California does not have enough physicians to meet the needs of its population. From 2013 to 2015, the total number of active patient care physicians in California declined, exacerbating an already critical situation. Though shortages exist in most specialties, they are most extreme in psychiatry and family medicine. Accessibility varies widely across geographic locations, with the Inland Empire, the San Joaquin Valley, and the Northern and Sierra regions experiencing the greatest paucity of physicians.

To address this physician workforce crisis, California must train new doctors to replace those who retire. There is a bottleneck, however, in training capacity during residency. Currently, there are more medical school graduates wanting to complete residency training in California than there are positions available. Expanding residency training capacity will directly increase the number of doctors practicing in California. If the expansion can focus on underserved regions of the state and underserved populations, California can not only produce more physicians but also do so in the areas that need them the most. Studies have shown that physicians tend to stay and practice near where they complete their residency. In fact, California has the highest retention rate in the nation of physicians who complete residency in California: 71% of physicians remain in California after residency training.

Graduate Medical Education
Graduate medical education (GME) includes physician residency and fellowship training after graduation from allopathic or osteopathic medical school, domestically or internationally. (GME does not include dentistry.) When they graduate from medical school, physicians are not yet prepared to enter directly into clinical practice. Residency is the next step in a physician’s training, and completing an accredited training program for a minimum of three years is a requirement for licensure in California, though some specialties, such as general surgery and psychiatry, require additional years to complete. This on-the-job GME training can take place in teaching hospitals, Federally Qualified Health Centers, and various other types of institutions, but they must be accredited by the Accreditation Council for Graduate Medical Education. Residents cannot work more than an 80-hour week, averaged over four weeks, and the median annual salary in California is $60,000. Any GME program that commits to training a physician commits financially to that physician for multiple years.

Funding: The Main Obstacle to GME Expansion
Federal and state governments heavily subsidize GME, unlike training for any other profession, regardless of where the resident completed medical school. Though it can vary between institutions, most experts suggest that on average it costs an institution $150,000 per resident per year to run a residency program. In California,
subsidies for GME do not come from one source but rather are cobbled together from multiple federal, state, and often private sources. The largest GME funder by far is Medicare, but the Balanced Budget Act of 1997 capped Medicare GME payments for each teaching hospital to the number of full-time equivalent (FTE) residents and fellows that it had in training in 1996. This limit on Medicare FTE positions is referred to as the 1997 Medicare GME cap. The cap essentially freezes the geographic and financial distribution of Medicare-supported GME positions without regard for future changes in local or regional health workforce priorities or the geographic distribution and demographic makeup of the US population.

The main obstacle to expanding GME in California is lack of funding. For an existing institution to increase its training capacity, it must find additional revenue to cover the expenses. Short-term funding for institutions and programs, such as limited-term grants, make long-term GME strategic planning difficult or even impossible. Institutions relying on additional funding constantly face the possibility of not receiving one of the very competitive state grants, such as from Song-Brown or CalMedForce. Because federal funding has been frozen, the state must choose between taking on a long-term financial burden or not allowing capacity to increase as the population grows.

California has about 150 Medicare GME-naive acute care hospitals.

GME-Naive Hospitals

Hospitals that have never been teaching hospitals are referred to as Medicare GME-naive hospitals and are not subject to the 1997 Medicare GME cap. These hospitals are of great interest to policymakers because of their potential for GME expansion using federal funds. California has about 150 Medicare GME-naive acute care hospitals, defined as acute care hospitals that did not receive Medicare GME funding from 1996 to 2015. If one of these hospitals becomes a new teaching hospital, the Medicare GME cap is calculated and implemented in the fifth year of the new training program. Centers for Medicare & Medicaid Services staff have said, however, that a hospital is a teaching hospital (that is, not naive) if training takes place according to a planned and regular schedule (that is, not spontaneously or randomly), even if the hospital does not incur the costs of the residents’ salaries, does not sponsor the program, and trains only a small number of FTE positions.

Hospitals that have never been teaching hospitals are referred to as Medicare GME-naive hospitals and are not subject to the 1997 Medicare GME cap.

The Role of GME-Naive Hospitals in GME Expansion

Some of these Medicare GME-naive hospitals have the capacity and interest to create new GME programs in shortage specialties, focusing on underserved areas and populations. If a Medicare GME-naive hospital becomes a new Medicare teaching hospital, new federal funding becomes available for that program. This means that California’s GME capacity can be increased without relying on a permanent contribution of state dollars. For GME-naive hospitals launching new GME programs, it is important to quickly scale up the programs so that at the end of the five-year period, the Medicare GME cap, and the associated federal funding, will be maximized.

Start-Up Funding and Technical Assistance Are Necessary

Medicare GME-naive hospitals typically require large amounts of start-up funding and technical assistance for two to three years while they establish a new residency training program and become accredited by the Accreditation Council for Graduate Medical Education. These start-up costs are upfront expenses not subsidized with federal funding. Song-Brown and CalMedForce start-up grants can help with start-up costs only after a program has been accredited. A review of the evidence on the efficacy of strategic health workforce policy interventions focused on increasing and diversifying the health workforce showed that other states that significantly invested in expanding residency have reported meeting or exceeding the goals of that investment. A
one-time state investment of start-up funds to establish new teaching centers in California could produce hundreds of new primary care physicians and psychiatrists to serve the needs of Californians for decades to come.

Yet not all GME-naive hospitals are good candidates for GME; there are other challenges to launching new GME programs. Programs need strong leadership, qualified program directors, and many patients with diverse medical conditions to be successful. With technical assistance, some of these challenges can be overcome.

Examples of Successful GME Expansion in GME-Naive Hospitals
Several hospitals in California have undertaken the difficult task of starting new programs recently and are now receiving new federal dollars for their efforts. Kaweah Delta Medical Center in Visalia was able to begin six programs during its start-up period, with a Medicare cap of 129 residents in 2018. Others include Riverside Community Hospital and Dignity Health St. Joseph’s Hospital, which are each setting up eight new residency programs. As of 2021, neither cap is set.

In 2012, Georgia made GME expansion a priority, expecting to spend $22 million with the goal of adding 400 new positions in high-need specialties. When the program ended in 2018, Georgia had spent $19.2 million and is expected to gain 613 new residency positions when programs reach full capacity in 2025. The resulting state investment averaged $31,000 per permanent residency position created. According to a report from the Georgia Department of Audits and Accounts, about 75% of the new residencies are in primary care. It is too soon to adequately measure retention rates, but early indications seem promising.

In 2013, Texas also prioritized GME expansion, with a goal of increasing residency positions to 10% more residency positions than medical school positions. The state created multiple programs, which included GME planning grants, new residency position grants, and direct state funding for existing program expansion. From 2014 to 2019, Texas spent $164.3 million on GME expansion, creating roughly 400 new positions in 13 new residency programs.

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About the Foundation
The California Health Care Foundation is dedicated to advancing meaningful, measurable improvements in the way the health care delivery system provides care to the people of California, particularly those with low incomes and those whose needs are not well served by the status quo. We work to ensure that people have access to the care they need, when they need it, at a price they can afford.

CHCF informs policymakers and industry leaders, invests in ideas and innovations, and connects with changemakers to create a more responsive, patient-centered health care system.

Endnotes