How does paediatric dentistry recover post-pandemic?

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Introduction

Last month there was a full-blown national conversation surrounding the number of local councils who wished to close their schools two days ahead of the Christmas break due to rising COVID-19 infection rates. Ultimately, and after being threatened with legal action, those councils backed down, with the government adamant in-school education was crucial to the continued development of children in these troubling times.

After seeing the number of parents home-schooling from March through to the summer break – to varying degrees of success – you can understand elements of both sides of the argument. The welfare of children remains of paramount importance, even in a COVID-19 world. For paediatric dentistry, the circumstances the four nations have found themselves throughout 2020 pushing that mantra – through no fault of their own – to the very limit.

Which, in truth, is frustrating. Access to dental services for paediatric patients was trending in the right direction, even if waiting times for GA lists and the number of teeth being removed were not. The pandemic has exposed the continued and long-term dereliction of paediatric dental services.

Key points

- → 'Perfect storm' on the horizon?
- → Access to GA list the number one priority
- → Major opportunities to improve paediatric dental services

A route to 'normality'

So how would the events of 2020 be unpicked? Could they be unpicked? What impact would we see on paediatric dental health? Claire Stevens, BSPD spokesperson, wasn't sure.

'Truth be told, we don't fully understand the full impact of 2020 yet', she said. 'The worry is that we will find out in time, but it's not difficult to see there are brewing issues with no simple solution.

'Children across the country have been taken from their normal routines – schools have closed, parents have had to work from

home, home school in many cases and try to juggle the two. For anyone who found themselves furloughed, out of work or their income severely strained, this is a problem in itself, but those close to the breadline may have suddenly found themselves the wrong side of that. Budget reasons often mean healthy and nutritious food is put to one side in favour of multibuy deals, for example. This is not a problem created by the pandemic, but rather one made worse. A Report by the All-Party Parliamentary Group On A Fit And Healthy Childhood identified that COVID-19 is 'the last straw for millions of people already struggling with the impacts of conflict, climate change, inequality and a broken food system that has impoverished millions of food producers and works.'[1] Hidden hunger is a real danger to children, and it is our responsibility to address oral health needs that may result. Only time will tell how significant the six-month lockdown was for children's oral health.

'Combine this with general dental services closing for routine, face-to-face dentistry between March and June and you have the nucleus of a problem that will manifest at some point. Longer waiting lists and new ways of prioritising patients – not to mention having to compete for surgery space – are not things any paediatric dentist anticipated having to manage. Given the length of waiting lists for GA pre-pandemic, you'd be hard pushed, in my opinion, to find another specialty affected as much as paediatric dentistry.'

For David Auld, Chair of the BSPD Specialists Branch, a unique pathway meant some of the pressure could be alleviated.

'At Clarendon Dental Spa, we have a contract to provide NHS, specialist-led paediatric dentistry, one which I have been part of for eight years. We work on multiple ways of referral – some patients come through triage, some come through direct referral and some come through an e-referral management system that any providers in West Yorkshire can access.

'Where necessary – and appropriate – they're treated in the dental chair under local anaesthesia or inhalational sedation with our specialists and dental therapists. Some children requiring a GA for multiple extractions are referred directly to Leeds Dental Institute. It saves patients, many of whom may be experiencing their first visit to the dentist, having to go through multiple visits to the Dental Hospital before treatment.

'Perhaps unsurprisingly, referral numbers dropped when practices in England had

to close their doors. Ordinarily we'd see in excess of 200 referrals a month, so the absence of patients was difficult for us. We re-opened as an urgent care centre and have gradually resumed face-to-face treatment, but we haven't been able to achieve anything like the activity we saw pre-pandemic.

'It was an incredibly busy time seeing lots of children in pain. You only need to see how incredibly tough it has been for parents – working from home, home schooling, pressure on income in some cases – to know that good dietary habits could well have fallen by the wayside during lockdown. I am concerned that teeth we saw in January last year will be in a much worse condition when we next see those patients, and I have seen a number of cases where this has happened.

'That's not to say I lay the blame at the doorstep of parents. As Claire mentioned earlier, it's been an incredibly trying time. It's very easy for good habits to be lost just as easily as it is for bad ones to be gained. We had dental therapists and hygienists who found ways to try and get positive messages through to parents about diet and regular brushing, but there can be no substitute for face-to-face interaction when it comes to active treatment.

'I'm working on a service evaluation of remote consultations to see areas we can improve and areas we can adopt once some normality is resumed, and it has amazed me how quickly our clinical practice has evolved, using newer technologies and adapting to different ways of managing dental care. If the funding continues, remote consultations could continue to be very useful moving forward. Meeting regularly with other specialists and consultants virtually through BSPD and other platforms has been hugely valuable for sharing best emerging best practice and supporting one another.'

Robin Mills, a part-time Specialty Doctor in a district general hospital (DGH) and Specialist in Paediatric Dentistry, thinks previous warning signs about the current state of play could have been acted on and prevented.[2]

'I haven't done any elective surgery since March 2020. It was worse in a DGH than general practice. The OMFS team have done a wonderful job treating life threatening and very urgent cases. In a risk-averse society managers in NHS Trusts have to plan for large influxes of COVID-19 cases and repurpose facilities including theatres. The seesaw on-off imposition of tiers makes this planning an imprecise science coupled with conflicting opinions of scientists and politicians.

'While these are COVID-19 specific issues, many of problems affecting services can be traced – in my view – back to 1 January 2002, when overnight hospital OMFS departments took over GA for children. I say 'took over', it was pretty much dumped on them. Children's wards were expected to suddenly cope with an extra influx of child dental cases and have to limit the number of beds available to avoid bottleneck situations in other areas

'To compensate for a general demand in elective surgery NHS Treatment Centres have been opened, but they did not have the contracts to treat children. Money was diverted from improving the 24/7 facilities for all patients, to part-time facilities for adult-only services. This created the first 'red flag'. I thought 'hey guys, we need more specialists and facilities!' At the time we didn't have the muscle of a commissioning document to support us, and but the science was already there showing specialist planning led to fewer repeat GAs.[3]

'The second red flag was a 2010 paper in which the authors stated not only were there too few paediatric dentists, but the composition of the workforce meant many were part time, and for a good reason.[4] This meant costs were unmanageable and the workforce would remain stretched until more funding was available. Fast forward a decade, and these two red flags are right at the heart of the problems we face now – too few paediatric specialists and not enough funding to adequately plan.'

Undesirable ratios

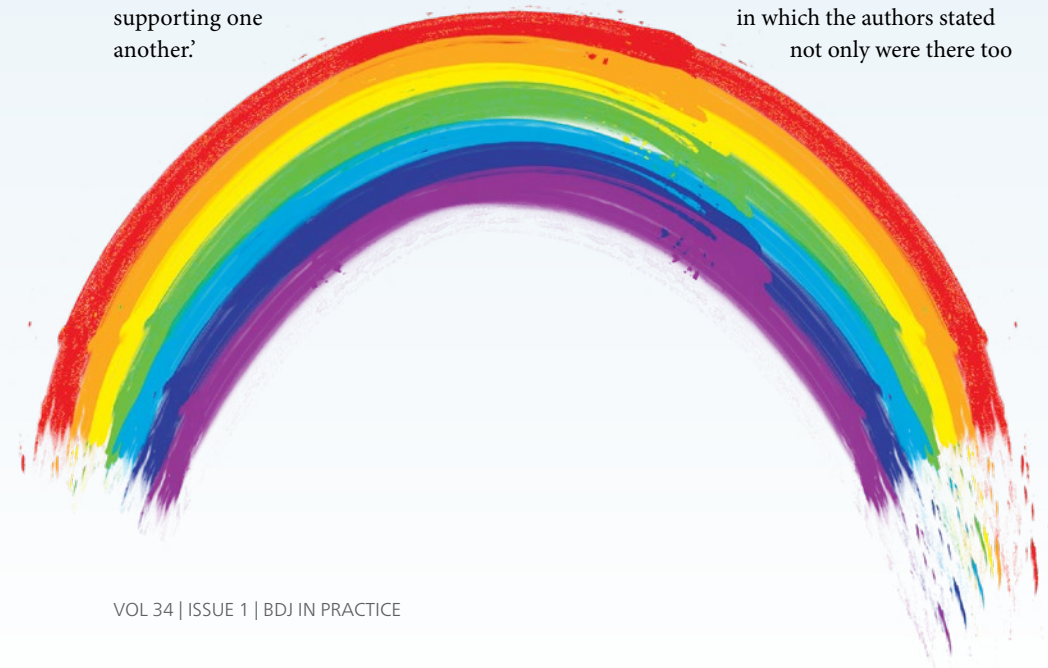
In February of last year, I asked the question 'where are all the specialists?'[5] The overall tone highlighted Robin's point about the chronic shortage of paediatric specialists, unaware some 11 months later we'd be gripped by a pandemic. A workforce planning initiative a decade ago suggested that the UK needs one paediatric dentist per 100,000 total population. By dividing the total UK population by the number of specialists, the figure today is fewer than one paediatric dentist per 250,000 total population. By contrast, there is one orthodontist per 48,000 total population.[6]

I asked Robin why more wasn't done at the time to prevent this question from being asked.

'In 2000 specialist lists were yet to be properly established, so that evidence-base wasn't as solid as it is now to make the case. It didn't take a genius to see there were issues brewing, and rather like COVID-19, experts haven't been listened to and political decisions have taken precedence. In my view, CDOs in England prior to Sara Hurley's arrival ought to have done something about the continued dearth of paediatric specialists. The current ratio of paediatric to orthodontic specialists is 5.6 to 1. How can that be appropriate? One mitigating factor is that orthodontists support children with craniofacial problems into adulthood. Why hasn't someone listened to the experts and made paediatric dentistry a more attractive career? The sums of money needed to invest in the workforce would be a drop in the ocean compared to money spent this year.'

David echoed Robin's view about career options.

'Robin's work highlighted 54 postcodes in the UK without a paediatric specialist, so there has to be a different approach when it comes to recruitment because what we've done to date has not worked' he said. 'I am grateful that, working in the specialist practice setting, I have the clinical freedom and fewer barriers than some colleagues working in hospitals and community services have, feel and can make a real difference,



but if we want to motivate people to become paediatric specialists, this can't be the exception going forward.

'Local commissioning groups need to discuss and listen to local dental committees, Dental Public Health Consultants and the clinicians working at the coal face, for example, and take on their feedback. If they can work together, other, novel ways of commissioning services can be found to plug the glaring gaps in paediatric dental specialist workforce. There are a number of highly-skilled but highly-frustrated GDPs out there waiting on a new contract to fulfil their potential. Level Two-accredited practitioners would be a start, followed by a recognition that more training places for paediatric specialists is an urgent necessity. Trusts have to employ and pay Specialist paediatric dentists appropriately and not demean their expertise by trying to recruit these clinicians at lower pay bands. Commissioning more specialist-led teams in practices and offering flexible or part-time training of specialists and consultants, including out with the teaching hospital environment, should all contribute to attracting more people to the specialty, and more importantly, improving access for children to high quality care, regardless of where they live.'

David Johnson, Chair of the BDA's Welsh Committee for Community Dentistry (WCCD), said things were slightly different in Wales.

'Yes, there are problems at present, but they are COVID-19 specific, and prioritising the needs of paediatric patients makes sense, especially in the absence of no routine dentistry like pre-pandemic. In Wales, the more west you go, the more difficult it has traditionally been to recruit the specialists needed to undertake the work. Many roles had to be advertised multiple times just to fill them once, and with the increased desire to have a better work/life balance, this was becoming problematic. However, at the beginning of and during the pandemic, employers have reported no difficulties in being able to take on, which is a positive reflection I believe of the leadership shown by the Welsh CDO. The Deputy CDO for Wales is on record stating the CDS kept dentistry going throughout lockdown, which should make every community dentist in Wales very proud.'

In a Summary report of Freedom of Information responses from NHS Boards relating to Paediatric Extractions (PE) under General Anaesthetic in Scotland, BDA Scotland discovered over the past decade, there had been an overall 12% decrease in the number of teeth removed from children.[7] In both 2017 and 2018, the BDA's Scottish Public Dental Service Committee surveyed all NHS Boards across Scotland for information about waiting times for PEs under GA. Despite the Scottish Government's 12-week Treatment Time Guarantee and 18-week Referral To Treatment standard, some NHS Boards reported waiting times of up to 20-26 weeks for assessment and treatment.

'Local commissioning groups need to discuss and listen to local dental committees, for example, and take on their feedback. If they can work together, maybe discussions about lists will cease to happen.'

So how has the pandemic potentially affected these data? Liz Roebuck, Consultant in Paediatric Dentistry and former BSPD President in Scotland, pointed to Scotland's dedicated children's oral health programme as an area of concern.

'As schools, nurseries and dental practices closed, Childsmile activities were put on hold. For some children the daily toothbrushing programme was the only opportunity they had to brush their teeth. The full impact of this, the reduced access to dental care, and potential changes in eating habits already alluded to, are still to be quantified. However, as Public and Hospital Paediatric Dental Services remobilise, anecdotally, we're seeing more children with caries, the cavities are deeper, and symptoms are worse. Parents are also experiencing difficulties registering their child in pain with a local dentist as, understandably, our colleagues in general dental services focus their reduced clinical footfall on patients who are already under their care. There is clear support within dentistry for resuming Childsmile activities, however, the logistics of doing this within an ever-evolving pandemic situation are challenging.

'As to the GA waiting lists, well with the cessation of elective services for a number of months across most health board areas, it's an understatement to say they are long. While waiting lists have been validated, re-validated, re-re-validated to prioritise clinical and wellbeing needs, there remain several thousand children across the UK who are in pain, receiving repeated courses of antibiotics as they wait for treatment. There are vulnerable children, and there are challenges in addressing it. There was some access to urgent GA during lockdown, however, the majority of the children listed were new to our services. As elective lists are reinstated, there is still some way to go to achieve pre-pandemic capacity. Within Scotland, the majority of services are reporting equitable access compared to surgical specialties, which is encouraging.

'In addition to the general anaesthetic waiting lists, returning and new patient lists are also being validated for clinical need. The ongoing redeployment of team members to urgent dental centres and non-dental COVID-19 activities poses capacity challenges to both clinic space and staffing, and some services have made changes to their referral acceptance criteria to ensure children who need to be seen within specialised and specialist salaried paediatric dental services are prioritised. Within Scotland, this is compounded by the shortage of specialists across the country, often necessitating lengthy journeys for families. One of the positives of the pandemic has been the rapid roll out of virtual consultations, and, when the bandwidth has been decent, they have been used to good effect by our teams. Looking forward, this technology presents a potential medium for remote specialist support, however, the clinical nature of much of our dental disease means that the virtual will be an 'adjunct to' rather than 'replacement for' the clinical assessment.'

Finding new ways

Prior to the pandemic, David Johnson said waiting times for GA lists were what he would describe as 'reasonable and acceptable'. Like every member of the profession, finding new ways of reaching patients became a priority. So how did he do it?

'We have to assess and prioritise patients based on clinical need' he said. 'All assessments were cancelled due to COVID-19, and upon the resumption of services, not all lists in all areas of Wales have been able to resume. There are now fewer lists and fewer patients on those lists, with the added pressure that waiting times have increased. 'When services did resume, we had a traffic light system in place, grading those children who needed urgent treatment down to those who did not. This is a model that we believe has worked and can be part of any long-term

adjustments once the pandemic is over. It ties into work Welsh Government were doing to really place more responsibility with the patient and their parents/carers to manage and maintain their oral health.

'As part of the Dental Recovery Plan, Assessment of Clinical Oral Risks and Need – ACORN – was introduced. One of the key learnings from the reform programme was that ACORN shifts focus from treatment to patient engagement, prevention and management of dental diseases as chronic conditions. ACORN also supports dental teams to work with patients to co-produce annual preventive dental care plans where patients play an active role in improving and maintaining oral health. The preventive model is exactly what patients and practitioners need.

'What the pandemic has also highlighted is those services that have been underfunded for years have found their situation worsening. Some health boards in Wales have seen their long waiting lists grow longer and their under-staffed community become even more thinly-spread.

'What I think we all want to see is the swift resumption – when it is safe and practical to do so – of Designed to Smile. I anticipate it will be restarting in the near future, but clearly this is dependent on getting COVID-19 under control. It is the only thing to have reduced DMFT since the introduction of fluoride toothpaste in Wales, and like its Scottish counterpart has been a great success. It is not a new way of working, but it is an important one. There are tangible benefits to getting the programme back up and running – namely oral health improvements – but for the time being the risk of COVID-19 outweigh them. Only time will tell how much of a long-term impact not having the programme in 2020 has had.'

According to Claire, teams pulling together made a huge difference.

'It never fails to amaze me how innovative this profession can be' she added. 'We've seen oral health promotion teams dropping toothbrushes and toothpastes to families who need them the most, the huge boom in adoption of remote and online support/consultations, advice given out through NCT groups about DCby1, and that's before we get to some of the work the BSPD has done. Dr Ranj's video, launched earlier this year, has been a valuable tool for many families. We have supported families who can make healthier choices to do so and started to remove some of the barriers people have to resuming dental appointments.

'Paediatric Dental Services didn't close. We've been seeing patients on an emergency basis. Like others have mentioned, the balance between face-to-face and remote consultations tipped somewhat, but we've always had both options available to us. Parents have been understandably anxious about travelling to appointments by public transport and being in a hospital setting, but if their child needed treatment that was their main priority.

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'When primary care dental services could resume face-to-face contact from June, we found attitudes slightly softened. It's about individual risk approach, and we're understanding of every parent's opinion. As we saw government messaging change from lockdown to restrictions, there was understandably some scepticism. As those messages gained clarity, we have seen an uptick in the number of patients coming in for treatment. Post lockdown, dental treatment has been successfully restarted, yet there was an estimated reduction in capacity of 50-65% by October due to essential measures to minimise the risk of viral transmission and protect staff and patients.'

Worse before it gets better?

A question understandably on most people's lips, but also one few can answer: when will things get better, and will they get worse before they do so?

With what he describes as 'deep-rooted problems', Robin believes it will get worse before it gets better.

'I have worked on extrapolating the previous 10 yearly child health surveys and estimate by 2073, 22% of children aged 15 will have obvious signs of decay. This sounds like forever away, but is only a total of six further surveys. The overall trend is down. There are also many uncontrollable factors that can happen between now and 2073. The prevalence could start to rise. We could see multiple COVID-19 waves beyond the two we have and are experiencing. If the child population increases overall and/or as a proportion of the total population these factors will also have a bearing on the services required for children. If enough specialists are not trained, this is probably false economy, as the amount of repeat GAs may be more costly than training sufficient specialists, not to mention the unnecessary suffering and risk.

'Which begs the question is decay totally preventable? No, I don't think so. There are two types of dentist – those that believe caries is completely preventable and those that believe it is mostly preventable. I fall into this latter category.

'Asthma occurs on a spectrum in around 10% of children and is associated with an increased susceptibility to decay. Poor air quality has recently been implicated by a coroner in London as a cause of exacerbating asthma. You only need to glance at the problems many developed and developing cities globally are reaching critical levels of air pollution to realise this is not something that can be eradicated overnight. Even electric vehicles produce fine particles from tyre wear.'

'You also have an increasing number of C-Sections which are just one factor linked to MIH. MIH occurs on a spectrum in around 20% of children and more severe cases can predispose to decay. If both air pollution and C-sections are on the increase then you have two factors which can potentially, albeit counterintuitively, exacerbate decay. In my briefing paper contribution, I stated that we can fight caries but it appears we will never completely eradicate it. It will, if NHS access is easy and affordable, be kept to an absolute minimum.'

Claire believes that lessons can be learned from the first national lockdown to minimise further damage to the specialty.

'In general, prior to COVID-19 more and more children were accessing NHS dental care in England. The question was how quickly they were able to do so in secondary and tertiary services, which for me was the challenge. As a consultant on the ground, it was already a stressful experience. Waiting times for GA were trending in the wrong direction for an already stretched service. This is clearly unacceptable for everyone involved, and the pandemic has made that significantly worse.

'Now we're finding theatre space has been repurposed as COVID-19 wards, and

anaesthetists have been re-deployed to support the national response, both of which are totally understandable but an additional challenge when we are trying to relieve children of pain. As we're going through the second wave with multiple waves potentially on the horizon, we need to prioritise those requiring urgent care and maximise services to the best of our ability. BSPD believes paediatric dental services have to be maintained and protected and this is now recognised as a national priority. Paediatric dental patients should have the same access to theatre time if their clinical priority is the same as other paediatric surgical services. We're not looking to jump any queues, but we should have equality.

'There's no doubt the system as a whole needs to be addressed. Again, understandably, budgets are being shifted to where the greatest need is right now, and that's keeping patients with COVID-19 alive. No-one would dispute that. What the pandemic has highlighted is the need for paediatric dentistry to take greater priority.

'The long term solution isn't more waiting lists or more specialists – although both are needed right now – the solution is to stop children requiring treatment in the first place. 2020 saw plenty of innovative practices and solutions being implemented and brought forward, and they need to be retained once we're through the pandemic.

'It may seem easy to point to this, but there's no escaping that the current NHS dental contract does not work for children. Child-friendly dental practice pilot schemes must be evaluated and adopted at pace. With the right contract in place, some of the challenges we know we will face this year would be easier to overcome.'

Climbing the ladder to recovery

It's one thing to know what the challenges are, but how does paediatric dentistry actually go about implementing changes as a specialty that will aid its recovery?

'There are a tough few months ahead, but I really believe everything that needs to and can be done is already being done in Wales' David said. 'I would be prepared to work every day for a month to clear the backlog, carrying out GAs every day. I feel very passionate that I want to get these children out of pain.

'Wales has enjoyed success for a reason – the top-down approach means everyone buys into the common goal of improving oral health. For us, that's in children, and you only need to look at how treatment hubs in the midst of lockdown worked seamlessly with practices in the best interests of patients.

'The trouble is that there are other surgical modalities which need theatre space and beds, whether ENT, ophthalmology, or cancer, we are all competing. Clinical leads and medical directors are having to make these difficult decisions. When you are trained and feel able to do your job, and for me that is treating children and thereby improving their quality of life, it's a moral injury that you are unable to fully provide this. That is how a lot of dentists are feeling. But it will pass, and we will get through this, but we must learn to prioritise the children who most need to be seen.'

According to Robin, it will require a fundamental change of attitude.

'Paediatric specialty needs to be taken seriously', he told me. 'Sara has done plenty for paediatric dentistry, but I believe she's encountered the same issues Professor Whitty is facing at the moment. CDOs and CMOs are supported by many eminent scientists and well placed to advise, but it is the politicians that decide.'

'Our CDO is right to call for the mouth to be put back in the body – it was something I also called for in a letter to the Department of Health in 1994. It was met with indifference then. The voice of a child is not a strong one and often not heard. The Munro report into child safeguarding in 2011 advocated listening to 'the voice of the child.' As a profession, we must continue to gather evidence and act as advocates for children to facilitate this.'

Liz suggests some of the challenges that have been identified have already begun to be addressed.

'While some staff remain in COVID-19 related activities, we are seeing the re-opening of clinic care, albeit often slowly. Minimally invasive dental treatments such as silver diamine fluoride are being approved and rolled out, virtual consultations are available.

'COVID-19 has highlighted how important health is in its broadest sense. The lack of access to dental services has only amplified the state of the nation's oral health, highlighting the importance of proactive and timely dental care and prevention to secure resilience, not only for our patients ,but also for our teams and our services. Our own health and resilience is a crucial piece in the jigsaw of getting it right for our patients, We've seen rapid change in a few short months, let's use these lessons as a springboard for securing a healthy future for our services in whatever the shape the new norm is.'

For Claire, the road to recovery stretches further back than the beginning of the pandemic.

'The main challenge is bringing waiting times for GA under control', she said. 'It's not COVID-19 specific – waiting times were bad – but they have clearly worsened. I am concerned that paediatric dentistry will take more time to recover than adult specialties – it's not as if theatres are vacant and we can get to work on the backlog, and there's no certainty of when the pandemic will be brought under control to allow us to start.

'In the meantime, we need to be louder. The workforce is exhausted, and there are well-documented shortages of paediatric specialists. There is a determination among the BSPD and other organisations to make this situation better for colleagues, every one of whom has such a passion for their role. Greater collaborations with medical colleagues to come together and say 'the situation facing paediatric dental surgeons is unacceptable' is a small step in the right direction. I have spoken on so many occasions about better communication with the wider NHS, and perhaps one of the few good things to come out of the pandemic is that this is starting to happen. Doors are opening, and together I believe we can influence national policy for the betterment of paediatric dental services.' ◆

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