Wales may ban e-cigarette use in public places

Wales could be the first part of the UK to ban the use of e-cigarettes in enclosed public places, due to a concern that the devices normalise smoking and undermine the smoking ban.

Health Minister Mark Drakeford said: “I have concerns about the impact of e-cigarettes on the enforcement of Wales’ smoking ban. That’s why we are progressing restricting their use in enclosed public places.

“I am also concerned that their use in enclosed public places could normalise smoking behaviour. E-cigarettes contain nicotine, which is highly addictive, and I want to minimise the risk of a new generation becoming addicted to this drug.”

This comes as new research has found that e-cigarette use among adolescents is associated with cigarette smoking.

The study, carried out by researchers at the Center for Tobacco Control Research and Education, found that e-cigarette use among adolescents in the US doubled from 3.3 per cent in 2011 to 6.8 per cent in 2012. They also found that those who used e-cigarettes were more likely to progress to traditional cigarettes and become regular smokers.

These results call into question e-cigarette advertisers’ claims that they are effective smoking cessation devices.

Chief Executive of the British Dental Health Foundation, Dr Nigel Carter, said: “When the Foundation questioned more than 2,000 people about safe alternatives to smoking, more than half (57 per cent) thought e-cigarettes fell into this category. This research shows they appear to be acting as a gateway for teenagers to take up smoking.

“The results of the study certainly suggest there is plenty of room for improvement when it comes to getting young adults to kick the habit. Factors such as social economic status and peer pressure certainly suggest there is plenty of room for improvement when it comes to getting young adults to kick the habit.

However Richard Filbrandt, e-cigarette user and co-own- er of the Vibrant Vapour café in Camarthen, said they had studies showing there was no risk to passive smokers.

He told the BBC: “There are studies done by Air for Change in America that say it doesn’t warrant withdrawing them from public places, and they are the same people that said take cigarettes away from public places.

“Why should we be treated like smokers? Why should we be put out at risk of passive smoking ourselves in a smoking area when we do not smoke?”

Wales could be the first part of the UK to ban the use of e-cigarettes in enclosed public places, due to a concern that the devices normalise smoking and undermine the smoking ban.

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Sugar costs NHS £1.25bn each year

The National Health Service is spending £1.25 billion each year on sugar-damaged mouths, according to the Health and Social Care Information Centre (HSCIC).

According to a blog on the Teethwise website (www.teethwise.co.uk), this accounts for 55 per cent of its annual budget, and does not include the cost of obesity, diabetes and other health complications caused by the consumption of excess amounts of sugar.

Periodontist Dr Rana Al-Falaki said: "Sugar leads to tooth decay – fixing which requires fissure sealants, simple fillings, root canal treatments, and in some cases extractions. With this in mind, we estimate that sugar costs the government at least over £1.25bn in outpatient (dental) fees annually alone, and that’s only if you’re considering the direct effect of sugar on the dental care budget and ignoring the NHS costs on diabetes and heart disease.

"Sugar also leads to plaque build-up, which is the main factor in the aetiology of periodontal disease. Periodontal disease is the major cause of tooth loss, and has strong links to diabetes, heart disease, and arthritis. Of course diabetes and sugar have their own direct connections, but oral health is a known contributor too."

IDH acquires The Dental Directory

Supply business The Dental Directory has been bought by Integrated Dental Holdings (IDH), one of Britain’s corporate dental services providers.

Terry Seccombe, Chief Executive of IDH said: “Dental Directory is a well-established business delivering clear benefits to customers and suppliers. The existing management team, which will continue to lead the business, has done a great job of delivering strong business performance and customer service.

“As part of the Dental Buying Group (DBG), we will have a comprehensive integrated consumables and service support structure in the UK for dental practices. We look forward to building on this in the future and further improving the quality of service provided to both Dental Directory and its customers and suppliers. The prospect of greater co-operation with IDH, which operates one of the largest dental healthcare practice networks in the UK with over 600 practices, and with DBG, will significantly add to our ability to provide a superior, cost-effective service to customers."

Low vit D during pregnancy linked to caries in toddlers

Low vitamin D levels in women during pregnancy lead to a higher risk of cavities in their toddlers, new research has found.

According to Reuters, researchers from the University of Manitoba’s dental school in Winnipeg measured vitamin D levels in the second or early third trimester in 207 pregnant women and then examined the teeth of 15% of their children when they were an average of 16 months old. There were significantly fewer cavities in the children whose mothers had higher vitamin D levels.

The researchers said: ‘Prevention efforts should begin during pregnancy by bolstering maternal nutrition, either through improved dietary intake or supplementation with vitamin D.’

Dentistry ‘under attack’ - BDA

Dentistry is under attack from governments, regulators and the fearfulness of politicians, Chair of the British Dental Association’s (BDA) Principal Executive Committee (PEC) Dr Mick Armstrong (pictured) said at the British Dental Conference and Exhibition on 10 April 2014.

In his inaugural address, Dr Armstrong argued that the dental profession is facing a burgeoning challenge, with a double standard between the professionalism expected of it, and the lack of professionalism with which it is treated, emerging.

Dr Armstrong also stated that the profession could be proud of the way it continues to rise to the challenge and reasserts its professionalism when it appears to falter.
Incorporated dental practices challenged by HMRC

A growing number of dentists who have incorporated their dental practices are being challenged by HM Revenue and Customs to defend both the valuation and the process by which the practice assets were transferred to the new limited company, recent figures by NASDAL reveal.

If HMRC is successful in its challenge, any reduction in the valuation could be taxed by up to 50 per cent.

Accountant Alan Suggett, a member of NASDAL’s technical committee, said: “The goodwill transferred to the limited company can be treated as taxable remuneration. This creates a liability for income tax at 45 per cent and National Insurance at 15.8 per cent.

“In the case of an NHS incorporation, where the contract remains in the name of the dentist, this could apply to the whole goodwill value. How many practice owners could afford to write out a cheque to HMRC for 50 per cent of their goodwill?”

The British Dental Association (BDA) has launched a petition to oppose a proposal to reduce the salary paid to Dental Foundation Trainees in England.

NHS England is proposing a cut of nearly eight per cent to the salary which would see those beginning DFT in September 2014 would be paid £28,076, more than £2,000 less than those currently completing their DFT year.

The BDA believes that this is an ‘attack on the youngest and most vulnerable members of the profession’, and argues that dental students are graduating with increasing levels of debt so are already facing challenges to manage their finances and launch their careers.

At the time of going to press, the e-petition had 4,168 signatures. It can be viewed at petitions.direct.gov.uk/petitions/64208.

BDA launches petition over DFT salary cuts

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Alasdair Miller named next BDA President

D r Alasdair Miller will take on the role of President of the British Dental Association (BDA) from 10 April 2014. He will be the BDA’s 128th President, succeeding Dr Barry McComb.

For more than 20 years Dr Miller was a partner in a mainly NHS dental practice in Taunton. From 1997 to 2013 he was the Regional Postgraduate Dean of Western Region of the University of Bristol where he was also Programme Director for the University’s Open Learning for Dentists Diploma programme. In 2009 he was the first dentist to become Fellow of the Academy of Medical Educators.

From 2007 to 2010 he was consultant to the Peninsula dental School. He currently sits on the Council of the MDU and is the interim Chair of the Bristol, North Somerset, Somerset and South Gloucestershire Dental Local Professional Network.

Dr Miller served on the BDA’s Representative Body from 1986 to 2012. He also been an active member of the BDA’s Education Committee for ten years and served on a variety of task groups and advisory boards within the dental education and training arena.

Dr Miller said: “It is an honour to be taking up the Presidency of the Association and I look forward to acting as an ambassador for the profession in what are challenging times for it. During my year as President I will champion the profession and its commitment to maintaining the highest standards of patient care and professional excellence.”

Binge drinking prolongs wound recovery time

P ersons who are injured while binge drinking are much slower to heal from wounds, researchers from Loyola University have found.

In the United States, alcohol dependence and/or abuse affects 20 per cent to 40 per cent of hospitalised patients. Patients with surgical site infections are hospitalised for twice as long, have a higher rate of re-admission and are twice as likely to die as patients who did not binge drink.

The study, published in the journal Alcoholism: Clinical and Experimental Research, showed that binge drinking reduces the amount of white blood cells called macrophages that chew up bacteria and debris. This makes the wound more likely to be infected by bacteria.

Binge drinking also reduced levels of CRAMP – a type of protein that kills bacteria, and recruits macrophages and other immune system cells to the wound site.

“Together these effects likely contribute to delayed wound closure and enhanced infection severity observed in intoxicated patients,” the researchers concluded.

Call for tougher exams for international doctors

H igher exam pass marks are needed for international medical graduates to work in the UK, researchers from Durham University and University College London suggest.

The researchers found that there is a ‘performance gap’ between international and UK medical graduates, and that tougher tests will close this gap. However, the British International Doctors Association argues that there should be a standardised test for all.

In the UK, 57 per cent of doctors registered with the General Medical Council in 2012 qualified in other countries, with 27 per cent obtaining their medical degree from outside the European Economic Area (EEA).

Dr Paul Tiffin from Durham University said: “Further research is needed to understand the potential reasons for these differences in performance, and in particular, the possible role that language and culture may play. A more detailed analysis based on country, not just region, of qualification would also be important to conduct in the future.

“There may be better ways of supporting overseas doctors to adjust to UK culture, and that of the health service more quickly.”

Tougher language checks for European doctors coming to work in Britain are expected to begin in June.

Dentist who changed patient records struck off

A Birmingham dentist has been struck off by the General Dental Council (GDC) for changing patients’ records.

Omar Narayan, who practised at the Hamstead Dental Practice in Birmingham, was charged with adding entries onto a patient’s original green-coloured private treatment record, and re-writing the patient’s brown-coloured NHS treatment record card. He also created the document entitled Assessment of Capacity for Proposed Dental Treatment/Decision.

Mr Narayan said he amended the records and created the assessment form at the request of Joyce Trail, the Practice owner and his employer at the time. As previously reported in Dental Tribune, Ms Trail was convicted of conspiracy to defraud the NHS. She submitted 7,141 fraudulent claims to the NHS, which amounted to almost £1.4 million being paid to Ms Trail by the NHS.

The GDC’s Professional Conduct Committee said: “The Committee is satisfied that Mr Narayan’s dishonest conduct is so serious that it is fundamentally incompatible with him remaining on the Dentists Register. For these reasons, the Committee has determined that the only appropriate and proportionate sanction to protect patients and maintain public confidence in the dental profession, is to erase the name of Omar Narayan from the Dentists Register.”

England to have standardised cigarette packaging

T he government is moving ahead with plans to ban branding on cigarette packaging in England, Public Health Minister Jane Ellison has said.

According to the BBC, Ms Ellison told MPs the latest independent report has found that the Australian legislation (Australia introduced the ban in 2012) has had a positive impact.

“We want our nation’s children to grow up happy and healthy and free from the heavy burden of disease that tobacco brings,” she said.

However, Labour has accused the government of delaying the decision for too long, with shadow health secretary Luciana Berger saying that it is “caving in to vested interests”; while some Conservative backbenchers say that the plan is an example of the ‘nanny state’ and that there were enough warnings about the dangers of smoking already.

Ellison promised that changes will be implemented before the next election in May 2015, although MPs would be given a vote on the proposals before they came into force.

Conservative MP Sir Paul Beresford, a dentist, told those protesting the ban: “If I could arrange for them to come into an operating theatre to see the damage that oral cancer does to people they might actually change their mind.”

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The role of physiotherapy in the management of TMD

Anne Budenberg discusses using physiotherapy for patients with TMDs.

The Association of Chartered Physiotherapists in Temporomandibular Disorders (ACPTMD) is a clinical interest group, established in November 2009, dedicated to the advancement of physiotherapy for patients with Temporomandibular Disorders (TMDs). Physiotherapy clinicians in the North West of England and the TMD Clinic, Manchester Dental Hospital, started the group as a response to the lack of specialist physiotherapy practice for this patient group. Now the ACPTMD has over 140 physiotherapists listed on their website, and a committee made up of clinicians and academics across the UK.

A primary objective of the association is to promote the highest standards of clinical physiotherapy practice in the treatment of TMDs. Traditionally, there has been a paucity of clinical attention from physiotherapists towards patients with jaw and facial pain. It is unclear why this is, especially as there is good evidence to support the use of physiotherapy in the management of TMDs. Other manual therapy groups, such as Osteopathy and Chiropractic, regularly manage patients with maxillofacial pain and jaw movement problems, but physiotherapy has so far failed to meaningfully engage with this patient group. It appears that there are only small regional groups of clinicians who happen to have a specific interest in TMDs who offer physiotherapy services. This has resulted in gross national inequality for this patient group, and confusion for referring parties.

The ACPTMD aims to provide a balanced, evidence-based standard of care throughout the UK. The group hopes to provide a forum for promoting the exchange of ideas and new developments in treatment of these conditions. Although evidence supports physiotherapy as an intervention at a fundamental level, there is still a lack of clarity as to precisely which physiotherapy interventions are most effective. Not being a priority area for many clinicians, creative and innovative thought and practice seems to be limited. The group provides a forum for exchange of ideas regarding good practice, challenging existing practice, and providing peer support for the development of new practice methods.

ACPTMD is working with the Chartered Society of Physiotherapy to establish an identity as a recognised Professional Network. This relates to the groups aim of maintaining and strengthening relationships between itself and other organisations. The group hopes to develop future working relationships with relevant medical and dental organisations. The group has dental representation at committee level and hopes to develop existing links with regional and national medical groups. The group thoroughly embraces the multi-disciplinary nature of TMDs management.

Ultimately, it is the purpose of the ACPTMD to promote professional and public awareness of the benefits of physiotherapy in the treatment of TMDs. ACPTMD intend to work hard over the next few years to raise the profile of TMDs management and provide the right information to the public and media about the value of physiotherapy management in the care of patients with TMDs.

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Leading the way to Great Dental Care

Good leadership and management by Glenys Bridges

At every level of dental care provision the skills required for good leadership and management are becoming increasingly important. Dental teams with good leadership and management consistently meet compliance requirements defined in the regulations of the Health and Social Care Act and the Dentists Act. These requirements challenge dental professionals to develop a new range of non-clinical skills not only to meet standards, but also to ensure that doing so realises tangible benefits for patients, the team and the business.

The Chartered Management Institute recognises a six step model of leadership and management. This model begins with the development and communication of goals (the vision) leading to the creation of small achievable steps to achieve the vision, set out in a business plan. This requires leadership skills to define what the team is aiming to achieve and create excitement about the vision, through the progression of these steps:

Step 1 - set the vision
Good leadership starts with ‘the end in mind’. These leaders have a clear vision of goals the practice is working towards. These goals should be defined in the long term over the next five to ten years, the middle term over the next one to five years and short term over the next year. Once goals are defined work can begin on planning how they will be achieved and targets can be set for each aspect of the plan.

Step 2 - Encourage creativity and drive change
The most effective leaders are charismatic individuals. To drive continuous improvement, they need to inform, involve and inspire their people so that they can take them out of their comfort zones and on to new levels of achievement. These leaders understand that if you do what you have always done, you get what you already have. For new levels of achievement, teams need to step out of their comfort zones. This can be scary but with the right preparation and support it can be very rewarding.

Steps one and two are the leadership phase; from step three onwards management skills are required to turn the aspirations into reality. Now it’s time for managers to decide ‘How’ to realise the vision by planning, training the team and deploying resources. Steps three to five are governance steps.

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Step 5 - Planning, organising and allocating work

With the strategic goals in place the management role begins with the development of SMART objectives. These objectives are specific, measurable, achievable, relevant, and time bound. These are operational goals based on measurable end results and consideration of how to make best use of the skills and resources available. They consider how each individual aspect fits into the strategic plan and sets a time frame for monitoring and completion.

Step 4 - Instructing the team

Information, communication and knowledge are the lifeblood of successful business operations. Policies and working procedures supported by working instructions drive consistent results. Working instructions should be written by those carrying out the procedures they cover and should be continuously developed as the task evolves.

Step 5 - Co-ordinate the resources

Good management requires an operational plan and appropriate resources. By the time step five has been reached the operational plan is in place to direct the deployment of resources such as people, budgets and time. Clever management allows the best use of resources, without driving people so hard that they are unable to produce their best work.

Step 6 - Measuring and correcting performance

To ensure continuous improvement take time out to compare the results achieved to the SMART objectives set at step three. This is an audit, or gap analysis process that can be used to recognise and reward success as well as for making the corrections needed to keep the strategic plan on track.

Even in small dental teams these skills are needed at three management levels, individuals will invariably work at more than one level

1. Senior management - setting strategic goals and inspiring others
2. Middle management - setting operational goals to deliver the strategic goals
3. Junior management - managing tasks

Clear leadership is the starting point for the success of any team. When leaders know and understand their role they are able to inspire their teams. Good leaders understand how by defining the practice’s vision and setting it out as strategic goals and plans can lead the team to achieve them. Formal training in leadership and management can enable dental professionals to excel in these roles. To find BTEC level three and four qualifications geared for dental teams visit www.dentac.co.uk

‘Clear leadership is the starting point for the success of any team’

About the author

Glenys is an experienced management trainer and assessor with 20 years’ experience of working with General Dental Practitioners and their teams. In addition, she has expertise and qualifications in Counseling and Life Coaching. Her first book Dental Practice Management and Reception was published in 2006 her second book Dental Management in Practice was published during 2012.
Annual Planning

Carina Shaw dissects developing a strategic marketing plan

Developing a strategic marketing plan for the new financial year can not only help you keep on top of your regular practice marketing, but help you target the right people at the right times to achieve the practice growth you’re aiming for.

Marketing plans are most effective when set out clearly, reviewed regularly and stuck to. This way you can allocate a budget for your marketing and tailor it for the various seasons, school holidays, anniversaries and national events, such as Mouth Cancer Action Month.

A marketing plan must also be part of a broader business plan, however, and be thought about in a structured, strategic way. For example, it might not be the right time to do any marketing if your practice is at the early stages of a refurbishment. Here is some advice on how to put together a strategic marketing plan and some tips on how to populate your regular marketing with timely and interesting content.

Establish your audience
This is where a patient profiling report, available through some payment plan providers, can come in really handy as it will show you the best audiences to target in your area. It uses postcode information to profile the types of people who live within a reasonable drive of your practice, categorising them so that you know who and where your target audience are and the best way of reaching them.

For example, that national average for the ‘Affluent Achievers’ category is 22 per cent. If your report says that there are more than usual in your area, you will know to pitch your tone of voice and marketing activity for this group. Likewise, if you have a high percentage of the ‘Mature Money’ group in your area, social media marketing might be less effective so you need to look at alternative ways to reach this audience.

You may also find that there is a high percentage of a group you have never targeted before, which can be a great opportunity for a targeted flyer drop or regional magazine focus, but remember to always put in a strong call to action so people have a reason to contact you.

Get your team involved
Below are just a few ideas from us on how you can capture your patients’ interest with your marketing efforts each month for the full financial year. However, it’s worth including an ideas session in your regular practice meetings too, as your team may have some brilliant ideas which are more closely tailored to your practice.

By establishing your audience and deciding on the most appropriate way to reach them, you are far less likely to waste money on unsuccessful marketing as you will be far more targeted, as opposed to a more scattergun approach. However, it’s also a good idea to monitor your marketing so that you can see what the most successful marketing campaign of the year was. That way you can do more of that type of campaign in the future or spend more money promoting it in your strategic plan for the following year, thus making your marketing more and more successful year on year.

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Monthly tips for regular marketing content

April - Easter – if your area has a high percentage of families, why not target parents and children with some marketing on children's oral health and tips on how to enjoy Easter treats without ruining teeth? If you have any payment plans for children at your practice, then this is a great time to promote these too.

May – From mid May till mid June it's National Smile Month. Why not try hosting an open day or free check up event to help people in the area make the most of their smiles? You could even hold a competition to win some treatment to help someone's smile be the best it can be!

June - Summer hydration – create some leaflets, slides for your practice waiting room screens or a section in your regular email newsletter on tips to reduce fizzy/sugary/acidic drinks in the hot summer months. Include some facts and tips and some alternatives to keep people hydrated.

July – It's National Kissing Day on 6th July, so get involved and perhaps include some facts in your marketing about targeting bad breath and some practical tips for getting your patient's mouths healthy for kissing!

August - Back to School – target by offering tips for pre-school term check-ups, morning brushing and lunch boxes. You could also offer free check-ups for children to get them school ready and hopefully encourage their parents to become regular patients.

September – September is Colegate Oral Health Month, so why not promote an event such as a toothbrush amnesty where people bring in their old toothbrush and you will give them a new one for the month? This is a great way of driving potential patients into your practice and potentially helping your business to grow.

October - Halloween is becoming more popular in the UK every year, so get involved by getting your practice team to dress up in scary Halloween costumes for an open day promoting family oral health. You could also produce flyers or a section on your website on tooth friendly trick or treating, recipes and snack ideas!

November – November is Mouth Cancer Action Month and practices across the country are offering free screenings to highlight the importance of the ‘If in Doubt, Get Checked Out’ message. Mouth cancer is on the rise and the more people know about this highly treatable disease the better the survival rates will become.

December – It's Christmas of course! So a personalised greetings card to your patients is always a nice gesture. But why not include some tips on how to enjoy Christmas treats without spoiling their oral health; or run a free check-up offer leading up to December 24th. It's a great way of getting people into the practice and signing them up to Denplan can be a way of them fulfilling a new year's resolution.

January - New Year's resolutions – this can cover anything from quitting smoking, regular attendance, keeping an eye on alcohol intake, better diet (from dental perspective) and better oral hygiene.

February - Budgeting – February is the month when a lot of Christmas credit card bills are due and is one of the toughest financial months of the year. Target new patients with information about payment plan options and spreading the cost of treatment.

March - Preparation for wedding season – look at what brides are doing to prepare for the most important day of their lives – tooth whitening, straightening, facial rejuvenation etc. Attend some bridal fairs and talk about your minimal invasive aesthetic services.

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About the author

Carina Shaw is a Senior Practice Consultant at Denplan. As a former Business Development Manager at a large specialist centre, as well as a senior Dental Nurse, Carina understands how dental practices work and provides them with bespoke advice on how to grow their patient numbers, using her extensive knowledge of recruitment and retention strategies.
Because of today’s wide selection of bonding systems with complicated work processes the desire to simplify working steps during restorative treatment is becoming greater than ever before. Particularly in the case of small Class I restorations, as well as fissure sealing and lining, which can be performed relatively quickly, preparatory steps such as etching and bonding protract the working time unnecessarily. At the same time, they increase the number of possible sources of error since, if certain working steps are neglected, the durability of the restoration can be drastically reduced.

Many dentists would like to have fewer work steps required, in order to be able to work more reliably and focus primarily on the restoration. This can be achieved through the use of self-etching and self-adhesive synthetic materials.

Constic is the new self-etching and self-adhesive flowable composite from DMG, which combines etching, bonding and filling in one step and features superior adhesion to enamel and dentine along with good aesthetics.

Case study
In the following case, a small and inadequate Class I restoration on tooth 17 can be seen (Fig 1).

Procedure
After preparing the cavity, it is initially recommended to clean the tooth, remove any debris using water-spray and blow it dry (Fig 2). Then an approximately 0.5mm thick layer of Constic flowable composite is applied to the cavity using the Luer-Lock-Tip and massaged in for 25 seconds using a brush (Figs 3&4). Thereafter any excess should be removed (Fig 5). Then the layer is light-cured using a polymerisation light for 20 seconds (Fig 6).

The actual restoration is then performed. For the restoration, the material is applied in layers that are a maximum of 2mm thick (Fig 7). The low-viscosity and uniform consistency of Constic ensures that the restoration has no trapped air or marginal gaps. This is facilitated by the fact that no additional bonding materials are used. Each layer is light-cured for 20 seconds (Fig 8).

Using a dental probe, a high-quality aesthetic fissure surface can be achieved prior to final curing (Fig 9). Apart from the Luer-Lock-Tips and the brush, which are included in the set, few additional modeling instruments are required. Thus sterilisation costs and instrument wear are kept to a minimum.
The cured restoration is then checked for overhangs, which are removed using a scaler, and then polished (Figs 10-12).

Conclusion

Constic, as a self-etching and self-adhesive flowable composite, stands out due to its uncomplicated application with simultaneously high-quality aesthetic results.

Since Constic is available in many different shades, a restoration that is individually characterised can be prepared for each tooth. The range includes shades A1, A2, A5, A5.5, B1, as well as opaque-white. Since the working steps of etching, bonding and filling are combined into one step, the dentist is able to have a shortened working time on the one hand and also stress-free work on the other hand.

In addition, considerably fewer instruments are required, which improves both the work flow and also the dentist’s concentration on his/her own work and thus has a positive effect on the final results.

Steps such as etching, which represent a certain degree of patient risk, are combined with filling into one work step and this increases reliability for the dentist. In addition, this ensures that no intermediate step is forgotten. Due to its versatile applicability - Constic is suitable for lining and also for small Class I restorations, as well as fissure sealing - the size of the inventory improves, while purchasing costs for other systems are minimised at the same time.

The radiopacity of the material also ensures easy identification of the restoration by dentists in the future.

Finally, it can be said that Constic enables work to be performed in a more relaxed fashion, while decreasing the amount of work and achieving an aesthetically challenging and functionally high-quality result.

About the authors

Julia Gerke is doing doctoral studies at the Pathological Institute of RWTH Aachen.

Matthias Hodecker is currently doing advanced training for a qualification in Orthodontics in Aachen.
Minimally invasive treatments restore form, function and aesthetics with minimal removal of sound tooth structure. Understandably, the restorations age with the patient. Eventually, teeth that have been restored will break down and patients will need to have those restorations replaced.

Fortunately, restorative materials and procedures evolve constantly. If an initial restoration was created using minimally invasive procedures, there should be more tooth structure to work with when a second restoration is needed. The following case report demonstrates such a conservative approach.

Following enamel preserving preparation using a tapered, round-ended fine diamond bur and sandblasting, a celluloid strip was placed subgingivally and fixed using flowable composite. This helped to create the desired emergence profile and contact points. Next, a retraction cord was inserted into the labial part of the gingival sulcus (Fig 5).

After isolation of the operative field, the preparation was etched with 37 per cent phosphoric acid for 30 seconds, then thoroughly rinsed and dried. A fifth-generation bonding agent was then applied and light cured.

Dr Monika Marciniak presents a case showing direct composite resin restoration of conoid lateral incisors

Case report
After orthodontic treatment, a 19-year-old female patient was dissatisfied with the unpleasant, disproportional appearance of her conoid maxillary lateral incisors. A direct composite technique was selected for smile enhancement at the initial appointment (Figs 1–4).
The case presented describes a minimally invasive way of addressing this problem using direct composite bonding.

Dentine in a darker shade was placed onto the cervical third. Prior to light curing, the white strip was painted horizontally along the incisal edge of the enamel shell using a white tint and smooth brush (Fig 9). Finally, an enamel resin layer was placed, contoured, smoothed with a brush and light cured (Fig 10).

After completion of composite applications and polymerisation, fine flame-tipped finishing diamond burs and Sof-Lex discs (3M ESPE) were used for gross contouring and creating texture. The final polish was achieved using rubber finishers, a brush, a felt wheel and a paste kit (Fig 11).

The same procedures were followed during reconstruction of the left lateral incisor (Figs 12&13). Figures 14 to 16 show the situation 30 days post-operatively. The lateral incisors show favourable integration of form and colour as achieved through the direct composite resin restoration procedure. Adequate contours and proportions create a smile with harmonious symmetry and a natural appearance.

Some cases present with conoid lateral incisors displaying a lack of gingival harmony, as were the cases with those patients (Figs 17&20). This usually manifests as the translocation of the gingival contour coronal to the zenith of the canine and the central incisor. Such a clinical situation requires gingival re-contouring before direct restoration.

In presented cases, the re-contouring procedure was carried out using a Soft Tissue Trimmer bur (Edenta). Modifications were limited by the patient’s biologic width. As observed at four-week follow-up visits, there was a very good gingival response to the polished restorations (Figs 19&21).

Conclusion
Conoid lateral incisors are not uncommon. They may be found unilaterally or bilaterally. Their poor appearance can spoil an otherwise attractive smile. The case presented describes a minimally invasive way of addressing this problem using direct composite bonding.

The step-by-step images illustrate how dentists can solve this cosmetic issue without using aggressive techniques and with the advantage of being in full control of shade matching and characterisation.

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Bioactive materials support proactive dental care

Dr John C Comisi discusses bioactive materials

Resin bonding of the human dentition has become a ‘standard’ in the United States and Canada. There are more than 80 different bonding systems on the market today. We have seen them evolve through multiple generations in an attempt to ‘simplify’ the bonding process. Yet, as these agents have simplified, many in our profession have seen many challenges arise.

A significant number of reports in the literature have been showing that the “immediate bonding effectiveness of contemporary adhesives are quite favourable, regardless of the approach used (however) in the long term, the bonding effectiveness of some adhesives drops dramatically.” The hydrophillicity that both etch and rinse and self-etch bonding agents offer initially in the dentin bonding process becomes a significant disadvantage in terms of long-term durability.

It is this hydrophillicity of simplified adhesive systems combined with other operator-induced challenges that contribute to these failures. Tay, Carvalho, Pashley, et al. have reported repeatedly in the literature of this problem. They continue to report that these bonding agents do not coagulate the plasma proteins in the dentinal fluid enough to reduce this permeability. The fluid droplets contribute to the incompatibility of these simplified adhesives and dual-/auto-cured composites in direct restorations and the use of resin cements for luting of in direct restorations.

The term “water-tree” formation has been coined to describe this process, which originated from the tree-like deterioration patterns that were found within polyethylene insulation of underground electrical cables. It is now being applied to the water blisters formed by the transfer of dentinal fluid across the dentin bonding interface. These “water blister... act as stress raisers and form initial flaws that cause subsequent catastrophic failure along the adhesive composite interfaces.”

The previously mentioned plasma proteins are released by the dentin when subjected to acids and cause hydrolytic and enzymatic breakdown of the dentin and resin bonding agent interface. These enzymes are called matrix metalloproteinases (MMPs).

Currently, there are only three methods of reducing these MMPs: two per cent chlorhexidine solutions that are used prior to application of bond...
ing agents; etchants containing benzalkonium chloride, otherwise known as BAC (ie Bisco’s Uni-etch products); and polyvinylphosphonic acid-producing products (glass ionomer and resin modified glass ionomers).

Due to the short efficacy of these chlorhexidine solutions being used before bonding, this methodology has come into question as of late. Etchants with BAC have been shown to be valuable in the reduction of MMPs and should be considered in all bonding processes. However, the most intriguing methodology of reducing MMPs and remineralising tooth structure is with the use of glass ionomer cements (GIC) and resin-modified glass ionomers (RMGIC).

Glass ionomers and resin-modified glass ionomers

Glass ionomer cements have long been used as a direct restorative material. Their early formulations made the material difficult to handle, and the breakdown of the material made it an undesirable solution in dental restoration. However, these materials, especially in today’s formulations and pre-encapsulated presentations, have many properties that make them very important in the restorative process.

The work at companies such as SDI North America (Riva product line), GC America (Fuji product line) and VOCO (Ionomat product line) have continued to make great strides in improving these products for easier and longer-lasting use of GIC and RMGIC products.

First, these materials are bioactive, and up until recently, they were the only materials with this property; that is they have the capacity to interact with living tissue or systems. Glass ionomers release and recharge with ions from the oral cavity.

This transfer of calcium phosphate, fluoride, strontium and other minerals into the tooth structure helps the den- tition deal with the constant assault of the acidic nature of day-to-day ingestion of food and beverages and encourages remineralisation; and the incorporation of phosphorous into the acid in today’s GICs creates polyvinylphosphonic acid.

This property of GICs makes them a major agent in the reduction of MMP formation, and thereby minimising if not eliminating the collagen breakdown commonly found in many resin-dentin bonding procedures.

Second, they bond and ultimately form a union with the dentin by chemically fusing to the tooth. The combination of the polyacrylic acid and the calcium fluoro-alumino silicate glass typically found in GICs reacts with the tooth surface, which releases calcium and phosphate ions that then combine into the surface layer of the GIC and forms an intermediate layer called the “inter-diffusion zone.”

No resin bonding agents are required due to this chemical fusing to the tooth structure. This ion release helps inhibit plaque formation and provides an acid buffering capability that helps to create neutralisation effect intraorally. In addition, these GICs have very good marginal integrity with better cavity-sealing properties, have better internal adaption and resistance to microleakage over extended periods of time, have no free monomers, can be bulk filled and offer excellent biocompatibility.

Another important consideration is that GICs are moisture-loving materials, which makes them very sensible for use in the intraoral cavity. The transfer of dentinal fluid from the tooth to the GIC essentially creates a “self-toughening mechanism of glass ionomer based materials... serves to deflect or blunt any cracks that attempt to propagate through the matrix [and] plays an adjunctive role by obliterating pores [which] delay the growth of inherent cracks in the GIC under-loading.”

The intermediate layer of the GIC provides flexibility during functional loading and acts as a stress absorber at the interface of the restoration and the tooth.

Resin-modified glass ionomers (RMGIC), which are a hybrid of traditional glass ionomer cements with a small addition of light-curing resin, exhibit properties intermediate of the two materials. This material has been shown to have properties similar to GIC, but with better aesthetics and immediate light cure. RMGICs have been shown to undergo slight internal fracturing from polymerisation shrinkage, yet have an inherent ability to renew broken bonds and reshape to reinforce new forms.

Application of RMGIC to all cut dentin in Class II composite restorations has been shown to significantly reduce micro-leakage along the (axial) wall of the restoration, and helps prevent bacterial invasion of the restored tooth. RMGIC biomaterials are multifunctional molecules that can adhere to both tooth structure and composite resin, thus providing an improved sealing ability by chemical or micromechanical adhesion to enamel, dentin, cementum and composite resin.

They, like GICs, can be bulk filled to reduce the amount of composite necessary to restore the cavity preparation and act as dentin substitutes in the restoration. The use of GIC and RMGIC in the restoration of posterior Class V restorations and conservative Class I restorations provides many benefits. They are easy to place and reasonably forgiving, even in a slightly moist environment. They should be placed in a moist but not wet environment, so familiarity with technique is imperative as it is with all dental restorations. I will often use Riva SC (SDI) or Fuji 9 GP Extra (GC America) in posterior Class I and V restorations (Figs 1-7).

Polishing and shaping of the materials must be done with water spray and fine/ultra-fine composite finishing burrs and polishers so as not to destroy the surface of the material (Fig 8). The use of RMGIC products, such as Riva LC or Fuji II LC, is great in bicuspid and anterior Class V composite restorations, especially in high caries prone patients (Figs 9-12).

Class II restorations, however, have always presented a challenge to the clinician. If the operator wanted to use GIC or RMGIC, there was no easy way to do this that appeared to provide satisfactory results. It is with this in mind that the ‘sandwich technique’ was developed.

It was thought that using the properties of GIC to bond to the tooth and then applying resin bonding agents and composite to the set GIC could help reduce sensitivity and bond failures typically seen in many resin-bonded composite (RBC) techniques.

Typically, the GIC is placed in the preparation, allowed to set, cut back to ideal form and then bonded to with an RBC technique. However, the inability of RBCs to adhere to the set GIC often creates many failures. The materials by themselves are incompatible over the long term.

The modified sandwich technique evolved as a means to overcome this problem. Placing RMGIC over set GIC - and then adding a RBC to that - provided a better solution, but was as laborious and time consuming to do, as is the sandwich technique.

The ‘Co-Cure Technique’

In 2006, an article was published that, in my opinion, has revolutionised the way I approach direct posterior restorations and direct restorations as a whole. The article presented a radical approach to direct posterior restorations, called the Co-Cure Technique. This technique is defined as the simultaneous photo-polymerisation of two different light activated materials that involves “the sequential layering of GIC, RMGIC and composite resin prior to photo-polymerisation and before the initial set of the GIC [which] enables an efficient single-visit placement of a [direct] restoration...”
In the Co-Cure Technique, the composite restoration does not require a bonding agent because the bonding agent is essentially the RMGIC. The RMGIC acts as the interface between the GIC and the composite material. It combines the GIC, RMGIC and composite in a way to form what can best be described as a ‘monolithic biomimetic restoration.’

This restoration is an ‘open sandwich’ type of sandwich technique. That is, the GIC component is exposed to the oral environment (Fig 15) at the gingival portion of the restoration. It is quickly and efficiently accomplished and has significantly reduced postoperative sensitivity compared with typical direct RBC techniques. I have been placing these types of direct posterior restorations since 2008. They have become the cornerstone of my practice.

**Technique procedure (Fig 14)**

After placement of an appropriate dental matrix, the technique incorporates the use of 37 per cent phosphoric acid to prepare the tooth for restoration. The acid is essentially ‘flooded’ into the preparation in a similar manner to doing a ‘total-etch’ RBC. It is, however, washed off after five seconds of placement. The tooth is then dried but not desiccated. The area remains slightly moist because the GIC that will be placed next is hydrophilic.

Fill the preparation with the triturated GIC material up to the level of the DEJ, then immediately place the triturated RMGIC in a very thin layer to cover the GIC and walls of the preparation. Finally, place the composite over the previous materials to slightly overfill the preparation. With a large round burnisher dipped in an unfilled resin material (e.g., Riva Coat by SDI or G-Coat by GC), wipe away the excess GIC and composite restoration material to create your margins and prevent ditching and white lines.

The occlusal table of the restoration can then be compressed gently with a plastic occlusal matrix by either having the patient bite or by the operator pressing gently with his thumb or forefinger to improve the coalescence of the three materials. This can help reduce the time involved in creating the final occlusion of the restoration by creating a functional occlusal table.

The restoration is then cured for 50 to 40 seconds with an LED curing light that generates at least 1,500mW/cm². Appropriate light output is critical for all direct cured restorations, and assurance that appropriate output is provided by the curing light is needed.

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The restoration is evaluated for complete cure and then a layer of an unfilled resin is placed on the exposed GIC/ RMGIC composite complex and cured for an additional 10 seconds. The matrix band is removed and the restoration is trimmed and polished as any typical RBC restoration would be.

I have found that an entire three-surface posterior restoration can be accomplished in less than three minutes once the matrix has been placed. Typically, finishing the restoration can also be done in less than three minutes. This makes the direct posterior restoration quite efficient and beneficial to the clinician and the patient because we are providing a restoration that will help enhance healing of the dentin and reduce recurrent decay and restorative failure.

**Nanotechnology in dental materials**

Nanotechnology involves the production of functional materials and structures in the range of 0.1 to 100 nanometers by various physical or chemical methods. Today, the development of nanotechnology has become one of the most highly energised disciplines in science and technology because it can stimulate the creation of many new materials with previously unimagined applications and properties.

Several studies\(^{23}\) have shown that the inclusion of these types of nano-fillers and nano-fibres into the dental materials (dental composites and bonding agents) can improve the physical properties by increasing the strength, polishing ability, wear resistance, aesthetics and bond strengths in many dental applications.

It is also envisioned that the incorporation and utilisation of these nanoparticles in the form of nano-rods, nano-fibres, nano-spheres, nano-tubes and ormoners (organically modified ceramics) into dental restorative and bonding agents can create more biomimetic (life-like) restorations. This will not only enable these materials to mimic the physical characteristics of the tooth structure, but will also be able to facilitate the remineralisation of that structure.

As Saunders states in his conclusion, “such nano-restorative biomaterials could very credibly be the next transfusion/clinical leap” in restorative dentistry.

**Giomers**

In that vein, an exciting advancement in bioactive materials is the development of giomer products (SHOFU Dental, Beautifil II, and Beautifil Flow Plus). These giomers are resin-based composites that contain pre-reacted glass ionomer particles (S-PRG). These particles are made of fluorosilicate glass reacted with polyacrylic acid (just like a GIC), just before being incorporated into the resin. This creates a new type of bioactive material.

These giomer products display properties in a manner similar to GICs\(^{24}\); they release ions and recharge with ions from the oral cavity, inhibit plaque formation and neutralise and buffer the acids of the mouth.\(^{25}\)

No other composite material has this property to date. I use these giomers instead of traditional nano-hybrid composites in my restorations because of these properties. They complete the entire biomimetic and bioactive nature of all the co-cure procedures that I create.

The Beautiful Flow Plus product line has also expanded the way that I create restorations due to their unique viscosities. These materials can be stacked (Fig 15) and used in a restorative process I call the ‘modified resin cone technique’ (Fig 16).

They can also be applied to create direct composite veneers that can be easily placed, sculpted and highly polished (Fig 17). Easy placement, the ability to stack and maintain position and shape, plus their bioactive nature, make these materials a ‘game changer.’

**Resin-modified, light-cured bonding agents**

Another advancement that I have been working with is a product that is a resin-modified, light-cured bonding agent (SDI, North America: Riva Bond LC). This product is a specially formulated liquid RMGIC that can be used to bond composite restorations in the traditional sense, used in traditional sandwich and modified sandwich techniques and, of course, used in the Co-Cure Technique.

This concept is especially appealing in light of research that indicates RMGICS provide quite good marginal seal when used as a bonding agent on cut dentin surfaces.\(^{26}\) I especially like to use it with the Co-Cure Technique and when doing anterior restorations.

Using this technique I am able to get a completely biomimetic, bioactive restoration in both situations because of the bioactive nature of the materials used.

The technique for use of this RMGIC bonding agent with composite is as follows:

1. Etch with 57 per cent phosphoric acid for five seconds
2. Wash and dry but do not desiccate
3. Titrurate and apply the RMGIC bonding agent with a micro-brush and cure for 20 seconds
4. Place composite to fill the preparation and cure as appropriate

When I use this material in the Co-Cure Technique, I just substitute it for the traditional RMGIC material that I would have used otherwise.

**Resin-modified calcium silicates**

Another recent interesting product release is from Bisco and is called TheraCal LC. This light cured bioactive material is used to seal and protect the dentin-pulp complex. It is the first of a new class of internal pulp protectant materials known as resin modified calcium silicates (RMCS).

It acts as a pulp capping and liner material. Calcium hydroxide (CH) has been the “gold” standard for pulp capping for many years. However, it has always had difficulties in use as a liner under BBC adhesives. In fact, despite their frequent use, the success of CH based therapies is only 50 to 50 per cent.\(^{27}\)

It has also been shown that traditional resin-based light-cured liners have been cytotoxic to cultured odontoblast-like cells, while light-cured resin-based MTA cements presented the lowest cytotoxic effects.\(^{27}\)

Based on this, the creation of light-cured RMCS is a logical step in developing a solution for direct pulp protection. Calcium has been shown to be crucial for the formation of apatite, dentin bridge formation and re-apatite potential of affected dentin.

Additionally, alkalinity also seems to be contributory toward this goal. This combination in the RMCS material appears to form good, hard and thick dentin bridges and stimulates dentin pulp cells to turn into odontoblastic dentin cells.\(^{28}\)

This type of material represents a promising new direction in direct pulp-capping clinical procedures with its ability to form apatite and further contribute to the formation of new dentin.

**Conclusion**

It is my belief that using bioactive materials in the provision of care for my patients has been paramount to the success of the care I have been providing. In this way, I have provided ways to heal the dentition, enhance the restoration and improve the health of my patients.

I believe we are on the threshold of further bioactive material advancements and that learning and incorporating these restorative materials into the day-to-day provision of care will continue to help our patients, our practices and our profession.

**Editorial note: A complete list of references is available from the publisher.**

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**About the author**

Dr John C Comisi, DDS, MAGD, has been in private practice in Buffalo, NY since 1983. He is a graduate of Northwestern University Dental School and received his Bachelor of Science in biology at Fordham University. He is a member of the American Dental Association and its tripartite organisations, the Academy of General Dentistry, the American Equilibration Society, the International and American Association of Dental Research, a research associate at New York University Dental School and an editorial board member of Dental Products Shopper Magazine. Comisi is a Master of the Academy of General Dentistry, and holds fellowships in the Academies of Operative Dentistry, the American College of Dentists, the Pierre Fauchard Academy and the International College of Dentistry. He may be contacted at jcomisi@jcomisi.com. (Photos provided by Dr John C Comisi unless noted otherwise.)
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“Anyone with an interest in laser dentistry should read the SIROLaser Factbook. The book is especially meant for beginners, however, experienced users will also find it worth reading.”

“Anyone with an interest in laser dentistry should read the SIROLaser Factbook,” says Ingo Höver, product manager at Sirona. The book is especially meant for beginners, says the laser specialist. “However, experienced users will also find it worth reading. I am sure that they will be surprised to learn the many possibilities of diode lasers and the range of applications that are open to them with models like the SIROLaser Advance or SIROLaser Xtend.”

Routine and less common aspects of dental treatment

The 970-nm diode laser discussed in the SIROLaser Factbook covers a variety of dental indications, says co-publisher and co-author Professor Doctor Andreas Braun from the Center for Dental and Oral Medicine of the...
‘Academic articles and real-life user reports by well-known experts provide information on the many uses and treatment options of diode lasers with a wavelength of 970nm. Interesting facts and figures, study results, documented case studies with descriptive pictures, and recommendations for further reading complete the compendium’

University of Marburg. These include incision/excision associated with gingivectomy, gingivoplasty, implant exposure, and removal of abnormal tissue and reducing bacteria as a supporting measure in periodontal, peri-implant or endodontic procedures as well as adjunctive therapy in the treatment of aphthous ulcers. “The selected articles cover both routine and less common aspects of dental treatment with a particular focus on new treatment strategies combined with conventional techniques,” says Prof. Dr. Braun.

“There are few instruments that symbolise modernity and innovation in dentistry more than the laser,” says Prof. Dr. Roland Frankenberger. Laser applications in dentistry are now scientifically established. The President of the German Society for Restorative Dentistry (DGZ) writes in his foreword, “I am especially pleased that a variety of interesting aspects of routine work are examined and laser treatment is conveyed objectively, but with enthusiasm.” Prof. Dr. Braun hopes, “Perhaps new recommendations for day-to-day practice will result from the treatment procedures described.”

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Let The Dental Directory help you take a BIG BITE out of your marketing

The Dental Directory is the leading one-stop shop for all your marketing needs. With a number of services to choose from for all practices, we are the experts in marketing.

As many dentists, supplying oral hygiene products to patients has proved to be a valuable revenue generator for their practice. Big Bitie is an ideal source of inspiration and supplies, ranging from toothbrushes to xylitol chewing gum, toothpaste and much more.

For more information, contact The Dental Directory on 0800 585 586, or visit www.dentaldirectory.co.uk

We are at your service. Make The Dental Directory your first choice for your marketing – it’s amazing what you can achieve with a little Magic….

And more information is available on the new website, www.7connections.co.uk, or visit the brand new website www.7connections.com.

For more information about 7connections and the MagicBox, please call 01647 478145, email phillippa.goodwin@7connections.com or visit the brand new website www.7connections.com.

Discount code valid until the end of May 2014

BPE guidance at your fingertips - new gum health app available now!

GlasstecInsight Consumer Healthcar, manufacturer of Corsodyl mouthwash, has launched a new mobile app to help support dental professionals with the use of the basic IntraoralExamination (BPE). The app provides information on:

• Background to the BPE codes
• Description and clinical image of each BPE code

Summary of recommended treatment

Developed by the British Society of Periodontology, the BPE allows dental professionals to help patients to make informed choices. The BPE is designed to be used within the revised dental contract.

The assessment of gum health, together with the provision of support for patients to help them to stop or reduce their bad breath, will be of even greater importance since the Dental Quality & Outcomes Framework comes into force in the revised dental contract. Therefore, any clinician is committed to supporting dental professionals when educating patients on the importance of gum health and the early signs of gum disease. This app forms part of a range of materials that also includes the Corsodyl/Gum Care Guidance Park which can be requested for dental practices.

Compatible with iPhones and iPads, the app can be downloaded from the app store by searching “bpe app” and further information can be accessed from www.gks-dentalprofessionals.co.uk

The University of Buckingham and LDTA agreement

The University of Buckingham and the LDTA have signed an agreement on April 27th 2017 to establish a Dental School in Leicestershire which will initially provide after a year BDS degree course. This was to complement a new Medical School which the University was also pursuing at the time.

In October 2012 the University and the LDTA had launched a launch in Leicestershire of invited audience of 100 delegates drawn from the country’s dental professionals and a small number of other interested parties. Both the University and the LDTA pursuing this venture with enthusiasm. However, delays in the anticipated start date for the Medical School and the legal and administrative procedure required to make this project a reality has left the University with no choice but to delay the Dental School until the Medical School is in fact established. As the University is unlikely to commit to a start date this has made it impossible for the LDTA to complete contracts for the provision and construction of facilities in the interim period.

Both parties therefore reached an amicable agreement and to the joint venture in January 2014.

The University of Buckingham will support, as far as it is able, the efforts by the LDTA to attract an alternative venture partner.

InstaLive university programme for post graduate orthodontic training expand

Align Technology has agreed to provide a further four dental schools to join its orthodontic training programmes, bringing the number at which it teaches to seven. The InstaLive University Programme started with an introduction to the InstaLive Doctor Site, treatment options and treatment selection; record submission; the use of the ClinCheck® software and aligner delivery, through to monitoring and finishing. Each university is provided with a University Kit which includes instaLive materials and access to the ClinCheck software programme - everything the students need to get started.

The participating university is also issued with a username and password for students to use to access the instaLive site which is a website portal for submitting cases. In addition to this, the site includes an educational sub-site which is continuously updated with clinical tips, hints, clinical presentations and publications.

Other benefits include additional live instaLive treatments and workshops for the first students who are taking the BDS course. Every student who participates is also entitled to an Invisalign account which is activated after their graduation, which allows them to care for patients using the instaLive system once they start in practice.

An authorised member of the faculty of universities interested in adding instaLive to its orthodontic training curriculum is requested to email: euniversities@align.com for more information.

The Independent Certified Best Priced Dealer!

For more information, contact The Dental Directory on 0800 585 586, or visit www.dentaldirectory.co.uk

For more information about CB12 and how it could benefit your patients, please visit www.cb12.co.uk

Endocare

Unilateral Symmetry and Denton Foundation has introduced a number of promotions with the BDHF for orthodontic – where people are motivated to actually seek out treatment from therapists.

Survey 1 showed that 12% of people surveyed in the UK experience extreme tooth anxiety. The British Dental Health Foundation’s 2014 National Smile Month campaign.

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**Enhance Your Patient Service With The Experts At The London Smile Clinic**

Regardless of your dedication to training and education, at some point you will come across a patient that requires treatment outside of your skill set.

In those cases, offer the widest range of treatment options by referring to the award-winning London Smile Clinic. The practice is open for referrals for orthodontic treatment, implant work and complex multi-implant cases.

The expert team includes implantologist Dr Zaki Ramadan and Specialist Orthodontist Dr Pawel Bregi. They are highly experienced and qualified professionals dedicated to ensuring the success of your patient’s treatment.

As the referring dentist, you will be involved in the treatment planning, have regular progress updates, and be required to approve each stage of the treatment. Every case is documented with before and after photographs, with orthodontic referrals receive treatment planning models to send to their nearest.

Offer your patients more – contact the London Smile Clinic and see how they can help you with your skills.

For more information, please contact 020 7255 2559 or visit www.londonsmileclinic.co.uk – refer your patients will be glad you did!

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**The Power of Information from Christie + Co**

What questions do you have about selling or buying a practice, Christie + Co can help.

From the best strategy to sell your practice to the best specialist dental finance and very clearly – which areas are carious and which ones are not.

Areas are visibly red. The attending dentist can therefore see at first glance – doesn’t only stimulate degradation products of caries bacteria but also healthy teeth are illuminated with violet light in the spectrum of around 405 nm, it develops.

SIROInspect is based on Fluorescence-Aided Caries Excavation technology, www.dental-directory.co.uk.

For more information, contact The Dental Directory on 01453 872266, email info@nuview-ltd.com or visit www.nuview.co.uk

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**The Carl Zeiss OMPI Pico microscope**

The OMPI Pico microscope – remains an impressive now as it was when I purchased it.

I’ve been using the OMPI Pico microscope for about 18 months now and I remain as impressed now as I was when I purchased it.

Dr David Gold is a Major General (MGen) in the Royal Army Medical Corps (Dental) and the Royal Army Medical Corps. His interested in ultrasonic Magnification. Its arms and binaural interface allow it to be positioned at a wide range of angles over a two-metre span. Its locking screws hold very well even when gently tightened, allowing minor degrees of movement, especially important when under high magnification. A DUR or Camcorde specific adaptor can be mounted on the unit. It’s great for presentations to colleagues and patients. Assistants like it too!

The Carl Zeiss OMPI Pico microscope is available exclusively from Nuview in the UK. If you and your team at Nuview recognise this purchase as a large investment, continues Dr Vogelich. “I have dealt with a team for a few years now and have no hesitation in recommending them. They offer good technical support, advice and a prompt service.”

For more information please call Nuview on 01453 872266, email info@nuview-ltd.com or visit www.nuview.co.uk

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**The Carl Zeiss Loupes from Nuview – “The field of vision is brilliant.”**

Many dentists are discovering the numerous advantages that a set of loupes can bring to their clinical work and name Carl Zeiss is recognised for creating visualisation systems of the very highest standard and Carl Zeiss’ range of loupes is no exception.

However, using a set of Carl Zeiss loupes doesn’t just guarantee enhanced visualisation, it also ensures comfort. Carl Zeiss loupes allow the user to sit in an upright position, this improved posture makes developing back and neck problems a lot less likely. Dr Urs Moutsch, Dental Associate at All Saints Green Dental Practice says: “With the loupes I can see minor details, which can otherwise be missed and helps in diagnostics. I can add finesse to a greater degree, which was not achievable with naked eyes, especially when I am doing cromic work and a higher level of fines is expected. I don’t have to adjust the light if I want to see in cold corners of the mouth as the light follows my direction of the head. I would absolutely recommend these to every dentist.”

Available exclusively in the UK from Nuview. Carl Zeiss loupes offer comfort, sophisticated technology and unparalleled visualisation.

For more information please call Nuview on 01453 872266.

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**Visualisation solutions for all situations**

Delegates at the BDA Conference and Exhibition 2014 were the opportunity to test for themselves the Carl Zeiss visualisation systems provided exclusively in the UK by Nuview. They were particularly impressed by the incredible image quality and ergonomic stimulation on display.

With a selection of loupes and microscopes ranging from the fantastic TTL Telescope and the G7X, to the top-of-the-range QMFP/OMPI dental microscope, the team from Nuview were happy to explain the advantages of these fantastic dental tools.

Whether delegates were endodontic specialists looking for the perfect microscope or deep down into the root of a problem, or G7X looking for a set of loupes to accompany their everyday dentistry, Nuview exhibited an effective solution for every scenario.

Discover the benefits that employing a Carl Zeiss visualisation system can bring to your daily practice by contacting the team at Nuview today.

For more information please call Nuview on 01453 872266, email info@nuview-ltd.com or visit www.nuview.co.uk

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**The Best of the British**

Delegates visiting the award-winning Sparkle Dental Labs at the year’s BDA Conference and Exhibition were eager to find out more about what the company can offer their business.

Visitors were keen to find out more about Sparkle Dental Lab’s customer service and from dental practices. The first to find them was the company’s first service: first class dental equipment.

The team were keen to pass on information about the full certification provided for each restoration, which fully complies with GDC regulations, and spoke about the benefits of using British made restorations.

All in all the exhibition was a great success for the company which looks set to continue leading the way in product excellence.

For any additional information please call 01386 625 055 or email customerservice@sparkledental.co.uk or visit www.sparkledental.co.uk

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**Tendex provide quality Orthodontic Kits to help your patients achieve their perfect smile**

As the health of your patient’s teeth can be a valuable revenue builder for their practice.

Big Bite is an ideal source of inspiration and supplies, ranging from toothbrushes to sister’s cleaning gum, waterers to Tooth Fairy envelopes.

Our sales teams are ready to help you and with no minimum order value, no delivery charge and same day delivery for orders received before 5pm, we are at your service. Make The Dental Directory your first choice for your oral hygiene needs.

For more information please call 01453 872266, email info@nuview-ltd.com or visit www.nuview.co.uk

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**The Independently Verified Best Priced Dealer!**

For more information, contact The Dental Directory on 0800 515 586, or visit www.dental-directory.co.uk

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**Exercising cavities: check-ups are good, SIRIDInspect is better**

In many scenarios, technology leader in the dental industry, is bringing a detection system onto the market that enables dentists to identify reliably, quickly and easily areas of high risk, which comply fully with GDC regulations, and spoke about the benefits of using British made restorations.

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**The power of information from Christie + Co**

What questions do you have about selling or buying a practice, Christie + Co can help. Whatever your buying or selling a dental practice, Christie + Co is here to show you the right information presented in the right way can lead to the most desirable result – your business or retirement goals, met with ease.

The power of information from Christie + Co

Contact Simon Hughes on 0207 227 0749

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**The Juice is the newest in the Sparkle Dental Labs’ Black Friday sale!**

Sparkle Dental Labs’ courier service to and from dental practices. The first of its kind when it was introduced by the company, the Sparkle Dental Labs’ courier service is an impressive and streamlined workflow.

For any additional information please call 0800 138 6255 or email info@nuview-ltd.com or visit www.nuview.co.uk
5TH INTERNATIONAL CAMLOG CONGRESS
26TH – 28TH JUNE 2014
VALENCIA, SPAIN

CONGRESS OF THE YEAR

"THE EVER EVOLVING WORLD OF IMPLANT DENTISTRY"

What you can look forward to: a first class program, lectures from renowned speakers, exciting workshops, a stylish party with a Spanish twist at a wonderful location. Do not hesitate to register now.
See you in Valencia!