

Commentary

Interpreting HRSA's Latest Dentist Workforce Projections

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With the U.S. health care system in the midst of a major transition spurred on by the Affordable Care Act (ACA), there is renewed debate over key health workforce policy issues. Health insurance coverage is expanding under the ACA, which will likely lead to increased demand for health care services. Longer term, there will be increased emphasis on value, efficiency, and accountability within the health care system. These developments have major implications for the health care workforce. One key issue is whether the U.S. will face health care provider shortages as health insurance coverage expands and several health care occupations experience aging and other demographic transitions. Another key issue is how the move away from fee-for-service payment to more value- or outcome-based reimbursement models could potentially change the role of – and, therefore, demand for – different types of providers within the health care delivery team.

Dentistry is no different. There has been considerable debate in recent years on the adequacy of the dentist workforce, particularly for certain geographic settings (e.g. rural areas) and for certain population groups (e.g. Medicaid). Assessing current and future provider adequacy is both conceptually and empirically challenging. It requires modeling labor market choices of dentists, dental school enrollment levels, and demand for dental care. It also requires a good understanding of barriers to dental care. For example, a recent [study](#) found that the main barriers to dental care among adults are overwhelmingly financial and are not supply related. Another [study](#) found that cost and low perceived need are by far the top reasons adults avoid going to the dentist, not lack of dental care providers.

Which brings us to the Health Resources and Services Administration's (HRSA) latest [analysis](#) of the future supply of and future demand for dentists and hygienists. This analysis models the future supply of and demand for dentists through 2025. The analysis predicts that nationally, increases in dentist supply will not meet the increases in demand for dentists,

leading to an exacerbation of the existing shortage. Further, the analysis predicts that every state and the District of Columbia will experience a dentist shortage by 2025.

HRSA needs to be commended for taking a leadership role in developing a sophisticated empirical [simulation model](#) that aims to predict demand for and supply of various types of health care professionals, including dentists. This is an incredibly challenging pursuit. Through HRSA's National Center for Health Workforce Analysis, the agency is taking considerable strides to expand data availability and research efforts in this critical area of health policy. However, there are several important aspects of HRSA's dentist workforce projections that merit some discussion.

First, the modeling of dentist supply, overall, is quite sound and empirically grounded. HRSA's model predicts a rising supply of dentists. The ADA Health Policy Institute (HPI) recently developed a sophisticated empirical model to predict the future supply of dentists and the [analysis](#) also predicts a rising supply of dentists. HPI's model predicts that the number of practicing dentists under age 75 in the U.S. will increase to 210,780 by 2025 while HRSA's analysis predicts the number of full-time-equivalent (FTE) dentists under age 75 will increase to 202,600 by 2025. The main differences in HPI's and HRSA's models relate to assumptions on the number of dental school graduates per year as well as the rate at which dentists leave the workforce. In addition, HPI's model does not calculate FTEs so there is no way to make an "apples-to-apples" comparison between the two projections. While, in my view, HPI's workforce projection model is built upon a more reasonable set of assumptions that are grounded in empirical evidence, both models are consistent in the "big picture" conclusion that the number of practicing dentists will increase in the coming years.

Second, HRSA's demand modeling is flawed, primarily because it is based on some key assumptions that are inconsistent with the best available empirical evidence. HRSA's demand modeling is based on assumptions related to epidemiological factors, future patterns of health insurance coverage and dental care utilization. HRSA's model is still (understandably) somewhat of a "black box" – for example, given that Medicaid programs rarely provide extensive dental benefits to adults, it is unclear how Medicaid expansion is assumed to impact dental insurance coverage. But the most critical assumption, in my view, is that dental care utilization patterns will remain constant through 2025. This is a highly flawed assumption. The best available data show that while dental care utilization has been increased among children, dental care utilization among adults has [declined steadily](#) for more than a decade. The decline in dental care utilization among adults has caused a significant [slowdown in the dental economy](#), a significant increase in the level of [unused capacity](#) in the dental care system, and [stagnating dentist earnings](#).

Third, the best available evidence suggests that current dental care utilization trends – namely a continued decline among adults – will continue unless major reforms occur to influence dental benefits coverage rates or demand for dental care. In my view, such reforms are not on the horizon. It is certainly true that the ACA will expand dental benefits coverage to children and to low-income adults in many states via Medicaid expansion. There will also likely be some increase – but a much [smaller increase](#) – in demand for dental care for adults under 26 years of age through the [enhanced dependent coverage policy](#), and for adults more broadly through purchases of dental coverage in the [health insurance marketplaces](#). It is extremely important to note, however, that the increase in dental benefits coverage among adults on Medicaid due to the ACA – [up to 8.3 million adults nationally](#) – will not translate into increased dental care visits unless states take bold action to reform their Medicaid programs. Perhaps more importantly, new research suggests that even if states do implement the 'enabling conditions' that make [Medicaid programs successful](#) – a

combination of patient education and outreach, streamlined administrative procedures, and [enhanced provider incentives](#) – the existing dental care system already has the capacity to absorb large [inflows of Medicaid patients](#) and, in fact, additional providers may not be needed to address any future increase in demand for dental care. In fact, [several states](#) have seen significantly increases in dental care utilization among Medicaid children as a result of comprehensive Medicaid reforms.

Fourth, in addition to the *future* shortage estimates calculated as the difference between future demand for and future supply of dentists, HRSA's model adds estimates of *current* dentist shortages based on the health professional shortage designation [methodology](#). This methodology has undergone several changes in recent years aimed at addressing some of the [significant shortcomings](#). Nevertheless, the core flaw of relying on simplistic population-to-provider ratios remains which significantly limits the insight that can be gleaned into provider adequacy. Treating the U.S., or a state, or even a county, as a single market is, in my view, a far too aggregate approach to assessing provider adequacy.

Fifth, there is strong evidence that there is significant unused capacity within the dental care system today. In fact, more than [one out of three](#) dentists report they are not busy enough and can see more patients. Together with the strong empirical evidence indicating that the [main reasons](#) adults, especially low-income adults, do not seek dental care are related to cost and low perceived need, there is little empirical evidence suggesting there is, in aggregate, a shortage of dentists. HRSA's analysis assumes that the market is currently in balance and that the supply of dentists is, in essence, equal to the demand for dentists. However, the best empirical evidence suggests that, in aggregate, there is an [excess supply of dentists](#) in the U.S.

How then should HRSA's analysis be interpreted? Zooming out to the big picture, analyses like HRSA's and HPI's dentist workforce projections, through a strong micro-data empirical approach, shed important light on how the supply of dentists will evolve in the coming years. HRSA's analysis attempts to go one step further and models the future demand for dentists, concluding that demand will grow faster than supply. In my view, neither HPI's nor HRSA's analyses are appropriate methodologies for assessing provider adequacy – even at the national level. In HPI's [workforce projection model](#) as well as [other HPI studies](#) we explicitly state this and caution against the “over-interpretation” of our findings. HRSA's analysis suggests that more dentists or other types of dental care providers are needed to meet the future demand for dental care. However, as noted above, the most important barriers to dental care are not supply related. Specific to one important population – Medicaid beneficiaries – access to dental care is unlikely to improve without comprehensive reforms to state Medicaid programs. Simply increasing the number of dentists in the market is not the solution. Future research should focus on analyzing the dental market in smaller geographic areas and on better understanding the drivers of demand for dental care. The ADA Health Policy Institute is currently engaged in several research initiatives in partnership with other academic and government agencies to help contribute to this effort.