

Juncol Juncol Journal of the Irish Dental Association Iris Cumainn Déadach na hÉireann Volume 71 Number 3

June/July 2025

Handling negative online reviews

Received a complaint? We can keep it the right size.

We're not only here to help with claims. Our dentolegal team bring all their expertise, empathy, and local experience to see you through complaints, disciplinary and regulatory proceedings, and criminal investigations related to your professional practice. Here for you 24/7 in a dentolegal emergency.

Put your future in safe hands. Join us.

dentalprotection.org

Always there for you



Dental Protection is a trading name of The Medical Protection Society Limited ("MPS"). MPS is a company limited by guarantee in England with company number 00036142 at Level 19, The Shard, 32 London Bridge Street, London, SE1 9SG. Dental Protection serves and supports the dental members of MPS with access to the full range of benefits of membership, which are all discretionary, and set out in MPS's Memorandum and Articles of Association. MPS is not an insurance company. Dental Protection® is a registered trademark of MPS. For information on MPS's use of your personal data and your rights, please see our Privacy Notice on the website.

HONORARY EDITOR	Dr Cristiane da Mata BDS MFD (RCSI) Dip TLHE MPH Phd FFD RCSI journaleditor@irishdentalassoc.ie
DEPUTY EDITOR	Dr David McReynolds BA BDentSC MFDS RCSEd DChDent (Pros) FFD RCSI
EDITORIAL BOARD	Dr Meriem Abbas BDS (NUI) MFDS RCSEd PGDip TLHE Una Farrell Dip Dental Hygiene Dr Geraldine McDermott BA BDentSc MFDS (RCSI) PGradDip ConSed (TCD) MSc Healthcare Leadership (RCSI) Dr Clair Nolan BDS (NUI) MSc (Endo) U. Lond Dr Adedeji Daniel Obikoya BChD MFDS (RCSI) MSc Dr Judith Phelan BDS (NUI) MDS (NUI) MSc (U Lond) MRD (RCS Eng and Glas) Dr Patrick Quinn BCL BDS LLM MDPH Dr Catherine Vaughan BDS (NUI)
IDA PRESIDENT IDA CHIEF EXECUTIVE CO-ORDINATOR	Dr Will Rymer Fintan Hourihan Liz Dodd

The Journal of the Irish Dental Association is the official publication of the Irish Dental Association. The opinions expressed in the Journal are, however, those of the authors and cannot be construed as reflecting the Association's views. The editor reserves the right to edit all copy submitted to the Journal. Publication of an advertisement or news item does not necessarily imply that the IDA agrees with or supports the claims therein. For advice to authors, please see: https://jida.scholasticahq.com/for-authors.



Published on behalf of the IDA by Think Media, 537 NCR, Dublin 1 T: +353 1 856 1166 www.thinkmedia.ie

ADVERTISING DESIGN/LAYOUT

MANAGING EDITOR Ann-Marie Hardiman ann-marie@thinkmedia.ie Colm Quinn Paul O'Grady Rebecca Bohan, Tony Byrne

colm@thinkmedia.ie

paul@thinkmedia.ie



Audit issue January-December 2023: 3,867 circulation average per issue. Registered dentists in the Republic of Ireland and Northern Ireland.

Irish Dental Association Unit 2 Leopardstown Office Park, Sandyford, Dublin 18. Tel: +353 1 295 0072 Fax: +353 1 295 0092 www.dentist.ie Follow us on Facebook (Irish Dental Association).

Follow us!

in irish-dental-association irishdentalassociation

		120	
109	EDITORIAL	137	QUIZ
105	The power of connection	120	
111	ASSOCIATION NEWS	138	PEER-REVIEWED Oral cancer perceptions among adult attendees of a dental hospital in the Republic of Ireland:
113	IDA NEWS		a cross-sectional pilot study S. Anishchuk, S. Galvin, G. Moran,
	Autumn CPD programme;		C.M. Healy
	Bank CPD points with the	1 42	
	IDA webinar library	143	CLINICAL TIPS Shade selection and communication
115	BUSINESS NEWS		communication
	All the latest news from	146	ESSAY PRIZE
	the trade	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Cone-beam computed tomography (CBCT) in endodontics: diagnostics,
120	ANNUAL CONFERENCE 2025	0 0 0 0	treatment planning, and
	Charting the way forward		outcome assessment C. Holden, H. Duncan
125	COMMENTARY	148	NEW DENTAL SCIENCE
	What should HSE secondary	140	
	and tertiary care look like?	149	PRACTICE MANAGEMENT Handling negative online reviews
133	PEER-REVIEWED		
	Interproximal reduction in orthodontics: reported practices	151	CLASSIFIEDS
	and perceptions of orthodontists	154	FUTURE DENTISTS
	in the Republic of Ireland	134	Meet the next generation
	J. Donovan, D.T. Millett,		of dentists in Ireland
	M. Harding		
•••			FIDA Enclosed
129	MEMBERS' NEWS		MEMBERS
	• The importance of written	contract	s in dentistry
	Cot roady for poncions auto		•

Get ready for pensions auto-enrolment



Turning off sensitivity pain is as instant and simple

1.5X more in vitro tubule occlusion vs competitive technology¹

of patients experienced 100% instant² & long-lasting pain relief³

Recommend Colgate® SENSITIVE INSTANT RELIEF



References: 1. PRO-ARGIN® technology vs stannous Fluoride/sodium fluoride technology, in vitro study, confocal images after 5 treatments. Liu Y, et al. J Dent Res. 2022;101(Spec Iss B):80. 2. For Instant relief, apply directly to the sensitive tooth with fingertip and gently massage for 1 minute. Supported by a subanalysis of Nathoo 5, et al 2009. Data show that 42 subjects out of 42 (100% or 10 out of 10) experienced immediate sensitivity relief on both tactile and air blast measu after a single direct topical self-application using the fingertip and massaging. Subanalysis of Nathoo S, et al 2009 (CRO-2009-01-SEN-IARG2-ED; Nathoo S, et al. J Clin Dent. 2009;20(4):123-30). 3, With 4 weeks of continued use. Supported by a subanalysis of Docimo R, et al 2009. At 4 weeks, 40 out of 40 subjects (100%, 10 out of 10) achieved lasting sensitivity relief on both tactile and air blast measures. Subanalysis of Docimo R, et al. J Clin Dent. 2009;20(1): 17-22.

PROFESSIONAL ORAL HEALTH-

as a flick

SENSITIVE

olgate

SENSITIVE

Personal Secondary altern of the

SENSITIVE

aswitch



The power of connection

Speakers at this year's Annual Conference, as well as the wonderful experience of meeting with friends and colleagues, highlighted the vital importance of connection, both with our peers and with our patients.

I held off on writing this editorial until after the IDA's Annual Conference in Kilkenny, as I always return from it feeling re-energised and inspired by the incredible presentations and conversations with colleagues. This year was no exception – once again, I was fortunate to have great discussions with dentists, exhibitors, friends, and speakers alike. I've come back with a notebook brimming with notes and a head full of new ideas!

For me, the highlight of the Conference was undoubtedly our new President's address during the Annual Dinner. By coincidence, I had just finished watching the Netflix series *Tour de France*, which had amazed me in its depiction of the incredible level of organisation and teamwork among the cyclists in the peloton – the main group of riders in a road race. Dr Will Rymer used this analogy brilliantly, likening the IDA and its members to a peloton: riding together, taking turns at the front, shielding others from headwinds, and conserving energy by following closely until it's time to lead. It was a powerful image – collaboration in motion – and a perfect reflection of what our Association stands for.

This is especially relevant in our profession, which is well known for its isolating nature and high levels of stress – factors that contribute to significant rates of

Dr Will Rymer used this analogy brilliantly, likening the IDA and its members to a peloton: riding together, taking turns at the front, shielding others from headwinds, and conserving energy by following closely until it's time to lead. burnout. Dr Rory O'Reilly addressed this pressing issue during the Conference, offering a range of strategies to both prevent and manage burnout. Alongside the fundamentals of quality sleep, regular exercise, and practising self-compassion and mindfulness, he highlighted the crucial role of social support and community – an element consistently present in all evidence-based frameworks he presented for preventing and tackling burnout.

So, to answer your question, Will: no, you absolutely didn't overuse the peloton analogy! I wish you every success in the year ahead, and I have no doubt you'll lead the IDA peloton with strength and vision.

The importance of rapport

Another talk that stood out to me was Dr Mark Leffler's presentation, 'Disasters in dentistry: when the unthinkable happens'. While the cases he shared were thankfully rare – and in some instances, quite extreme (including one where a patient had half of her mandible mistakenly removed due to communication failures!) – they served as a powerful reminder of just how critical clear communication within the dental team is. His talk underscored the importance of accurate note-taking, diligent checking and double-checking and, perhaps most importantly, the wisdom of pausing and reassessing whenever there is uncertainty.

Dentistry is a technically demanding and intellectually complex field, and despite all the training, adherence to protocols, and advances in technology, adverse events remain an inherent part of clinical practice. Obviously, we should do everything in our power to avoid things going wrong, but if or when they do go wrong, having built a rapport with your patient will be extremely helpful. Several studies to date support the claim that patients often decide to sue not after a clinical error, but before – based on how they felt they were treated. The adverse event becomes the trigger, not the cause, of the legal action. Therefore, developing a genuine connection with patients – listening attentively, showing empathy, and taking time to build rapport – besides good ethics and patient care, is one of the strongest protections against litigation.¹

I hope you all had a great few days in Kilkenny and that just like me, you have brought home something to reflect on and maybe learn more about. Until we meet again next year!

Reference

 Levinson W, Roter DL, Mullooly JP, Dull VT, Frankel RM. 1997. Physician– patient communication. The relationship with malpractice claims among primary care physicians and surgeons. JAMA. 1997;277(7):553-559.

TURBO SMART MULTIPLE SURGERY **VARIABLE SPEED SYSTEM** IDEAL FOR CONSERVATION AND SURGICAL APPLICATIONS

HIGH AIRFLOW AND HIGH VACUUM POWER USING ONLY THE POWER REQUIRED

Supplied for two surgery use, upgradable to four surgeries if required.



WI-FI CONNECTION

Via the free Cattani SmartApp, enabling professionals to check unit status, alarms, servicing and maintenance requirements*.



DIGITAL DISPLAY Informs the user of the amalgam

container level, operating temperature and hours worked for accurate servicing.

PROGRAMMABLE VACUUM LEVEL

Turbo Smart systems can automatically alter vacuum on demand and respond to any change in use from the surgeries.

SOUND PROOF CABINET AVAILABLE

Turbo Smart cabinet can reduce noise levels to an impressive 51.6 dB (A).

TURBO SMART 2V

Ideal direct replacement for any wet-ring system. All the same features as the Turbo Smart with the addition of an extremely powerful Uni Jet 75 2V motor, producing 270mbar negative pressure for up to 4 surgeries.

TUV certified 98.1% amalgam retention.

Turbo Smart and 2V systems are supplied with a 3 year warranty*. Extended warranty now available*.

* Warranties are subject to Terms and Conditions of servicing schedule. Registration on SmartApp should be completed by an engineer upon installation and is a requirement of the units warranty isee our terms and conditions for further information. Warranties are subject to Terms and Conditions of servicing schedule. Additional 2 year warranty must be purchased with the unit at point of sale.







TENDEN

10W AVAILABI



6

C



AIR TECHNOLOGY

IRELAND



MORE THAN 50 YEARS EXPERIENCE IN AIR TECHNOLOGY

HOW IS IT WE LEAD IN OUR FIELD, WHEN WE COST LESS THAN THE ALTERNATIVES? THIS IS HOW:

Constant research This lets us apply the latest technology in all of our products and solutions. We enhance performance Electronic and information technology allow us to increase the performance and reliability of our products. We reduce costs

Less maintenance and energy costs mean on a cost-benefit analysis we are always the most economical. We reduce environmental impact

We save 50% on raw materials in the production stage and our customers save between 30% and 50% on electrical consumption thanks to inverter drive technology.

Cattani ESAM UK Limited, 21A Harris Business Park, Hanbury Road, Stoke Prior, Bromsgrove, Worcestershire, B60 4DJ. +44 [0]1527 877997 WWW.CATTANIESAM.CO.UK INFOECATTANIESAM.CO.UK

Cattani ESAM Ireland Limited, C/O O'Connell & Meskill, Station House, Railway Square, Waterford, Ireland. WWW.CATTANIESAM.IE OAC@CATTANIESAM.IE

PRESIDENT'S NEWS



Dr Will Rymer

Turning momentum into action

In his first message for the *JIDA*, Dr Will Rymer calls on colleagues to embrace collaboration, mentorship and unity to meet the challenges facing the profession.

As we take stock of where Irish dentistry stands today, one message rings clear: real transformation is possible, but only if we work together. Our profession has endured years of fractured policy, chronic underfunding, and systemic strain. We've seen the erosion of public dental services, the collapse of screening programmes, and the slow departure of colleagues worn down by burnout, litigation, and isolation. Yet in this moment of challenge lies unprecedented opportunity: a shared recognition across the sector that the current model is no longer sustainable.

We must harness this momentum. Whether in general practice, the HSE, specialist care, or education, we all have a role in building a system that is equitable, sustainable, and future focused. That begins with unity. Mentorship must be at the heart of our profession. I know personally the difference it makes. Early in my Irish career, I felt isolated, navigating unfamiliar systems with little support. It was only when colleagues reached out offering guidance and genuine inclusion, that I began to find my place. That support changed my professional path entirely.

My UK Foundation Training was a decisive period of mentorship that guided me from a safe beginner to a confident beginner: an option sadly departed from the Irish vista. It allowed me to embark on a lifetime of learning, yet it was only the beginning. Strong mentors in the IDA proved to me that guidance is not only essential at the start but throughout a career. They reminded me that true collaboration means standing beside, not above. This is what the IDA must be: not just a representative body, but a community where no dentist is left behind. We must actively draw colleagues into that space, especially younger dentists, those in isolated settings, and those disillusioned by a broken system. Every one of us benefits when we work collectively.

Now is the time for public and private practitioners, new graduates and seasoned professionals, to unite behind a common vision. A vision where patient care, prevention, and professional well-being are the core of our health service, not afterthoughts.

This is not idealism, it is a necessity. And it is achievable, if we choose collaboration over competition, mentorship over isolation, and unity over division.

To those already leading this charge, we thank you. To those unsure of their place in it, there is one, and you are needed.

Let's make this the year we turn momentum into action. Collaboration. Mentorship. Unity.



ADVOCACY AND CAMPAIGNS UPDATE

Fintan Hourihan

Big changes are coming – make sure your voice is heard

The implementation of Smile agus Sláinte will shape dentists' careers for years to come.

The Department of Health has announced that it will shortly publish a three-year plan to begin the roll-out of the reforms signalled in the 2019 Smile agus Sláinte document. This will directly affect how you practice, how services are funded, and how patients access dental care across Ireland. The Department has indicated that it has a number of priorities for oral health over the next three years, including improving access to dental care for children up to seven years of age, reform of the medical card scheme, new legislation for mandatory CPD, and a larger overhaul of the Dentists Act, 1985. While many of these will be welcome developments, others fall into the category of laudable objectives, with the wrong solutions being proposed. Whether you are in general or specialist practice, public or private clinics, rural or urban locations, these reforms will shape your professional career for decades to come. Now more than ever, it's essential for every dentist to stand together.

Why join the Irish Dental Association?

- Have your say: as an IDA member, you can shape our response to the Department of Health;
- stay informed: get early access to expert analysis and policy updates;
- protect your practice: we are fighting for fair funding, clinical independence, and viable public dental schemes; and,
- be part of the solution: influence how reforms affect you, your patients, and the profession.

What's next?

- The IDA will be engaging in direct discussions with the Department of Health;
- we are already consulting all members through surveys, town halls, and representative panels; and,
- we need your input to ensure that our position is strong, united, and reflective of real-life practice.

How you can get involved

Join or renew your membership at www.dentist.ie.

Participate in member consultations – watch your inbox for invites to surveys and town halls.

Share your perspective – reach out to your local IDA representative or email us at info@irishdentalassoc.ie.

Together, we are stronger. Together, we shape the future of Irish dentistry. Join today. Speak up. Be heard.



THE COLGATE® KIDS RANGE

DESIGNED TO NEUTRALISE SUGAR ACIDS IN PLAQUE^{2,3}

- Significantly increases resting pH in plaque to a healthier level^{2,3}
- O 1,450 ppm Fluoride

Recommend Colgate[®] Kids Toothpaste, clinically proven to provide superior caries prevention⁴

References:

1. Cantore M et al., J Clin Dent 2013; 24(Spec Iss A): A32-44. 2. Wolff M et al. J Clin Dent 2013; 24(Spec Iss A): A45-54. 3. Santarpia P et al. Am. J. Dent 2014; 27(2):100-5. 4. Cummins D. J Clin Dent 2010;21[Spec Iss]:25-37.





Are you about to graduate or new to dentistry in Ireland? Or maybe you know a colleague who is! Then don't forget to watch the IDA's 'Starting Dentistry in Ireland' webinar. The IDA's Director of Communications, Roisín Farrelly, discusses topics such as the registration process, CVs and interviews, professional indemnity, tax affairs, the difference between being self-employed and being an employee, mentorship, third-party dental schemes, data protection, Dental Council guidelines, and continuous professional development (CPD) requirements.

Contact IDA House for access to the webinar and to get a copy of our 'Starting Dentistry in Ireland' booklet, or email molly@irishdentalassoc.ie.



The IDA's popular webinar programme has finished for the summer, and will recommence in September. However, don't forget that the majority of webinars are in our library and are available exclusively for IDA members to watch anytime.

The webinars cover a range of clinical topics, as well as compliance and practice management. So make sure to log in over the summer months and catch up on your CPD.



NEW FROM THE IRISH DENTAL ASSOCIATION ONLINE BRIEFINGS FOR MEMBERS

YOUR VOICE MATTERS. YOUR CAREER MATTERS. THIS IS YOUR CHANCE TO STEP UP, GET INVOLVED, AND BE HEARD.

This is your opportunity to hear directly from IDA leaders about the latest developments, upcoming initiatives, and the vital role young dentists play in shaping our profession's future. Whether you're recently qualified or a few years into practice, this briefing is designed to inform, inspire, and involve.

- Learn about current challenges and opportunities in Irish dentistry
- Find out how the IDA is working for YOU
- Ask questions, share your views, and connect with peers
- Discover how you can influence the future of general dental practice

The briefings will also feature panel discussions with expert IDA leaders.



TO REGISTER TODAY, EMAIL US AT INFO@IRISHDENTALASSOC.IE. DON'T MISS OUT.



IDA CPD PROGRAMME THIS AUTUMN

THE IDA HAS A VERY EXCITING CPD PROGRAMME FOR AUTUMN 2025.

THE MAGIC OF COMPOSITES

- TWO-DAY GALWAY COURSE FOR GDPs

The IDA in association with Voco is delighted to bring a two-day handson composite course to Galway this September. Aimed at all GDPs who are looking to enhance their skills in composites, the course will be given by Dr Ash Soneji, a GDP based in Bristol, UK.

The course takes place on Friday and Saturday, September 26 and 27, at the Galmont Hotel, Galway.

Places are limited, so early booking is advised. To book, go to www.dentist.ie.

Open to members and non-members. Discounted rate for IDA members.

PAEDIATRIC DAY IN ASSOCIATION WITH EAPD RETURNS

The very successful 'Paediatric Dentistry in a Day' course returns to Dublin on Friday, November 21. In association with the European

Association for Paediatric Dentistry (EAPD), the IDA last ran this event in 2023 and it sold out, so don't miss this opportunity to attend and book early. Booking will open later this summer. Watch this space!

DR JASON SMITHSON BACK IN DUBLIN FOR TWO-DAY COMPOSITE COURSE

The IDA is delighted to welcome Dr Jason Smithson back to Dublin on Friday and Saturday, November 14 and 15, to deliver his two-day composite course. In association with NSK and Kulzer, this interactive and highly educational programme is suitable for any GDP. Places are limited so book early.

WEBINAR SERIES RETURNS IN SEPTEMBER

SCAN TO

REGISTER

Our very popular webinar series is finished for the summer recess and will return again in September. Full details will be announced soon.

More dates, venues and courses to be announced over the summer months.

Receive updates direct to your mobile phone!

Register for our free newsletter

By signing up to our mailing list, you will receive a monthly email* including information on our offers, product updates, company news and eCPD opportunities directly to your inbox.

*You can unsubsribe at any time.

ivoclar.com Making People Smile

Invisalign for Class II corrections



The Invisalign System with mandibular advancement featuring occlusal blocks.

Align Technology has announced commercial availability of the Invisalign System with mandibular advancement, featuring occlusal blocks designed specifically to address Class II skeletal and dental corrections by simultaneously advancing the mandible while aligning the teeth. According to Align, this is first clear aligner product with integrated solid occlusal blocks that delivers predictable mandibular advancement.

The company states that Invisalign occlusal blocks provide durability, improve engagement, and enable vertical opening to offer earlier advancement of the mandible in cases like Class II deep bite.

The Invisalign System with mandibular advancement featuring occlusal blocks is primarily intended for growing patients in the late mixed or early permanent dentition stages who are still experiencing growth.

By leveraging the natural growth potential during pre-adolescence and adolescence, the company states that the Invisalign System with mandibular advancement featuring occlusal blocks facilitates effective correction of Class II malocclusions, helping to improve occlusal relationships, enhance facial aesthetics, and provide long-term functional benefits.



It's time to talk to Medisec about **dental indemnity insurance**



At Medisec, our promise is to look after our members while they look after their patients.

We're delighted to announce that thanks to our business relationship with MedPro, we can now arrange outstanding occurrence professional indemnity insurance for dentists.

Switching is easy – just visit our website or contact our membership advisors for more information and assistance.

All coverage subject to business approval.

Call O1 661 O5O4 or visit medisec.ie

Medisec Ireland CLG (trading as Medisec Ireland) is regulated by the Central Bank of Ireland.

Rerkshire Hathaway European Insurance DAC trading as MedPro. Insurance products are underwritten by 8erkshire Hathaway European Insurance DAC. Berkshire Hathaway European Insurance DAC is a Private Company Limited by shares, non-life Insurance company, with registered office 2nd Floor, 7 Grand Canal Street Lower, Dublin DO2 KW91, Ireland and regulated by the Central Bank of Ireland, Company Registration No. 636883; VAT No. 3583602.



FILES THAT ARE ENGINEERED FOR PERFECTION

REMARKABLE STRENGTH, ENHANCED CUTTING EFFICIENCY, DESIRABLE OUTCOMES

EDGETAPER BLAZE 🙂 UTOPIA" EDGE X7 🙂 UTOPIA"

EDGEONE R U UTOPIA"

HENRY SCHEIN® IRELAND LIMITED

t: 01 456 5288 www.henryschein.ie 😱 🙆 💥

Endodontic Sales Specialist

Alex Murphy

- 086 204 2750 • alex.murphy@henryschein.ie

Omnichroma composites continued success



Tokuyama Dental's Omnichroma filling materials have once again received a top product award from the trade journal Dental Advisor. The company states that this honour emphasises the outstanding quality and innovative strength of the Japanese manufacturer.

According to Tokuyama, the Omnichroma family, with its three viscosities, continues to be at the centre of state-of-the-art restorative dentistry.

The independent reviewers of the Dental Advisor said: "Omnichroma is an absolute game changer in dentistry". In Dental Advisor, particular emphasis was placed on the colour-matching properties and ease of use, as well as the aesthetic results. In particular, Omnichroma Flow was praised as the perfect addition due to its versatility for all cavities. In addition, Tokuyama's Bond Force II, a self-etching single-component adhesive, and Shield Force Plus, a dentine sealing material, have once again been honoured as 'Preferred Products'.

The company states that these accolades underscore the exceptional quality and added value of the Japanese manufacturer's comprehensive product range.





Henry Schein is celebrating its 35th anniversary in Europe. Founded in 1932 in the USA, the company began its European operations in the spring of 1990 in the Netherlands, and today serves customers in 16 countries across the continent, including Ireland. Andrea Albertini, Chief Executive Officer, Global Distribution Group of Henry Schein, said: "We are

dedicated to serving as trusted advisors and consultants to our customers, empowering healthcare professionals to deliver the highest quality patient care while optimising their practice management. This commitment has always been at the core of our operations across Europe and beyond". Along with its range of healthcare consumables and equipment, Henry Schein states that it also offers top solutions from its own brand portfolio. According to the company, the more than 10,000 Henry Schein brand products are designed with an emphasis on quality and value to help make practices more efficient while providing great patient satisfaction. Throughout spring 2025, Henry Schein will celebrate its 35 years of

Throughout spring 2025, Henry Schein will celebrate its 35 years of dedication and service to Europe-based healthcare providers.



A Coltene favourite

Dr Asmaa Al-Taie (right), Clinical Lecturer and Honorary Consultant in Restorative Dentistry at the School of Dentistry, University of Leeds, recently shared her favourite product from Coltene. She chose the Diatech ShapeGuard Polishing System, citing both its powerful polishing action and the amazing results it provides for her patients.



Dr Al-Taie said: "The Diatech ShapeGuard Polishing System is my favourite product because it's a two-step polishing system that gives me superior aesthetics, excellent gloss, and my patients really love the feel of the restorations after I've polished them".

Diatech ShapeGuard features a special head shape, developed to facilitate intraoral polishing of composite, ceramic and zirconia restorations. According to Coltene, the flexible lamellas allow these silicone polishers adapt to any surface and provide uniform pressure distribution so that the morphology of the tooth is preserved. The company states that this polisher is fast, easy and intuitive to use, and achieves an outstanding lustre.

Ultra-thin Prettau Skin veneers

Prettau Skin is a new clinical and technical protocol developed by Zirkonzahn for producing and cementing ultra-thin zirconia veneers. According to the company, veneers can be as thin as just 0.15mm, allowing patients to get a healthy smile with zero



to minimal impairment of tooth substance. Zirkonzahn states that the new technique is suitable for the aesthetic correction of tooth discolourations, tooth gaps, crooked teeth, cone teeth, and abraded teeth.

Prettau Skin veneers can be made from all types of zirconia included in the Zirkonzahn Prettau line. The company states that one particularly suitable type is the Prettau Dispersive zirconia line, as the included materials are already provided with a natural colour gradient from dentine to enamel during the production process. In particular, Prettau 3 Dispersive zirconia is characterised with gradual-triplex-technology: the material shows a triple gradient of colour, translucency and flexural strength, according to Zirkonzahn.



FLOWABLE BULK-FILL COMPOSITE

COLTENE

BRILLIANT Bulk Fill Flow NEW

The ideal filling material for fast and easy restorations

- → No capping layer needed
- → Reliable curing depth up to 4 mm
- → One adaptive Multi-Shade material

x 2.3g Syringe Application Needles

BRILLIANT BUIK FIII FLOW CE

BRILLIANT BUIK Fill Flow

3

2



Contact your COLTENE Territory Manager: **Nick O'Keeffe** Mob: +353 (0)86 413 5766 nicholas.okeeffe@coltene.com www.coltene.com









Charting the way forward

Dentists and dental team members gathered in glorious sunshine in Kilkenny in May for the 2025 IDA Annual Conference. Below are just some of the many highlights from a fantastic weekend.



Can you spot yourself at Conference 2025?

Scan the QR code to see highlights of this year's Annual Conference in Kilkenny.



Past Presidents of the IDA gathered for their annual lunch. Back row (from left): Dr Leo Stassen; Dr Tom Feeney; Dr Eamon Croke; Dr Charles O'Malley; Dr Robin Foyle; and, Dr Martin Holohan. Middle row (from left): Dr Donal Blackwell; Dr Garry Heavey; Dr Michael Galvin; Dr Billy Davis; and Dr Conor McAlister. Front row (from left): Dr Anne O'Neill; Dr Rory Boyd; Dr Ena Brennan; current President Dr Will Rymer; Dr Clodagh McAllister; Dr Kieran O'Connor; Vice President Dr Bridget Harrington-Barry; and, Dr Caroline Robins.

There was truly something for everyone at this year's Annual Conference in Kilkenny's beautiful Lyrath Estate. The sun may have been shining, but there was plenty to tempt attendees indoors, with excellent pre-Conference courses, sessions for dental nurses and hygienists, and a fantastic main session that this year included a dedicated programme on facial aesthetics. A truly impressive line-up of speakers from at home and abroad shared their knowledge and expertise across parallel lecture sessions throughout the weekend.

On Thursday, courses covered a wide range of topics, from maximising success in endodontics, and a composite onlay and edge bonding masterclass, to dental implant maintenance, advanced toxin treatments, and modern approaches to prosthetic rehabilitation. The dentist's role in managing sleep-related disorders was also featured, along with managing patients with substance use disorders.

Thinking beyond the guidelines

On Friday morning, Dr Gabriel Krastl asked us to think beyond the guidelines when managing challenging paediatric trauma cases. In younger patients, clinicians will try to save a tooth that they would not save in an adult, and Gabriel presented a series of cases where thinking outside the box resulted in a good outcome for patients, preserving the tooth and preventing bone loss. Treatments such as surgical or orthodontic extrusion, intentional replantation, and partial pulpotomy all have a role to play. Gabriel emphasised the importance of good clinical inspection, with appropriate imaging (such as CBCT) in deciding how to proceed. He concluded by saying that much is possible in these cases that might at first glance appear untreatable – "be a healer, not a tooth mechanic".

Prof. Ama Johal presented a new approach to clear aligner treatment (CAT), where access to expert support can aid general practitioners in offering this treatment to patients. He emphasised the importance of knowing which cases are suitable for CAT, and cautioned that some treatment planning software creates an illusion of simplicity, leading to issues for dentists when cases do not progress as expected. He then spoke about his role as Clinical Lead in Orthodontics at 32Co, a company set up to offer expert advice and training to general dentists. He said that access to specialist support leads to better case selection and assessment, more predictable treatment plans and outcomes, better consent, and lower risk.

Aesthetics, facial pain and polypharmacy

Topics at the dedicated programme on facial aesthetics included communication and patient management, skin health, and minimally invasive aesthetics. Dr Dallas Walker's presentation looked at chin and jawline augmentation. Dallas talked about the role of cultural perceptions in how we view jawline appearance, and outlined elements of anatomy, proportions and aesthetic theory, discussing how he assesses a patient's face to identify issues and come up with a treatment plan. He discussed managing patient expectations, and highlighted the many factors that affect the jawline, from anatomy and ageing to skin quality and, of course, the dentition. A range of non-surgical treatment options are available to patients. Dallas said that fillers are often not appropriate for the jawline, although he does use some semipermanent fillers. He discussed the injection techniques he employs, especially for chin augmentation. He also discussed biostimulatory techniques such as radiofrequency microneedling, which he said is minimally invasive. He cautioned practitioners regarding placing filler in patients who have had surgical interventions, saying that there is an increased risk of complications or infection.

Does Botox have a role in the management of orofacial disorders? That was the question posed by Dr Dermot Canavan. Orofacial pain and bruxism are complex, multifactorial conditions and dentists need to be aware of the evidence, and of each patient's individual circumstances, in order to diagnose and treat. Dermot advised taking a careful history, listening to the patient, and evaluating the whole head and neck area, saying that persistent pain will likely have multiple sources. Botox is only part of treatment, with education, reassurance and explanation also playing vital roles. He also spoke briefly on the increasing use of Botox in treating neuropathic pain, where some good success rates have been noted. In summary, Botox does indeed have an important role in orofacial pain, but it is important to be aware of its limitations.

Prof. Ann Spolarich addressed the topic of managing patients with polypharmacy. Our patients are living longer, she said, and are more likely to suffer chronic illnesses, so dentists need to be aware of the medications their patients are taking, and how these might interact with each other, and affect dental treatment. There is no consensus definition of 'polypharmacy', and patients may be on several medications that are not an issue as they are managing conditions successfully. She referred to this as "appropriate polypharmacy – the right medicine, for the right reason, and the right duration". She also discussed "inappropriate polypharmacy", such as unnecessary or duplicate medications, and medication errors, as well as how drugs metabolise in the body, and the effects of polypharmacy with a specific focus on dentistry.

Burnout and facial trauma

Conference delegates came together for the final two presentations of the day. First up was Dr Rory O'Reilly to talk about evidence-based solutions for burnout. Rory's message was that "giving your patients what they need shouldn't take everything you have", and he looked at interventions to reduce stress and minimise the risk of burnout at both a system and personal level. Rory recommended thinking in terms of the PERMA model: Positive emotion; Engagement; Relationships; Meaning; and, Achievement. He also discussed the role of self-determination theory, which places a focus on autonomy – our own power to make our lives better. Healthcare systems can be a help or a hindrance, he said, and change is often slow in coming, but it can happen, and organisations like the IDA can play a huge role in providing leadership and support.

Finally, Dr Jeroen Liebregts finished the day with a fascinating (and hair-raising) presentation on functional and dental rehabilitation of facial trauma. With help from his own AI avatar, he outlined the '4 Ps' approach to solving the problems created by these complex traumas: personalised; predictable; participatory; and, preventive. He outlined his outcome-based approach to planning and treatment, and the role



Serving dentists since 2005

For more information or to request a quote: 01 293 8554 • info@omegafinancial.ie www.omegafinancial.ie

OFM Financial Ltd trading as Omega Financial Management, is regulated by the Central Bank of Ireland. Registered in Ireland. Reg Number 34963



Pictured at Thursday's social event in Kilkenny were (from left): IDA Vice President Dr Bridget Harrington-Barry; IDA CEO Fintan Hourihan; and, Dr Nuala Carney.



IDA President Will Rymer with Fiona Considine (left) and Stephanie Gribben (right) from Colgate.

of both digital planning and the interdisciplinary team to rebuild anatomy, restore function, and address aesthetics. He then took the audience through three cases of dentoalveolar and panfacial trauma, finishing with the story of professional cyclist Fabio Jakobsen, who suffered extensive facial and dental trauma after a horrific crash during a race in 2020. Jeroen outlined the planning and treatment that got Fabio back on his bike and competing professionally eight months after the crash.

Top tips

A medical emergency can be defined as a situation requiring immediate action because someone has been injured or is suddenly taken ill. In her presentation, Dr Catherine Gallagher explained that emergencies in the dental setting happen about

No more 'drill and fill'



On Friday afternoon, Dr Isabel Olegário took on the topic of contemporary caries management, where the overwhelming evidence now supports a minimally invasive approach, coupled with support for patients in achieving behaviour change.

We know that caries is a disease, she said, and the caries lesion we see at the dental

exam is the evidence of that disease.

Caries is caused by sugar and poor dental hygiene, so while dentists can of course help in treating it, patient behaviour is key.

The evidence now is that preserving the pulp is crucial to preserving the tooth, so selective caries management, leaving some 'caries' behind to





Prof. Ama Johal.

Peter Morris of Medray (centre) receives the JIDA Cup from Paul O'Grady of Think Media (left) watched by runner-up Colm Hayes of Solventum (right).





Prof. Ann Spolarich.

Dr Mauro Frediani gave a course on modern prosthetic rehabilitation.

once every one to two years, with syncope (fainting) by far the most common, and cardiac arrest the rarest event. Statistics mean very little to the individual experiencing the emergency, however, so it's all the more important that the dental team is trained and prepared to deal with it appropriately. Catherine summarised the guidance contained in the Dental Council's Code of Practice regarding Medical Emergencies within the Practice of Dentistry, which sets out the ethical obligation on dental professionals to have the knowledge and competence to deal with an emergency. The Code covers all requirements, from developing a written plan, though prevention, training, and documentation and review of incidents. She also took a whistle stop tour through a number of emergencies, and how they should be dealt with in the dental setting.

preserve the pulp and then restoring the tooth, is best practice.

"Keep tissue there if you can", said Isabel, to aid remineralisation and avoid the cycle of restoration.

International guidelines such as the International Caries Classification and Management System (ICCMS) provide information and education for dentists on implementing best practice.

Isabel talked through the four 'Ds' of caries management: Determine (caries risk); Detect (lesions); Decide (treatment planning); and, Do (preventive and clinical care).

She used clinical case examples, asking the audience: "What would you do?" $% \left(\mathcal{A}_{n}^{\prime \prime}\right) =\left(\mathcal{A}_{n}^{\prime \prime}\right) =\left(\mathcal{A}_{n}^{\prime \prime}\right) +\left(\mathcal{A}_{n}^{\prime$

The message is that patient-level management, then a toothlevel approach, are key, sealing caries to arrest disease and promote remineralisation.



From left: IDA President Dr Will Rymer with Dave Keenan, Geraldine Kennedy, Simon Shaw, Daire O'Neill, and Richard Kenny from DMI.



Dr Aisling Donnelly teaches delegates how to maximise success in endodontics.

Dr Mary O'Keefe also took the audience on a tour, this time of 10 cases she has treated in her orthodontic practice, to discuss early orthodontic treatment – when, why and how? Mary spoke about the importance of good imaging, including a detailed series of clinical photographs, to document diagnosis and treatment. She outlined the problems encountered and the factors she took into consideration when deciding on treatment, as well as the evidence base for these decisions. She spoke about how her approach has changed in line with the evidence and technology. She concluded by saying that early treatment works: it can efficiently correct some malocclusions, and help to reduce or avoid complex treatment in later years.

Dr Criag Mallorie also used case examples in his presentation, which covered top tips and tricks to improve oral surgery skills. He took the audience through

Telling a new story about oral health



This year's Costello Medal was won by Sydney Goan and Grace Feighan from the Dublin Dental School, for their poster entitled 'Addressing oral health disparities: a co-designed oral health resource for the Irish traveller community'. Pictured at this year's award presentation were (from left): Tony Costello (grandson of Dr Tony Costello for whom the award is named); Sydney Goan; Grace Feighan; and, Dr Will Rymer, IDA President.

surgical procedures from start to finish, offering advice on techniques to administer local anaesthetic, as well as tips on access and flap design. He showed video demonstrations of extraction and suturing techniques to enable quicker and more efficient extractions and better healing. He also offered advice on multiple extractions, dealing with bleeding patients, and avoiding dry socket. A strong theme throughout was the importance of having the right equipment, from scalpels and handpieces to retractors and sponges. He emphasised the importance of preserving buccal bone, as patients may want implants in future. In summary, he said that x-rays should be assessed carefully pre-operatively, and equipment should be ready and appropriate for the job – fail to prepare, and prepare to fail...



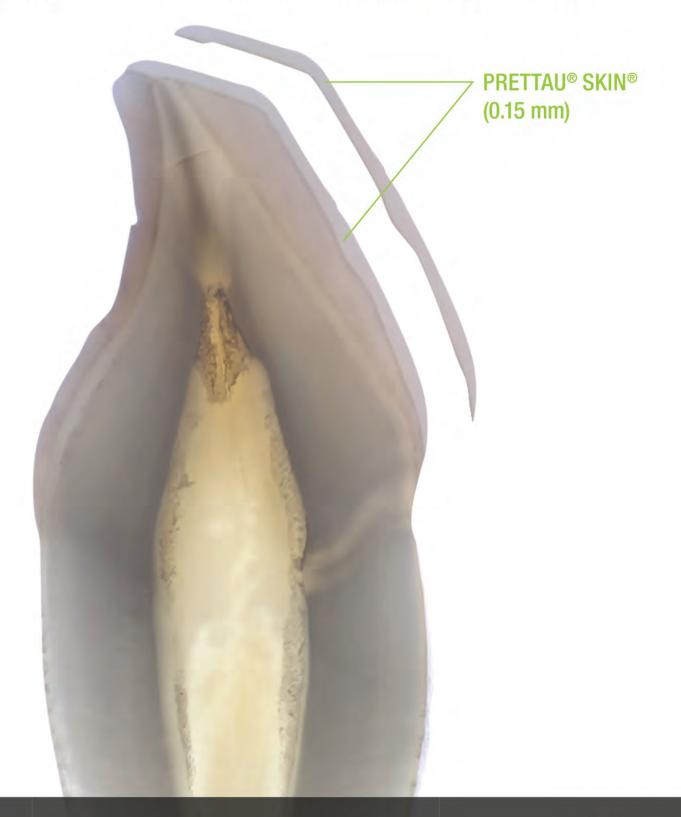
Dr Tim Donley spoke on Saturday morning about the peri-cardio link and how it can affect patients and practice. Tim's message was clear: the link between periodontal disease and other conditions, in particular cardiovascular disease, is now well established, and dentists can help patients to improve their overall health, and help medicine to get better results for patients.

We now know that gum disease increases the risk of heart attack by 49%, and is associated with increased risk of cardiovascular disease. Periodontal therapy should therefore be part of all preventive care, along with addressing the traditional risk factors such as weight, smoking, stress, blood pressure, etc. How do we get this message to patients and medical practitioners? Tim said that "medicine gets it", and dentists need to collaborate with medical colleagues. He outlined the approaches he takes in his practice to getting this message out. The first step is changing the narrative with patients, explaining that dental care is about inflammation, and that the practice will monitor gum health and treat where appropriate. He advised taking a priority patient approach: patients who are at increased risk for gum disease are also at increased risk for cardiovascular disease, so these patients should be seen more frequently, with more adjunctive therapy. He also enrols patients as messengers, asking them to tell their doctor when they have been diagnosed with gum disease and ask their doctor to communicate with their dentist.

Tim has designed a range of patient and professional information and education resources, which can be found at www.beyondthemouth.com, and he invited attendees to use these in getting the message across. "If we keep banging the drum, eventually the message will get through."

PRETTAU® SKIN®

NON-INVASIVE TREATMENT WITH ULTRA-THIN PRETTAU® ZIRCONIA VENEERS





MORE INFO ABOUT PRETTAU® SKIN®



What should HSE secondary and tertiary dental care look like?

Is it time for a national model of secondary and tertiary dental care?

Introduction

The evolution of public secondary and tertiary dental services in Ireland has been piecemeal and haphazard to date. Patients with complex dental needs requiring multidisciplinary dental care are poorly provided for within the Health Service Executive (HSE) due to a historical inadequacy of strategy and service planning. There has been a failure to develop adequate and robust care pathways or create a workforce with the requisite level of specialist skills. Clinicians and health service managers feel frustrated as they are unable to deliver appropriate and timely care to patients with complex care requirements. They also feel unable to improve matters through service development and navigate the obscure pathways between the HSE and The Department of Health.¹

The majority of public secondary and tertiary dental care in Ireland, with the exception of orthodontics, paediatric dentistry and some oral surgery, is provided through the two dental schools. These are both university teaching and research institutions with different remits, which are facing staff shortages to address their core work. They are insufficiently staffed and funded to provide the levels of public service required and support primary care provided in general dental practice.

Outside of the dental schools, State-funded secondary care dentistry has focused on the HSE orthodontic service. This service has developed in an unbalanced manner, largely focused on orthodontics at the expense of other specialist dental services that are also needed. The HSE Orthodontic Review Group report² set out the strategic direction of and eligibility for the service, and while there has been progress developing orthodontics, a significant number of HSE eligible patients need multidisciplinary care pathways to manage their complex needs. The skill mix in HSE orthodontic departments is not fit to deliver a contemporary service as there has been an inadequate development of oral and maxillofacial surgery, restorative dentistry, oral surgery, paediatric dentistry and special care dentistry in the public sector. The service is fragile and poorly equipped to manage multidisciplinary care, and often fails to deliver care to patients with the greatest need for treatment, while prioritising other treatments because they are less complex and easier to provide.

No plan for HSE specialist dental services

Smile agus Sláinte, the national oral health policy (NOHP) published by the Department of Health in April 2019, is a well-intended document but has limited

content on commissioning and delivery of specialist dental services. The scant plans for secondary and tertiary services appear to relate to the present two specialties, orthodontics and oral surgery. The focus of much of the policy is primary dental care, which requires high-quality and evidence-based dental training and education (undergraduate, postgraduate and CPD). The provision of most of the patient care in the NOHP will be delivered by general dental practitioners. In a future-facing service, well-resourced, appropriate secondary and tertiary care is a prerequisite to underpin primary care delivery at all stages. The policy references advanced dental centres but has no detail on how they will be achieved, how they will integrate into the healthcare system, what level of service will be provided, and who will advise on delivery. Similarly, there is a need to establish the characteristics and requirements for advanced centres of care. Are these physical centres or figurative groupings of dentists in a catchment area? Whose remit do they fall under and against what criteria? The document refers to complex and advanced care but these terms are not defined. There is a need to ensure that all stakeholders are using the same terminology. Otherwise there is a risk of inconsistency in interpretation of the NOHP.

There is also a need for dental services to integrate with medical specialties and bring dental health into general healthcare. This includes integration with medical teams, frequently in a hospital setting, for patient groups such as unstable cardiac patients, patients undergoing organ transplants, and medically complex paediatric patients. Other areas where dental care can improve patient outcomes include sleep disorders, post-traumatic dento-facial rehabilitation, diabetic care, patients receiving treatment for osteoporosis, and the long-term management of patients diagnosed with head and neck cancer.

The HSE National Oral Health Office (NOHO) responds to policy from the Department of Health but currently has no position for a Clinical Director of Orthodontics or any other specialist dental services. The skill mix within the NOHO should reflect the broad spectrum of dentistry covering primary, secondary and tertiary care. The HSE orthodontic lookback report in 2022, for example, recommended strengthening clinical governance and leadership in HSE orthodontic services. It is imperative that the NOHO follows through on this recommendation to ensure that decisions are made from an informed position in respect of secondary and tertiary HSE multidisciplinary care pathway development and delivery.



Consultant Orthodontist HSE Orthodontic Department Simms Building Tallaght Dublin Chairman, Irish Consultant Orthodontic Ge Michael O'Sullivan Professor/Consultant in Restorative Dentistry (Special Needs) Clinical Director Director of Graduate Prosthodontics Dublin Dental University Hospital

E: simon.wolstencroft@hse.ie

Recognising dental specialisation

Development of multidisciplinary dental care services is hampered by the decision of successive Ministers for Health not to recognise dental specialisation outside of orthodontics and oral surgery. The HSE has developed specialist centres for orthodontics but oral surgery specialist provision has not progressed in spite of it being a recognised specialty.

The failure of the Irish State to recognise additional dental specialties creates difficulties for the HSE to develop clinical care pathways and appropriate multidisciplinary dental teams with the necessary skill mix. The real effect of this is inadequate service for public patients who require advanced multidisciplinary dental care. No matter what services may be delivered in primary care, by means of the NOHP, these patients will always be with us, only increasing in numbers and complexity. The requirement to recognise dental specialisation is supported by the IDA and was recently confirmed in its position paper entitled 'Towards Sustainable National Oral Health Services' (2024), in harmony with the Dental Council's support for an expansion of specialties.

Training and education of future dental consultants and specialists

The lack of coherent health service strategy for secondary and tertiary care dentistry and lack of workforce planning impacts on the training and education of dental specialists. There is currently no mechanism within the HSE for dental consultant succession planning, or State support to fund specialist training to develop the dental specialists of the future. The majority of trainees self-fund their postgraduate education and seek a career in private dental practice on completion. In order to promote specialist training in Ireland, specific areas should be prioritised, including:

- 1. Training financial support, similar to medical specialties.
- 2. Workforce planning to ensure alignment of training posts with the national clinical need.
- Recognition of dental specialties outside of oral surgery and orthodontics to enable appropriate skill mix development in clinical teams.

The absence of a planned training strategy in Ireland has become a workforce crisis. The areas of concern include:

- 1. The increasing age profiles of existing Irish dental consultants.
- 2. Insufficient new consultant posts to match the increase in population and population needs.
- 3. Severe shortages in the clinical academic dental workforce who are essential to train and educate the dental team.
- 4. Current public secondary and tertiary multidisciplinary dental treatment (outside of cleft lip and palate services) is provided in consultant-led clinics in the HSE Regional Orthodontic Units, Children's Health Ireland or the dental schools. The operation of these clinics is inconsistent and varies geographically.

The lack of suitably qualified applicants for senior academic posts in Ireland is of concern. Both of the dental schools enjoy a very high profile and their graduates are highly sought after. This is important in attracting the best quality undergraduate and postgraduate dental students. The inability of the schools to fill senior posts with high-calibre applicants will reduce academic output and undermine international competitiveness.

Consultant training in medicine in Ireland is fully State funded and trainees are salaried throughout. In dentistry all costs associated with specialist training are

undertaken by the trainee at a cost of up to €75k. This means that very few are in a financial position or prepared to undertake the expense of consultant training in Ireland. The fact that there is no defined training pathway is a further disincentive. How the disparity in training between professions arose is not clear, but may be linked to the dissolution of the Postgraduate Medical and Dental Board and the subsequent establishment of the Education and Training and Research Committee of the HSE, which excluded dentistry at its inception. As it stands, there is no equivalent national body or forum where matters relating to specialist dental training, including funding, can be discussed and progressed. As per Section 86 of the Medical Practitioners Act 2007, the HSE has a number of responsibilities in relation to the development and co-ordination of specialist dental education and training, and its subsequent alignment with dental workforce planning.

How to move forward

There is clearly a need to make our dental health service fit for purpose. The development of appropriate secondary and tertiary care services in Ireland is essential to underpin the NOHP, meet population needs, and support primary care. The proposed next steps should include:

- Provide the HSE NOHO with access to experienced dental specialists to develop dental care pathways. A HSE national lead for secondary and tertiary dentistry would strengthen the skill mix within the NOHO.
- Clarification and elucidation of terms used in the NOHP to provide a focus for secondary and tertiary dental care development.
- 3. Engagement with specialist groups to promote the recognition of additional dental specialties.
- Outlining priorities for the development of multidisciplinary care in the HSE, the necessary skillsets and associated funding.
- Workforce planning for secondary and tertiary care provision in a manner that would link postgraduate training with national needs in both the public and private sectors.
- 6. In areas where services have been evaluated previously, there is a need to update and implement previous findings and recommendations. For instance, the HSE orthodontic review group report of 2006 is now 18 years old. This strategy should be revisited with a working group of appropriate stakeholders to consider scope of service, eligibility criteria, appropriate skill mix, and educational needs of the future workforce.
- 7. A number of medical national clinical programmes have been successfully created or are in design stages through the HSE Clinical Design and Innovation Platform. Its success has been underpinned by close collaboration between the HSE, postgraduate training bodies and patient groups. This approach could provide a template for the development of integrated specialist dental services.

In summary, a national model of care for secondary and tertiary dental care is overdue. It is essential to provide a framework for developing services in line with Sláintecare principles and appropriately plan for the current and future dental needs of the Irish population.

References

- McAuliffe Ú, Whelton H, Harding M, et al. 'Toothless' the absence of political priority for oral health: a case study of Ireland 1994-2021. BMC Oral Health 2022;22(1):95.
- Health Service Executive. Orthodontic Review Group Report. https://www.lenus.ie/handle/10147/44938. Published 2006. Accessed November 6, 2024.

The Invisalign[®] System is redefining Class II treatment in growing patients.

Tapered upper block facilitates lower molar eruption by minimising occlusal contact. O-

5mm fixed block height holds and maintains the jaw in a forward position. O-

Attachments are allowed on the teeth under the blocks to facilitate leveling and other movements or to prevent unwanted movements'. oLaser-welded solid blocks for structural rigidity and durability.

> Angled engagement plane guides forward posture and improves engagement.

The new Invisalign System with mandibular advancement featuring occlusal blocks is the first integrated clear aligner product from Align with solid blocks to minimise crushing and is designed to treat Class II malocclusion while simultaneously aligning the teeth.

- Invisalign occlusal blocks minimise the need for multiple appliances to treat skeletal Class II malocclusion.
- Made with the same proprietary Invisalign aligner SmartTrack^{*} material that is more comfortable than traditional appliances²², . encouraging adherence to prescribed wear time for optimal outcomes⁴.
- Invisalign occlusal blocks advance and hold the mandible while they simultaneously move teeth to treat conditions like deep bite.
- Invisalign occlusal blocks are solid with laser welding, designed to provide structural rigidity and durability throughout the treatment.

Clinical use cases

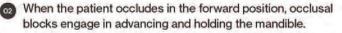
The Invisalign System with mandibular advancement featuring occlusal blocks is a new treatment innovation designed to treat all types of Class II malocclusions including cases with severe deep bite. Patient profiles to consider for this solution:

Brachyfacial "short" facial profiles with a low mandibular angle and deep overbite.

Mesofacial "normal or neutral" facial profile with deep overbite.

How occlusal blocks work

Invisalign clear aligners with integrated blocks are positioned on the occlusal surface.



The system moves the jaw forward while simultaneously moving teeth and treats Class II malocclusion, including cases with severe deep bite.

Key benefits

Efficient treatment.

Treat Class II malocclusions while simultaneously aligning the teeth. The robust solid block design ensures durability to minimise crushing. Jaw opening mitigates anterior contacts and allows MA phase to begin sooner for Class II div 2 patients. Some crossbite cases may need pre-MA.

Elevated patient comfort2.3 and compliance4.

The Invisalign System with mandibular advancement featuring occlusal blocks is made from the same proprietary Invisalign aligner SmartTrack[®] material that is more comfortable than traditional fixed appliances23.

Predictable tooth movement.

By combining SmartTrack[™] material, SmartForce[™] features, and SmartStage" technology, the Invisalign System allows for more predictable tooth movement⁵. Attachments are also allowed on the teeth under the blocks to facilitate leveling and other movement or to prevent unwanted movements.

Talk to your Invisalign representative to learn more about transforming your approach to Class II cases.

Clign @2025 Align, Invisalign, ClinCheck, the starflower mark, and invis are trademarks of Align Technology. Inc. | M21580







In some cases, attachments may be removed on teeth under occlusal blocks due to interferences with other features.
 Study sponsored by Align Technology and based on adult Class I, non-extraction, mild to moderate crowding cases with SmartTrack material.

David W. White, Katie C. Julien, Helder Jacob, Phillip M. Campbell and Peter H. Buschang, Discomfort associated with Invisalign and traditional brackets: A randomised, prospective trial. The Angle Orthodontist Nov 2017, Vol. 87, No. 6 pp. 801-808.

Studies show that patient discomfort with functional appliances affect patient compliance with prescribed wear times and could lead to unsatisfactory outcomes. https://pubmed.ncbi.nlm.nih.gov/34949565/

^{5.} Compared to Invisalign aligners previously made from single-layer (EX30) material.

Easolief DUO BRIDGING THE GAP IN PAIN RELIEF



500mg/150mg film-coated tablets Paracetamol / Ibuprofen

DOUBLE ACTION PAIN RELIEF

24 FILM-COATED TABLETS

PHARMACY ONLY

DUAL ACTION PAIN RELIEF

moderate pain. Dosage Adults/elderly. The us

Fertility, pregnancy and lactation

Contraindications



ery lindesirable effects

References: 1: Daniels et al, Mangesic® 325 Acute Dental Pain Study, "compared with the same daily dose of standard paracetamol elone. Thester onset of action then standard paracetamol elone. Thester onset of action then standard buorofen atone. Easolief DUO 500 mg/150 mg film-coated tablets Each tablet contains paracetamol 500 mg and Duproten 150 mg. Presentation: White, capsule shaped tablet with breaking on one side and plain on the other side Indications. Short-term symptomatic treatment Children: Basolief DUO is contributicated in children under

BUPROFEN

Volume 71 Number 3 June/July 2025

irish dental association

MEMBERS' NEWS

Contracts provide a mechanism for handling notice periods and transitions, helping to maintain patient care standards and practice stability if an associate departs.

How the IDA can help you

- We provide template contracts for dentists (employees), dental nurses and hygienists.
- We provide professional advice in an FAQ document for self-employed dentists.
- We can assist with interpretation of contracts.
- We can help in guiding parties on how to resolve disagreements.
- We can recommend trusted mediators when disputes become seriou
- Relations Commission) operate.

IDA members should email us in confidence at contracts@irishdentalassoc.ie for more advice and information.

For associates, clarity on what's expected prevents exploitation and burnout. For owners, it ensures consistency, and performance, in both cases, written agreements (reduce) ambiguity, and (create) a professional (baseline) that promotes trust.

Financial interindentiandings are among the most common causes of disputes in disensi practice anongements. Without a contract, issues around remunieration esuch, as, percentage splits, Julis fee, contributions, classification, and payment is scholass, can pulkely splits, but fee, contributions, classification, and payment is scholass. The second secon

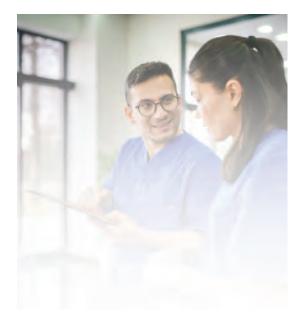
sources provide a mechanism for shanding method and and an example of the standing method provides and

IDA Dental Practice Employee Handbook – exclusive for IDA members

The IDA has developed a bespoke employee handbook for dental practices that can be specifically tailored for each practice. The template is editable,

The employee handbook has been produced with the essentance of hit exceeds back to provide exclusively to IBA members at a cost of 6200 plus VAT. An employee handbook is an essential document for practice owners and onan essential document, for practice complex complexes with the essential operation of the secret of the essential document. For practice complex the essential document, in dependent of the estimate of the practice complex to demonstrating the document, in demonstrating that your practice complex to demonstrating that your practice complexes.

nith current employment law.



Rolon Farreby in our Advisory Service provides excellent advice on all HR leaves to IDA members free of charge (some 200 quenes were deals with in 2024), we publish regular HR advice for IDA members exclusively in the Journal of 164) Percel Association

we arrange regular HR webinars exclusively for IDA members; and,

we can provide in person presentations to IDA regional meetings, free and reschedered and the second statement of the second s

MEMBERS' NEWS

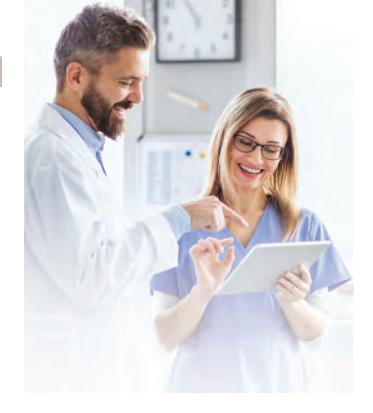
Get ready for auto-enrolment

Prepare your practice for Ireland's auto-enrolment pension scheme.

From January 1, 2026, Ireland will implement a new auto-enrolment pension savings scheme, known as the 'My Future Fund'. Under the new scheme, employers must automatically enrol eligible employees into a retirement savings plan, with contributions made by the employee, employed, and the State. Eligible employees are those aged between 23 and 60 years of age, encode 620,000 or more per annum, and our currently part of a ward block.

palision sublime. Other employees may out into the scheme voluntarily. The introduction of the e auto-employees have been expresents, a significant shift, in heland's sector.

For employees, it eliminates the need to establish and monage a separate eccupational persons scheme, klowever, early preparation is key to ensuring compliance. By updating oversity, mucching employees, and permute financiality



Your responsibilities

As an employer, your key responsibilities include:

- Automatic enrolment: identify and enrol eligible employees into the scheme.
- Employer contributions: contribute funds in line with the phased
- Facilitating employee contributions: deduct and remit employee contributions.
- Providing informations informations appropriate about the scheme, including their provide and posters

to ensure a smooth transition, you should:

update payrol systems:

Interproximal reduction in orthodontics: reported practices and perceptions of orthodontists in the Republic of Ireland

Précis: Interproximal reduction is commonly undertaken by orthodontists using handheld strips to the lower labial segments of adults or adolescents with aligner or fixed appliance treatment.

Abstract

Objectives: To ascertain reported practices and perceptions of orthodontists regarding interproximal reduction (IPR) in the Republic of Ireland (RoI).

Method: Questionnaires were administered to orthodontists in the Rol, seeking their demographics, reported IPR practices, and related perceptions.

Results: Questionnaire responses were received from 105 (75%) of those invited to participate. Nearly all (98%) performed IPR, with 44% reporting increased recent use. Lower labial segment teeth were most frequently reduced, in adults or adolescents, to reshape teeth, resolve mild crowding, or address tooth size discrepancies. This was in conjunction with aligner (59%) or fixed appliance (33%) treatments. Removal of 2-4mm of enamel per arch was most common (60%). The majority (82%) performed IPR over several visits with handheld strips (87%), strips in holders (58%), or with diamond burs in an air rotor (51%). Orthodontists perceived their patients to be unfamiliar with IPR, and to find it uncomfortable (48%) rather than painful (9%), and preferable to extraction (71%). **Conclusions:** Conservative IPR of less than 4mm per arch was mostly undertaken for teeth in the lower labial segment, in adults or adolescents, in conjunction with aligner or fixed appliance treatments. Handheld strips were most commonly used. Orthodontists perceived their patients to be unfamiliar with IPR, and to find it uncomfortable reatments. Handheld strips were most commonly used. Orthodontists perceived their patients to be unfamiliar with IPR, and to find it uncomfortable reatments. Handheld strips were most commonly used. Orthodontists perceived their patients to be unfamiliar with IPR, and to find it uncomfortable rather than painful, and preferable to extraction.

Journal of the Irish Dental Association 2025;71(3):133-137

Introduction

Interproximal reduction (IPR) involves mechanical reduction of the mesiodistal dimensions of teeth.^{1,2} This procedure can be used to create space for relief of crowding, address tooth size discrepancies (TSDs), reduce black triangles, and promote stability of the lower labial segment.³⁻⁷ IPR is frequently used in combination with clear aligner treatment, but may also be used in conjunction with treatment involving other appliances, such as fixed, functional or retention appliances.⁸ Recent surveys have indicated a trend for increased use of IPR by both general and specialist practitioners in conjunction with aligner treatment and a decline in tooth extraction for the relief of crowding.^{9,10,11}



. Donovan BDS DClinDent (Orthodontics) M pecialist in Orthodontics Private practice Singapore Questionnaire surveys in North America and India have explored use and perceptions of IPR by dental professionals.¹²⁻¹⁴ IPR was used most frequently to address TSDs, relieve anterior crowding, improve aesthetics, create space in borderline extraction cases, and to reduce relapse. Handheld strips were mostly employed and postoperative fluoride treatments were infrequently prescribed.¹⁴ The concern expressed by clinicians in regard to caries development and postoperative sensitivity following IPR differed between surveys.¹²⁻¹⁴ Respondents to North American surveys felt that IPR posed little caries risk (95%)¹⁴ and seldom applied topical fluoride postoperatively (40%¹² and 27%¹⁴), while a sample of orthodontists in India felt that teeth were more susceptible to

D.T. Millett N BDSc DDS FDS DOrth MOrth FHEA Bi Professor of Orthodontics/Consultant Pro Orthodontist Pri Orthodontic Unit, Oral Health & O Development Cork University Dental School & Hospital Cor Cork, Ireland

BDS MDPH PhD FDS PGDipTLHE Professor of Dental Public Health and Preventive Dentistry Oral Health Services Research Centre Cork University Dental School & Hospital Cork, Ireland

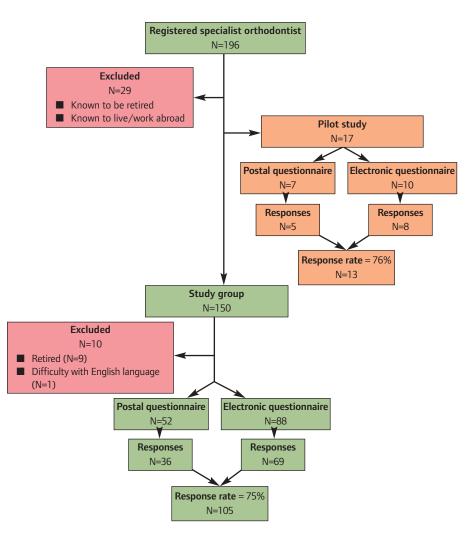


FIGURE 1: Responses to survey by specialist orthodontists.

caries (91%) and sensitivity (55%) after IPR, applying topical fluoride frequently (87%) to reduce these risks.¹³

With the use of IPR on the rise,¹¹ it is timely to further explore this procedure. To date, there is no evidence available on how IPR is used by orthodontists in the Republic of Ireland (RoI), or their perceptions of this procedure. The aim of this study, therefore, was to ascertain orthodontist-reported practices and perceptions regarding IPR.

Materials and methods

Ethical approval was granted by the Clinical Research Ethics Committee of the Cork Teaching Hospitals. Postal and electronic versions of a *de novo* questionnaire were developed for orthodontists with reference to previous surveys.^{8-10,12-14} The questionnaire was formulated and pre-piloted internally according to recommended guidelines, and modified following feedback on the order of questions and formatting.^{15,16}

The Dental Council of Ireland's Specialist Register, Division of Orthodontics, and the Orthodontic Society of Ireland membership list were used to generate a database of participants. Using a random sequence generator (www.random.org/sequences), the survey was initially piloted with 17 orthodontists, approximately 10% of the total sample. Attempts were made by one author to contact all of these by telephone. Those contacted were provided with an overview of the study and invited to participate. Following consent, the option of receiving a postal or electronic version of the questionnaire was offered. Those uncontactable by telephone after three attempts were sent the postal version of the questionnaire by default. All responses were anonymised. After one month, non-responders were sent one reminder to complete the survey. Following piloting, minor modifications to question coding and survey layout were made. The main survey was conducted using the same methodology as for the pilot study. Following exclusion of members who were contacted and subsequently found to be retired or to have difficulty with the English language (n=10), the survey was distributed to the final sample (n=140).

Results were analysed descriptively. Responses to the pilot survey were not included in data analyses.

Results

Demographic details

Responses were received from 105 orthodontists (75% response) (Figure 1), comprised of 57 males and 48 females. The average time in practice was 15.5

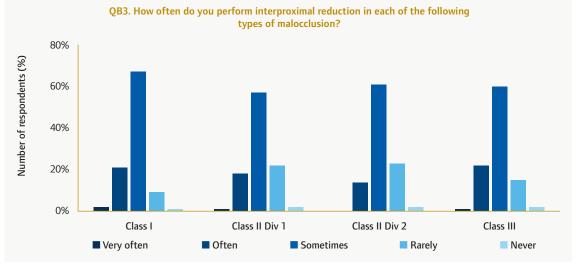


FIGURE 2: Use of IPR in different types of malocclusion.

QB5. How often do you perform interproximal reduction at each of the following stages of treatment?

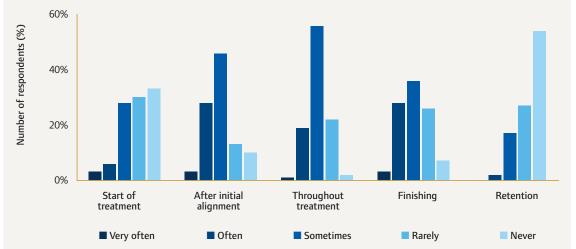


FIGURE 3: Use of IPR at different stages of treatment.

years (range 1-45 years). Most trained in the UK (53%), followed by the Rol (27%). The remainder trained in the US (7%) and other countries (13%) including Bulgaria, Canada, Greece, Hong Kong, Hungary, Poland and Romania. The majority worked in private practice (58%), followed by State-funded practice (21%) or a mixture of private and State-funded (11%), with the remainder a mix of private practice, State-funded and teaching hospital (6%), private practice and teaching hospital (2%), and teaching hospital only (2%). Most (77%) received IPR instruction during postgraduate training using strips, handheld (63%) or in a holder (50%).

IPR practices: indications and uses

Nearly all (98%) orthodontists reported that they performed IPR, and almost half (47%) of orthodontists used IPR routinely. More orthodontists reported increasing (44%) than decreasing (6%) frequency of IPR use over the past five years, while 50% reported no change. IPR was most often used in adults, followed by adolescents in the permanent dentition. Little difference existed in frequency of use of IPR across malocclusions (**Figure 2**). IPR was undertaken primarily after initial alignment and least commonly during retention (**Figure**)

3). Use was most frequent with aligner treatment (59%) or fixed appliance treatment (33%) and least with functional appliances (1%). IPR use did not influence retainer choice for most respondents (92%). IPR was used for triangular-shaped teeth (97%), reshaping existing restorations (92%), addressing TSDs (89%), and reducing black triangles (66%). Mild crowding was considered an indication for IPR (92%), and less so for moderate (40%) or severe (12%) crowding.

Mandibular anterior teeth in the order of lateral incisors, central incisors, and canines were most frequently reduced, followed by maxillary central and lateral incisors. IPR was less frequently used posteriorly in the mouth (**Table 1**).

IPR practices: procedure

Prior to IPR, only 26% undertook a Bolton analysis (which is used to assess if there is a tooth size discrepancy by comparing the sizes of maxillary and mandibular teeth).¹⁷ A preference was indicated for 0.3mm enamel removal from proximal surfaces of upper (43%) and lower anterior teeth (38%), and 0.4mm for posterior teeth. Most (60%) opted for space creation of 2-4mm maximally per arch with IPR.

Rank	Tooth	Very often (%)	Often (%)	Sometimes (%)	Rarely (%)	Never (%)
1	Mandibular lateral incisor	14.4	35.1	42.3	8.2	0
2	Mandibular central incisor	13.4	33	43.3	10.3	0
3	Mandibular canine	9.4	22.9	41.7	24	2.1
4	Maxillary central incisor	8.2	18.6	49.5	17.5	6.2
5	Maxillary lateral incisor	4.1	18.6	41.2	27.8	8.2
6	Mandibular first premolar	1	6.3	42.7	39.6	10.4
7	Maxillary canine	1.1	10.5	38.9	33.7	15.8
8	Mandibular second premolar	1	5.2	30.2	40.6	22.9
9	Maxillary first premolar	0	2.1	33.7	42.1	22.1
10	Maxillary second premolar	0	1	26	46.9	26
11	Maxillary first molar	0	1	10.4	44.8	43.8
12	Mandibular first molar	0	1	9.4	40.6	49
13	Maxillary second molar	0	1	3.1	21.9	74
14	Mandibular second molar	0	1	3.1	17.7	78.1

Table 1: Teeth ranked according to how frequently interproximal reduction was reportedly performed.

The majority (82%) performed IPR over several visits, with handheld strips (87%), strips in holders (58%), or with diamond burs in an air rotor (51%). Almost half (47%) measured tooth reduction with a leaf gauge. Most (93%) recorded the teeth reduced but fewer (64%) recorded the amount of enamel reduction per tooth. After IPR, the use of fluoride mouthwash (57%) and interdental brushes (51%) was encouraged, but recontouring (44%), polishing (45%), or treatment of enamel surfaces with fluoride (24%) or amorphous calcium phosphate products (6%) was undertaken less frequently.

Written information on IPR for patients was provided by a minority (11%). Of those who did, most gave the information leaflet developed by the British Orthodontic Society (BOS).¹⁸ Risks of pain (71%), sensitivity (34%), gingivitis (15%), and caries (12%) were routinely discussed with patients, as were benefits such as reducing black triangles (94%), relief of crowding (94%), improvement in tooth shape (93%) and size (83%), avoidance of extractions (72%), and improved stability (49%).

Perceptions of IPR

IPR was perceived to be easier to perform anteriorly than posteriorly (87%). Orthodontists felt that IPR posed little caries risk to patients (72%). Some 62% had researched the effects of IPR and indicated a willingness to have IPR carried out on themselves (87%). Orthodontists perceived their patients to find IPR uncomfortable (48%) rather than painful (9%), and preferable to extraction (71%). Orthodontists perceived their patients' level of pain during IPR to be 3.3/10 (range 0-7) and a minority (2%) reported that they had encountered postoperative sensitivity in their patients. Although considered easy for patients to understand (89%), few orthodontists (12%) reported that their patients were aware of IPR.

Discussion

While clinical considerations and short- and long-term effects of IPR have been studied, ^{1,19} no previous survey has investigated the use and perceptions of IPR in contemporary orthodontic practice in the Rol. The 75% response achieved in this survey is considered 'extremely good', ¹⁵ and higher than the response to similar surveys, which ranged from 0.92-66%. ^{8,10,11}

Reported use of IPR by 98% of orthodontists was in keeping with previous studies where 89-100% use was described.¹²⁻¹⁴ Some 44% of respondents indicated increased use over the past five years, which supports the trend observed in UK and Belgian surveys.^{10,11} Data gleaned from 2014 and 2020 North American studies revealed no change in the frequency of IPR use but a very low

response (0.92%) precluded meaningful conclusions.⁸ The instruments used, indications for use, and the conservative amount of enamel reduction reported in the present study align with previous findings.^{8,12} Postoperative enamel recontouring, polishing or surface treatment with fluoride or other agents were not routine, suggesting a perception among orthodontists that IPR poses a minimal iatrogenic risk, in agreement with existing literature.^{1,19}

Almost two-thirds of respondents to the present survey indicated that they had researched the effects of IPR on dental health, fewer than had done so in North America (81%).¹⁴ Orthodontists in both surveys were amenable to having IPR performed on themselves (87% and 92%, respectively).¹⁴

As orthodontists perceived their patients to be unfamiliar with IPR before the procedure, this highlights that further information may be needed to assist with informed decision-making.²⁰ Patients were also perceived to find IPR uncomfortable rather than painful, and preferable to extraction.

The strengths of the present study include its high response and specific focus on IPR, which heretofore has received limited coverage in surveys. Responses were restricted to orthodontists who were registered and working in one country, but the wide range of locations where orthodontists were trained limits this impact. In addition, this survey provides new baseline data on the practice of IPR in the Rol, to which comparison can be made by other researchers. With all surveys, practices and perceptions were self-reported, which may differ from actual practice.

Future research could investigate IPR use among general dental practitioners who practise orthodontics, especially considering the widespread adoption of IPR with clear aligner treatment.

Conclusions

Conservative IPR of less than 4mm per arch was mostly undertaken for teeth in the lower labial segment, in adults or adolescents, in conjunction with aligner or fixed appliance treatments. Handheld strips were most commonly used. Orthodontists perceived their patients to be unfamiliar with IPR, and to find it uncomfortable rather than painful, and preferable to extraction.

References

- Zachrisson BU, Nyoygaard L, Mobarak K. Dental health assessed more than 10 years after interproximal enamel reduction of mandibular anterior teeth. *Am J Orthod Dentofacial Orthop.* 2007;131(2):162–169.
- Livas C, Jongsma AC, Ren Y. Enamel reduction techniques in orthodontics: a literature review. Open Dent J. 2013;7:146-151.

- Pindoria J, Fleming PS, Sharma PK. Inter-proximal enamel reduction in contemporary orthodontics. *Br Dent J*. 2016;221(12):757-763.
- 4. Sheridan JJ. Air-rotor stripping. J Clin Orthod. 1985;19(1):43-59
- Ballard ML. Asymmetry in tooth size: a factor in the etiology, diagnosis and treatment of malocclusion. *Angle Orthod*. 1944;14(3):67-70.
- Zachrisson BU. Interdental papilla reconstruction in adult orthodontics. World J Orthod. 2004:5(1):67-73.
- Boese LR. Fiberotomy and reproximation without lower retention 9 years in retrospect: part II. Angle Orthod. 1980;50(3):169-178.
- Keim RG, Vogels DS, Vogels PB. 2020 JCO Study of Orthodontic Diagnosis and Treatment Procedures Part 1: Results and Trends. J Clin Orthod. 2020;54(10):581-610.
- Best AD, Shroff B, Carrico CK, Lindauer SJ. Treatment management between orthodontists and general practitioners performing clear aligner therapy. *Angle Orthod.* 2017;87(3):432-439.
- Fleming PS, Cunningham SJ, Benson PE, Jauhar P, Millett D. Extraction of premolars for orthodontic reasons on the decline? A cross-sectional survey of BOS members. J Orthod. 2018;45(4):283-288.
- Evrard A, Tepedino M, Cattaneo PM, Cornelis MA. Which factors influence orthodontists in their decision to extract? A questionnaire survey. J Clin Exp Dent. 2019;11(5):432-438.
- CPD questions 1. There is a trend in the literature that suggest

To claim CPD points, go to the MEMBERS' SECTION of www.dentist.ie and answer the following questions:



- literature that suggests interproximal reduction:
- A. Is being utilised by orthodontists less frequently than before
- B. Has replaced extractions as the main way to relieve crowding in orthodontics
- C. Is being utilised by orthodontists more frequently than before

- Sheridan JJ. The readers' corner. Enamel reproximation and consultants. *J Clin Orthod*. 2006;40(3):155-157.
- Srivastava SC, Verma V, Panda S, Anita G. Current status of interproximal enamel reduction in orthodontic treatment. *Pak Oral Dent J.* 2012;32(2):237-240.
- Barcoma E, Shroff B, Best AM, Shoff MC, Lindauer SJ. Interproximal reduction of teeth: differences in perspective between orthodontists and dentists. *Angle Orthod.* 2015;85(5):820-825.
- 15. Williams A. How to...write and analyse a questionnaire. J Orthod. 2003;30(3):245-252.
- Dillman DA, Smyth J, Christian LM. Internet, Phone, Mail and Mixed-Mode Surveys: The Tailored Design Method. 4th ed. Wiley, 2014.
- Bolton WA. The clinical application of a tooth-size analysis. Am J Orthod. 1962;48(7):504-529.
- British Orthodontic Society. Interproximal reduction leaflet. https://bos.org.uk/wpcontent/uploads/2022/03/British-Orthodontic-Society-InterproximalReductionMarch 2019.pdf. Accessed March 10, 2024.
- Koretsi V, Chatzigianni A, Sidiropoulou S. Enamel roughness and incidence of caries after interproximal enamel reduction: a systematic review. Orthod Craniofac Res. 2014;17(1):1-13.
- Barber S. Shared decision-making in orthodontics: are we there yet? J Orthod. 2019;46(1_suppl):21-25.
- 2. Orthodontists in the Republic of Ireland use interproximal reduction most frequently in cases of:
- \bigcirc A. Mild crowding
- O B. Moderate crowding
- O C. Severe crowding

- 3. On which teeth did orthodontists report use of interproximal reduction most frequently?
- A. Upper lateral incisors with a Bolton discrepancy
- O B. Teeth in the lower labial segment
- C. Molar teeth with over-contoured mesial or distal restorations

Quiz Submitted by Dr Clair Nolan.

A 23-year-old healthy female presented complaining of pain associated with her partially erupted lower right third molar. On clinical examination, both her lower third molars were partially erupted. All of her remaining adult teeth were fully erupted with no previous restorations, no caries and no malocclusion. To assess the lower third molars, an OPG was taken (right).

Questions

- 1. How many supernumerary teeth can you identify?
- What additional imaging could be used to assess the unerupted supernumerary teeth?
- What cyst could be associated with the crown of unerupted teeth?



Answers on page 150.

Oral cancer perceptions among adult attendees of a dental hospital in the Republic of Ireland: a cross-sectional pilot study

Précis: This study reveals limited awareness of the signs, symptoms and risk factors of oral cancer, and of the dentist's important role in oral cancer screening.

Abstract

Objectives: This study aimed to assess: (i) awareness of the signs and symptoms of oral cancer and its risk factors; and, (ii) awareness of and attitudes towards oral cancer screening, in an Irish cohort.

Methods: A cross-sectional, self-administered survey was used in a convenience sample of patients >18 years with no cancer history attending the Dublin Dental University Hospital. The data were analysed using descriptive statistics, Pearson's Chi-squared and Fisher's exact tests.

Results: A total of 124 responses were received, and 83.7% reported knowing little/nothing about oral cancer risk factors. Some 12.8% did not identify smoking, 35.3% alcohol consumption, 90.5% betel nut, 35.3% age, and 80.2% male gender, as risk factors. Some 46% were unaware that a dentist is trained to check for oral cancer. Participants were more likely to seek advice regarding a persistent oral white or red patch from their doctor than their dentist, but were more likely to attend their dentist in relation to a persistent ulcer, swelling or pain. The study did not find any statistically significant relationship between gender, age, educational level and either awareness of the signs and symptoms of oral cancer and its risk factors, or experiences and attitudes towards oral cancer screening.

Conclusions: The study demonstrated a lack of knowledge of the risk factors, signs and symptoms of oral cancer, and of awareness of the role of dentists in screening for oral cancer. It should be repeated in a larger cohort in non-dental settings to inform the development of oral cancer awareness programmes that address those areas where awareness is lacking.

Key words: oral cancer awareness; oral cancer knowledge; oral cancer perceptions; oral cancer screening experience.

Journal of the Irish Dental Association 2025;71(3):138-142

Introduction

Incidence of oral cancer

Oral cancer is ranked as the 13th most common cancer worldwide with an estimated 377,713 new cases and 177,757 deaths in 2020.1 Tobacco, alcohol and betel quid use, and the presence of an oral potentially malignant disorder (OPMD), e.g., oral leukoplakia, are recognised as the main risk factors for oral cancer,1 with up to 80% of oral cancers occurring in smokers.2 While the synergistic effect of tobacco and alcohol is well documented,² other risk factors such as being male, older age, South Asian race, low socioeconomic status, and low consumption of fruit and vegetables are also associated with an increased

Sheila Galvin Division of Oral and Maxillofacial Surgery, Oral Medicine and Oral Pathology School of Dental Science Trinity College Dublin Dublin Dental University

Claire M. Healy Division of Oral and Maxillofacial Surgery, Oral Medicine and Oral Pathology School of Dental Science Trinity College Dublin Dublin Dental University

risk of oral cancer.³ Research has shown that public awareness of oral cancer ranges from 56% to 72%,⁴⁻⁶ and in particular there are varying levels of awareness of the associations between gender and age and oral cancer. Lack of awareness of the signs and symptoms of oral cancer can lead to misattribution, and this has been reported as the most common reason for a delay in seeking help for the common signs and symptoms.⁷⁻⁸

As the early stages of oral cancer development are often asymptomatic, screening provides an opportunity for early detection of both oral cancer and OPMDs.⁹ Signs of early oral cancer can be identified by trained healthcare professionals with limited special equipment¹⁰ and even by individuals themselves if sufficient education is provided.¹¹ Despite the ease of detection of oral cancer, approximately one-third of patients wait more than three months before consulting a healthcare professional about signs of oral cancer.⁸ Existing research suggests that opportunistic screening of high-risk individuals is valuable in early cancer detection and down-staging of the disease,^{9,10} resulting in more favourable long-term outcomes for the patient.⁷

Unfortunately, the incidence and mortality rates of mouth and pharyngeal cancer in the Irish population have been gradually increasing for the past 25 years, with oral cancer accounting for 44% of these cases (ICD CO2-CO6).¹² The highest incidence of this cancer is recorded in males, where it is most commonly seen in 60-66 year olds. In females it is most prevalent in 50-64 year olds.¹² The overall five-year survival rate still remains poor despite advances in treatment (53%), with early stage at diagnosis being the most important factor in improving prognosis.¹² Therefore, it is pertinent to investigate the awareness of oral cancer in an Irish cohort.

The purposes of this study were to: i) assess the awareness of the signs and symptoms of oral cancer and its risk factors in an Irish patient cohort; and, ii) examine the awareness and attitudes of this patient cohort towards oral cancer screening.

Methods and materials

Study design

This was a cross-sectional pilot study. Ethical approval was obtained from the Research Ethics Committee, School of Dental Science, Trinity College Dublin (approval number DSREC02022-02). This study is reported using the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) cross-sectional reporting guidelines.¹³

Setting

Patients waiting for appointments for various dental clinics through routine, emergency and referral pathways were approached in the waiting area of the Dublin Dental University Hospital (DDUH) lobby by one of the investigators between August and October 2022, and invited to participate in the study. All consecutive attendees were supplied with a participant information leaflet (PIL) and consent form, and details of the study were discussed. Versions of the consent form and questionnaire were available both on paper and online via a QR code link to SurveyMonkey.

Participants

Inclusion criteria were patients over the age of 18, with no prior history of cancer other than non-melanoma skin cancer, attending dental clinics in the DDUH. Patients attending the oral mucosal dysplasia clinic and post-oral cancer treatment clinics were excluded from participation.

Data collection

Participants were asked to self-complete the previously validated questionnaire^{9,14} containing 32 questions on socio-geographic parameters, lifestyle factors, and validated items examining participants' beliefs, awareness, knowledge and experience of early detection of oral cancer and its risk factors.¹⁴⁻¹⁷ The questionnaire took approximately 10 minutes to complete. All data were anonymised and no personal details were identifiable.

Statistical analyses

Power analysis calculation for this study was not performed, as this was a pilot study in an Irish cohort. Descriptive analyses were used to describe the characteristics of the participants. The data were analysed using RStudio (Version 4.2.2). Pearson's Chi-squared, Fisher's exact, and Fisher's exact with simulated p values based on 2,000 replicates, tests were used as appropriate, and a table of counts and percentages generated. Logistic regression, to determine odds ratios and confidence intervals (CI), was carried out using the R packages epiR and car, and multinomial regression was carried out using the R package nnet.

Results

Participants

A total of 124 individuals were recruited, and 10 other individuals declined to participate. One respondent was excluded from the analysis due to a history of melanoma. Only two participants completed the online version of the questionnaire, while the remainder completed the paper version.

Sociodemographic parameters

The mean reported age of the participants was 45 years (range 18-89). Age was categorised into groups of 18-39 (32.4%), 40-60 (51%), and over 60 years (16.6%), for analysis.

Risk factors

Audit-C scores were calculated and revealed that almost one-third of the respondents (31.1%) had scores indicating severe and high-risk alcohol use. One-quarter (24.4%) were current smokers, with the majority of these (67.7%) smoking 10 or more cigarettes per day. A total of 42 respondents indicated that they were former smokers, with 54.8% of these having stopped smoking more than 10 years previously. There were no statistically significant associations in relation to lifestyle factors.

In relation to previous dental visits, 65.6% of participants reported that they had visited a dentist in the past year, 10.7% had visited within the past one to two years, and 23.8% had not visited for at least two years. Some 39% of respondents visited their dentist for a regular check-up at least annually, 17.2% visited less regularly for an occasional check-up, and 43.4% only visited when having trouble with their teeth.

Participants were asked if they would seek help for various key signs and symptoms of oral cancer and, if so, which healthcare professional (general medical practitioner (GMP), dentist, pharmacist, or other) they would attend. Nearly half of the respondents reported that they would seek help from their GMP for an oral white patch (45.9%) or red patch (46.6%), while only 33.6% and 34.7%, respectively, would attend their dentist for these lesions. On the other hand, the participants were more likely to seek help from their dentist than their GMP for an oral ulcer, oral pain/discomfort, or an oral swelling (**Table 1**).

	White patch	Red patch	Ulcer	Swelling	Pain/discomfort
Doctor	56 (45.9%)	55 (46.6%)	47 (39.2%)	52 (43.7%)	44 (37.6%)
Dentist	41 (33.6%)	41 (34.7%)	61 (50.8%)	59 (49.6%)	65 (55.6%)
Pharmacist	7 (5.7%)	8 (6.8%)	3 (2.5%)	3 (2.5%)	2 (1.7%)
Other	5 (4.1%)	4 (3.4%)	5 (4.2%)	3 (2.5%)	3 (2.6%)
Total who would seek help from a HCP	109 (89.3%)	108 (91.5%)	116 (96.7%)	117 (98.3%)	114 (97.5%)
Would not seek help	13 (10.7%)	10 (8.5%)	4 (3.3%)	2 (1.7%)	3 (2.5%)
Missing data	n=2	n=6	n=4	n=5	n=7

Table 1: Number (%) of respondents and their intention to seek help from a healthcare professional for various key signs and symptoms of oral cancer.

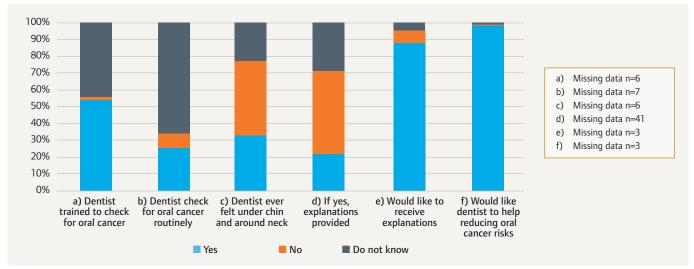


FIGURE 1: Participants' awareness of oral cancer screening.

Oral cancer awareness and knowledge

Although 69.7% of respondents had heard about oral cancer, the majority of these (83.7%) indicated that they knew nothing or very little about it. With regard to knowledge of risk factors for oral cancer, the majority could not identify the use of betel nut (90.5%) or male gender (80.2%) as risk factors. Surprisingly, 35.3% failed to recognise alcohol consumption, 22.5% chewing tobacco, and 12.8% smoking, as risk factors.

Interestingly, males were 4.88 times more likely to know that male gender was associated with an increased risk of oral cancer (adj OR 4.88, padj=0.02) than females. No statistically significant associations between gender, age, educational level, and awareness of the signs and symptoms of oral cancer and its risk factors were found.

Oral cancer screening awareness and attitude

Figure 1 summarises participants' awareness of oral cancer screening. Almost half of the respondents (45.8%) did not know that dentists were trained to identify signs and symptoms of oral cancer and only one-quarter (25.6%) were aware of being routinely checked for oral cancer at their dental visits. Those aged 40-60 years were 4.74 times more likely to know that dentists were trained in oral cancer screening (95% CI 1.84-12.15) than those aged 18-39. Almost all respondents (87.6%) would like their dentist to tell them if they were checking for signs of oral cancer and 98% would like their help in reducing their risk of developing it.

Overall, most respondents (98.3%) had a positive attitude towards having an oral cancer screening.

Discussion

This cross-sectional study was designed to assess awareness of the signs and symptoms of oral cancer and its risk factors, as well as experiences and attitudes towards oral cancer screening, in an Irish patient cohort. It should be noted that the results present the views of a convenience sample of patients from one institution and so sampling bias cannot be excluded.

Knowledge of oral cancer was poor, with less than one-fifth of respondents (16.3%) indicating some knowledge. This figure is similar to reports from studies in the UK (19%)⁵ and Australia (25%),¹⁸ but shows some improvement from an earlier study in Ireland (6%).¹¹ However, the majority of respondents understood that smoking (87.2%) and alcohol consumption (64.7%) were risk factors for oral cancer, similar to a study in Portugal,⁶ where 89.5% of individuals identified tobacco, and 63% alcohol, as causes of oral cancer. Knowledge in relation to alcohol was higher than demonstrated in earlier UK and Ireland reports, where only one-fifth and one-tenth of respondents identified it as a risk factor for oral alcohol consumption. However, knowledge of other risk factors was poor, including male gender (19.8%) and betel quid use (9.5%). These were consistent with results from other studies, where only 22% of respondents identified male gender⁶ and 12% betel quid use²⁰ as risk factors. The low knowledge on chewing betel quid is unsurprising, as 84.4% of our cohort was Caucasian, with only 6.8% being Asian/Asian Irish. It is interesting to note that men in our study were significantly more likely than women to know that male gender places them at increased risk for oral cancer. The basis for this increased knowledge among men is not clear; however, it may be part of a general awareness among men that

they are more likely to be diagnosed with a cancer in their lifetime than women. While the results in relation to tobacco and alcohol awareness are encouraging, there is still a clear need to educate the general public with regard to these and other common risk factors for oral cancer. Similarly, it is important to educate patients about clinical presentations of oral cancer and the display of diagnostic toolkits in waiting rooms is a simple possible measure.

Exploiting every opportunity for oral cancer screening is vital for early cancer detection and hence, improved survival. Unfortunately, only 15% of mouth and pharyngeal cancers presented at stage I, while 49% presented at stage IV, in the 2014-2018 interval.²¹ The sample demonstrated a positive attitude towards oral cancer screening (98.3%), with most professing that they would not be particularly anxious about having this carried out (80.2%). Only one-quarter were aware of being routinely checked for oral cancer at their dental visits, which was consistent with other studies (14-47%).^{5,20,22} This indicates a need for clear communication from dentists that a routine check-up appointment entails not only a dental review but also examination of the oral mucosa for signs of oral cancer and other oral mucosal diseases.

It is reassuring that the majority of the respondents would consult a healthcare professional for each of the signs and symptoms of oral cancer. This study identified that patients preferred to visit their doctor instead of their dentist in relation to an oral white or red patch. There was a small percentage of respondents who would seek help in relation to signs and symptoms of oral cancer from other healthcare professionals, such as pharmacists. While dentists are trained to examine soft tissues and detect oral cancer, there is varying knowledge among healthcare professional groups when it comes to recognition of signs and symptoms of oral cancer. One Irish study explored knowledge among non-consultant hospital doctors and reported that only 19% of respondents regularly examined the oral mucosa during consultations, with many exhibiting a lack of knowledge of how to diagnose oral cancer based on clinical appearance.²³ Rogers *et al.* reported that 82% of pharmacists could identify a non-healing ulcer but fewer identified white (52%) and red (57%) patches as possible oral cancer.⁷

Irregular dental attendance is associated with an increased risk of head and neck cancer²² and it is a significant cause for concern that nearly a quarter of respondents had not attended a dentist in the previous two years. Funding of the public dental service has fallen dramatically in both Ireland and the UK in the last 10 years, leaving more people without access to regular dental care.^{24,25} This makes it increasingly likely that patients will seek the advice of other healthcare professionals in relation to oral signs and symptoms. Therefore, the wider healthcare team should be trained to recognise oral cancer signs and symptoms, and to refer in a timely manner.

The study did not find any statistically significant relationship between gender, age, and educational level, and either awareness of the signs and symptoms of oral cancer and its risk factors, or with experiences and attitudes towards oral cancer screening. These results differ from previous studies, which indicated that female gender and high occupational and educational status were associated with increased awareness of oral cancer and its risk factors.^{5,19,22} Our results indicate that the age group 18-39 years were the least aware of the availability of oral cancer screening from their dentists. This is not surprising, as it has been recently reported in the UK²⁰ that general awareness of oral cancer usually increases with age. Therefore, education of younger age groups is needed for improving oral cancer awareness in the general population, particularly in view of the increasing incidence of the disease.

Strengths

This study was the first to assess awareness of the signs and symptoms of oral cancer, its risk factors, and experiences and attitudes towards oral cancer screening in an Irish cohort. Previously, a study of people attending Mouth Cancer Awareness Day was completed by MacCarthy *et al.*, but mainly assessed attendees' knowledge on self-examination and dental attendance, with a small number of questions relating to habits or activities that might cause oral cancer.¹¹ Contrary to our study, where individuals attended for routine dental care, the attendees in the MacCarthy *et al.* study were attending as part of an oral cancer awareness campaign and could be considered more informed than the current study population.¹¹ Our study is adding new information on association analyses between gender, age, educational level, and either awareness of the signs and symptoms of oral cancer and its risk factors, or with experiences and attitudes towards oral cancer screening.

Limitations

We acknowledge that we surveyed a convenience sample attending a dental hospital's outpatient clinics for a range of dental procedures, and this may have introduced some bias. Therefore, the results may not be representative of the general Irish population.

Recommendations

- Collaboration with the wider team of healthcare professionals in non-dental settings on public awareness of oral cancer and the importance of opportunistic screening is desirable.
- 2. Oral cancer public awareness campaigns, targeting all age groups, based on tested interventions, should be developed.
- The dental team should avail of every opportunity to educate patients about the risk factors for oral cancer, and inform patients that an oral mucosal screening for oral cancer forms part of their routine dental reviews.

Conclusion

This pilot study indicates a lack of knowledge of some of the risk factors, signs and symptoms of oral cancer in our study population. It also demonstrated a lack of public awareness of the role of dentists in screening for oral cancer. This study should be repeated in a larger cohort in non-dental settings. The information obtained will be useful in designing and implementing oral cancer awareness programmes and initiatives, which should particularly target those areas where awareness is lacking.

Acknowledgements

We would like to thank all participants for completing the survey. We would also like to thank Adam McQuillan for helping with data entry.

References

- WHO. Oral Health. Updated 2023. https://www.who.int/news-room/factsheets/detail/oral-health. Accessed February 20, 2023.
- Macfarlane TV, Macfarlane GJ, Oliver RJ, *et al*. The aetiology of upper aerodigestive tract cancers among young adults in Europe: the ARCAGE study. *Cancer Causes Control*. 2010;21(12):2213-2221.
- NHI. Oral Cancer incidence (new cases) by age, race, and gender. Updated 2023. https://www.nidcr.nih.gov/research/data-statistics/oralcancer/incidence#:~:text=Oral%20cancer%20rates%20are%20significantly,between% 20ages%2060%20and%2070. Accessed April 1, 2023.

- Warnakulasuriya KA, Harris CK, Scarrott DM, et al. An alarming lack of public awareness towards oral cancer. Br Dent J. 1999;187(6):319-322.
- Awojobi O, Scott SE, Newton T. Patients' perceptions of oral cancer screening in dental practice: a cross-sectional study. *BMC Oral Health*. 2012;12:55.
- Monteiro LS, Salazar F, Pacheco J, Warnakulasuriya S. Oral cancer awareness and knowledge in the city of Valongo, Portugal. *Int J Dent.* 2012;2012:376838.
- Rogers SN, Lowe D, Catleugh M, Edwards D. An oral cancer awareness intervention in community pharmacy. Br J Oral Maxillofac Surg. 2010;48(7):498-502.
- Scott SE, Khwaja M, Low EL, *et al*. A randomised controlled trial of a pilot intervention to encourage early presentation of oral cancer in high-risk groups. *Patient Educ Couns*. 2012;88(2):241-248.
- 9. Warnakulasuriya S, Kerr AR. Oral cancer screening: past, present, and future. *J Dent Res.* 2021;100(12):1313-1320.
- Morikawa T, Shibahara T, Takano M, et al. Countermeasure and opportunistic screening systems for oral cancer. Oral Oncol. 2021;112:105047.
- MacCarthy D, O'Sullivan E, McAlister C, et al. The development of mouth, head and neck cancer awareness in Ireland and results of Mouth Cancer Awareness Day 2011. J Ir Dent Assoc. 2012;58(2):109–113.
- NCRI. Cancer in Ireland 1994-2020: Annual statistical report of the National Cancer Registry. Cork, Ireland. 2022.
- von Elm E, Altman DG, Egger M, et al. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. Int J Surg. 2014;12:1495 1499.
- Bradley KA, Bush KR, Epler AJ, *et al.* Two brief alcohol-screening tests from the Alcohol Use Disorders Identification Test (AUDIT): validation in a female Veterans Affairs patient population. *Arch Intern Med.* 2003;163(7):821-829.

- Humphris GM, Field EA. An oral cancer information leaflet for smokers in primary care: results from two randomised controlled trials. *Community Dent Oral Epidemiol*. 2004;32(2):143-149.
- Saunders JB, Aasland OG, Babor TF, et al. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption – II. Addiction. 1993;88(6):791-804.
- Babor TF, Higgins-Biddle JC, Saunders Maristela JB, Monteiro, G. The Alcohol Use Disorders Identification Test Guidelines for Use in Primary Care. 2nd ed. WHO. 2001.
- Zachar JJ, Huang B, Yates E. Awareness and knowledge of oral cancer amongst adult dental patients attending regional university clinics in New South Wales, Australia: a questionnaire-based study. *Int Dent J.* 2020;70(2):93-99.
- West R, Alkhatib MN, McNeill A, Bedi R. Awareness of mouth cancer in Great Britain. Br Dent J. 2006;200(3):167-151.
- 20. Oral Health Foundation. Mouth Cancer Action Month 2022 United Kingdom Survey, Broadcast Revolution, September 2022.
 - https://www.dentalhealth.org/thestateofmouthcancer. Accessed February 20, 2023.
- Chang JS, Lo HI, Wong TY, Huang CC, Lee WT, Tsai ST. Investigating the association between oral hygiene and head and neck cancer. Oral Oncol. 2013;49:1010-1017.
- 22. NCRI. Cancer Factsheet Mouth & pharynx (ICD 10 C01 14). Cork, Ireland. 2022.
- Shanahan D, Healy CM. Oral cancer awareness of non-consultant hospital doctors in Irish hospitals. *Ir Med J.* 2018;111(1):667. PMID: 29869848.
- 24. Garratt K, MacDonald M, Harke, R. Dentistry in England. House of Commons Library. 2022.
- IDA. Budget allocation for dental care amounts to pocket change Irish Dental Association. Updated September 2022. https://www.dentist.ie/latestnews/%E2%80%98budget-allocation-for-dental-care-amounts-to-pocket-change%E 2%80%99-%E2%80%93-irish-dental-association.8569.html. Accessed May 10, 2023.

$CPD \ questions \quad 1. \ \ \text{Which of the following is correct}$

To claim CPD points, go to the MEMBERS' SECTION of www.dentist.ie and answer the following questions:

- Which of the following is correct with regard to risk factors for oral cancer?
- A. Up to 80% of oral cancers occur in smokers.
- B. Alcohol and tobacco have a synergistic effect in increasing the risk of oral cancer.
- C. Males have a higher risk of oral cancer than females.
- D. Presence of an oral potentially malignant disorder is associated with an increased risk of oral cancer.

- The highest incidence of oral cancer in males in Ireland is in which of the following age groups?
- In this survey, approximately what percentage of respondents had heard of oral cancer?

E. All of the above.

- age groups?

 A. 40-46 years.
 A. 10%.

 B. 50-56 years.
 B. 30%.

 C. 60-66 years.
 C. 50%.
- O D. 70-76 years. O D. 70%.
- E. 80-86 years. E. 90%.

Shade selection and communication

This article offers practical tips for selecting accurate shades and communicating with dental laboratories for fabricating indirect restorations.

Background

While the colour of a fixed dental restoration may not impact its biological success, it frequently plays a crucial role in the patient's overall acceptance of the restoration. Achieving total colour reproduction between fixed dental restorations and natural teeth is an impossible task. Despite this, the goal is often to make a believable restoration for most lighting situations encountered. Precise shade selection of the target tooth being matched, together with clear communication of this assessment to the dental laboratory, are crucial for successful results.

Shade selection

Visual assessment of shade utilising commercially available shade guide systems is the most frequently used method in dentistry. $^{\rm 1}$

Tips:

1. Shade selection must be carried out before any operative procedure, tooth isolation or impression making. Such procedures cause dehydration and increase the opacity of the enamel, such that teeth may appear brighter.

2. Anything present on the patient that will greatly influence shade selection should be identified. Lipstick or other make-up should be removed. If the patient is wearing bright clothing, it should be draped with a neutral-coloured patient bib.



FIGURE 1: Light-correction device (Smile Lite; Smile Line GmBH, Germany) being used to create ideal lighting conditions and an appropriate colour temperature of 5,500°K (natural daylight) during shade assessment. 3. Shade selection should occur during daylight, in the middle portion of the day with northern exposure sunlight, and lastly, on a day that is slightly overcast.² To ensure practicality and avoid the interference of surrounding colours in the dental surgery, a dedicated light-correction device can be used for shade selection (**Figure 1**). These devices correct for varying light conditions such as time of day, season of the year, and different types of light sources present in the dental surgery.

4. The patient should be in an upright position at eye level when the shade is selected to ensure that the teeth are viewed under similar conditions to those in daily life. Additionally, at eye level, the most colour-sensitive part of the dentist's retina is utilised.

5. Shade guides were initially developed to meet the requirements for prosthetic denture teeth rather than encompassing the variety of natural tooth colours. Contemporary shade guides based on the colour space of natural teeth, such as the VITA Linearguide 3D Master, are best employed (**Figure 2A**). First, the value (the relative lightness or darkness of a colour) of the tooth being matched is determined by selecting one of six 'M' groups tabs (0M2 to 5M2) present on the dark grey holder (**Figure 2B-2C**). Lastly, the chroma (intensity or saturation of the dominant colour) and hue (dominant colour) are chosen by matching the tabs present on the light grey holder with the group corresponding to the initial value selection (**Figure 2D-2E**).

6. Shade tabs should be held and aligned with the target tooth so that light reflects off the shade tab in a similar manner (**Figure 2F**). It is important not to view the comparison for more than five to seven seconds at a time to avoid fatiguing the cones of the retina. Looking at a contrasting colour (such as a blue patient bib) between comparisons will relieve eye fatigue and sensitise the eye to the colour being observed.

7. Quickly reduce the number of potential shade tabs and select the best matches for incisal, body, and cervical regions.

8. The level of translucency/opacity of the target tooth is assessed and observed. This is critical in aiding the material selection process. A matt black contrastor can be placed behind the teeth. This can be helpful to visualise the translucencies and nuances of the enamel (**Figure 3**).



Dr Advan Moorthy BA BDentSc MFDS RCPS (Glasg) DChDent (Prosthodontics) Santry Specialist Dentistry Building 1 Swift Square, Northwood, Santry, Dublin 9, and South East Dental Solutions, Floor 2 Block, Cleaboy Business Park, 4a Old Kilmeaden Rd, Waterford

prresponding author: Dr Advan Moor

amprosthodontics@gmail.com

CLINICAL TIPS



FIGURE 2: (A) VITA Linearguide 3D Master shade guide system (VITA Zahnfabrik GmBH, Germany); (B-C) Value group selection. (D-E) Chroma and hue selection. (F) Optimal positioning and alignment of the shade tab in relation to the target tooth for accurate matching.



FIGURE 3: (A) Black photographic contrastor (Flexipallet Smile Lite; Smile Line GmBH, Germany); (B) Positioning the contrastor behind the teeth enables the observation of translucencies, craze lines, and other subtle details in the enamel.

9. The presence of any further characterisation such as surface texture, gloss, craze lines, or staining should also be assessed.

10. Lastly, special consideration should be given if tooth preparation is required. The shade of the prepared tooth substrate will influence the final shade of the indirect restoration if an all-ceramic material is used. Commercially available dentine stump shade guides can be used to record the shade of the prepared tooth.

Shade communication

Following visual shade assessment, the following information must then be summarised and communicated to the dental laboratory:

- the shades selected;
- the translucency/opacity level observed;
- the presence of any specific characterisations on the target tooth; and,
- the substrate shade.

Communication of the above information is largely done by a combination of:

a written description of the visual assessment that took place;

- an annotated line drawing prescription or annotated intra-oral photographs showing different shade distributions and demarcations; and,
- intra-oral photographs taken with shade tabs.

Tips:

1. Important considerations in the selection of a camera system include the ability to take repeatable macro images as well as the ability to reproduce accurate colour. Photographs captured with a digital single-lens reflex (DSLR) or mirrorless camera using a macro-lens easily satisfy this requirement. This is especially important in challenging anterior cases (**Figure 4A, 4B**).

2. The colour of light from a camera-mounted flash can vary due to different environmental factors. To control the colour-processing algorithms on cameras and achieve accurate colour representation, it is necessary to apply the correct white balance setting on the camera. This is critical for the area of photographic shade communication. The typical white balance setting for shade taking is generally considered to be 5,560K. Alternatively, a photograph can be taken with the presence of a calibrated grey card (**Figure 4C**). Photographic editing software may be used to adjust known references

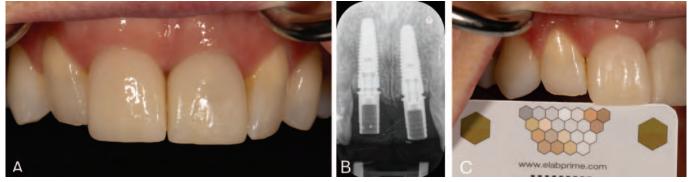


FIGURE 4: (A) Two maxillary central incisors lost to dental trauma with provisional implant restorations in situ ready for permanent restoration fabrication. (B) Periapical radiograph of provisional restorations and implants. (Surgical work courtesy of Dr Mark McLaughlin, periodontist.) (C) Photograph of target tooth to be matched (maxillary lateral incisor) with the presence of a calibrated grey card.

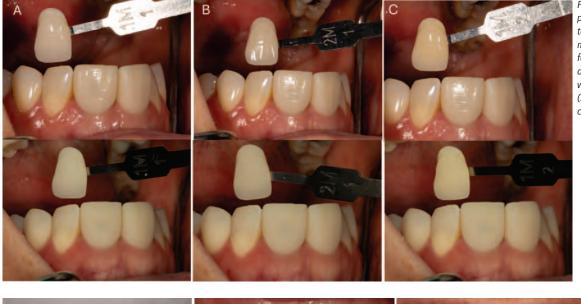


FIGURE 5: Reflected and polarised photographs of target tooth to be matched with shade tabs for each of the three distinct colour zones within a tooth – incisal (A), body (B) and cervical (C).



FIGURE 6:(A) Final screw-retained layered ceramic implant crowns on custom abutments. (B) Fitted restorations demonstrating believable shade matching. (C) Smile view highlighting well-integrated aesthetics. (D) Post-fit periapical radiograph. (Laboratory work courtesy of Mr Vlad Antanasoaie (Oxford, UK)).

within the image for calibrating unknown image components, yielding an accurate image for on-screen viewing.

3. The polychromatic effects of teeth should be identified and photographed with shade tabs for each of the three distinct colour zones within a tooth – incisal, body and cervical. These photographs are then repeated with a cross-polarisation filter. This provides an easy method to record the appearance of teeth in the absence of specular surface reflections. This allows the dentist and technician to easily read the different zones of shade demarcations present on teeth (**Figure 5**), allowing the fabrication of well-integrated and aesthetically pleasing restorations (**Figure 6**).

References

- Pecho Yataco OE, Ghinea RI, Della Bona A. Color management and communication in dentistry. In: Della Bona A (ed.). *Color and Appearance in Dentistry*. Springer Nature 2020: 99-114.
- Chu SJ, Paravina RD, Sailer I, Mieleszko AJ. Color in Dentistry: A Clinical Guide to Predictable Esthetics. Hanover Park (IL): Quintessence Publishing; 2017.

Cone-beam computed tomography (CBCT) in endodontics: diagnostics, treatment planning, and outcome assessment

Charlee Holden is the winner of the Irish Endodontic Society's Undergraduate Essay Prize Competition 2024. The competition asked for essays on the theme 'CBCT should be the standard imaging for assessing endodontic outcomes – discuss'. The *JIDA* is delighted to publish Charlee's winning entry, which has been edited for publication.

Introduction

Conventional two-dimensional (2D) intraoral periapical radiographs (IOPAs) are the current standard for diagnosing and evaluating treatment outcomes in endodontics.¹ While IOPA is accessible, cost-effective, and involves minimal radiation exposure, it has limitations. Cone-beam computed tomography (CBCT) is an advanced imaging technique, providing more diagnostic information.² Guidelines from the European Society of Endodontology (ESE) and the American Association of Endodontics (AAE) recommend CBCT for specific/complex cases and/or when conventional radiographs are inconclusive.^{3,4} CBCT's advantages and limitations in diagnostics, treatment planning, and outcome assessment are summarised in **Table 1**.

Outcome assessment

The ESE identifies tooth survival as the most critical measure of endodontic success.¹⁶ Additional criteria include no radiographic evidence of periapical lesions or reduced lesion size, normal periodontal ligament space, and absence of symptoms or need for medication (e.g., analgesia or antibiotics).¹⁶ Assessing success through clinical symptoms is challenging due to the variability and subjectivity of pain. CBCT's increased sensitivity provides a more objective assessment, allowing clinicians to quantify lesion dimensions and evaluate bony healing.⁵ However, CBCT's increased sensitivity challenges traditional success criteria by detecting residual lesions that may be clinically insignificant, risking overdiagnosis and overtreatment.⁸

Recommendations

- CBCT should only be considered following a thorough clinical examination, including conventional radiographs;
- CBCT should be limited to cases where its diagnostic advantages outweigh risks;

- consideration should also be given to CBCT's high sensitivity, which can complicate outcome assessment;⁵ and,
- integrating CBCT training into dental education and professional courses will ensure appropriate use and interpretation.^{5,17}

Conclusion

CBCT offers advantages over IOPA. However, challenges such as increased sensitivity leading to potential overdiagnosis, increased radiation exposure and cost, and inconclusive evidence linking its use to improved clinical outcomes highlight the need for judicious use. CBCT should be integrated selectively until further evidence supports its routine adoption as the standard imaging modality. Current guidelines advocate use in specific cases where information gained from IOPA is perceived to be insufficient.⁴

References

- Kruse C, Spin-Neto R, Wenzel A, Kirkevang LL. Cone beam computed tomography and periapical lesions: a systematic review analysing studies on diagnostic efficacy by a hierarchical model. *Int Endod J.* 2015;48(9):815-828.
- Abella F, Patel S, Durán-Sindreu F, Mercadé M, Bueno R, Roig M. An evaluation of the periapical status of teeth with necrotic pulps using periapical radiography and conebeam computed tomography. *Int Endod J.* 2014;47(4):387-396.
- Patel S, Brown J, Semper M, Abella F, Mannocci F. European Society of Endodontology position statement: use of cone beam computed tomography in endodontics: European Society of Endodontology (ESE) developed by. Int Endod J. 2019;52(12):1675-1678.
- American Association of Endodontists. The impact of cone beam computed tomography in endodontics: a new era in diagnosis and treatment planning. 2018. https://www.aae.org/specialty/newsletter/the-impact-of-cone-beam-computedtomography-in-endodontics-a-new-era-in-diagnosis-and-treatment-planning/ [Accessed November 15, 2024].



Final year dental student School of Dental Science Dublin Dental University Hospital Trinity College Dublin

prresponding author: Charlee Holder

Prof. Hal Duncan

(RCS) PhD FTCD Director of Research and Professor and Consultant in Endodontics Dublin Dental University Hospital Trinity College Dublin

E: charlee.holden@dental.tcd.ie

Category	CBCT advantages	CBCT limitations
Diagnostics	 Provides precise detail on root canal number, length, curvature, and apical foramen location.^{5,6} Detects 34% more periapical lesions compared to IOPA.⁷ Identifies complex anatomy, 'hairline' fractures, and subtle pathology.^{5,6} Identifies reasons for treatment failures (missed canals, perforations, fractured instruments), facilitating further interventions.⁷ 	 Image artifacts from radiopaque materials can compromise image quality and diagnostic yield.³ Regulations in many jurisdictions require reporting all findings visible on CBCT scans, which may necessitate additional training. Increased sensitivity may lead to overdiagnosis and overtreatment.⁸
Treatment planning	 Improved level of detail is especially useful in cases of resorption or complex anatomy.⁵ Precise detail on root canal morphology facilitates targeted treatment strategies for effective root canal disinfection and reduces the risk of iatrogenic damage.^{5,6} Additional information gathered from preoperative CBCT compared to IOPA resulted in treatment plan modifications in 62% of cases (i.e., previously undetected canals or fractures).^{9,10} Enables patient-specific treatment planning and improves prognostic accuracy.^{6,5} 	 Higher radiation dose compared to IOPA.^{3,4,11} Requires additional staff training.¹¹ Higher costs and the need for specialised training limit accessibility.¹¹
Outcome assessment	 Ability to quantify lesion dimensions.⁵ CBCT detects root filling voids in 46% of cases compared to 16% with IOPA.^{5,12} More effectively identifies prognostic factors, including root canal curvature, untreated root canals, fractures, and coronal restoration quality.¹³ 	 Increased sensitivity reveals more residual pathology, reducing perceived success rates (62.5% with CBCT vs 87% with IOPA one year after primary treatment).^{5,14} Specificity in distinguishing healing-related changes from residual disease remains uncertain.¹⁵ Lack of <i>in vivo</i> studies limits evidence of direct clinical impact.

Table 1: Advantages and limitations of CBCT in endodontics.

- Patel S, Durack C, Abella F, Shemesh H, Roig M, Lemberg K. Cone beam computed tomography in endodontics – a review. *Int Endod J.* 2015;48(1):3-15.
- Bornstein MM, Bingisser AC, Reichart PA, Sendi P, Bosshardt DD, von Arx T. Comparison between radiographic (2-dimensional and 3-dimensional) and histologic findings of periapical lesions treated with apical surgery. *J Endod*. 2015;41(6):804-811.
- Low KM, Dula K, Bürgin W, von Arx T. Comparison of periapical radiography and limited cone-beam tomography in posterior maxillary teeth referred for apical surgery. *J Endod.* 2008;34(5):557-562.
- Duncan HF, Kirkevang L-L, Peters OA, El-Karim I, Krastl G, Del Fabbro M et al. Treatment of pulpal and apical disease: the European Society of Endodontology (ESE) S3-level clinical practice guideline. Int Endod J. 2023;56(Suppl. 3):238-295.
- Ee J, Fayad MI, Johnson BR. Comparison of endodontic diagnosis and treatment planning decisions using cone-beam volumetric tomography versus periapical radiography. J Endod. 2014;40(7):910-916.
- Rodríguez G, Patel S, Durán-Sindreu F, Roig M, Abella F. Influence of cone-beam computed tomography on endodontic retreatment strategies among general dental practitioners and endodontists. *J Endod*. 2017;43(9):1433-1437.
- 11. Venkatesh E, Elluru SV. Cone beam computed tomography: basics and applications in dentistry. *J Istanb Univ Fac Dent*. 2017;51(Suppl. 1):S102-S121.
- Liang YH, Li G, Wesselink PR, Wu MK. Endodontic outcome predictors identified with periapical radiographs and cone-beam computed tomography scans. *J Endod.* 2011;37(3):326-331.
- Fernández R, Cadavid D, Zapata SM, Alvarez LG, Restrepo FA. Impact of three radiographic methods in the outcome of nonsurgical endodontic treatment: a fiveyear follow-up. J Endod. 2013;39(9):1097-1103.

- Patel S, Wilson R, Dawood A, Foschi F, Mannocci F. The detection of periapical pathosis using digital periapical radiography and cone beam computed tomography – part 2: a 1-year post-treatment follow-up. *Int Endod J.* 2012;45(8):711-723.
- de Paula-Silva FW, Wu MK, Leonardo MR, da Silva LA, Wesselink PR. Accuracy of periapical radiography and cone-beam computed tomography scans in diagnosing apical periodontitis using histopathological findings as a gold standard. *J Endod*. 2009;35(7):1009-1012.
- Duncan HF, Nagendrababu V, El-Karim I, Dummer PMH. Outcome measures to assess the effectiveness of endodontic treatment for pulpitis and apical periodontitis for use in the development of European Society of Endodontology S3-level clinical practice guidelines: a consensus-based development. *Int Endod J.* 2021;54(12):2184-2194.
- McGuigan MB, Duncan HF, Krastl G, Ludwig J, Honari B, Horner K. The impact of cone beam CT on outcomes associated with endodontic access cavity preparation: a controlled human analogue study using 3D-printed first maxillary molars. *Dentomaxillofac Radiol.* 2025;54(1):43-55.

Clinical performance of preheating thermoviscous composite resin for non-carious cervical lesions restoration: a 24-month randomised clinical trial

Favoreto MW, Carneiro TS, Ñaupari-Villasante R, et al.

Objectives: This 24-month, double-blind, split-mouth randomised clinical trial aimed to compare the retention rates of a preheated thermoviscous composite resin (PHT) to a non-heated composite resin (NHT) in non-carious cervical lesions (NCCLs).

Methods: A total of 120 restorations were restored on NCCLs using a preheated (VisCalor bulk; Voco GmbH) and a non-heated (Admira Fusion; Voco GmbH) composite resin, with 60 restorations per group. A universal adhesive in the selective enamel conditioning was applied. In the PHT group, composite was heated at 68°C using a bench heater. In the NHT group, no heating was employed. Both restorative materials were dispensed into caps and inserted into the NCCLs. The restorations were evaluated at baseline, six, 12, 18, and after 24 months of clinical service using the FDI criteria. Statistical analysis was performed with Kaplan-Meier estimation analysis for retention/fracture rate and Chi-square test for the other FDI parameters (=0.05).

Results: After 24 months, 108 restorations were assessed. Seven restorations were lost (two for the PHT group and five for the NHT group), and the retention rates (95% confidence interval [CI]) were 96.7% (81.5-99.9) for the PHT group and 90.8% (81.1-96.0) for the NHT group, with no statistical differences between them (p>0.05). The hazard ratio (95% CI) was 0.52 (0.27 to 1.01), with no significant difference within groups. In terms of all other FDI parameters that were assessed, all restorations were deemed clinically acceptable.

Conclusions: Both composites showed high rates of retention after 24 months.

Clinical significance: The clinical performance of the new preheated thermoviscous composite resin was found to be as good as the non-heated composite after 24 months of clinical evaluation in non-carious cervical lesions.

J Dent. 2024;144:104930

Light-curing of restorative composite through milled and 3D-printed full-contour zirconia for adhesive luting

Jacobs W, Camargo B, Ahmed M, et al.

Objectives: To evaluate the effect of different zirconia compositions and manufacturing processes on the light irradiance (LI), to measure the degree of conversion (DC) of solely light-curing restorative composite underneath these zirconia grades and to evaluate the respective zirconia microstructures. **Methods:** Six dental zirconia grades (GC HT, GC UHT [GC]; Katana HT, Katana UTML [Kuraray Noritake]; Lava Esthetic, Lava Plus [3M Oral Care]) were cut and sintered per manufacturer instructions. One 3D-printed zirconia grade (XJet [XJET]) was prepared according to previous research. Zirconia plates were ground to four thicknesses (0.5, 1.0, 1.5, 3.0mm). The LI through these zirconias was measured using light spectrometry using two light-curing units

(Demi Plus [Kerr], Bluephase G4 [lvoclar]). Restorative composite (Clearfil AP-X [Kuraray Noritake]) was light cured through the zirconia plates and the DC was determined by micro-Raman spectrometry five minutes, 24 hours and one week after light curing. Statistical analysis of LI and DC data involved linear mixed-effects modelling and multi-way ANOVA. Microstructural analysis of zirconia was performed by scanning electron microscopy.

Results: Zirconia type and thickness, and LCU had a significant effect on LI (p<0.0001). DC significantly increased over time (p<0.0001) and was not influenced by curing light attenuation if LI reached at least 40mW/cm². Increased yttria content resulted in an increased zirconia grain size.

Significance: Despite significant light attenuation, DC of composite light cured through zirconia at almost all thicknesses, approached DC measured without zirconia interposition for five out of seven zirconia grades. Additionally, the manufacturing process did not seem to influence LI or DC.

Dent Mater. 2025;41(3):331-340.

Artificial intelligence for orthodontic diagnosis and treatment planning: a scoping review

Gracea RS, Winderickx N, Vanheers M, et al.

Objectives: To provide an overview of artificial intelligence (AI) applications in orthodontic diagnosis and treatment planning, and to evaluate whether AI improves accuracy, reliability, and time efficiency compared to expert-based manual approaches, while highlighting its current limitations.

Data: This review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist.

Sources: An electronic search was performed on PubMed, Web of Science, and Embase electronic databases. Additional studies were identified from Google Scholar and by hand searching through included studies. The search was carried out until June 2023 without restriction of language and publication year.

Study selection: After applying the selection criteria, 71 articles were included in the review. The main research areas were classified into three domains based on the purpose of AI: diagnostics (n=29); landmark identification (n=20); and, treatment planning (n=22).

Conclusion: This scoping review shows that AI can be used in various orthodontic diagnosis and treatment planning applications, with anatomical landmark detection being the most studied domain. While AI shows potential in improving time efficiency and reducing operator variability, the accuracy and reliability have not yet consistently surpassed those of expert clinicians. At all moments, human supervision remains essential. Further advances and optimisations are necessary to strive towards automated patient-specific treatment planning.

Clinical significance: Al in orthodontics has shown its ability to serve as a decision support system, thereby enhancing the efficiency of diagnostics and treatment planning within orthodontics digital workflow.

J Dent. 2025;152:105442.

Handling negative online reviews

Learning how to navigate and effectively deal with negative online reviews is crucial for any modern dental professional.

Imagine working as a sole practitioner at a dental practice, relying on positive reviews to generate new patients and to grow your business. You provide cosmetic treatment to a patient who is disgruntled and storms out of the practice. You reach out to the patient to resolve the issue immediately but do not receive a response, and you begin to see scathing patient reviews emerge on third-party sites, all of which are anonymous. You suspect that these have been written by the disgruntled patient and fear that this may prevent prospective patients from joining the practice. What do you do in the situation?

Patients are becoming increasingly savvy in searching online reviews prior to seeking treatment. While negative reviews can be undoubtedly stressful, learning how to navigate and effectively deal with them is crucial for any modern dental professional.

When faced with a negative online review, there are several options available to you:

Do nothing

At Dental Protection, we often talk to members about such negative reviews and, in general, our advice is to ignore the review. This works best where a practice has numerous positive reviews – negative reviews will often get lost in the sea of the positives that your practice has received.

Respond online

When choosing to do this, practitioners need to be mindful of the risk that an online response to someone who is dissatisfied can lead to further engagement with the negative review, and this may mean that the review is one of the first things that a potential patient will see.

If you wish to respond, you should be mindful of not breaching the reviewer's confidentiality and privacy by discussing their clinical care, and you should try to keep the response simple, short and composed. For example:

"Dear Reviewer, I am sorry to hear that you were disappointed with your visit to ABC Dental. Please call us on 01-1234567, and we would be happy to discuss this with you further".

Contact the patient directly

If you can identify the patient from their review, you can try reaching out to them directly and ask them to come to discuss their concerns with you. If a

> Dr Kiran Keshwara Dentolegal Consultant at Dental Protection

resolution is reached when you meet, this would be the time to ask the patient to remove the review. Contacting the reviewer could be a double-edged sword – the patient may agree to meet with you and the complaint can be resolved with the patient removing the review, or the patient may feel that you are harassing them, leading them to complain further. It is wise to tread this path very carefully.

Contact the patient via a legal professional

This will require independent legal advice and may be appropriate in instances where the patient's reviews are tantamount to harassment or blatantly untrue. There are occasions where a solicitor can send a strongly worded cease and desist letter to the patient, assuming that they have been correctly identified. There are costs involved with getting legal advice and having a solicitor write and send the letter, which will be borne by you. As above, there is a risk that the patient may complain further.

Ask the website to remove the review

It is possible to remove a Google review or those on other third-party websites. Instructions on how to request the removal of a Google review are available from Google Help.¹

While Google is a third-party site, it is probably the most common means for new patients to find out about your business and reach out to you. While you cannot control the reviews on Google, you can ask Google to remove reviews that fall within certain categories.

Is it defamation?

Before you decide whether to pursue a claim for defamation against negative reviews, it is important to consider whether a negative review actually amounts to defamation. This is a complex issue.

A claim for defamation also has to be commenced within one year of the publication of the review, and the reviewer is generally required to be given notice prior to commencing proceedings. Defamation may be claimed if:

- it involves an individual or a corporation with fewer than ten employees;
- the published material has caused, or is likely to cause, serious harm to the reputation of the person (in the case of a corporation serious financial loss) – serious harm is determined by the judicial officer; or,
- the published material was published to a third person (i.e., not a complaint made directly to the business).

Importantly, the reviewer can defend themselves if, among other things, they can prove that the published information is true, has been in a public document, or is an expression of honest opinion. It is incredibly difficult to make a claim for defamation against an anonymous review. In a situation such as this, the member would be required to issue proceedings against the third-party website or email

provider to release the identity details of the anonymous reviewer. To be successful, the member would need to demonstrate that the third party was sufficiently involved in the wrongdoing, which may be difficult to prove and costly.

Even if you can obtain these details, you may find that the reviewer has provided false identity details when setting up their email address or account.

It is firstly advisable to seek independent legal advice, as each case needs to be assessed individually in line with existing laws in the jurisdiction in which defamation is being considered.

Quiz answers

Questions on page 137.

- 1. There are six unerupted supernumerary teeth.
- 2. A CBCT would be beneficial to clarify the position of these teeth and their relationship to the surrounding structures.
- 3. Dentigerous cysts usually present as well-defined and unilocular radiolucency surrounding the crown of an unerupted or impacted tooth.

Online reputation management

There are also companies that deal with online reputation management to 'push down' negative Google search results so that they no longer appear at the top, or on a first page, of reviews, making them less obvious/buried. Again, this can be a costly exercise.

Final thoughts

Given the nature of dentistry, we would all expect some patients not to be happy with the services provided and while a negative review may be distressing, in most cases it will be ignored or seen as a blip by potential patients. It can also be an opportunity for open communication with a patient, and to learn from their experience and feedback. When considering taking action, it is important to consider all the pros and cons. As always, Dental Protection members can contact us for advice and guidance in navigating this potentially challenging area, as well as for any other dentolegal queries.

References

 Google Help. Report inappropriate reviews on your business profile. https://support.google.com/business/answer/4596773?hl=en-GB&ref_topic=4596755&sjid=6458939241952014836-EU.



NEW SERVICE

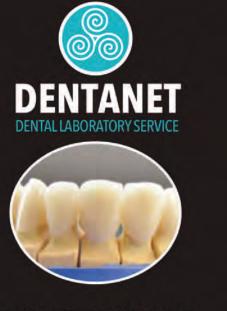
IDJ Paving the way to Streamline the Irish Dental Council Registration Process

To be led by: Dr. Pádraig Creedon

Dental Advisor at IDJ

Contact Us: info@irishdentaljobs.ie 01-8494070 www.irishdentaliobs.ie





QUICK TURNAROUND HIGH AESTHETICS SUPERIOR QUALITY

22 Tralee Road, Castleisland, Co. Kerry V92 AF82 T: +353 (0)66 714 3964 M: +353 (0)87 332 4779 E: infodentanet@gmail.com www.dentanet.ie

SITUATIONS VACANT

Associates

Dental associate position available in Dublin. Flexible days available. State-of-the-art dental practice with 3Shape scanner, CBCT, endodontic microscope, and premium dental materials. Opportunity to work alongside specialists and GDPs in a large multidisciplinary team. Excellent remuneration. Contact dublindentalassociateposition@gmail.com.

West Dublin. Dental associate required three to four days/week to take over existing patient list in a very busy private practice. We are a well-established multidisciplinary team with lots of experience. Contact westdublindental@gmail.com.

Drogheda: associate position available two days/week. May suit recent graduate interested in high clinical standards in well-supported, all digital, all private practice with mentorship available. Please email current CV for consideration. Contact angelamkearney@gmail.com.

Full/part-time dental associate position available in state-of-the-art, fully private, busy, multidisciplinary practice 15 minutes' drive from Dublin city centre. Flexible days/times available. Experienced and friendly support staff. Specialists on site. Contact dublindentistjob@gmail.com.

South Co. Dublin: part-time associate wanted for busy, fully computerised, long-established practice. 50% remuneration. Non-corporate. Excellent support staff in great personal friendly environment. Must be IDC registered. Contact dentalassoc993@gmail.com.

Associate wanted to join our friendly, supportive team – computerised, air-conditioned, six-surgery practice in Dungarvan. Days/hours flexible up to full time. Contact tomasireland@hotmail.com.

Classified advertisements are accepted via the IDA website – www.dentist.ie – only, and must be pre-paid. The deadline for receipt of advertisements for inclusion in the next edition is **Friday**, **July 11**, **2025**. Classified ads placed in the *Journal* are also published on www.dentist.ie for 12 weeks.

Please note that all prices are inclusive of VAT.

Advert size	Members	Non-members
up to 25 words	€135.30	€270.60
26 to 40 words	€161.70	€330.65

The maximum number of words for classified ads is 40.

If the advert exceeds 40 words, then please contact:

Think Media, The Malthouse, 537 North Circular Road, Dublin 1.

Tel: 01-856 1166 Fax: 01-856 1169 Email: paul@thinkmedia.ie

Please note that all classified adverts MUST come under one of the following headings:

- Situations wanted
- Situations vacant
- Practices for sale/to let
- Practices wanted
- Equipment for sale/to let

Classified adverts must not be of a commercial nature. Commercial adverts can be arranged by contacting Paul O'Grady at Think Media.

Lucey Dental Greystones: Experienced associate required to join our multi awardwinning, state-of-the-art, multidisciplinary, fully private, family-run, six-surgery practice. Full- or part-time, full patient list available. Fantastic opportunity. Contact manager@luceydental.ie.

Cork City – full-time associate sought, busy family practice, with a view to taking over the practice in short to medium term. Contact amonahan1962@gmail.com.

Full- or part-time dental associate position available in multidisciplinary, state-of-theart fully private practice located 15-minute drive from Dublin city centre and five-minute walk from the DART Station. Specialists, GDPs and hygienists on site. Contact dentalgraduatementorship@gmail.com.

Full-time dental associate required for our Naas and Newbridge practices. CBCT, CEREC, inhalational and IV sedation. Reply with CV to james@theclinicnaas.ie.

Full/part-time dental associate position available in fully private, multidisciplinary dental practice in Dublin. Flexible days. Excellent remuneration. Experienced, friendly support staff. Fully digital with 3Shape scanner, CBCT scanner, hygienist, and specialists working with team. Mentorship available. Contact dublindentistposition@gmail.com.

Dental associate required for Ballyconnell Dental Surgery. The practice provides the full range of private treatment/PRSI and Medical Card patients. Part/full-time position. Fully equipped practice with digital X-ray and intraoral scanner. Contact info@ballyconnelldentalsurgery.com.

Smiles Ballsbridge (Bupa) – join our established team as a part-time associate dentist. Contact leah.hall@bupadentalcare.co.uk.

Smiles Cork (Bupa) – opportunity for an associate dentist to join an experienced and established team. Contact leah.hall@bupadentalcare.co.uk.

Smiles Waterloo Rd, Dublin (Bupa) – modern clinic with a supportive team. Associate dentist role. Email leah.hall@bupadentalcare.co.uk.

Smiles Grand Canal, Dublin (Bupa) – join our well-established practice as an associate dentist. Contact leah.hall@bupadentalcare.co.uk.

Smiles South Anne St (Bupa) – central Dublin location with a warm team. Part-time associate dentist role. Reach out to leah.hall@bupadentalcare.co.uk.

Smiles Swords, Dublin (Bupa) – part-time associate dentist opportunity in a thriving practice. Email leah.hall@bupadentalcare.co.uk.

Dental associate position available in Newbridge, Co. Kildare. Flexible days available. Brand new dental surgery, fully digital and premium dental materials. Excellent remuneration. Contact shackletonclinic@gmail.com.

Associate dentist needed for busy private practice. 50%, preferably someone experienced in composite bonding as fully booked, full/part-time. Modern, friendly practice. Position also available for an orthodontist. Contact diamondsmilesjobs@gmail.com.

We are seeking an associate dentist to join our busy team in Family Dental Practice, Mallow. Thirty minutes from Cork City. Great working environment and support staff including our wonderful practice manager. Call 086-393 4060 or email mallowdentist@gmail.com.

Experienced dental associate position in private practice in Limerick city centre. Digital scanner, modern equipment and excellent support staff in practice. Apply with CV to jacqueline.obrien89@gmail.com.

Seeking part-time associate with a view to becoming full-time in Cork City. General dental practice, fully digital, X-rays, scanner, etc. Ideally have experience. Generous remuneration. Must be IDC registered. Apply to dentalassociate2025@gmail.com.

Be your own boss with superb support staff and full-time hygiene support. Enjoy complete clinical freedom. Session work available on days of your own choice. Complete digital set up with TRIOS scanner and on-site lab. Contact dillondental2@qmail.com.

Dental associate position available in fully private, large, multidisciplinary practice in Dublin. 3Shape scanner, CBCT scanner, hygienists present, specialists present on site.

Flexible days. Clinic five-minute walk from DART Station and free parking available. Mentoring available. Excellent remuneration. Contact dentalassociatejobdublin@gmail.com. General dental associate – Mayo Dental and Implant Clinic. Part/full-time. Modern, well-equipped, four surgeries, intraoral scanners, CBCT, excellent remuneration. Professional, patient-focused, supportive, experienced team in beautiful Westport. Excellent opportunity for professional growth. Flexible terms, available now. Contact Shane@mayodentalclinic.com.

Associate required for a very busy, private, state-of-the-art clinic in the lovely town of Nenagh. Excellent support staff, three surgeries, two digital scanners, OPG/ceph, two hygienists. Please send your CV to contact@nenaghdental.ie.

Dentists

Part-time orthodontist (dentist with interest in orthodontics) required for our beautiful clinic in Meath. If you'd like to work with a dynamic, innovative, collaborative team with high-tech equipment, then forward your CV! Contact meathdentists@gmail.com.

Dame Street Dental Hospital seeking dentist to join our modern, vibrant team of 400+ people. CBCT, IOS and facial scanners, specialist dentistry. General anaesthesia. Candidate must have genuine passion for dentistry. Excellent remuneration. Thirty chairs and operating theatres. Fully private. Contact Selim@trulydental.ie.

We're looking for a motivated, ambitious full-time dentist for our busy private clinic in Clane. CBCT, digital scanners. Amazing team. Invisalign certification and cosmetic training provided. Accommodation available if needed. Contact louise@clearbraces.ie.

Dentist required to join our team at Westside Dental Athlone. Flexible hours. Modern, friendly practice. New chair and equipment. Excellent support staff. Contact info@westsidedental.ie.

Dentist required to join our busy team, modern and friendly practice in Cavan Town. CV to churchstdental@gmail.com.

Dentist required for expansion to third surgery with a long-established team. Modern, fully digital, AI software, OPG. 50% remuneration. One hour north of Dublin. Fully private and currently booked six weeks ahead. Start date June/July. Contact Laura_mcatarsney@yahoo.com.

Dentist required to join our busy team. Modern practice with full patient list five days per week in Carlow Town. CV to info@dentalsuite.ie.

Great opportunity for a highly motivated dentist with two years plus experience to join an established family practice in Co. Limerick. Fully computerised. In-house prosthodontist happy to mentor a suitable applicant. Must be IDC registered living in Ireland. Contact info@mullanedental.ie.

Dentist required in busy south Tipperary practice. Two days a week available – all options considered. Computerised, modern practice with excellent, experienced support staff and friendly working atmosphere. Reply with CV to dentalpost1@gmail.com.

Opportunity to join busy, long-established practice in Limerick. Private, fully digital, IO scanner, newly refurbished, new dental chairs, IO cameras. Excellent earning potential from established patient base. New patients attracted for modern procedures. Great support staff. Contact kevin.murphy@murphydentalcare.ie.

Join Smiles Dental Cork as a general dentist. Great opportunity in a modern, patient-focused practice. Apply to leah.hall@bupadentalcare.co.uk.

Smiles Dental South Anne St is hiring! Join our friendly team and grow your career in a leading city centre practice. Apply to leah.hall@bupadentalcare.co.uk.

Oral surgeon or dentist with an interest in surgery required for busy specialist practice. Part- or full-time. On-site CBCT, sedation, modern clinic. High earning potential. Contact tomas.allen@kingdomclinic.ie.

Dentist required to join our team at Colm Smith Dental Cootehill/Monaghan. Busy multidisciplinary long-established practice, full/part-time hours. Team of oral surgeons, orthodontists, endodontists and hygienists. Must be IDC registered. Email CV to drcolmsmith@gmail.com.

Full or part-time general dentist position available. New clinic, Enfield, Co. Meath. Reply with CV to info@mgmclinic.ie.

Join us at Dentistry and Orthodontics for Children and Adolescents. Close support and mentoring from the team specialists. Details: three days per week approx. Generous salaried position. Minimum one-year experience. Modern apartment accommodation available. Start early June 2025. Contact mtuite1@gmail.com.

Hiring dentists and specialists? Dent Recruit connects clinics with talented graduate dentists and experienced specialists across Ireland. Find the perfect addition to your team today! Visit dentrecruit.ie.

Join our busy private practice two to four days/week. Excellent team, digital clinic, great earning potential. IDC registration required. €200-€400/hour – Rush Dental Surgery. Contact info@rushdentalsurgery.ie.

Full- or part-time dentist required for friendly two-chair practice. Flexible hours on offer. IDC registered. Please reply with CV to info@denticare.ie.

Join our high-tech, growing practice! iTero and CBCT. We're seeking an ambitious and motivated general/cosmetic dentist eager to enhance their clinical skills and advance their career. Invisalign certification and cosmetic training provided. Contact eoin@oneilldentalcare.ie.

Seeking a dedicated dentist to join our west coast clinics in Ennis and Mayo. Treating private, PRSI, and medical card patients. Applicants must be hardworking, dedicated and committed to professional development. Forward CV to jobs@cubedental.ie.

Part-time dentist required to join our team in a longstanding, modern, busy practice in Dublin 22. Full book. Experienced staff. Great work environment. Please send CV to practicemanager221@gmail.com.

Locums

Locum dentist required for four days (Monday-Friday) to cover maternity leave in busy, modern, private Dublin 3 practice. June 2025 to January 2026 inclusive. Contact garmcgann@gmail.com.

Specialist/limited practice

Part-time orthodontist (dentist with interest in orthodontics) required for our beautiful clinic in Meath. If you'd like to work with a dynamic, innovative, collaborative team with high-tech equipment, then forward your CV! Contact meathdentists@gmail.com.

We're looking for an endodontist to join our teams in Wexford and Enniscorthy. Supportive environment and modern facilities. Apply to leah.hall@bupadentalcare.co.uk. We're seeking a specialist orthodontist for our Cork practice. Be part of a caring, professional team. Apply to leah.hall@bupadentalcare.co.uk.

Part-time periodontist required for Limerick City clinic. Newly refurbished clinic with new chairs and bright and spacious rooms. Excellent support staff and on-site hygiene. High demand for specialist care and busy book guaranteed. Contact kevin.murphy@murphydentalcare.ie.

Specialist registered orthodontist required to join modern, digitalised, fully private Dublin practice. Potential to work in multiple chair set-up supported by multiple orthodontic therapists, assistants/co-ordinators. Excellent remuneration potential. Contact shauna@3dental.ie.

Implant dentist required to join modern, digitalised, fully private Galway City practice. Fully digital workflow, CBCT, 3D printers and scanners. Further training and development opportunities. Excellent remuneration potential. Contact amy-galway@3dental.ie.

Orthodontist for a specialist clinic in Dublin close to M50 and the airport. We are seeking a caring professional for three to four days. Excellent support from principal orthodontist, therapist, hygienist, and other dentists. Latest techniques and technology available. Excellent terms. Contact info@dublinorthodontist.ie.

Periodontist wanted for sessions for busy private practice south Meath. Twenty minutes from Dublin off the M3 motorway. Large, modern practice. Great potential, five associates, oral surgeon, implantologist, endodontist and four hygienists. Highly skilled support staff. IV sedation available also. Contact rcf291@hotmail.co.uk.

Oral surgeon or dentist with an interest in surgery required for busy specialist practice. Part- or full-time. On-site CBCT, sedation, modern clinic. High earning potential. Contact tomas.allen@kingdomclinic.ie.

Periodontist wanted to join team at long-established, multidisciplinary specialist dental practice in Limerick. Very busy practice, opportunity for immediate full book. Contact perio@riverpointdentalclinic.ie.

Established west Dublin orthodontic practice, excellent location, area wide open, requires enthusiastic, empathetic orthodontist. Presently part-time - increasing, expanding rapidly. Immediate start. Private, fully digitalised, CBCT, intraoral scanners. Flexible days/hours. Experienced general dentists on site. Contact tristanorthodontics@gmail.com. Hiring dentists and specialists? Dent Recruit connects clinics with talented graduate dentists and experienced specialists across Ireland. Find the perfect addition to your team today! Visit dentrecruit.ie.

Smiles Dun Laoghaire (Bupa) – seeking a facial aesthetics practitioner to join our growing team. Get in touch with leah.hall@bupadentalcare.co.uk.

Part-time prosthodontist required for busy multidisciplinary private practice in Dublin. Opportunity involves working alongside other specialists and dentists with a special interest, such as periodontists, endodontist, oral surgeon. Flexible day(s). CBCT scanner and 3Shape scanner on site. Experienced, friendly support staff. Contact dublindentistposition@gmail.com.

Specialist orthodontist required for busy specialist practice in south Dublin. We are seeking a caring orthodontist to join our team at Rathfarnham Orthodontics. Excellent support team and a modern, well-equipped practice. Opportunity for excellent remuneration. Contact isy.keyes@gmail.com.

Hygienists

Part-time dental hygienist position available in state-of-the-art, fully private, busy, multidisciplinary practice 15 minutes from Dublin city centre. Flexible days/times available. Experienced, friendly support staff available. Periodontists, endodontist and general dentists on site. Contact dublindentistjob@gmail.com.

Beautiful, newly refurbished Limerick clinic requires hygienist for full book with excellent earning potential. Cavitrons, ProphyFlex, IO cameras, new dental chairs, preferred equipment and instruments provided. Excellent support staff with mentorship available from senior hygienist and partner. Contact kevin.murphy@murphydentalcare.ie.

Tipperary. Hygienist required. Long-established practise with Cavitrons in surgery. Two days available. Attractive remuneration and busy book. Contact info@danieloconnelldental.com.

Hygienist position: join a team that is committed to delivering outstanding patient care! Full book available one day a week in Ballsbridge, Dublin. Flexible on day. Competitive package. Newly refurbished, fully equipped featuring Cavitron, iTero, intraoral camera, and a brand-new dental chair. Contact drbronaghkeane@gmail.com.

Part-time hygienist position available. Superb, friendly team. Your own dedicated surgery. Very busy private clinic. No weekends/evenings. Excellent remuneration. Fully computerised. Contact dillondental2@gmail.com.

Part-time hygienist position available in large, multidisciplinary private practice in Dublin. Flexible day(s). Experienced, friendly nursing support. State-of-the-art equipment. Periodontists on site. CPD provided. Free parking. Dart stop five-minute walk. Contact dublinhygienistposition@gmail.com.

Sligo: Cleary FitzGerald Dental Practice is a five-surgery, modern, private practice providing CEREC, implants and a full range of cosmetic and general treatment. We are seeking a full-time hygienist to replace a departing colleague. Contact info@clearyfitzgeralddentalpractice.ie for details.

Dental hygienist wanted for full/part-time work in busy, multidisciplinary (periodontist, prosthodontist, oral surgeon) specialist dental practice in Limerick. Excellent salary. Contact perio@riverpointdentalclinic.ie.

Dental nurses/receptionists/practice managers/ treatment co-ordinators

Malahide Dental Care is looking for a part-time nurse. Excellent team and location. Ideally fully qualified. CV to cirociao4@gmail.com.

Part-time nursing role available at Swords Dental with sessions available on Monday, Tuesday, Thursday and Saturday. Busy, modern practice with full range of dental procedures performed and excellent support staff. Contact colinpatricklynam@hotmail.com.

Exciting opportunity for a full-time receptionist in a new practice in Ballisodare, Co. Sligo. Candidates must have a friendly nature, excellent communication, telephone and computer skills, and be a team player. Knowledge of dental background preferable. Contact info@deasydental.ie.

Full- or part-time nursing role available at Swords Dental. Busy, modern practice with full range of dental procedures performed, excellent support staff and friendly team. Contact colinpatricklynam@hotmail.com.

Small, friendly advanced Rathgar practice looking for a full-time dental nurse. Duties include chairside assistance, materials orders, sterilisation and taking payments. Contact ildiko@rathgardental.ie.

PRACTICE FOR SALE/TO LET

Co. Kerry: long-established, very busy town, two-surgery: private, PRSI, hygienist: 90%. Prime location. Central sterilising. Very busy, strong active hygienist. Active recall system. Competitive rent, freehold/leasehold option available. Area wide open. Principal available for transition. Contact niall@innovativedental.com.

South Dublin. Long-established, two-surgery, fully private/PRSI practice. Excellent location with room to expand. Low overheads. Plentiful parking next door. Very strong new patient numbers. Computerised/digitalised. Strong potential for growth. Principal available for transition. Contact niall@innovativedental.com.

Cork. Long-established, very busy two-surgery practice, ample room for expansion. Freehold included. Separate decontam. Excellent location, large footfall. Patient parking available. Two well-equipped, modern surgeries. Active hygienist service. Experienced, qualified staff. Good figures/profits. Contact niall@innovativedental.com.

Waterford City. Well-established, very busy practice in a superb location. Modern/walkinable premises with potential for growth/expansion. Digitalised, computerised, excellent equipment, air con. Good profits - low rent. Ample new patients. Principal available for transition. Contact niall@innovativedental.com.

Dublin west: Very busy private, long-established, three-surgery practice. High-profile location, huge footfall. Extensive free parking. Digital OPG/lateral skull. Experienced, loyal staff. Computerised, walkinable. High new patient numbers. Excellent profits. Contact niall@innovativedental.com.

EQUIPMENT FOR SALE/WANTED

Carestream 8100Sc OPG + Ceph machine for sale – €4,000. Working perfectly, upgrading to CBCT. Does not include install. Contact louise@clearbraces.ie.

Sirona OPG Machine 2010. Contact onemanorplace@gmail.com.

Equipment for sale, dentist retired. DURR compressor in good condition. Handpieces, Belmont chair, instruments, Prophy X-ray and periomat. Contact: 087-954 8387.

As a member of the Irish Dental Association you can use this logo on your website and other practice material. Contact rosalba@irishdentalassoc.ie for details.

Journal of the Irish Dental Association | June/July 2025 : Vol 71 (3) 153



Europhile

Max Walsh's interests extend beyond dentistry to digital marketing, and to supporting young colleagues across the EU.

Max recently completed his final exams at the School of Dental Science at Trinity College Dublin.

Why did you choose dentistry?

I always wanted to work with my hands, work in healthcare, and deal with people as a career. I knew from Transition Year work experience that I didn't want to work in an office. In sixth year I asked my family dentist, Dr Peter Moran of Tralee Dental & Implant Clinic, if I could shadow him for some days over the summer and he obliged. After seeing what the job was like first hand, I knew dentistry was the career for me.

What is your favourite subject in dentistry?

It's hard to pick just one area. I'm really interested in both oral surgery/periodontics and prosthodontics. I enjoy the precision of surgeries, especially in perio cases like implant procedures, and I appreciate the prosthodontic element for the difference it can make to patients' lives.

What did you find most challenging about the course?

I think trying to balance the heavy clinical aspect with the academics of the course was probably the most challenging.

Can you name a lecturer/mentor you admire and why?

Dr Emma McAleese, Dr John Kane and Dr Michael O'Sullivan all come to mind. Dr McAleese taught us the basics of dental care in the clinical skills lab using mannequin heads, which laid a solid foundation for my training. Dr Kane, one of my supervisors in second year when we first began clinics, really showed us the ropes. Practising dentistry on real patients, including my peers, was an eyeopening experience, and Dr Kane was excellent at explaining everything in a practical, hands-on way. Dr O'Sullivan has always been a great source of support and encouragement throughout the years – a fellow SEM, Killarney and Kerry man!

What do you think are the big issues for dentistry right now?

I'd say a major issue is ensuring everyone, especially those in rural areas, has access to dental care. There's also the workforce challenge. I think this may be eased by increasing funding to dental schools and expanding the number of places for CAO applicants. Ideally, training more Irish students would encourage them to stay and work in Ireland after graduation, rather than returning to their home countries if they're international.



Max Walsh at the DDUH.

Tell us about your involvement with the European Dental Students' Association (EDSA).

I joined the EDSA in second year as Ireland's National Delegate, served two consecutive terms as Treasurer (2022-24), and I now sit on its Supervisory Board.

As Treasurer, I managed all financial operations, including sponsorship income and budgets for our twice-yearly General Meetings, and represented over 70,000 European students at the Council of European Dentists, the Council of European Chief Dental Officers and the European Parliament, to name a few, where I advocated for workforce planning, curriculum reform and equitable oral health policies.

I also led a full corporate rebrand, relocated the EDSA's legal headquarters to Dublin Dental University Hospital/Trinity College Dublin, and am currently overseeing the redevelopment of the Association's website.

I'm delighted to be a part of the local organising committee for the upcoming 76th EDSA Meeting for Dublin in August 2025, which will take place in the RCSI.

Tell us about an interest you have outside dentistry.

I spend a lot of my time in digital marketing for The Killarney Park, a five-star hotel, and The Ross, a four-star hotel in my hometown of Killarney.

I also have my own business designing and developing websites, as well as marketing for various types of businesses from boutiques to cafes. I really enjoy doing it; it certainly keeps me busy, and it's a good break from dentistry. I really enjoy skiing and travelling around Europe too.



Max (far right) is pictured at the launch of the Platform for Better Oral Health in Europe Manifesto at the European Parliament in Brussels with (from left): Prof. Brian O'Connell, Dr Dymphna Kavanagh, and Deirdre Clune MEP.

Not just by your side BUT READY IN YOUR CORNER

Be confident knowing you can access expert dentolegal advice and support. Whatever the issue, whenever it happens, we're here for you 24/7.

- A wide range of protection beyond claims
- Advice for any eventuality your career may face
- Fast to respond to unexpected situations
- Support today, tomorrow, and yesterday



Find out more dentalprotection.org/JIDA

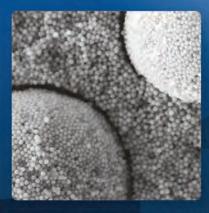




Dental Protection is a trading name of The Medical Protection Society Limited ("MPS"). MPS is a company limited by guarantee in England with company number 00036142 at Level 19, The Shard, 32 London Bridge Street, London, SEI 95G Dential Protection serves and supports the dental members of MPS with access to the full range of benefits of membership, which are all discretionary, and set out in MPSs Memorandum and Articles of Association, MPS is not an insurance company Dental Protection is a registered trademark of MPS. For information on MPSs use of your personal data and your rights, please see our Privacy Notice on our website.

© Tokuyama OMNICHROMA

COLOUR FROM LIGHT INFINITE POSSIBILITIES





Clearly visible in the SEM image: The bead structure of OMNICHROMA compared to conventionally crushed particles.

Smart Chromatic Technology – 1.000 Shades of White

Structural shade without artificial colour pigments: adapts seamlessly to any tooth shade from A1 to D4



0 Tokuyom

Bis-GMA-free formulation: for better biocompatibility

Easy stocking: only 1 shade for economic sustainability



60 C