to do when they come across suspected EDS cases. This includes tools to aid identification and management such as an extended medical history form, resources to bring patients' and clinicians' knowledge of EDS up to speed, and draft emails to patients and referral letters for GMPs. Dr Kershaw is keen for dental professionals to reach out if they would like access to these resources or any advice about identifying EDS.

Now we have many other dentists recognising HCTD/EDS in their patients, not just in Scotland but also in England and further afield. Dr Kershaw invites any dental professionals to join the EDS Friendly Dental Facebook Group (https://www.facebook.com/groups/1725465841301142) for up-to-date information and research on EDS. Along with colleagues from EDS support UK, we approached MSP Michael Marra and he has brought a motion forward to the Scottish Parliament to improve EDS patient care. Anne Sutherland, EDS UK's Volunteer Lead for Scotland, was instrumental in this success.

Above: Dr Kershaw with Corrie Crompton

Get in touch

Dr Kershaw and her team look forward to seeing you at the 2026 Scottish Dental Show at stand E19 and at her lecture. The concept of HCTD/EDS can be difficult to grasp; we encourage anyone who wants to understand more to reach out to Dr Kershaw to discuss at hello@oralsurgery.scot.

Sponsorship

Thanks for sponsorship go to MDDUS and S4S Dental's Matt Everrat. We are open to sponsors for 2026.

[1]www.sdmag.co.uk/ehlers-danlos-syndrome

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PRACTICE PROFITS FALL AND COSTS RISE

Private practices saw a big drop and it's not good news for associates, according to NASDAL

WORDS
WILL PEAKIN

NASDAL (National Association of Specialist Dental Accountants and Lawyers) Scotland has published its annual Benchmarking Report for the financial period, 2023-24.

The statistics provide average 'state-of-the-nation' figures so NASDAL accountants can benchmark their clients' earnings and expenditure and help them run their practices more profitably. The basis of the survey figures is 2024 tax returns and accounts with year ends up to 5 April 2024.

The statistics show:

- Private practices saw a big drop in average net profit per principal – down to £206,276 from £237,352 in 2022-23. However, net profit as a percentage has increased 0.9%.
- NHS practices showed an increase on last year – net profit per principal to £180,018 from £170,610 in the year ending 2023. Net profit as a percentage decreased slightly, by 0.2%.
- Mixed practices did see a small growth in average net profit per principal – to £199,471 from £191,003 in 2022-23 but a fall in net profit as a percentage of 3.5%.
- All NHS and Private practices saw a decrease in associate fees.
- Increases in costs across the board and laboratory fees up significantly.
- Not good news for associates with a year-on-year decline for the previous three years in net profit and a 1.3% decrease in net profit percentage compared with the prior year.

Roy Hogg, of Johnston Carmichael, Specialist Dental Accountant and Chair of NASDAL (National Association of Specialist Dental Accountants and Lawyers) Scotland, said: "Costs are definitely on the rise, with laboratory costs being the largest of these in 2023-24.

"A reduction in profitability for private and mixed practices was expected – 2022 was higher due to the impact of the pandemic and the last couple of years have perhaps seen less disposable income in the economy.

"It will be interesting to see the effects that global economic conditions have on costs on profits in the next 12-24 months."

Restoring a full arch in just three hours

Dr Henry Cairns presents a recent full arch rehabilitation utilising cutting-edge digital solutions to elevate the final result and significantly reduce treatment time.

Patient presentation

A 71-year-old male patient was referred by another dentist in the practice. His chief complaint was a lack of remaining teeth in the upper arch and he expressed sincere dislike of their appearance. The patient was initially seeking a fixed upper solution, although discussion was also had about improving the lower teeth too at a later date.

Clinical assessment

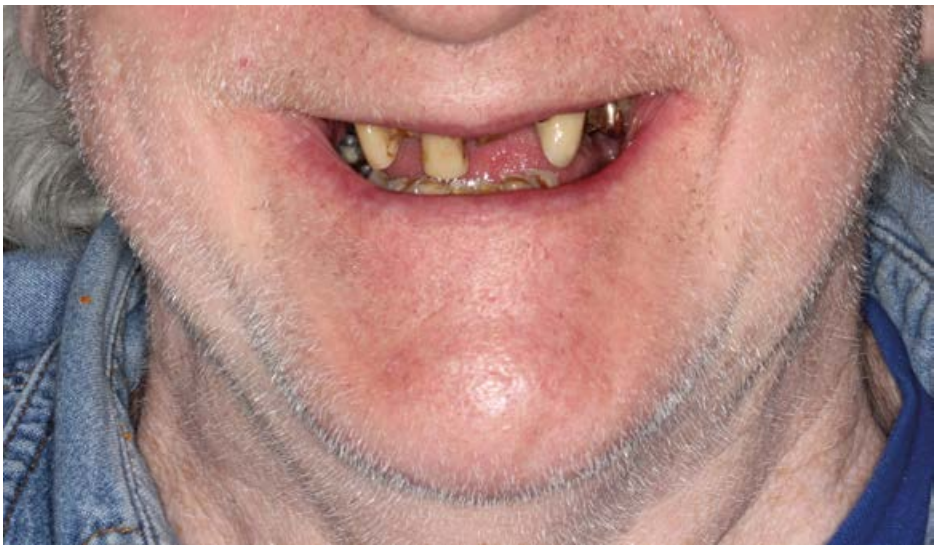
A full assessment was conducted to evaluate the treatment options available. There were six teeth remaining in the upper arch, although most were broken or fractured with poor prognoses. This indicated full arch rehabilitation.

A full suite of clinical photographs, intraoral scans and a CT scan were taken. The option of either a removable or implant-retained denture was discussed in detail with the patient, who favoured a fixed solution.

A digital planning workflow

At Clyde Munro, clinicians have access to the CHROME GuidedSmile workflow, which is designed to increase efficiencies and save time during the implant treatment planning process.

For this case, the scans were uploaded to the software and the ideal implant positions, depths and angles were identified. The laboratory also produced a smile simulation, which afforded the patient the benefit of seeing what his smile may look like post-treatment.



The patient had missing teeth

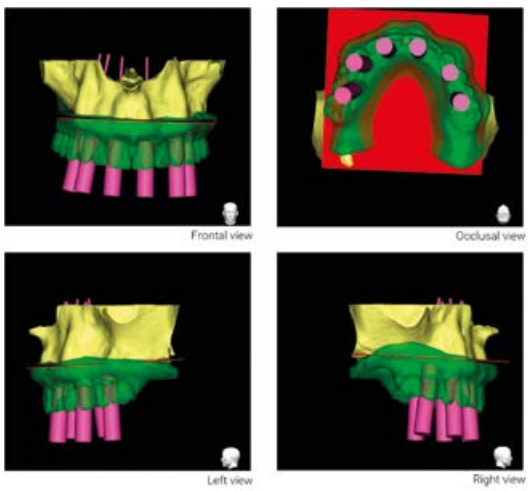
With the patient's informed consent, the treatment plan was approved and a series of stackable guides were designed and fabricated, providing a framework to follow for the surgery. This would involve the placement of six implants in the upper arch, fitted with an implant-retained full arch prosthesis.

Restoring the smile in a day

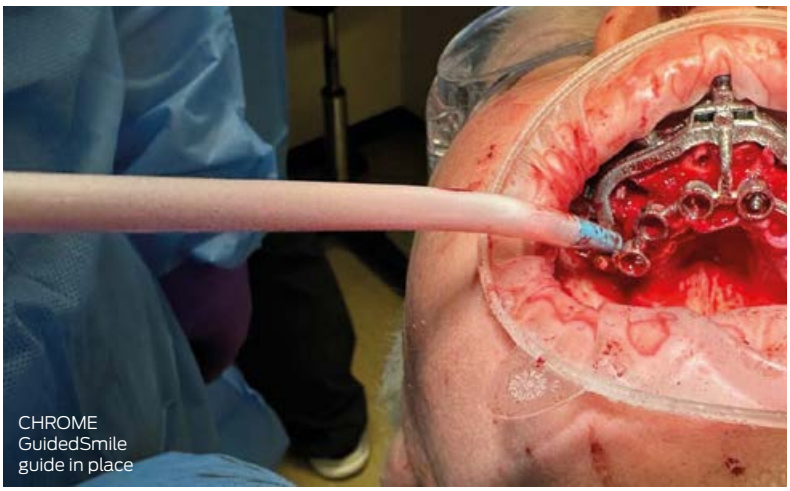
On the day of treatment, the procedure was once again outlined for the patient. Local anaesthetic was administered to the upper arch and a full thickness flap was raised. The CHROME GuidedSmile base guide was placed in the mouth, over the teeth, and pinned into place.

The existing teeth were then extracted as atraumatically as possible. Bone reduction was also performed at this time, using the designated guide to facilitate the removal of hard tissue until the top of the bony structure was flat against the guide. Next in the sequence was the drilling guide, which was placed onto the existing framework. The osteotomies were created by drilling through the relevant guide to ensure accuracy.

Six BTI Interna Narrow implants –



Digital planning of implant placement

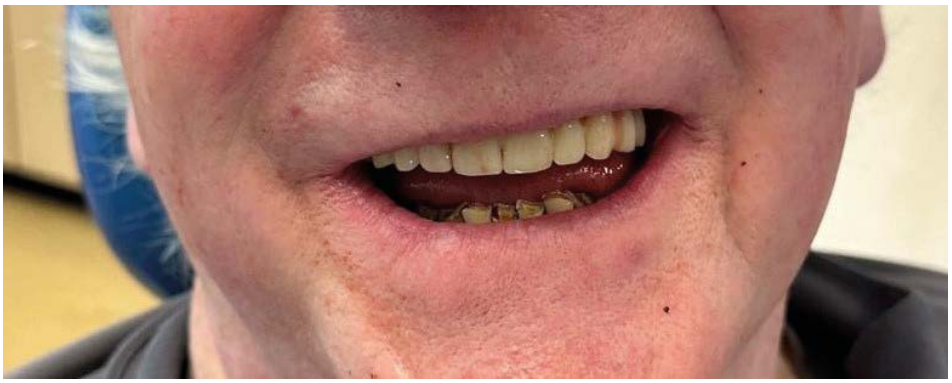


CHROME GuidedSmile guide in place

including five 4mm x 11.5mm implants and one 4.25mm x 8.5mm – were then placed, once again through the guide to precisely achieve the predetermined positions, depths and angles.

The CHROME GuidedSmile drilling guide was then removed and replaced with the prosthetic guide. Two prosthetics are made as part of this workflow prior to the patient visiting for surgery; one is for the patient to wear home as a provisional and the other – known as the rapid appliance – is kept at the practice and used to fabricate the final restoration.

The temporary prosthetic was picked up through the relevant guide and tried in the mouth. With no immediate concerns presenting, the provisional is removed for suturing of the surgical sites and replaced for the patient to leave with a full dentition. The patient



Post-operative temporary prosthesis

> **THE TEMPORARY PROSTHETIC WAS PICKED UP THROUGH THE RELEVANT GUIDE AND TRIED IN THE MOUTH"**

was given standard post-operative instructions relating to oral hygiene and diet, and he was out of the door with an entirely new smile approximately three hours after arriving at the practice.

Outcome

A review was conducted two weeks later, during which the sutures were removed and the provisional restoration checked. Healing continued as expected and, upon review after four more months, the patient was ready for the final restoration.

The workflow was straightforward thanks to the CHROME GuidedSmile protocols. The rapid appliance was placed in the mouth and an analogue impression was taken of underneath the device to pick up the soft tissue contour post-healing. A bite registration was also taken at this time, before replacing the other provisional. These are the only conventional steps in an otherwise entirely digital workflow. The final prosthesis – a zirconia bridge – was fabricated and placed.

Treatment concluded with some composite build-ups on the lower teeth to optimise aesthetics and the patient was thrilled with the outcome.

Discussion points

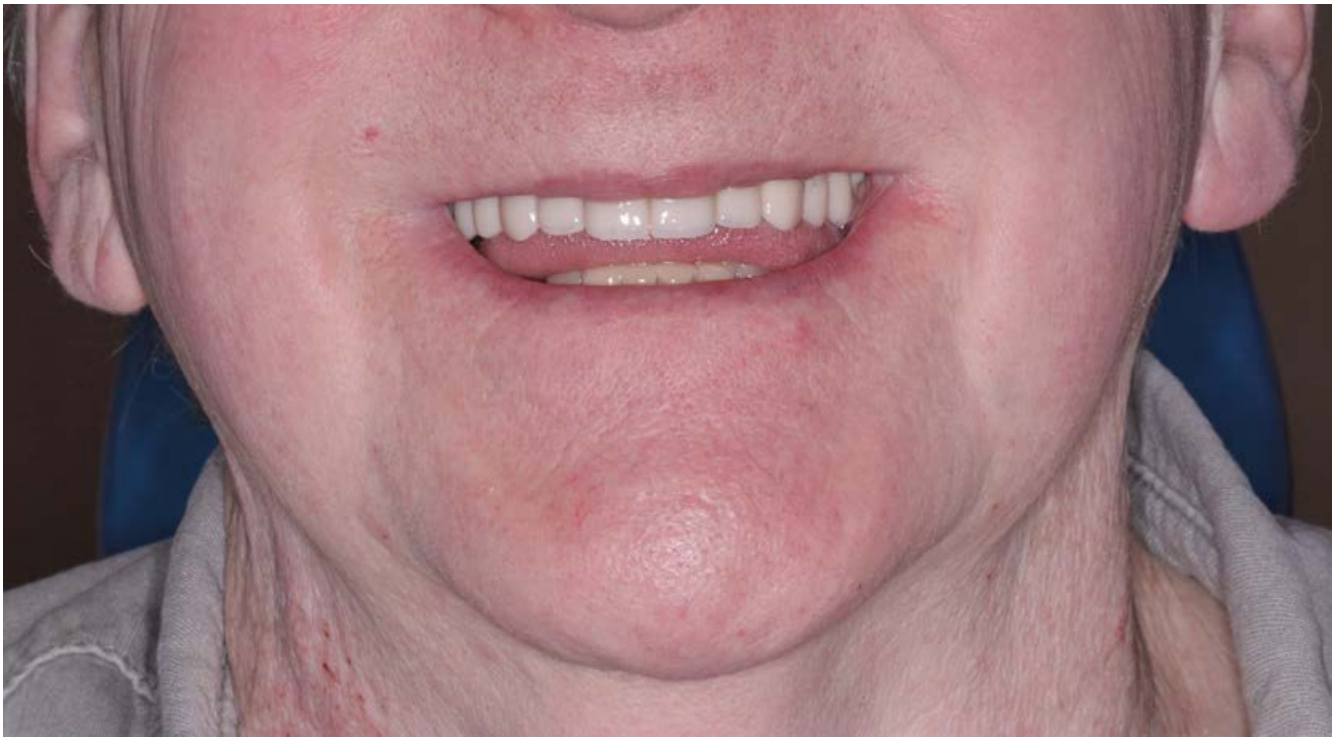
When moving into full arch rehabilitation, it is useful to follow a specific protocol such as the CHROME GuidedSmile workflow. It makes the process more predictable, without any surprises or unnecessary complications on the day of surgery. Every step is preplanned and the clinician need only work through the sequence of guides. This also reduces surgical time, which can otherwise be substantial for full arch cases, which benefits both patient and practitioner.

For clinicians moving into full arch cases, good communication with the lab is crucial. If they can be involved from the planning phase, this will facilitate smoother workflows for all and better outcomes. For any cases that are beyond your remit as a clinician, referral remains key.

> “FOR CLINICIANS MOVING INTO FULL ARCH CASES, GOOD COMMUNICATION WITH THE LAB IS CRUCIAL. IF THEY CAN BE INVOLVED FROM THE PLANNING PHASE, THIS WILL FACILITATE SMOOTHER WORKFLOWS FOR ALL AND BETTER OUTCOMES”

Contact Dr Henry Cairns at Torwood Dental Practice, Inverness, by emailing Henry.Cairns@clydemunrodental.com or calling 01463 712772

Dr Henry Cairns graduated from the University of Dundee in 2016 as a Dental Therapist. He went on to study at the University of Aberdeen to become a Dentist and graduated in 2020. Henry has a diploma in Implant Dentistry and has a special interest in this field.



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TURNKEY SURGERY DESIGN

Vermilion's stunning second floor expansion is a showcase for IWT's expertise and exceptional service

IWT Dental Services was the obvious choice, says Kay MacMillan, General Manager at Vermilion – The Smile Experts. "I have worked with Ian [Wilson] and Bruce [Deane] on two other clinic build projects for Vermilion and we have developed a good working relationship," she said.

Their latest collaboration has been on Vermilion's £800,000 second floor expansion at 24 St John's Road in Edinburgh.

"We were looking to expand our current offering by doubling our clinic capacity, offering our referring practitioners more specialist services and to reduce patient wait times," she said. "It was also an opportunity for us to bring our hygiene and admin team back under the one roof and condense the working week."

The expansion covers 3,500 square feet and comprises a swish reception and staff area, five beautifully executed surgeries, a high-end LDU and space for continuing professional development courses with capacity for live video links to the surgeries.

"IWT was involved in the early stages of planning to install all of our dental chairs, the LDU and X-ray equipment as well as the IT/AV offering," said Kay. "They collaborated with both our architect and builder throughout the project to ensure that nothing was a surprise along the way.

"Bruce also worked with a bespoke supplier to install their high calibre dental cabinets in all of our surgeries and LDU. Ian was responsible for the IT and the audio visual equipment that we have in every area of the clinic."

HOW DID THE PROCESS WORK?

"They attended planning and site meetings – assisting me in the preparation of the new space, back when it was a blank canvas – working out the correct equipment for the practices needs.

< Reception area

Surgery >

They also provided detailed schematic drawings to ensure that the equipment was installed accurately in the surgeries and LDU.

"The install was seamless, with minimal disruption in the clinic during this time. All of the technicians were professional and supportive throughout; the guys are a credit to both Bruce and Ian. There were challenges during the project – it's not surprising with a large team of people working on the build – but I feel we all worked together to achieve an amazing result overall."

WHAT QUALITIES DO IWT BRING TO A PROJECT?

Kay said: "They're personable, they have a hands-on approach, wanting to understand your business needs while offering their knowledge. Ian and Bruce are always there to help."

ABOUT IWT

IWT provides industry-leading solutions for dental practices of any size and at any stage in their development.

Their partnership philosophy offers full optimisation of your practice, equipment and workflow, enabling you to focus maximum attention on your patients.

From single surgery installations to end-to-end managed services, including building works, plumbing, electrics, flooring, dental chairs and bespoke cabinets, IWT are experts in working with you and your team to identify your specific requirements and deliver your vision.

IWT has long-established relationships with leaders and vanguards of dental equipment supply, and their experience in delivering excellence throughout the industry allows them to offer you cutting-edge innovation and complete practicality, regardless of budget. They strive to provide your business with the right equipment, supported by their expert advice and exceptional customer service.

Their service covers IT and networking, dental chair supply, imaging supply and project management.

Their high client retention rate is a source of great pride to all at IWT and is testimony to their dedicated team of expert technicians and the exceptional service they provide.

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THE COMPLACENCY OF SUCCESS

... and the need to avoid it

CHARLES HANDY, the management thinker, author and former head of the Sloan Programme at the London Business School, disliked being referred to as a 'guru'. On the only occasion that I heard him speak, at the University of the West of England, he quoted one of his contemporaries, the equally influential Peter Drucker, who said: "People who described themselves as gurus only did so because they couldn't spell charlatan."

Handy died at the end of 2024, in his 93rd year, and the collection of his final writing, *The View from Ninety*, was published in June. I have read many of his books since I was introduced to his work in the early 1990s, when I enrolled on some courses on business and management with the Open University. At that time I was wrestling with the challenge of balancing management, ethics, making a profit and staying sane. Handy was so far removed from the movement that glorified shareholder value above all other things, including people, whether they be customers or employees, that he helped rescue me from what had become a trough of despair.

The subtitle of his last book, *Reflections on How to Live a Long, Contented Life*, also struck a chord. As time passes, I seem to encounter more and more superficially successful individuals in dentistry. These are people who are, on the face of it, dedicated to their profession; they continue to try to develop their skills but have become, not to put too fine a point on it, unfulfilled and discontented. They feel that the happiness they once obtained from their chosen profession is dwindling and, this time, it feels as if it would barely register as a blip on a contentment meter.

Since selling my practice two decades ago, I have helped people get some order into their own businesses using a framework based on *The Seven Pillars of A Successful Dental Practice*©. Increasingly however I have been assisting my clients – through mentoring, coaching and guiding – to discover balance and success in their bigger lives, including, but definitely not limited to, their business.

There would appear to be a general rise in disillusionment at the moment. I am reminded of the story *Disillusionment*, by Thomas Mann, which was adapted for the song *Is That All There Is?* The narrator tells the tales of three events in their life which are supposed to be unique experiences, yet have little effect on them, causing them to ask: "Is that all there is?"

In *Understanding Organisations*, first published in 1976 but still highly relevant today, Handy identifies the importance of culture within an organisation. His thoughts and beliefs on the role of conflict and change are timeless in many ways. On conflict, he wrote: "Conflict is natural and can be constructive if managed well". While he said of change that "organisations must embrace and adapt to change, must be flexible and need to exhibit continuous learning".

The practical applications are that there is no room for rigidity and excessive bureaucracy in any organisation, large or small. Indeed, for success you need adaptability, be people centred and agile.

My paperback copy of his book, *The Age of Unreason*, is falling apart because I kept it with me and dipped into it so many times. Its core messages still resonate:

- The thinking that got us to where we are now is not enough to get us where we will need to go. He encouraged us to think "counterintuitively".
- Organisations need to change; he described a "three-leaf shamrock organisation" (he was an Irishman and knew they were all three-leaved but didn't presume of his readers).

1) There would be core workers who were permanent and highly skilled.
2) Specialised tasks would be done by external firms.
3) Flexible labour would be required on a part-time, 'gig-working' basis.

He anticipated the challenges ahead for this structure.

- People would not have a 'job-for-life', and we should all cultivate a portfolio of skills and income streams. He described this as 'The Portfolio Life' and the mix of part-time, freelancing, learning, volunteering and leisure is one I, and many others, have embraced.
- He wrote of a form of 'servant leadership', later well described by Robert Greenleaf, where organisation structures were inverted.
- Education had to change to embrace critical thinking, adaptability and creativity. I think we're still waiting.

Finally and very important, was his description of 'The Second Curve', later expanded into another book, which can be summed up as 'the complacency of success and the need to avoid it'.

As the peak of success is approaching and before decline sets in, whether that is organisations or individuals, you must jump to a second curve. That can be a new business model, a career or a new invention. My own thinking on this is that you must imagine your success as a soap bubble on the palm of your hand, take it for granted, try to grasp it and it disappears.

In the dawning days of the 'AI revolution' we should all consider Handy's writings and his "unreasonable" thinking. May he rest in peace, but may his thoughts, writing and work persist for all our benefit.

WORDS
ALUN K REES

Alun K Rees BDS is The Dental Business Coach. An experienced dental practice owner who changed career, he now works as a coach, consultant, trouble-shooter, 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.

alunrees@mac.com

BUILDING BUSINESS IN ENDODONTICS

Nicolas Coomber, COLTENE National Account and Marketing Manager, on the aspects to consider

Business development and growth is a priority for practice principals and their teams across the UK. The turbulence of the national economy means that you never know what is around the corner, increasing the importance of future-proofing and enhancing business resilience. For those looking to achieve this by maximising their endodontic offerings, there are several aspects to consider.

TEAM

As many as 94% of general dental practitioners refer patients for an endodontic problem in the UK. This number may increase further when considering newly qualified clinicians, with endodontic confidence among dental students found to be highly varied, peaking when faced with advanced situations – as would be expected. The reasons for referral vary, but most commonly include anatomical challenges, root canal retreatment, trauma, medical factors and iatrogenic errors. To establish yourself as a competent referral centre, it's crucial that your team can confidently take on such cases. As demand for services grows, the team must be adequately trained and prepared.

This might mean advancing the skills and capabilities of in-house staff, facilitating clinical courses or even supporting individuals on the pathway to specialism. It is also necessary to consider the training needs of more than just the clinicians. For example, dental nurses are integral to smooth and effective endodontic procedures, so ensuring they have sufficient skills and confidence in the field is essential. In addition to investing in the team, the opportunity to diversify skills and use their full scope of practice is great for increased job satisfaction among team members as well. In a world where staff retention is crucial – especially with regards to talented dental nurses – this can only be a positive for the future of the business.

MARKETING SERVICES AND REFERRAL RELATIONSHIPS

Once the team is in place, attention should turn to promotion of the services available. This may take different forms depending on the practice's situation, but will likely centre around building a trusted referral network. Direct marketing tends to work well in order to effectively target practices in the surrounding area who may not offer advanced endodontic care in-house. Sending flyers, emails or even giving them a call allows you to communicate exactly what you offer and how you can help them and their patients.

Once colleagues show interest or even start referring patients to you, managing this professional relationship becomes crucial. Communication must be kept open and consistent, both during an active referral and beyond. When a referred patient is undergoing treatment, be sure to keep the routine clinician informed of progress, maintaining a collaborative approach where appropriate. Between patients, consider sending regular marketing materials to your referral network that advise of any additions to your team, services or technologies, reminding them that you are there when they need to provide advanced endodontic care to their patients. This is complemented by a strong online presence, which should include an easy-to-navigate website and up-to-date social media platforms, with the option for targeted digital advertising. Additional promotional opportunities include the provision of study clubs for local clinicians to attend and lecturing at industry events.

Much of this continuous communication with the wider profession is about maintaining and enhancing the reputation of your practice among the profession. Sharing positive reviews from other referring clinicians is a powerful way of demonstrating the standards you achieve and encouraging others to work with you. It also gives potential new business partners a chance to get to know you and your team, building respect and trust over time.

CLINICAL STANDARDS

Of course, in order to achieve those high clinical standards that colleagues and their patients will appreciate, it is crucial to use evidence-based techniques, cutting-edge technologies and clinically-proven instruments. Utilising renowned guidelines and consensus documents in the field is useful, such as the Guide to Good Endodontic Practice from the British Endodontic Society.

The tools employed are just as important, having an impact on everything from the accuracy and speed of treatment to patient comfort and long-term satisfaction. COLTENE offers an array of solutions that have been developed specifically to help clinicians overcome common challenges in endodontics. The innovative HyFlex EDM files, for example, are designed for optimised fracture resistance and flexibility, with shape memory and high cutting efficiency to elevate the professional workflow.

A BRIGHT ENDODONTIC FUTURE

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Martin Aitken & Co merged with Armstrong Watson in April, bringing together the Glasgow teams of both businesses and combining forces into a 150-strong team of accountancy advisory professionals dedicated to supporting the dental sector.

To learn more about the services Jayne and the team at Armstrong Watson can offer your dental business, call 0141 233 0846 or email jayne.clifford@armstrongwatson.co.uk

FIXING THE NHS WON'T WORK WITHOUT DENTISTS

David Chong Kwan on workforce, politics and private practice

In a candid conversation with Practice Plan, that ranged from team-building strategies to national health policy, Scottish dentist David Chong Kwan offered a clear-eyed assessment of the state of dentistry in the UK. Speaking from his Dunfermline-based practice, Kwan reflected on what he sees as the biggest threat to NHS dentistry – not funding, but the people. "The workforce crisis isn't new," he said. "It's been deepening for over a decade. You can probably track it back to when they closed dental schools in the late 1990s. We told them it would cause problems – and here we are."

Despite being a private practitioner who runs a membership plan model, Kwan's commitment to the principles of the NHS is unequivocal: "Fundamentally, I believe we should have an NHS," he said. "I believe the NHS should look after people. That's what you pay your tax for."

Yet he is clear that idealism must be matched with realism. "You can't keep heading towards American-style taxation and expect Scandinavian-style services," he said. "Until people are prepared to pay a bit more – especially at the top – this system can't sustain itself."

A DATA-DRIVEN ADVOCATE

Kwan has become an unexpected figure in the policy space, leveraging Freedom of Information (FOI) requests submitted by MPs from across the political spectrum to extract workforce data from the General Dental Council (GDC). "I've just got a shedload of data that I'm struggling to wrap my head around," he admitted. "But my main complaint is the GDC's sluggishness in responding to the workforce crisis." He argues that NHS reform is meaningless if there aren't dentists available to deliver the care. "It doesn't matter how much you fix the system - if there aren't enough dentists to work in it, patients will continue to drift toward private practice."

INDEPENDENCE WITH INTENT

For Kwan, practice independence is not just a preference – it is a principle. He runs his business valuing the freedom and transparency that come without corporate shareholders or holding companies.

SYSTEMIC BLIND SPOTS

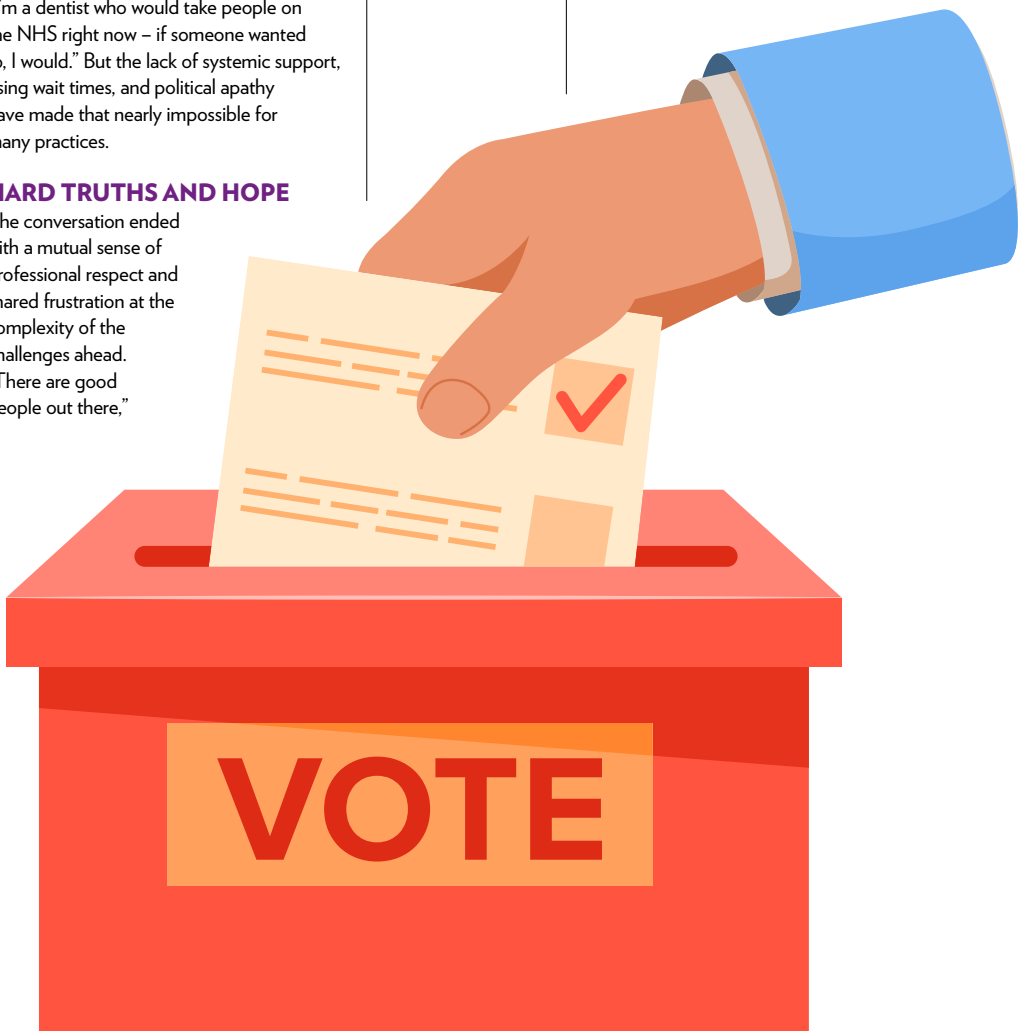
Beyond dentistry, Kwan raised broader concerns about the disconnect between healthcare and social care policy in the UK. "Social care blocks beds in healthcare, but we still don't have a unified approach," he said. "They think in silos – and that's not how it works." He also expressed frustration with the current political climate, particularly regarding immigration and its impact on the NHS workforce. "All politics seems to do is reduce our NHS workforce by tarring all immigrants with the same brush. I think the recruitment problem is going to get worse." Despite this, he maintains optimism and a willingness to act for the greater good. "I'm a higher-rate taxpayer, and I'd be prepared to take a bit of a hit if I thought it was going to do something," he said.

LEADERSHIP AND LEGACY

Kwan did not hold back when talking about leadership in dentistry, including the regulatory and policy landscape. He noted his recent acquisition of GDC data, which he plans to analyse for patterns and potential policy failings. In the end, it is clear that his heart lies with patients, whether they are served by the NHS or through private means. "I'm a dentist who would take people on the NHS right now – if someone wanted to, I would." But the lack of systemic support, rising wait times, and political apathy have made that nearly impossible for many practices.

HARD TRUTHS AND HOPE

The conversation ended with a mutual sense of professional respect and shared frustration at the complexity of the challenges ahead. "There are good people out there," Kwan noted. "Look at Bill Gates – he's giving away a fortune. But then you've got Elon Musk... well, let's not go there." Whether advocating for structural reform, championing independence or simply fighting for better care, Kwan is a dentist who speaks not only from experience but from a deeply held belief in fairness, integrity, and doing what's right. As he put it: "It's a damn shame. We can do better." This year, Practice Plan celebrates 30 years of welcoming practices into the family, helping them to grow profitable businesses through the introduction of practice-branded membership plans. If you're looking to switch provider or are considering a full or partial move away from the NHS, why not start the conversation with Practice Plan by giving us a call on 01691 684165, or for more information visit the Practice Plan website: **www.practiceplan.co.uk**



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CAN YOU DRIVE YOUR DENTAL PRACTICE'S VALUE BEFORE A SALE?

Martyn Bradshaw from PFM Dental discusses the key factors

For dentists looking to sell their practice in years to come, with some planning and guidance you can significantly increase its value first. This is an exercise we have undertaken with a number of practices and some relatively small changes have increased the value by circa £500,000. This is achieved by really understanding the key drivers of the valuation and making these work for you.

KEY METRICS

The valuation of the practice is determined by applying a multiple to the EBITDA, therefore Principals will often look at the turnover and profit to judge how well they are doing. But these figures are after the event and more of a result of what you are implementing. As such, it is useful to track things such as new patient acquisitions, retentions and recall effectiveness. Review on a monthly basis the appointment target against actual performed, plan patient numbers seen against expectations and private growth per clinician.

PRIVATE CONVERSION?

While this may not be something that you may wish to do in the latter few years of your career, we have seen a number of clients undertake part or full private conversions. This can provide a number of benefits, as well as giving more clinical freedom.

At present there are more buyers looking for private practices than NHS, especially if you are of a size that would suit a corporate (typically when turnover is exceeding £1,000,000 to £1,500,000). As such, you will likely open yourself up to more buyers.

A second factor demonstrated clearly in the valuation is that a private conversion will often lead to a higher turnover and profitability of the practice. Private plans can often be seen as advantageous as there is third-party administration showing patient numbers and they also provide the practice with regular monthly income.

OPERATIONAL EFFICIENCY

High values are achieved by ensuring that a dental practice is running as efficiently as possible. If there is a spare surgery (or room to fit a surgery) in the practice and sufficient patient base to fulfil this, then this is where

real value can be created. If we assume that most of the overheads would remain fairly static, then generating a further £300,000 in gross fees could give extra EBITDA of around £93,000 (after £138,000 associate cost, £24,000 lab, £15,000 materials, £30,000 nurse). If we assume we are working on a seven multiple then this would give extra value of £651,000.

There may also be available capacity where each surgery is not running every day. Whether filled by a new associate or hygienist/therapist, make sure that you are maximising what you can.

TREATMENT COSTS

While some practices are now getting used to increasing patient charges, as required, others can be more reluctant or still fearful of increasing pricing to counteract cost increases. As costs increase, there is a real need to ensure that the prices are going up at least with these, to ensure that the EBITDA is not reducing (like for like).

CONCLUSION

It may seem obvious to focus on the business but it is easy for one year to drift into another without any clear push to grow the dental practice and, in turn, increase the value of the practice. It can also be easy to go down a wrong path and not focus on the elements that will really increase the practice value. When possible, get professional guidance – having a valuation (regardless of what stage of career you are at) and looking at ways to then enhance this, can be a good start.

Martyn Bradshaw is a Director of PFM Dental. With more than two decades of experience, he understands the intricacies of dental practice sales to corporates, private buyers, partners and associates alike. PFM Dental is one of the leading dental sales agencies in Scotland. Learn more by visiting ***pfmdental.co.uk***

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Thinking of selling your practice?

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Braehead Arena, Glasgow

Buying or selling a dental practice?

Whether you're preparing to sell your practice or take your first steps into ownership, our team is here to guide you through the process with clarity, confidence, and care.

Thinking of buying? Set yourself up for a successful purchase.

What are you buying? Assets, goodwill or shares?

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Thinking of selling? Make your next move with clarity and confidence.

Valuation matters: Based on turnover or EBITDA, but ultimately down to what a buyer is willing to pay

Corporate buyers: May offer more but often come with conditions and deferred payments

Associate buyers: Flexible and familiar but may require more time and funding

Tax implications: Capital Gains, Income Tax and Inheritance Tax need careful planning

Legal support: Work with solicitors experienced in dental practice sales

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Taking care of **dental** business

For the outcome you're looking for – whether that is buying or selling your practice, advice on associate agreements, partnership agreements and/or shareholder agreements or specialist immigration advice, to property matters, employment law and data protection - speak to our expert Dental Team for **specialist legal advice**.

SUCCESSION PLANNING

Make sure that you do not neglect getting your personal affairs in order, writes Corah Franco

As a practice owner, your day to day will be consumed with the delivery of patient treatment and the task of managing, developing and growing your business. With the busy schedule of most practice owners, planning your own personal affairs usually takes a back seat.

However, with recent changes to Inheritance Tax, including significant reforms to Business Property Relief announced in the Autumn Budget 2024 (due to take effect from April 2026), this could have a considerable impact on your estate, making it more important than ever to seek specialist advice.

Succession planning is essential if you want to avoid any unintended consequences should you become seriously ill or die. As your estate will likely consist of both personal and business assets, there are various considerations required when planning for the future. However, an easy and fundamental starting point is to make a Will and Power of Attorney.

You should consult a specialist Solicitor with regards to making a Will. As part of this process, they can carry out a full review of your estimated Inheritance Tax position to establish what tax reliefs may be available against your personal and business assets on your death and factor this into the shape of your Will. A detailed discussion should also be had about who you would like to benefit from both your personal and business assets on your death (your beneficiaries) and who you wish to have the authority to wind up your estate and deal with all the necessary tax administration (the Executors).

The assumption that your estate will automatically pass to your spouse/civil partner or children if you don't have a Will is incorrect. Without a Will, no family member will have any automatic powers to deal with personal or business assets on your death. Not having a valid Will is leaving matters outwith your control and has the potential to cause problems for both your family and your business. You also need to ensure that in the event of an untimely death, the business is not disrupted and there is a planned route to allow the business to continue operating.

As a further consideration, if you are in practice with others as a partnership or limited company, you need to have arrangements in place with your co-principals which address eventualities such as long-term illness or death.

The second step is to ask your solicitor to prepare you a Power of Attorney. By making a Power of Attorney you are confirming who will be your Attorney (or Attorneys) should you require assistance with running your finances, or if you become very ill, to make decisions about your welfare.

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You can only make a Power of Attorney while you retain the capacity to do so. Often, individuals leave it too late to make a Power of Attorney as they have already become very ill. A family member then has to apply to the Court for a Guardianship Order, a costly and burdensome process which is not designed to assist individuals with complex business interests. Within the Financial Powers of a Power of Attorney, in some circumstances, provisions can be included which relate specifically to your business.

While the development of your business will be your focus week to week, make sure that you do not neglect getting your personal affairs in order by making a Will and Power of Attorney.

Thorntons Dental Team are specialists in the sector and we would be happy to guide you, with our expertise, in making a Will and Power of Attorney. Get in contact with one of the team today on 03330 430350 or visit our website at www.thorntons-law.co.uk

LOOKING TO BUY A DENTAL PRACTICE IN SCOTLAND? HERE'S WHERE TO START

In this article, Kevin Strain, Senior Business Agent – Dental at Christie & Co, shares some key tips

Buying a dental practice is an exciting goal for many dentists, offering numerous benefits. Here are some key considerations before purchasing a practice in Scotland.

CHOOSING A PRACTICE

When planning your next steps, consider whether you'd prefer to own an NHS, private, or mixed-income practice, and think about the number of surgeries, the location, and your commuting distance. Flexibility is essential here, as not every practice will meet all your criteria, so go in with an open mind.

STARTING YOUR SEARCH

Register your interest with a dental agent to help you with your search. Avoid agents who charge you fees – those should sit with the seller – and a fair agent will share practice details with all interested buyers to ensure equal opportunities.

FINANCING YOUR PURCHASE

In most cases, a deposit of between 5% and 20% is required to purchase a dental practice in Scotland.

If you require financial help, it'll be useful to know that the dental market is considered a prime sector for funding due to its needs-driven nature, so consult with a specialist finance broker to ensure you're getting what you need at the right rate.

TRUSTED ADVISORS

Engage a solicitor and accountant who specialise in the dental sector, as their expertise will help you navigate the process smoothly, avoiding common pitfalls.

Kevin Strain
Senior Business Agent at Christie & Co
E: kevin.strain@christie.com
M: 07701 315 069

BE PREPARED

The dental sector is secure, profitable and driven by need, and therefore, there is plenty of competition from like-minded buyers. If you lose out on a sale, don't be too disappointed – the market is full of other opportunities, and the right one is out there for you.

To find out more about the dental market in Scotland, or for a confidential chat about your business options, contact Kevin Strain.

CONNECTION, COMMITMENT AND CAPACITY

Making a meaningful difference to the practices and people we work with

It was a real pleasure for us to attend this year's Scottish Dental Show and reconnect with so many clients, friends and colleagues across the profession. While the challenges across the sector are ever-evolving, it remains an uplifting and energising experience to be reminded of the shared purpose, passion and camaraderie that exists in Scottish dentistry.

At Dental Accountants Scotland, we remain fully committed to making a meaningful difference to the practices and people we work with. Our work is about more than just numbers – it's about helping practice owners achieve clarity, confidence and control in their professional and personal lives.

We're honoured (and if we're honest, a little overwhelmed) by the volume of dentists who now wish to work with us. As a result, and in order to protect our service levels, we are now operating on a waiting list basis. It's a position we never take for granted and one that we believe reflects the depth of relationship and quality of outcomes we aim to deliver.

We remain proudly independent and entirely focused on the Scottish dental sector. Our conversations are not always about profit and tax – more often than not they're about purpose, people, or peace of mind. We see it as a privilege to be trusted advisors on the journey of practice ownership, and we take that responsibility seriously.

As always, if you're at a crossroads, planning for growth or just need a sounding board – we're here. And if there's a short wait before we can work together, we'll make sure it's worth it. Wishing you continued success and calm through the months ahead.

Victoria Forbes
Director, Dental Accountants Scotland
E: victoria@dentalaccountantscotland.co.uk

SUPPORTING PRINCIPALS WITH NEW START FUNDING

Performance Finance are experts in dentistry and can help you become a practice owner

After qualifying and then spending a few years building experience as an associate, many dentists have a desire to start their own practice.

Many might consider a 'high street' bank for funding. However, the banks' particular expertise is normally with mortgages for the premises and overdrafts for working capital.

In terms of equipping and fitting out a practice, it is often more advantageous to team up with a dental specialist finance provider who understands your industry and can work with you while offering support during this important step in your career.

Finance is a great option, with key advantages including:

- Equipment can be financed anywhere between six months and seven years, therefore allowing the cost to be spread evenly over the term.
- 'Low start' and payment deferral options can also be considered.
- Refurbishment and fit-out costs can be financed anywhere between six months and five years, again allowing the cost to be spread evenly over the term.
- Approvals are normally achieved within a day or two of receiving the information.
- Credit approvals last for a minimum of three-months, therefore giving you plenty of time to start on the other action points; such as premises, lease, marketing, staff etc.

All funding facilities come with an option to take ownership at the end of term; no peppercorn or lifetime rentals. Performance Finance is an expert in dental funding and is renowned for maximising tax allowances when funding surgeries, reception areas, sterilisation rooms, IT, digital equipment and new start practices. We offer an exceptional range of services, not only requirements of the business but also maximising those all-important tax allowances.

Contact Performance Finance.
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W: www.performancefinance.co.uk/contact-us

THE 'GO-TO-GUY' FOR COMPLEX CASES

Duncan Robertson, of Snow Ceramics, works to the highest standards

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By embracing cutting-edge techniques and using the latest restorative systems, Snow Ceramics streamline workflows to save you time while maintaining exceptional quality.

Snow Ceramics is headed by Duncan Robertson who qualified as a ceramic technician in 2003 with an HND from Edinburgh's Telford College, specialising in fixed prosthodontics and ceramics.

He has more than 25 years of experience in the dental industry working in the public and private sectors with a speciality in full-arch zirconia fixed restorations. He has become one of the 'go-to-guys' for more complex cases.

Duncan has also worked as a lecturer at Edinburgh's Telford College delivering the dental technology course to all levels.

"I've a keen interest in aesthetics and porcelain work," said Duncan, "and continually look to strengthen my knowledge and skills, always looking to learn new techniques, keep up with the latest systems and materials, and implementing these into the everyday workflows to try to stay ahead of the industry."

E: snowceramicsltd@gmail.com
W: snowceramics.co.uk

› DENTAL ELITE

"I CANNOT RECOMMEND DENTAL ELITE ENOUGH"

DENTAL ELITE supports clients with all aspects of a dental practice sale or purchase.

The dedicated team of experts within the specialist dental finance arm of Dental Elite, DE Finance, prides itself on making the process of financing your new dental practice as seamless and stress-free as possible.

Dr Ahmer Ali recently commented on the support he received: "It was a very easy experience acquiring the practice. The professionals at Dental Elite and DE Finance were all very helpful in arranging everything from start to finish.

"Tommy Glasscoe [pictured], Finance Broker at DE Finance, was especially helpful in factoring in all the numbers. He was always there on the other end of the phone, giving his professional advice without bias.

"I cannot recommend Dental Elite enough for the great help that they provide."

To find out more about the services offered by Dental Elite, contact the team today!

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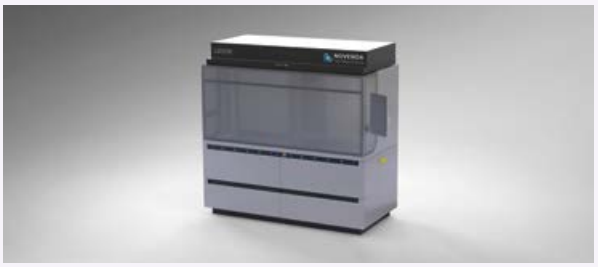
› NOVENDA

NOVENDA TECHNOLOGIES TO REVOLUTIONISE DENTAL PRODUCTS



NOVENDA TECHNOLOGIES has announced $6.1m in funding to transform dental product manufacturing with its revolutionary multi-material 3D printing technology. This innovative solution aims to make high-quality dental care better, more aesthetically pleasing, accessible and affordable.

The company's full stack technology enables the manufacturing of more comfortable, natural-looking dental products that combine hard materials for protection with soft materials for comfort – all in a single piece. This represents a fundamental shift in dental product manufacturing.

While traditional methods require manual assembly and post-processing, the company's platform combines multiple materials seamlessly in a single print run, using water-soluble supports that dissolve with a simple tap water wash. Novenda Technologies has developed smart print modes that achieve precise layer control without mechanical rollers – a limitation that causes ink contamination and restricted colour capabilities in competing systems.

The system can produce up to 15 nightguards and eight dentures per hour, making it ideal for mid-size and large dental labs. While Novenda's LD100 printer represents a one-time investment, the LD100 works exclusively with its own materials to ensure quality and biocompatibility, generating recurring revenue while maintaining strict quality standards.

Looking ahead, Novenda plans to expand its platform to other dental applications and eventually enter new markets where individualised mass manufacturing is key. The company's immediate focus is on deploying its technology in large and mid-size dental labs across Europe and the US, where its high-throughput, automated solution can help meet growing demand.

For more information, visit tinyurl.com/3uze3yhw
Story courtesy of stockwoodstrategy.com

› CARESTREAM

FUTURE-PROOFING YOUR PRACTICE WITH AN ADAPTABLE AND SCALABLE IMAGING SYSTEM

CARESTREAM DENTAL provides the CS 8200 3D Advance, an incredibly versatile 2D/3D imaging system. Maintaining the ultra-compact and award-winning smart design of the CS 8200 3D lineage, its panoramic mode minimises radiation exposure without compromising image quality.

Designed to grow alongside your practice, it allows effortless recommendation of the correct treatment to each patient. With three upgradable field of view (FOV) configurations (8×9 cm, 12×10 cm, and 16×10 cm), the Advance edition adapts seamlessly to clinical changes and requirements, placing your practice constantly ahead in the industry. With 11 selectable and extended FOV options, the CS 8200 3D Advance offers vast ability including full-arch, TMJ, sinus, and airway scans, all at high resolution.

AI-powered software tools are user-friendly and automate planning tasks, significantly accelerating treatment preparation and simplifying workflow. It also offers panoramic curves mapping, nerve canal tracing, CBCT and intraoral scan matching, and virtual crown placement.

Built on an open platform, it integrates readily with third-party intraoral scanners and devices, future-proofing your investment and adding invaluable efficiency to workflows.

Carestream DENTAL

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› DD

MUCH MORE THAN A PRODUCT SUPPLIER

DD has long been known across the dental profession for supplying an all-inclusive range of products.

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DD has been supporting the UK dental profession for five decades, providing a comprehensive range of products and technical services.

The available portfolio encompasses everything from restorative materials and endodontic handpieces to decontamination equipment, CBCT imaging units, facial aesthetics and more.

Complementing these solutions is an extensive equipment testing, repair, validation and maintenance service, delivered by a team of multi-skilled engineers nationwide.

As such, we return repaired handpieces within 48 hours and even guarantee an engineer will be on-site when required within eight hours. Plus, we achieve a first time fix rate of well over 90%, with all repairs accompanied by a warranty for total peace of mind.

At DD, we are proud to offer more than 30,000 products and equipment solutions while supporting more than 12,000 dental practices across the UK. See what we could do for you today.

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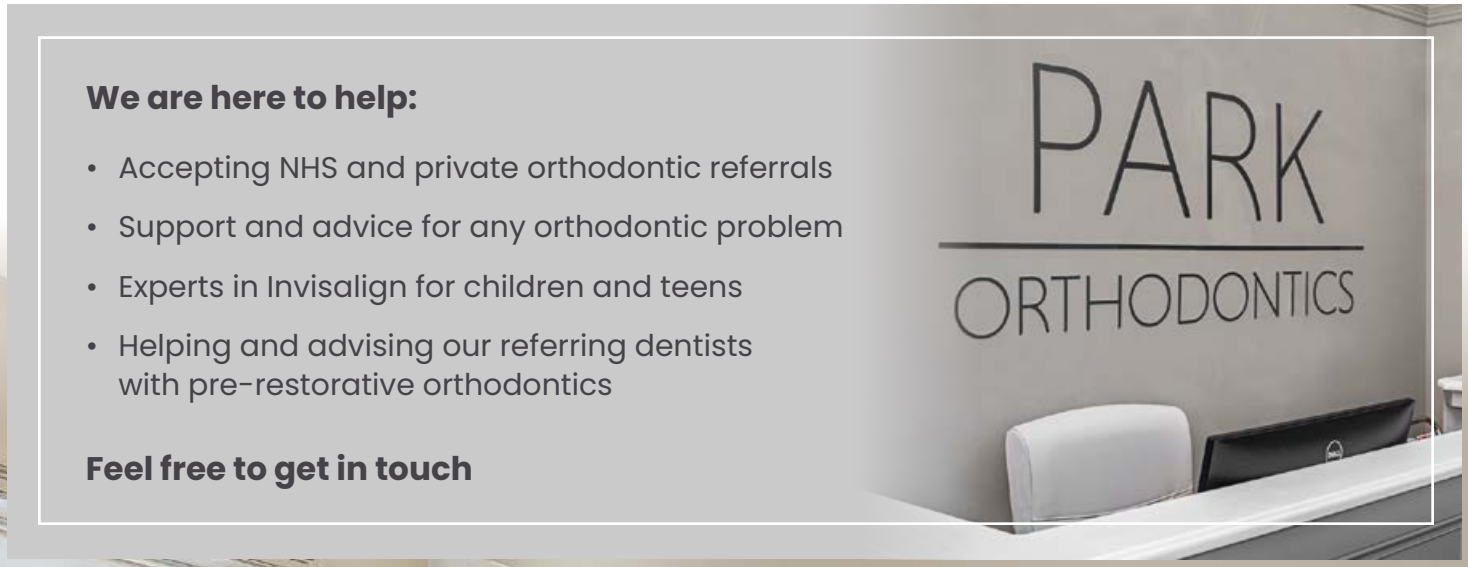

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"IWT have been supporting our practice IT network for many years so we were happy to discuss our new surgery requirements with them. IWT's hands-on approach throughout the purchase process and surgery design through to the end to end management of the new surgery installation greatly reduced any potential disruption to the practice throughout the surgery refurbishment project. In addition to the exceptional service and support we received throughout the surgery works, we have been delighted with the Stern Weber dental unit and the ongoing support from IWT."

Alastair Fraser, Principal Dentist, Greygables Dental

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