Accelerated Health Professions Education Programs in California

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Overview

California has a well-documented health workforce shortage, especially in rural areas.[1] Accelerated education programs are one of the many approaches being employed to reduce shortages by shortening the educational pathway and increasing the production of qualified health care providers. This issue brief explores what we know about accelerated health professions educational programs in California and how they impact the essential workforce goals of increasing supply, equity, diversity, access to education, cost, and time to entry into practice, and, ultimately, access to care in low-income and rural areas (geography and distribution) and improved health outcomes. Accelerated programs are not a one-size-fits-all solution to California's health workforce shortages and may even contribute to workforce challenges by being less diverse and as expensive as their traditional counterparts.

Key takeaways

- In California, accelerated programs are common for PharmDs, increasingly common for RNs, and remain rare for MDs and DDS/DMDs.
- Strategies to accelerate programs (deleted content, summer terms, increased course load, etc.) vary widely.
- Across professions, there is mixed evidence on the academic outcomes of accelerated programs.
- Some accelerated programs are just as expensive and less diverse when compared to traditional programs.

Problem

California has shortages of physicians, nurses, and dentists, especially in the San Joaquin Valley, Inland Empire, and Northern and Sierra regions. In recent years, an increase in exits from these professions has coincided with a decrease in new licenses issued further escalating shortages.[1] The

production pathway for these providers is long, often entailing training across multiple institutions and degree programs, in addition to clinical training experiences. The educational requirements take time, making addressing urgent shortages difficult.

Why it matters

In California, accelerated programs are common for pharmacists (PharmDs), increasingly common for nurses (RNs and NPs), and rare for physicians (MDs and DOs) and dentists (DDS and DMDs). Programs use a variety of strategies to decrease the time to graduation.

Workforce development goals

Ensuring an ample supply of health workers is just one critical goal of state health workforce policy. Additional California workforce goals[a] include:

1. Diversifying California's workforce so that it reflects the people that it serves
2. Increasing health workers in medically underserved areas, especially rural areas; and
3. Increasing health workers serving Medi-Cal (California's state Medicaid program) members

Strategies for program acceleration:

- Increased course load per term
- Added summer terms
- Deleted content (including didactic or clinical rotations, extracurriculars, electives)
- Revised content to shorten course length
- Hybrid or online options
- Undergraduate to graduate / single entry
- Early commitment to specialty upon admission (e.g., MD programs)
- Advanced placement for people who hold similar degrees from another country
- Advanced placement for people who hold bachelor's degrees in another field

Achieving these goals requires improved access to education, reduced cost and time to enter practice, and better retention. The ultimate goal of workforce development is better access, experience, and health outcomes for all patients, and improved job opportunities for health care workers.

Below are the criteria related to these overall goals that we used to contextualize our review of accelerated programs.

Access to education / acceptance rates. The accessibility of health profession education programs is impacted by a variety of factors, including but not limited to, public awareness of the programs, exams,

[a]These goals are drawn from the Workforce for a Healthy California for All; Guiding Principles and Strategic Priorities - California Health and Human Services, and Elevating Equity through California's Health Workforce Funding Processes: Final Recommendations for HCAI.

other requirements to apply, loan and grant eligibility (i.e., Pell grants), location of programs, admissions criteria and processes, and program acceptance rates.

Cost of education. The cost to the student is impacted not only by the tuition and fees charged by a school, but also the cost of living in the area, and whether students can hold a job while in their program. If a school charges more per term for an accelerated program or prevents students from working, the accelerated program may not necessarily be cheaper than a comparative traditional program. Cost to the institution is also a factor, with variable issues impacting the tuition charged.

Diversity of workforce. The diversity of the health care workforce is an important component in achieving health equity for patients. The diversity of the workforce is impacted by the demographics of students entering educational programs, as well as graduation and licensure rates and retention and advancement in employment.

Appropriate supply. The overall supply of qualified health professionals in nursing, medicine, pharmacy, and dentistry in California should meet the demand and need for these providers. This goal is impacted by how many students graduate from schools each year and licensing exam pass rates, and the number of graduates seeking jobs in those professions in California.

Geography. Patients' access to care is directly related to the supply of health professions in their given area. A lower supply of health professionals in low-income and rural areas is an ongoing challenge in California. Programs can address this by locating in medically underserved areas, hosting classes online, recruiting students who commit to serving in rural or low-income areas, developing partnerships with clinical sites, and pairing students with mentors from such communities.

Figure 1. Theorized impact of acceleration strategies on workforce goals

Strategies	Access to education	Cost	Diversity of workforce	Supply	Geography	Retention
Increased course load per term						
Added summer terms						
Deleted content						
Revised content / structure						
Hybrid or online programs						
Undergrad to grad / single entry						
Early commitment to specialty upon admission (MD)						

Key: Green = hypothesized positive impact, yellow = hypothesized neutral impact, red = hypothesized negative impact

Retention. Workforce retention is whether health care professionals continue working in the professions they have trained in. It also refers to whether they continue working in certain desired specialties (primary care, psychiatry, etc.), areas (rural, low income, etc.), and location types (primary care clinic, safety net hospital, etc.).

Figure 1 shows the hypothesized impact of various acceleration strategies (listed as rows) on these workforce goals (listed as columns). This is based on our literature review and data collection on California accelerated programs.

However, the impact of an accelerated program on these workforce goals is highly dependent on the profession. The next sections explore what we know about accelerated programs in California for medicine, dentistry, pharmacy, and nursing. Our search encompassed both academic literature (articles published in research journals) and the grey literature (materials published outside of journals, such as reports, op-eds, and data collection by professional associations).

Medicine

History and context

Accelerated, or three-year, programs have a varied history in the United States (US)—they rose in popularity during World War II and then again in the 1970s in response to physician shortages before subsequently declining. This third wave, which began in the 2010s, is part of a trend of curricular reform.

Eighty percent of these accelerated programs have focused on primary care, and are shortened by removing the fourth year, which is typically used for clinical rotations and residency applications. Almost all programs guarantee their students local residency positions, a necessary step given the limited time to travel to interview for residency.[2]

What the research says

Accelerated students generally have the same performance in classes, major exams, and clinical skills assessment as traditional students, and on average, they also may have less debt.[3–7] Limited data showed that accelerated graduates perform the **same or better than traditional students in residency**.[8]

Racial and socioeconomic diversity is a persistent issue with medical school admissions. Research comparing the demographics of accelerated to traditional students was limited. Other than University of California (UC) Davis, which has had 71% underrepresented in medicine (UIM) students,[9] **most accelerated programs that published data had lower rates of UIM students compared to their traditional programs** (New York University, University of North Carolina at Chapel Hill, Sidney Kimmel Medical College).[4,5,7,10] Students from systematically marginalized communities in the US may be less likely to have the exposure to and experience in medicine that would enable them to commit to a specialty early.

Data on employment after program completion is limited. Most accelerated programs focus on primary care and guarantee their students local residency positions (UC Davis, New York University Grossman

Long Island School of Medicine).[9,10] Evidence shows that residency training location influences future practice location.[11]

California programs

There is only **1** accelerated program in California, UC Davis, out of a total of 16 medical schools.

- UC Davis has a 3-year program in partnership with Kaiser Permanente Northern California, focusing on primary care. Their integrated Graduate Medical Education program is linked to a primary care residency program at UC Davis or Kaiser Permanente Northern California. Most of the eliminated weeks are in fourth year of the traditional curriculum, however, students start also 6 weeks early, and do not have the first year summer off.
- UC Davis has found success in diversity—since 2014, **71% from UIM groups, 64% are first-generation college students, and all graduates are practicing in California, including 66% at Federally Qualified Health Centers**.[9] Their traditional program is similarly diverse.
- Annual tuition costs are identical to the tuition costs associated with the four-year UC Davis MD program, with the exception that the first-year costs are slightly higher since the three-year students will be starting six weeks earlier.

Summary

Accelerated MD programs generally focus on primary care, are attached to traditional MD programs, and shorten by removing the fourth year. Currently, they educate a small number of students each year. Their students perform similarly to traditional students in school, on licensing exams, and in residency.

Dentistry

What the research says

Accelerated programs in dentistry are rare—no academic or grey literature was found on them. There are two notable three-year DDS or DMD programs in the US: **University of the Pacific in California and Roseman University in Nevada**. A few universities have bachelor's degree to DDS or DMD programs, shortening the length of undergraduate education, but not dental training. Information about student demographics or post-degree employment was not available.

California programs

University of the Pacific has the only accelerated DDS or DMD program in the state, out of 7 total dental schools. Information about how the University of the Pacific shortens its DDS curriculum was not readily available. It appears that they do not have any summers off and possibly increase the course load per term.

- Compared to other dental schools in California, University of the Pacific has lower percentages of Latino and Black students. University of the Pacific also has a higher percentage of male

students than other California dental schools. While comprehensive research is lacking on why their diversity numbers are the lowest, the high cost and intense schedule may be indicators that should be examined.

- Information about student outcomes for University of the Pacific was not readily available.
- Tuition at University of the Pacific was $127,910.00 per year for 2024-2025. In comparison, at University of Southern California, another private institution with a 4-year program, the tuition was $119,313 per year for 2024-2025.

Summary

Accelerated DDS or DMD programs are very rare and condense the four-year curriculum into three years.

Pharmacy

History and context

The first three-year PharmD program was launched at the University of the Pacific in 1970, and an increasing number of accelerated programs have been launched in recent years, as part of a wave of pharmacy education expansion. PharmD programs were typically 4 years. Pharmacy education and the PharmD are currently at a crossroads—within the next ten years, the number of annual PharmD graduates is projected to exceed the number of annual pharmacist job openings. Shifting job markets and a decline in pharmacy school applicants is expected to require pharmacy schools to reconsider their purpose and strategy.[12–14]

Most programs are shortened by reducing the length of the didactic curriculum—a traditional program has 3 years of didactic and 1 final year of clinical education, while most accelerated programs in California have 2 years of didactic and 1 final year of clinical. This is achieved by a variety of strategies, including not having summers off, curriculum redesign, and increasing course loads per term.

What the research says

Research and information on accelerated pharmacy programs is very limited. **North American Pharmacist Licensure Examination (NAPLEX) first time pass rates are significantly lower at accelerated programs compared to traditional ones**, contributing to the decline of NAPLEX pass rates nationally (over 90% in 2015 to below 80% in 2023).[15,16] In the few available studies, students in accelerated programs had higher stress levels and lower quality of life than students in traditional programs.[17,18]

Research on placement and employment rates was not available. In surveys, pharmacy residency program directors did not on average differentiate between traditional and accelerated programs in assessing students. However, directors from health care systems, university hospitals, and community hospitals were more likely to say that graduating from a traditional program was ‘very important’ or ‘important.’[19]

No information was available on the student demographics in accelerated pharmacy programs.

California programs

64% of all pharmacy programs in CA are accelerated—11 out of the total 17 programs. This contrasts with the national landscape, where only 26% of all programs are accelerated.

- Outcomes in accelerated programs range widely from being above national and traditional averages to being significantly below. Chapman University has a NAPLEX pass rate almost 10 percentage points above the national average, **while American University of Health Sciences has a rate over 30 percentage points below the national average** (47% vs 87.9%).
- Information about employment and residency placement was limited. When it was available, rates ranged from very good (85% of graduates accepted to residency programs from the Chapman undergraduate to graduate program) to very poor (only 24% of California Northstate University Class of 2021 employed as a pharmacist).
- The costs of accelerated programs in California varies.
    - Private: Using University of the Pacific as an example of an accelerated program—the estimated cost of their program is $228,904 for the 2024-2025 school year. Using Loma Linda as an example of a traditional program—the estimated cost of their program is $228,140 for the 2024-2025 school year.
    - Public: Using UC San Francisco as an example of an accelerated program—the estimated cost of their program for nonresidents is $204,943 for the 2024-2025 school year. Using UC Irvine as an example of a traditional program—the estimated cost of their program for nonresidents is $264,835.88 for the 2024-2025 school year.

Summary

Accelerated PharmD programs are generally created to replace traditional programs, and accelerate by redesigning curriculum, not having summers off, and increasing the course load. Over half of PharmD schools in California are accelerated, and their quality is highly dependent on the school.

Nursing

History and context

Accelerated nursing programs are growing in popularity. We focus on accelerated bachelor's level registered nurse (RN) programs that bring new licensed nurses into the workforce. Typically, they are offered to those who already have a bachelor's degree in another discipline. These programs are sometimes referred to as second degree Bachelor of Science in Nursing (BSN) programs. Accelerated BSN programs are generally 11 to 18 months, while Master of Science in Nursing (MSN) programs are less than 2 years.

What the research says

Accelerated nursing students generally have similar or better academic achievements and similar National Council Licensure Examination (NCLEX) pass rates than traditional students.[20–23] Accelerated students also have the same or lower attrition rates than traditional students.[24] However, accelerated BSN students may be at a disadvantage financially due to the financial restrictions on second bachelor's degrees.[25] Second degree bachelor's students are only eligible for federal loans or private loans, and additionally, there are limits on how much a student can borrow based on the amount that was borrowed for their first degree.

Research on student demographics is limited. However, **men are more likely to enroll in accelerated programs** than traditional programs.[25,26]

Data comparing accelerated and traditional student employment placement was generally not available.

California programs

There are 13 accelerated BSN American Association of Colleges of Nursing (AACN) member programs in CA, out of 53 total AACN programs[b] (accelerated BSN is less than 4 years). All but one of the BSN programs require completion of a bachelor's degree in a non-nursing field and the completion of pre-requisite courses. NCLEX pass rates and employment outcomes specific to the accelerated programs were not available.

There are 3 MSN programs in California that are accelerated, meaning that they are under 2 years in length. Employment outcomes specific to accelerated programs were not available.

- Academic outcomes for accelerated nursing programs were not available.
- Employment outcomes for accelerated nursing programs were not available.
- To compare costs: For example, at California State University, Fullerton, the tuition of the accelerated BSN program is estimated to be $17,992 for the 2024-2025 school year, while the traditional BSN program is estimated to be $29,888.

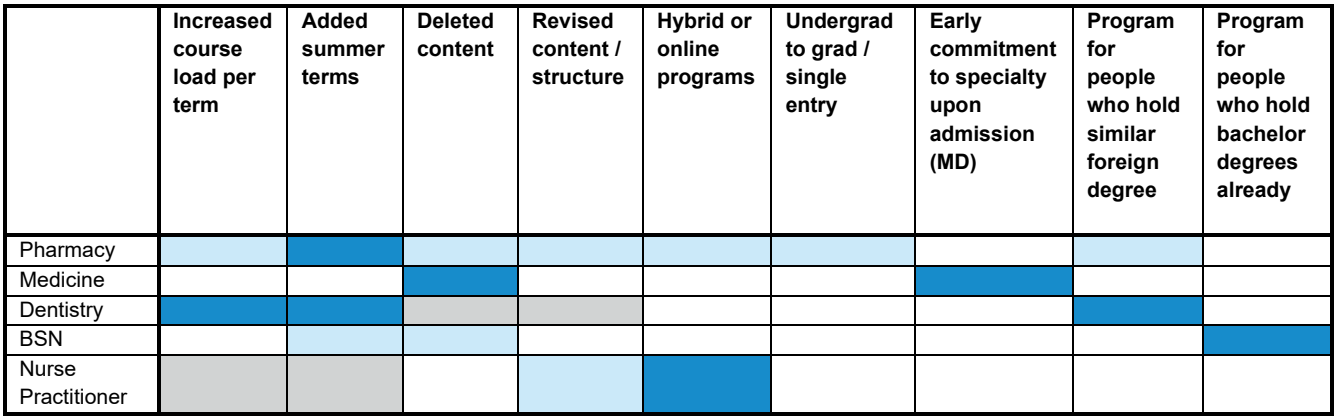
Summary

Accelerated RN programs are generally designed for second-degree BSN students; are run alongside traditional programs, not replacing them; and shorten by admitting students who already have a bachelor's degree and have completed pre-requisites. Their students perform similarly to traditional students in school and on licensing exams. Because of their structure, they do not address the issue of how long it takes for a first-degree BSN to attain their license.

Figure 2 shows the distribution of acceleration strategies (columns) by profession and degree type (rows) in California schools. This is based on our original data collection using school websites, handbooks, and interviews. A more comprehensive display of the data can be found here.

[b] AACN does not include all nursing schools in the US.

Figure 2. Distribution of acceleration strategy by degree and profession for California schools



Key: Dark blue = 50% or more of schools in California in this profession use this strategy, light blue = 49% or less of schools in California in this profession use this strategy, white = no schools in California use this strategy, grey = information is unavailable for many schools. Source: Original data collection by Healthforce Center.

Conclusions

Accelerated programs are not a one-size-fits-all solution to California's health workforce shortages. Accelerated programs may even contribute to workforce challenges based on our review of available evidence, by being less diverse and just as expensive as their traditional counterparts, although more definitive research on this is needed. While accelerated programs in some fields have the same academic outcomes as traditional programs, in other fields, the outcomes, such as licensing exam scores, are lower. This is concerning because students who do not pass the licensing exam on the first try will lose time as well as future earnings. In addition, students who need to work to support themselves or others, have family responsibilities, or need more exposure to the field before committing to it may not be well served by accelerated programs. Accelerated programs are one of many strategies that can be implemented to address workforce shortages; however, policymakers and educational leaders must consider each profession, its needs, and which acceleration strategies to use carefully before setting policy.

Find more research and evidence from Healthforce Center on health professions education.

About us

Policy at Healthforce promotes health workforce diversity and economic opportunities in California through a responsive, community-informed research and policy agenda rooted in social justice, with support from The California Endowment. Policy at Healthforce is part of Healthforce Center at UCSF, a trusted partner to funders, policymakers, and health care organizations, delivering impactful research, evaluation, policy

insights, and capacity building programs. A key lever of Policy at Healthforce is to elevate and accelerate the dissemination of Healthforce Center workforce research and evidence into the hands of community advocates and policymakers to advance policy.

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