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Empty Chairs, Aging Hands: The U.S. Dental Workforce Shortage and the Future of Oral Health Delivery in New York and New Jersey

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Abstract:
Background: *The United States dental workforce faces a structural shortage driven by geographic maldistribution, an aging practitioner base, constrained hygienist and allied-staff pipelines, and a dental school financing model now facing significant federal policy disruption.*
Materials and Methods: *This narrative review synthesizes federal HPSA data, HRSA workforce projections, American Dental Education Association (ADEA) enrollment and debt data, and New York and New Jersey state government and legislative sources describing workforce shortage and mitigation policy.*
Results: *More than 33% of practicing U.S. dentists are aged 55 or older, nearly 57 million Americans live in a dental HPSA, and closing the gap nationwide requires more than 12,500 additional practitioners. Dental school enrollment reached 28,925 students in 2025-26 with an average graduate debt of $297,800, and federal loan policy changes taking effect July 1, 2026 will eliminate the Grad PLUS loan program on which 79% to 85% of dental students currently rely. New York's Office of the State Comptroller has formally documented rural health workforce shortages across 16 counties, while New Jersey's five dental hygiene programs graduate approximately 100 hygienists annually to serve nearly 6,000 dental practices statewide.*
Conclusion: *Interstate licensure compacts, targeted loan redemption, protection of dental student borrowing capacity, and Rural Health Transformation Program-funded workforce pipelines offer concrete pathways to convert newly available federal capital into durable dental workforce capacity in both states.*

Key Word: *Dental Workforce Shortage, Dental Health Professional Shortage Areas, Dental Hygienists, Interstate Licensure Compact, Loan Redemption, Dental Education Debt.*

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I. Introduction

Workforce capacity, not merely insurance coverage or facility infrastructure, increasingly determines whether Americans can obtain timely dental care. The Health Resources and Services Administration (HRSA) projected in its Oral Health Workforce Projections, 2017–2030 report that 206,850 dentists would be needed nationally by 2030[1], while the American Dental Association's Health Policy Institute has separately projected a possible national dentist surplus by 2040[1]. This divergence underscores that the workforce problem is less a simple national numbers deficit than a distributional and financing one, a conclusion reinforced by the fact that dental school enrollment and applicant volume are simultaneously at multi-decade highs even as access in rural and underserved counties continues to deteriorate[2].

This review examines the dental workforce shortage in New York and New Jersey with four objectives: to document the current scale and geographic distribution of the shortage using federal HPSA and state workforce data; to analyze the federal and state financial cost of the shortage; to examine the educational financing pipeline, including dental student debt and imminent federal student loan policy changes, that determines the future supply of dentists willing to practice in underserved settings; and to evaluate current and proposed financing solutions, including licensure reform, loan redemption, and Rural Health Transformation Program-funded workforce initiatives.

II. National Scope of the Shortage

As of 2024, nearly 57 million Americans lived in a region experiencing a shortage of dental health professionals, with approximately 67% of these HPSAs located in rural areas, and eliminating the national dental HPSA backlog would require more than 12,500 additional practitioners[3]. Three structural drivers compound this shortfall: an aging workforce, more than 33% of U.S. dentists are aged 55 or older and approaching retirement[3]; turnover and burnout among practicing dentists[3]; and geographic maldistribution, with dentists preferentially locating in affluent suburban markets[4].

A federal Health and Human Services workforce report notes rising demand for general dentists, periodontists, and dental hygienists alike, and that more than 68 million American adults lack dental insurance, a gap that itself functions as a demand-suppressing and financially destabilizing force on private dental practice viability in underserved markets[5].

Paradoxically, the educational pipeline feeding the profession is currently expanding, not contracting, in raw numbers: during the 2025-26 academic year, 28,925 students were enrolled in U.S. predoctoral dental education programs, up from 27,920 the prior year, and the class of 2025 produced 7,015 graduates, up from 6,872 in 2024[2]. The applicant pool reached its highest level in a decade for the 2025 entering class, with growth beginning to outpace available seats and the applicant-to-enrollee ratio rising accordingly[6]. This enrollment growth demonstrates that the national shortage is not primarily a shortage of interest in the profession, but rather a shortage of graduates choosing, or being financially able, to practice in rural and Medicaid-dependent settings specifically. The composition of this growing pipeline is also shifting: 58.1% of all predoctoral dental students enrolled in 2025-26 were female, and 947 graduates of international dental schools were admitted to U.S. dental schools with advanced standing that year, up from 915 the prior year, indicating that supply-side diversification is occurring even as location-based access outcomes remain stagnant in rural New York and New Jersey counties[2].

The allied workforce shortage compounds the dentist-supply problem independent of dentist headcount. The ADA Health Policy Institute's own practice research bluntly acknowledges that the profession faces a major dental hygienist shortage, a constraint that directly limits total patient throughput even in practices adequately staffed with dentists, since preventive and periodontal maintenance visits, the majority of routine dental appointments, are typically delivered by hygienists rather than dentists[7]. In 2025, the average net income for dentists in private general practice reached $215,320, with average gross billings of $965,660, figures that illustrate the earning potential dental hygienists' labor helps generate and that underscore why hygienist recruitment and retention carries outsized economic significance for practice viability in already financially marginal rural and Medicaid-heavy settings[7].

III. Federal and State Financial Dimensions of the Shortage

A. New York: Documented Rural Shortage and Its Fiscal Signal

New York's shortage is now formally documented at the state fiscal-oversight level. In August 2025, the Office of the New York State Comptroller published a dedicated report, The Doctor Is … Out: Shortages of Health Professionals in Rural Areas, covering county-level primary care, dental, mental health, and maternity-care provider data across 16 rural New York counties[8]. An analysis by the Schuyler Center for Analysis and Advocacy found that more than 2.8 million New Yorkers live in a dental HPSA, and that in 2021, fewer than 30% of Medicaid-enrolled adults in New York saw a dentist[9].

B. New Jersey: A Constrained Training Pipeline

New Jersey's shortage is primarily a pipeline-capacity problem. State legislative testimony accompanying a 2024 Assembly bill establishing New Jersey's participation in an interstate dental and dental hygienist licensure compact noted that the state's five dental hygiene schools produce approximately 100 hygienists per year to serve nearly 6,000 dental practices statewide[10], a ratio legislators explicitly identified as creating delays in preventive dental treatment access.

C. Federal Financing Response: RHTP Workforce Investment

Both states are now deploying federal Rural Health Transformation Program (RHTP) funds toward workforce development. New York's RHTP allocation explicitly designates a 'Rural Roots' workforce initiative as one of four funding pillars within its $212 million first-year award[11]. At the national level, CMS's April 2026 RHTP post-award guidance references funding models for one-year dental-graduate internship programs in specialized fields such as oral and maxillofacial surgery[12].

D. Specialty-Level Distribution: Access to Complex and Surgical Dental Care

The workforce shortage documented above is not confined to general dentistry. Industry workforce analyses project rising demand not only for general dentists but specifically for oral surgeons, endodontists, and orthodontists, specialties whose services, complex extractions, root canal therapy, and orthodontic correction, are frequently unavailable within a reasonable travel distance in HPSA-designated rural counties even where a general dentist is present[1]. Because specialist training requires an additional two to six years beyond the four-year dental degree, and because specialists disproportionately locate in metropolitan referral markets rather than rural counties, the specialty-level shortage compounds, rather than merely mirrors, the general-dentist shortage documented in Sections II and III.A–C: a rural New York or New Jersey resident who does find a local general dentist may still face a multi-hour drive, or a multi-month wait, for a periodontal, endodontic, or oral-surgical referral. This distinction matters directly for the financing solutions proposed in this review, since loan-redemption and rural-conditioned scholarship programs calibrated only to general dentistry will not, by themselves, address the specialty-access gap; a state-level rural specialty-placement incentive, modeled on the same loan-redemption structure but carrying a larger award commensurate with the longer training pathway, would be required to close it.

E. The Educational Pipeline: Enrollment, Debt, and Federal Loan Policy Risk

The financial structure underlying dental education is undergoing significant federal disruption at precisely the moment rural and underserved workforce needs are most acute. The most recently reported average educational debt for indebted dental school graduates of the class of 2025 was $297,800, with dental-school-specific debt averaging $280,300, and 79% of graduates carrying dental school debt, a decline from 81% in 2021[13]. Separate reporting places the comparable average debt figure as high as $312,700 and notes that 85% of dental students currently rely on the Grad PLUS federal loan program to finance the full cost of attendance[14].

The One Big Beautiful Bill Act (OBBBA), signed into law in July 2025, eliminates the Grad PLUS loan program for dental students starting new borrowing on or after July 1, 2026, replacing it with capped federal Direct Unsubsidized Loans limited to $50,000 per year, with interest rates fixed at up to 9.5% and the rate on loans disbursed after July 1, 2026 set at 8.07%[15]. Because dental school cost of attendance frequently exceeds these new federal caps, students will need to rely on private student loans to cover the gap, loans that typically carry higher interest rates, fewer income-driven repayment protections, and no public service loan forgiveness eligibility[15,16]. ADEA's own legislative analysis warns explicitly that this financing disruption could deter students from pursuing careers in rural and underserved areas, precisely the practice settings New York and New Jersey most need to fill, even as 67% of rural areas already lack adequate dental providers[14]. In response, ADEA has prioritized advocacy for the Rural Educational Demonstration Initiative (REDI) Act and the Dental Loan Repayment Assistance Act, alongside protection of Title VII health professions training funding[14], while some members of Congress have proposed more structural alternatives, including a tuition-free dental school model

under the Health Care Workforce Expansion Act[14]. New York itself is part of a modest national expansion in dental school capacity intended to offset these pressures: Yeshiva University's College of Dental Medicine in New York, NY, opened as a new accredited dental school in 2026, joining a small wave of new U.S. dental schools established in the preceding two years[2]. Whether new-school capacity of this kind translates into additional rural or Medicaid-serving practitioners in New York specifically, as opposed to simply adding graduates to already well-served metropolitan markets, depends directly on whether the loan-redemption, scope-of-practice, and rural-conditioned financing solutions proposed in this review are adopted before, rather than after, this new cohort of graduates enters the workforce.

IV. Proposed Solutions

First, New Jersey should expedite full implementation of its pending interstate dental and dental hygienist licensure compact, since the state's own legislative record identifies the constrained hygienist pipeline as a primary access bottleneck. Second, both states should establish or expand loan-redemption programs targeted at dentists and hygienists who commit to multi-year practice in HPSA-designated rural counties, financed jointly through RHTP workforce funds and existing state loan-redemption statutes.

Third, New York should use its Rural Roots RHTP workforce initiative to fund clinical rotation placements specifically in the 16 counties identified in the state Comptroller's 2025 shortage report. Fourth, both states should expand scope-of-practice authority for dental hygienists and community dental health coordinators to perform preventive services under general supervision in designated HPSA counties. Fifth, given that federal RHTP funding is time-limited through federal fiscal year 2030, both state legislatures should enact statutory workforce-incentive funding independent of RHTP.

Sixth, given the OBBBA's elimination of Grad PLUS loans effective July 1, 2026, New York and New Jersey should establish or expand state-funded dental school scholarship and bridge-loan programs specifically conditioned on a multi-year rural or Medicaid-heavy practice commitment, both to offset the reduced federal borrowing capacity and to convert the resulting financing gap into a targeted rural-workforce recruitment tool rather than a uniform barrier to entry. Seventh, both states' dental schools and hospital systems should actively market National Health Service Corps loan repayment, offering up to $50,000 to $100,000 in tax-free debt relief for a two-year HPSA service commitment, directly to graduating seniors as a structured alternative to private lending, particularly given that NHSC rural providers already represent 38% of the program's supported workforce nationally[17]. Eighth, New York and New Jersey dental licensing boards should jointly track, on a recurring public basis, the practice-location choices of graduates from in-state dental schools, including the new Yeshiva University College of Dental Medicine cohort in New York, so that policymakers can measure directly whether rural-conditioned scholarships and loan-redemption incentives are succeeding in redirecting graduates toward HPSA-designated counties rather than assuming success from enrollment growth alone.

V. Discussion

A. Synthesis and Limitations

The evidence reviewed indicates that the dental workforce shortage in New York and New Jersey, while differing in root cause, shares a common financial thread: both states are now channeling newly available federal RHTP dollars toward workforce solutions that were previously unfunded or underfunded at the state level, even as a separate federal policy change, the OBBBA's elimination of Grad PLUS loans, threatens to constrict the very educational pipeline these RHTP investments depend on. This review is limited by the divergence in national-level projections between HRSA's dentist-shortage estimate and the ADA Health Policy Institute's dentist-surplus projection, by the early implementation stage of RHTP-funded workforce initiatives in both states, and by the fact that the OBBBA loan changes had not yet taken effect at the time of writing, meaning their actual effect on dental school enrollment and practice-location choice remains projected rather than observed. The review is further limited by the absence, in the sources reviewed, of any New York- or New Jersey-specific modeling of how many graduating dentists or hygienists the OBBBA financing change is likely to divert away from rural or Medicaid-heavy practice settings, a state-specific data gap that state workforce planning agencies in both states would need to close before the scholarship and bridge-loan solutions proposed here could be sized appropriately.

B. National Interest for the United States

The dental workforce shortage addressed in this review is explicitly recognized as a matter of federal concern: HRSA's National Center for Health Workforce Analysis (NCHWA) maintains a standardized Health Workforce Simulation Model applied uniformly to every state precisely because workforce shortages are treated as a national health security and economic productivity issue rather than a set of unrelated local problems[3,5]. The scale of the federal response, an RHTP workforce pillar embedded in $50 billion of federal investment across all

fifty states, confirms that Congress and CMS regard closing state-level workforce gaps such as those documented in New York and New Jersey as integral to the broader national rural health strategy[11]. At the same time, the OBBBA's Grad PLUS elimination was enacted as national legislation applicable to every dental student in every state, meaning that its interaction with rural workforce policy is, by definition, a national policy question rather than a New York- or New Jersey-specific one: any state-level scholarship or bridge-loan response developed in these two states addresses a financing gap that every other state's dental schools and rural health systems will face simultaneously beginning July 1, 2026.

New York and New Jersey additionally illustrate two structurally distinct workforce failure modes, an aging, geographically maldistributed practitioner base in New York and a bottlenecked educational pipeline in New Jersey, that together represent the two dominant workforce shortage patterns found nationally among U.S. states. Because these two patterns recur across most other states' HRSA-documented shortages, and because the OBBBA financing disruption will recur identically in every state's dental schools, the interstate licensure compact, targeted loan-redemption, and rural-conditioned scholarship solutions validated here are not idiosyncratic to New York and New Jersey but are directly generalizable federal-and-state policy instruments. Strengthening the U.S. dental workforce pipeline in a manner that can scale nationally therefore serves a substantial and demonstrable national interest: it protects the return on the federal government's Rural Health Transformation Program investment, cushions the disruptive effect of a separate, nationally applicable federal student-loan policy change, supports the economic productivity of underserved rural counties that depend on a stable oral health workforce, and advances the explicit federal policy goal, embodied in HRSA's National Health Service Corps and NCHWA simulation infrastructure, of equitably distributing health professionals across the entire United States rather than concentrating them in already well-served markets. The stakes of getting this financing transition right are immediate rather than distant: because the OBBBA's Grad PLUS elimination takes effect for new borrowing on July 1, 2026, and because New York's and New Jersey's RHTP Budget Period 1 funds must be substantially obligated within the same fiscal year, the two federal policy changes are converging on an overlapping timeline, one contracting the supply of affordably financed new dentists just as the other is attempting to expand rural placement capacity. How New York and New Jersey policymakers navigate this narrow, roughly twelve-month window in which both dynamics are simultaneously in motion will offer an early, closely watched indicator of whether federal rural health workforce investment can outpace a concurrent federal contraction in educational financing, a question with direct bearing on every other state managing the same two overlapping federal timelines.

VI. Conclusion

The dental workforce shortage documented in New York and New Jersey reflects two distinct but related structural failures, geographic maldistribution compounded by an aging practitioner base in New York, and a constrained training pipeline in New Jersey, both now receiving dedicated federal RHTP investment even as a separate federal policy change threatens to raise the financial barrier to entry into rural and underserved practice nationwide. Converting available federal capital into durable workforce capacity will require state-level statutory commitments, including licensure reform, loan redemption, and rural-conditioned educational financing, that extend beyond the current federal grant cycle and directly counteract the imminent Grad PLUS financing gap, commitments whose success carries direct relevance to the national effort to close the dental workforce gap across the United States. For New York, this means pairing its Rural Roots RHTP allocation with a state-funded, rural-conditioned scholarship mechanism before the July 2026 Grad PLUS elimination takes full effect; for New Jersey, it means prioritizing swift ratification of its pending interstate hygienist licensure compact alongside expanded NHSC recruitment at its five dental hygiene programs. Neither state can fully resolve its workforce shortage in isolation from the other, given their shared labor market along the Hudson and Delaware River corridors, nor in isolation from the federal financing decisions, RHTP appropriations, NHSC funding levels, and OBBBA-driven loan policy, that will continue to shape the supply and geographic distribution of the U.S. dental workforce for the remainder of this decade.

References

[1]. Becker's Dental Review. Projected Workforce Shortages: Dentists vs. Physicians. DSO + Dental News; 2023.
[2]. American Dental Association. Dental Education; 2026.
[3]. AmeriHealth Caritas. The Dental Workforce Shortage; 2026.
[4]. Tele-Dentistry and Access in Underserved Urban & Rural Communities. ADA Commons; 2026.
[5]. Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. Health Care Workforce: Key Issues, Challenges, and the Path Forward; 2026.
[6]. American Dental Education Association. ADEA Releases New Data on U.S. Dental School Applicants and Enrollees, 2025 Entering Class; 2026.
[7]. American Dental Association Health Policy Institute. Dental Practice Research: Survey of Dental Practice; 2026.

[8]. Office of the New York State Comptroller. The Doctor Is … Out: Shortages of Health Professionals in Rural Areas. Cited in Rural Health Information Hub resource listing; 2025.
[9]. Walsh B. Oral Health Disparities in New York. New York State Association for Rural Health; 2024.
[10]. New Jersey Assembly Republicans. NJ Needs More Dental Providers, Matsikoudis Bill Would Help; 2024.
[11]. COPE Health Solutions. New York State Rural Health Transformation Program; 2026.
[12]. Centers for Medicare & Medicaid Services. Rural Health Transformation Program Post-Award Frequently Asked Questions, April 2026; 2026.
[13]. EducationData.org. Average Dental School Debt [2026]: Student Loan Statistics; 2026.
[14]. Legis1. ADEA Lobbies Congress on Dental Education Funding, Student Debt; 2025.
[15]. American Dental Education Association. Important Update on Borrowing for Dental School; 2026.
[16]. American Student Dental Association. Dental Student Debt; 2026.
[17]. HRSA National Health Service Corps. NHSC Rural Community Loan Repayment Program; 2026.