Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

January 5, 2026

Joint Standing Committee on Education & Cultural Affairs
c/o Chairs Senator Joe Rafferty and Representative Kelly Murphy
100 State House Station
Augusta, ME 04333

Dear Senator Rafferty, Representative Murphy, and distinguished members of the Legislature's Joint Standing Committee on Education & Cultural Affairs,

On behalf of the state we proudly serve, the University of Maine System (UMS) is grateful for the leadership and vision of the 131st Legislature and Gov. Janet Mills in directing us to explore the feasibility of establishing a public allopathic medical school in Penobscot County.

Through a transparent, competitive process, UMS selected Tripp Umbach, the nation's leading medical education consultant, to conduct the study, which included interviews with more than 60 Maine healthcare, higher education, and life science research leaders; a comprehensive statewide stakeholder survey; and detailed financial modeling. With this cover letter, UMS is submitting their recently completed independent analysis, which affirms both the urgency of Maine's physician workforce challenges and the unique strengths that position the University of Maine — in partnership with other System universities — to address them in the future if properly resourced.

Tripp Umbach's report makes clear that Maine faces a growing and unsustainable shortage of physicians, particularly in primary care and rural communities. The oldest population in the nation, an aging physician workforce, and limited clinical and residency training capacity are converging in ways that further threaten access to care across the state. Their analysis also notes that on a per capita basis, Maine produces only one-third the national average rate of M.D. school applicants and that the overwhelming majority of graduates from the two private medical education programs already here ultimately leave the state to practice.

As Maine's only R1 research institution and the flagship of a statewide public university system, UMaine already prepares the state's health workforce through high-quality nursing and other allied health degree and certificate programs, world-class biomedical science and engineering, and research partnerships that span every healthcare provider and community in Maine. The study highlights the university's expanding strengths: nationally competitive life sciences research; deepening clinical and research partnerships with MaineHealth, Northern Light Health, VA Maine Healthcare System, The Jackson Laboratory, and community providers; and growing innovation and capacity in rural training, simulation, and health professions education. Tripp Umbach and the many stakeholders they interviewed to inform this report conclude that these assets position UMaine as the only logical institution to establish a future public medical school and as a critical partner in building the physician workforce Maine needs. Recent federal policy changes that limit how much students can borrow for their graduate and professional education only heighten the need for an affordable high-quality public medical school option.

At the same time, the study is clear that establishing a public M.D.-granting medical school is not currently financially feasible. The scale of investment required — hundreds of millions in start-up costs and tens of millions in sustained operating support that must be supplemental to current and ongoing public, private, and philanthropic funding for the System — combined with limited residency capacity and the financial constraints facing Maine's healthcare systems, makes such an undertaking imprudent at this time. Importantly, Tripp Umbach's conclusion reflects fiscal reality, not a lack of vision, need, or opportunity. The path forward is not whether Maine should pursue a public medical school, but when and under what conditions it can be done responsibly and sustainably.

As a result, the report recommends a deliberate, phased approach: strengthening undergraduate and graduate medical education pipelines and partnerships between current programs and UMaine; expanding residency training and rural clinical capacity; investing in research, nursing, and allied health programs; and building the physical infrastructure necessary for long-term success, including a proposed cutting-edge health sciences complex at the flagship for which significant federal funding requested by U.S. Sen. Susan Collins is currently pending. These are areas where UMS/UMaine is already delivering measurable results and where growing State, federal, and other support will yield both near-term and lasting returns for the health and prosperity of all of Maine.

With strategic, sustained investment and a clear champion, Maine can "grow its own" physician workforce and position itself for the successful launch of an innovative public medical school at UMaine in the future, which would require approval by the UMS Board of Trustees as part of an inclusive public process. We are ready and eager to lead that work — convening partners, training the next generation of healthcare professionals, advancing research, and ensuring that when the time is right and with your support, Maine is prepared to take this next step.

We appreciate the Legislature's continued commitment to Maine's public universities, and we look forward to working with you and other stakeholders to strengthen the state's healthcare workforce and ensure access to the highest-quality care for generations to come. We welcome the invitation to meet with you and any other interested parties to discuss the next steps we can take together to advance these exciting opportunities and Maine.

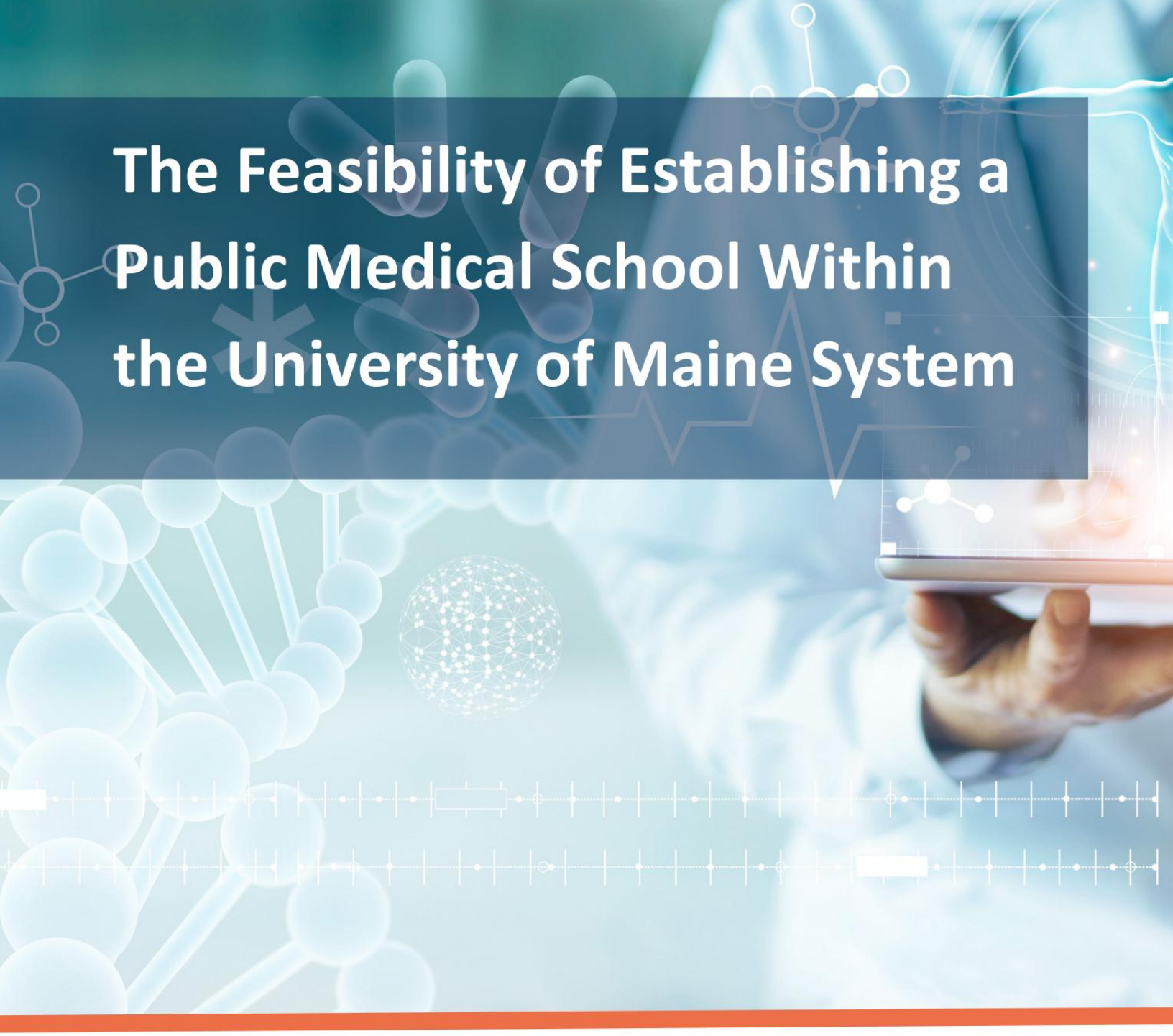
Sincerely,

Dannel P. Malloy
Chancellor, University of Maine System

Joan Ferrini-Mundy
President, University of Maine
Vice Chancellor for Research & Innovation, University of Maine System

CC

Senator Henry Ingwersen
Representative Michele Meyer
Joint Standing Committee on Health and Human Services



The Feasibility of Establishing a Public Medical School Within the University of Maine System

Addressing the Need for Primary Care Physicians in Rural Maine through Medical Education Expansion

December 2025

Maine's Public Universities

UNIVERSITY OF MAINE SYSTEM

Tripp Umbach

Turning Ideas Into Action

15 Estabrooke Drive
Orono, ME 04469

Table of Contents

Executive Summary

In response to a critical shortage of physicians in rural Maine and in recognition of the University of Maine System's (UMS) leadership in healthcare workforce development and research, in 2023, the Maine Legislature provided funding to the UMS to study the feasibility of establishing a public allopathic medical school in Penobscot County, likely associated with the University of Maine (UMaine). Following a competitive request for proposals, UMS engaged Tripp Umbach in fall 2024 to complete the following independent feasibility study. The study focused specifically on evaluating the potential development of an M.D.-granting medical school at UMaine and its alignment with Maine's healthcare needs.

To inform this analysis, Tripp Umbach conducted extensive research, a statewide environmental scan, and financial modeling, and introduced discussion about alternative approaches to medical education that might be worthy of consideration in Maine. The study was rooted in interviews with key stakeholders across Maine's healthcare, higher education, policy, and community sectors, as well as a comprehensive online survey. These conversations and survey research highlighted the significant and ongoing efforts in Maine to strengthen the physician workforce, address primary care shortages, particularly in rural areas, and improve overall access to and quality of care. The feasibility study builds on this context, providing objective findings and recommendations informed by Maine's existing medical education and research landscape and future workforce demands.

Tripp Umbach believes that UMaine is well-positioned to strengthen its statewide health and biomedical infrastructure over the next five years, positioning the state for the potential addition of an M.D. program in the future. UMS and UMaine have many strengths that the State and private organizations can leverage to address a critical physician shortage, particularly in rural Maine. UMS is the state's most significant driver of educational attainment and economic development. Over the past decade, the System has awarded nearly 59,000 degrees and certificates, of which 12% pertain to the health professions. In response to Maine employer and community needs, over the past five years, UMS has been highly focused on expanding programs and research that grow the size and skill of the state's healthcare workforce and improve healthcare access and outcomes. Specifically,

- UMS delivers Maine's largest healthcare workforce pipelines in nursing, allied health, behavioral health, public health, biomedicine, and life sciences.
- UMaine is the only R1 research university in Maine and accounts for more than 80% of the state's federal R&D expenditures. A significant portion of UMaine's research is in health and medicine, and the university offers a unique statewide doctoral program in biomedical science and engineering.
- The System's statewide footprint (including nursing programs and simulation learning in rural regions like Ellsworth, Farmington, Fort Kent, Machias, and Presque Isle, etc.) and strong local partnerships, including with healthcare organizations, make it uniquely positioned to expand its distributed rural training network to include a future medicine program.

- UMaine's proposed Health Sciences Complex, for which initial federal funding is pending, presents a transformative opportunity and strategic platform for future medical education that complements nursing and allied health training and research.
- As part of its goal to double the number of nursing graduates, the University of Maine System has secured $13 million in Congressionally Directed Spending, requested by U.S. Senators Susan Collins, chair of the Senate Appropriations Committee, and Angus King, to expand enrollment and enhance nursing education across the System. Approximately $10 million has been invested to strengthen nursing simulation learning, including through a new UMA Capital Center for Nursing and Cybersecurity Workforce Center in Augusta. Funds will also be used to launch northern New England's first nursing Ph.D. program at UMaine.

Physician Workforce Assessment

This independent report provides a comprehensive assessment of Maine's physician workforce and highlights the significant challenges the state faces in meeting current and future healthcare needs. Maine's physician workforce is aging at one of the fastest rates in the nation, and population trends combined with high demand for primary care, behavioral health, and rural health services are intensifying pressure on an already strained system. The supply of in-state-trained physicians remains limited, and without sufficient residency positions to retain graduates, Maine continues to rely heavily on attracting physicians from outside the state.

Data indicate a need for a public medical school to provide an accessible pathway for Maine students to pursue high-quality, high-value medical education and then be retained to practice in the state. According to survey respondents, there is broad support for a new public medical school, with strong majorities in Maine answering "Yes" to the concept, averaging more than 74%. Further, many respondents would like to see the medical school at UMaine's main campus in Orono. Stakeholders agree that UMaine should lead this initiative. At UMaine, the Graduate School of Biomedical Science and Engineering (GSBSE) is a multi-institutional research consortium whose faculty members are internationally respected, well-funded researchers. It has research funding and output comparable to those of other new public medical schools. In addition, UMS has a robust state-wide health science education and clinical training platform for nursing and allied health professions. Survey respondents overwhelmingly perceive UMS as the leader in addressing healthcare provider shortages in key areas of need, such as nursing, behavioral health, and pathways for physician assistants and pharmacists, and as the best positioned to offer a public M.D. degree.

The feasibility process concluded that while Maine needs more physicians and establishing a new M.D.-granting medical school at UMaine is necessary to ensure a sustainable pipeline of physicians committed to practicing in the state; however, a public medical school is not currently the most financially sustainable strategy to address these shortages.

Tripp Umbach's comprehensive risk assessment indicates that under current conditions, developing a public M.D. program in Maine presents significant financial uncertainties. At the same time, a public M.D. school would impose substantial fixed costs on taxpayers, increase dependence on financially weak clinical partners, and expose the program to research-funding uncertainty, leaving it highly sensitive to

enrollment fluctuations and political budget cycles. However, in the long term, a public M.D. school would ultimately improve healthcare access and outcomes, resulting in public health savings and increased economic productivity.

These risks are compounded by national challenges in medical education, including residency bottlenecks and rising competition among additional well-funded M.D. programs, which could undermine Maine's return on investment. Recent federal funding trends and new graduate and professional student borrowing caps create even greater difficulties in starting a new medical school and in securing applicants without significant supplemental State resources to reduce tuition costs.

Importantly, a public M.D. school must receive significant public investment not only in medical education but also in residency training and other rural-physician workforce development strategies. These strategies include expanding residency slots, funding rural incentive programs, and strengthening primary care and behavioral health pipelines, especially given a 10-year lag between the start of planning and the first graduate completing residency and entering practice. Due to expected physician shortages, especially in rural areas and primary care, Tripp Umbach recommends that the state of Maine, in partnership with UMS, reassess the feasibility of a public medical school within 3 years. Until this time, the State of Maine, in collaboration with UMS, should work with existing medical schools and hospitals to expand UME and GME until a public medical school becomes financially viable.

Taken together, these investments underscore Tripp Umbach's assessment that the State of Maine and UMS are not in a position to launch a public M.D. program at this time, despite the long-term benefits it would realize. Finally, the findings highlight the importance of strengthening and expanding existing medical education, workforce, and research pathways, primarily through the UMS, to enable the future establishment of a medical school.

Over the past 30 years, every newly established public medical school in the United States has been propelled by a clear champion: a university system determined to expand mission, a health system seeking to strengthen its workforce pipeline, a philanthropic foundation investing in community well-being, or an elected leader prioritizing long-term economic and population health. Tripp Umbach's analysis shows unequivocally that new medical schools succeed only when a driving individual or entity assumes ownership of the vision, gathers other partners to achieve political and financial support, and carries the initiative across the finish line. While the University of Maine System remains a critical and committed partner in addressing the state's healthcare workforce shortages, it is not, at this time, positioned to independently lead, fund, and operate a new public M.D. program given its other responsibilities as the state's largest educational and research enterprise, and limited resources.

Looking ahead, other champions may indeed emerge, whether from State government, the healthcare sector, private philanthropy, or a collaborative coalition, to make a public school in Maine a reality. When that moment comes, UMS/UMaine will be an essential partner. At present, a rural-serving public medical school affiliated with UMaine, located on the Orono campus or elsewhere in Penobscot County, is not feasible.

Innovative Models

Workforce shortages are apparent in primary and specialty care, with more than 220 open physician positions statewide.[1] Therefore, Tripp Umbach believes that Maine can pursue several innovative, lower-risk models to grow the number of Maine students who attend medical school, complete residency, and ultimately practice in the state, without immediately building a costly public M.D. school.

Strategies could include UMS funding to establish a pipeline program that enables UMaine students and other public university students to matriculate directly into the University of New England College of Osteopathic Medicine (UNE COM). The feasibility and cost of the program are outside the parameters of this study but could be evaluated in the future. UMS can also facilitate, through current clinical training partnerships statewide, the aggressive expansion of in-state residency programs and rural training tracks, layering robust scholarships, loan forgiveness, and service commitment programs tied to in-state training and practice.

A consideration is contacting nearby public medical schools to purchase seats in their classes. For example, the State of Idaho purchases seats for Idaho students from the University of Washington and the University of Utah. Together, these options form a flexible, distributed "Maine Medical Education Network" that grows the pipeline, maximizes retention, and aligns with the state's fiscal reality.

Maine can expand the existing Maine Track[2] pipeline by adding more slots, giving stronger preference to UMS graduates, and deepening integration with rural sites in Penobscot County in partnership with UMaine. Additionally, the State can invite UNE COM to create a "Maine Track 2" to expand the current program. Idaho currently has two partners, the University of Washington and the University of Utah, which train approximately 200 Idaho students over four years. Delaware's DIMER program has approximately 40 students from two medical schools, Jefferson University's Sidney Kimmel Medical College (Jefferson SKMC) and Philadelphia College of Osteopathic Medicine (PCOM).

Table 1: Options Comparison – Pros and Cons

Option	Description	Key Pros	Key Cons	Assessment for Maine
Expand the current Tufts University School of Medicine	Increase Maine Track class size, prioritize Maine residents, and add more	• Fastest way to scale M.D. seats linked to Maine hospitals • Builds on proven infrastructure and brand	• Continued dependence on out-of-state private partner • Seats still competitive for non-Maine students	***Strong Opportunity*** Best near-term lever to grow Maine-linked M.D. capacity with

[1] Practice Match

[2] The Maine Track is a community-focused medical education program run through a partnership between Tufts University School of Medicine (TUSM) and MaineHealth Maine Medical Center (MHMMC) designed to address Maine's ongoing physician shortage by training medical students within the State and encouraging them to practice there after residency. To support this, Maine Track offers substantial scholarship support (commonly $25,000 per year for each of 20 students per class), making medical education more affordable and less debt-driven — a factor shown to influence specialty choice and practice location.

Option	Description	Key Pros	Key Cons	Assessment for Maine
Maine Track.	rural clerkship and longitudinal sites.	● Strong alignment with Maine Med and existing premed pipelines	● Limited direct control over curriculum/ governance	manageable risk and cost.
Add a second Maine Track partner.	Invite UNE COM to create a parallel Maine-focused track (e.g., rotations and partial pre-clinical presence in Maine).	● Diversifies partners and increases total seats ● Increases capacity for high-quality Maine clinical sites ● Spreads risk across institutions ● Could negotiate stronger guarantees for Maine residents	● Requires new affiliation agreements and start-up work ● Coordination challenges between multiple schools and clinical sites ● Risk of dilution if not carefully governed	***Strong opportunity*** UMS and UNE COM to advocate for Maine-first admissions and long-term clinical investments.
Strengthen UNE COM as a Maine pipeline.	Support UNE COM to reserve more seats for Maine residents, develop rural primary care tracks, and align with state incentives.	● Builds on in-state D.O. infrastructure ● Faster and cheaper than creating a new M.D. school ● D.O. graduates are well-suited for primary care and rural practice ● High potential for long-term retention if coupled with Graduate Medical Education ● (GME)[3]	● Perception issues among some stakeholders preferring M.D. ● Requires parallel GME expansion to retain graduates	***Important component*** A pragmatic, high-yield way to grow Maine-trained physicians, especially for rural and primary care.
Regional public consortium model	Partner with another state's public medical school (e.g., a "Northern New England" consortium)	● Offers public-school tuition and brand advantages without full start-up costs ● Shares risk and governance across states	● Complex interstate governance and funding formulas ● Requires a long negotiation timeline ● May still leave Maine with less control than desired	***Consideration*** Worth exploring conceptually, but complex; should not delay more

[3] Graduate medical education refers to the residency and fellowship training that physicians complete after medical school, which prepares them for independent practice and is a critical factor influencing where they eventually work.

Option	Description	Key Pros	Key Cons	Assessment for Maine
	to guarantee seats for Maine students and host clinical campuses in Maine.	● Could secure dedicated Maine resident slots		immediate, scalable steps.

Tripp Umbach believes that Maine, in partnership with UMS, should pursue an independent, public, community-based medical school model to train physicians in real-world settings where they are most needed, rather than relying solely on large academic medical centers. This approach emphasizes partnerships with a distributed network of hospitals, community health centers, FQHCs, and rural clinics to provide diverse clinical training experiences. Students learn in small, team-oriented environments that prioritize primary care, population health, and service to underserved communities. By embedding learners directly in community settings, the model fosters strong connections between medical education and local health needs, ensuring that training is both relevant and responsive to them. Additionally, the model supports interprofessional collaboration by integrating medical students with nursing, pharmacy, public health, and allied health trainees, preparing graduates to work in coordinated care teams. Nationally, community-based medical schools not only expand access to medical education but also improve physician retention in the regions where they are trained, strengthen healthcare systems, and contribute to local economic and workforce development. Importantly, a new public medical school must be a high priority for the state and include a broad coalition of public and private organizations, with UMS playing an implementation role but not being responsible for raising public-private funds.

A public M.D. program can provide a clear, strategic pathway for the University of Maine to address the state's most pressing healthcare and economic challenges. As Maine's only R1 research institution, UMaine is uniquely positioned to lead this effort by leveraging its established strengths in pre-pharmacy, nursing, and health sciences and by building a mission-driven, community-based model of medical education. An M.D. school not only carries the highest level of national and international recognition, but it also maximizes opportunities for State investment, federal research funding, and philanthropic support. Most importantly, it provides a sustainable solution to Maine's physician shortages, ensuring that more locally trained physicians remain in the state to practice, as 68.0% of students who complete medical school and residencies in the same state stay to practice.[4]

[4] Association of American Medical Colleges

Conclusion

This feasibility study concludes that establishing a new, standalone public medical school in Maine is not prudent at this time. This determination reflects current structural realities, including limitations in clinical training capacity, an insufficient scale of graduate medical education, significant capital and operating requirements, and the financial and accreditation risks inherent in launching a high-quality, sustainable medical school. Importantly, this conclusion should not be interpreted as a lack of need or ambition. On the contrary, Maine's physician workforce challenges are real, urgent, and well documented, and they are solvable with the right statewide strategy.

The findings of this study point to a broader, more constructive framing of the issue, that medical education development in Maine is not a choice between developing a new public medical school and doing nothing. Instead, it represents a continuum of strategic options that can deliver near-term workforce gains while strengthening the foundation for future consideration of a public medical school. These options include deeper and more structured partnerships with existing medical education providers, expanded in-state pathways for Maine-connected students, and a more distributed, community-based medical education network that leverages hospitals and health systems across the state as teaching partners. Each approach carries different cost profiles, timelines, and outcomes, but all offer meaningful opportunities to increase the number of physicians who train and ultimately practice in Maine.

Central to this path forward is recognition that Maine's physician shortage is a statewide challenge that cannot be solved by the University of Maine System or any single institution acting alone. Sustainable progress will require coordinated engagement by the Legislature, State agencies, healthcare systems, academic partners, and philanthropic organizations. Targeted public investment in expanding graduate medical education, strengthening rural training capacity, recruiting faculty, and supporting students, paired with shared governance and risk-sharing frameworks, will be essential to improving retention outcomes and stabilizing Maine's physician pipeline. Without this collective commitment, Maine will remain at a structural disadvantage in competing for physicians trained elsewhere.

At the same time, the University of Maine System plays a critical role in positioning the state for future success. By strengthening pre-medical pipelines, expanding research and clinical partnerships, recruiting mission-aligned faculty, and serving as a convener for statewide collaboration, UMS can help build the academic and operational infrastructure necessary for more ambitious medical education initiatives in the future. Progress in these areas would materially improve the conditions under which the concept of a public medical school could be responsibly revisited.

Taken together, this study should be viewed not as an endpoint, but as a strategic roadmap. Maine has the opportunity to move forward, deliberately making targeted investments that deliver immediate workforce benefits while reducing long-term risk. With sustained leadership, shared accountability, and coordinated action, the state can expand medical education pathways, improve physician retention, and lay the groundwork for a future public medical school that is feasible, sustainable, and transformative for Maine's communities.

Consultant Recommendations

Tripp Umbach recommends that UMS invest time and resources to create an environment that could make a public M.D. school viable in the future; however, this report does not advise our client to proceed with a public M.D. school at this time. This recommendation is based on extensive research, financial modeling, workforce analysis, and stakeholder engagement. Tripp Umbach developed a set of recommendations grounded in the feasibility study's findings, especially the realities of Maine's healthcare landscape, financial capacity, and the state's long-term workforce needs. At the same time, Maine faces significant physician workforce challenges, including an aging physician workforce, limited per-capita residency capacity, constrained clinical training sites, and limited financial resources. Short-term pathways to expand medical education and improve physician retention must be pursued immediately to ensure that a future public M.D. program could be established at UMaine under the right conditions and be as successful as possible. By having UMS develop a statewide pathway for Mainers to enter medical school at a higher rate and, in partnership with hospitals and health systems, expand residency training capacity, the stage can be set for a feasible medical school in the future.

As the largest producer of Maine's healthcare workforce, UMS is already a central driver of the state's clinical training pipeline; thus, UMS is uniquely positioned to assist and replenish an aging physician workforce, expand training opportunities for students who are more likely to remain and practice in Maine, and ensure long-term access to care across the state's rural and underserved communities.

The following recommendations are intended to support strategic, sustainable action that aligns with Maine's resources, healthcare environment, and goals for access, quality, and workforce stability, positioning the state for a future M.D. program at UMaine.

Recommendation 1. Maine must expand its medical education pipeline at both the undergraduate and graduate levels. The State of Maine, in partnership with UMS, should collaborate with existing medical schools and hospitals to expand UME and GME until a public medical school becomes financially viable. This underscores the importance of developing and supporting pathways that encourage more Maine students to pursue medicine.

Meeting the physician workforce needs of a state or region requires a fully integrated strategy that aligns undergraduate medical education (UME) with graduate medical education. Neither medical schools nor residency programs alone can produce enough physicians to meet long-term demand. UME expands opportunity, ensuring that qualified local students can enter medical school close to home, while GME determines where those students ultimately train, specialize, and practice. Together they form a single pipeline. When aligned, this pipeline keeps more physicians in-state, strengthens local health systems, and builds a sustainable workforce capable of serving rural and underserved communities.

National workforce data show that residency training location is the strongest predictor of physicians' practice locations. According to the Association of American Medical Colleges (AAMC), 58.6% of physicians who completed residency between 2014 and 2023 practice in the same state where they

trained.[5] Yet states cannot simply expand residency programs without strengthening medical school programs. Students who attend medical school and complete residency in the same state are dramatically more likely to stay. Multiple studies have shown that 70–80% of physicians who complete both UME and GME in the same state establish long-term practice there, compared with roughly half of those who complete residency in-state and far fewer who attend medical school in-state but complete GME elsewhere.[6] This "stacked retention effect" forms the foundation of every successful grow-your-own physician strategy in the United States. Specifically, 74% of Maine Medical Center's Maine Track students who completed their residency in Maine are practicing in Maine.[7]

The most effective strategy is to link UME and GME intentionally through coordinated efforts. States that design integrated pathways, admitting in-state students, placing them in regional clinical rotations, and matching them into in-state residency programs, consistently see higher retention, better geographic distribution, and more substantial alignment with workforce needs.

Portland already hosts UNE's large osteopathic medical school and Maine Medical Center's partnership with Tufts University SOM through the Maine Track. While these programs have historically produced roughly 30 physicians annually who remain in Maine to practice, a future public medical school will help expand the needed scale to address Maine's growing workforce challenge. Currently, most graduates leave the state for residency, reducing the likelihood that they return to practice in Maine. Therefore, Tripp Umbach recommends that the state of Maine partner with UMS, existing medical schools, and hospitals to grow UME and GME until a public school of medicine becomes financially viable. A long-term relationship between the Georgia and the University of Georgia System has measurably increased undergraduate and graduate medical education outcomes over the past 25 years. This initiative includes public and private medical schools that receive State support. The Georgia Medical Education Development Board serves as the state's coordinating entity for medical education strategy, workforce alignment, and oversight of public investment across both public and private medical schools. The Board is designed to ensure that Georgia's UME and GME capacity grows in a coordinated, data-driven manner aligned with statewide physician workforce needs. The Board provides a centralized forum to align medical school expansion, residency development, and clinical training capacity with Georgia's priority shortage areas, including primary care, rural health, behavioral health, and high-need specialties. It supports both public and private institutions by coordinating state funding mechanisms, facilitating partnerships with health systems, and reducing duplication across regions.[8]

Based on the most recent AAMC data for the 2024–25 enrollment year, approximately 75 Maine students applied to U.S. M.D.-granting medical schools, and 34 ultimately matriculated, yielding an acceptance rate of about 45%.[9] Over the last 5 years, the average has been 96 applicants, of whom 38 were accepted into an M.D. program.[10] These figures are close to the national acceptance rate of roughly 44% across all states, indicating that qualified applicants from Maine are admitted to medical

[5] Association of American Medical Collages
[6] National Library of Medicine
[7] MaineHealth
[8] Georgia Board of Heath Care Workforce
[9] Association of American Medical Colleges
[10] Association of American Medical Colleges

school at rates comparable to those of their peers nationwide; however, the number applying to medical school is far below the US average. On a per capita basis, Maine produces only one-third the national rate of M.D. applicants. To be on par with the U.S. average, Maine would need about 220 M.D. applicants each year, meaning the physician pipeline would need to roughly triple to reach the national norm.[11]

Financial Constraints

While adding a public medical school in the future would help alleviate the growing need for physicians, Tripp Umbach's pro forma demonstrates that establishing a new M.D.-granting medical school similar in size and scale to the most recent M.D. granting public medical schools would require substantial and sustained financial investment from the state and UMS, well beyond the scale typically feasible for a rural state with a small population and economic constraints. Refer to Appendix G for the detailed pro forma.

Additionally, the fiscal and operational demands of launching a Liaison Committee on Medical Education (LCME) accredited M.D. school are also substantial and require long-term financial commitments. New public medical schools require hundreds of millions of dollars in capital and operating investments over their first decade to build basic science facilities, research infrastructure, student services, and a sufficiently large and stable clinical faculty base. Tripp Umbach's analysis for the UMaine campus in Orono indicates the need for significant capital investment to meet LCME standards. Tripp Umbach's financial model (in Appendix G) calls for a minimum investment of $125 million.

Those investments must be layered on top of a clinical environment where Maine hospitals already face thin margins, staffing shortages, and rising labor costs. Analyses from Maine policy organizations warn that the state already "has too few doctors" and that the shortage is expected to worsen as the population ages, putting additional financial pressure on hospitals and clinics.[12] Requiring these same institutions to absorb large student cohorts, provide extensive clerkship capacity, and support new academic departments could further strain them, particularly when many are still working to stabilize finances and maintain essential services in rural areas. One national solution is to develop a program to directly fund medical education expansion in hospitals, similar to those in Texas and Indiana.[13,14]

Additionally, Maine's relatively small number of M.D. applicants and matriculants presents a challenge for supporting a financially sustainable public medical school. While Maine could currently secure approximately 40 Mainers annually, to be economically viable and to ensure physician workforce development statewide, an M.D. school typically requires 90 students per class. This underscores the importance of expanding and supporting pathways that encourage more Maine students to pursue medicine.

Tripp Umbach's pro forma demonstrates that establishing a new M.D.-granting medical school within UMS would require substantial and sustained financial investment from the state, well beyond the scale

[11] Association of American Medical Colleges
[12] Maine Policy Institute
[13] Texas Higher Education Board
[14] Indiana Commissionn for Higher Eduction

typically feasible for a rural state with a small population and strained hospital systems. The model prepared by Tripp Umbach indicates that a new public medical school would require more than $250 million in start-up costs, tens of millions in recurring expenses, and substantial state subsidies, all of which must be in addition to the System's existing state operating and research appropriations. (See Appendix G) Therefore, from both fiscal and training perspectives, establishing a new M.D.-granting school at UMaine is not the most prudent or effective strategy for the state.

Recommendation 2: Tripp Umbach recommends expanding GME development through a consortium of hospitals and clinical institutions across Maine, particularly in rural areas. Additionally, UMaine can take a leadership role in aligning Maine's rural clinical training and residency expansion efforts. Working with MaineHealth, Northern Light, VA Maine, and independent hospitals, UMaine could support the development of new Rural Training Tracks (RTTs**)** in family medicine, psychiatry, general surgery, internal medicine, and pediatrics. Through data analytics, workforce forecasting, and policy research, the university can help the state strategically grow GME capacity.

Expanding GME in Maine will have a transformative impact on the state's healthcare workforce by enabling graduates from multiple medical schools to complete their residency and specialty training in-state, thereby strengthening the pipeline needed to alleviate physician shortages, especially in rural and underserved communities. According to the AAMC, Maine currently supports only 290 Medicare-supported GME slots and a total of 333 residents in training, with just 18.4% of physicians who trained in Maine remaining to practice.[15] To reach the national average, Maine would need to increase the number of ACGME residents and fellows statewide to 660. This represents an increase of about 327 training positions, nearly doubling the current GME footprint.[16] Therefore, Maine has few residency training programs and few physicians who remain in Maine after completing residency training.

To address these deficits, the State has begun to seed initiatives: the State awarded $950,000 to a collaborative among MaineHealth, Northern Light Health, Central Maine Healthcare, and the Maine-Dartmouth Family Medicine Residency to develop rural training sites and a shared rural GME curriculum.[17] Building on that foundation, a consortium model, anchored by an extensive system like MaineHealth and including multiple community hospitals across northern, western, and eastern Maine, offers a promising strategy. Under this model, each hospital contributes clinical training capacity and community-based rotations, while the consortium shares governance, curriculum, accreditation support, and faculty infrastructure.

Coordinated efforts to build such initiatives could benefit from involving UMS participation, to allow Maine to expand GME capacity more rapidly than through isolated efforts, distribute training across geographically diverse sites, infuse a research component, and increase the likelihood that trainees stay and practice where they trained. In essence, the consortium approach aligns training with community needs, optimizes resource use, and strengthens in-state physician retention in the locations where they

[15] Association of American Medical Colleges
[16] Association of American Medical Collages
[17] State of Maine; Office of the Governor

are most needed. Experience nationwide indicates that state investments in GME expansion have the most significant impact on physician workforce retention.

Table 2: Graduate Medical Education Summary

Maine	
Medicare-Supported GME Slots in Maine	290
Total Residents in Training	333
Projected Primary Care Shortage by 2030	120 physicians
State Investment (Rural GME Expansion)	$950,000
Consortium Partners	MaineHealth, Northern Light, Central Maine Medical Center, Maine-Dartmouth

Source: AAMC and State of Maine; Office of the Governor

The state's exploration of a new public M.D. program at UMaine comes at a time of real and growing physician shortages. Analysis from the Cicero Institute reports that Maine is projected to be short of 120 primary care providers by 2030 and that the state offers only 35 primary care residency slots per year**,** with 45.2% of those residents ultimately practicing out of state.[18] The aging physician workforce is also a concern, as Maine has approximately 1,750 physicians aged 60 or older and nearly 2,000 physicians aged 55 or older who are at or nearing retirement. In many rural counties, more than half of all practicing physicians fall into this near-retirement category, signaling an impending statewide access crisis.

Maine leaders and analysts, along with Tripp Umbach's survey results, underscored the fundamental importance of growing residency capacity and ensuring that graduates from these programs remain in Maine to practice. The president of the University of New England has publicly stated that "Maine does not have a shortage of medical students; it has a shortage of clinical training opportunities and residencies," in the context of the University of New England's College of Medicine's (UNE COM) efforts to expand in-state rotation and residency options.[19] However, increasing the number of Maine students who apply to medical school from 75 to 200 annually will measurably increase the percentage of Maine students at UNE COM and result in more Maine students remaining in the state for training and practice.

Maine is already investing in solutions that directly address GME and workforce retention problems. Through initiatives under the Maine Jobs & Recovery Plan, Governor Janet Mills announced a $2.25 million investment to strengthen the healthcare workforce in rural communities by expanding training and career opportunities for doctors and other health professionals, explicitly including rural GME expansion.[20] Legislative testimony on measures such as LD 129[21] and subsequent workforce bills has consistently highlighted the need to use state and federal funds to expand clinical training sites and residencies, rather than simply adding more medical school seats. Sentiment from the Maine Hospital

[18] Cicero Institute
[19] Mainebiz
[20] State of Maine; Office of the Governor
[21] Resolves 2023, ch.273 (LD 129)

Association, Northern Light Health, and others emphasized the importance of also establishing a public medical school.

These policy directions recognize what the national literature also shows: Clinical training and residency distribution, especially in rural areas, are the lever that changes where physicians practice, not the number of M.D. diplomas alone.[22]

Given this landscape, moving forward with an M.D.-granting medical school at this time would involve significant financial risks while doing relatively little to address the fundamental constraint of limited GME. A more strategic approach is recommended to deepen partnerships with organizations expanding and regionalizing GME capacity, strengthening rural training tracks, enhancing loan repayment and retention incentives, and strengthening partnerships with existing medical schools that already send students to Maine for clinical training. By focusing on residency growth and retention, the state can more effectively address physician shortages, protect the financial health of Maine's hospitals, and, in the short term, ensure that scarce public dollars deliver the most significant possible impact on access to care.

Therefore, UMS can become the central driver of a system that identifies tomorrow's physicians, prepares them academically, connects them to the right medical school pathway, and places them in clinical rotations and GME opportunities within Maine's most underserved regions. Additionally, UMaine can take a leadership role in aligning Maine's rural clinical training and residency expansion efforts. Working with MaineHealth, Northern Light, VA Maine, and independent hospitals, UMaine could support the development of new Rural Training Tracks (RTTs**)** in family medicine, psychiatry, general surgery, internal medicine, and pediatrics. Through data analytics, workforce forecasting, and policy research, the university can help the state strategically grow GME capacity. UMaine's convening role in a future initiative can help integrate pre-med advising, medical school partnerships, rural clerkships, and residencies into a single statewide pipeline, one designed not only to train physicians, but to retain them.

Recommendation 3: Strengthen retention incentives for physician development in Maine.

For Maine to achieve meaningful, long-term improvements in its physician workforce, the state must prioritize strategies that cultivate local talent and create strong incentives for graduates to remain in the state. Maine has several established initiatives aimed at strengthening healthcare pipeline programs, including Maine AHEC, Northern Light Health pathway programs, MaineHealth workforce development efforts, and UMaine's Health Professions advising programs, all of which provide a foundation the state can build upon to develop a more coordinated "grow-your-own" physician workforce strategy.

Developing a "grow-your-own" pipeline should begin well before medical school through partnerships with Maine high schools, expanded STEM and health sciences pathways, and early assurance programs for undergraduates at UMaine and other UMS universities. Admissions policies for any expanded medical education pathways should emphasize applicants from Maine and those with demonstrated

[22] National Conference of State Legislators

commitment to practicing in rural and underserved communities, particularly in primary care and behavioral health.

Retention will require robust financial incentives tied directly to service commitments. These may include in-state tuition guarantees, targeted scholarships, and loan repayment or forgiveness programs for graduates who commit to practicing in Maine for a minimum number of years after residency. Significantly, such incentives must be funded in addition to any State support required for medical education programs, as they directly address the debt pressures that often push new physicians out of state. The State of Maine should also work closely with health system partners to expand fellowship opportunities in high-need specialties such as psychiatry, geriatrics, cardiology, general surgery, and gastroenterology, ensuring that graduates have viable pathways to complete advanced training within the state. With a large share of Maine's physician workforce nearing retirement, and persistent shortages across primary care and specialty fields, building local talent pipelines and providing strong retention incentives are essential components of a comprehensive statewide workforce strategy.[23]

[23] Cicero Institute

Introduction

At the request of the State Legislature and Governor, the University of Maine System engaged Tripp Umbach to conduct an independent study on the feasibility of establishing a public M.D.-granting School of Medicine at the University of Maine. Tripp Umbach was selected because of its national experience in medical education planning, having supported the development of more than 40 new medical schools and completed over 2,500 consulting engagements with universities, health systems, and state leaders since 1990.

The findings presented in this report reflect the professional judgment of Tripp Umbach, drawing on comprehensive research, demographic and workforce analyses, stakeholder perspectives, survey findings from a broad cross-section of stakeholders central to Maine's medical education and healthcare landscape, and a detailed financial model built on the assumptions and conditions outlined in the study. The assessment evaluated Maine's physician workforce shortages, healthcare access challenges, and the state's current and future capacity to expand medical education and clinical training. It also examined institutional readiness, resource requirements, long-term financial sustainability, and the broader economic and social impacts a medical school could have on Maine's healthcare system and economy.

Building a strong physician workforce in Maine requires cultivating local talent early and sustaining that support throughout all stages of education and training. Engaging students as early as middle school and continuing through high school, college, and pre-medical preparation is essential to nurturing interest in healthcare careers, particularly among those who may ultimately serve rural or underserved communities. Equally important is the continued expansion of residency and fellowship programs across Maine, as physicians tend to practice where they complete their residencies.

Achieving long-term workforce stability will require broad, ongoing collaboration among state leaders, health systems, educational institutions, and community partners to champion financial incentives, supportive legislation, and payment reforms that make training and practicing in Maine more attractive. By strengthening this coordinated approach, Maine can make meaningful progress toward addressing its physician shortages, improving healthcare quality, and ensuring that people across the state have access to timely, equitable care. Finally, the state may be able to develop a successful and sustainable public medical school at some point in the future.

Maine's Medical Education Landscape

Maine's current medical education ecosystem is anchored by two established pathways that have played central roles in training physicians for the state: the Tufts School of Medicine Maine Track and the UNE COM. Together, these programs form the backbone of Maine's medical education infrastructure, offering UME, extensive clinical training opportunities across the state, and long-standing partnerships with healthcare systems that directly support physician workforce development. Any consideration of establishing a new M.D.-granting medical school at the University of Maine within UMS must therefore be evaluated in the context of these existing programs, their capacity, and their demonstrated contributions to the state's workforce.

Tufts University School of Medicine–Maine Track

The Tufts SOM–Maine Track, launched in 2008, represents a nationally recognized partnership between Tufts University and MaineHealth Maine Medical Center (MaineHealth/MMC), with collaboration from hospitals and clinics across the state. Designed specifically to address Maine's rural and primary care workforce shortages, the Maine Track recruits students with ties to the state. It provides approximately 40 students from Maine each year with extensive clinical rotations in Maine communities. Students complete their preclinical education in Boston, then transition to clinical training at MMC and a network of community hospitals, including sites in Lewiston, Bangor, Augusta, Brunswick, Rockport, and Presque Isle. While this program retains 17 of its graduates in GME programs in Maine, approximately 10 physicians remain in Maine each year, highlighting the need for a new public medical school to meet growing workforce demands.[24]

University of New England College of Osteopathic Medicine

The University of New England College of Osteopathic Medicine, founded in 1978 and located in Biddeford, is Maine's only medical school and one of the nation's long-standing osteopathic institutions. UNE COM enrolls approximately 700 medical students across four class years and has developed a robust network of clinical affiliates throughout New England, including significant partnerships with Maine hospitals, FQHCs, and community-based practices. UNE's mission-driven approach emphasizes primary care, rural health, osteopathic philosophy, and whole-person care, priorities that align strongly with Maine's demographic and clinical needs.

M.D. and D.O. programs train fully licensed physicians; however, they differ in focus. M.D. programs emphasize biomedical research, scientific rigor, and broad global recognition, aligning well with research universities and attracting significant funding. However, they require greater investment and face more complex accreditation requirements. D.O. programs emphasize holistic, primary-care-oriented training, with an emphasis on whole-person health and distributed clinical education. Generally, D.O. graduates are more likely to practice in primary care specialties compared to M.D. graduates. (See Appendix F)

UNE COM plays an essential role in physician training in Maine. Approximately 50–60% of UNE graduates enter primary care specialties, a rate significantly higher than the national average for allopathic medical schools. UNE students complete clinical rotations in Maine and neighboring New England states. Approximately 25 UNE students remain for residency training at programs affiliated with MaineHealth, Northern Light Health, and various community health centers. UNE has also expanded programs in geriatrics, behavioral health integration, interprofessional education, and rural medicine fields in which Maine faces particularly acute shortages. Over its history, UNE COM has graduated nearly 5,000 physicians, of whom 650 practice in Maine. Using this as a proxy, Tripp Umbach estimates that 23 students from each graduating class remain in the state to practice.[25]

It is important to note that the median total cost of attending a four-year medical school (Class of 2025) is over $286k at public medical schools, compared with over $390k at private medical schools. A medical student borrower will accrue more than $200k in debt from a public medical school than from a private

[24] TUSM MMC Maine Track Longitudinal Integrated Clerkson (LIC) Program Department of Medical Education
[25] University of New England

medical school ($227,000).[26] Student debt will become a larger issue as the federal government has recently capped annual borrowing.

Undergraduate Medical Education Outcomes in Maine

Combined, the Tufts Maine Track and UNE COM currently serve as Maine's primary medical education engines; together, they produce only 33 physicians annually, underscoring the need for a public medical school in Maine. Again, Tripp Umbach's feasibility analysis assumes that a new public M.D. program would rely on the same applicant pool, clinical training sites, and GME programs. In a state with limited clinical capacity, restricted GME slots, and significant workforce constraints, expanding clinical training sites must be addressed first before launching another medical school.

Key Evaluation Criteria

Tripp Umbach's feasibility analysis is grounded in evaluation criteria that determine whether Maine has the essential foundation to launch and sustain a high-quality medical education program. These criteria reflect national best practices in medical school planning and are informed by Maine's unique demographic, clinical, and workforce landscape.

1. Physician Shortage
    - A documented and escalating need for physicians is typically a prerequisite for establishing a new medical school. Tripp Umbach assessed statewide provider shortages, population health trends, aging workforce data, and projected demand to determine whether Maine's physician shortages can justify the development of a new M.D. program and whether a medical school would meaningfully address these gaps. Maine has a documented shortage that is expected to grow. (See Appendix D and Appendix E)
2. Evaluation of Medical School Models
    - Identifying the most appropriate approach to medical education requires examining a range of options. Tripp Umbach reviewed specific models related to UMS. These included establishing an independent public allopathic (M.D.) school within UMS through existing institutions and forming partnerships with UNE COM and the Maine Track, or with regional campuses that have medical schools in neighboring states. Each model was assessed for fit with Maine's healthcare needs, educational capacity, and long-term sustainability. While the preferred model for addressing physician workforce shortages at the undergraduate level is the creation of an independent public medical school, financial constraints make it impractical at this time.
    - Tripp Umbach believes that UMaine is well-positioned to strengthen its statewide health and biomedical infrastructure over the next five years, which would position the system for the potential addition of an M.D. program in the future. Expanding research capacity, building clinical training partnerships across the state, and enhancing health-related academic programs will position UMaine for a stronger footing should the conditions for medical education expansion improve. However, any future pursuit of an M.D. program must be supported by a

[26] Association of American Medical Colleges

broad coalition of public and private champions, including health systems outside of Portland who are willing to share in the financial investment and long-term commitment required. With these partners in place, UMaine could play a central role in shaping a medical education model that meets Maine's needs without bearing the burden alone.

3. Institutional Readiness and Capacity

The University of Maine has emerged as a central pillar of Maine's health-sciences ecosystem, demonstrating a sustained commitment to workforce development, applied research, and statewide partnerships that together lay the groundwork for hosting a future public medical school. UMaine's impact is already visible in rural healthcare delivery, where graduates of its nursing programs are strengthening primary care access in some of Maine's most underserved communities. By training nurses with strong clinical preparation and exposure to rural practice, UMaine directly addresses Maine's workforce shortages while demonstrating its capacity to align education with pressing statewide health needs—an essential prerequisite for any future medical education enterprise.

UMaine has also built a deep, durable partnership with the U.S. Department of Veterans Affairs, further demonstrating its readiness to serve as a clinical-academic hub. As the academic affiliate of VA Maine under a formal memorandum of understanding, UMaine's Institute of Medicine has integrated VA researchers and clinicians into its faculty and research enterprise. Joint faculty appointments, shared salary support, and dedicated clinical and research space have enabled close collaboration in health services research, psychology, and population health. Regular leadership-level coordination with VA Maine has expanded access to federal research funding and created a platform for discussing VA participation in a future university-based medical school—an asset few institutions in rural states can claim.

Across its research portfolio, UMaine demonstrates breadth and sophistication in health and life sciences that rival much larger institutions. Faculty investigates how infections spread and evade immune defenses, how genes and RNA regulate disease and injury, and how muscles and hearts develop, fail, and repair themselves. Researchers study aging and neurodegeneration at the cellular level while engineers design advanced biomaterials—many derived from Maine's forest economy—that hold promise for medical devices and health technologies. Together, this work reflects a mature biomedical research environment capable of supporting translational science, clinical partnerships, and medical education over time.

UMaine's trajectory is reinforced by significant federal investment in health workforce infrastructure. Between FY 2022 and FY 2024, the University of Maine System secured major Congressionally Directed Spending awards to expand nursing simulation, pediatric and obstetric training, dental workforce capacity, and the state's first Ph.D. in Nursing. These investments address a core bottleneck in healthcare education: the shortage of doctorate-level prepared faculty required to expand statewide enrollment. In parallel, UMaine has become a regional leader in applied public health through initiatives such as tick-borne disease surveillance and prevention across Northern New England, demonstrating its ability to lead multi-state, data-driven health initiatives with real population-level impact.

Looking ahead, the proposed $45 million Science Complex for Health represents a transformational step in UMaine's evolution. Supported by Maine's leading health systems, research institutions, and business leaders, the facility would anchor a broader health sciences district on the flagship campus—integrating nursing, allied health, biomedical research, and community health delivery. Combined with planned expansions in biomedical science, bioinformatics, and engineering graduate education, UMaine is intentionally building the research capacity, workforce pipelines, and clinical partnerships required for a future public medical school. Taken together, these accomplishments position the University of Maine not only as a statewide research leader today, but as the logical long-term home for Maine's next generation of public medical education when the state is ready to take that step.

- Launching a medical school requires significant academic, research, and administrative infrastructure. Tripp Umbach assessed UMS's institutional capacity, including leadership readiness, faculty depth, laboratory and simulation resources, research portfolio, accreditation requirements, and the university's ability to take on a medical school without compromising existing programs. The analysis also examined whether UMS could support the financial, operational, and academic demands of a medical school.
- Investing in UMS will expand state capacity, particularly for rural clinical education innovation. UMS locations sit exactly where rural shortages are most acute (e.g., Aroostook, Washington, Penobscot, Franklin, etc.) Currently, UMS is expanding in rural nursing, behavioral health, and interprofessional telehealth training to address community health needs. For example, the UMA/UMaine Machias Downeast Nursing Track demonstrates how UMS's unified accreditation and statewide locations make rural workforce expansion possible.[27]
- UMS has significant, rapidly growing research strengths that uniquely position it to support expanded medical education and rural health innovation. UMaine brings a level of scientific capacity unmatched in the state, with significant strengths in biomedical engineering, aging, rural and Indigenous health, genomics, AI and digital health, and One Health research. These capabilities, combined with strong partnerships with The Jackson Laboratory, MaineHealth, Northern Light Health, and the University of New England, create a robust network that integrates basic science, clinical research, and workforce development.
- UMaine's research trajectory underscores this potential. The university secured $243.6 million in external R&D funding in FY25, an 8% increase from FY24 and a 384% increase over the past decade. This rapid growth reflects UMaine's ability to attract competitive federal funding, expand interdisciplinary research, and build programs that directly support health and biomedical innovation.
- Maine graduate students and clinicians participate in MATCH (Modular Approach to Therapy for Children), a flexible, scientifically supported mental health intervention for children and youth. MATCH has proven effective in treating anxiety, depression, PTSD, and behavioral problems, issues that represent the clinical needs of 70-80% of children aged 6-17 in outpatient care.[28]

[27] Bangor Daily News
[28] The University of Maine; University of Maine Receives Grant to Expand Youth Behavioral Health Workforce

- Several years ago, UMS secured a $1 million grant to advance technology in healthcare and higher education sites, enabling improved distance learning and telehealth across the state. The grant from the U.S. Department of Agriculture funded technology improvements at 42 locations, including 26 web-conference-enabled classrooms, expanding the statewide reach of the Maine Graduate and Professional Center's existing smart classrooms in Portland and Orono to other campuses and learning centers.[29]
- The University of Maine School of Nursing offers a Master of Science in Nursing Leadership (with a Rural Health Family Nurse Practitioner track). This graduate program prepares nurses to become primary care Family Nurse Practitioners (FNPs) with clinical training designed to serve rural and underserved communities in Maine. The curriculum includes clinical practicum experiences and coursework designed to prepare graduates to provide primary care across the lifespan and address rural health needs.
- Penobscot Community Health Care (PCHC) NP Residency offers a 12-month Nurse Practitioner Residency Program for Family Nurse Practitioners. The residency supports new FNPs transitioning from education into primary care practice, with clinical mentoring and experience in integrated safety-net settings across Maine.

4. Clinical Training Capacity and Interest
    - Robust clinical training sites are essential for both undergraduate and graduate medical education. Tripp Umbach evaluated Maine's hospitals, clinics, Federally Qualified Health Centers (FQHCs), and community health providers to evaluate their ability to support high-quality clinical rotations and residency programs. This included examining patient volumes, specialty mix, teaching capacity, geographic distribution, and clinical partners' willingness to participate in medical education expansion. While interview participants indicated willingness to provide clinical training if a new public medical school were developed, the financial position of health systems outside of Portland presents a barrier to expanding clinical training for medical students and residents.
5. Community and Stakeholder Support
    - Broad support from local health systems, government agencies, academic institutions, and philanthropic partners is critical for long-term success. Tripp Umbach analysis considered the depth of engagement and alignment with community health priorities and workforce development goals. Data from 89 survey respondents represented a wide range of stakeholders across Maine's healthcare and education sectors. Engagement included practicing clinicians and members of medical associations, hospital and health system leaders, university personnel, and individuals directly involved in medical education. Together, these groups provided a comprehensive perspective on Maine's capacity and the challenges of expanding medical education.

[29] The University of Maine

- Survey results indicate strong support for UMaine to play a leadership role immediately in expanding pipeline programs and engaging stakeholders statewide to develop readiness to launch a public medical school in the future.

Key Findings

Maine is at a defining crossroads as the state confronts an aging population, widespread physician shortages, and escalating demand for healthcare services, along with pressures that are felt most acutely in rural and underserved regions. These converging challenges highlight the need for a strategic, home-grown approach to building a resilient healthcare workforce capable of meeting the state's current and long-term needs. Across Maine, stakeholders increasingly agree that traditional recruitment and retention efforts are no longer sufficient to close the widening gaps in primary care and specialty services. Strengthening the pipeline must involve closer engagement with the state's higher education system.

Within this context, UMS is uniquely positioned to lead a transformative solution. As the state's flagship public research institution, UMaine has the academic foundation, statewide partnerships, and mission-driven focus needed to expand physician training capacity and anchor a sustainable model of workforce development. Findings suggest that a public medical education pathway centered at UMaine, supported by collaborating clinical partners, opportunities to expand GME capacity, and alignment with Maine's pressing workforce needs, offers a viable and forward-looking strategy to improve access to care.

There is a Need for a Public Medical School in Maine, Given Evolving Demographics and Implications for Healthcare Demand.

The changing demographic profile of Maine has direct implications for the UMS's role in preparing the healthcare workforce and shaping regional health strategies. Maine's demographic and workforce challenges are significant and interwoven, affecting the state's capacity to care for its residents now and into the future. With a median age of 44.8 years, Maine is the oldest U.S. state, and approximately 23% of its population is age 65 or older, placing pressure on healthcare, long-term support systems, and social services.[30]

These age-related changes occur in a predominantly rural landscape, where roughly 40.2% of Maine's population lives in non-metro areas, where distance, transportation limitations, and fewer providers amplify access issues.[31] Rural health infrastructure is strained because most counties are designated as, or partly within, federally recognized Health Professional Shortage Areas (HPSAs) in primary care and mental health. For primary medical care alone, Maine has 77 HPSA designations, covering approximately 85,501 residents, with only 44.8% of need met and 17 additional practitioners needed to remove the designations.[32]

Furthermore, healthcare workforce shortages are acute: Recruitment and retention challenges affect hospitals, clinics, and community-based services alike, with the Maine Hospital Association and the state's workforce development groups aiming to grow and stabilize the clinical workforce.[33] As Maine grapples with a growing older adult population, rising chronic disease burden, mental health and substance-use issues, and constraints in rural service delivery, the convergence of these demographic

[30] World Population Review
[31] Rural Information Hub
[32] Bureau of Health Workforce; Health Resources and Services Administration (HRSA)
[33] Maine Hospital Association

and workforce trends underscores an urgent need to expand training pipelines, strengthen retention strategies, invest in rural and community-based care models, and build a system capable of meeting the increasingly complex demands of its residents.

Penobscot County's health needs mirror and magnify these demographic realities. The Maine Shared Community Health Needs Assessment (CHNA) identifies priorities such as substance use, mental health, nutrition, and access to care. It highlights a specific concern for older adult health and healthy aging.[34] A recent county health profile notes that as Maine's population ages, impacts will be felt across the state on healthcare costs, caregiver availability, and workforce capacity.[35] Statewide healthy aging data reinforce the complexity of older adults' needs: the 2025 Maine Healthy Aging Data Report highlights that older Mainers have among the highest rates in New England of ever being diagnosed with depression (34.8%), and that a majority of residents 65 and older are managing multiple chronic conditions.[36] These patterns translate into greater demand for accessible primary care, behavioral health, long-term services and supports, and age-friendly community infrastructure in the Orono–Bangor region.

1) The Physician Shortage in Maine is Worsening

Maine's healthcare workforce is already strained and is projected to fall further behind demand if the state does not significantly expand and better align education and training pipelines. More recent workforce briefs from hospital and policy groups underscore that this shortfall is now visible across the state, as 15 of Maine's 16 counties have federally designated HPSA, and state leaders estimate that more than 100 new primary care physicians will be needed in just the next five years to maintain access.[37] A 2024 fact sheet notes that Maine has about 35 primary-care residency slots per year and that nearly half of trainees leave the state after graduation, limiting the pipeline of physicians likely to stay and practice.[38]

Table 3: Designated Health Professional Shortage Areas October-December 2024[39]

	Number of Designations	Population of Designated HPSAs	Percent of Need Met	Practitioners Needed to Remove Designation
Primary Care	76	85,155	44.54%	18

For UMS and particularly UMaine, these dynamics create an opportunity. As the flagship public research university in the center of an aging, largely rural state with a documented chronic disease burden and provider shortages, UMaine is uniquely positioned to design and deliver solutions. This can include expanding pre-health and graduate health science programs; partnering with regional health systems, FQHCs, and long-term care providers to develop rural training tracks; and leveraging university research

[34] Northern Light Health; Community Health Needs Assessment
[35] Penobscot County Health Profile; Community Health Needs Assessment
[36] Healthy Aging Data Report
[37] The Maine Hospital Association
[38] Cicero Institute
[39] Designated Health Professional Shortage Areas-2024

capacity to address priority issues identified in the Maine Shared CHNA, such as mental health, substance use, and older adult health.[40] By intentionally aligning academic programming, community partnerships, and workforce initiatives with the evolving demographic profile of Maine as a whole, the university is playing a central role in ensuring that the state's healthcare system is prepared to meet the needs of an older, more complex, and more diverse population over the coming decades.

Maine is already experiencing a physician shortage that is no longer theoretical; it is visible in clinic schedules, emergency departments, and rural communities across the state. Recent analyses by the Robert Graham Center and Maine Hospital Association estimate that, to maintain current levels of access, Maine will need about 120 additional primary care physicians by 2030, representing roughly a 9% increase over the current primary care workforce.[41] This projected gap is primarily driven by population aging, increased utilization, and an aging physician workforce. Nearly 39% of Maine physicians are already within retirement range**,** and approximately 30% of the broader healthcare workforce is over age 55**,** signaling that a large cohort of clinicians is likely to retire in the coming decade. Without a stronger pipeline of new physicians, retirements will compound existing shortages and further strain access, especially in rural and underserved areas.

Geographic access is already a serious concern. Recent data show that 13 of Maine's 16 counties are designated, at least in part, as the HPSAs for primary care, and another statewide analysis notes that 15 counties are partial shortage areas across primary care, mental health, and dental care. Many of these areas have 3,500 or more patients per primary care provider, and more than 85,000 Maine residents live within designated primary care shortage areas. The Maine Hospital Association has emphasized that, although the state's overall physician-to-population ratio looks relatively strong on paper, many of those physicians are clustered around Portland. At the same time, large rural regions remain underserved, leaving residents to delay care or rely on emergency departments for conditions that should be managed in primary care.

Maine's training pipeline is insufficient to close these gaps. A 2024 workforce brief notes that the state has only about 35 primary care residency slots per year, of which approximately 20% are filled by Maine residents, and that about 45% of those residents ultimately practice out of state**.** At the same time, Maine does not have an in-state M.D.-granting medical school. It relies heavily on regional institutions in other New England states and on the state's sole osteopathic medical school to train new physicians. Because physicians are significantly more likely to practice where they complete medical school and residency training, this limited in-state capacity makes it difficult for Maine to grow its own workforce at the scale needed to replace retiring clinicians and serve an aging, largely rural population.

The short-term implications of failing to shore up Maine's physician workforce are already evident. Rural reporting from Washington County describes patients waiting days in crowded emergency departments for hospital beds or higher levels of care, long delays in diagnosis, and difficulty transferring patients because larger hospitals lack staffed beds.[42] Hospitals report adding beds in hallways, relying heavily on

[40] Northern Light Health
[41] Robert Graham Center: Projecting Primary Care Physician Workforce
[42] The Maine Monitor

traveling clinicians, and struggling to secure ambulance transport, all symptoms of a system stretched thin by workforce shortages.[43]

Legislative testimony and workforce briefs consistently link these shortages to longer wait times, higher costs, greater reliance on emergency care, and lower quality of life for Maine residents. When primary care access is limited, chronic conditions go unmanaged, preventable complications increase, and behavioral health crises escalate, creating avoidable suffering for patients and higher downstream costs for hospitals, payers, and the State.

The long-term implications are even more serious. Maine is the oldest state in the nation. As the population ages, demand for chronic disease management, behavioral health services, and complex care will grow faster than in younger states. To address this issue, UMaine secured $1.5 million in federal funding to prepare and place additional behavioral health professionals, including psychologists, social workers, and substance use clinicians, particularly in northern and eastern Maine and tribal communities.[44] The program was expanded in 2022 with an additional $650,000 to train clinical psychologists to work in primary care and to expand access through tele-behavioral health.

If physician supply does not keep pace, Maine can expect growing "medical deserts," especially in northern and eastern counties; more frequent service interruptions when recruitment fails; and increased dependence on locum tenens providers, which is both costly and disruptive to continuity of care.[45, 46] Media coverage has already highlighted clinic closures and reductions in primary care services due to workforce and funding pressures, forcing low-income and rural patients to travel farther or to forgo routine care altogether.[47] Over time, this dynamic can worsen health disparities, accelerate hospital financial distress, particularly for small rural hospitals, and undermine broader economic development as communities struggle to attract and retain employers without reliable healthcare access.

Recognizing these risks, state leaders and healthcare organizations have begun to pursue targeted solutions. However, these initiatives will take years to bear fruit. In the absence of sustained and coordinated action to expand medical and residency training, support rural practice, strengthen loan forgiveness and incentives, and integrate physician assistants, nurse practitioners, and other team-based models, the combination of an aging workforce, widespread HPSA designations, and increasing patient need will likely deepen Maine's access crisis. Addressing the physician shortage is therefore not only about filling vacancies, but also a foundational requirement for protecting population health, stabilizing hospitals and clinics, and ensuring that every community in Maine can count on timely, high-quality medical care over the next decade and beyond.

---

[43] Ibid.

[44] The University of Maine News

[45] A locum tenens provider is a physician or advanced practice provider who fills in for another clinician while they are unavailable.

[46] Healthcare deserts are areas that lack adequate access to and infrastructure for healthcare services.

[47] The Associated Press

2) Residency Program Expansion, Physician Recruitment, and Retention Programs must be addressed before establishing a State-Sponsored Medical School

Maine is at a critical juncture in preserving equitable access to medical care; its population is the oldest in the country, provider retirements are looming, and the shortage of physicians in rural and underserved areas is no longer a distant threat but a current reality. One of the most consequential strategies states can employ to address this challenge is to invest simultaneously in both physician recruitment and retention programs, recognizing that hiring new physicians without ensuring they remain in-state or in community-based practices limits long-term impact. Research has consistently shown that physicians who train in rural or underserved settings are far more likely to stay in such practice environments only if conditions are supportive, sustainable, and connected to community needs. Failure to invest in retention risks ongoing vacancies, reliance on expensive temporary staffing, interruptions to continuity of care, and degraded health outcomes in already vulnerable regions.

A proposed legislative response is ongoing to address the workforce shortages. For example, the Maine Legislature is currently considering LD 1311, "An Act to Expand Maine's Health Care Workforce by Improving Educational Opportunities," which attempts to establish the Maine Health Care Education Training and Medical Residency Fund. If funded, this could support the physician training pipeline by expanding rural primary care rotations for medical students, increasing rural residency positions, establishing clinical preceptorships in underserved communities, and developing innovative pathways.[48] The bill aims to ensure annual appropriations for physician workforce development in rural and underserved areas of Maine.[49] Moreover, in 2022, Governor Janet Mills announced a $1.6 million grant program under the Maine Jobs & Recovery Plan to expand medical residency training sites in rural Maine, directly targeting the pipeline into physician practice in less-served regions.[50]

Survey responses indicated that expanding GME is the most immediate and effective strategy to strengthen Maine's physician workforce. Respondents consistently noted that the state's limited residency capacity is the primary barrier to recruiting and retaining physicians. Many highlighted significant structural challenges to GME growth, including insufficient clinical sites, limited faculty and preceptors, and competition with existing programs such as UNE COM and the Tufts Maine Track.

Participants cautioned that adding a new medical school without first expanding GME would strain already limited training capacity and risk producing graduates who must leave Maine for residency and do not return. Across stakeholder groups, there was strong support for pairing GME expansion with financial incentives such as loan forgiveness, rural residency tracks, and service-based repayment programs to improve long-term retention, particularly in primary care and rural areas. Together, these insights underscore that meaningful progress in Maine's workforce development hinges on prioritizing GME growth and retention-focused strategies before considering adding a new M.D. program.

These policies signify a strategic shift from traditional physician recruitment efforts to a "grow-our-own" framework that begins with training, placement, community integration, and long-term support. For

[48] LegiScan
[49] State of Maine
[50] State of Maine; Office of the Governor Janet T. Mills

Maine to meet projected needs, such as the estimate that another 120 primary care physicians will be required by 2030 to maintain current access levels, pairing recruitment and retention initiatives is indispensable.[51] In practice, this means not simply filling physician vacancies, but establishing conditions under which clinicians remain embedded in Maine communities, feel professionally supported, are responsive to local populations, and thereby contribute to stabilized care delivery.

Graduate Medical Education Expansion in Maine

Graduate Medical Education is a cornerstone of any effective physician workforce strategy, serving as the critical bridge between medical school and independent clinical practice. Its importance extends far beyond training alone, as residencies are among the strongest predictors of where physicians ultimately practice. For states like Maine, facing widespread provider shortages, an aging population, and swaths of rural regions with persistent access challenges, expanding and strengthening GME capacity is essential to ensuring a stable, locally trained, and community-rooted physician workforce. GME not only prepares new doctors with the clinical and procedural skills needed to deliver high-quality care, but it also embeds them within Maine's hospitals, clinics, and rural health systems at the very moment when long-term practice patterns are formed. As a result, investment in GME is one of the most potent and evidence-based strategies to increase physician supply, improve retention, and ensure that residents across the state have reliable access to the healthcare services they need. (Please see Appendix E for a complete list of all residency programs (AGME) in Maine.)

Expanding GME opportunities in Maine is a foundational component of improving recruitment and retention and, in turn, ensuring that physicians have a reason to train and ultimately practice in-state. The flagship sponsoring institution, MaineHealth Maine Medical Center (MHMMC) in Portland, currently supports an extensive suite of residency and fellowship programs that train hundreds of physicians annually and offer rural training tracks designed explicitly for Maine's underserved regions.[52] Among its offerings are the Maine Rural GME Education (MERGE) Collaborative, a multi-institution initiative to expand rural residency rotations and sites across the state.[53]

By locating training programs closer to rural and underserved communities, Maine increases the likelihood that trainees will remain in-state and serve those communities long-term. Given the state's rural character and dispersed population, GME expansion is imperative. Maine's GME infrastructure development supports not only clinical training but also community engagement and physician retention where they are most needed.

[51] MaineHealth
[52] MaineHealth
[53] Maine Rural Graduate Medical Education Collaborative

Table 4: GME Infrastructure in Maine

Sponsoring Institution	Location	Program Types	Expansion Focus
MaineHealth Maine Medical Center	Portland	Multiple residencies and fellowships across specialties[54]	Rural track and underserved site development
MERGE Collaborative (statewide)	Statewide	Rural-focused residency rotations and electives[55]	Building training sites in rural, underserved regions
Proposed State-level initiatives via the LD 1311 fund	Statewide	Would support rural rotations, residencies, and preceptorships[56]	The pipeline would strengthen rural primary care and the underserved

The recruitment/retention programs and GME expansion strategy form two mutually reinforcing pillars. For Maine, success in strengthening its physician workforce will depend not only on attracting providers but also on retaining them and embedding training and practice structures that align with community-based care and long-term rural stability.

3) The University of Maine is Developing the Infrastructure to Support a Future Medical School

The University of Maine is strengthening its statewide health and biomedical education and research infrastructure, and over the next five to 10 years, may be positioned to launch a successful M.D. program. Expanding research capacity to build on its exciting R1 capabilities at UMaine, building clinical training partnerships across the state, and enhancing health-related academic programs can position UMaine for a stronger footing should the conditions for medical education expansion improve. However, any pursuit of an M.D. program must be supported by a broad coalition of public and private champions, including health systems outside of Portland, who can, in the future, with potential federal rural health funding, make financial investments and provide the long-term commitment required. With these partners and financing in place, UMS/UMaine could play a central role in shaping a medical education model that meets Maine's needs without bearing the burden alone.

The Graduate School of Biomedical Science and Engineering is a multi-institutional research consortium that anchors Maine's most extensive biomedical Ph.D. program and connects more than a dozen UMaine departments with four major research partners: The Jackson Laboratory, the MaineHealth Institute for Research, the MDI Biological Laboratory, and the University of New England. This extensive collaborative network significantly bolsters UMaine's capacity to develop a future medical school by expanding research infrastructure, increasing access to nationally recognized investigators, strengthening translational science opportunities, and providing a robust environment for faculty recruitment, interprofessional training, and clinical-research integration. Together, these partnerships can position UMaine to support the academic, scientific, and clinical requirements essential for launching and sustaining a high-quality M.D. program.[57]

[54] MaineHealth
[55] MaineHealth
[56] Northern Light Health
[57] The University of Maine

Between FY22 and FY24, the UMS secured a series of Congressionally Directed Spending (CDS) awards that significantly strengthen Maine's health-care workforce pipeline, investments that could build capacity for a future UMaine medical school. These awards include $1 million to expand pediatric and obstetric simulation equipment across multiple campuses, $4.5 million to standardize and enhance nursing simulation infrastructure statewide, and another $4.5 million to establish UMA's Capital Center for Nursing Workforce Development to increase nursing enrollment by 20 percent through new clinical training spaces. Additionally, a $3 million award supports the launch of Maine's first Ph.D. in Nursing, addressing the acute shortage of doctoral-prepared faculty needed to expand nursing education programs. Collectively, these investments expand simulation capacity, strengthen interprofessional training infrastructure, and create a larger, better-prepared clinical education workforce, laying the foundation for the successful development and sustainability of an M.D. program at UMaine.

Proposed University of Maine Health Sciences Complex

The University of Maine has requested Congressionally Directed Spending to support the development of a state-of-the-art education, research, and clinical facility that will serve as the cornerstone of Maine's future health-science workforce. If funded, the new facility, estimated at 75,000 to 80,000 gross square feet, will anchor a larger health sciences district on the Orono campus, catalyzing innovation across nursing, allied health, biomedical research, and community health delivery. Federal funding requested by U.S. Senator Susan Collins is pending, and the Legislature, healthcare, and other philanthropic partners would have an essential role in providing additional needed funding. Among the organizations that provided letters of support for the project are Northern Light Health, MaineHealth, The Jackson Laboratory, and the Bangor Region Chamber of Commerce, each of which affirms the facility's role as a statewide catalyst for innovation, education, and health access.

Purpose and Vision of the Complex

Within five years, the state will face a shortfall of 2,700 registered nurses; within a decade, half of the current nursing workforce will reach retirement age. At the same time, research and development in life sciences, driven overwhelmingly by the University of Maine, which accounts for more than 80% of federal R&D expenditures in the state, requires new space to sustain and expand discovery, commercialization, and training capacity.

The health sciences complex directly addresses these challenges by creating an integrated learning and research environment that unites the School of Nursing, allied health disciplines, and biomedical and life sciences research programs, while also hosting a modern health facility that provides clinical services to eastern Maine and offers students hands-on training opportunities.

Facilities and Program Components

Approximately $125 million will fund 75,000–80,000 GSF of flexible and phased space, including:

- Nursing Education and Workforce Development (25,000 GSF): undergraduate, graduate, and Ph.D. teaching spaces, simulation and assessment labs, and student support areas.
- Allied Health Programs (10,000 GSF): interdisciplinary classrooms and offices supporting physical therapy, public health, and related disciplines.
- UMaine Health Facility (15,000 GSF): an integrated on-campus clinic offering examination rooms, imaging, counseling, and ambulance bays for both community care and student clinical training.
- Biomedical and Life Science Research (15,000 GSF): individual and shared labs, equipment suites, and graduate research offices to strengthen UMaine's R1 research enterprise.
- General Teaching and Learning Space (10,000 GSF): active learning classrooms, flexible labs, and collaboration zones.

Need for a Future Medical School Facility

While the proposed health sciences complex will address urgent nursing and allied health needs, space is insufficient on the Orono campus or within the proposed complex to accommodate the additional infrastructure required for a new medical school. As UMaine and state partners advance plans for a Maine-based medical education program to address future physician shortages, an additional 80,000-square-foot medical school facility, estimated at $100 million, will be required.

This complementary facility would provide specialized anatomy, simulation, and clinical-skills laboratories; faculty offices; and research collaboration space to support the education of new physicians in partnership with Maine's health systems and community clinics. Together, the health sciences complex and a future medical school facility will form a comprehensive academic health science campus uniting nursing, medicine, research, and community health.

Financial Analysis for a Public M.D.-Granting SOM

The financial analysis conducted by Tripp Umbach indicates that establishing an LCME-approved School of Medicine within UMS would require a substantial financial commitment, beginning with more than $210 million in early capital investment from private and institutional sources before the school even opens. The pro forma further assumes that the state of Maine would provide a $15 million start-up appropriation, followed by annual appropriations of $22.5 million once the school becomes operational, alongside additional investments in tuition support, loan forgiveness, and workforce retention incentives, all of which are not included in the pro forma. Stakeholders expressed concerns that state funding directed towards a new medical school and physician workforce development would divert funding from existing higher education institutions, especially UMS.

The model relies on a phased financial strategy that blends early philanthropic and institutional contributions with long-term revenue from tuition, research activities, clinical partnerships, and practice plans, assuming the school opens in 2029. Tuition is projected to start at $50,000 per student per year in 2029, increasing to $63,338 by 2037, levels intended to mirror out-of-state tuition at peer public medical schools while maintaining affordability for in-state and regional students.[58,59] However, these projections underscore the significant and ongoing financial obligations required to sustain an independent public medical school in Maine.

While tuition revenue is projected to grow from $2.5 million in the first year of enrollment (2029) to more than $24 million by Year 9, diversified revenue streams, including philanthropy, endowment growth, and clinical partnerships, are essential to cover operating costs. Expenses, led by faculty and staff salaries, benefits, facilities, and student services, are expected to grow in parallel, from $22.9 million in 2029 to $61 million by 2037. It is essential to note that new medical schools typically increase their research expenses in line with available research funds. The cost for researchers is embedded in salaries, assuming 30% of basic science faculty time (funded externally) is devoted to research. Importantly, while modest deficits are expected in the earliest operational years, revenues begin to exceed expenses by Year 5, with surpluses expanding to nearly $16 million annually by 2037.

The projected pro forma shows annual operating expenses rapidly rising to $67 million by 2037**,** driven by escalating faculty salaries, fringe benefits, instructional costs, simulation operations, technology infrastructure, and clinical education expenses. Wages and fringe benefits alone exceed $42 million annually in full operational years, with combined operating, IT, simulation, and building expenses pushing total expenditures even higher. Concurrently, tuition revenue, which cannot exceed 20% of total revenue per accreditation standards, will not keep pace with these costs, leaving significant financial gaps that UMS (and likely the State) would need to subsidize for the life of the medical school. These fiscal pressures mirror national trends. LCME-accredited medical schools typically require $250–

[58] The base college of medicine tuition for UNE SOM for 2025-2026 is $69,220. Tuition including student fees increases to $74,870 at UNE SOM.
[59] The average cost of a private M.D. or D.O medical school is $67,174. Education Data Initative

$300 million in start-up capital and annual subsidies for 10 years before reaching financial stability, especially when a large integrated academic medical center is not the primary partner.[60]

These financial projections underscore Tripp Umbach's significant concerns about the long-term viability of a proposed School of Medicine within UMS. Rather than demonstrating reliable surpluses, the pro forma highlights substantial financial exposure, with no guarantee that the school could sustain high-quality academic and clinical programs without additional and continuous state subsidies. The model's assumptions, including a scholarship endowment projected to reach $3.7 million annually by 2037 and robust state-supported tuition, depend on more than $150 million in private contributions for start-up and public appropriations that are uncertain and potentially unrealistic for Maine. Further, these projected supports do not resolve the fundamental challenge; without expanded GME capacity, Maine cannot retain the physicians it trains. Taken together, the financial and structural risks indicate that early start-up investments are unlikely to lead to long-term sustainability.

Economic Impact

Nationally, academic medicine plays a significant role in driving economic activity, with medical schools and teaching hospitals contributing more than $600 billion to the U.S. economy each year. This sector fuels job creation, advances research, and drives innovation across communities of all sizes. While a medical school often brings the promise of growth, the development of a new M.D.-granting School of Medicine within UMS would be expected to influence Maine's economy only if supported by substantial private and public investment and clinical, research, and industry partnerships. Such an institution has the potential to stimulate expansion in health sciences education, encourage collaboration with hospital systems, and attract private-sector investment in healthcare and biotechnology. However, realizing these benefits would require substantial and sustained commitments of resources, infrastructure, and statewide coordination.

Projections for the proposed UMS School of Medicine suggest the program could generate significant economic activity for the state, with an estimated $8.70 in return for every dollar invested once the school reaches full maturity in 15 years. This estimate reflects the direct economic contributions of the school's operations, including capital construction, ongoing academic and administrative spending, faculty and staff hiring, and the economic activity generated by students living and learning in the community. Additional indirect benefits would likely arise as these dollars circulate through Maine's economy, amplifying their impact through a multiplier effect. With an inaugural class of 50 students projected for 2029 and full enrollment of 100 students by 2033, the school's graduates would eventually help reinforce Maine's physician workforce, particularly in primary care, supporting improved access and potential efficiencies in healthcare delivery across the state.

Annually, the proposed SOM would generate a wide range of economic effects, from the direct impact of its operations and employment to the indirect and induced activity stimulated by student spending, visitor travel, and the expanded physician workforce. Tripp Umbach's current analysis does not capture additional areas of potential economic value, such as increased patient retention in Maine, new patients

[60] The Liaison Commission on Medical Education is the accrediting body for all M.D. programs in the United States and Canada.

drawn to the state by expanded clinical services, or the economic boost generated by enhanced training activity at partner hospitals, which could further amplify the institution's overall impact. (See Table 5)

By 2030, the institution's annual operations are estimated to produce roughly $88 million in economic activity, support approximately 655 jobs, and generate about $2 million in tax revenues. Continued growth is expected to increase the annual impact to $147 million by 2035, sustaining approximately 910 jobs and contributing $3.5 million in state and local revenue. Looking ahead to 2040, the school's operations could generate up to $196 million annually, support an estimated 1,335 jobs, and generate $4.5 million in public revenue, reflecting the long-term economic significance of a fully mature medical education enterprise.

While national data from the American Medical Association show that physicians can generate substantial economic value, an average of $3.2 million in impact, 17 jobs, and more than $126,000 in state and local tax revenues per physician, the application of these benchmarks to a proposed UMaine SOM must be approached with caution. Although, in theory, a graduating class of 100 physicians could eventually contribute significant economic activity if a portion remained in Maine after residency, these projections are highly uncertain in Maine's current context. The state's limited residency capacity and the well-documented tendency of physicians to practice where they complete their training, rather than where they attended medical school, make it unlikely that a large share of graduates would remain in-state. Thus, estimates suggesting that 60 graduates could produce $160 million annually, support hundreds of jobs, and generate millions in tax revenue are speculative and dependent on conditions Maine does not currently meet. Likewise, anticipated savings tied to primary care retention cannot be realized without first addressing the state's structural gaps in GME capacity and clinical workforce infrastructure. For these reasons, such long-term economic projections should be interpreted cautiously and not viewed as justification for establishing a new School of Medicine at UMaine.

Long-term projections suggest that the economic contributions of practicing physicians can grow; however, applying these assumptions to a proposed UMS SOM requires considerable caution. Estimates indicating that Maine could generate more than $1.1 billion in annual economic activity by 2045, based on 10 graduating classes and a 60% in-state retention rate, are highly uncertain and rest on conditions the state does not currently meet, particularly with respect to residency capacity and workforce infrastructure. Maine's stable population and the impending retirement of a large share of its physician workforce do underscore the state's need for more providers. Still, without significant expansion of GME slots and stronger retention mechanisms, it is unlikely that most new graduates would remain in-state to produce such impacts. For these reasons, while the long-term economic potential of increasing the physician workforce is clear, these projections should not be interpreted as evidence that establishing a new School of Medicine at UMS would reliably achieve such outcomes.

Projections suggest that more than 500 physicians could eventually complete residency and remain in Maine over the next two decades and that their presence could generate more than $10 billion in economic impact, support 5,000 jobs, and contribute $63 million in state and local taxes. However, these projections must be viewed with significant caution.

It must be remembered that these economic impact estimates rely heavily on assumptions about retention, clinical capacity, statewide workforce infrastructure, and funding that Maine currently lacks.

Without major expansion of residency programs and substantial improvements in workforce incentives, the state is unlikely to retain enough medical graduates to realize such figures. While additional physicians would undoubtedly strengthen Maine's economy and improve health outcomes, the projected scale of impact is speculative and contingent on conditions not yet in place.

Return on Investment (ROI)

Projections indicate that a proposed UMaine SOM could yield a transformative return on an annual state investment of $22.5 million, assuming this investment is secured over a 20-year horizon, with an additional $15 million in start-up funding. Tripp Umbach advises the State of Maine and UMS not to proceed with a public M.D. school at this time, as over the 20 years from 2026 to 2045, the state contribution would exceed $382 million. However, at some point in the future, when this level of investment may be available, the associated estimates of more than 500 physicians remaining in-state and generating nearly $30 in economic activity for every taxpayer dollar by 2045 may not hold in Maine's current environment.

It must be remembered that Tripp Umbach's economic impact and ROI projections depend on $200 million in initial investment, high in-state recruitment and retention rates, expanded clinical capacity, and substantial growth in residency positions, factors that Maine does not presently have in place. Without significant structural changes to the state's GME system and healthcare workforce infrastructure, achieving these outcomes is uncertain. While the long-term potential of a strengthened physician workforce is clear, the anticipated return on investment for a new medical school at UMS remains highly speculative.

Table 5: ROI in 2035 and 2045, assuming $382 million in Investment

Metric	Economic, Fiscal Impact, & Cost Savings Impacts 2035	ROI 2035	Economic, Fiscal Impact, & Cost Savings Impacts 2045	ROI 2045
Total Economic Impact of the SOM and 564 physicians in practice	$982.5 million	$1: $7.28	$10.7 billion	$1: $28.03
Total State Taxes Generated by UMaine SOM and new physicians	$22.1 million	$1: $0.17	$155.1 million	$1: $0.41
Healthcare Cost Savings to the state over the 20 years	$--	$--	$575.3 million	$1: $1.50
Total	**$1.0 billion**	**$1: $7.45**	**$11.5 billion**	**$1: $29.94**

Projections suggest that adding 500 physicians over 20 years could represent roughly 20% of the workforce Maine is expected to need by 2045. Again, these figures depend on assumptions that may not be realistically achievable. Retaining locally trained physicians requires robust in-state residency opportunities, strong clinical infrastructure, and coordinated retention strategies, conditions that Maine

currently lacks. Without addressing these foundational gaps, there is no guarantee that graduates will remain in Maine to meaningfully offset projected shortages. While expanding medical education through a UMS/UMaine School of Medicine is often framed as a way to stimulate innovation, strengthen regional training pipelines, and improve health outcomes, these broader benefits are contingent on significant private and public investments in GME capacity, research infrastructure, hospital partnerships, and workforce incentives. In the absence of these critical elements, establishing a new medical school risks creating expectations that cannot be met and diverting resources from more effective, targeted strategies to strengthen Maine's physician workforce.

Economic Impact of Graduate Medical Education

GME remains one of the most effective tools for strengthening Maine's healthcare workforce, but expanding residency programs must be approached through a statewide strategy. While national estimates suggest that each resident physician in training can generate roughly $450,000 in annual economic impact, primarily because residency funding flows from outside the state, these benefits depend entirely on Maine's ability to secure new GME slots, develop clinical training sites, and sustain hospital partnerships. Expanding residencies in high-need fields such as primary care, pediatrics, psychiatry, and general internal medicine would certainly help address shortages. Yet Maine's hospitals currently face staffing constraints, financial pressures, and limited capacity to assume the substantial teaching and supervision responsibilities required of accredited programs, let alone tens of millions in start-up costs for new residency training programs.

Residency programs can strengthen hospitals, improve access, and reduce recruitment costs, but only when supported by robust infrastructure and stable funding. Maine's current GME footprint outside of Portland is small. Without significant investment, it is unlikely that residency expansion alone would generate the full range of benefits seen in peer states. Projections that tie long-term economic growth to residents remaining in Maine after training must be treated cautiously; retention depends on the availability of well-supported practice environments, not simply the existence of a medical school.

Although expanding GME is essential for strengthening Maine's healthcare delivery and physician workforce capacity, creating an independent M.D.-granting School of Medicine at UMaine is not sufficient to achieve these goals on its own. The transformative economic and workforce gains often associated with new medical schools depend on conditions that Maine has not yet established, most notably substantial growth in residency positions, strong hospital partnerships, and coordinated, statewide investment in clinical training infrastructure. Without these prerequisites, the projected benefits remain speculative, and the financial and operational risks of opening a new medical school become significant. Moving forward prematurely could divert limited resources from more effective, evidence-based workforce strategies that would more directly advance Maine's ability to recruit, train, and retain physicians.[61]

[61] It is important to note, that the analysis does not consider ROI of improved healthcare access and outcomes, including in increased workforce productivity, reduced State-funded health costs, which are in addition to the impacts noted by Tripp Umbach.

Pro Forma of a Public M.D.-Granting Medical School in Maine

Key Elements

Capital

- Capital needs exceed $210 million before enrollment begins, including $15 million in Planning Year 1, $147.5 million in Planning Year 2, and $47.5 million in Planning Year 3, for a total pre-launch investment of more than $210 million.

Tuition

- Tuition revenue starts at $2.5 million in 2029 and approaches $24.5 million by 2037.

Operations

- Ongoing revenue required to support the program rises from $29 million in Year 1 to $31.9 million in Year 2 and to $41.6 million in Year 3. It continues upward to $79.1 million by Year 9, indicating sustained, long-term financial obligations.
- Diversified revenues by 2037, including research, clinical, philanthropy, and endowment support, are collectively at $30 million annually, supplementing tuition and state support.

Institutional Support

- The University of Maine System, through internal fundraising, will need to secure $15 million in Planning Year 1 to support the start-up expenses for the new medical school. These include hiring initial leadership and faculty as well as planning funds for facilities and infrastructure.

Partner Support

- Hospital System/Hospital contributions represent a primary early financial requirement, with the pro forma assuming $25 million in Planning Year 2 and another $25 million in Planning Year 3, despite no clinical partner yet being secured. Because no Maine health system has committed to providing these funds or taking on the associated teaching and clinical training responsibilities, Tripp Umbach relied on best-practice national assumptions to estimate hospital support. This creates a significant feasibility risk, as the model depends on a level of hospital investment that may not be achievable or realistic within Maine's current healthcare landscape.

Private Support

- Launching a new public medical school requires significant private/philanthropic funding. The proposed medical school pro forma indicates that $100 million in private donations will be required.

State Support

- Being the cornerstone of the support for a new school of medicine, the state's role in the first decade will be $247 million, providing both essential start-up capital and stabilizing recurring support. The State of Maine would become the primary financial backer, as the pro forma shows that both the initial capital outlay and the recurring annual funding, rising from $22.5 million,

cannot be met through tuition, partnerships, or philanthropy alone, requiring significant and ongoing state appropriations.

Compared with other new medical schools, the System's presumed hospital contribution is a significant assumption, and outside of MaineHealth, it does not appear that other healthcare systems in the state are in the financial position to make such investments. Many recently established schools spread health-system support across multiple partners and funding streams rather than relying on a single or small group of hospitals to deliver substantial, up-front cash contributions. For example, the University of Central Florida College of Medicine and the Dell Medical School at the University of Texas at Austin were launched with a mix of state appropriations, university funds, county or local government support, and philanthropic gifts. At the same time, affiliated health systems primarily contributed through clinical training capacity, faculty time, and in-kind support rather than large direct cash infusions. By contrast, the UMS pro forma assumes $50 million in direct hospital contributions over just two planning years ($25 million in Planning Year 2 and $25 million in Planning Year 3), in a state where no clinical partner has yet been identified and where hospitals are already under financial pressure. This comparison underscores the feasibility risk, as Tripp Umbach modeled hospital investment levels that are higher and more front-loaded than what may be possible in Maine.

Table 6: Funding Requirements by Year (Start-Up and Recurring in Millions Unless Otherwise Noted)

	Planning Year 1	Planning Year 2	Planning Year 3	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Revenue												
Tuition				$2.5	$5.0	$9.0	$13.2	$16.3	$19.6	$21.6	$23.7	$24.4
Research grants/ contracts						$3.2	$4.0	$5.0	$6.3	$7.8	$9.8	$12.2
Clinical Revenue						$1.0	$1.4	$1.8	$2.5	$3.3	$4.5	$6.1
Practice Plan						$1.0	$540k	$729k	$984k	$1.3	$1.8	$2.4
Endowment (Private funds)		$50.0		$2.5	$2.5	$2.5	$2.5	$2.5	$2.5	$2.5	$2.5	$2.5
Hospital Contributions		$25.0	$ 25.0									
Naming Donor		$50.0										
Seed Funding (University Contributions)	$15.0											
State Allocation (Recurring)		$22.5	$22.5	$22.5	$22.5	$22.5	$22.5	$22.5	$22.5	$22.5	$22.5	$22.5
Philanthropy				$1.5	$2.0	$2.3	$3.0	$3.7	$4.6	$5.7	$7.2	$8.9
Total funding (in millions)	**$15.0**	**$148.0**	**$47.5**	**$29.0**	**$32.0**	**$42.0**	**$47.0**	**$53.0**	**$59.0**	**$65.0**	**$72.0**	**$79.1**

Note: A detailed breakout of the pro forma can be found in Appendix G.

Risk Assessment of a Public M.D.-Granting Public Medical School in Maine

1. Risk that Maine does not need the additional number of physicians produced

While Maine currently faces well-documented physician shortages, particularly in rural and primary care settings, there is always a strategic risk that long-term supply and demand may not align perfectly with the output of a public M.D. program. If the State invests heavily in a public medical school and simultaneously expands residency training and recruitment incentives, Maine could, over a 30-year horizon, move from shortage to local oversupply in certain specialties, regions, or practice settings.

This "mismatch risk" could manifest in several ways:

- Regional and specialty imbalance: Even if Maine needs more physicians overall, a public school might produce more graduates in competitive specialties who leave the state, while rural primary care vacancies remain, leading critics to argue that public dollars are not solving core access problems.
- Changing care models and technology: Expanded use of advanced practice providers, telehealth, and AI-enabled care could, over time, reduce the per-capita need for physicians in some settings. If Maine's workforce planning does not adapt, the state may find itself funding a production system that is out of step with evolving delivery models.
- Demographic uncertainty: Slower population growth, economic disruptions, or policy changes could reduce future demand for physicians relative to projections. In that scenario, the state could be locked into high fixed costs (facilities, faculty, debt service) for a level of physician production that Maine no longer clearly needs.

2. Risk that students decide they do not want to be physicians (pipeline and preference risk)

A public M.D. school requires a steady pipeline of capable, motivated applicants who are prepared for the rigor of medical education. Several downside scenarios can threaten that pipeline:

- Shifts in career preferences: Over time, talented Maine students may increasingly choose careers in engineering, tech, business, or other health professions (PA, NP, PT, public health) that involve less debt and a shorter training period. If interest in medicine softens relative to other options, the state could struggle to fill seats with high-caliber applicants.
- Burnout and perception of the profession: Growing awareness of physician burnout, long training, work-life balance challenges, and administrative burden can dampen interest in medicine. If this trend accelerates, the school might need to draw more heavily from out-of-state or lower-qualified applicant pools to sustain enrollment, which can undercut the original workforce missions.
- Academic preparedness gaps: If Maine's K–12 and undergraduate systems do not produce enough students with strong science preparation, the public schools may face pressure to admit

students who need significant remediation, increasing costs, and potentially lowering board-pass rates and graduation rates. This, in turn, can harm accreditation status and reputation.

3. The risk that Maine students do not want to attend an in-state public M.D. program

Even if Maine students are interested in becoming physicians, they may not choose a public in-state M.D. school:

- Geographic and lifestyle preferences: Applicants may want to train in larger metropolitan areas, coastal markets, or regions with more diverse clinical settings and social amenities. If Maine's public M.D. school is based in Penobscot County and seen as less attractive on these dimensions, it may rely disproportionately on out-of-state students.
- Tuition and aid competitiveness: If the public M.D. school cannot offer tuition or financial assistance that is meaningfully lower than those of neighboring M.D. programs, Maine students may not see enough financial advantage to stay in-state for medical school

4. Financial sustainability risk of a public M.D. program

Operating a public medical school is one of the most capital-intensive and operationally complex endeavors in higher education. For Maine, key downside risks include:

- High fixed costs: Faculty salaries, accreditation-required faculty-to-student ratios, simulation centers, labs, and ongoing facilities maintenance all contribute to high fixed costs. These costs are difficult to reduce without impairing educational quality or risking accreditation problems.
- Enrollment volatility: If applications grow or decline due to changing preferences or competition, the school may need to reduce tuition, expand scholarship support, or recruit more aggressively out of state, eroding net revenue and increasing reliance on state appropriations.
- Research growth: A public M.D.-granting school would need to secure approximately $20 million in NIH research funding from federal sources, which presents a significant hurdle at this time. With only $4.1 million in NIH funding currently received, a partnership with GSBSE will be essential, as consortium members have collectively received $124.7 million in NIH funding.[62]
- Dependence on financially strong clinical partners: An M.D. program's viability depends on stable clinical training sites that also produce significant clinical revenue for medical schools. Suppose hospital partners experience financial strain, merge, close, or shift strategic priorities. In that case, the school may need to invest additional resources to secure placements or build new partnerships, thereby raising costs and risk.
- Budget pressure and political cycles: In economic downturns, the legislature may face competing demands (higher education, K–12, corrections, infrastructure). A public medical school can become a recurring budget line, politically vulnerable to cuts. Reduced operating support can lead to tuition hikes, faculty attrition, and a decline in quality.

[62] National Institutes of Health; Research Portfolio

- Accreditation and quality risk: If financial stress leads to underinvestment in faculty, facilities, or student services, accreditation bodies may impose warnings or conditions. Addressing these issues often requires rapid, expensive corrective action, precisely when budgets are already strained.

5. Risks that M.D. programs face nationally

Although M.D. graduates enjoy strong residency placement, a state-owned M.D. school is still exposed to broader national trends:

- Market saturation risk: The rapid expansion of M.D. schools nationwide over the past decade has raised concern about potential over-production in some specialties or regions, especially if GME slots do not expand at the same pace. A tightening residency market would heighten scrutiny over state investments in pre-GME education.
- Residency bottleneck risk: If residency positions do not keep pace with class size, graduates may leave the state to train or struggle to match into their desired specialties. Policymakers and the public could question why Maine is funding a school whose graduates must complete their training elsewhere.
- Shifts in accreditation or national policy: Changes in federal policy (Medicare GME funding), accreditation standards, NIH funding levels, or match dynamics could disadvantage newer or smaller M.D. programs relative to more established institutions in neighboring states. Under the scenario as of July 1, 2026, where borrowing limits may reduce participation in medicine, public medical schools will have an advantage, as tuition and fees will fall below federal thresholds. However, the state may need to invest even more heavily to keep its new M.D. program competitive.

6. Opportunity cost and policy flexibility

Rather than launching a costly new medical school, UMS can leverage existing partnerships with established medical education providers, such as Tufts University School of Medicine's Maine Track, the University of New England College of Osteopathic Medicine, and regional GME networks, to expand clinical training capacity and improve retention. Strengthening undergraduate-to-medical-school pipeline programs, expanding rural residency placements, and investing in incentives to retain in-state physicians would be more effective in addressing the workforce crisis.

Stakeholders emphasized the need for an innovative program tailored to Maine's needs, including interdisciplinary curricula, partnerships across the University of Maine System, and integration with engineering and medical innovation initiatives.

Finally, there is a strategic opportunity for UMS to lead, such as investments that support UMS and enable the school to prepare other in-demand healthcare professionals, conduct cutting-edge health and biomedical research. The following leadership opportunities for UMS to address physician workforce shortages are provided, assuming that additional state funding is supplied.

- Expanding and funding GME/residency positions across multiple hospitals.

- Offering loan repayment and incentive programs tied to rural and underserved practice.
- Strengthening primary care, behavioral health, and other high-need professions.
- Investing in pipeline programs, community colleges, or nursing and allied health.

Charting a Path Forward

Tripp Umbach's feasibility assessment concludes that while the need for additional physicians in Maine is both clear and urgent, the development of a new, public M.D.-granting School of Medicine within the University of Maine System is not advisable at this time. The analysis found that although Maine faces some of the most severe physician shortages in the nation, particularly in primary care, psychiatry, and rural practice, there is not sufficient stakeholder consensus to support the establishment of a new public medical school as the most effective or financially feasible solution.

Stakeholder feedback from healthcare leaders, policymakers, and higher education administrators consistently reflected concerns about financial feasibility, duplication of efforts with other medical education programs, and long-term sustainability. The start-up and operational costs of establishing a new public M.D. program within UMS, estimated at more than $200 million in start-up and capital investment and $22.5 million in annual state operating support, would place an extraordinary fiscal burden on both the University of Maine System and the State of Maine. Given the state's current budget environment and competing priorities in higher education, infrastructure, and healthcare delivery, such an undertaking would not be financially prudent at this time, especially without a financially strong healthcare partner.

While this recommendation reflects the current reality, Tripp Umbach acknowledges that a future evaluation of medical education infrastructure in Maine should remain open to reconsideration over the next three years. If financial conditions improve, or if new partnerships with hospitals, private investors, or philanthropic donors emerge, the state and its higher education and healthcare leaders may wish to revisit the potential establishment of a medical school, whether public or private, aligned with Maine's population health needs and economic capacity.

The Feasibility of Establishing a Public Medical School Within the University of Maine System

Addressing the Need for Primary Care Physicians in Rural Maine through Medical Education Expansion

Appendix

Appendix A: Project Overview

Project Facilitation

Recognizing UMS's strength in health science education and research, the legislature directed UMS in the fall of 2024 to engage Tripp Umbach to conduct a comprehensive feasibility study on establishing a new medical school in Maine. The study assessed the state's readiness to support expanded medical education by analyzing healthcare needs, physician workforce shortages, and community priorities. Tripp Umbach evaluated market conditions, examined demographic and workforce trends, and collected input from key stakeholders to determine the viability of developing a public medical school within UMS, likely affiliated with the flagship University of Maine. Throughout the process, the team provided ongoing data review, structural feedback on report components, and integrated suggestions to refine the analysis. Regular update meetings ensured strong communication, collaboration, and alignment on project milestones and deliverables.

Feasibility Analysis

To assess the need and feasibility of launching a potential medical education program in Maine, Tripp Umbach conducted a comprehensive analysis using both primary and secondary data. The team held individual and group interviews with more than 50 key leaders, including senior academic administrators, health science program directors, researchers, healthcare executives, and community health leaders, to gather insights on curriculum expectations, student recruitment, faculty needs, clinical training capacity, community health priorities, funding opportunities, residency expansion, and potential partnerships. An environmental scan further examined demographic trends, population health indicators, and physician workforce needs across the state and region, while also inventorying teaching hospitals, clinical training sites, residency programs, research institutes, and reviewing regional medical school development efforts. Additionally, recent community health needs assessments conducted by Maine health systems and public health organizations were examined to understand better local health priorities within the broader context of federal healthcare reform and population health goals. To support financial planning, Tripp Umbach also developed a 10-year financial model outlining projected revenues, expenses, faculty and staff requirements, start-up and operating costs, escrow needs, and capital investments for the proposed medical school.

Economic Impact Analysis

Tripp Umbach conducted an economic impact analysis to assess the benefits of a public medical school in the state. The study examined:

- **Construction Impacts:** Direct effects of campus development, including spending on labor, materials, and services, and the resulting economic ripple effects.
- **Operational Impacts:** Ongoing benefits once the school is established, including job creation for faculty, researchers, and staff, as well as indirect and induced impacts on local businesses, property values, tax revenues, and community investment.

- **Long-Term and Social Impacts:** The role of the school in attracting healthcare professionals, researchers, and students; expanding the healthcare workforce; advancing research; and improving public health outcomes through education, outreach, and community engagement.

Final Feasibility Analysis Report

Tripp Umbach will integrate findings from the interviews, environmental scan, financial modeling, and community health assessments into the final feasibility report, incorporating UMS input into the recommended program structure and financial model. Tripp Umbach has prepared an independent report outlining detailed findings and strategic recommendations, including the rationale for the proposed program, the monetary framework, and projected economic benefits. This report provided UMS with a foundation for determining whether to advance or refrain from pursuing medical school, while also guiding stakeholder engagement across higher education, healthcare providers, physicians, government leaders, and community partners.

Appendix B: Stakeholder Findings

Tripp Umbach extends its sincere appreciation to the many stakeholders who generously contributed their time, insights, and expertise throughout the feasibility study. Key stakeholders are listed alphabetically by last name. Every effort was made to recognize the individuals and organizations who participated in interviews and discussions. We also express our gratitude to all who completed the online feasibility survey, whose thoughtful feedback enriched the quality and depth of the assessment. Their contribution played a vital role in shaping the depth and quality of the study, ensuring that the findings reflect the priorities and experiences of those connected to advancing medical education in Maine.

1. Bailey-Soctomah, Becky, Community Learning Manager, Wabanaki Public Health & Wellness
2. Bing-You, Robert, M.D., Med, MBA, Co-Chair of the Maine Track Admissions Subcommittee and Former Maine Medical Center Vice President for Medical Education
3. Carreiro, E. Jane, D.O., Vice President of Health Affairs and Dean, University of New England College of Osteopathic Medicine
4. Charland, Jason, MSW, Senior Advisor to the President and Executive Director of Research Development, University of Maine
5. Chaudron, Linda, Vice President of Medical Education, MaineHealth
6. Collins, Ava, FACHE, President, Northern Light Eastern Maine Medical Center and Senior Vice President of Northern Light Health
7. Connolly, Patrick, M.D., MaineHealth Medical Center
8. Coughlin, Kevin, Ph.D., Vice President of Enrollment Management, University of Maine
9. Cox, Greg, Ph.D., Director of the Graduate School of Biomedical Science and Engineering
10. Defeo, Guy, D.O., Senior Associate Dean for Clinical Education, University of New England College of Osteopathic Medicine
11. Dill, Griffin, EES, SBE, Ph.D. candidate, Extension Professional/Tick Lab Coordinator, University of Maine
12. Dorsey, Carolyn, Ph.D., Vice Chancellor for Strategic Initiatives and Chief of Staff, University of Maine System
13. Duguay, Holly, CPRP, Specialty & Medical Staff Recruiter, MaineGeneral Medical Center
14. Dwyer, Lori, JD, President/CEO, Penobscot Community Health Care
15. Edelman, Emily, M.S., Director of Clinical Education, The Jackson Laboratory
16. Ferry, Emily, MSW, Director, Training & Technical Assistance, Maine Primary Care Association
17. Ferrini-Mundy, Joan, Ph.D., President, University of Maine and University of Maine at Machias; Vice Chancellor for Research and Innovation, University of Maine System
18. Guidoboni, Giovanna, Ph.D., Interim Vice President for Research and Dean, Maine College of Engineering and Computing, University of Maine
19. Harder, David, Ph.D., Associate Professor of Microbiology, University of Maine

20. Harris, Katie, Chief Government Affairs Officer, MaineHealth
21. Harvey-McPherson, Lisa, RN, MBA, MPPM, Vice President for Government Relations, Northern Light Health
22. Henry, Clarissa, Ph.D., Professor of Biological Sciences, University of Maine
23. Herbert, D. James, Ph.D., President, University of New England
24. Howell, Caitlin, Ph.D., Professor of Bioengineering and Head of the Howell Biointerface Engineering Group
25. Jarvis, Jim, M.D., Director of Clinical Education, Northern Light Health
26. Khalil, Andre, Ph.D., Professor of Mathematics and Director of CompuMAINE Lab, University of Maine
27. King, Benjamin, Ph.D., Associate Professor of Bioinformatics, University of Maine
28. Letourneau, Lisa, M.D., Senior Advisor, Delivery System Change, Maine DHHS
29. Low, Ryan, Vice Chancellor for Finance and Strategic AI Integration, University of Maine
30. Maginnis, Melissa, Ph.D., Director, Institute of Medicine, University of Maine
31. Malloy, Dannel, Chancellor, University of Maine System
32. McKernan, Michael, Director, Government and Community Relations, The Jackson Laboratory
33. Mills, Jeff, Ph.D., President/CEO, University of Maine Foundation
34. Mueller, Andy, Chief Executive Officer, MaineHealth
35. Pierce, Kathryn, The Peter and Carmen Buck Foundation
36. Pinkham, Tanya, EdD, MHI, Assistant Director, Institute of Medicine for Development and Administration, University of Maine
37. Petrie, Rebecca, MPH, CEO, Wabanaki Public Health & Wellness
38. Riley, Trish, President Emerita, National Academy for State Health Policy; University of Maine System Board Chair
39. Rogers, Michelle, EdD, Former Chief of Staff, University of Maine
40. Rounsville, Tom, Ph.D., Assistant Extension Professor and Applied Molecular Specialist, University of Maine
41. Rowland, Diane, Ph.D., College of Earth, Life, and Health Sciences; Director, Maine Agricultural and Forest Experiment Station, University of Maine
42. Rueter, Jens, M.D., Chief Medical Officer, The Jackson Laboratory
43. Sawyer, Doug, Chief Academic Officer, MaineHealth
44. Sedlack, E. Anne, Director of Advocacy, Maine Medical Association
45. Sockabasin, Lisa, MS, RN, CEO, Wabanaki Public Health & Wellness
46. Sparks, Kelly, Ph.D., Former Vice President for Finance and Administration and Chief Business Officer, University of Maine

47. St. John, Jeff, Ph.D., Vice Chancellor for Academic and Student Affairs, University of Maine System
48. Strout, Kelley, Ph.D., RN, Director and Associate Professor of Nursing, University of Maine
49. Talbot, Jared, Ph.D., Assistant Professor of Developmental Biology
50. Tedesco-Schneck, Mary, Ph.D., RN, CPNP, Pediatric Nurse Practitioner and Associate Professor, UMaine School of Nursing
51. Tilbury, Karissa, Ph.D., Associate Professor of Chemical and Biomedical Engineering, University of Maine
52. Varahramyan, Kody, former Vice President for Research & Dean of the Graduate School, University of Maine
53. Volin, John, Ph.D., Former Provost and Executive Vice President for Academic Affairs, University of Maine
54. Warren, Samantha, Chief External & Governmental Affairs Officer, University of Maine System
55. Ward, Jake, BS, MS, Vice President for Strategic Partnerships, Innovation, Resources, and Engagement (SPIRE), University of Maine
56. Weiss, Sally, Vice President, Workforce Policy & Strategic Initiatives, Maine Hospital Association
57. Westhoff, Angela, President & CEO, Maine Health Care Association
58. West-Ciaccia, Laura, Associate Director of Medical Education, The Jackson Laboratory
59. Wheeler, Rob, Ph.D., Professor of Microbiology, University of Maine
60. Wray, Charles, Ph.D., Vice President for Education, The Jackson Laboratory
61. VA Maine Healthcare System

Interview Process

Tripp Umbach facilitated a comprehensive study to evaluate the feasibility and necessity of establishing Maine's first public M.D.-granting medical school within the University of Maine System. This initiative offers a transformative opportunity to address the state's healthcare challenges, especially in underserved rural areas, while fostering economic and social growth. The study assessed multiple factors, including Maine's healthcare needs, the university system's existing infrastructure, and financial viability, to recommend whether and how to develop a successful public M.D. program.

In-person and phone interviews were conducted with key leaders from the University of Maine System, healthcare providers, representatives of healthcare associations, and public health officials in Orono and Portland. In addition, Tripp Umbach toured UMaine's campus and the Maine Center in downtown Portland. The interviews focused on four key questions: the need for physicians, the role for the state to sponsored a public medical school to address this need, the University of Maine System's capacity to offer an M.D. degree, identifying clinical partnerships to support the program, and the optimal location and model for the medical school to maximize economic, social, and community health benefits while ensuring financial sustainability.

Key Findings from Interviews

1) A public medical school is needed to address health outcomes

A public medical school in Maine could significantly improve health outcomes, strengthen the workforce, and drive economic development by addressing the state's physician shortages, especially in rural areas, and enhancing healthcare education and research infrastructure. Maine faces a dire need for physicians, with an aging population and the oldest average physician age in the United States. Workforce shortages are apparent in primary and specialty care, with more than 300 open physician positions statewide.

2) **The existing medical education landscape does not fully address the need**

Maine has a Tufts University School of Medicine Maine Track program in which students spend their first year at Tufts University in Boston and the subsequent three years at Maine Medical Center in Portland. While this track has been in place for decades, it has not led to significant physician retention in Maine—fewer than half of graduates remain in the state to practice. In fact, Maine has among the lowest numbers of medical school graduates and residents compared with other states. Additionally, Maine hosts the University of New England's osteopathic medical program, which has operated successfully since the 1970s without state funding. However, fewer than one-third of UNE's students complete their training in Maine, and fewer than 25% remain in Maine after graduation.

There is skepticism that a new public M.D. program focused solely on primary care would be sustainable, especially given national trends in which fewer than 10% of M.D. graduates enter primary care and fewer still practice in rural areas.

3) Maine hospitals and health systems have the capacity to provide clinical training to public M.D. students but need financial resources.

Maine's healthcare system is dominated by two major players: MaineHealth, headquartered in Portland, and Northern Light Health, headquartered in the Bangor region, with a distinct focus on rural health. These systems face significant workforce challenges, with MaineHealth being more financially robust than Northern Light. Given Maine's vast geography and dispersed population, the distribution of healthcare services is critical. Stakeholders emphasized that any new M.D. program must address the state's unique geographic and workforce needs, particularly the lack of physicians in northern and rural areas. These two systems, along with other hospitals and health systems in Maine, have the capacity to provide clinical training to additional M.D. students.

4) **An innovative model is needed to fulfill statewide needs.**

Stakeholders emphasized the need for an innovative program tailored to Maine's needs, including interdisciplinary curricula, partnerships across the University of Maine System, and integration with engineering and medical innovation initiatives. Support is broad for a distributed clinical model in which students train at multiple sites statewide, including rural and underserved areas.

5) Graduate Medical Education Expansion is Critical to Workforce Development

Stakeholders questioned whether a public medical school with a class size of 40-50 students per year could meet workforce needs without expanding GME. Currently, Maine has about 330 residency positions, with plans to grow to 420. However, most residency programs are concentrated in Portland. Expanding GME opportunities in northern Maine and rural areas is essential to ensure that physicians trained in these regions remain to practice there. Northern Light facilities will most likely expand GME; however, State funding will be required. Studies show that the combination of expanding public medical education and GME is most successful in attracting and retaining primary care physicians, especially in rural areas.

1. **State Commitment and Orono Facilities Pose Challenges**

Most stakeholders are concerned about the financial viability of a new M.D. program. The state currently invests minimal public funds in medical education, and stakeholders were clear that any new program must attract external funding from private donors, industry, and federal sources. The University of Maine's facilities in Orono are underfunded, and significant investment would be required to develop a medical school campus.

Location and Infrastructure Challenges

Two primary locations for the potential M.D. program emerged:

- Orono: While the University of Maine offers research infrastructure, it lacks the modern, specialized facilities required for a medical school. Significant investment in state-of-the-art laboratories and resources would be necessary. Northern Light Eastern Maine Medical Center, the largest hospital in the system, is near the university and could provide pre-clinical experiences to students in their first and second years, as well as third- and fourth-year clinical training.
- Portland, Maine's largest population center and home to Maine Medical Center, is an established academic medical center offering robust clinical training opportunities and residency/fellowship programs. However, stakeholders noted that a Portland-based program wouldn't resolve physician shortages in rural areas outside the Portland metropolitan area. Maine Track students from Tufts University currently complete their second, third, and fourth years in Portland. Of the 25% of graduates from this program who remain in Maine, few practice outside Portland.

Opportunities to Mitigate Challenges

Pipeline: Maine enrolls among the fewest medical students in the U.S., alongside only Wyoming, Alaska, and Vermont. Therefore, programs must be developed and sustained that encourage students from K-12 and higher education institutions (public and private) to enter the medical profession. Tripp Umbach believes that UMS can play a critical role in pipeline development; therefore, assuring enough Mainers are enrolled if a new public medical school were developed.

Data collected from survey respondents indicated that Maine's PK-12 schools generally prepared students for pre-medical studies, with 38.2% reporting that they were somewhat well or very well equipped.

Infrastructure Needs: UMaine lacks adequate facilities and faculty for a medical school; substantial investment would be required.

Collaboration Among Existing Programs: The new M.D. program must complement, rather than compete with, the existing UNE osteopathic program.

Retention of Graduates: Without targeted incentives, such as loan forgiveness or tuition subsidies tied to service in Maine, the state may struggle to retain graduates.

Financial Sustainability: Stakeholders expressed concerns about the cost of establishing a medical school and the need to ensure that public dollars are used effectively.

Conclusion

A new M.D. program at UMaine has the potential to address critical workforce shortages and improve healthcare access statewide. The preferred model—integrating basic science education in Orono with clinical training in Northern/Eastern Maine and Portland—offers a balanced approach that leverages existing strengths while addressing geographic disparities. However, the program's success will depend on robust partnerships, innovative funding strategies, and a clear focus on meeting Maine's unique healthcare needs. Stakeholders emphasized that any solution must be community-driven and aligned with the state's long-term healthcare and economic development goals.

Appendix C: Survey Findings

A statewide stakeholder survey was initiated as part of the University of Maine System's legislatively mandated feasibility study to evaluate the need for a public M.D.-granting medical school. In total, 89 surveys were utilized for data analysis. As Maine faces an urgent and growing physician shortage and recognizes UMaine's central role in advancing healthcare workforce development, the survey was designed to gather firsthand insight from healthcare, education, and community across the state, including public policymakers. Their perspectives are essential to understanding current gaps in physician supply, opportunities to expand in-state medical education, and strategies to recruit and retain providers who will serve Maine's diverse and rural communities. The survey ensured that the feasibility study reflected the experience, priorities, and vision of those most connected to healthcare delivery, ultimately guiding evidence-based decisions that strengthen access to care and improve health outcomes for all Maine residents.

Key Findings

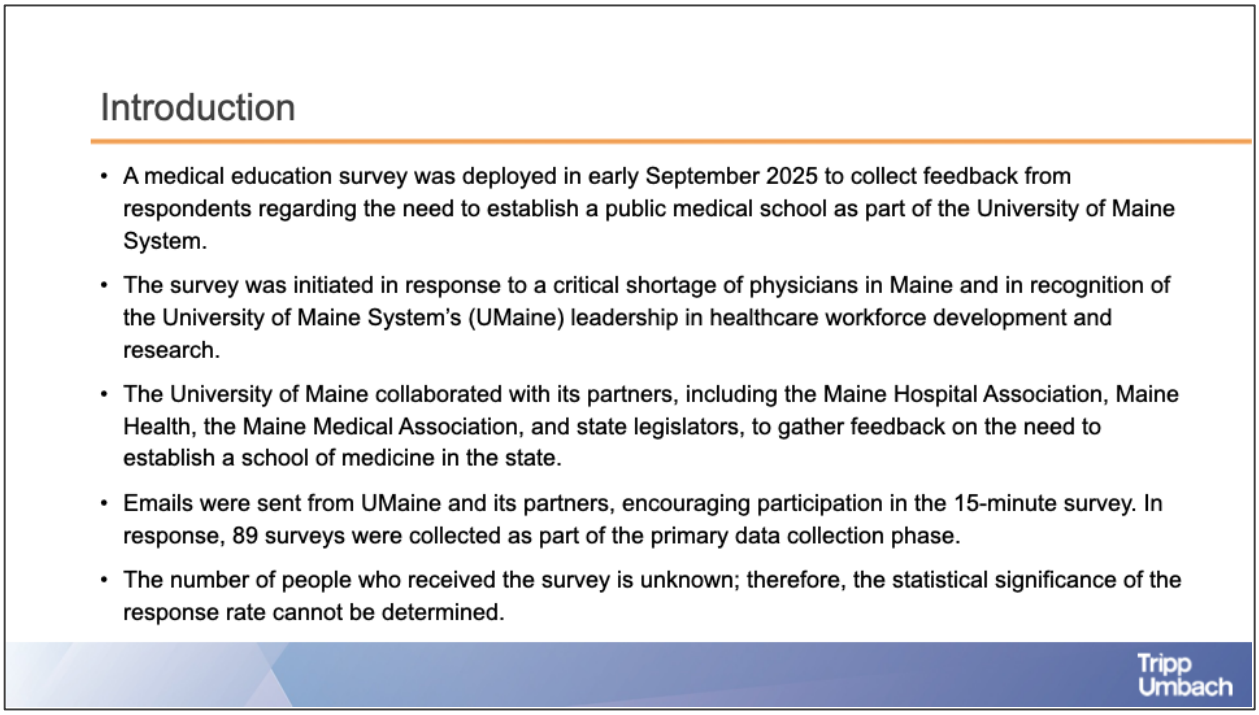
Stakeholders perceive a clear opportunity to enhance access, affordability, and workforce retention by establishing a new medical school in Maine. However, the central challenge is financing, both the up-front construction costs and ensuring a reliable long-term funding model.

- **Broad Support for a New Medical School**
  Across questions, strong majorities of respondents answered "Yes" to supporting the concept of a public medical school in Maine, with an average of more than 74% endorsing the idea. Further, many respondents would like to see the medical school at the University of Maine in Orono.
- **Need: Affordability and Access**
  The strongest themes were the importance of affordable tuition for in-state students (92%), alongside expanding access to healthcare in the region (80%) and addressing physician shortages (83%).
- **Retention and Workforce Alignment**
  Respondents emphasized that a new medical school must focus on retaining graduates in Maine (81%), with structured community-based primary care rotations (84%) and programs that support rural health and community care (75%).
- **Funding Realities and Opportunities**
  There was recognition of financial challenges, with concerns about the high cost of construction (75%) and uncertainty over a clear funding source (81%). However, respondents also identified private philanthropy (84%), state government funding (76%), and federal grants (76%) as critical levers.
- **Maine's Strengths as a Training Environment**
  Stakeholders pointed to the state's high quality of life (78%), loan repayment/forgiveness incentives (77%), and strong community orientation as key assets that could help attract and retain future physicians.

Table 7: Opportunities and Challenges Identified in Stakeholder Survey

Opportunities	Challenges
Affordable tuition for in-state students (92%) – broadest support for lowering financial barriers.	No clear source of funding (81%) – strongest concern across stakeholders.
Community-based primary care rotations (84%) – grounding education in Maine communities.	High cost of constructing a medical school (75%) – a significant up-front barrier.
Addressing physician shortages (83%) – direct link to solving statewide workforce gaps.	Dependence on state (76%) and federal (76%) funding – seen as both critical and uncertain.
Retaining graduates in Maine (81%) – ensuring long-term return on investment.	Lack of adequate or long-term funding (60% / 49%) – sustainability concerns.
Expanding healthcare access statewide (80%) – reducing care deserts.	Uncertainty ("Don't know" responses 15%) – reflects knowledge gaps or skepticism.

Presented below are the overall survey findings:



Key Findings

1. Strong perceived need for expansion of the physician workforce.
   - Many respondents emphasized that Maine must "grow its own" doctors to improve retention and access.
2. Residency expansion is viewed as a higher priority than developing a new public medical school.
   - Calls for more GME slots, especially in family medicine and rural areas, with incentives such as loan forgiveness and tuition reimbursement tied to in-state practice, were greater than for a new public medical school.

Tripp Umbach

Key Findings

3. Mixed support for creating a new public medical school.
   - Supporters highlighted affordability compared to UNE COM, improved rural retention, economic development, and equity for Maine residents.
   - A public option could reduce debt loads and make primary care careers more viable.
   - Many support a SOM at the University of Maine due to its research strength, affordability, and statewide reach.
   - The location in Bangor/Orono is perceived to be better than Portland, providing a central location for students and aligning with rural retention goals.
   - Skeptics prefer reallocating resources to residency expansion or incentives for out-of-state graduates to practice in Maine.

Tripp Umbach

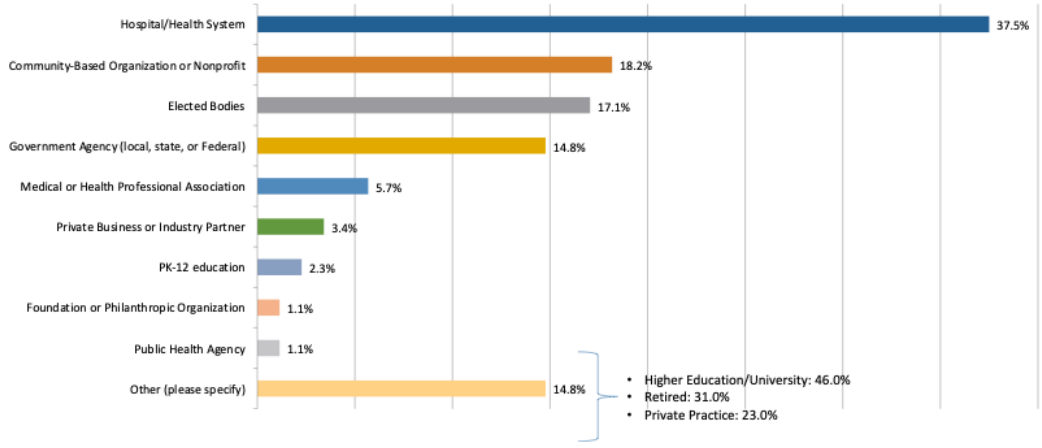
Key Findings

4. Financial issues and clinical training sites were raised as the leading barriers to medical school development:

- Advocates argue that Maine should make a strong state commitment, stressing long-term benefits.
- Many worry about UMaine's financial strain, political interference, and dilution of resources.
- Some suggested an independent model that could cost less to develop and not rely on state resources.
- Opponents expressed concern over limited clinical training capacity, high costs, and duplication of existing programs (e.g., UNE COM and Tufts Maine Track).
- Limited preceptor and clinical site capacity and difficulty attracting sufficient students and faculty.

Tripp Umbach

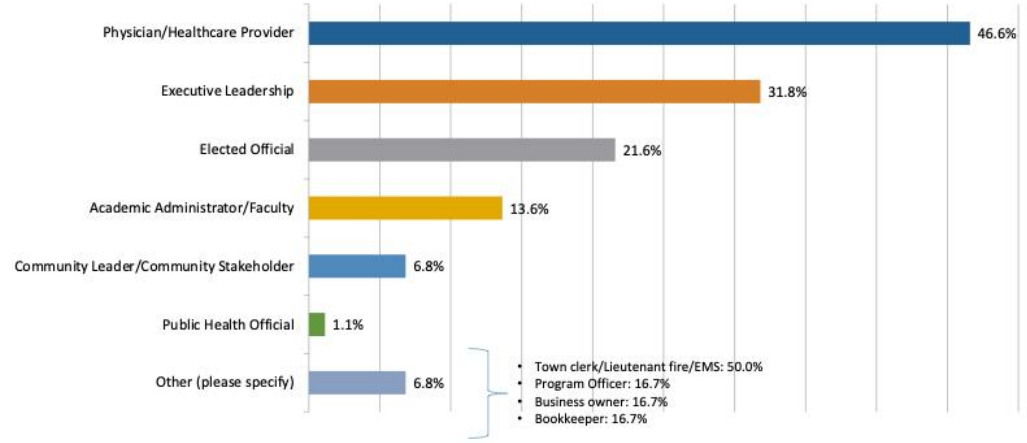
Type of Organization



*Check all that apply question

Tripp Umbach

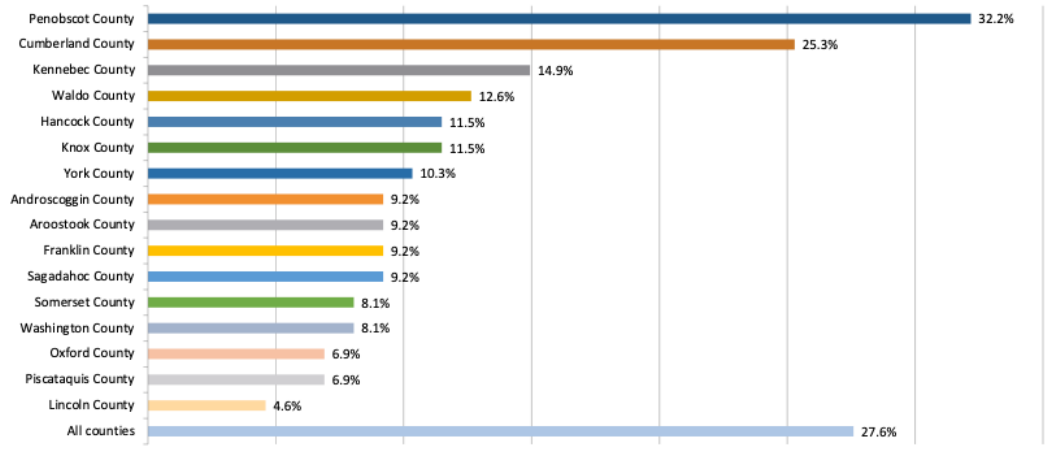
Role Within the Organization



*Check all that apply question

Tripp Umbach

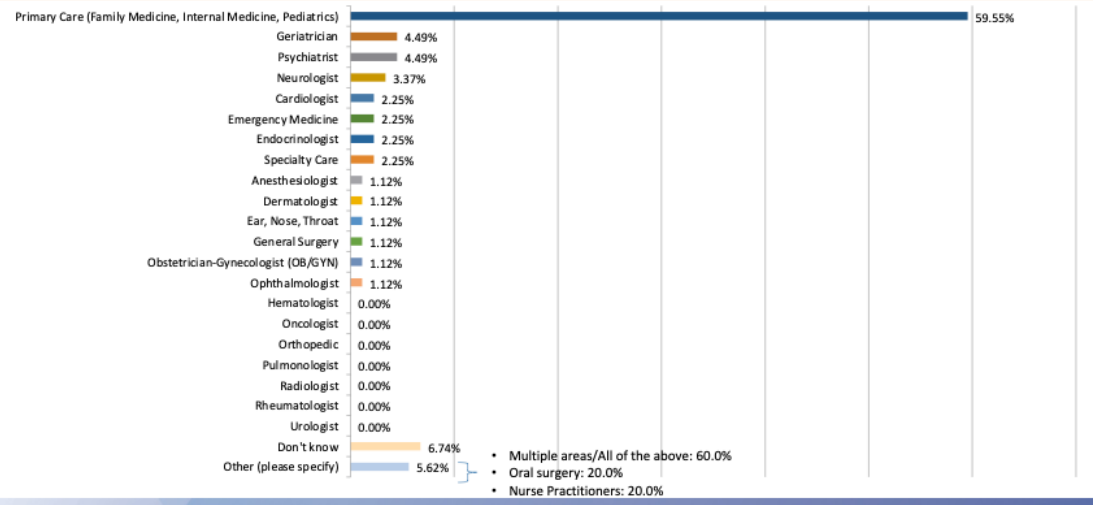
County Organization Serves



*Check all that apply question

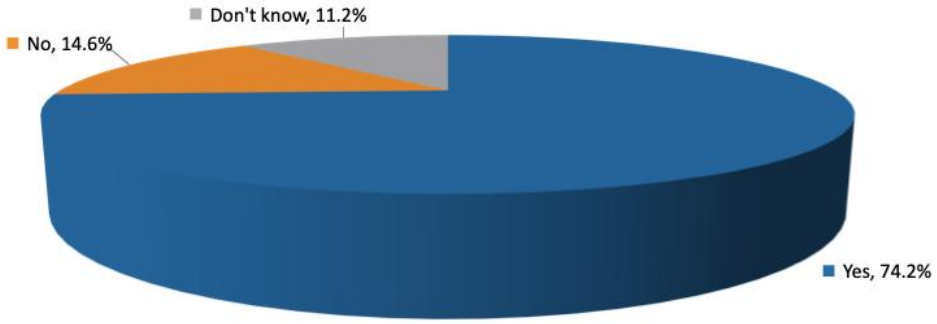
Tripp Umbach

Profession Most Needed in the Community



Tripp Umbach

Does Maine Need a Public Medical School?



Tripp Umbach

Why Maine should/shouldn't have a Public Medical School

The responses are categorized into thematic categories. The breakdowns of the main groupings include examples of respondents' perspectives.

1. Support for a Public Medical School
- Maine must "grow its own" physicians, especially for rural areas.
- A public medical school would be more affordable than UNE COM ($120k/year COA).
- Training in Maine increases the likelihood of retention.
- Maine's aging population and physician shortage make this urgent.
- A public option could focus on primary care, family medicine, and rural tracks.
- It could stimulate economic growth, research, and telehealth initiatives.
- Equity: More accessible for Maine residents and rural students.

2. Concerns and Opposition
- Maine lacks a clinical training infrastructure to support a larger number of students.
- Risk of dilution of training by splitting limited preceptor sites.
- There are cost and resource challenges. The state lacks sufficient funds and students.
- Existing programs, such as UNE COM and Tufts, already train over 200 students/year.
- Residency slots are more critical than medical school seats.
- Other pressing needs (e.g., dentists, specialists) may be higher priorities.
- Fear of duplicating efforts without addressing core issues.

3. Residency & Retention Emphasis
- Strong consensus: Residency location is the most significant factor in retention.
- Calls for expansion of GME slots, especially in primary care and rural sites.
- Proposals for residency-linked incentives (e.g., loan forgiveness, tuition reimbursement, "live in Maine, work in Maine" programs).
- Suggestion to allow students to skip 4th-year interviews if they commit to the required specialties in Maine.

Tripp Umbach

Why Maine should/shouldn't have a Public Medical School

The responses are categorized into thematic categories. The breakdowns of the main groupings include examples of respondents' perspectives.

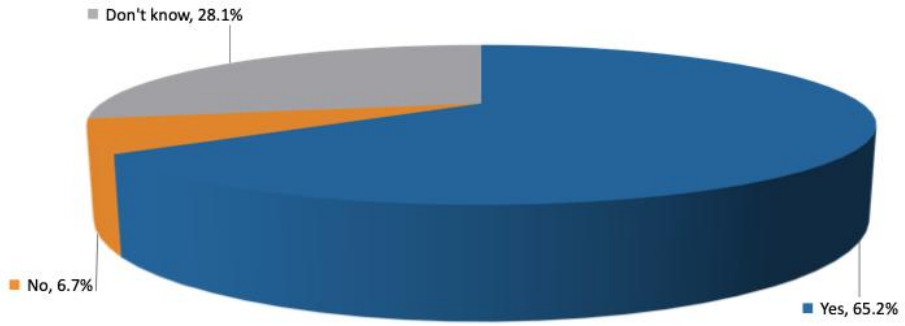
4. Financial Incentives & Affordability
- Tuition at UNECOM is prohibitive, as graduates are burdened with $500k in debt.
- Public schools could lower costs, making it more likely for individuals to choose primary care.
- Desire for broader access to Drs. for Maine's Future program (not just Tufts).
- National Health Service Corps and other loan repayment programs could help.

5. Broader Benefits of a Public Medical School
- A public medical school builds pipeline programs (e.g., high school, college, and medical school).
- Enhances state identity and pride in training its own doctors.
- Increases awareness among Maine youth that medicine is a viable path.
- Potential to attract research funding and strengthen the life sciences economy.
- Could anchor rural healthcare networks in underserved regions.

6. Skepticism / Alternative Suggestions
- Maine already has two pathways (e.g., UNE COM and Tufts Maine Track).
- Better to expand existing programs than build new.
- Maine may not have enough demand/population for a third school.
- Medical school alone won't fix shortages. The issue lies in workforce culture, salaries, taxes, housing, and the education system.

Tripp Umbach

Should the Public Medical School be part of the University of Maine System?



Tripp Umbach

Why the Public Medical School should/shouldn't be part of UMS

1. Support for Housing the Medical School in the University of Maine System

- UMaine is the logical host due to its R1 research status, infrastructure, and faculty expertise.
- Being part of a large, established public system ensures affordability, accountability to Maine residents, and reduced duplication of services.
- Leverages existing biomedical, nursing, engineering, and research programs.
- UMS's multiple campuses and statewide footprint could broaden access.
- Integration would strengthen educational pipelines from undergraduate to medical school and residency.
- Provides access to funding, grants, and donor networks within the established system.
- Seen as aligned with state priorities in workforce and healthcare.

2. Concerns About UMS Capacity/Funding

- UMS is already underfunded and struggling with resources.
- Adding a medical school could strain finances and compete with existing needs.
- Some fear the system lacks the political stability or resources to sustain such an effort.
- Worries about the allocation of resources across UMS campuses and potential dilution.

Tripp Umbach

Why the Public Medical School should/shouldn't be part of UMS

3. Alternative Views (Independent or Other Models)

- Some respondents have argued that the school should be independent, like a law school or a standalone institution.
- A few noted Northern Light or other healthcare systems lack the history/tradition to lead such a school.
- Comparisons to other states where medical schools were launched independently of a university system.
- Concerns about political interference if housed in UMS.

4. Neutral/Uncertain Responses

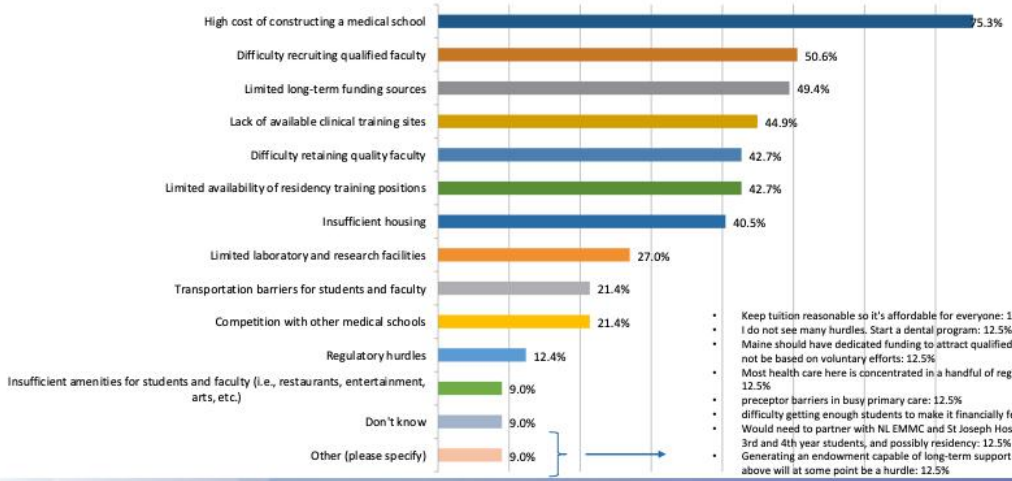
- Respondents who are agnostic: fine with UMS if it works, fine with independence if better.
- Several respondents stated that they lacked sufficient information to make a decision.
- Some gave no opinion or expressed confusion about costs/politics.

5. Arguments Against a New Medical School (Regardless of Structure)

- Belief that Maine doesn't need another medical school at this time.
- Maine already has UNE COM and Tufts-MMC, which should be expanded rather than replaced.
- Concern that demand is insufficient and residency slots are the real issue, not med school seats.

Tripp Umbach

Challenges the Medical School Would Face

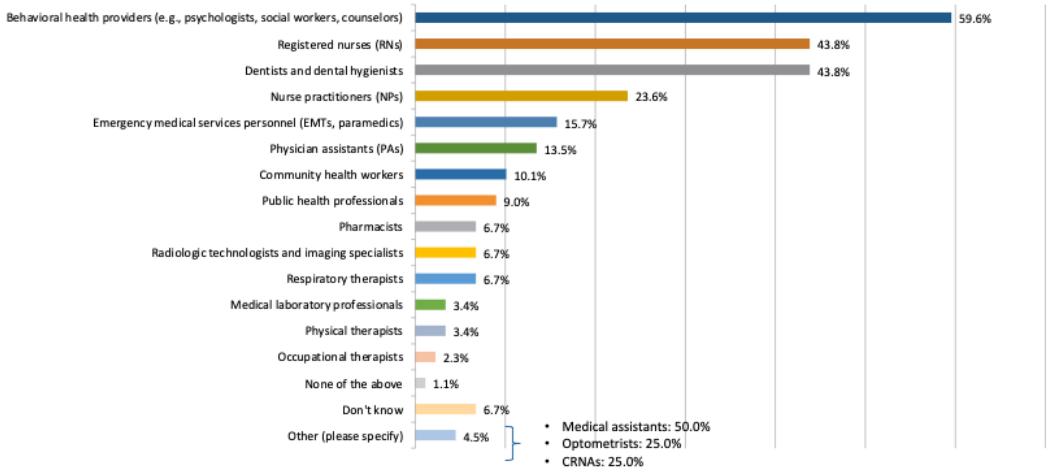


- Keep tuition reasonable so it's affordable for everyone: 12.5%
- I do not see many hurdles. Start a dental program: 12.5%
- Maine should have dedicated funding to attract qualified professionals to teach, and this should not be based on voluntary efforts: 12.5%
- Most health care here is concentrated in a handful of regional hospital network monopolies: 12.5%
- preceptor barriers in busy primary care: 12.5%
- difficulty getting enough students to make it financially feasible: 12.5%
- Would need to partner with NL EMMC and St Joseph Hospital for clinical rotations, inclusive of 3rd and 4th year students, and possibly residency: 12.5%
- Generating an endowment capable of long-term support. Other issues will be location. All the above will at some point be a hurdle: 12.5%

*Check all that apply question

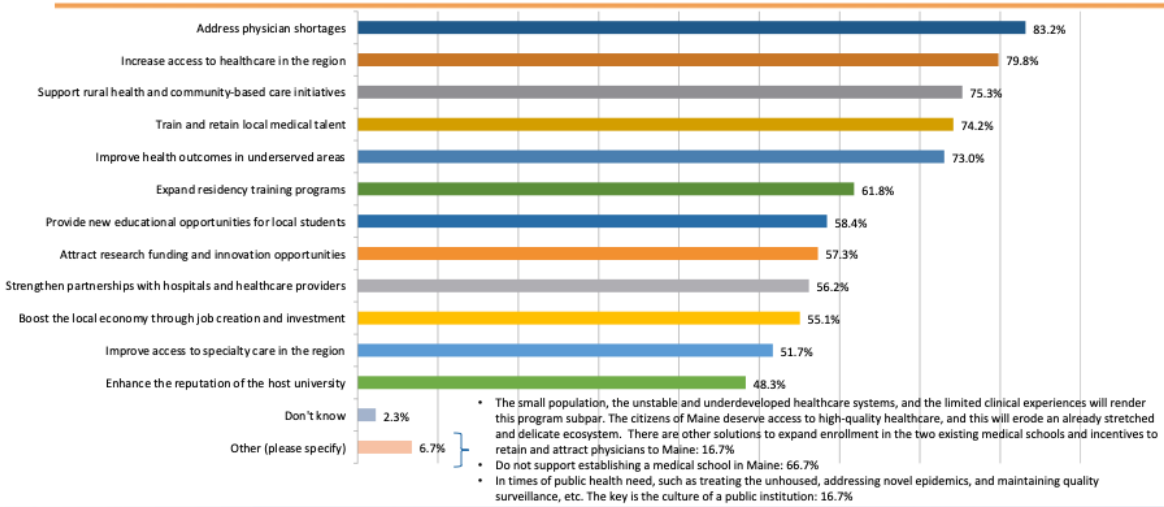
Tripp Umbach

Healthcare Workforce Needs, Beyond Physicians, That Are Most Critical and Could Be Addressed Through Existing or New University of Maine System Programs



Tripp Umbach

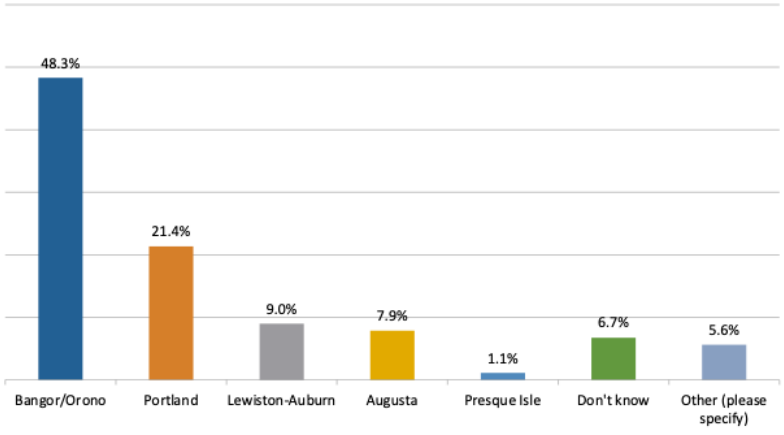
Advantages of Establishing a Public Medical School



*Check all that apply question

Tripp Umbach

Where Should a Public Medical School, If Established, Be Located?



- Lincoln/Medway/Millinocket area: 20.0%
- Gray, ME: 20.0%
- Pineland Farms: 20.0%
- Place with the greatest opportunity for clinical instruction; many hospitals should participate: 20.0%
- Should have a home base and satellites, taking full advantage of new teaching technology: 20.0%

Tripp Umbach

Why Do You Believe the Medical School Should Be in That Community?

1. Central Location & Accessibility
- Bangor/Orono is considered centrally located, offering access to both northern and southern Maine.
- The location enables connections to multiple hospitals and communities across the state.
- Transportation links (i.e., airport, bus, highways) make commuting feasible.
- Balances rural exposure with access to urban amenities.

2. Addressing Rural & Underserved Needs
- Northern and rural Maine are the most underserved regions, facing the greatest physician shortages.
- A school in Bangor/Orono (or further north) would increase retention of providers in rural areas.
- Locating outside Portland avoids oversaturation in southern Maine and focuses on communities in need.

3. Existing Infrastructure & Institutional Strength
- Proximity to the University of Maine (Orono) with its research faculty, biomedical programs, and labs.
- Eastern Maine Medical Center, St. Joseph's, and Northern Light Health collaborate to create a comprehensive clinical training ecosystem, enabling students to complete a diverse range of clerkships within Maine. Embedding a medical school in proximity to these facilities strengthens partnerships between academic and clinical entities, enhances residency program development, and significantly increases the likelihood of retaining graduates to serve the state's healthcare needs.
- Existing infrastructure (labs, housing, research centers, teaching resources) supports sustainability.
- Opportunities for collaboration with Jackson Lab, Mount Desert Island Biological Lab, and Roux Institute.

4. Clinical Training & Residency Opportunities
- Bangor and the surrounding areas provide multiple hospitals and specialty practices for training.
- Residency programs are critical for retention; students trained in Maine residencies are more likely to stay.
- Proximity to MMC (Portland) and other hospitals allows a statewide training network.

Tripp Umbach

Why Do You Believe the Medical School Should Be in That Community?

5. Workforce Retention & "Grow Our Own" Strategy

- Students from rural areas who train locally are more likely to remain in Maine.
- Being embedded in communities with high need fosters long-term commitment.
- Avoids over-reliance on recruiting from outside the state (esp. Boston/MA pipeline).

6. Economic & Community Impact

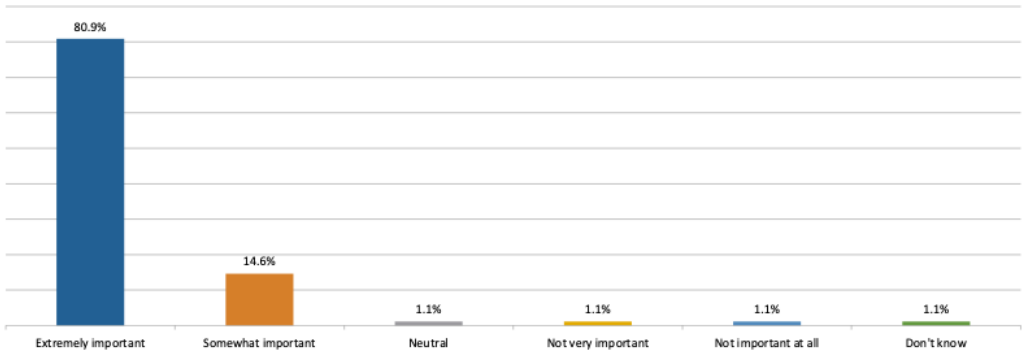
- Locating in Bangor/Orono would drive economic development in central/northern Maine.
- Students and faculty contribute to the community during training and beyond.
- Strengthens healthcare workforce pipelines and improves local health outcomes.

7. Concerns/Alternative Perspectives

- Some suggested Portland due to its concentration of physicians, teaching hospitals, and residency programs.
- Others argued that Maine's healthcare ecosystem is fragile, adding that a school could divert resources from existing efforts.
- A few favored forming a task force first to ensure partnerships and synergies before choosing a site.

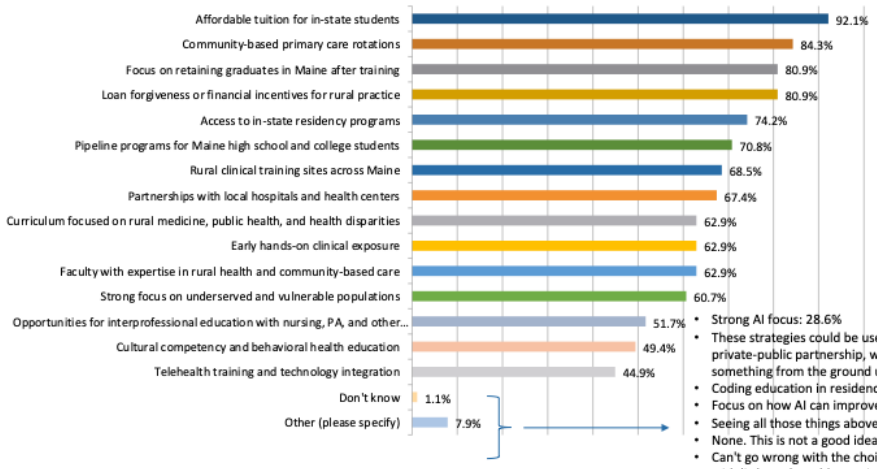
Tripp Umbach

Importance of a Public Medical School with Strong Rural and Community-Based Clinical Training Components



Tripp Umbach

Important Components in a Maine Public Medical School

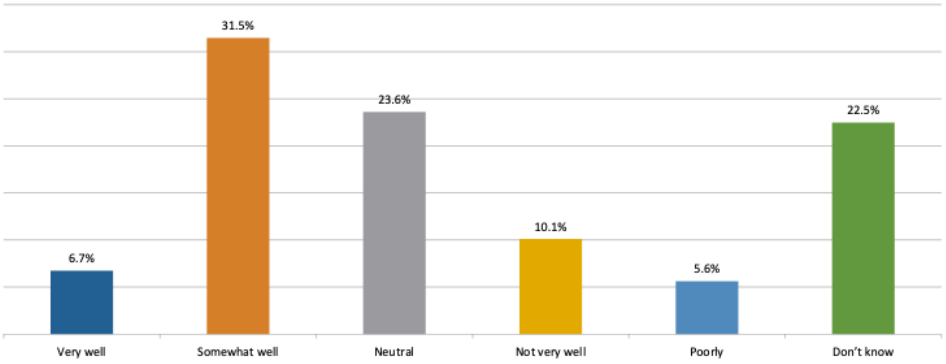


- Strong AI focus: 28.6%
- These strategies could be used to support the two existing medical schools in a private-public partnership, while saving the money that would be required to build something from the ground up: 14.3%
- Coding education in residency: 14.3%
- Focus on how AI can improve healthcare: 14.3%
- Seeing all those things above, I'm convinced that this would be a good idea: 14.3%
- None. This is not a good idea or use of resources: 14.3%
- Can't go wrong with the choices, what it should not be is a siloed traditional program with little real-world experience: 14.3%

*Check all that apply question

Tripp Umbach

How well do Maine's PK-12 Schools Prepare Students to be Ready to Pursue Pre-Medical Studies in College?



Tripp Umbach

Key Reasons or Experiences That Led to Your Assessment of How Well Maine's PK-12 Schools Prepare Students for Careers in Medicine

1. Strong Foundations and Positive Experiences

- Some respondents noted that Maine schools provide solid science and math preparation.
- Teachers and guidance counselors encourage students to pursue careers in healthcare.
- Advanced Placement (AP) and honors programs help motivated students succeed.
- Individual experiences of Maine students entering college and professional tracks are successful.

2. Limited Exposure to Medical Careers

- Lack of early exposure programs to health professions.
- Few structured pipeline initiatives (shadowing, mentorships, healthcare career days).
- Students in rural areas, especially, have fewer opportunities to interact with medical professionals.

3. Gaps in Academic Preparation

- Concerns about math, science, and writing skills not being strong enough.
- Variability across districts—some schools provide advanced coursework, others do not.
- Perception that Maine schools are under-resourced compared to national peers.

4. Equity and Access Issues

- Rural and underserved communities lack consistent access to rigorous coursework.
- College preparatory resources (SAT prep, advising) are not equally available.
- Students from lower-income backgrounds face additional challenges in pursuing a career in medicine.

5. Role of Teachers and Guidance Counselors

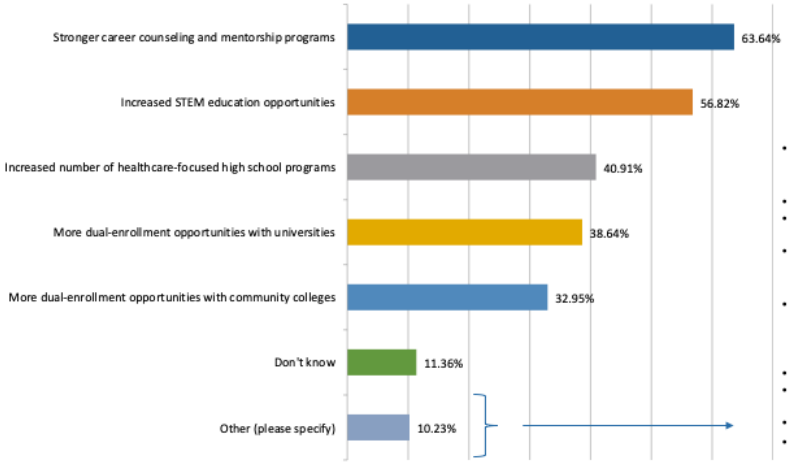
- A strong influence is observed when schools have motivated teachers who nurture students' interest in science.
- Inconsistent guidance. Some schools encourage healthcare careers; others lack counseling staff with knowledge of medical pathways.

6. Neutral / Mixed Views

- Some respondents stated that they did not have enough knowledge to make a judgment.
- Others described Maine PK–12 as adequate but uneven, with pockets of excellence and areas of weakness.

Tripp Umbach

What Changes are Needed in Maine's PK-12 Education System to Better Prepare Students for Pre-Medical Studies in College?

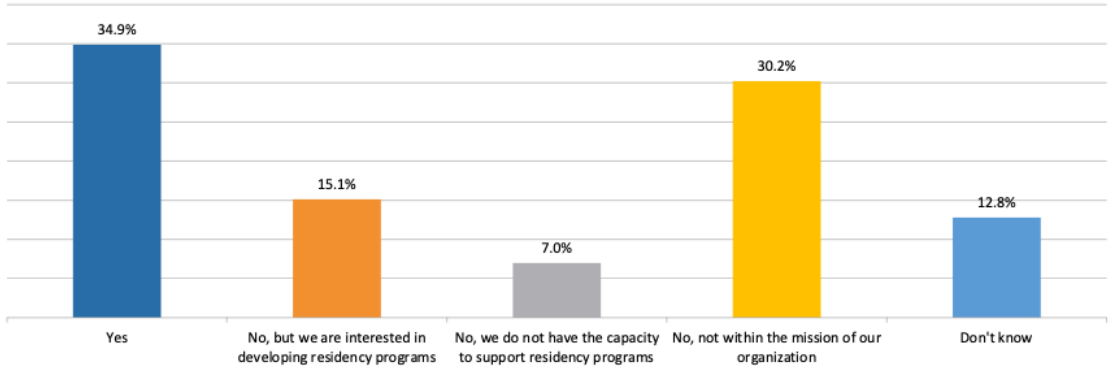


- Provide good continuing educational opportunities for existing teachers so they can develop skills and strategies to better prepare their students: 11.1%
- Improve achievement levels in math and science: 11.1%
- High schools should try to offer programs that are health care related: 11.1%
- Science/math should be strongly supported by art/music programs as well as athletic opportunities: 11.1%
- More realistic expectations of the rigors of college courses and preparation, especially in science and math. So not just more opportunity, but more rigorous opportunity: 11.1%
- Strong basic skills: 11.1%
- Strong liberal arts and critical thinking, as well as Basic Science: 11.1%
- Get kids working before graduation: 11.1%
- Greater access to shadowing/mentoring opportunities with healthcare professionals: 11.1%

*Check all that apply question

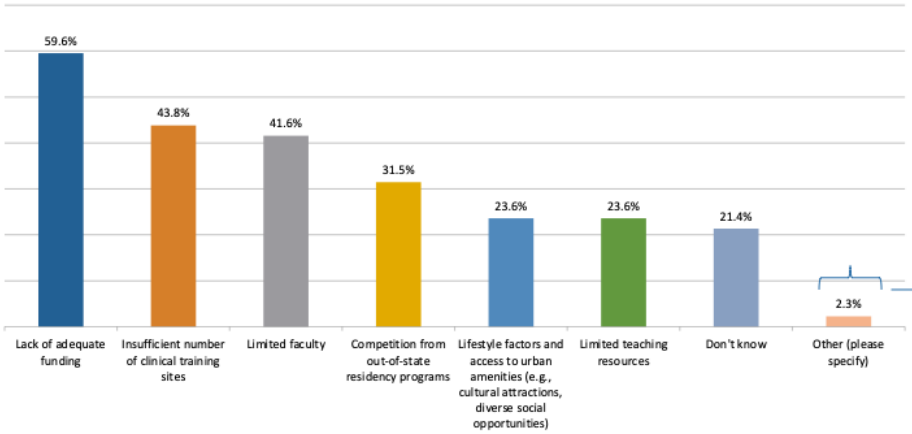
Tripp Umbach

Does your Organization Support or Participate in Residency Programs?



Tripp Umbach

What are the Most Significant Challenges in Expanding Residency Programs in Maine?

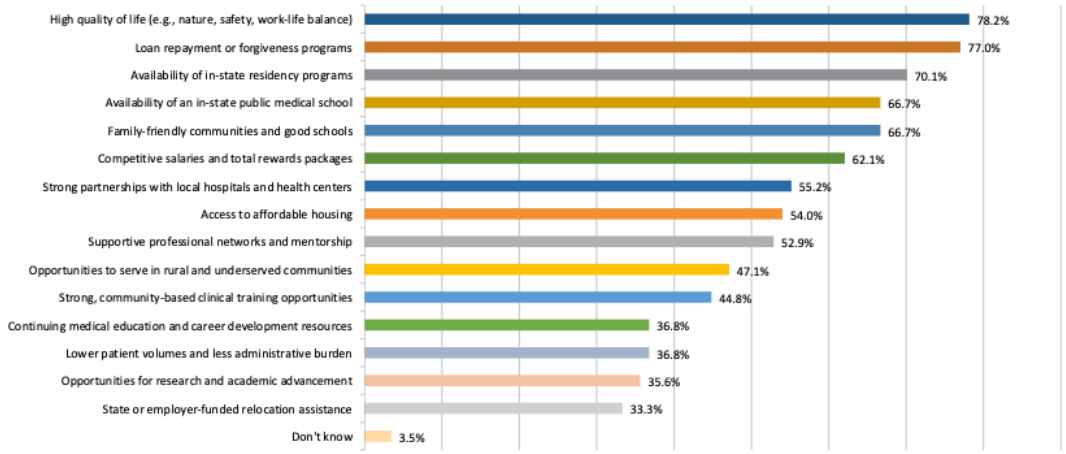


- Clinical infrastructure: 50.0%
- Not enough pediatrics and obstetrics opportunities to increase residency slots for family medicine residents: 50.0%

*Check all that apply question

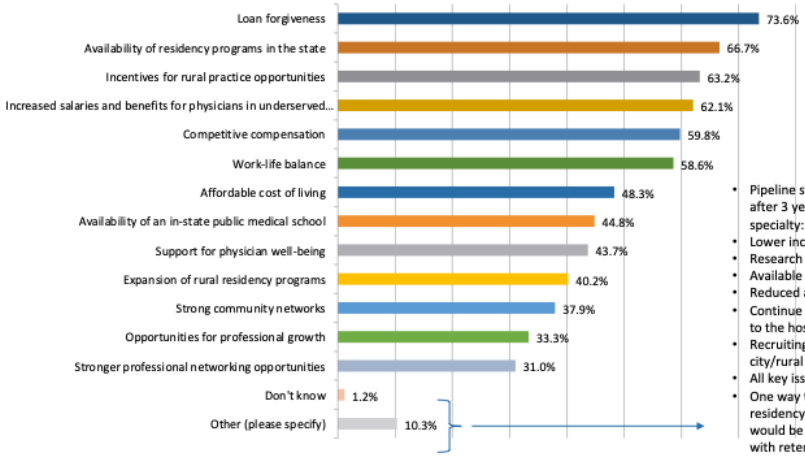
Tripp Umbach

What would Attract Medical Students and Physicians to Maine?



Tripp Umbach

What Strategies Would be Most Effective in Retaining Physicians trained in Maine?

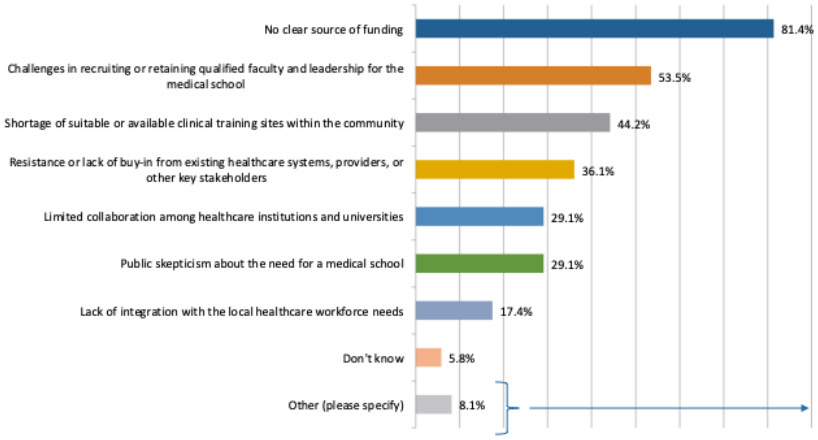


- Pipeline system from medical school directly into local residency after 3 years, provided that the student is pursuing a needed specialty: 11.1%
- Lower income taxes: 11.1%
- Research opportunities: 11.1%
- Available (and affordable) housing: 11.1%
- Reduced administrative burdens: 11.1%
- Continue to support primary care and specialty care as alternatives to the hospital monopolies: 11.1%
- Recruiting physicians who are interested in small town/small city/rural living: 11.1%
- All key issues: 11.1%
- One way to retain physicians is to increase the number of residency programs. To create a medical school with doing so would be irresponsible. Housing and loan forgiveness would help with retention: 11.1%

*Check all that apply question

Tripp Umbach

What do you See as the Most Significant Community or Healthcare System Barriers to Establishing a Successful Public Medical School in Maine?

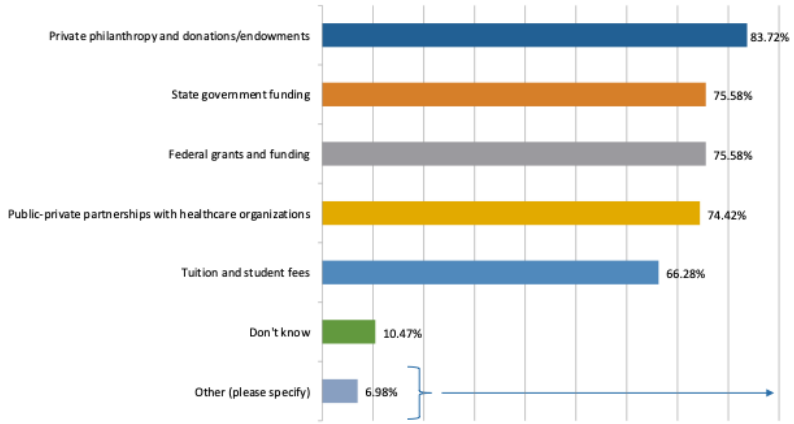


- The challenge of the lack of adequate clinical infrastructure: 14.3%
- Residency programs: 14.3%
- Shortage of clinical instructors due to lack of funding: 14.3%
- Better options such another program like Tufts Maine Track, make a new school relatively costly: 14.3%
- Shortage of students to attend: 14.3%
- Maine needs more doctors, especially family medicine and those who are willing to practice in rural areas, as well as more nurses and dentists: 14.3%
- Opposition from UNE: 14.3%

*Check all that apply question

Tripp Umbach

What Potential Funding Sources Should be Explored for Establishing a Public Medical School Program in Maine?

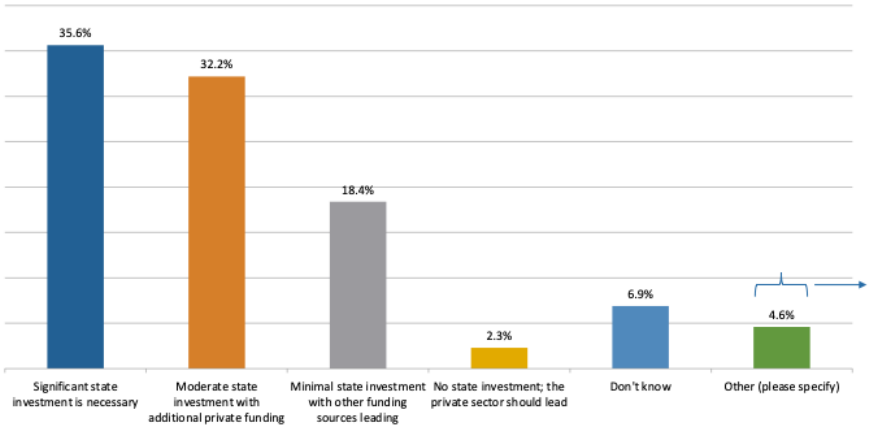


- Global Health Partnerships, Bilateral Agreements (Canada specifically), International research consortia: 16.7%
- Should not reduce or compete with current investment: 16.7%
- Find creative solutions through private-public partnerships to expand enrollment in the two medical schools. We already have an incentive for the recruitment and retention of post-residency physician graduates to Maine: 16.7%
- Should not dilute current investments: 16.7%
- The cost is too great, and the same investment should be made to incentivize Maine students who attend medical school out of state to return to practice in Maine: 16.7%
- It can't be funded by tuition alone, or it will be cost-prohibitive: 16.7%

*Check all that apply question

Tripp Umbach

What Level of Financial Support do you Believe the State of Maine Should Commit to Establishing and Sustaining a Public Medical School?



- Recruiting and retaining physicians to Maine is not a result of a lack of medical school access. Spending money on a medical school is wasteful. Instead, develop strategies to address the root causes: 25.0%
- Financing a public medical school should not come at the expense of defunding existing programs: 25.0%
- Should not dilute current funding for current programs: 25.0%
- No investment should be made to establish a new institution. Direct funding to less capital-intensive programs to achieve similar goals: 25.0%

Tripp Umbach

What Level of Financial Support should Maine Commit to Establishing and Sustaining a Public Medical School?

1. Strong State Commitment/High Investment
- Advocates believe that Maine should make a significant financial commitment, given the physician shortage and the long-term benefits.
- Arguments stress that "doing nothing is more expensive" in terms of poor health outcomes.
- Respondents view this as a top state priority, on par with essential infrastructure.
- Some emphasized that funding should support both startup and sustained operations.

2. Moderate or Shared Investment
- The state should contribute but not carry the full burden.
- Suggestions for a mixed funding model: state appropriations, philanthropy, federal grants, and partnerships with healthcare systems.
- Recommendations to fund start-up costs with philanthropy and grants, while ensuring long-term sustainability through state and institutional commitments.
- Some called for in-state tuition discounts and targeted financial aid rather than full state coverage.

3. Minimal/Reallocation of Resources
- Concerns about diverting scarce funds away from existing healthcare and education infrastructure.
- Some believe resources are better used for residency expansion, clinical training, and workforce incentives.
- Proposals to focus on financial aid agreements with out-of-state schools, similar to past U. of Vermont seat-sharing programs, rather than building a new institution.

4. Conditional Support
- Several respondents noted that funding levels should depend on:
- Clear workforce goals (e.g., primary care, rural retention).
- Demonstrated clinical training capacity.
- Partnerships with research institutions and teaching hospitals.
- Suggested a phased or task force approach before committing large sums.

5. Opposition to State Funding
- Some opposed state financial commitment altogether, citing:
- Maine's fragile healthcare system finances.
- High costs of establishing a school vs. uncertain returns.
- Preference to invest in existing schools/programs rather than starting new.

Tripp Umbach

Appendix D: Maine Environmental Scan

The environmental scan below provides a comprehensive context for evaluating the viability, sustainability, and alignment of a potential expansion of a medical education program with regional needs. By examining demographic trends, physician workforce projections, and community health indicators, the scan ensures that the proposed medical school is responsive to the realities of population health and the state's long-term provider demand. It also assesses the capacity of hospitals, clinics, and community health centers to serve as clinical training sites, a factor essential to accreditation and student success. In addition, an environmental scan of the higher and medical education landscape across the region helps identify potential overlaps, gaps, and opportunities for collaboration. The environmental scan evaluates external factors, such as economic conditions, public policy priorities, and regulatory environments, that could shape the initiative's success. Taken together, these insights provide decision-makers with a clear, evidence-based picture of the opportunities and challenges, allowing them to make informed choices about the feasibility and strategic direction of a new medical school.

The focus areas for the feasibility study encompassed all 16 of Maine's counties: Androscoggin, Aroostook, Cumberland, Franklin, Hancock, Kennebec, Knox, Lincoln, Oxford, Penobscot, Piscataquis, Sagadahoc, Somerset, Waldo, Washington, and York.

Maine Population Data

Maine covers 30,845.10 square miles and had a 2022 estimated population of 1,366,949, with 549,861 (40.2%) living in nonmetro areas. According to 2022 data from the U.S. Census Bureau, an estimated 92.3% of the state's population is White, 1.6% is African American/Black, 1.1% is Asian, 0.5% is Native American or Alaska Native, 0.0% is Native Hawaiian or Other Pacific Islander, 0.6% is Some Other Race, 3.9% are Multiple Race and 1.9% is of Hispanic or Latino origin.[63]

According to the Economic Research Service, Maine residents' average per capita income in 2021 totaled $58,484, with rural per capita income at $52,287.[64]

The ERS reports that the poverty rate in rural Maine is 12.9%, compared with 10.0% in urban areas. Unemployment rates are 3.4% in rural Maine and 2.7% in urban Maine. A total of 7.2% of the rural population has not completed high school, while 5.6% of the urban population lacks a high school diploma (USDA-ERS, 2022).[65]

[63] U.S. Census Bureau, American Community Survey. 2022
[64] Rural Health Information Hub
[65] Rural Health Information Hub

Age[66]

In 2023, the median age of all people in Maine was 44.8. In 2022, the average age of all Maine residents was 45.1. Piscataquis County has the oldest population in the state, with a median age of 51.4 in 2023, higher than the state median (44.8) and the national median (38.7).

Table 8: Age in Maine Counties

Report Area	Median Age
Androscoggin County	40.8
Aroostook County	48.4
Cumberland County	42.1
Franklin County	46.1
Hancock County	49.1
Kennebec County	44.0
Knox County	49.2
Lincoln County	51.1
Oxford County	48.3
Penobscot County	42.5
Piscataquis County	51.4
Sagadahoc County	47.3
Somerset County	46.9
Waldo County	46.9
Washington County	48.6
York County	45.3
Maine	44.8
United States	38.7

[66] U.S. Census Bureau. ACS 5 Year Estimate. 2023.

Income and Poverty[67]

In 2023, households in Maine had a median annual income of $71,733, which was lower than the U.S. median of $78,538. This compares to a median income of $68,251 in 2022.

Table 9: Income

2023	Total Households	Average Household Income	Median Household Income
Androscoggin County	46,632	$85,807	$67,298
Aroostook County	29,684	$73,148	$54,254
Cumberland County	130,003	$125,434	$92,983
Franklin County	12,457	$80,168	$58,522
Hancock County	24,992	$91,525	$69,630
Kennebec County	53,936	$85,256	$65,062
Knox County	17,979	$95,678	$71,903
Lincoln County	16,201	$98,711	$72,018
Oxford County	23,694	$78,431	$57,933
Penobscot County	64,769	$84,825	$63,248
Piscataquis County	8,111	$74,961	$55,234
Sagadahoc County	16,175	$101,281	$82,080
Somerset County	22,737	$72,900	$56,199
Waldo County	17,476	$86,416	$68,441
Washington County	13,989	$71,586	$52,237
York County	90,250	$104,151	$82,904
Maine	589,085	$96,507	$71,733
United States	127,482,865	$110,491	$78,538

[67] U.S. Census Bureau. American Community Survey. 2023.

In 2023, 10.8% of the Maine population for whom poverty status is determined (approximately 145,000 of the 1.37 million people) lived below the poverty line. The national average is 12.4%. The largest impoverished demographic is those under 18, with 13.1%. A higher percentage of females was found to be below the poverty line than males, at 11.7% and 9.8%, respectively.[68]

Table 10: Population in Poverty in Maine Counties

Report Area	Total Population	Population in Poverty	Population in Poverty (Percentage)
Androscoggin County	108,293	14,060	13.0%
Aroostook County	65,298	9,423	14.4%
Cumberland County	296,707	20,956	7.1%
Franklin County	28,908	3,403	11.8%
Hancock County	54,683	5,591	10.2%
Kennebec County	121,518	14,969	12.3%
Knox County	39,094	3,424	8.8%
Lincoln County	35,134	2,985	8.5%
Oxford County	57,725	8,187	14.2%
Penobscot County	146,494	19,846	13.5%
Piscataquis County	16,723	2,761	16.5%
Sagadahoc County	36,671	4,086	11.1%
Somerset County	49,843	7,756	15.6%
Waldo County	39,150	4,992	12.8%
Washington County	30,299	5,396	17.8%
York County	211,533	16,428	7.8%
Maine	1,338,071	144,263	10.8%
United States	324,567,147	40,390,045	12.4%

Employment[69]

From 2023 to 2024, employment in Maine grew by 1.10%, from 667,444 to 674,619.

Table 11: Employment in Maine Counties

2024	Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Androscoggin County	55,029	53,018	2,011	3.7%
Aroostook County	29,255	27,964	1,291	4.4%
Cumberland County	170,523	165,085	5,438	3.2%
Franklin County	13,812	13,213	599	4.3%
Hancock County	28,137	27,083	1,054	3.7%

[68] U.S. Census Bureau, American Community Survey. 2023.
[69] Maine Center for Workforce Research and Information. 2024

2024	Labor Force	Number Employed	Number Unemployed	Unemployment Rate
Kennebec County	63,678	61,462	2,216	3.5%
Knox County	19,655	18,926	729	3.7%
Lincoln County	16,667	16,046	621	3.7%
Oxford County	26,174	25,083	1,091	4.2%
Penobscot County	76,762	73,753	3,009	3.9%
Piscataquis County	7,075	6,717	358	5.1%
Sagadahoc County	19,922	19,294	628	3.2%
Somerset County	22,620	21,582	1,038	4.6%
Waldo County	20,205	19,479	726	3.6%
Washington County	13,695	13,096	599	4.4%
York County	116,670	112,815	3,855	3.3%
Maine	699,880	674,619	26,261	3.6%
United States	168,164,000	161,456,000	6,708,000	4.0%

Table 12: University Degrees Awarded (Top Programs but not all Degrees)

The Largest Universities by Number of Degrees Awarded	
Androscoggin County	Bates College (601; 57.2%), Central Maine Community College (349; 33.2%), and Maine College of Health Professions (100; 9.52%).
Aroostook County	University of Maine at Presque Isle (272; 44.5%), University of Maine at Fort Kent (231; 37.8%), and Northern Maine Community College (108; 17.7%).
Cumberland County	University of Southern Maine (1,918; 40%), Southern Maine Community College (804; 16.8%), and Bowdoin College (631; 13.1%).
Franklin County	University of Maine at Farmington (394; 100%).
Hancock County	Maine Maritime Academy (177; 66.3%) and College of the Atlantic (90; 33.7%).
Kennebec County	Colby College (734; 41%), University of Maine at Augusta (616; 34.4%), and Thomas College (276; 15.4%).
Knox County	Maine Media College (5; 100%).
Lincoln County	No degree-granting institution
Oxford County	No degree-granting institution
Penobscot County	University of Maine (2,876; 64.2%), Husson University (1,065; 23.8%), and Eastern Maine Community College (365; 8.15%).
Piscataquis County	No degreegranting institution
Sagadahoc County	No degreegranting institution
Somerset County	Kennebec Valley Community College (398; 100%).
Waldo County	No degreegranting institution

	The Largest Universities by Number of Degrees Awarded
Washington County	Washington County Community College (87; 100%).
York County	University of New England (1,557; 86.2%), York County Community College (193; 10.7%), and The Landing School (57; 3.15%).
Maine	University of Maine (2,876; 18.3%), the University of Southern Maine (1,918; 12.2%), and the University of New England (1,557; 9.92%).

The most popular degree majors awarded in Maine are Registered Nursing (510; 6.59%), General Business Administration and Management (483; 6.24%), and General Political Science and Government (329; 4.25%).

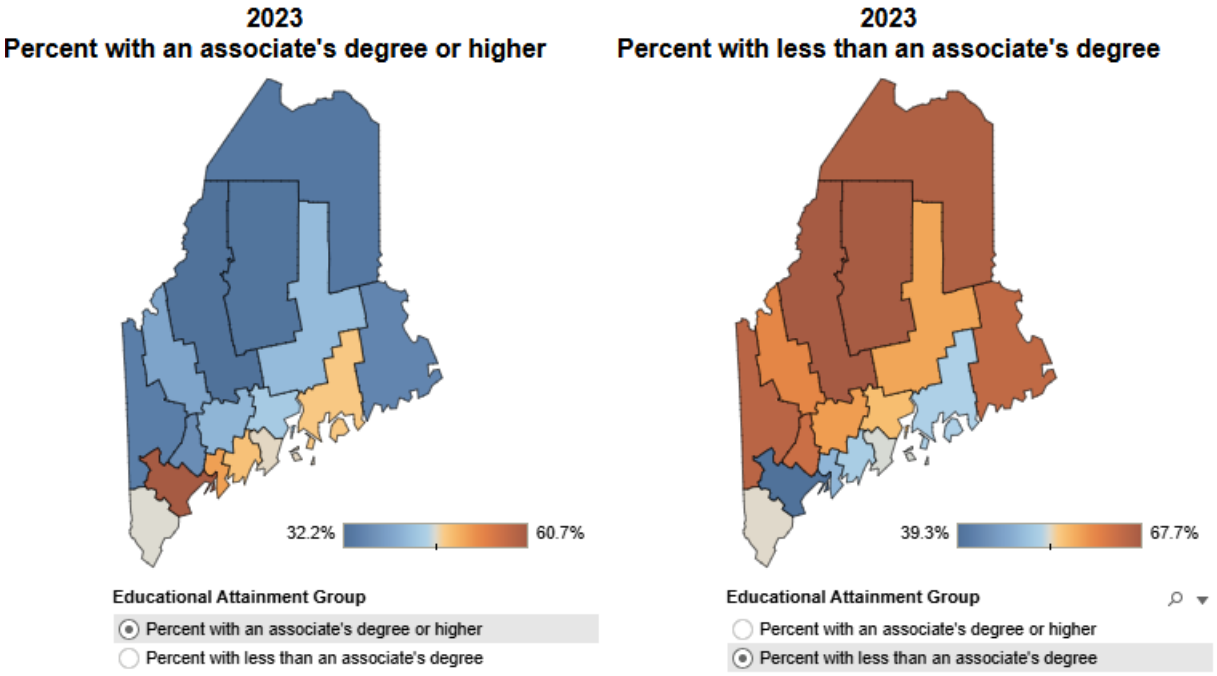
In 2022, White students were the most common race/ethnicity group awarded degrees at institutions. These 12,431 degrees mean that there were 19.6 times as many degrees awarded to White students as to the next closest race/ethnicity group, Unknown, with 635 degrees awarded.

Table 13: Popular Majors

	Popular majors
Androscoggin County	Other Research & Experimental Psychology (83; 7.9%), Registered Nursing (81; 7.71%), and Econometrics & Quantitative Economics (68; 6.48%)
Aroostook County	Nursing School (169; 27.7%), General Business Administration & Management (114; 18.7%), Liberal Arts & Sciences (78; 12.8%)
Cumberland County	Registered Nursing (291; 6.06%), General Business Administration & Management (204; 4.25%), and Liberal Arts & Sciences (166; 3.46%)
Franklin County	Elementary Education & Teaching (38; 9.64%), General Psychology (38; 9.64%), and Higher Education & Administration (37; 9.39%)
Hancock County	Liberal Arts & Sciences (90; 33.7%), Naval Architecture & Marine Engineering (61; 22.8%), and Marine Science & Merchant Marine Officer (51; 19.1%)
Kennebec County	Liberal Arts & Sciences (125; 6.98%), General Business Administration & Management (96; 5.36%), and Econometrics & Quantitative Economics (89; 4.97%)
Knox County	General Fine Studio Arts (5; 100%) and Film, Cinema, & Video Studies (0)
Lincoln County	No Data
Oxford County	No Data
Penobscot County	General Business Administration & Management (359; 8.01%), Registered Nursing (313; 6.99%), and Management Science (152; 3.39%)
Piscataquis County	No Data
Sagadahoc County	No Data

	Popular majors
Somerset County	General Health Services (68; 17.1%), General Studies (38; 9.55%), and Registered Nursing (33; 8.29%)
Waldo County	No Data
Washington County	Electrician (17; 19.5%), General Human Services (7; 8.05%), and Diesel Mechanics Technology (7; 8.05%).
York County	Social Work (164; 9.08%), Osteopathic Medicine/Osteopathy (162; 8.97%), and Registered Nursing (115; 6.36%).
Maine	Registered Nursing (510; 6.59%), General Business Administration & Management (483; 6.24%), General Political Science and Government (329; 4.25%).

Map 1: Educational Attainment Group[70]



Cumberland County had the highest percentage of residents with an associate's degree or higher, with 60.7%, while Somerset County had the lowest rate with 32.2%. Somerset County also has the highest percentage of residents with less than an associate's degree at 67.7%, followed by Piscataquis County with 67.5%. Other counties that border Penobscot County, Aroostook (66.7%), and Washington (64.9%), also had high percentages of residents with less than an associate's degree.

[70] Maine.gov. Center for Workforce Research and Information. 2023

The table below indicates that counties surrounding Penobscot have high incidences of population without a high school diploma. Piscataquis County had the highest at 24.1%, followed by Washington at 17.7% and Somerset at 17.2%. Aroostook County, which also borders Penobscot County, had a rate of 14.5%, the seventh-highest among counties.

Table 14: 18- to 24-Year-Olds Without a High School Diploma, Maine, 2023[71]

	Percent	Metro/Nonmetro
Androscoggin County	9.6%	Metro
Aroostook County	14.5%	Nonmetro
Cumberland County	8.6%	Metro
Franklin County	8.8%	Nonmetro
Hancock County	5.8%	Nonmetro
Kennebec County	15.3%	Nonmetro
Knox County	11.3%	Nonmetro
Lincoln County	15.8%	Nonmetro
Oxford County	17.8%	Nonmetro
Penobscot County	5.3%	Metro
Piscataquis County	24.1%	Nonmetro
Sagadahoc County	10.8%	Metro
Somerset County	17.2%	Nonmetro
Waldo County	10.9%	Nonmetro
Washington County	17.7%	Nonmetro
York County	7.8%	Metro
Maine-Metro	7.9%	
Maine-Nonmetro	13.9%	

Health[72]

Per capita personal healthcare spending in Maine totaled $12,077 in 2020. This is a 4.88% increase from the previous year ($11,488).[73]

As of 2024, primary care physicians in Maine see an average of 930 patients per year. This represents a 3.22% increase from the previous year (900 patients).

Table 15: Patients Seen by Primary Care Physicians

2024 Reported Year	Primary Care Physicians 2023	Primary Care Physicians 2024	% Change Primary Care Physicians
Androscoggin County	1,250	1,350	7.4%
Aroostook County	900	890	-1.1%

[71] Rural Information Hub. 2023
[72] County Health Rankings and Roadmaps. 2024
[73] Kaiser Family Foundation

2024 Reported Year	Primary Care Physicians 2023	Primary Care Physicians 2024	% Change Primary Care Physicians
Cumberland County	580	600	3.3%
Franklin County	970	960	-1.0%
Hancock County	850	950	10.5%
Kennebec County	850	900	5.3%
Knox County	890	930	4.3%
Lincoln County	870	920	5.4%
Oxford County	1,450	1,500	3.3%
Penobscot County	740	740	0.0%
Piscataquis County	1,550	1,720	9.9%
Sagadahoc County	1,570	1,540	-1.9%
Somerset County	1,880	1,740	-8.0%
Waldo County	1,330	1,250	9.6%
Washington County	2,250	2,390	5.9%
York County	1,370	1,480	7.4%
Maine	900	930	3.2%
United States	**1,310**	**1,330**	**1.5%**

Mental health providers in Maine see an average of 180 patients per year, as of 2024. This represents a 5.56% decrease from the previous year (190 patients).[74]

Table 16: Patients Seen by Mental Health Providers

2024 Reported Year	Mental Health Providers 2023	Mental Health Providers 2024	% Change Mental Health
Androscoggin County	200	190	-5.3%
Aroostook County	160	160	0.0%
Cumberland County	130	120	-8.3%
Franklin County	320	310	-3.2%
Hancock County	230	220	-4.5%
Kennebec County	190	180	-5.6%
Knox County	190	190	0.0%
Lincoln County	480	470	-2.1%
Oxford County	360	350	-2.9%
Penobscot County	160	150	-6.7%
Piscataquis County	430	440	2.3%
Sagadahoc County	440	430	-2.3%

[74] County Health Rankings and Roadmaps. 2024

2024 Reported Year	Mental Health Providers 2023	Mental Health Providers 2024	% Change Mental Health
Somerset County	530	530	0.0%
Waldo County	350	320	-9.4%
Washington County	160	150	-6.7%
York County	230	220	-4.5%
Maine	190	180	-5.6%
United States	**340**	**320**	**-5.9%**

Health Risks[75]

The table below shows the percentages of adults with diabetes and obesity by county in Maine.

Table 17: Adults with Diabetes and Obesity Conditions

2023	% Adults with Diabetes	% Adults with Obesity
Androscoggin County	9.0	35.0
Aroostook County	9.0	35.0
Cumberland County	7.0	26.0
Franklin County	8.0	31.0
Hancock County	7.0	29.0
Kennebec County	9.0	34.0
Knox County	7.0	29.0
Lincoln County	7.0	25.0
Oxford County	9.0	34.0
Penobscot County	9.0	34.0
Piscataquis County	9.0	34.0
Sagadahoc County	8.0	31.0
Somerset County	10.0	33.0
Waldo County	8.0	32.0
Washington County	9.0	35.0
York County	8.0	31.0
Maine	7.0	30.0

[75] Data USA. 2023.

Health Overview[76]

The following indicators are essential for understanding Maine's current and future medical education and workforce needs. The uninsured rate, primary-care physician-to-population ratio, and hospital utilization patterns collectively highlight gaps in access, provider shortages, and the intensity of clinical demand across the state. This overall health overview demonstrates the urgency of expanding the physician pipeline, strengthening primary care capacity, and preparing a workforce aligned with Maine's population health realities in rural and underserved regions of the state.

- Overall, 9% of Maine's population under age 65 did not have health insurance in 2023.
- In 2023, the ratio of patients to primary care physicians in Maine reached 930:1.
- In 2023, the number of hospital discharges for ambulatory-care-sensitive conditions per 100,000 Medicare enrollees totaled 2,096.

Challenges in Maine[77]

- High prevalence of multiple chronic conditions.
- High prevalence of frequent mental illness.
- High Black/white residential segregation.

County Health Rankings[78]

Health is influenced by every aspect of how and where we live. Access to secure and affordable housing, safe neighborhoods, good-paying jobs, and quality early childhood education are essential factors that can put people on a path to a healthier life. But access to these opportunities often looks different based on where you live, your race, or the circumstances you were born into. Data show persistent barriers to opportunity for people with lower incomes and communities of color across the U.S.

Medical education programs anchored in communities have great potential to address the present and future needs of physicians who care for the region. Maintaining strong ties to the community improves clinical outcomes. Strong community partnerships in medical education will become increasingly critical as hospitals assume responsibility for health outcomes. The following table shows the health rankings of counties in Maine.

[76] County Health Rankings & Roadmaps
[77] America's Health Rankings
[78] County Health Rankings & Roadmaps

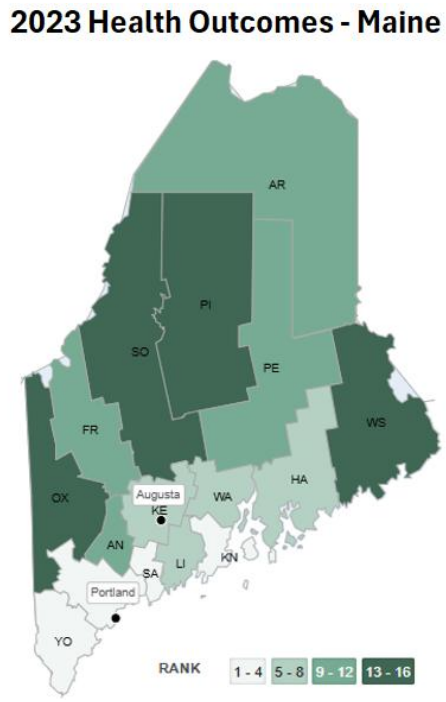
Table 18: 2023 County Health Rankings within Maine's 16 Counties[79]

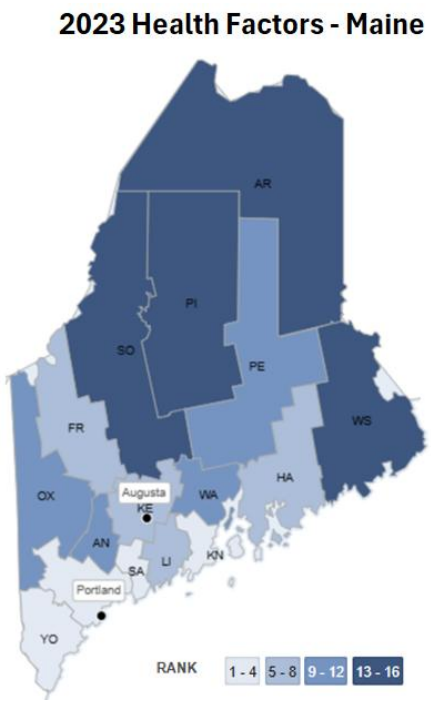
	Health Outcomes	Length of Life	Quality of Life	Health Factors	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
Androscoggin County	12	12	10	11	11	7	11	7
Aroostook County	9	9	9	13	15	11	12	11
Cumberland County	1	1	1	1	1	1	1	14
Franklin County	10	8	15	8	8	5	10	3
Hancock County	5	4	5	5	6	6	6	2
Kennebec County	8	10	6	6	9	3	4	10
Knox County	3	5	4	4	5	2	7	6
Lincoln County	7	3	12	7	4	13	5	15
Oxford County	14	14	14	12	13	10	13	5
Penobscot County	11	11	8	9	10	9	8	8
Piscataquis County	13	13	16	14	12	16	14	4
Sagadahoc County	2	2	2	2	2	8	2	9
Somerset County	15	15	13	15	14	12	15	13
Waldo County	6	7	7	10	7	14	9	12
Washington County	16	16	11	16	16	15	16	1
York County	4	6	3	3	3	4	3	16

[79] Country Health Rankings and Roadmaps

Map 2: 2023 Health Outcomes and Health Factors in Maine[80]

The maps illustrate Maine's 2023 county-level rankings for Health Outcomes and Health Factors. Darker shades represent poorer rankings (13–16), while lighter shades indicate stronger performance (1–4). The Health Outcomes map highlights variations in residents' overall health status, such as length and quality of life, while the Health Factors map reflects the underlying drivers of health, including behaviors, clinical care, social and economic conditions, and the physical environment. Together, these maps show clear regional differences across Maine and help identify where targeted interventions and resource allocation may most improve population health.





A state demonstrates a high need for primary care physicians as measured by the number of counties in the state that are full or partial HPSAs for primary care physicians. Maine has 76 primary-care HPSA designations, requiring an additional 18 practitioners to remove the HPSA designation label as of December 2024. Map 3 shows the significant primary care shortage throughout Maine. A higher HPSA score indicates a more severe provider shortage. The HPSAs in Maine are mostly located in rural areas in the north and central parts of the state.

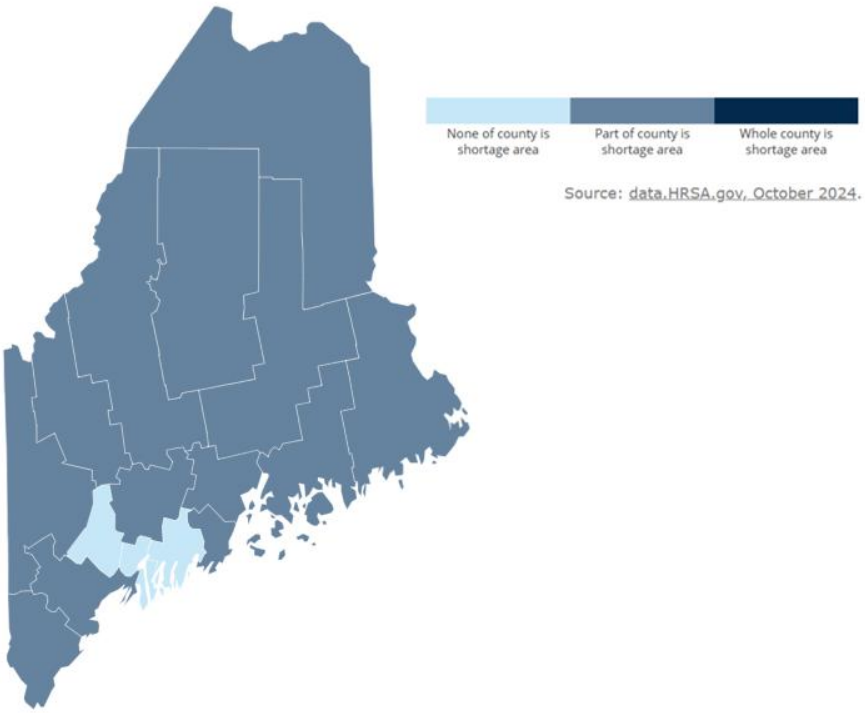
[80] County Health Rankings & Roadmaps

Table 19: Designated Health Professional Shortage Areas, October-December 2024

Maine	Number of Designations	Population of Designated HPSAs	Percent of Need Met	Practitioners Needed to Remove HPSA Designation
Primary Care	76	85,155	44.54%	18
Dental Care	82	234,694	27.97%	39
Mental Care	65	268,713	13.93%	11

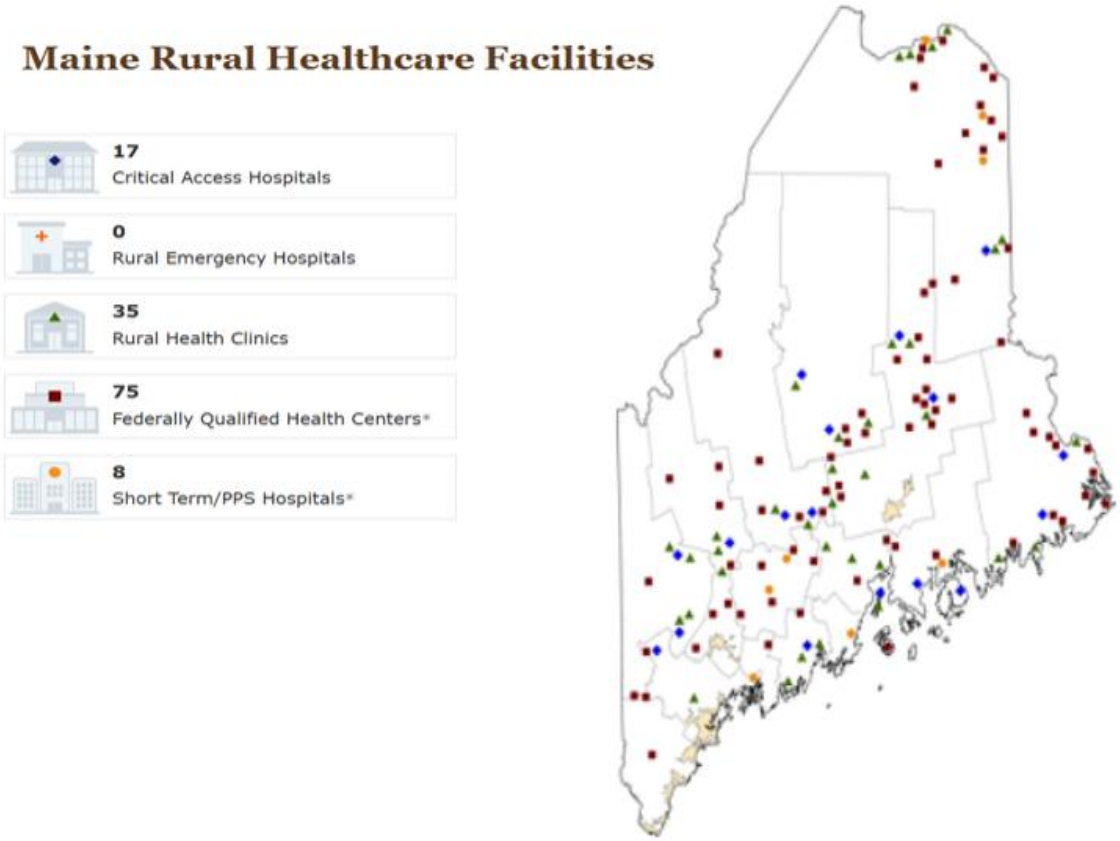
Source: Designated Health Professional Shortage Areas-2024

Map 3: Professional Shortage Areas in Maine



Only the counties of Androscoggin, Sagadahoc, and Lincoln have no primary care shortage areas. Parts of other counties are designated as primary care shortage areas.

Map 4: Maine Rural Healthcare Facilities, 2024



*Sites according to data.HRSA.gov (October 2024), showing only locations outside of U.S. Census Bureau Urban Areas with a population of 50,000 or more

Appendix E: Clinical Landscape in Maine

Table 24 lists the hospitals and medical centers in Maine, totaling more than 2,841 beds. These sites offer opportunities for students to obtain clerkships and residency training. Clinical partnership opportunities exist at FQHCs, physician offices, community centers, and clinics.[81]

Table 20: Non-Federal, Short-Term, Acute-Care Hospitals

Hospital Name	Staffed Beds	Total Discharges	Patient Days	Gross Patient
Cary Medical Center	49	1,266	9,022	$162,104
Central Maine Medical Center	200	7,897	39,423	$1,170,475
Maine Medical Center	700	29,800	188,893	$4,568,602
MaineGeneral Health	198	8,863	57,868	$1,436,397
MaineHealth Franklin Hospital	41	1,771	7,906	$288,689
MaineHealth Maine Medical Center Biddeford	180	6,501	29,885	$959,131
MaineHealth Mid Coast Hospital	93	4,495	25,928	$626,572
Northern Light AR Gould Hospital	83	1,606	9,553	$502,919
Northern Light Eastern Maine Medical Center	349	14,246	100,326	$2,612,115
Northern Light Inland Hospital[82]	33	1,050	6,571	$183,503
Northern Light Maine Coast Hospital	45	1,511	9,226	$315,991
Northern Light Mercy Hospital	77	3,746	18,355	$738,881
Northern Maine Medical Center	94	832	4,030	$107,268
MaineHealth Pen Bay Hospital	165	2,517	18,210	$457,827
St. Mary's Regional Medical Center	381	3,405	19,016	$653,628
St. Joseph Hospital	99	4,094	22,497	$586,464
York Hospital	54	2,200	9,067	$513,233
TOTAL	2,841	95,800	575,776	$15,883,798

Table 21: Federally Qualified Health Centers and Look-Alikes in Maine[83,84]

	County
Community Clinical Services Inc.	Androscoggin County

[81] American Hospital Directory
[82] Facility is closed
[83] Health Resources & Services Administration
[84] There are multiple locations for some FQHCs; however, not all counties are listed in the table.

	County
Pines Health Services	Aroostook County
St. Croix Regional Health Center	Washington County
DFD Russell Medical Center Inc.	Androscoggin County
Penobscot Community Health Center	Penobscot County
Eastport Health Care Inc.	Washington County
Sebasticook Family Doctors	Penobscot County
Harrington Family Health Center	Washington County
Bucksport Regional Health Center	Hancock County
Regional Medical Center of Lubec Inc.	Washington County
Katahdin Valley Health Center	Penobscot County
Islands Community Medical Services Inc.	Knox County
Maine Mobile Health Program Inc.	Kennebec County
Fish River Rural Health	Aroostook County
Portland Community Health Center	Cumberland County
Health Access Network	Penobscot County
York County Community Action Corporation	York County
HealthReach Community Health Centers	Kennebec County
Sacopee Valley Health Center	Oxford County

Table 22: Accreditation Council for Graduate Medical Education (ACGME)Family Medicine Residency Programs in Maine[85]

Institution Name	Program Name	Program City
Central Maine Medical Center	Central Maine Medical Program	Lewiston
Eastern Maine Medical Center	Eastern Maine Medical Center Program	Bangor
Maine-Dartmouth Family Medicine	Maine-Dartmouth Family Medicine Program	Augusta
MaineHealth	MaineHealth Program	Portland

[85] ACGME

Appendix F: Differences between M.D. and D.O. Degrees

Tripp Umbach evaluated the distinct advantages/disadvantages of both degrees for a public medical school to assist stakeholders in selecting the optimal path forward.

Table 23: Overview of Medical School Models

Allopathic (M.D.)	Osteopathic (D.O.)
Advantages	
• The M.D. degree carries the strongest prestige and visibility worldwide, enhancing UMaine's profile and competitiveness. • Alignment of UMaine's R1 Research Status supports growth in biomedical research, NIH funding, and interdisciplinary collaboration across pharmacy, nursing, and health sciences. • The output of an M.D. workforce directly addresses Maine's critical physician shortages, especially in primary care and underserved communities. • A public M.D. program with in-state admissions, focused service incentives, and an increased likelihood of graduates staying and practicing in Maine increases the likelihood that graduates will stay and practice in Maine. • Generates hundreds of millions in annual economic activity, creates thousands of jobs, and expands the tax base. • More likely to attract significant state investment, private gifts, and health system partnerships, building a diversified and sustainable financial base. • Creates opportunities for Mainers to pursue affordable in-state medical education, strengthening local healthcare capacity.	• D.O. programs are recognized for producing a higher proportion of graduates in primary care, thereby directly addressing workforce shortages. • Emphasizes whole-person care, preventive health, and patient-centered practice, aligning with community health needs. • Osteopathic medicine is one of the fastest-growing fields in the U.S., with rising student interest and expanding recognition. • D.O. schools have been developed with leaner infrastructure compared to M.D. programs, which could reduce initial costs. • Strong emphasis on distributed clinical education, which may align well with Maine's network of community hospitals and clinics. • Could position UMaine as the first public university in New England to host a D.O. school, offering a unique identity in the regional education landscape. • Provides an alternative pathway into medicine for Maine students who may not otherwise pursue an M.D., helping expand the overall physician pipeline.

Disadvantages	
• Requires significant upfront investment for facilities, faculty, and infrastructure. • The LCME accreditation pathway is lengthy and complex, requiring early evidence of robust clinical and financial capacity. • Developing an M.D. school may take longer than a D.O. program due to stricter accreditation and infrastructure standards • An M.D. program often has higher tuition, which could deter applicants or increase graduate debt without sufficient scholarship support. • Even in public schools, retention of physicians after residency is not guaranteed unless paired with strong pipeline and incentive programs. • Launching a medical school could divert resources, leadership attention, and state appropriations from other UMaine programs and priorities.	• The presence of UNE-COM presents the most significant challenge, and a second D.O. program within the same state would present political and accreditation challenges. • D.O. programs generally emphasize teaching and primary care over high-level biomedical research, limiting alignment with UMaine's research mission and funding opportunities. • A D.O. program may attract less philanthropic interest and fewer large-scale research grants than an M.D. program. • Growth of D.O. schools nationally may saturate the market, making it harder for UMaine to stand out. • D.O. program may not offer a clear distinction from UNE-COM, other D.O. schools nationally, whereas an M.D. program in Maine would be unique.

Appendix G: Pro Forma Overview for a Public M.D.-Granting Medical School (2026–2037)

Tripp Umbach developed a comprehensive financial pro forma to evaluate the feasibility of establishing a state public M.D.-granting medical school. This analysis provided a detailed, multi-year projection of the resources required to plan, launch, and sustain a high-quality medical education program capable of addressing Maine's growing physician workforce shortages. Spanning the 2026–2037 period, the pro forma outlines anticipated revenue streams, operating expenses, capital needs, and long-term financial performance. Together, these projections offer state leaders, health system partners, and higher-education stakeholders a clear roadmap for understanding the investments needed to expand physician training capacity in Maine and the role a new medical school could play in strengthening the state's healthcare system.

Revenue Development and Funding Strategy

The financial plan assumes a diversified revenue structure that leverages philanthropic investment, university support, and state appropriations during the early years, followed by tuition-driven growth once students matriculate.

- During the planning period, seed funding and early support revenue is driven initially by a $15 million university contribution in Planning Year 1 and a combined $147.5 million in Planning Year 2 from endowment contributions ($50 million), naming gifts ($50 million), hospital contributions ($25 million), and State allocation ($22.5 million), followed by planning year 3 in revenue of $47.5 million stemming from hospital contributions ($25 million) and state allocation ($22.5 million).
- Tuition begins in 2029, scaling from $2.5 million in Year 1 to nearly $24.5 million by Year 9, reflecting enrollment growth in the subsequent years.
- Tripp Umbach's model assumes a consistent $22.5 million annual State allocation, which provides baseline operating support aligned with the state's interest in expanding physician training capacity.
- Annual philanthropic and other revenue ranges from $1.5 million to $8.9 million, supplemented by practice plan, clinical revenue, and research grants as the school grows its academic and clinical footprint.

Overall, total annual revenue reaches $75.4 million by Year 9, with steady increases as tuition and clinical revenue mature.

Expense Structure and Operating Costs

Expenses are separated into Salaries & Fringe and Other Operating Costs, reflecting the staffing and infrastructure requirements of a fully accredited medical school.

- Core staffing expenses, such as academic affairs, student services, basic science and clinical faculty, and administrative leadership, increase as educational programs and class sizes expand. By Year 9, total salary and fringe costs reach $41.9 million, including the full build-out of faculty.
- Additional operating expenses include IT, academic operations, accreditation-related costs, simulation center operations, and building maintenance. Notably, a $50 million building investment begins in the planning years 2 and 3, with an annual building operating cost of approximately $2.5 million.
- By Year 9, total expenses reach $67.7 million, consistent with the staffing and infrastructure requirements of a mature medical education program.

Financial Performance and Sustainability

The pro forma shows early operating deficits as the school recruits faculty, prepares facilities, and ramps up operations. Small deficits appear in the early operational years, most notably in Years 3–7.

By Year 8 (2036), the program begins to achieve a positive operating margin, and by Year 9 (2037), the school reaches a projected operating surplus of $7.6 million. The cumulative financial outlook remains positive across the entire timeline, with cumulative running totals rising to over $69 million by 2037, underscoring the long-term sustainability of a public medical school once complete enrollment and revenue diversification are in place.

Strategic Implications for Maine

The pro forma demonstrates that an M.D.-granting medical school within UMS could be financially viable with substantial early-stage investment from philanthropy, the State, and partner health systems. Without $250 million in start-up and $20 million annually, a public medical school is not feasible.

As tuition, research activity, and clinical revenue strengthen in later years, the program transitions into a sustainable model capable of supporting faculty growth, high-quality medical education, and statewide workforce development.

Importantly, this plan positions Maine to expand physician training capacity, improve retention of medical graduates, and strengthen the state's long-term healthcare workforce pipeline. The pro forma provides a financially grounded roadmap that complements the state's strategic goals for improving access to care and addressing physician shortages, especially in rural and underserved regions.

UMS Public Medical School Pro Forma Budget Summary												
	Planning Year 1	**Planning Year 2**	**Planning Year 3**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**
	2026	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**
Revenue												
Tuition	$	$	$	$2,500,000	$5,047,000	$9,017,650	$13,167,360	$16,319,878	$19,591,732	$21,612,347	$23,736,566	$24,448,663
Research grants/contracts	$	$	$	$	$	$3,200,000	$4,000,000	$5,000,000	$6,250,000	$7,812,500	$9,765,625	$12,207,031
Clinical Revenue	$	$	$	$	$	$1,000,000	$1,350,000	$1,822,500	$2,460,375	$3,321,506	$4,484,033	$6,053,445
Practice Plan	$	$	$	$	$	$1,000,000	$540,000	$729,000	$984,150	$1,328,603	$1,793,613	$2,421,378
Endowment (Private funds)		$50,000,000		$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000
Hospital Contributions		$25,000,000	$25,000,000	$	$	$	$	$	$	$	$	$
Naming Donor		$50,000,000	$	$	$	$	$	$	$	$	$	$
Seed Funding (University Contributions)	$15,000,000	$	$	$	$	$	$	$	$	$	$	$
State Allocation		$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000	$22,500,000
Philanthropy	$	$	$	$1,500,000	$1,875,000	$2,343,750	$2,929,688	$3,662,109	$4,577,637	$5,722,046	$7,152,557	$8,940,697
Other Revenue	$	$	$	$	$	$	$	$	$	$	$	$
Subtotal Revenue	$15,000,000	$147,500,000	$47,500,000	$29,000,000	$31,922,000	$41,561,400	$46,987,048	$52,533,487	$58,863,894	$64,797,001	$71,932,395	$79,071,214
Scholarship Contra Revenue*	$	$	$	$375,000	$757,050	$1,352,648	$1,975,104	$2,447,982	$2,938,760	$3,241,852	$3,560,485	$3,667,299
TOTAL REVENUE LESS SCHOLARSHIP	**$15,000,000**	**$147,500,000**	**$47,500,000**	**$28,625,000**	**$31,164,950**	**$40,208,753**	**$45,011,944**	**$50,085,505**	**$55,925,134**	**$61,555,149**	**$68,371,910**	**$75,403,914**

* Assume 15% of Tuition

The University of Maine Pro Forma Budget Summary												
	Planning Year 1	Planning Year 2	Planning Year 3	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Expenses												
Salaries and Fringe												
Administrative	$	$3,887,630	$3,887,630	$4,080,710	$4,406,960	$4,406,960	$4,406,960	$4,406,960	$4,406,960	$4,406,960	$4,406,960	$4,406,960
Academic Affairs	$	$2,302,505	$2,966,548	$3,589,048	$4,310,657	$5,101,907	$5,341,046	$5,314,269	$5,351,395	$5,356,804	$5,362,376	$5,368,114
Student Services	$	$697,757	$1,913,013	$2,213,013	$2,370,513	$2,370,513	$2,370,513	$2,370,513	$2,370,513	$2,370,513	$2,370,513	$2,370,513
MS1 and MS2 Faculty	$	$2,522,780	$2,522,780	$4,745,559	$5,524,839	$8,137,259	$8,137,259	$8,137,259	$8,137,259	$8,137,259	$8,137,259	$8,137,259
MS3 and MS4 Faculty	$	$881,369	$881,369	$2,696,807	$4,812,333	$11,237,229	$11,237,229	$15,212,706	$15,212,706	$19,638,183	$19,638,183	$20,720,756
Institutional Support**	$	$	$	$	$	$	$	$	$	$	$	$968,500
Total Salaries and Fringe	**$**	**$10,292,039**	**$12,171,339**	**$17,325,137**	**$21,425,301**	**$31,253,867**	**$31,493,006**	**$35,441,706**	**$35,478,833**	**$39,909,719**	**$39,915,290**	**$41,972,101**
Other Expenses												
Operating Expenses	$	$5,857,000	$2,072,650	$3,497,845	$3,163,093	$6,927,177	$12,693,500	$13,333,785	$14,299,939	$17,154,235	$17,910,011	$18,179,492
IT Expenses	$	$813,340	$1,904,015	$2,143,280	$2,273,958	$2,591,600	$2,627,519	$2,867,493	$3,011,340	$3,222,212	$3,324,510	$3,604,723
Simulation Expenses	$	$2,650,000	$571,400	$909,240	$1,105,002	$1,166,552	$1,228,880	$1,281,549	$1,335,126	$1,378,182	$1,422,792	$1,457,031
Building Expenses	$	$50,000,000	$50,000,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000
Total Other Expenses	**$**	**$59,320,340**	**$54,548,065**	**$9,050,365**	**$9,042,052**	**$13,185,329**	**$19,049,899**	**$19,982,827**	**$21,146,406**	**$24,254,629**	**$25,157,312**	**$25,741,246**
TOTAL EXPENSES (Salaries and Fringe + Other)	**$**	**$69,612,379**	**$66,719,404**	**$26,375,501**	**$30,467,354**	**$44,439,196**	**$50,542,905**	**$55,424,534**	**$56,625,239**	**$64,164,348**	**$65,072,602**	**$67,713,347**
TOTAL REVENUE EXPENSES	**$15,000,000**	**$77,887,621**	**$(19,219,404)**	**$2,249,499**	**$697,596**	**$(4,230,443)**	**$(5,530,961)**	**$(5,339,028)**	**$(700,105)**	**$(2,609,199)**	**$3,299,308**	**$7,690,567**
Running Profit (Loss) (Cumulative)		$92,887,621	$73,668,217	$75,917,716	$76,615,312	$72,384,869	$66,853,908	$61,514,880	$60,814,775	$58,205,576	$61,504,883	$69,195,451

** Eliminated in Year 9 (picked up by school)

Appendix H: University of Maine System and the University of Maine Capabilities and Recent Accomplishments

Examples of UMaine Health and Life Sciences Research Areas

UMaine's health and life sciences work spans how infections start, how cells and genes respond to stress, how muscles and hearts develop and fail, how aging drives disease, and how new materials can support better health technologies.

Infections and the Immune System

Researchers examine how human viruses enter cells, travel through the body, and sometimes cause severe brain and nervous system diseases. Others focus on fungal infections, watching how common yeasts dodge the immune system and testing new ways to strengthen natural defenses or improve antifungal drugs.

Genes, RNA, and Cell Behavior

Teams use genomics and big-data methods to see how genes and different types of RNA control cell responses to stress, injury, and disease. This work helps reveal how complex conditions such as diabetes, tissue damage, and infection arise from changes in gene networks and molecular "on/off switches."

Muscles, Joints, and Heart Function

Scientists use animal models, such as zebrafish, to observe how muscles form, attach to tendons, and repair themselves, with clear connections to human muscle and joint disorders. Other projects drill down to how heart muscle proteins sense mechanical force, showing how tiny molecular changes can lead to inherited heart disease.

Aging and Age-Related Decline

Several labs study how aging affects cells and tissues, using simple organisms to uncover how mitochondria, protein quality control, and stress responses shape lifespan. Their goal is to understand why risks of neurodegenerative and other age-related diseases rise over time and to find levers that could support healthier aging.

New Materials and Medical Technologies

Engineers and biophysicists design advanced materials, including wood-derived nanocellulose composites, that could be used in medical devices and other health tools. They also apply precision spectroscopy and modeling to understand how these materials and heart or muscle proteins behave, informing the development of safer, more effective biomedical products.

UMS Congressionally Directed Spending history on awards related to nursing (along with other health topics)

The University of Maine System has requested a $45 million FY 2026 Congressionally Directed Spending (CDS) request by U.S. Senator Susan Collins, chair of the Senate Appropriations Committee. If funded, the request would support the development of the Science Complex for Health, a state-of-the-art education and research facility that will serve as the cornerstone of Maine's future health-science workforce. The new facility would anchor a larger health sciences district on the University of Maine flagship campus, catalyzing innovation across nursing, allied health, biomedical research, and community health delivery. This funding request has broad support from Northern Light Health, MaineHealth, The Jackson Laboratory, and the Bangor Region Chamber of Commerce, each of which affirms the facility's role as a statewide catalyst for innovation, education, and health access.

FY22 - 24 CDS History for UMS Nursing-related awards:

1. UMS Nursing Pediatric and Obstetric Simulation - (UMaine lead) FY22 CDS $1M. Purchase pediatric and obstetric simulation equipment to expand and improve health care workforce training (UMFK, UMPI, USM, UMaine, and UMA Centers).
2. Improving Access to Care and Patient Outcomes Across Maine (UM Augusta Lead) FY 23 CDS $4.5M This request is inclusive of all individual campus nursing sim related requests (UM/UMM, UMA, USM) and additionally proposes further resources, with the collective goal of strengthening and expanding university nursing simulation to standardized nursing simulation experiences across all UMS nursing programs and produce a highly qualified nursing workforce that will provide optimal patient care and advance equitable health outcomes. Project funds will support construction on multiple campuses to create and expand simulation ($2M), invest in simulation equipment at multiple campuses that mimic the physiological human response in health situations across the lifespan ($2M), and purchase software, hardware, and related training and program development.
3. University of Maine at Augusta Capital Center for Nursing Healthcare Workforce Development FY 24 CDS $4.5M HRSA Construction Expand enrollment by 20% in the University of Maine at Augusta's nursing degree and related programs to meet state healthcare workforce needs through the relocation to, and renovation of, the former Purdue University Global campus in the Augusta Marketplace. CDS funds would support the retrofitting of the now-vacant building into UMA's Capital Center for Nursing Workforce Development and Cybersecurity.
4. Expanding Maine's Nursing Workforce Pipeline: Launching Maine's First Ph.D. in Nursing FY 24 CDS $3M ED FIPSE State regulation and national accreditation standards require faculty to have a doctoral degree to teach masters nursing courses and for faculty teaching bachelor's level nursing to have a masters degree, yet no nursing Ph.D. programs exist in Maine, New Hampshire and Vermont. The University of Maine School of Nursing aims to address the immediate crisis of a shortage of doctorally prepared nursing faculty by developing a Ph.D. in Nursing that will directly enable increased enrollment in all nursing education programs in the state, producing more highly qualified nurses to care for the people of Maine.

Other health topics - UMS FY 22 - 24 Congressionally Directed Spending:

1. UMaine Tick-Borne Disease Prevention in Northern New England $6.173M through multiple FY 23 CDS awards (Collins $2.5M for "University of Maine Tick-borne Disease Prevention in Northern New England" in Ag bill AND Collins $2.02M for "University of Maine for Tick-Borne Disease Management Strategies" in Interior bill AND Collins $1.653M for "University of Maine System for rural health activities to prevent tick-borne diseases" in LHHS bill) The objective of this pilot project is to build upon existing resources to create a coordinated system of tick and tick-borne pathogen surveillance and risk communication in northern New England. Through collaborations with stakeholders in Maine and researchers at the University of New Hampshire and the University of Vermont, the University of Maine will implement an initial comprehensive sampling of tick populations and tick-borne pathogen prevalence in Maine, with some additional surveillance in New Hampshire and Vermont. The collection of tick data at this scale will facilitate the designation of tick management zones and allow for targeted outreach and tick management strategies. Partnerships with applicable state and local agencies will also be established or enhanced to facilitate widespread dissemination of the data collected through this program. Within designated tick management districts, long-term monitoring sites will be established to allow for continuous active surveillance of tick populations. A genetic biobank will also be based at the University of Maine, where genomic extracts from tick samples will be stored indefinitely.
2. Dental Workforce Development and Community Dental Health Services in Aroostook County $750k FY 23 LHHS CDS Build-out dental lab at UMPI so UMA can bring its dental assisting and expanded functions dental assisting program to the County in support of local workforce and patient needs, while providing free or low-cost dental services to underserved residents. Could be coupled with the LAC dental workforce expansion project for $1.72M.

Graduate School of Biomedical Science and Engineering (planned expansion):

1. Additional development of internship options within the curriculum of the biomedical science and biomedical engineering programs to promote further connection with the biotech industry and to enhance career opportunities for PhD graduates.
2. Expansion of the PSM program in bioinformatics to include a PhD option. Bioinformatics remains a highly popular online master's degree option at UMaine, with an admission waitlist. Given the limited number of PhD programs nationwide and the potential for collaboration with the Jackson Laboratory in this area, a PhD option would increase doctoral enrollment at the GSBSE.
3. Creation of an MS in biomedical science to complement the MS in biomedical engineering to provide a pipeline to the PhD program. Explore the development of an accelerated program that would extend the pipeline to undergraduate students both within the UMS and to Colby, Bates, and Bowdoin.

Appendix I: ACGME Residency and Fellowship Programs in Maine

1. MaineHealth Maine Medical Center (Portland)

Maine Medical Center (MMC) is the flagship teaching hospital in the state and the largest GME site, training 360+ residents and fellows annually across 17 ACGME-accredited residency programs, 18 ACGME-accredited fellowship programs, and rural tracks.[86]

Core & Specialty Residency Programs (physician ACGME)

- Anesthesiology – categorical residency
- Diagnostic Radiology – categorical residency
- Emergency Medicine – 3-year program, Level 1 trauma, busiest ED in Maine; ~10 residents per class.
- Family Medicine – full-spectrum training with Maine/rural rotations
- General Surgery
- Internal Medicine (categorical) – the sole IM residency in Maine, with training at MMC and other urban/rural sites.
- Internal Medicine–Pediatrics (Med–Peds) – combined residency with rural track options
- Interventional Radiology – Integrated – IR residency
- Neurology
- Neurosurgery
- Obstetrics & Gynecology
- Pediatrics
- Psychiatry
- Urology
- Vascular Surgery – Integrated

Fellowship Programs (largely ACGME)

MMC lists the following fellowships: the majority are ACGME-accredited physician subspecialties, with a few institutional or APP fellowships.

- Addiction Medicine
- Adult Cardiac Anesthesiology
- Advanced Practice Provider (APP) Critical Care – APP fellowship (not ACGME physician GME)
- Cardiovascular Disease
- Child & Adolescent Psychiatry

[86] MaineHealth Maine Medical Center

- Critical Care Medicine
- Emergency Medicine Services (EMS)
- Gastroenterology
- Geriatrics
- Hematology & Oncology
- Hospice & Palliative Medicine
- Infectious Disease
- Integrative Family Medicine
- Nephrology
- Preventive Medicine
- Pulmonary & Critical Care Medicine
- Sports Medicine
- Surgical Critical Care
- Vascular Surgery

2. Northern Light Eastern Maine Medical Center (Bangor)

Northern Light EMMC is the tertiary referral center for the northern two-thirds of Maine and runs small but high-impact ACGME programs with a strong rural and osteopathic flavor.[87]

Residency Programs

- Family Medicine Residency
- A 30-resident ACGME-accredited, unopposed family medicine residency with Osteopathic Recognition, designed explicitly for rural practice.
- Osteopathic Neuromusculoskeletal Medicine (ONMM-3) Residency
    - ACGME ONMM-3 program with strong outpatient, inpatient, and sports medicine exposure.
- Psychiatry Residency
    - General psychiatry residency based at EMMC (ACGME).

Fellowship Programs

- Hospice & Palliative Medicine Fellowship

[87] Northern Light Health

3. Maine-Dartmouth Family Medicine Residency/MaineGeneral (Augusta/Waterville)

Maine-Dartmouth Family Medicine Residency (MDFMR) is an ACGME-accredited sponsoring institution, in partnership with MaineGeneral Medical Center, and operates multiple programs with a strong osteopathic and primary-care emphasis.[88]

Residency Programs

- Family Medicine Residency (10–10–10)
    - Community-based 3-year family medicine residency, training both M.D. and DO residents.
- Osteopathic Neuromusculoskeletal Medicine (ONMM) Residency
    - One-year advanced ONMM residency (ACGME).

Fellowship Programs

All are listed as ACGME-accredited one-year advanced training programs.

- Sports Medicine Fellowship
- Geriatric Medicine Fellowship

4. Central Maine Medical Center (Lewiston)

Central Maine Medical Center (CMMC) is the fourth ACGME-sponsoring institution in the state and runs a significant Family Medicine program with a rural track. [89]

Residency Programs

- Central Maine Medical Center Family Medicine Residency (CMMC FMR)
    - Includes a Rural Track (Swift River) supported by state funding and the MERGE Collaborative.[90]

[88] Maine-Dartmouth Family Medicine Residency
[89] American Medical Association
[90] Rural Medical Training Collaborative

Appendix J: Economic Impact Methods and Notes

Tripp Umbach has conducted over 500 economic impact studies for academic institutions and large healthcare systems, including all 154 U.S. medical schools and more than 400 teaching hospitals, encompassing allopathic and osteopathic institutions.

IMPLAN Methodology

The economic impact of the proposed medical school at the University of Maine was estimated using IMPLAN (IMpact Analysis for PLANning), an econometric modeling system developed by applied economists at the University of Minnesota and the U.S. Forest Service. The IMPLAN modeling system has been in use since 1979 and is used by more than 500 private consulting firms, university research centers, and government agencies. The IMPLAN modeling system combines the U.S. Bureau of Economic Analysis' input-output Benchmarks with other data to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers. From this data, one can examine the effects of changes in one or several economic activities to predict their impact on a specific state, regional, or local economy (impact analysis). The IMPLAN input-output accounts capture all monetary transactions in the market for consumption in each period. The IMPLAN input-output accounts are based on industry survey data collected periodically by the U.S. Bureau of Economic Analysis (U.S. BEA) and follow a balanced account format recommended by the United Nations.

IMPLAN's Regional Economic Accounts and the Social Accounting Matrices were used to construct state- and regional-level multipliers that describe the economy's response to changes in demand or production driven by anticipated activities and expenditures. Each industry that produces goods or services generates demand for other goods and services. This demand is multiplied through a particular economy until it dissipates through "leakage" to economies outside the specified area. IMPLAN models discern and calculate leakage from local, regional, and state economic areas based on workforce configuration, the inputs required by specific types of businesses, and the availability of both inputs in the economic area. Consequently, economic impacts that accrue to other regions or states because of a change in demand are not counted as impacts within the economic area.

The model accounts for substitution and displacement effects by deflating industry-specific multipliers to levels well below those recommended by the BEA. In addition, multipliers are applied only to personal disposable income to obtain a more realistic estimate of the multiplier effects of increased demand. Importantly, IMPLAN's Regional Economic Accounts exclude imports to an economic area, so the calculation of economic impacts identifies only those impacts specific to the economic impact area. IMPLAN calculates this distinction by applying Regional Purchase Coefficients (RPC) to predict regional purchases based on an economic area's particular characteristics. The RPC represents the proportion of goods and services purchased regionally under normal circumstances based on the area's economic characteristics described in terms of actual trade flows.

Employment Definitions

IMPLAN analysis measures jobs/positions (part-time or full-time), not full-time equivalents (FTEs). Full-time and part-time employees impact the economy and support additional indirect and induced

employment. Employment data for this was provided as an output of all individuals who receive a paycheck. This includes all full-time and part-time employed faculty, staff, and students.

State and Local Tax Impact Definition

State and local tax impacts generated in future years are based on actual taxes generated by established branch campuses (i.e., payroll, property, sales, unemployment, income, and any other taxes paid to the state). Any federal taxes paid by the proposed campus are not included in the state and local tax impacts (i.e., FICA payments).

Visitor Definitions

Impact analysis looks to quantify the impact of attracting "fresh" dollars to a region. Therefore, when including visitor spending in the impact analysis of a medical school, the analysis will include only those visitors coming to a region from outside of the said region. Visitors to events who also live in the region would have spent their dollars in that region otherwise; therefore, this dollar was not attracted to the region because of the organization being analyzed. For this project, the impact analysis looked at impacts on the state of Maine. Visitors were counted only if they were from outside the region being analyzed.

FAQs Regarding Economic Impact Assessment

What is the economic impact?

Economic impact begins when an organization spends money. Economic impact studies measure the direct economic impact of an organization's spending, plus additional indirect spending resulting from direct spending. The economic impact has nothing to do with dollars collected by institutions, their profitability, or their sustainability, since all operating organizations have a positive economic impact when they spend money and attract spending from outside sources.

Direct economic impact measures the dollars generated within a geographic region because of the presence of an institution. This includes spending on goods and services with vendors within the region, the spending of its employees and visitors, and the economic impact generated by businesses within the region that benefit from the institution's spending. It is important to remember that not all dollars spent by an institution stay in the geographic region of study. Dollars spent outside the region in the form of purchases from out-of-area vendors are not included in an institution's economic impact on the region.

The total economic impact includes the "multiplier" of spending from companies that do business with an institution. Support businesses may include lodging establishments, restaurants, construction firms, vendors, and temporary agencies. Spending multipliers attempt to estimate the ripple effect in the economy where the spending occurs. For example, spending by an institution with local vendors provides these vendors with additional dollars that they re-spend in the local economy, causing a "multiplier effect."

What is the multiplier effect?

Multipliers are a numeric way of describing the secondary impacts stemming from an organization's operations. For example, an employment multiplier of 1.8 would suggest that for every 10 employees

hired in the given industry, eight additional jobs would be created in other industries, such that 18 total jobs would be added to the given economic region. The multipliers used in this study range from 1.8 to 2.0. The Multiplier Model is derived mathematically using the input-output model and Social Accounting formats. The Social Accounting System provides the framework for the predictive Multiplier Model used in economic impact studies. Purchases for final use drive the model. Industries that produce goods and services for consumer consumption must purchase products, raw materials, and services from other companies to create their product. These vendors must also procure goods and services. This cycle continues until all the money is leaked from the region's economy. Three effects are measured with a multiplier: the direct, the indirect, and the induced effects. The direct effect is the known or predicted change in the local economy to be studied. The indirect effect is the business-to-business transactions required to satisfy the direct effect. Finally, the induced effect is derived from local spending on goods and services by people working to satisfy the direct and indirect effects.

What methodology was used in this study?

IMPLAN (IMpact analysis for PLANning) data and software. Using classic input-output analysis in combination with regional-specific Social Accounting Matrices and Multiplier Models, IMPLAN provides a highly accurate and adaptable model for its users. The IMPLAN database contains county, state, ZIP code, and federal economic statistics specialized by region and not estimated from national averages. It can measure a regional or local economy's effect on a change or event in its activity.

What is employment impact?

Employment impact measures the direct employment (employees, staff, faculty, administration) plus additional employment created in the economy because of an institution's operations.

Indirect and induced employment impact refers to other regional employees whose jobs exist because of an institution's economic impact. In other words, jobs related to the population—city services (police, fire, EMS, etc.), employees at hotels and restaurants, clerks at retail establishments, and residents employed by vendors used by the institution.

What is the difference between direct and indirect taxes?

Direct tax dollars include sales taxes and net corporate income taxes paid directly by the institution to the state. In contrast, indirect taxes include taxes paid by vendors to the state for doing business with an institution and or individuals.

Is this a one-time impact, or does the impact repeat each year?

The results presented in this economic impact study are generated annually. The economic impact in future years can be either higher or lower based on the number of employees, students, capital expansion, increases in external research, and state appropriations.

Appendix K: Consultant Qualifications

Tripp Umbach is recognized nationally as the leading consulting firm in academic medicine and the development of new medical schools. Over its history, Tripp Umbach has consulted with more than half of all U.S. medical schools, as well as international universities, to advance medical education, improve healthcare access, and strengthen local economies. This track record demonstrates the firm's capacity to deliver actionable, data-driven, and community-responsive solutions for universities and states seeking to establish new medical schools.

Over the past three and a half decades, the firm has guided the creation, expansion, and accreditation of more medical schools than any other consulting organization in the United States. Specifically, Tripp Umbach has provided feasibility, planning, and implementation services for 50 new or expanding medical schools through projects in more than 100 regions. The firm's expertise spans a wide range of models, including traditional stand-alone institutions, health system-driven schools, multi-regional partnerships, and the transition of existing regional campuses into independent programs.

Beyond medical education, Tripp Umbach is a national leader in Graduate Medical Education consulting, helping communities and health systems expand residency and fellowship training to complement undergraduate medical education. This dual expertise in both UME and GME enables the firm to design comprehensive physician workforce pipelines tailored to the needs of states and regions.

Tripp Umbach also brings unmatched experience in economic impact analysis for academic medicine. Since 1995, the firm has conducted national economic impact studies for the Association of American Medical Colleges, measuring the contributions of all U.S. medical schools and more than 400 teaching hospitals.

Tripp Umbach

Turning Ideas Into Action