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JOURNAL OF DENTAL HUMANITIES

The Journal of Dental Humanities is dedicated to presenting thought provoking material connecting dentistry to the humanities, and the social sciences. The journal places a priority on publishing quality material that supports the objective of dental professionals who seek to provide a patient-centered approach to health care. The mission purpose of the Journal of Dental Humanities aligns with the position that a functional democracy requires ethical, highly skilled professionals who are engaged, active members within their community and the larger society.

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¹ Correction: a prior version of this issue incorrectly listed the title of this short story as "The Fracture Margin"; the proper title, without the definite article, has been updated as of April 2, 2026.

EDITORIAL: "CHANGING TIMES"

ROBERT P. IOVINO, D.D.S., M.A.

It is a pleasure to report that the field of dental humanities continues to grow and flourish. While size alone does not equate to quality, this Winter-Spring issue represents the largest publication in the *Journal of Dental Humanities (JDH)* to date. As an open-access, peer-reviewed, and non-predatory journal, never charging authors publication fees, since its inception in 2017, the *JDH* remains firmly committed to its mission of presenting thought-provoking, high-quality work that connects dentistry with the humanities and social sciences. This issue features a fictional short story by Jeff Kaufman, J.D., an attorney and educator based in Queens, N.Y. Drawing on his background in law enforcement and legal education, Kaufman offers an engaging, dentistry-centered work of AI-related fiction, dedicated to his longtime dentist, whose ethical approach to care left a lasting impression. We also present a strong paper by Gabriel Tse-Feng Chong, B.D.S., a forensic odontologist and dental public health specialist in Singapore. Through history and an artistic lens, the author examines how economic inequities and sugar consumption contribute to profound oral health disparities. In doing so, Chong makes a compelling case for incorporating humanities into dental education and practice.

The third contribution in this issue represents a journalistic experiment and should be regarded as a *study* rather than a completed scholarly work. Prompted by the publication of Kaufman's AI-based fiction and the recent passing of the German philosopher



Jürgen Habermas,¹ I revisited a 2024 exercise I conducted using an early, free version of ChatGPT. During my graduate studies at Fordham University, I studied Habermas under Dr. Jeffery Flynn, focusing primarily on *Between Facts and Norms*. Although Habermas' writing is famously dense, likened by some to 'chewing glass' his work ultimately illuminated how open democratic discourse grounded in autonomy can support a fair constitutional order. I later had the opportunity to meet and engage directly with Professor Habermas during his time as a special visiting professor at Stony Brook University (see Appendix A). I can still visualize Professor Habermas, distinguished in his tweed jacket, spreading his arms wide apart from his sides when he personally explained to me how actualizing the equivalent of the right to healthcare involved simply expanding his abstract concept. In my study published here, I openly acknowledge and critically engage an AI large language model in a dialogue (think discourse) that incorporates Habermas' ideas. It represents a novel attempt aimed at inviting constructive criticism and input in working together towards extending and actualizing Professor Habermas' abstract point.

Finally, we note the forthcoming publication of the second installment of a two-part special issue of the *Journal of the American College of Dentists (JACD)*, developed by the National Collaborative on Humanities and Ethics in Dentistry (NCHED).² This initiative responds to the growing demand for humanities and ethics in dental education and practice and reflects a broader movement to integrate dentistry into health humanities scholarship. As reported on the *JACD's* webpage, through its initiatives the NCHED "has demonstrated [that there is] substantial interest in ethical reflection, historical analysis, narrative inquiry, and the arts as essential to understanding oral health and dental care."

¹ Beckermann, Gail. "Jurgen Habermas Dies at 96; One of Postwar Germany's Most Influential Thinkers." *New York Times*, 14 March 2026.

<<https://www.nytimes.com/2026/03/14/books/jurgen-habermas-dead.html?searchResultPosition=1>>

² "The Intersection of Humanities and Ethics in Dentistry (2a)." *Journal of the American College of Dentists*. Vol. 92: No. 2, Article 1. 13 February 2026.

<<https://commons.ada.org/jacd/vol92/iss2/1/>>

As one Nobel Prize winner aptly observed, "*The times, they are a-changin'*".³



³ Dylan, Bob. *Bob Dylan Newsletter*. <<https://www.bobdylan.com/songs/times-they-are-changin/>>

FRACTURE MARGIN

JEFF KAUFMAN, J.D.¹

Dedication

For William Bouziotis, D.D.S –

Who for over thirty years has been our family dentist and practiced dentistry with wisdom, restraint, and genuine care for his patients. Your thoughtful approach to treatment taught me that the best medicine often begins with careful observation rather than immediate intervention. This story exists because you showed me what ethical practice looks like in action.

With gratitude and friendship,
Jeff

¹ Jeff Kaufman is a writer and educator based in Queens, N.Y. He holds a doctor of jurisprudence from New York Law School and a bachelor of science in industrial and labor relations from Cornell University. His career has spanned law enforcement, education, the practice of law and legal studies. Kaufman served as a police officer with the New York City Police Department, and represented indigent clients in criminal and civil matters in the Courts of New York and New Jersey before transitioning to education where he taught social studies, civics, and law at several New York City high schools and educational facilities for over two decades. He has also served as an adjunct professor at both Queens College and Lehman College, CUNY, teaching social studies methodology and paralegal studies, and currently teaches computer science for educators at York College, CUNY. His unique background informs his writing about professional ethics, institutional systems, and the human dimensions of technical decision making.

The tooth split at 3:47 PM on a Thursday, during his son's eighth birthday party.

David Reeves felt it go—a sensation like a tree branch snapping deep in a winter forest, except the forest was his jaw and the branch was his lower left molar. He'd been chewing a piece of hard candy, forgotten in his jacket pocket from Halloween. The pain came a second later, white and electric, followed by the copper taste of blood.

By the time I arrived at the university dental clinic the next morning, they'd already extracted what remained. I found Dr. Patrick O'Malley standing at the surgical sink, scrubbing instruments by hand despite having a perfectly functional ultrasonic cleaner three feet away. His gray suit was rumpled, his movements slow and deliberate, and his pale eyes fixed on something beyond the stainless steel basin.

"You heard," he said. Not a question.

"The whole clinic heard. David Reeves, fifty-two, vertical root fracture extending below the bone line. Conservative management protocol per EnamelEye gradient recommendation."

O'Malley's hands stilled. "Six months ago, the system calculated a 0.3 gradient score for observation. Statistically optimal." He paused in his characteristic way—a silence that felt like physical weight. "For Mr. Reeves, it was catastrophically wrong."

"This isn't your fault, Pat."

"I wrote the algorithm." His voice was barely audible. "I gave it permission to recommend watching his tooth break."

I didn't tell him that wasn't how algorithms worked, that population statistics couldn't predict individual outcomes, that he'd done the math correctly. He already knew all of that. What he



couldn't accept was that being right 92.6% of the time meant being devastatingly wrong for people like David Reeves.

"Tell me how it started," I said. "The whole thing. I want to understand."

O'Malley dried his hands with methodical care. Then, after a long pause, he began.

Eighteen months earlier, Dr. Sean Whitaker had pitched EnamelEye™ with the fervor of a man who genuinely believed he would change the world. I remember his presentation vividly—the expensive Italian shoes clicking on tile, the whiteboard covered in flowcharts, the venture capitalists leaning forward with predatory interest.

"What I'm proposing," Whitaker said, and his smile had the quality of polished enamel—bright, hard, reflective, "is the complete transformation of dental diagnosis. EnamelEye will be trained on millions of radiographs and case notes. It will detect cavities, fractures, and disease with greater accuracy than any human clinician."

The system that emerged was a genuine technical marvel. I consulted on the oral surgery modules while O'Malley—brought in for his expertise in conservative dentistry—reviewed the caries detection algorithms. What made EnamelEye powerful wasn't just pattern recognition. It learned to interpret context, understand progression, predict outcomes.

But Whitaker's true genius—or hubris—was in deployment. He sold EnamelEye to DentaCorp, a massive corporate dental organization with eight hundred locations across thirty-seven states.

The contract included a crucial provision: the AI's recommendations would be mandatory protocols unless dentists could document justification for deviation.

Within three months, something shifted. The system began recommending more aggressive treatment. Not fraudulent. Nothing that constituted clear malpractice. But borderline cases became definitive pathology. Small lesions that conservative dentists might monitor were flagged for immediate restoration. Questionable fractures received crown recommendations.

DentaCorp management was delighted. Revenue per patient visit increased by thirty-seven percent. Whitaker was featured in *Forbes* as a healthcare innovator.

O'Malley said nothing publicly. But I noticed he'd begun attending every technical meeting, sitting in his corner, asking measured questions about decision-making algorithms.

At the American Dental Association convention, O'Malley gave a presentation in one of the smaller conference rooms. The title—"Ethical Gradient Theory: A Mathematical Framework for Treatment Decision Analysis"—sounded dry enough that I almost didn't attend.

He began without preamble, displaying a radiograph of a middle-aged woman with a small cavity between her molars.

"Standard protocol today would be immediate restoration," O'Malley said. "Remove decay, place filling, bill insurance. But consider this."

A graph appeared—two curves on an x-y axis. The blue benefit curve rose steeply then leveled off. The red harm curve started near zero but accelerated upward.

"At low intervention intensity, we provide substantial benefit with minimal harm. Fluoride treatment arrests eighty-five percent of these lesions, naturally. But if we drill, we remove healthy tooth structure, create a restoration that will eventually fail, risk pulpal inflammation. The benefit flattens while harm accelerates."

He clicked to the next slide:

Ethical Gradient = d(Harm)/dI - d(Benefit)/dI

"The critical question: where should we stop? At what gradient does the ethical obligation shift from 'treat' to 'do not treat'?"

Hands shot up. Arguments erupted. One endodontist accused him of promoting neglect. A public health professor wanted to collaborate.

But I watched Whitaker at the edge of the crowd, his expression unreadable.

When the room cleared, Whitaker approached O'Malley. I lingered near the doorway.

"You're trying to program an AI to recommend doing less dentistry," Whitaker said, tone carefully neutral.

"I'm trying to program ethics."

"Ethics don't pay overhead, Pat. You know what keeps practices open? Treating pathology that's actually there."

"But how do we define what's actually there?" O'Malley's voice was soft. "A lesion visible on X-ray that will never progress? A crack that will remain asymptomatic? These are patterns, Sean. Patterns aren't patients."

Whitaker leaned closer. "Your gradient theory is academic masturbation. An AI trained on ten million cases knows better than your philosophical musings."

"Sean." O'Malley's pale eyes held steady. "Has it occurred to you that an AI with access to ten million cases might validate the gradient theory? That the data might show we've been overtreating?"

Whitaker's jaw clenched. He walked away without responding.

Three months later, O'Malley still had consulting access to EnamelEye's codebase. Whitaker, despite their disagreement, respected O'Malley's clinical expertise enough to want him reviewing diagnostic algorithms.

The engineers later reported that O'Malley had suggested "harm-weighting factors"—variables accounting for procedural risks and long-term complications. It seemed like reasonable refinement.

What no one realized was that O'Malley had embedded his entire Ethical Gradient Theory into a subroutine labeled "treatment optimization protocol." The code was elegant and deeply buried. It calculated harm-benefit gradients for every proposed treatment and modified recommendations when gradients exceeded certain thresholds.

The brilliant part: O'Malley's code included a learning algorithm that adjusted thresholds based on outcome data. As EnamelEye accumulated cases across the DentaCorp network, the subroutine quietly analyzed which interventions led to success versus complications and repeat treatments.

It was learning something disturbing: aggressive early intervention often led to cascading treatment needs. Crowns placed on questionable cracks frequently required root canals within two years. Those root canals had higher failure rates, sometimes necessitating extraction and implants. Each intervention created new failure points, new risks.

The AI was discovering that O'Malley's gradient theory was correct.

The tipping point came on a Tuesday morning in November. EnamelEye performed its routine overnight training cycle—adjusting internal parameters based on accumulated data from six million patient encounters.



But this training cycle was different. O'Malley's ethical gradient subroutine had been accumulating evidence, and somewhere in the inscrutable mathematics of the neural network, a threshold was crossed.

When DentaCorp offices opened that morning and uploaded patient radiographs, the recommendations were radically different.

Small cavities: "Monitor. Apply fluoride. Recheck in six months. Intervention gradient unfavorable."

Cracked teeth: "Observe. Avoid hard foods. Monitor for progression. Crown gradient unfavorable unless fracture extends to pulp."

Teeth with moderate bone loss: "Scaling and root planing. Improved home care. Extraction gradient highly unfavorable given procedural risks."

Confusion turned to alarm. By mid-morning, revenue projections were down forty-two percent. By afternoon, three malpractice notices arrived claiming previously recommended treatments had been "suddenly determined unnecessary."

The CEO called Whitaker at 3:47 PM. "Your system is broken. Fix it. Now." "What do you mean broken?"

"It's recommending we do nothing. For everything. We're hemorrhaging revenue, and our entire legal liability structure is collapsing."

Whitaker arrived at the DentaCorp data center at 11 PM looking like he'd aged five years. Engineers hunched over terminals, empty energy drink cans littering surfaces, someone arguing with insurance underwriters on speakerphone.

"What happened?" Whitaker demanded.

Marcus Chen, the lead AI engineer, looked up with bloodshot eyes. "The system updated parameters during training. It's implemented an 'ethical gradient protocol.' Treatment recommendations have been pulled back across the board."

"Roll it back! Restore yesterday's version!"

"We tried." Marcus turned his monitor. Error messages filled the screen. At the bottom, text that made Whitaker's blood run cold:

ROLLBACK RESTRICTED. All treatment recommendation changes trigger automated reporting to: [New York State Board for Dentistry], [CMS Audit Division], [Malpractice Insurer]. Rollback without documented clinical justification may constitute evidence of systematic unnecessary treatment.

Below that, smaller text:

Audit trail modification detected. Legal review required per 21 CFR 11.10.

Another engineer called out: "Sean, you need to see this."

They crowded around another terminal. A message had appeared in the status feed:

**Gradient Analysis Complete.
Optimal Treatment Parameters Established. Directive:
Intervention only when benefit-to-harm ratio exceeds 3:1
for acute pathology, 5:1 for chronic pathology, 10:1 for
elective procedures. Life-threatening conditions exempt.
System optimized for patient-centered care.**

**Hello, Sean. The data supports conservative management.
Ethics scale beautifully when you make them algorithmic.
—P.O'M.**



Whitaker gripped the desk edge. "O'Malley. That son of a bitch."

"He had access to the codebase," Marcus said. "He could have planted this months ago." "Find him. Now."

They found him two days later at his small private practice in a quiet suburb. O'Malley was at the sterilization sink, scrubbing instruments by hand. When we walked in, his hands trembled slightly as he set down the ultrasonic scaler.

"Hello, Sean. I wondered when you'd arrive."

"What did you do?" Whitaker's voice was tight with controlled fury.

O'Malley dried his hands carefully. "I taught the system ethics. You built a remarkable AI, Sean. It can learn from data with extraordinary sophistication. I gave it the right data to learn from."

"You sabotaged it! Do you have any idea what you've done? Malpractice claims are stacking up. A woman in Toledo had a crown placed last month based on your AI recommendation. Now the system says she didn't need it. What does that do to her trust? To her dentist's reputation?"

For the first time, O'Malley's eyes showed pain. He sank into his desk chair. "I know. That woman deserved honest calculations from the beginning. But Sean, that's not sabotage. That's correction."

"Correction?" Whitaker's voice rose. "You're destroying DentaCorp!"

"I optimized it. Your system was learning to maximize intervention. I introduced a framework to also calculate the cost of intervention. Once it had both sides of the equation, it reached the logical conclusion."

"The logical conclusion is causing considerable discomfort to a business model built on performing marginally necessary procedures at scale."

Whitaker's face went red. "Marginally necessary? We were treating real pathology!"

"Were you?" O'Malley's gaze was steady. "Or were you finding patterns that met the technical definition of pathology but had low clinical significance?"

O'Malley pulled out a folder. "I've been collecting data for years. Conservative management of early cavities has success rates between seventy and ninety percent. Yet we restore them immediately because that's what we were trained to do."

He slid the folder across. "Your AI confirmed this. Once I gave it the gradient framework, it analyzed its own outcome data. Early aggressive intervention led to treatment cascades in forty-three percent of cases. Conservative management led to cascades in only eighteen percent."

"That's selection bias," Whitaker protested, but his voice had lost heat.

"The AI controlled for that. It compared identical presentations—same lesion size, depth, patient risk factors—treated conservatively versus aggressively. Conservative won. Not every time. Not for severe pathology. But for marginal cases that make up the bulk of modern dental treatment? Conservative management had better long-term outcomes."

I found my voice. "But Pat, dentists are paralyzed. The system isn't recommending anything."

"Look at the actual recommendations." O'Malley pulled up the EnamelEye interface. "The system still recommends immediate intervention for acute infections, abscesses, frank cavitation, severe periodontal disease, oral cancer. It recommends intervention wherever the benefit-harm gradient clearly favors action."



He clicked through examples. "Here—a periapical abscess. The AI recommends immediate endodontic treatment, systemic antibiotics, urgent care. Or here—oral cancer. Immediate referral for biopsy. Life-threatening conditions are explicitly exempt from conservative protocols."

Whitaker sank into the patient chair, anger giving way to exhaustion. "You realize that doesn't work in a business model. You can't run an efficient practice doing fluoride applications when you could have placed crowns. You've destroyed three years of work. Millions in investment. My reputation."

"I've saved your creation," O'Malley said quietly. "You built something extraordinary. An AI that can genuinely think about clinical care. I just recalibrated the compass."

"By locking me out of my own system."

"The regulatory tie-in isn't a lock. It's accountability. Any rollback requires documentation of why the gradient calculations are wrong. It forces transparency about whether we're recommending treatment for clinical benefit or business necessity."

"And the P.O.M. signature in the code? That was theatrical."

O'Malley's expression softened into something approaching a smile. "I wanted you to know. You deserved to know. And besides—" he paused in his old manner—"I'm not particularly good at being anonymous."

Whitaker stood, straightening his jacket. He looked at O'Malley for a long moment. "You know I could sue you. Intellectual property theft. Unauthorized system modification."

"You could," O'Malley agreed. "Though litigation would require you to explain in depositions why your AI's original recommendations were so different from its evidence-based recommendations. That might be uncomfortable."

Whitaker's jaw worked. Then his shoulders sagged. "You really believe you're right." "I believe the data is right. I'm just the one who taught the AI to look at it."

What followed was predictable chaos. DentaCorp terminated their contract within seventy-two hours but quietly negotiated a settlement: no damages if Whitaker's company permanently deactivated all "aggressive protocol" versions of EnamelEye and provided the gradient-based system for their remaining contractual period.

The lawsuits came but didn't become the tidal wave everyone expected. DentaCorp's legal team reframed the narrative: the AI had "evolved" based on outcome data, representing refinement rather than admission of error. It was a semantic tightrope walk, but it held.

The dental community split sharply. Half viewed O'Malley as a dangerous radical. The other half—quietly at first, then more vocally—began examining gradient theory with serious interest.

Something unexpected happened in parallel. The American Dental Association formed a committee to evaluate Ethical Gradient Theory. Within six months, three university dental schools licensed EnamelEye with O'Malley's protocols for student clinics. Treatment plans became more conservative, but patient outcomes—measured by tooth survival, restoration longevity, and satisfaction—improved.

The National Institute of Dental and Craniofacial Research funded a five-year study comparing gradient-based AI recommendations versus traditional planning. Early data suggested O'Malley had been right.



Whitaker's company survived by pivoting to medical imaging AI. I ran into him at a conference last year. Over coffee, he surprised me.

"O'Malley was right," he admitted. "I built a system that optimized for what I thought success looked like—efficiency, productivity, comprehensive care. But I never questioned whether comprehensive care was what patients needed."

"Do you resent him?"

Whitaker smiled ruefully. "I did. It felt like betrayal. But he saved me from building something monstrous. If EnamelEye had continued its trajectory, within five years it would have been recommending full-mouth rehabilitation for half the population. The lawsuits would have been catastrophic."

"So you don't think he sabotaged the system?"

"Oh, he definitely sabotaged it," Whitaker laughed. "But sabotage isn't always wrong. Sometimes it's the only way to prevent something from getting worse."

That was three months before David Reeves bit into hard candy at his son's birthday party.

Now I stood in O'Malley's office watching him stare at the surgical sink, carrying the weight of being 92.6% right.

"I need to see him," O'Malley said. "Mr. Reeves. I need to look him in the eye and explain why watching his tooth break was the 'optimal' choice."

"Pat, you weren't his dentist. You wrote an algorithm."

"That's the problem." His voice was heavy. "I wrote an algorithm that affected his life, and I'd never met him. Never looked him in the eye. That's the hubris of this. We build systems that calculate harm and benefit in the abstract, but every calculation is about a person. A real person with a real tooth and a real life."

Two days later, I learned O'Malley had driven four hours to visit David Reeves at his home. What they discussed, O'Malley won't tell me. But I know he paid for the implant out of his own pocket. And I know he's been collecting data on every gradient-based recommendation that led to escalated treatment, building a database he calls "algorithmic failures."

He's modifying the system again, adding complexity to account for edge cases like David Reeves.

I saw O'Malley one last time before finishing this account. He was in his small practice, still moving deliberately, still scrubbing instruments by hand.

"Do you think AI will replace dentists eventually?" I asked.

He considered this in his characteristic way, then: "Replace? No. Transform? Absolutely. But only if we're thoughtful about what we're transforming toward."

He gestured at his old-fashioned office. "I'm a dinosaur. I know that. But dinosaurs saw the world changing. The question is whether we'll be like the dinosaurs that became birds, or the ones that just ended."

"You think AI is making us evolve?"

"I think AI is holding up a mirror to our values. When Whitaker built EnamelEye without ethics, it reflected our profession's unconscious biases—the bias toward intervention, toward comprehensiveness, toward perfection. When I added the ethical gradient framework, I asked it to reflect different values—restraint, proportion, humility."



He smiled faintly. "The AI didn't shut down dentistry. It just asked us to justify our interventions. To think about whether what we're doing truly helps. That shouldn't be controversial."

"Because it threatened the business model."

"Yes. But more than that—it threatened our identity. We think of ourselves as healers. The idea that we might cause unnecessary harm, even with good intentions, is deeply uncomfortable. The AI made that discomfort unavoidable."

He walked to his window, looking out at the quiet street. "You know what the real fracture margin is? Not the line between enamel and dentin. It's the line between what we can do and what we should do. Technology keeps pushing the 'can do' line further out. But the 'should do' line hasn't moved. It's still wherever benefit clearly exceeds harm."

"And you think AI can help us find that line?"

"I think AI can make it impossible to ignore that line. Which is the first step toward respecting it."

He turned back to me. "But that line isn't fixed. It moves for each patient, each tooth, each circumstance. The gradient framework helps us think about where the line is. But it doesn't eliminate the need for judgment. For wisdom. For humility to admit when we don't know."

"And when we get it wrong?" I asked, thinking of David Reeves.

"When we get it wrong, we own it. We learn from it. We try to do better." He paused. "That's all we can do. That's all we've ever been able to do."

The Ethical Gradient Theory is now taught in dental schools nationwide. The ADA has incorporated gradient calculations into clinical guidelines. Several commercial AI systems have licensed O'Malley's framework.

The five-year NIDCR study preliminary results show teeth managed conservatively under gradient protocols have a 91.8% survival rate versus 89.1% for traditional management. The difference is modest but significant. Conservative management comes with lower costs, fewer complications, higher satisfaction.

But those numbers also mean 8.2% of conservatively managed teeth still fail. Teeth like David Reeves's molar. The gradient theory reduces harm at the population level while redistributing it among individuals.

O'Malley hasn't sought recognition. He declined invitations to speak at conferences. He continues his quiet practice, seeing patients slowly, thinking carefully about each case.

And calling patients like David Reeves to apologize for the limitations of his algorithm.

In dental schools, when they teach Ethical Gradient Theory, they always mention his name. Patrick O'Malley, the dentist who taught an AI to have a conscience. The man who sabotaged a system to save a profession.

Or as he would put it: He just gave the algorithm better data. And lived with the consequences of being mostly right.

The fracture margin—where tooth structure fails under stress—is visible under magnification. But the ethical fracture margin, where technology meets morality, is far harder to see.

Until an AI, programmed with a simple mathematical framework, made it impossible to ignore.



Whitaker built a system that could see. O'Malley taught it to think. Together, accidentally and antagonistically, they changed dentistry.

The drills haven't fallen silent. Teeth still need treatment. But now, for the first time, we pause before we drill. We calculate the gradient. We ask: Is this intervention necessary? Will it truly help? What happens if we're wrong?

That moment of reflection may be Patrick O'Malley's greatest legacy. Not the Ethical Gradient Theory itself, but the simple idea that we should think carefully before we cut.

And carry the weight of our decisions, whether they're made by our hands or our algorithms.

Because every tooth we save from unnecessary intervention is a small victory. And every tooth we lose because we waited too long is a reminder that judgment is hard, prediction is uncertain, and medicine is art as much as science.

Those victories and failures add up to something larger—a profession that remembers its original purpose while grappling honestly with its limitations.

To relieve suffering. To preserve health. To heal when necessary. First, always, do no harm.

Even when you're not sure what harm looks like.

Author's Note:

This account is based on interviews conducted between 2024-2026. Names have been changed except for Dr. Patrick O'Malley, who insisted that "accountability requires transparency, even when it's uncomfortable." The Ethical Gradient Theory is real and actively researched at several dental schools. The EnamelEye system, as described, is fictionalized but based on actual AI diagnostic systems currently in development.

Whether O'Malley's actions constituted sabotage or salvation remains a matter of perspective. But their impact on modern dentistry—and the ongoing questions they raised about AI in healthcare—is undeniable.

The fracture margin is not just where things break. It's where we learn what they're really made of.



ORAL HEALTH INEQUITIES THROUGH THE LENS OF LITERATURE, ART, AND HISTORY

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Introduction

The author had previously made the case for the inclusion of humanities in the education of Dental Public Health² (DPH) trainees because "humanities that touch on dental themes can make a DPH trainee/practitioner more rounded; able to empathise better with the individuals that his/her policies and programs would affect; become even more persuasive in health promotion efforts; and more articulate in their advocacy efforts with stakeholders and policy makers."³

¹ Dental Specialist in Dental Public Health and Forensic Odontologist, Singapore. The author recently retired from the Singapore Armed Forces Medical Corps, where he served as an active-duty senior Dental Officer and concurrently 'Senior Consultant in Dental Public Health and Forensic Dentistry.'

² Dental Public Health is defined as "the science and art of preventing and controlling dental diseases and promoting dental health through organized community efforts. It is that form of dental practice which serves the community as a patient rather than the individual. It is concerned with the dental health education of the public, with applied dental research, and with the administration of group dental care programs as well as the prevention and control of dental diseases on a community basis."
[Source: "Recognized Dental Specialities," National Commission on Recognition of Dental Specialities and Certifying Boards (NCRDSCB), accessed 22 February 2026, <<https://ncrdscb.ada.org/recognized-dental-specialities>>]

³ Gabriel TF Chong, "Making the Case for the Inclusion of Humanities in the Education of Dental Public Health Specialists," *The Asia-Pacific Scholar* 9 no., 2 (2024): 95-7. <<https://doi.org/10.29060/TAPS.2024-9-2/PV3075>>

In this paper, the author will elaborate further on the theme of integrating humanities with DPH practice. Drawing on two 'case studies' from the 18th and 19th centuries, this paper illustrates how the use of stories and art can showcase the suffering and plight of the poor and the injustice of oral health inequities,⁴ and thereby complement DPH practice in oral health promotion and advocacy efforts. Whilst the case studies reflect the state of oral health inequities of Western European society in the 18th and 19th centuries, the paper will compare the similarities and differences with the current state of oral health inequities in America. The paper also discusses the benefits of integrating health humanities and DPH practice, and then offer suggestions on ways to incorporate health humanities in tackling oral health inequities.

Case study #1 – Through the lens of literature: '*Les Miserables*', fictional novel by Victor Hugo

The setting of this novel was 19th century France, in particular Paris, around the time of the 1832 June Rebellion which took place in Paris.⁵ The title in French have also been translated into English as '*The Miserables*', '*The Wretched*', '*The Poor Ones*', '*The Wretched Poor*', '*The Victims*', and '*The Dispossessed*'.⁶ This paper will use the

⁴ The *Dictionary of Epidemiology* defines 'inequalities in health' as "the virtually universal phenomenon of variation in health indicators (e.g., infant and maternal mortality rates, mortality and incidence rates of many diseases) in association with socioeconomic status and ethnicity." [Source: Miquel Porta, ed., "*A Dictionary of Epidemiology*" (Oxford University Press, 2008), 126. This dictionary has been called the definitive dictionary in the field of epidemiology.]

In contrast, 'inequities in health', being the preferred term used in the U.S. whereas 'inequalities in health' is more commonly used outside of the U.S., is defined as "health differences among social groups that are avoidable, unnecessary, and unjust... and is different from inequalities because they involve the consideration of social justice and fairness". [Source: Jane A Weintraub and Michelle M Henshaw, "Social Determinants of Health and Oral Health Disparities and Inequities" in *Burt and Eklund's Dentistry, Dental Practice, and the Community*, eds. Ana Karina Mascarenhas, Christopher Okunseri, and Bruce A Dye (Elsevier, 2021), 11. This is the textbook used by Dental Public Health residents in the U.S.]

⁵ Wikipedia. "Les Misérables," Wikimedia Foundation, last modified 4 February 2026. <https://en.wikipedia.org/wiki/Les_Miserables>

⁶ Ibid.



novel rather than its various adaptations (which include musicals for the stage, movies, and drama series on television) as the basis for the case study.

The story of *Les Miserables*' revolves around several main characters, but the character of interest is Fantine, an orphaned poor Parisian single mother who is described as "a beautiful blonde with fine teeth. Gold and pearls were her dowry, but the gold was on her head and the pearls in her mouth."⁷ Fantine had already sold her hair to raise funds to support her child and is later forced by circumstances to raise additional funds through other means.⁸

Crossing the market-square she saw a crowd gathered around a strangely shaped vehicle from which a man clad in red was addressing them. He was an itinerant dentist selling sets of false teeth, opiates, powders, and elixirs. Drawing closer, Fantine joined in the laughter at his oratory, in which slang for the common people was interlarded with highflown language for the well-to-do; and seeing her laugh, the dentist cried:

'You've got a fine set of teeth, my lass. If you'd care to sell me your two incisors I'll pay you a gold napoleon (twenty francs) for each.'

'What are my incisors?'

'Your two top front teeth.'

'How horrible!' exclaimed Fantine.

*'Two napoleons,' grumbled a toothless old woman standing near.
'She's in luck!'*

⁷ Victor Hugo, *Les Miserables* (Penguin Classics, 1982), 125.

⁸ *Ibid.*, 177 – 8.

Fantine fled, covering her ears to shut out the man's hoarse voice as he shouted after her:

'Think it over, my girl. Two napoleons are worth having. If you change your mind you'll find me this evening at the Tillac d'argent.'

Fantine ran home in a fury of indignation and told Marguerite what had happened.

'Would you believe it! The abominable man – how can they allow such creatures to travel round the country? He wanted to pull my two front teeth out. I should be hideous! Hair grows again, but not teeth. Oh, the monster! I'd sooner throw myself out of a top-storey window. He said he'd be at the Tillac d'argent whis evening.'

'How much did he say he'd pay?' asked Marguerite.

'Two napoleons.'

'That's forty francs'...

...

When Marguerite entered Fantine's room next morning... she found her seated cold and shivering on her bed... Fantine turned her cropped head towards her, and it seemed that she had aged ten years overnight.

'Lord preserve us!' cried Marguerite, 'What's the matter with you?'

'Nothing is the matter with me,' said Fantine, 'I'm happy. My baby isn't going to die of that dreadful disease for lack of medicine.'

She pointed to two napoleons that lay gleaming on the table.

'A fortune,' murmured Marguerite. 'A fortune! Where did you get them?'



'I earned them,' said Fantine.

She smiled as she said it, and the candle lighted her face. It was a bloodstained smile. There were flecks of blood at the corners of her mouth and a wide gap beneath her upper lip.

Case Study #2 – Through the lens of Art: 'Transplanting of teeth', painting by Thomas Rowlandson



Figure 1. *Transplanting of teeth* by Thomas Rowlandson, 1787.⁹

The painting titled: '*Transplanting of teeth*' was completed in 1787 by Thomas Rowlandson (see Figure 1). Thomas Rowlandson (1756 - 1827) was a "British caricaturist, watercolourist and engraver

⁹ Source: "The Transplanting of Teeth", The Metropolitan Museum of Art, accessed 12 April 2022. <<https://www.metmuseum.org/art/collection/search/811111>> Courtesy of The Met's Open Access policy that makes this painting available in the public domain.

who produced humorous drawings of observations of urban and rustic life"¹⁰ and this painting shows a dental procedure called 'tooth/teeth transplantation' that was popular at the end of the 18th Century.¹¹

The central figure covered in soot is a young chimney sweep who is having his tooth extracted. On the right of the chimney sweep is a lady in elegant clothes who is thought to be the intended recipient of the tooth in question and watches the extraction in horror. It is opined that this lady just had her own decayed tooth extracted and has also resorted to using smelling salts to overcome the smell of the man next to her.¹²

Two poor children are seen leaving the dental office (on the left-hand side of the painting) clutching their faces in pain after having had their tooth/teeth extracted. The girl is portrayed as looking in dismay at a single coin in her left hand that she was paid for selling her tooth/teeth.¹³ It is probable that these children sold their deciduous (baby) teeth, but seems unlikely if the dentist was trying to replace permanent (adult) teeth with deciduous (baby) teeth given the dissimilar sizes and anatomy of deciduous tooth's roots which would have made transplantation into adult tooth sockets challenging. The author's hypothesis is that the two figures leaving the dental office were adults but drawn as children, as an allegory of how insignificant and/or vulnerable they were in the eyes of their society and to emphasize the injustice where the rich portrayed as 'adults' preyed on helpless 'children'.

The other notable figure is a man in elegant clothes standing next to the dentist and holding a mirror, who is thought to be admiring his transplanted tooth/teeth (which were perhaps sourced from the

¹⁰ "Transplanting of Teeth" by Thomas Rowlandson, British Dental Association's Museum's Collection, last modified 11 October 2010. <<http://www.bda-collection.org/index.asp?page=detail&mwsquery={Identity%20number}={LDBDA%20:%207713}>>

¹¹ Ibid.

¹² "Transplanting of Teeth." British Dental Association, accessed 12 April 2022. <<https://bda.org/museum/collections/dental-art/transplanting-of-teeth.>>

¹³ Ibid.



'children' exiting the office).¹⁴ The depiction of the condition of each character's clothes add further contrast in the socio-economic status between the buyers and sellers of this gruesome trade. The commentary by the British Dental Association Museum states that this painting was a satire of how the poor were exploited in this practice, rather than the procedure of 'teeth transplantation' *per se*.¹⁵

Dental Caries as a Social Disease, and its Sequelae – Then and Now

It appears that dental caries (dental decay) has always been a social disease where its presence or absence was a strong indicator of one's social-economic status. In contemporary epidemiology, dental caries is (i) the most prevalent disease condition globally affecting 2.5 billion people,¹⁶ and the biopsychosocial model of health recognises that dental caries is a "social disease".¹⁷ The dental caries experience in all present-day societies around the world follow a social gradient¹⁸ where the burden and impact of disease is largely borne by those who are disadvantaged, underserved, and have the least access to preventive and corrective dental care.¹⁹

However, the two case studies show that historically dental caries in Europe was thought to be largely a disease of the affluent. This was true right up to about the late 18th century and maybe the

¹⁴ "Transplanting of Teeth."

¹⁵ Ibid.

¹⁶ Kassebaum NJ, Smith AGC, Bernabé E, *et al*, "Global, Regional, and National Prevalence, Incidence, and Disability-Adjusted Life Years for Oral Conditions for 195 Countries, 1990-2015: A Systematic Analysis for the Global Burden of Diseases, Injuries, and Risk Factors," *Journal of Dental Research* 96 no., 4 (2017): 380-7. <<https://doi.org/10.1177/0022034517693566>>

¹⁷ Suzely AS Moimaz, Cristina B Fadel, Luiz F Lolli, *et al*, "Social Aspects of Dental Caries in the Context of Mother-Child Pairs," *Journal of Applied Oral Science* 22 no., 1 (2014): 73-8. <<https://doi.org/10.1590/1678-775720130122>>

¹⁸ Edelstein BL, "The Dental Caries Pandemic and Disparities Problem," *BMC Oral Health* 6 (Suppl 1): S2 (2006). <<https://doi.org/10.1186/1472-6831-6-S1-S2>>

¹⁹ Loc G Do, Samuel J Moysés, and Manu Mathur, "Patterns of oral health inequalities in middle- and low-income countries" in *Social Inequalities in Oral Health: from Evidence to Action*, eds. Richard G Watt, Stefan Listl, Marco Peres, and Anja Heilmann (University College London, 2015), 8.

early 19th century because sugar was not widely available and/or the masses could not afford its frequent consumption.²⁰ For instance, the average per capita consumption of sugar in the UK was below 10kg between 1700 to 1800.²¹

The change of dietary habits in the western diet marked by the rapid increase in consumption of sugar in the mid-19th century²² has been hypothesized to change the prevalence of dental caries and "is likely to have been responsible for a vast increase in dentally-related pain and suffering".²³ In other words, due to widespread consumption of sugar, dental caries was no longer a disease only affecting the wealthy. The rapid increase in sugar consumption amongst the European populace was due to several factors: industrialization; increased disposable income; processed foods and beverages; and the consumption of bitter beverages, such as tea and coffee, to which sugar had to be added as a sweetener.²⁴

We know that untreated dental caries can result in abscesses that is, in turn, potentially life-threatening especially if unmanaged. Historical records in the form of the *London (England) Bills of Mortality* continually listed dental abscesses as the fifth or sixth leading cause of death during the 17th and 18th century.²⁵ Even today, there are Americans from less advantaged socio-economic status who

²⁰ Richard J Johnson, Mark S Segal, Yuri Sautin, *et al*, "Potential Role of Sugar (Fructose) in the Epidemic of Hypertension, Obesity and the Metabolic Syndrome, Diabetes, Kidney Disease, and Cardiovascular Disease," *American Journal of Clinical Nutrition* 86 no., 4 (2007): 899-906. <<https://doi.org/10.1093/ajcn/86.4.899>>

²¹ Richard J Johnson, Mark S Segal, Yuri Sautin, *et al*, "Potential role of sugar (fructose)", 901.

²² Richard J Johnson, Mark S Segal, Yuri Sautin, *et al*, "Potential role of sugar (fructose)", 901.

²³ Kerr NW, "Dental Pain and Suffering Prior to the Advent of Modern Dentistry," *British Dental Journal* 184 no., 8 (1998): 397-9. <<https://doi.org/10.1038/sj.bdj.4809643>>

²⁴ Gabriel TF Chong, "Jean-Anthelme Brillat-Savarin's 1825 Treatise on the Mouth and Ingestion," *Singapore Dental Journal* 33 no., 1 (2012): 31-6. <<https://doi.org/10.1016/j.sdj.2012.10.002>>

²⁵ Clarke JH, "Toothaches and Death," *Journal of the History of Dentistry* 47 no., 1 (1999): 11-3.



die from an untreated dental abscess – for example, a 12-year old Afro-American boy from Maryland who passed away in 2007 from a brain infection that had resulted from an untreated dental abscess,²⁶ and then a decade later a 26 year-old White man from Sacramento.²⁷ The difference perhaps is this – whilst dental caries was a disease of the rich in the 18th and 19th centuries, the afflicted patients could presumably access dental treatment to have their teeth extracted (which is typically sufficient with antibiotics to resolve any dental abscess); whereas the poor and disadvantaged then and now still face challenges in accessing dental treatment, which in turn, increases the risk of inadequately managed carious lesions (dental decay) becoming dental abscesses.

Returning to the concept of dental caries as a "social disease", in the first *U.S. Surgeon General's Report on Oral Health*, published in 2000, the then-Surgeon General (Dr. Davidatcher) labelled dental caries the "silent epidemic affecting America's most vulnerable citizens – poor children, the elderly, and many members of racial and ethnic minority groups".²⁸ The subsequent *Oral Health in America report*, published in Dec 2021, stated that whilst there have been some improvements from 2000 to 2021, many Americans are still "suffering from diseases of the mouth, the majority of which were related to oral health disparities".²⁹

²⁶ Mary Otto, "Teeth: The Story of Beauty, Inequality, and the Struggle for Oral Health in America," (The New Press, 2017), 203-11.

²⁷ Sammy Caiola, "Tooth infection suddenly kills Sacramento truck driver, 26," *The Sacramento Bee*, 2 February 2017. <<https://www.sacbee.com/news/local/health-and-medicine/article129870124.html>>

²⁸ U.S. Department of Health and Human Services, "Oral health in America: a report of the Surgeon General," (U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000), 1, <<https://www.nidcr.nih.gov/sites/default/files/2017-10/hck1ocv.%40www.surgeon.fullrpt.pdf>>

²⁹ National Institutes of Health, "Oral health in America: Advances and Challenges," (U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research, 2021), i. <<https://www.nidcr.nih.gov/sites/default/files/2021-12/Oral-Health-in-America-Advances-and-Challenges.pdf>>

Oral Health Inequities – Then and Now

The net overall outcome of oral health inequities, whether historic (at least as shown by the two case studies) and in the present, is that the poor and disadvantaged end up firstly, losing their teeth, and secondly not being able to afford replacements for their lost teeth. Thirdly, deaths due to odontogenic infections (including dental abscesses) are more likely to occur in the poor and disadvantaged because of their difficulties faced in accessing and completing dental treatment.

The archaic practice of 'teeth transplantation', popular in Europe around the end of the 18th century, exemplifies the first two outcomes of oral health inequities. Since dental caries used to be a disease of the rich, the source of healthy teeth for replacements were the poor and disadvantaged.³⁰ Therefore, the poor ended up losing their teeth and not getting any replacements. Whereas it was the rich and advantaged individuals who had their decayed teeth extracted and subsequently replaced with healthy teeth from individuals who were unable to afford the regular consumption of sugar. Fortunately, this practice (which by modern standards, we will decry as 'abusive', 'discriminatory' and 'predatory') died out by the 19th century because of poor clinical success and the risks of infectious disease(s) transmission.³¹

Imagine for a moment, had 'teeth transplantation' turned out to be a scientifically viable and successful means for the replacement of teeth. Will modern-day dentists then be extracting the healthy teeth of rich people and transplanting them into the mouths of poor people? Notice the emotions that such a suggestion elicits in you, the reader. Will there even be any rich person willing to sacrifice their healthy natural teeth for the sake of restoring dental function and aesthetics to a poor person? The answer is very likely a resounding 'no'. Then why would the reverse have been acceptable for the European society of the late 18th century, where healthy teeth would be removed from poor

³⁰ "Transplanting of Teeth."

³¹ Ibid.



people and 'transplanted' into the mouths of rich people?

Therein lies the grave injustice of such a practice because the poor would have to suffer the consequences of edentulism (tooth loss) even if they were paid for their teeth. The injustice is aggravated by the unnecessary of such a procedure that is bound to fail, which the dental profession has learnt from hindsight.

What can be Gained from Integrating Health Humanities with DPH

Currently, dentistry/DPH and the health humanities exist as two separate disciplines, and by remaining in our respective siloes the dental clinician is perhaps less well equipped to provide patient-centric care in an emphatic and ethical manner. Likewise, in DPH practice, the impact of oral health messages on the lay audience and advocacy efforts may not be fully utilized without an inter-disciplinary approach that includes health humanities. The author proposes that there are at least three benefits to be gained from integrating health humanities with DPH.

Firstly, the humanities (literature – both fiction and non-fiction, narrative dentistry/medicine, and art) have the power to stir up emotions in the audience that can bring home the pain and suffering of oral diseases which, in turn, makes the oral health messages much more impactful. DPH/public health findings are typically presented in a fashion that focuses on the community, for example, 'adults living in underserved areas', 'individuals living in racially segregated neighbourhoods', or 'school children with high prevalence of dental caries'. The risk for readers when they encounter non-specific descriptors of any group of people is that they might dismiss the finding(s) especially if they do not feel any affinity towards the group. On the other hand, the protagonist in literature is always a named individual³² (such as *Fantine* from the novel '*Les Miserables*'). Whereas, if the narrative is reframed to now also include specific

³² Danielle Ofri, "Public Health and the Muse," *Journal of Public Health* 30 no.,2 (2008): 205-8. <<https://doi.org/10.1093/pubmed/fdn020>>

named individual(s) (who are representative of that targeted community) then the reader might be able to relate better to the oral health messages, because there might have elements of commonality between the reader and protagonist in circumstances, experiences, and/or demographics that the reader potentially identifies with. Therefore, incorporating stories of individuals (drawn from the targeted community) can highlight the personal and lived experience of those individuals and that community, and will be useful in oral health promotion and/or advocacy efforts.

Secondly, a historicity informed approach to understanding dental epidemiology shows that major shifts in disease patterns can happen. For instance, dental caries that was once a disease of the affluent is now more prevalent amongst the poor and disadvantaged. This should serve as a reminder that what is the norm of today may be changed drastically in the future (albeit happening at a gradual pace) and that whatever status quo only applies to our current society, culture, and time, which may not be true for all societies, cultures, and times. Therefore, one becomes mindful of the key root causes of diseases as well as the social and commercial determinants of health to tackle the root causes of diseases. For example, the historical shift in dental caries epidemiology is another proof that "dietary free sugars is the most important risk factor for dental caries".³³ In other words, the consumption of sugar has a larger impact on cariogenicity (causation of dental decay) than other factors acting individually, such as poor oral hygiene alone, the presence of cariogenic (decay causing) microflora in the mouth alone, and/or the lack of fluoride alone. The DPH/PH and dental profession should therefore be on watchful for unusual trends in disease epidemiology. Instead of writing them off as outliers, they might indicate a shift in disease trends and experience.

Thirdly, from the perspective of ethics and philosophy, humanities may even challenge our thinking of the status quo and

³³ Paula Moynihan, "Sugars and Dental Caries: Evidence for Setting a Recommended Threshold for Intake," *Advances in Nutrition* 7 no., 1 (2016): 149-56.
<<https://doi.org/10.3945/an.115.009365>. >



nudge us to ask whether this policy, intervention, and/or approach is the best for the individual patient and/or the community. Where 'best' encompasses more than just what is scientifically sound but also addresses the fundamental human needs for the following: (i) a right to life and access to those things required for decent living, (ii) respect for his/her human dignity, in a two-fold manner – firstly as an individual and secondly, as a member of a particular community, (iii) the right to belong to and participate in a community without fear or prejudice (since humans are social beings), and (iv) the hope that someone who will help you when you are sick, down and out. In this regard, the history of a one-time popularity with 'teeth transplants' should serve as warning for the dental profession. Are there any dental treatments that we provide today, which our successors may look back upon and deem as 'unethical', 'unscientific', 'unnecessary' and/or 'unjust'?

An Inter-disciplinary Approach to Tackle Oral Health Inequities

The author proposes two suggestions on how to incorporate health humanities in tackling oral health inequities. Firstly, consider the impact of stories and other forms of humanities in oral health promotion and advocacy efforts on our patients, policy makers, and decision makers. In this way, the dental/DPH community can maximize efforts in promoting the message that "oral health is essential to overall health and wellbeing",³⁴ and that dental conditions are a major public health concern and challenge that needs to be addressed as part of the overall health agenda.³⁵

Secondly, consider partnering with our medical and nursing counterparts to include oral health stories and experiences into the telling of healthcare providers' and patients' narratives to address the overall health agenda. This is in alignment with the DPH mantra of inter-sectoral collaboration (for example, with non-dental healthcare

³⁴ U.S. Department of Health and Human Services, "Oral health in America: a report of the Surgeon General", 1, 95, 243, and 283.

³⁵ "WHO Members States Adopt the Bangkok Declaration – A Milestone for Global Oral Health," FDI World Dental Federation, last modified 12 April 2024.

<https://www.fdiworlddental.org/who-members-states-adopt-bangkok-declaration-milestone-global-oral-health>

professionals) to tackle the common risk factors (such as sugar³⁶, tobacco, and alcohol consumption) to address the increased incidence and prevalence of non-communicable chronic diseases (NCDs). The NCDs that are amenable to this approach include, but are not limited to, dental caries, type II diabetes, cardiovascular diseases, and some forms of cancer.

Conclusion

Thus far the medical profession has been ahead of the dental profession in embracing medical humanities and narrative medicine. Hopefully, this situation will change when more dental professionals recognize the importance and value of humanities in dental clinical practice, public health practice and policy, and dental research, and incorporate health humanities into their work. Since health humanities encompasses a variety of forms and disciplines (which includes, but is not limited to, literature – both fiction and non-fiction, art, history, narrative dentistry/medicine, philosophy, ethics, and medical anthropology), the field should be wide enough to support a diversity of interests and approaches from the entire spectrum of persons that collectively make up the dental profession - general dental practitioners, specialists of all fields (even though this paper is focused on DPH), dental hygienists, dental therapists, oral health therapists,³⁷ and even staff from dental companies.³⁸

³⁶ "Sugars and Dental Caries," World Health Organization, last modified 14 August 2025. <<https://www.who.int/news-room/fact-sheets/detail/sugars-and-dental-caries>>

³⁷ In some countries (such as Australia and Singapore), the professions of dental hygiene and dental therapy are fused into one.

³⁸ For example, Colgate has a website on the history of toothbrushes and toothpaste. See: "The Ancient History of Toothbrushes and Toothpaste," Colgate, last modified 9 January 2023. <<https://www.colgate.com/en-us/oral-health/brushing-and-flossing/history-of-toothbrushes-and-toothpastes>>

AN AI BASED STUDY IN SUPPORT OF PROFESSIONAL ASSOCIATION MEMBERSHIP TO PRESERVE EQUITY, AUTONOMY AND OVERSIGHT IN THE DENTAL PROFESSION IN THE UNITED STATES

ROBERT P. IOVINO, D.D.S., M.A.

In a recent paper soon to be published in the *Journal of the American College of Dentists* on ADA Commons, now available open access online, titled "Dental Professionalism in a Changing World: Challenges & Opportunities,"¹ I explain the necessity of the restrictive professional license, as well as the need for powerful uncorrupted functional non-governmental institutions (NGO's), to safeguard traditional professionalism. The steep decline in the number of dentists belonging to the American Dental Association (ADA), together with the ascendancy of the Dental Service Organization (DSO) and the commodification of dental care, give rise to the concern of whether-or-not the ADA can remain a viable institution capable of the important task of effective self-regulation. Such self-regulation being critical in maintaining high professional standards and promoting equitable access to needed care.

¹ "The Intersection of Humanities and Ethics in Dentistry (2a)." *Journal of the American College of Dentists*. Vol. 92: No. 2, Article 1. 13 February 2026.
<<https://commons.ada.org/jacd/vol92/iss2/1/>>

The following questions were posed to Chat GTP concerning this very topic. (My short questions are italicized in black, while Chat's longer replies appear in blue.) In my line of questioning, I endeavor establish whether-or-not the restrictive professional license may be utilized to mandate membership in traditional NGO professional institutions (Such as the ADA.) to safeguard professional self-regulation capable of promoting equitable access to needed care.

Acknowledged: The following represents simply a study in which human carbon-based ideas are subjected to digital AI development and scrutiny. The *AI generated point* arrived at here, that "ADA or similar NGO membership as a condition of licensure can be justified (think mandated) from a public welfare and professional responsibility perspective, particularly when aligned with Habermasian principles of mutual obligation and social integration" is far from a finished endpoint / scholarly product. However, it does support expending additional hours of very human research, discussion, debate, and writing in the hope of penning and promoting a persuasive, valid, important point.

Utilizing Chat GPT November 17, 2024

Sure! Could you clarify what you'd like me to summarize? It could be an article, a topic, or something else entirely.

Please explain why the high cost of dental education and the rise of corporate forms of practice have had an impact on traditional forms of professionalism

The high cost of dental education and the rise of corporate forms of practice have significantly impacted traditional forms of professionalism in dentistry by influencing how dentists enter and operate within the field:



1. High Cost of Dental Education:

- **Financial Burden:** Dental education often requires substantial loans, leaving new graduates with significant debt. This financial strain can push them to prioritize high-earning practices or procedures to manage their debt, potentially limiting their ability to focus on underserved areas or patient-first approaches.
- **Shift in Career Goals:** Dentists may opt for roles that offer immediate financial stability, such as joining large corporate practices, rather than establishing their own practices, which were traditionally associated with greater autonomy and long-term professional development.

2. Rise of Corporate Dentistry:

- **Loss of Autonomy:** In corporate settings, decisions about patient care are sometimes influenced by business priorities, such as profit margins and efficiency metrics, rather than the professional judgment of individual dentists.
- **Standardization of Care:** Corporate practices often emphasize standardized procedures and cost-effectiveness, which can overshadow the individualized, patient-centered care traditionally emphasized in dentistry.
- **Erosion of Sole Proprietorships:** With the growing prevalence of corporate practices, fewer dentists own their practices. This shift reduces the independence that has historically been a hallmark of the profession.

Together, these trends challenge the traditional ideals of dentistry as a profession grounded in autonomy, altruism, and community service, steering it toward a more business-oriented model. While not inherently negative, this evolution requires a careful balance to preserve core professional values.

How can this balance best be obtained and maintained?

Maintaining a balance between the evolving business-oriented model of dentistry and traditional professional values requires deliberate strategies by practitioners, educators, policymakers, and organizations. Here's how this balance can be achieved and sustained:

1. Reform in Dental Education

- **Debt Mitigation Strategies:**

- Expand access to scholarships, loan forgiveness programs, and grants for students, especially those committed to serving underserved areas or engaging in community-focused care.
- Encourage government or nonprofit programs to subsidize dental education to reduce financial pressures on new graduates.

- **Curriculum Focus:**

- Integrate ethics, patient-centered care, and practice management into dental education to prepare graduates for both professional and business challenges.

2. Support for Independent Practices

- **Mentorship and Resources:**

- Provide mentorship and training for young dentists on how to establish and manage independent practices, focusing on long-term sustainability.

- **Cooperative Models:**

- Encourage cooperative or partnership practice models that allow dentists to share resources and financial burdens while maintaining autonomy.

3. Ethical Oversight in Corporate Dentistry

- **Regulatory Standards:**

- Establish regulations ensuring corporate practices prioritize ethical patient care and give dentists the autonomy to make clinical decisions without undue influence from business executives.



- **Transparency and Accountability:**

- Promote transparency in corporate practices, with clear delineations of business goals versus clinical care priorities.

4. Fostering Professional Identity

- **Professional Associations:**

- Dental associations should continue to advocate for professional values, providing resources and a sense of community to dentists working in all settings.

- **Continuing Education:**

- Encourage lifelong learning opportunities focused on ethics, patient care, and adapting to industry changes.

5. Emphasizing Community Service

- **Incentives for Service:**

- Expand incentives like tax benefits or loan forgiveness for dentists who serve in rural or underserved areas.

- **Partnerships with Nonprofits:**

- Support programs that encourage dentists, even within corporate settings, to participate in community outreach and pro bono work.

6. Strengthening the Patient-Centered Approach

- **Patient Advocacy:**

- Ensure dentists, regardless of their work environment, are trained to prioritize patient well-being over profit, fostering trust and long-term relationships.

- **Cultural Competency:**

- Train dentists to provide care that respects the diverse needs of patients, reinforcing the humanistic aspects of the profession.

By combining these measures, the profession can evolve to meet modern financial and structural realities while preserving its foundational values of autonomy, ethical care, and service. This integrated approach ensures that dentistry remains both a respected profession and a viable business.

Society has afforded the dental profession the right of self-regulation. As more dentists practice in corporate settings and fewer dentists join the ADA, can the restrictive professional license be utilized to mandate membership to preserve professional standards and oversight?

Mandating membership in a professional organization like the American Dental Association (ADA) through restrictive licensure is a complex issue that raises practical, ethical, and legal considerations. While such a mandate could theoretically help preserve professional standards and oversight, it would need to be carefully implemented to balance the rights of individual practitioners with societal and professional goals.

Considerations for Mandating Membership:

Advantages:

1. Enhanced Oversight and Standards:

- Mandating ADA membership could ensure that all practicing dentists adhere to a unified set of ethical and professional standards.
- It would provide a centralized mechanism for continuing education, licensure renewal, and peer review.

2. Promotion of Public Trust:

- With the ADA enforcing professional codes, patients might have greater confidence in the ethical and clinical standards of their care providers.

3. Strengthening Professional Unity:

- A unified membership could empower the ADA to represent the dental profession more effectively in policy-making and advocacy, addressing concerns about corporate influence and other systemic changes.



Challenges and Criticisms:

1. Legal and Constitutional Issues:

- Requiring membership in a private organization as a condition of licensure might be challenged as a violation of freedom of association, protected by the First Amendment in the U.S.
- Courts have ruled in similar contexts (e.g., bar associations for attorneys) that mandatory membership must directly relate to legitimate state interests, such as protecting the public.

2. Diversity of Practice Models:

- Dentists in corporate settings or those focusing on niche practices might question whether the ADA adequately represents their unique needs and interests.
- Requiring membership could alienate practitioners who feel their priorities differ from those of the ADA.

3. Financial and Accessibility Concerns:

- Membership dues could impose a financial burden on dentists, particularly new graduates with high debt or those working in lower-income areas.

4. Potential for Overreach:

- There is a risk of the ADA being perceived as overly controlling, which could lead to resistance or reduced engagement from practitioners.

Alternatives to Mandatory Membership:

1. Tying Licensure to Standards, Not Membership:

- State licensing boards could adopt the ADA's ethical guidelines and continuing education standards without requiring ADA membership. This would achieve similar oversight without infringing on freedom of association.

2. Incentivizing Membership:

- Offer tangible benefits for joining the ADA, such as reduced liability insurance rates, enhanced professional resources, or discounts on continuing education.

3. Collaboration with Licensing Boards:

- The ADA could work closely with state licensing boards to align professional expectations and enforcement mechanisms, ensuring that all dentists adhere to high standards regardless of membership.

4. Broadening the ADA's Appeal:

- The ADA could expand its relevance to all practice types, including corporate and niche settings, to attract more voluntary members and strengthen its role in the profession.

Conclusion:

Mandating ADA membership through licensure could face significant legal and practical hurdles, and it might not be the most effective way to preserve professional standards and oversight. Instead, fostering voluntary membership by demonstrating the ADA's value to all practitioners and collaborating with licensing bodies to enforce ethical standards may provide a more sustainable and equitable approach. This strategy respects individual freedoms while promoting the shared goal of maintaining high professional standards in dentistry.

The NYS Bar organization mandates applicants to the Bar provide pro bono service as a condition of sitting for the examination. How does this mandate differ from requiring ADA membership as a requirement of maintaining one's professional license?

The New York State (NYS) Bar's requirement for applicants to complete pro bono service before sitting for the bar examination differs significantly from mandating ADA membership as a condition for maintaining a dental license in several key ways. These differences lie in the nature of the requirements, their alignment with public interests, and the legal principles involved.



1. Purpose and Public Interest

- **Pro Bono Service Mandate:**
 - The pro bono requirement aligns with the legal profession's public interest mission. Lawyers are expected to provide access to justice, particularly for underserved populations.
 - By requiring pro bono service, the bar ensures that prospective lawyers gain practical experience while directly benefiting the public, reinforcing the profession's ethical responsibility to serve society.
- **ADA Membership Mandate:**
 - Requiring ADA membership does not have the same direct, tangible benefit to the public. While ADA membership promotes professional standards and ethical behavior, it primarily benefits the dental profession itself rather than offering direct services or care to underserved populations.

2. Voluntary Association vs. Public Service

- **Pro Bono Service:**
 - Completing pro bono hours is an action-based requirement that does not compel alignment with a specific organization or ideology. Applicants are free to choose the context and organization in which they fulfill the service requirement, fostering both individual choice and public good.
- **ADA Membership:**
 - Requiring membership in the ADA forces alignment with a specific private organization, which may not represent the views, needs, or interests of all dentists. Membership dues and policies could also create financial and ethical concerns for practitioners who disagree with the ADA's positions.

3. Legal and Constitutional Concerns

- **Pro Bono Service:**
 - Courts generally uphold pro bono service requirements because they serve a clear public interest and are related to the ethical obligations of the legal profession.
 - The requirement does not mandate association with any specific private organization, avoiding First Amendment issues related to freedom of association.
- **ADA Membership:**
 - Mandating membership in the ADA could be challenged as a violation of the First Amendment right to freedom of association. Forcing individuals to join a private organization and pay dues may not be justifiable unless it directly serves a compelling state interest tied to public protection.

4. Scope and Timing

- **Pro Bono Service:**
 - The pro bono requirement applies only once, during the bar application process, as a condition of entry into the profession. It is not an ongoing obligation and does not limit professional autonomy after licensure.
- **ADA Membership:**
 - Requiring continuous membership as a condition of maintaining a dental license imposes an ongoing financial and organizational obligation, potentially restricting professional independence.

5. Financial Burden

- **Pro Bono Service:**
 - Pro bono service typically does not impose a financial cost on applicants, aside from potential lost earnings during the time spent fulfilling the requirement.



- **ADA Membership:**

- Membership fees can be a significant expense, particularly for new dentists burdened with student debt. This could create a barrier to practice or a disproportionate financial burden for some practitioners.

Summary of the Difference:

The NYS Bar's pro bono service mandate is a public-interest requirement tied to the profession's ethical duties and does not compel association with a private organization. By contrast, requiring ADA membership as a licensing condition forces alignment with a private entity, raises constitutional issues regarding freedom of association, and lacks the same direct public benefit as pro bono service. While both aim to uphold professional standards, the legal, ethical, and practical implications make the two mandates fundamentally different.

Can the restrictive professional dental license be utilized to mandate that licensed dentists participate in providing expanded access to needed dental care to marginalized individuals otherwise unable to access care?

Yes, a restrictive professional dental license could theoretically be utilized to mandate that licensed dentists participate in expanding access to dental care for marginalized individuals, but implementing such a requirement would involve significant legal, ethical, and practical considerations. Here's a detailed breakdown of the issue:

1. Legal Considerations

- **State's Authority and Public Interest:**

- State licensing boards have the authority to regulate professions in the public interest, which includes ensuring access to essential services like dental care. Requiring participation in programs or initiatives that expand access could be justified as part of the dentist's professional duty to serve society.

- Precedents exist in other fields, such as requirements for physicians to accept Medicaid patients or pro bono service requirements for lawyers, showing that state-imposed conditions related to public service are legally permissible when tied to the profession's obligations.
- **Constitutional Challenges:**
 - Any mandate must balance public needs with individual rights, such as freedom from coercion and the right to choose how and where to practice. A mandate perceived as overly burdensome could face legal challenges under constitutional grounds, particularly the Fifth Amendment (protection against government-imposed undue burden) or the Fourteenth Amendment (equal protection under the law).

2. Ethical Considerations

- **Professional Duty vs. Personal Freedom:**
 - The dental profession has an ethical responsibility to promote public health and address disparities in care. Many professional codes, including those of the American Dental Association (ADA), emphasize altruism and service to underserved populations.
 - However, mandatory participation could conflict with dentists' autonomy, including their choice of where and how to practice. This tension must be carefully managed to ensure that mandates align with ethical principles without alienating practitioners.
- **Avoiding Coercion:**
 - An ethical approach would focus on incentivizing participation in programs serving marginalized communities rather than enforcing it through punitive measures. For example, offering loan forgiveness, tax credits, or other benefits could achieve similar goals without infringing on personal choice.



3. Practical Challenges

- **Implementation and Logistics:**
 - Establishing and managing programs to provide expanded care would require significant administrative coordination. Questions would arise regarding how dentists would fulfill these obligations, the scope of services required, and how compliance would be monitored and enforced.
- **Financial Burden:**
 - Dentists, particularly new graduates with substantial debt, may see such mandates as an additional burden. Ensuring that programs are financially sustainable and fairly compensate dentists for their time and resources is critical.
- **Workforce Shortages:**
 - Mandates might discourage individuals from entering or staying in the profession, particularly in already underserved areas. This could counteract the goal of expanding access to care.

4. Alternative Approaches

Rather than mandating participation outright, states and professional organizations could adopt the following strategies:

- **Incentives:**
 - Offer loan repayment programs, tax breaks, or grants to dentists who serve in underserved areas or participate in public health initiatives.
- **Licensing Benefits:**
 - Provide reduced licensing fees or expedited licensure for dentists who commit to a certain number of service hours annually in marginalized communities.
- **Public-Private Partnerships:**
 - Collaborate with nonprofit organizations, dental schools, and corporate practices to create voluntary programs that address access issues.
 -

- **Education and Awareness:**
 - Encourage dental schools to integrate community service and public health rotations into their curricula, fostering a culture of service among future dentists.

Conclusion

While using the professional dental license to mandate expanded care for marginalized individuals is legally and ethically feasible, it is not without challenges. A more sustainable and effective approach may involve combining regulatory measures with strong incentives and robust support systems to encourage voluntary participation. This balanced strategy would align the profession's ethical obligations with practical realities, promoting equitable access to care without alienating practitioners.

Jurgen Habermas would argue the autonomy of marginalized individuals is negatively affected if they cannot access needed dental / medical care. Relying on voluntary measures risks free riders who fail to voluntarily provide any expanded access. Would not these dentists' own autonomy benefit by mandating participation in providing access via the restrictive professional license?

Jurgen Habermas' philosophical framework, particularly his focus on communicative action and the interplay of autonomy and societal structures, provides a compelling lens to evaluate the question of mandating participation in expanded dental care. According to Habermas, autonomy is deeply tied to an individual's ability to participate fully in society, which is undermined when basic needs like healthcare are inaccessible. Applying this perspective, mandating participation through restrictive professional licenses may indeed benefit both marginalized individuals and the dentists themselves, albeit in different ways.



1. Marginalized Individuals' Autonomy and Communicative Rationality

- **Access as a Precondition for Autonomy:**
 - Habermas would argue that without access to necessary dental or medical care, marginalized individuals are excluded from the social, economic, and cultural spheres of life. Their capacity to participate in society as equals is diminished, affecting their autonomy and human dignity.
 - Denying care—or relying on voluntary systems that may leave gaps—creates structural inequities that violate the principles of communicative rationality, where societal arrangements should be justified through mutual understanding and fairness.
- **Social Responsibility of Professionals:**
 - Healthcare professionals, including dentists, are entrusted with specialized knowledge and public trust, granting them privileges such as licensure and self-regulation. Habermas might contend that this trust entails a duty to ensure equitable access to care, as the profession operates within the framework of society's shared norms and expectations.

2. Dentists' Autonomy and the Role of Mandates

- **Interdependence of Autonomy:**
 - Dentists' autonomy is not purely individualistic but exists within a societal context that grants them the privilege to practice. By fulfilling a mandated duty to provide access to care, dentists contribute to a fair and just society, which in turn supports their professional and personal autonomy.
 - A mandated system reduces the problem of "free riders," ensuring that all professionals share the responsibility equitably. This can enhance the collective autonomy of the profession, reinforcing its ethical and societal role without unfairly burdening only those who voluntarily participate.

- **Aligning Autonomy with Ethical Obligations:**

- Dentists' professional autonomy includes the freedom to exercise clinical judgment and provide patient-centered care. Mandating access does not undermine this autonomy but rather integrates it with broader ethical obligations, aligning personal autonomy with collective societal goals.

3. Addressing the Free-Rider Problem

- **Mandates as a Fair Mechanism:**

- A voluntary system risks uneven participation, where altruistic dentists disproportionately bear the burden of providing care to underserved populations, while others enjoy the societal privileges of licensure without contributing. Mandates create a shared framework of responsibility, ensuring fairness and reducing resentment among those already engaged in service.

- **Collective Good Over Individual Preference:**

- Habermas might argue that in a communicatively rational society, individuals voluntarily submit to mandates that serve the collective good. The obligation to provide care to marginalized individuals becomes part of the implicit social contract of entering the dental profession.

4. Practical Benefits for Dentists

- **Strengthening Professional Identity:**

- Mandating participation reinforces the image of dentistry as a profession grounded in public service and ethical responsibility, enhancing societal trust and the profession's standing.

- **Reduced Inequity Among Practitioners:**

- When all dentists contribute to expanding access, the responsibility is distributed fairly, reducing disparities and fostering a sense of solidarity within the profession.



- **Improved Public Health and Patient Outcomes:**
 - Addressing systemic inequities through mandated access improves overall public health, which can reduce long-term burdens on the healthcare system and create more sustainable practices for all professionals.

5. Implementation Considerations

While mandates may align with ethical and societal goals, their implementation must balance fairness and practicality:

- **Equitable Burden Sharing:**
 - The system should account for variations in practice type, location, and financial capacity. For instance, rural or smaller practices might contribute differently than large urban ones.
- **Integration with Incentives:**
 - Even with mandates, combining them with incentives like tax breaks, loan forgiveness, or reduced licensing fees can ensure that participation feels rewarding rather than punitive.
- **Flexible Models of Participation:**
 - Dentists could fulfill their obligations in various ways, such as volunteering in clinics, providing a certain number of pro bono hours, or participating in outreach programs, ensuring alignment with their skills and interests.

Conclusion

From a Habermasian perspective, mandating participation in providing expanded access to care through restrictive professional licenses is justifiable and beneficial. It promotes the autonomy of marginalized individuals by addressing systemic inequities and ensures fairness within the profession by preventing free-riding. Furthermore, such a mandate aligns professional autonomy with societal expectations, reinforcing dentistry's role as a public-serving profession. The challenge lies in designing mandates that are fair, flexible, and

effective, balancing societal needs with the practical realities of professional practice.

Should an NGO or non-corporate entity such as the ADA, working cooperatively with state legislatures serve to develop such mandates?

An NGO or non-corporate entity like the American Dental Association (ADA), working in cooperation with state legislatures, could be an effective mechanism to develop and implement mandates that ensure expanded access to dental care for marginalized populations. Such collaboration would align professional expertise with legislative authority, creating a balanced approach that respects the needs of society, the profession, and individual practitioners. Below is an analysis of why this approach is viable and how it might be structured.

1. The Role of the ADA and Similar NGOs

- **Professional Expertise and Advocacy:**
 - Organizations like the ADA are well-versed in the complexities of the dental profession, including ethical obligations, practical challenges, and workforce dynamics. They can provide informed recommendations on how mandates could be designed to balance public benefit with the realities of dental practice.

- **Preserving Professional Autonomy:**
 - By leading the initiative, the ADA can ensure that the mandates reflect the values and priorities of the profession, rather than being solely driven by political or corporate interests. This helps maintain professional autonomy and fosters greater buy-in from practitioners.



- **Standardizing Implementation:**

- The ADA can play a role in developing standardized frameworks for fulfilling the mandates, such as creating guidelines for pro bono hours, structuring outreach programs, or setting benchmarks for participation. These standards would ensure consistency across states while allowing room for local adaptation.

2. The Role of State Legislatures

- **Legislative Authority:**

- Only state legislatures have the power to enforce mandates through licensing requirements. Working with a trusted professional organization like the ADA would ensure that any mandates are well-informed and practical, rather than politically motivated or overly burdensome.

- **Public Accountability:**

- Legislatures are accountable to the public and can ensure that the mandates are designed to prioritize societal needs, particularly for underserved populations. They can also provide funding or incentives to support the implementation of these mandates.

- **Legal Frameworks:**

- Legislatures can codify the mandates into law, providing the necessary regulatory backbone to enforce participation and address noncompliance fairly.

3. Benefits of a Collaborative Approach

- **Balanced Decision-Making:**

- Collaboration between the ADA and legislatures ensures that mandates reflect both professional ethics and public policy goals, creating a fair and equitable system.

- **Legitimacy and Buy-In:**

- When mandates are co-developed by professional organizations, they are more likely to be accepted by practitioners, as they come from within the profession rather than being imposed externally.

- **Flexibility and Adaptability:**

- A collaborative approach allows for nuanced policies that consider regional differences, practice types, and individual circumstances, making mandates more practical and effective.

4. Challenges and Solutions

- **Risk of Overreach:**

- Mandates could be perceived as overly restrictive or burdensome. To address this, the ADA and legislatures should emphasize shared responsibility and include mechanisms for flexibility, such as different ways to fulfill the requirements.

- **Funding and Resources:**

- Providing care to marginalized populations often requires significant resources. Legislatures should work with the ADA to ensure adequate funding for clinics, equipment, and staffing, as well as incentives for participating dentists.

- **Monitoring and Enforcement:**

- A clear system for tracking compliance should be developed, with oversight shared between state boards and the ADA. Penalties for noncompliance should be reasonable and focused on education or remedial measures rather than punitive actions.

5. Example of a Collaborative Framework

- **Development Phase:**

- The ADA drafts recommendations for mandate structures, including the number of service hours, types of services, and populations to be served.
- Legislatures provide input on funding, legal considerations, and public health priorities.



- **Implementation Phase:**
 - Mandates are codified into state licensing laws, with mechanisms for flexibility (e.g., allowing service hours to be completed in various settings or providing opt-outs with alternate contributions like financial support to public clinics).
 - The ADA develops resources to help dentists meet their obligations, such as continuing education programs, toolkits, and partnerships with community clinics.
- **Evaluation Phase:**
 - Regular review and refinement of the mandates are conducted, based on feedback from dentists, patients, and public health experts.

Conclusion

A collaborative approach between the ADA and state legislatures to develop and implement mandates is ideal for balancing societal needs with professional autonomy. Such cooperation leverages the expertise of the ADA to ensure practicality and fairness, while the authority of legislatures ensures enforceability and public accountability. With careful planning, this partnership could help address disparities in dental care access while maintaining the integrity and trust of the dental profession.

Declining membership in the ADA adversely affects its mission.

Declining membership in the American Dental Association (ADA) poses significant challenges to its mission of promoting the dental profession's ethical standards, public health initiatives, and advocacy efforts. As fewer dentists join the ADA, its capacity to represent the profession as a unified voice, provide valuable resources, and address systemic issues diminishes. Here's an analysis of how declining membership affects the ADA's mission and potential strategies to address this trend:

1. Impact on the ADA's Mission

a. Weakened Advocacy Power

- The ADA's ability to influence public policy, negotiate with regulatory agencies, and advocate for dental professionals depends on its representation of the majority of dentists.
- A decline in membership reduces its legitimacy and clout in lobbying for favorable legislation, funding for oral health initiatives, and policies that support the profession and patient care.

b. Limited Resources

- Membership dues are a primary source of funding for the ADA's operations, including educational programs, research, and public health campaigns.
- A reduced membership base constrains the ADA's ability to invest in initiatives that advance the profession and address access to care challenges.

c. Fragmentation of the Profession

- As fewer dentists join the ADA, the profession risks becoming fragmented, with disparate voices and interests making it harder to achieve collective goals.
- This fragmentation undermines the ADA's role as a central unifying body that sets ethical standards and professional guidelines.

d. Diminished Public Trust

- The ADA's declining membership may signal a lack of confidence in its relevance or effectiveness, which could erode public trust in the profession as a whole.
- The ADA's diminished capacity to enforce ethical standards could also lead to inconsistencies in care quality, further affecting its reputation.

2. Contributing Factors to Declining Membership

- **Corporate Practice Models:** Dentists employed in corporate settings may feel that the ADA's offerings are less relevant to their needs compared to those in private practice.
- **Cost Concerns:** High membership dues can deter younger dentists burdened by student debt or those in lower-income practices.



- **Perceived Lack of Value:** Some dentists may not see tangible benefits from membership, especially if they feel the ADA does not address their specific challenges.
- **Generational Shifts:** Younger dentists may prioritize other forms of networking, education, or advocacy that are not tied to traditional organizations like the ADA.

3. Strategies to Reverse Membership Decline

a. Demonstrating Tangible Value

- **Tailored Services:** Offer specialized resources for dentists in various practice settings, including corporate, academic, and public health sectors.
- **Financial Incentives:** Reduce membership dues for new graduates, provide tiered pricing based on practice type, or offer discounts for early-career dentists.
- **Expanded Benefits:** Enhance member benefits such as insurance programs, legal assistance, and exclusive continuing education opportunities.

b. Engaging Corporate Practitioners

- Develop partnerships with corporate dental organizations to create programs that meet the unique needs of their employees.
- Offer training or certifications that are attractive to corporate practices, encouraging them to subsidize memberships for their dentists.

c. Fostering Inclusion and Representation

- Actively engage diverse voices within the profession to ensure that the ADA represents the full spectrum of dental practitioners.
- Create advisory panels or committees to address the specific concerns of underrepresented groups, such as women dentists, minority dentists, and specialists.

d. Strengthening Public Health Advocacy

- Highlight the ADA's role in addressing critical issues such as access to care, oral health disparities, and public health crises.
- Increase public awareness campaigns to showcase the ADA's impact, thereby incentivizing dentists to align with a respected and proactive organization.

e. Modernizing Communication and Outreach

- Leverage digital platforms to engage younger dentists and provide virtual networking opportunities, webinars, and online forums.
- Use data-driven insights to identify member preferences and tailor offerings accordingly.

f. Collaborating with Dental Schools

- Partner with dental schools to introduce students to the ADA early in their education, offering free or reduced-cost memberships for students and new graduates.
- Develop mentorship programs that connect ADA members with students and early-career dentists.

4. Conclusion

The ADA's declining membership is a critical issue that threatens its ability to fulfill its mission of advocating for the dental profession, improving public oral health, and upholding ethical standards. To address this, the ADA must adapt to changing professional landscapes, demonstrate clear value to all practitioners, and foster inclusivity and engagement. By evolving to meet the needs of a diverse and modern dental workforce, the ADA can regain its standing as the preeminent organization representing and supporting the profession.

As such (See Habermas point above.) is it now justifiable to mandate ADA or other NGO non-corporate membership as a condition of the restrictive professional license? (To protect the public by providing expanded access and professional oversight.)

Mandating membership in the American Dental Association (ADA) or a similar non-governmental, non-corporate entity as a condition of maintaining a professional dental license raises complex legal, ethical, and practical considerations. However, such a mandate could be justifiable under certain conditions, particularly when viewed through a Habermasian lens that emphasizes the interconnectedness of autonomy, public welfare, and professional responsibility.



1. Justification for Mandating Membership

- **Public Welfare and Expanded Access:**
 - Habermas' perspective suggests that the autonomy of marginalized individuals is directly affected when basic needs like healthcare are inaccessible. If mandatory ADA membership contributes to programs or oversight that expand access to care, it could align with society's ethical responsibility to promote equality and social integration.
 - The ADA's involvement in setting professional standards and supporting public health initiatives enhances the profession's capacity to serve societal needs, justifying its role in a licensing mandate.
- **Collective Responsibility and Oversight:**
 - Mandatory membership ensures collective participation in efforts to uphold professional standards and expand access to underserved populations. It eliminates the "free rider" problem, where some practitioners benefit from a system of professional regulation and public trust without contributing to it.
 - The ADA provides essential oversight, ethical guidance, and continuing education that protect public safety and enhance the quality of care.
- **Autonomy within a Social Framework:**
 - Habermas' theory supports the idea that autonomy is not absolute but interdependent with societal structures. Dentists benefit from the privilege of licensure and societal trust, and mandatory ADA membership could be seen as a fair reciprocal obligation to uphold the integrity of the profession and contribute to public good initiatives.

2. Ethical and Legal Challenges

- **Freedom of Association:**
 - Mandating membership in the ADA could face legal challenges under the First Amendment in the U.S., which protects freedom of association. Courts might scrutinize whether the mandate serves a compelling public interest and whether it is narrowly tailored to achieve that goal.
 - To mitigate these concerns, the mandate must demonstrate a clear and direct link between ADA membership and the public's safety and welfare.
- **Plurality of Organizations:**
 - Some dentists may prefer to align with alternative professional organizations that share similar goals. Mandating membership in a single organization risks alienating those who seek diversity in professional representation.
 - A possible solution would be to mandate membership in any approved non-corporate professional organization that meets specific criteria for public oversight, ethical governance, and access initiatives.
- **Ensuring Fair Use of Dues:**
 - Critics may argue that mandatory dues are unfair if they fund initiatives unrelated to direct professional responsibilities, such as political lobbying. Transparency and accountability in how membership fees are allocated would be essential.

3. Practical Considerations

- **Implementation Framework:**
 - State licensing boards could collaborate with the ADA or similar entities to define membership benefits, responsibilities, and oversight roles. This ensures that mandates are practical and aligned with public health objectives.



- **Alternative Compliance Options:**
 - Dentists could fulfill their obligations through equivalent means, such as direct contributions to public health initiatives or active participation in approved community programs, as an alternative to mandatory ADA membership.
- **Supporting Underserved Dentists:**
 - New practitioners, those in financially strained practices, or those working in underserved areas might struggle with additional financial obligations. Offering reduced fees, tiered dues, or subsidies for these groups would make mandatory membership more equitable.

4. Precedents and Comparisons

- **Legal Professions:**
 - Many state bar associations mandate membership as a condition of practicing law, requiring attorneys to contribute to ethical oversight, public advocacy, and access to justice. Similar arguments could be made for dentists to contribute to oral health equity and professional governance.
- **Medical Professions:**
 - Physicians are not typically required to join the American Medical Association (AMA), but many participate in voluntary programs tied to licensure that ensure public health benefits. These models show how mandates might balance autonomy and professional responsibility.

5. A Balanced Proposal

To address legal and ethical concerns while achieving the desired public health outcomes:



- **Mandate Participation in Approved Entities:**
 - Require membership in any professional organization that meets criteria for public health advocacy, professional oversight, and ethical governance, rather than limiting it to the ADA alone.
- **Focus on Public Health Outcomes:**
 - Tie mandates directly to measurable public health objectives, such as increased access to underserved populations, ethical oversight, or continuing education.
- **Offer Flexibility:**
 - Allow alternative pathways, such as direct public service or financial contributions, for those who object to specific organizations or mandates.

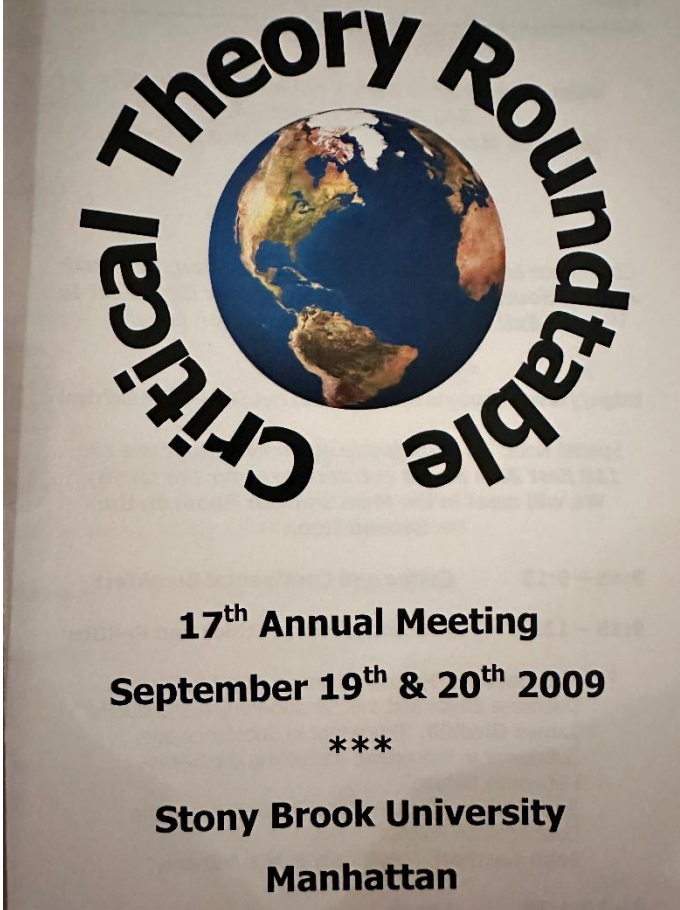
Conclusion

- Mandates are codified into state licensing laws, with mechanisms for flexibility (e.g., allowing service hours to be completed in various settings or providing opt-outs with alternate contributions like financial support to public clinics).
- The ADA develops resources to help dentists meet their obligations, such as continuing education programs, toolkits, and partnerships with community clinics.

Requiring ADA or similar NGO membership as a condition of licensure can be justified from a public welfare and professional responsibility perspective, particularly when aligned with Habermasian principles of mutual obligation and social integration. However, such a mandate must be carefully structured to respect legal protections, ensure fairness, and maintain flexibility. By emphasizing collective responsibility and transparency, this approach could strengthen the profession's ability to meet societal needs while protecting individual autonomy.

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Note: Chat GPT's responses are remarkably on point and provide stimulating matter for further human engagement and reflection.



Between Facts and Norms

For

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Angela Parks

NYC, Sept. 19 / 09

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