CALIFORNIA Health Care Almanac



REGIONAL MARKETS SERIES

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Inland Empire:

Increasing Medi-Cal Coverage Spurs Safety-Net Growth

Summary of Findings

A sprawling region of more than 27,000 square miles, the Inland Empire of Riverside and San Bernardino Counties is a study in geographic contrasts, with urban population centers in the west and rural, sparsely populated areas to the east. The region has enjoyed continued population and employment growth, although it continues to be poorer and less healthy than other parts of California. In recent years, the Affordable Care Act (ACA) has continued to play a large role in shaping the Inland Empire's health care sector, with increased Medi-Cal coverage decreasing the share of uninsured people and spurring growth of Federally Qualified Health Centers (FQHCs). Small group or solo physician practices remain common in the region; however, the landscape is shifting. Throughout the Inland Empire, provider shortages remain a pressing concern, although new medical schools may increase physician supply.1

The region has experienced a number of changes since the previous study, in 2015–16 (see page 21 for more information about the Regional Markets Study). Key developments include the following:

▶ The number of FQHCs and patient visits continues to grow, bolstering the safety net. As new FQHCs opened in the region, the number of FQHC patient visits more than doubled, from just under 500,000 in 2014 to more than 1.2 million in 2018. Nonetheless, the number of visits

per capita in the region is still only half the statewide average.

- ▶ Many physicians practice independently in solo or small practices. Throughout the region, a large share of care is delivered by these physicians. However, the physician practice landscape is shifting as financial pressures, market conditions, and demographics all combine to make independent practice less attractive. Additionally, many younger physicians increasingly prefer the stability of an employment relationship and are drawn to the region's larger providers, including Kaiser, FQHCs, and larger medical groups.
- ▶ The region's hospital market remains unconsolidated. San Bernardino and Riverside Counties have among the lowest levels of hospital market concentration in California, although countywide measures can mask the extent of hospital concentration, as some hospitals are dominant in their local submarkets. There have been no mergers or significant changes to hospital market shares over the past several years, although several hospitals have closed pediatric units. Kaiser Permanente, with about a quarter of the regional market in terms of covered patients, operates an integrated delivery system with a health plan, hospitals, and its own network of physicians and continues to be a major player in the market.

- Medi-Cal managed care plan, drives pay-for-performance (P4P) initiatives for Medi-Cal providers. IEHP provides coverage to nearly 9 in 10 Medi-Cal enrollees in the region equivalent to more than a quarter of the region's total population and contracts with more than half of the region's primary care physicians and roughly 40% of specialists. The plan's dominant role in the Medi-Cal market provides significant leverage to engage hospitals and physicians in incentive programs using data to drive performance improvement.
- rom the use of multiple electronic health record (EHR) systems, as well as staffing and financial constraints, especially among the region's many smaller practices, hinder adoption of quality improvement efforts. The relative lack of data sharing among the region's hospitals and physicians may also slow efforts to improve care and increase efficiency.
- ▶ Much of the innovation surrounding integration of behavioral and physical health care in the region has occurred in the Medi-Cal program and among safetynet providers. IEHP has supported several behavioral health integration efforts; many FQHCs in the region offer integrated behavioral health care; and both county departments of behavioral health are pursuing integration efforts. Nevertheless, access to behavioral health services remains an important issue in the region.
- ▶ The region continues to struggle with recruiting primary care clinicians and specialists. Compared with other California regions, the Inland Empire has fewer primary care and specialty physicians per person, with even greater disparities in the Inland Empire's eastern areas compared with the more densely populated

communities to the west. New medical schools in the region, coupled with incentives to encourage newly minted physicians to practice in the area, may help mitigate this challenge in the future.

Market Background

The Inland Empire is a sprawling two-county region, spanning the borders of Los Angeles and Orange Counties in the west to Arizona and Nevada in the east. The region is home to more than 4.5 million people, split roughly between Riverside County in the south and San Bernardino County in the north.

Most people live in the larger cities, south of the San Bernardino Mountains and east of the Santa Ana Mountains. Farther east are the more sparsely populated mountain and high desert regions. The federal government owns 80% of the land in San Bernardino County, including Mojave National Preserve, and a substantial portion of Riverside County. Communities in the region's denser suburban core are generally higher income than the cities and towns such as Hesperia and Barstow dotting the mountains and high desert

Before the COVID-19 pandemic, California's economic expansion was especially pronounced in the Inland Empire, where the unemployment rate fell by almost half, from 8.1% in 2014 to 4.5% in early 2020 (see Table 1, page 3). The drop in the unemployment rate coincided with the region's significant population growth. As the Los Angeles area continued to add jobs and new housing failed to keep pace, people moved to the Inland Empire. As a result, the populations of both Inland Empire counties have grown faster than the statewide average, with the region's population growing 5.5% over the past five years and 12.7% over the past decade.

The Inland Empire's Latinx population continues to grow more rapidly than that of other races/ethnicities, and Latinx residents now account for just over half the population of the two counties — a share that is more than 10 percentage

TABLE 1. Demographic Characteristics

Inland Empire vs. California, 2018

	Inland Empire	California
POPULATION STATISTICS		
Total population	4,622,361	39,557,045
Five-year population growth	5.5%	3.2%
AGE OF POPULATION, IN YEARS		
Under 18	25.7%	22.7%
18 to 64	61.2%	62.9%
65 and older	13.1%	14.3%
RACE/ETHNICITY		
Latinx	51.6%	39.3%
White, non-Latinx	31.5%	36.8%
Black, non-Latinx	7.1%	5.6%
Asian, non-Latinx	6.8%	14.7%
Other, non-Latinx	3.0%	3.6%
BIRTHPLACE		
Foreign-born	20.6%	25.5%
EDUCATION		
High school diploma or higher	83.6%	83.7%
College degree or higher	34.9%	42.2%
ECONOMIC INDICATORS		
Below 100% federal poverty level (FPL)	13.7%	12.8%
100% to 199% FPL	19.9%	17.1%
Household income \$100,000+	30.5%	38.0%
Median household income	\$65,512	\$75,277
Unemployment rate	4.5%	4.2%
Able to afford median-priced home (2019)	44.9%	31.0%

Sources: "County Population by Characteristics: 2010–2019," Education by County, FPL by County, Income by County, US Census Bureau; "AskCHIS," UCLA Center for Health Policy Research; "Employment by Industry Data: Historical Annual Average Data" (as of August 2020), Employment Development Dept., n.d.; and "Housing Affordability Index - Traditional," California Association of Realtors. All sources accessed June 1, 2020.

points greater than the Latinx share of the statewide population. Notably, despite the large Latinx share of the immigrant population statewide, a large proportion of the Inland Empire's Latinx residents were born in the United States: 26% of California residents but only 21% of Inland Empire residents were born outside the United States.

Even as the region's population grew and the unemployment rate fell, in other respects the region's economy has lagged behind the state's economy. More Inland Empire residents live in poverty and fewer earn more than \$100,000 annually compared with Californians generally. Thirty-five percent of Inland Empire residents have a college degree, compared with 42% of Californians statewide. The region is home to a relatively high number of construction, ecommerce wholesaler, and transportation jobs.² And per capita incomes remain less than two-thirds of the California average.

Other quality-of-life metrics also show San Bernardino and Riverside Counties trailing other California regions. The two counties have relatively high pollution levels; both rank in the bottom quartile on this metric, according to the California Healthy Persons Index.³ To some extent, these pollution levels are the result of the region's heavy reliance on automobile travel. Many residents work outside their county of residence, and Inland Empire commute times, which average more than 30 minutes, are the longest in Southern California.⁴ Relative to other counties in Southern California and the San Francisco Bay Area, there is limited access to public transit, with fewer than 5% of residents living within a half mile of a major transit stop.⁵

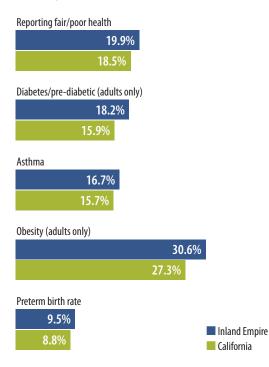
Inland Empire Residents Report Poorer Health Relative to Californians Generally

Across a range of both physical and behavioral health metrics, the Inland Empire's residents report poorer health relative to Californians generally. Nutrition is a significant concern, according to both local physicians and survey data. The region's obesity rate is 10% higher than the statewide

rate, and the incidence of diabetes is fully 20% higher (see Figure 1). More people in the Inland Empire report experiencing frequent mental distress compared with Californians generally, and more reported needing mental health treatment but not receiving care.⁶ Perhaps as a result, the suicide rate in the region exceeds that of California more generally.⁷

FIGURE 1. Physical Health Indicators

Inland Empire vs. California, 2018



Sources: "AskCHIS," UCLA Center for Health Policy Research; "Preterm and Very Preterm Live Births," California Department of Public Health. Both sources accessed June 1, 2020.

Fewer Inland Empire Residents Have Private Health Insurance

Because of the expansion of Medi-Cal under the ACA, as well as improving economic conditions before the COVID-19 pandemic, the number of Inland Empire residents going without health insurance declined significantly in recent years. The uninsured rate prior to the pandemic stood at just 8.9% — compared with 7.7% statewide — largely as a result of increases in the Medi-Cal program, which covers 1 in 3 people in the region (see Table 2).8 The region continues to sustain a lower-than-average rate of private insurance and higher-than-average rate of Medi-Cal coverage, despite the significant job growth noted previously.

TABLE 2. Trends in Health Insurance, by Coverage Source

Inland Empire vs. California, 2015 and 2019

	INLAND EMPIRE			CALIFORNIA
	2015	2019	2015	2019
Medicare*	13.2%	14.5%	14.4%	15.9%
Medi-Cal	33.5%	33.1%	29.1%	28.7%
Private insurance [†]	43.9%	43.5%	47.8%	47.7%
Uninsured	9.4%	8.9%	8.6%	7.7%

^{*}Includes those dually eligible for Medicare and Medi-Cal.

Source: Calculations made by Blue Sky Consulting Group using data from the US Census Bureau, the Centers for Medicare & Medicaid Services, and the California Department of Health Care Services.

Overall, health insurance coverage in the region is dominated by two players: IEHP, which covers about one-fourth of the region's population through the Medi-Cal program, and Kaiser Permanente, which covers an additional quarter of the population, primarily in the commercial and Medicare markets.⁹

Most coverage for Medi-Cal enrollees is provided under the Two-Plan Model, with care provided by one public plan and one private plan. IEHP, the public plan created by Riverside and San Bernardino Counties, covers 89% of managed care enrollees (about 1.3 million people); Molina Healthcare, the private plan, covers the remaining 11% of enrollees. The plans' market shares have remained relatively stable in recent years, although enrollment for both plans has grown as Medi-Cal eligibility expanded.¹⁰

Most Inland Empire Medicare beneficiaries are enrolled in generally lower-cost Medicare Advantage (MA) plans.¹¹ Statewide, MA accounts for 44% of beneficiaries, while nearly 59% of Inland Empire beneficiaries opt for MA. Kaiser covers 31% of MA enrollees, with UnitedHealthcare (19%) and SCAN Health Plan (12%) also accounting for significant market share.

Although Kaiser's total enrollment has increased as the region's population has grown, its market share has not changed significantly over the past several years. Nevertheless, Kaiser continues to play a dominant role in the region, effectively competing for patients and new providers

[†] Includes any other insurance coverage (excluding Medicare and Medi-Cal).

and adding capacity through a planned hospital expansion, new clinics, and a new medical school.

Kaiser also has a large share of Inland Empire enrollment on the state's health insurance exchange, Covered California, with just over one in four enrollees choosing Kaiser. Other large regional players in this market include Health Net, with more than 40% of enrollment, followed by Blue Shield of California, with almost 24% of enrollment.¹²

Overall, the share of Inland Empire residents enrolled in Covered California plans is smaller than the share of Californians generally enrolled in those plans (see Table 3). And while premiums in the Inland Empire are less expensive than the statewide average (\$408 for a silver plan policy compared with the statewide average of \$454), a recent analysis suggests that the region's *wage-adjusted* average silver plan premium is in fact more expensive than the statewide average, given the region's lower incomes. In addition, both inpatient and outpatient procedures in the Inland Empire's hospitals are, on a wage-adjusted basis, relatively less expensive than in other regions, perhaps in part because of the hospital market's lack of consolidation.

TABLE 3. Covered California Premiums and EnrollmentInland Empire (Region 17) vs. California, 2015 and 2019

	REGION 17		CALIFORNIA	
	2015	2019	2015	2019
Monthly premium (Silver Plan on the exchange for a 40-year-old individual)	\$278	\$408	\$312	\$454
Percentage of population enrolled	2.3%	2.3%	3.0%	3.1%

Source: Blue Sky Consulting Group analysis of data files from "Active Member Profiles: March 2019 Profile" (as of May 31, 2020) and "2019 Covered California Data: 2019 Individual Product Prices for All Health Insurance Companies," Covered California.

Provider Trends

Data suggest a relatively large share of care in the Inland Empire is delivered by independent physicians in solo or small group practices. According to interviewees, this land-scape is evolving, as small practices struggle to recruit new clinicians and more care is delivered by FQHCs, while larger medical groups continue to expand their reach in the region.

The region's hospital market remains relatively stable, with no mergers or significant changes in hospitals' market shares over the past several years, although several hospitals have closed pediatric units. Respondents noted that, particularly among hospitals, more traditional payment methods prevail, with most hospitals in the region reluctant to take on financial risk. Most physicians in private practice caring for Medi-Cal patients reportedly receive fixed per-member, per-month payments for their professional and related services, under the system known as capitation, as well as P4P incentives, which account for a significant share of revenue. According to interviewees, some larger organizations have assumed full risk, primarily in the Medicare Advantage market, but also for some commercial payers.

Independent Physician Practices Are Common

Data suggest the Inland Empire's primary care and specialty care provider landscape remains relatively unconsolidated compared with the rest of California, with many independent physicians in solo or small group practices delivering care throughout the region. More physicians in the Inland Empire than in the state as a whole practice in settings that are not owned or controlled by hospitals or health systems; this disparity is somewhat more pronounced among primary care physicians (see Table 4). Within the Medi-Cal market, more than 40% of all physicians who contract with IEHP do so directly and not through an independent practice association (IPA) or medical group.¹⁵

TABLE 4. Physicians in Practice Owned by a Hospital or Health System Inland Empire vs. California, 2019

	Primary care physicians	Specialists
Inland Empire	31%	47%
California	43%	53%

Source: Blue Sky Consulting Group calculation of population-weighted regional and state averages from Richard M. Scheffler, Daniel R. Arnold, and Brent D. Fulton, *The Sky's the Limit: Health Care Prices and Market Consolidation in California*, California Health Care Foundation, October 2019.

As a result of the large number of independent practices, the Inland Empire ambulatory care sector remains relatively unconcentrated. Riverside County's primary care market is the second least concentrated of 58 counties statewide, while San Bernardino County's market is the 12th least concentrated. The region's specialist markets also are relatively unconcentrated when compared with the rest of California; Riverside has the third-lowest and San Bernardino the fourth-lowest market concentration in the state.

The large number of independent providers and practices offers a range of choices to residents and autonomy for providers but, according to interviewees, may also slow innovations that are taking hold in other markets across the state, particularly with respect to the use of data to drive performance improvement and clinical integration. The region's geography, as well as its physician shortage (see Clinician Shortages on page 13), may prevent competition among providers necessary to spur these changes. As one administrator put it, "there are pockets with low access, and providers haven't had to innovate because they're the only game in town."

Although care delivery has long been dominated by small, independent practices, respondents note this landscape may now be shifting as financial pressures, market conditions, and demographics all combine to put pressure on solo and small practices. While increasing use of quality improvement incentives can help to improve patient outcomes, use of these incentives also has increased pressure on independent practices to better track and utilize data in clinical practice. According to several medical group leaders, these practices must not only compete with FQHCs and their more generous reimbursement rates for Medi-Cal patients but also invest in adoption and use of EHR systems and data analytics needed to qualify for most P4P incentives. One small medical group manager noted having "to scrape and fight to stay in business" amid the financial pressures and competition from FQHCs.

Interviewees noted that without the economies of scale offered by a large medical group or network of FQHCs, these

investments can be difficult for small practices to absorb. In addition, many younger physicians increasingly prefer an employment relationship and are therefore drawn to Kaiser, FQHCs, and larger medical groups. Although the region has not witnessed significant growth in the hospital-based medical foundation model, which has led to consolidation of primary care providers in other regions, the combination of increasing financial and demographic pressures may continue to propel growth away from solo and small practices toward larger organizations.

These market forces may benefit some of the region's largest IPAs and medical groups. OptumCare, through its subsidiaries PrimeCare and North American Medical Management (NAMM) California, provides care for approximately 440,000 assigned patients in the commercial, MediCare, and Medi-Cal markets (or roughly 10% of the region's insured population). PrimeCare is the largest IPA in the Inland Empire. Together with NAMM, PrimeCare has a network of approximately 650 primary care providers and takes full risk for MediCare Advantage and some commercial enrollees. PrimeCare and NAMM have continued a steady expansion in the region over the past several years, including the 2016 acquisition of the Inland Faculty Medical Group, a large IPA serving Medi-Cal enrollees. Other recent additions include the Empire Physicians Medical Group in the Coachella area; San Bernardino Medical Group, an 18-physician multispecialty medical group with locations in San Bernardino and Fontana; and the Riverside Physician Network, with 60 primary care physicians.¹⁷

Other major physician organizations primarily serving commercially insured patients include Beaver Medical Group, with about 220 physicians, and Riverside Medical Clinic, with 135. Beaver additionally owns EPIC Management, which provides administrative, information technology (IT), and management support to Beaver and eight other medical groups. EPIC Health Plan, a subsidiary of EPIC Management, covers more than 70,000 commercial enrollees (or about 4% of the Inland Empire's privately insured population), taking

on global financial risk and contracting with primary and specialty care providers and hospitals on a capitated and fee-for-service basis.

The region has also participated in a handful of accountable care organizations (ACOs) formed by the major commercial health plans. Blue Shield of California's Trio ACO network, established in 2016, now includes both PrimeCare and Beaver, as well as several other smaller physician groups and many regional hospitals. PrimeCare has similarly partnered with national carrier Aetna to establish Aetna Whole Health in the Inland Empire. As of 2018, the partnership's payment model included incentives tied to quality, efficiency, and patient satisfaction.

Outside of the Inland Empire's urban core, the affiliated Choice Medical Group (CMG), Horizon Valley Medical Group, and Choice Physicians Network are responsible for more than 40,000 people in the high desert area, including 20,000 Medi-Cal enrollees. Another larger provider in the region is the Heritage Provider Network (which also covers other areas across Southern California). Its affiliates, Heritage Victor Valley Medical Group, with 45 primary care providers, and Desert Oasis Healthcare, with 67, serve the high desert and Coachella Valley areas.¹⁸

Aside from the independent physicians contracting directly with IEHP — who collectively provide care for nearly half of all IEHP members — other large Medi-Cal providers in the region include the Inland Faculty Medical Group, Alpha Care Medical Group, and Kaiser. The Inland Faculty Medical Group includes 239 primary care providers and 230,000 Medi-Cal enrollees (or about 15% of the region's Medi-Cal population). Alpha Care Medical Group provides care for nearly 165,000 IEHP Medi-Cal enrollees (or about 13% of IEHP's enrollees). Kaiser is another large Medi-Cal provider, with 110,000 members; Kaiser provides Medi-Cal coverage under an IEHP subcontract while limiting Medi-Cal enrollment to previous Kaiser members or family members. The Medi-Cal provider landscape saw a shift in 2018 when IEHP terminated its contract with Vantage Medical Group and

reassigned nearly 275,000 patients to other providers. The region's FQHCs covered nearly 400,000 Medi-Cal lives (about 1 in 4 Medi-Cal enrollees) as of 2020, with Borrego Health, Riverside University Health System (RUHS), and SAC Health System among the largest providers.

FQHC Expansion

According to respondents, among the most notable recent Inland Empire trends is the rapid growth of FQHCs. In recent years, the number of FQHC patient visits, or encounters, more than doubled, increasing from just under 500,000 in 2014 to more than 1.2 million in 2018 (statewide, there were about one-third more FQHC patient encounters per capita during this period).²⁰ FQHCs now provide primary care for roughly one-third of the region's total Medi-Cal population.

FQHCs are eligible for enhanced Medi-Cal payments, student loan repayment programs, and federal operational and capital grants.²¹ Growth in the region's FQHCs was driven in part by the expansion of FQHCs from neighboring counties, such as San Diego-based Borrego Health, which now has 17 health center locations across Riverside and San Bernardino Counties and accounts for roughly half of all non-county-run FQHC patient visits, and Neighborhood Healthcare, which started in Escondido and now has four Inland Empire locations and accounts for 6% of all non-county FQHC visits. SAC Health System, with a half dozen locations across the Inland Empire (as well as mobile health and dental units), accounts for nearly 10% of all non-county FQHC encounters in the region and boasts more than 35 unique specialties. The county-run clinic systems also continue to provide a significant share of primary care services to the Inland Empire's low-income residents. RUHS operates 12 FQHCs across Riverside County that together saw nearly 63,000 patients in 2019.²² San Bernardino County operates four FQHCs that served more than 10,000 patients. The growth of FQHCs represents a significant expansion of the Inland Empire's safety net, historically an area of concern for the region.

Despite the recent FQHC expansion in the Inland Empire, on a per capita basis, the number of FQHC visits per person in the region was half the state average, up from one-third of the state average in 2014 (see Table 5).

TABLE 5. Federally Qualified Health Centers Inland Empire vs. California, 2014 to 2018

	INLAND EMPIRE		CALIFORNIA	
	2018	Change from 2014*	2018	Change from 2014*
Patients per capita	0.07	91%	0.15	29%
Encounters per capita	0.26	137%	0.51	35%
Operating margin	-5.7%	0%	2.1%	-1%

*Reflect the percentage change in patients/encounters per capita, and the absolute change in margins. Notes: Includes FQHC Look-Alikes, community health centers that meet the requirements of the Health Resources and Services Administration Health Center Program but do not receive Health Center Program funding. Patients may be double counted if they visit more than one health center. Source: "Primary Care Clinic Annual Utilization Data," California Office of Statewide Health Planning and Development, accessed June 1, 2020.

Moreover, an analysis of data from the Office of Statewide Health Planning and Development (OSHPD) shows that FQHC operating margins in the Inland Empire remained flat between 2014 and 2018, despite a reduction in care provided to uninsured people. In 2014, 6% of FQHC patients received free care, with an additional 29% paying a sliding fee based on income. In 2018, these groups accounted for 1.5% and 13.5%, respectively, of the FQHC patient population. In spite of the reduction in care for the uninsured, expenses per encounter increased during this period along with revenues, leaving operating margins unchanged from 2014.

The growth of FQHCs and other health centers in the region likely stems in part from the ACA's Medi-Cal expansion, given that FQHCs predominantly serve Medi-Cal patients, and this regional growth mirrors the larger statewide trend. Respondents note that FQHC growth in the Inland Empire may also be driven in part by the underlying characteristics of the provider landscape — notably the relatively large share of care for Medi-Cal patients provided by independent medical practices. The relatively small share of care previously delivered by health centers, along with the financial struggles of independent practices serving Medi-Cal patients, may have facilitated FQHC expansion through both

acquisition of and successful competition for patients with independent practices. As one observer noted, FQHCs are "Hoovering up private practices" across the region.

Hospital Finances Improve; Market Remains Unconsolidated

According to OSHPD data, the Inland Empire is served by 38 hospitals, including county hospitals in both Riverside and San Bernardino, as well as investor-owned, nonprofit, and district hospitals. Twelve hospitals are independent, accounting for nearly 30% of all discharges, with the remaining hospitals belonging to smaller local systems, such as Loma Linda University Health, or larger statewide or national networks, such as Kaiser Permanente and Universal Health Services.

The hospital sector in the Inland Empire remains relatively unconcentrated when compared with other markets across California. And according to several measures of market share — licensed bed days, discharges, and outpatient visits — hospital market concentration in the Inland Empire has not changed markedly in recent years. None of the region's hospitals has merged with or acquired other hospitals in the region over the past several years, and no hospital or system accounts for more than 13% of all discharges. A commonly used measure of market concentration shows San Bernardino County and Riverside County as having, respectively, the second- and third-lowest levels of hospital market concentration of all California counties, behind only Los Angeles.²³

Given the region's geography, however, assessing concentration based on each system's share of the total regional market may overstate the degree of fragmentation, because some hospitals are dominant players in their submarkets. For example, Tenet Healthcare Corporation, which operates three hospitals in the more sparsely populated eastern half of Riverside County, accounts for only 9% of all Inland Empire discharges but a far larger percentage of those in the local area (hospitals in the city of Riverside are more than an hour's drive away). Similarly, for a large portion of San Bernardino County's high desert community, Barstow Community

Hospital is the only hospital outside of Victorville, which is more than 30 minutes to the south. While not isolated geographically, Loma Linda University Medical Center is a prominent academic medical center and, as one of the area's two Level I trauma centers, provides a large amount of advanced specialty care. Nevertheless, the region has not experienced the consolidation of hospitals into large systems that has characterized the rest of the state.

The region's largest hospitals and hospital systems include the following.

Loma Linda University Medical Center serves as a key safety-net provider. The wider hospital system, with more than 1,100 licensed beds spread over six hospitals, accounted for 13% of the region's overall discharges and 16% of Medi-Cal discharges in 2018. Loma Linda operates a children's hospital with 343 beds, including 84 in its neonatal intensive care unit. The children's hospital is adding a new tower in 2021, which will offer a children's cardiovascular lab and pediatric emergency department (ED). Loma Linda's main site includes one of the region's two Level I trauma centers. Also part of the system is a separate surgical hospital, as well as a behavioral medicine center, which provides both inpatient and outpatient behavioral health services.²⁴ In addition to the hospital system, Loma Linda provides financial support to SAC Health System, an FQHC that runs clinics in six locations and is among the largest teaching health centers in the country.²⁵ The relationship between Loma Linda and SAC Health System dates to 1960, when university staff and students founded the Social Action Corps as parttime volunteers and offered temporary medical clinics in the community. The two have partnered to provide pediatric care at Loma Linda University Children's Health-Indio clinic, and in 2016 SAC Health System established a new facility at the university's campus in San Bernardino, which is also home to a health professionals training program.²⁶

Kaiser operates four hospitals in the Inland Empire's urban core and surrounding suburbs — in the communities of Ontario, Fontana, Riverside, and Moreno Valley. Kaiser

hospitals accounted for 12% of total discharges in 2018, including nearly 28% of all commercial payer discharges. Observers note that these metrics may understate Kaiser's total market coverage, however, given Kaiser's preventive health focus, which aims to reduce patients' reliance on hospital care. Kaiser has plans to expand acute inpatient capacity from the current 94 beds to an eventual 460 beds at Kaiser's Moreno Valley location in Riverside County.²⁷

Universal Health Services (UHS), a large investor-owned hospital system with acute care facilities in seven states, operates four hospitals in the region, including three in the southwestern corner of Riverside County. UHS has experienced the largest increase in hospital market share in recent years and is now the third-largest system in the region, accounting for 10.5% of acute care discharges in 2018, up from 7.5% in 2014. UHS's Temecula Valley location added a 28,000-square-foot wing in 2018 with space for cardiovascular and neuroscience services.²⁸ UHS also operates a psychiatric hospital at the western edge of the Inland Empire, providing nearly one-third of the region's psychiatric beds.

Dignity Health, which is part of a large multihospital system operating in 21 states, operates Community Hospital of San Bernardino and St. Bernardine Medical Center and serves as the region's other key nonprofit safety-net provider. The two hospitals account for 7% of total discharges and 11% of Medi-Cal discharges. St. Bernardine's is home to the Inland Empire Heart & Vascular Institute.

Riverside University Health System-Medical Center, the county hospital for Riverside, and **Arrowhead Regional Medical Center (ARMC)**, the county hospital for San Bernardino, together account for only 11% of total acute discharges but play a key safety-net role, providing 19% of Medi-Cal discharges. RUHS's medical center, which fits under a broader county umbrella that also includes 12 FQHCs as well as the county Departments of Behavioral Health and Public Health, recently opened a new 200,000-square-foot medical office building for primary care and specialty groups.²⁹ RUHS also expanded its ED and became a Level I

trauma center.³⁰ RUHS's FQHCs care for roughly 95,000 IEHP-assigned Medi-Cal enrollees. ARMC offers a Level II trauma center and burn center and provides primary care services through four family health clinics.

Although the region's population has continued to grow, hospital capacity remained relatively stable between 2014 and 2018, with hospitals' staffed bed count increasing by just 1%. More recently, however, Parkview Community Hospital, purchased by AHMC Healthcare Inc. in 2019, expanded its ED from 13 to 41 beds, and Riverside Community Hospital added more than 100 beds at a new seven-story patient tower as well as 14 ED beds.³¹ Redlands Community Hospital is tripling the size of its ED by adding 12 beds, critical care rooms, and a dedicated psychiatric care space.³² And more capacity is expected, as Kaiser plans an expansion in Moreno Valley from 94 to 460 beds. Although the number of hospital beds has increased only modestly, the region's hospital occupancy rate remains similar to the statewide average (with the exception of beds for psychiatric patients, which are in short supply in the Inland Empire).

These hospital expansions have been accompanied by a series of pediatric unit closures over the past several years. Most recently, Riverside Community Hospital administrators announced the November 2020 closure of the hospital's pediatric unit, stating that the move was the result of declining patient volumes. This announcement followed several similar closures, including at Kaiser Permanente Riverside Medical Center, Corona Regional Medical Center, and St. Bernardine Medical Center, which also stemmed from low patient volumes and a desire to lower costs. Although these closures may mean that children are treated at facilities that are better able to specialize in pediatric inpatient hospitalization, some pediatricians have expressed a concern that their patients may need to travel farther to receive care.

According to respondents, meeting state seismic standards remains a consideration for area hospitals, as it does for hospitals statewide. Among the region's smaller hospitals, accessing capital to make needed improvements is a

continuing obstacle, likely worsened by financial pressures from the COVID-19 pandemic. Some of the region's larger hospitals, however, are reportedly better positioned. Both county hospitals were previously rebuilt to comply with state seismic standards. Loma Linda University Health is nearing completion of a new Medical Center tower and a Children's Hospital tower. Kaiser, with its newer facilities, is also generally well positioned, as is St. Bernardine Medical Center, which has undergone seismic upgrades.

Stronger Financial Performance

According to OSHPD data, in the year prior to the COVID-19 outbreak, Inland Empire hospitals were enjoying much stronger financial performance than in previous years. Along with rising employment and health insurance coverage, hospital profitability during 2014–2018 improved. Across all hospitals in the region, the average operating margin rose from –0.2% in 2014 to 2.2% in 2018 (statewide margins improved from 2.5% to 4.6% over this period, as shown in Table 6).

TABLE 6. Hospital Performance (Acute Care)Inland Empire vs. California, 2018

Total operating expenses per adjusted patient day*

Inland EmpireCaliforniaBeds per 100,000 population158178Operating margin*2.3%4.4%Paid FTEs per 1,000 adjusted patient days*1515

\$3,088

\$4,488

*Excludes Kaiser.

Note: FTE is full-time equivalent.

Source: "Hospital Annual Financial Data - Selected Data & Pivot Tables," California Office of Statewide Health Planning and Development, accessed June 1, 2020.

Several factors may help explain this trend. First, largely because of the expansion of Medi-Cal under the ACA, hospital losses attributable to providing uncompensated care decreased, with this category accounting for only 1.4% of all visits in 2018, down from 6.7% in 2014. (This decrease was less pronounced statewide, with the rate falling from 4.9% to 1.8%.) Second, serving Medi-Cal patients grew more profitable. While hospitals reported that Medi-Cal managed care visits remained, on net, a financial drain (with expenses

exceeding net patient revenue), the average payment shortfall per discharge fell dramatically. For traditional feefor-service Medi-Cal patients — who account for 14% of all discharges and 18% of net patient revenues — net patient revenues per patient day increased substantially.

IEHP — Strong Market Position Amplifies P4P Initiatives

IEHP, the region's largest Medi-Cal managed care plan, covers nearly 9 in 10 Medi-Cal patients in the Inland Empire equivalent to more than a quarter of the region's population. With more than 1.3 million members and more than 6,000 network providers, many respondents noted that IEHP is a dominant force in the Inland Empire health care landscape. The health plan's strong position reportedly offers considerable leverage in negotiating contracts with the region's hospitals and other providers. However, IEHP's leverage is tempered by the relative lack of providers, especially in the region's eastern areas, where many hospitals and providers are "must haves" for IEHP to maintain an adequate provider network. Interviewees noted that this combination of balanced market forces and consensus among providers that IEHP is a "good partner" in delivering care to the region's Medi-Cal population results in generally positive relationships between IEHP and the provider community.

By its own estimate, IEHP has contracts in place with more than half of the region's primary care physicians and roughly 40% of specialists. Interviewees noted that IEHP has significant leverage in encouraging providers to utilize data to drive performance and implement new quality improvement programs. IEHP reports paying most primary care providers on a capitated basis, with additional payments in the form of performance-based quality improvement incentives comprising 10% to 25% of Medi-Cal revenue. For many physicians, IEHP is the sole Medi-Cal plan with which they contract; as a result, earning P4P incentives is reported to be somewhat simpler in the Inland Empire because only one plan's rules must be followed (unlike counties with many

competing plans and accompanying incentive schemes). Still, IEHP's efforts at implementing data-informed practices may be complicated by the region's size and large number of independent practices.

In recent years, IEHP has implemented several quality improvement initiatives — in addition to its global pay-for-performance program. For example, IEHP incentive payments encouraged hospital participation in the region's health information exchange (HIE), Manifest MedEx, which is now widely used by virtually all hospitals in the region. IEHP also implemented a shared-saving pilot that enabled participating primary care providers to earn up to 60% of any savings IEHP realized in paying for referred services, including hospital visits.³³ Most recently, IEHP has started assigning patients to providers based on the provider's clinical performance, with more effective providers rewarded with additional patient assignments.

Using Data to Drive Performance Improvement

The use of data to improve patient outcomes and lower costs has been gaining ground in the region and across the state. In the Inland Empire, many providers participate in at least some forms of data sharing, whether through use of a shared EHR system; participation in the region's health information exchange, Manifest MedEx; or delivery of care in an integrated system such as Kaiser or RUHS.

Data Sharing Increases Across Region

Formed in 2017, Manifest MedEx has made inroads in establishing connections among hospitals, health centers and clinics, and providers. IEHP encourages hospital participation through its hospital P4P program, which includes financial incentives to share data through the platform. As a result, nearly all hospitals in the region now provide event notification (admission, discharge, and transfer, or ADT) data. The region is also home to the Inland Empire Health Information Organization, a nonprofit designed to connect providers to Manifest MedEx and coordinate data sharing and use

of population health analytics. IEHP is funding an effort to incentivize independent practices to migrate to one of a small set of cloud-based EHR systems that would be integrated with Manifest MedEx.

In addition to use of the HIE, interviewees noted that partnerships between community providers and hospitals, at least where they share a common EHR system, are further driving improvements in data sharing in the region. For example, RUHS shares a common EHR system, Epic, across its flagship hospital, 12 FQHCs, and other sites across the county, including Loma Linda University Medical Center and SAC Health System. Users of Epic can gain access to patient records within the same EHR system using functionality known as Care Everywhere. San Bernardino County's hospital, ARMC, will also reportedly transition to Epic in the future, furthering the potential for information sharing among providers.

Health plans are also reportedly playing a role in collecting and disseminating information, offering gap-in-care reports to providers and information about patient prescriptions and specialist visits, among other types of information. For example, IEHP provides gap-in-care reports directly to all primary care providers, whether they work directly with the health plan or contract through an IPA. IEHP also provides information on prescriptions and other data through the member health record that is attached to eligibility verifications performed on the IEHP secure provider portal. Finally, the trend toward care delivery through larger medical groups and integrated systems may offer more providers the support of dedicated IT teams and access to integrated EHR systems, which observers expect to improve access to and use of patient data.

Challenges Remain

Interviewees noted that, despite progress on data sharing in the region, participation is primarily concentrated among hospitals and some large medical groups, with far less participation among smaller independent practices. As one clinic administrator noted, the "HIE is still a work in progress with lots of holes left to fill." For some practices, the IT complexity and cost of linking their EHR system to Manifest MedEx are prohibitive. For others that do participate, the additional task of regularly accessing and utilizing the available data requires staff training and changes in workflow that some perceive as too costly or burdensome. Even for larger medical groups or health centers, truly integrating and using data to improve care requires that offices hire new staff to monitor metrics, track referrals, and ensure that patients are following treatment plans. Physicians and support staff must undergo additional training, and the new operating procedures become a part of the routine workflow only over time.

To address some of the challenges associated with data sharing, some larger medical groups and IPAs in the region report employing dedicated data teams to collect and process internal data and work with partner providers and hospitals to collect and share information. Some of these inhouse data teams collect and process patient records in a largely manual process — "chart scrubbing," as one provider called it — to ensure information is available to monitor patient care. Tools developed by these organizations to coordinate across a broad range of hospitals and specialists in the region include stationing case managers in hospitals and using hospitalists to coordinate and deliver care to hospitalized patients and help keep primary care providers informed about their hospitalized patients. Even at larger institutions, administrators noted that data analytics initiatives are still in their early stages and that more must be done to build out the teams responsible for incorporating data into routine clinical practice.

Data sharing in the region may be further hampered by the fragmentation in the region's hospital and ambulatory care sectors. This fragmentation contributes to the wide array of sometimes siloed EHR systems used across the region, which may not be integrated with information from the HIE or have the capacity to communicate with EHR systems used by other practices. Smaller practices in the region are also less

likely to participate in larger EHR systems such as Epic that allow for data sharing with other users on the same system (as well as offering HIE integration with the EHR system).

Behavioral Health

Behavioral health care, which includes both mental health and substance use disorder services, remains an important issue throughout the region, with one observer noting that "behavioral health is a huge challenge." More Inland Empire residents report experiencing frequent mental distress compared with Californians generally, and more Inland Empire residents needed but did not receive mental health treatment.34 In line with the region's general lack of access to specialty care, the Inland Empire is home to only eight psychiatrists per 100,000 residents, the second-lowest ratio across the seven study markets. In addition, people with behavioral health needs often suffer from poorer physical health and may also lack access to adequate physical health care services. Interviewees noted that, in response, many providers in the region, including many FQHCs, have sought to integrate physical health and behavioral health care services. This transformation has been slower to take hold among many of the region's independent providers, and access to psychiatric services remains a daunting obstacle.

Respondents note that much of the innovation surrounding behavioral health care in the region has occurred in the Medi-Cal program. For most Medi-Cal enrollees needing nonspecialty services (that is, those with lower-acuity conditions), coverage is administered by their managed care plan, while county behavioral health departments are responsible for adults with serious mental illnesses and children with serious emotional disturbance. Some FQHCs in the region offer integrated behavioral health care (generally for lower-acuity conditions) from a behavioral health provider located within a physical health clinic. In addition, IEHP has been encouraging the integration of behavioral health with routine clinical care.

IEHP has launched several initiatives to improve behavioral health care integration, including complex care management teams to aid patients with physical, behavioral, social, and environmental needs. One such effort is the Behavioral Health Integration Complex Care Initiative (BHICCI), a partnership between 30 local health centers and clinic sites and IEHP, with a goal of improving Medi-Cal enrollees' health outcomes by providing care management and care coordination for physical and behavioral health needs across multiple providers and health care systems.³⁵

IEHP and the San Bernardino County Department of Behavioral Health have also explored ways to better integrate physical and behavioral health services, while Riverside County operates an integrated system consisting of its hospital, outpatient clinics, and behavioral health department (as well as the public health department). With all of these service providers reporting to the same leadership, the county seeks to improve integration across specialties and improve patient care.

Clinician Shortages

According to almost all respondents, access to care continues to be a significant issue in the Inland Empire as the region consistently struggles to recruit both primary care clinicians and specialists, as well as other health care professionals. Indeed, one observer said that the region "will never be able to bridge the gap in workforce shortage," noting that "the region is already behind and the population is growing."

While many factors contribute to recruitment difficulties, respondents note that competition with more geographically attractive neighboring regions, such as Los Angeles, Orange, and San Diego Counties with their greater access to the beach, cultural amenities, and educational and employment opportunities for clinicians' family members, likely contributes to the challenge. The access challenges caused by lower numbers of clinicians are exacerbated by the Inland Empire's sprawling geography, resulting in long patient travel times for care, especially specialist visits. Observers

are optimistic that the recent introduction of new medical schools may help mitigate this challenge in the future.

Inland Empire Faces Severe Physician Shortage

According to analysis conducted for this study by the University of California, San Francisco, the Inland Empire has fewer primary care and specialty physicians per 100,000 residents than other California regions. The region has just 42 primary care physicians per 100,000 residents, compared with 60 statewide, and just 83 specialists per 100,000 people, compared with 131 statewide (see Table 7). Moreover, even these metrics obscure significant intraregional disparities in health care access. There are far fewer physicians per capita in the Inland Empire's eastern regions than in more densely populated communities near the counties' western borders. Based on designations by the Health Resources and Services Administration, nearly 30% of the region's population lives within a Health Professional Shortage Area (HPSA). The largest of these is the Hemet–San Jacinto area, 35 miles southeast of the city of San Bernardino. The others are in the mountains or high desert and include Adelanto/Victorville, Hesperia, Joshua Tree, Colton, Barstow, and Canyon Lake. In addition, because of both the geographic spread and lower average incomes, the travel required to access care in the region can present a significant barrier. According to respondents, those living in the eastern part of the region may have to drive two or more hours to receive care from certain specialties.

TABLE 7. Physicians: Inland Empire vs. California, 2020

	Inland Empire	California	Recommended Supply*
Physicians per 100,000 population [†]	125.3	191.0	_
► Primary care	41.5	59.7	60-80
► Specialists	83.3	130.8	85–105
► Psychiatrists	8.2	11.8	_
% of population in HPSA (2018)	29.6%	28.4%	_

^{*}The Council on Graduate Medical Education (COGME), part of the US Department of Health and Human Services, studies physician workforce trends and needs. COGME ratios include doctors of osteopathic medicine (DOs) and are shown as ranges above.

Sources: Healthforce Center at UCSF analysis of Survey of Licensees (private tabulation), Medical Board of California, January 2020; and Health Professional Shortage Area (HPSA) data from *Shortchanged: Health Workforce Gaps in California*, California Health Care Foundation, July 15, 2020.

Survey data confirm that residents can struggle to access care. Nearly 25% of Inland Empire residents reported that they are "never" able to schedule a doctor's appointment within two days, compared with 15% of people statewide. Access remains a challenge in the Medi-Cal population as well, with nearly 29% of Medi-Cal patients reporting that they had not had a routine checkup within the previous 12 months, compared with 23% statewide. Access to specialists is more challenging for the region's Medi-Cal patients: 26% reported having their insurance turned down by a specialist, compared with 20% of Medi-Cal patients statewide.³⁶

Among providers participating in this study, there is widespread skepticism that the region will ever substantially fill this gap by recruiting doctors from other regions. California's larger cities are perceived as offering more amenities and better practice opportunities for more highly specialized physicians, which makes recruitment, particularly in the region's eastern areas, difficult. As a result, those seeking to recruit physicians emphasized the importance of developing the Inland Empire's local medical student pipeline and tapping personal connections to attract friends and acquaintances to work in the region. Data from the Bureau of Labor Statistics also shows that physician salaries for some specialties are higher in the region compared with nearby areas such as Los Angeles and San Diego, suggesting that recruiting challenges may have driven up physician pay rates.³⁷

In addition, IEHP's Provider Network Expansion Fund (NEF), established in 2014, awards \$30 million to attract physicians and midlevel practitioners to the Inland Empire. The NEF pays 50% of a recruited physician's salary for one year, up to \$100,000 for a primary care physician or \$150,000 for a specialist.³⁸ IEHP reports that, to date, NEF has led to the recruitment of more than 300 physicians and midlevel practitioners.³⁹ IEHP also developed a \$40 million scholarship fund to help health care professionals reduce school debt.

¹ Physicians with active California licenses who practice in California and provide 20 or more hours of patient care per week. Psychiatrists are a subset of specialists.

New Medical Schools May Lessen Physician Shortages

According to respondents, while an aging workforce threatens to further limit health care access, the arrival of new medical schools may mitigate this trend, although additional residency programs also may be needed to help retain additional graduates in the local area. The region's largest medical school, founded in 1909, is Loma Linda University School of Medicine, which graduated 140 students in 2020. Many graduates remain in the Inland Empire to practice.

The following recent and upcoming medical school openings in or close to the region may help to expand the Inland Empire physician pipeline:

University of California, Riverside (UCR) School of

Medicine, Riverside: UCR's first class of 40 students graduated in 2017. Later classes have included 50 students, and recent funding increases approved as part of the state's 2020–21 budget increased funding by \$25 million, which will allow the school to increase the size of each incoming class to 125 students.⁴⁰ The school's mission is to improve the health of the people of the "Inland Southern California" region, with a focus on innovative health delivery programs designed to treat the underserved. The school also seeks to train physicians who will remain in the region. Of UCR's incoming class, roughly 50% previously resided in or have a family connection to the Inland Empire.

In part because of UCR's scholarship incentives, 25% of recent graduates chose to remain in the Inland Empire for their residency, and 70% remained in Southern California. The school has actively sought to encourage this behavior through incentive programs. Roughly 30 students currently receive the Dean's Mission Award, which covers two years of all required university fees. In exchange, graduates must practice for at least 30 months as a primary care physician in the Inland Empire or Imperial County. The First 5 Riverside scholarship covers four years of university fees, with the graduate obligated to practice as a pediatrician in the region for five years following graduation.⁴¹ In addition to these programs,

the medical school seeks to retain physicians in the region by providing opportunities for physicians to partner with the school — for example, through a faculty appointment or through the pursuit of continuing medical education.

California University of Science and Medicine (CUSM), San Bernardino County: Founded as a private, nonprofit medical school with ARMC serving as its teaching hospital, CUSM's first class entered in 2018, and the 2020 entering class is expected to have 120 students. CUSM "aims to provide opportunities to individuals from low-social-economic status; Inland Empire residents; and first-generation college students." Fourteen percent of students are Inland Empire residents.⁴²

Keck Graduate Institute (KGI), Claremont: Located in Los Angeles County near the western border of San Bernardino County, KGI has not yet accepted its first class but, as of 2018, had secured funding to establish a new medical school just miles from the Inland Empire's western border. Noting the number of HPSAs for primary care in the region, the school's vision, in part, is to "increase population health, improve access to quality care, and lower healthcare cost.... We can effect systemic healthcare change — first within the San Gabriel Valley and Inland Empire areas, and then statewide and nationally."⁴³

Medicine, Pasadena: Located 50 miles from San Bernardino, Kaiser's first class, which entered in fall 2020, had 50 students. The school will waive tuition for all students entering prior to 2024, with additional grant aid available for those with demonstrated need.

Early Experience with COVID-19

According to respondents, the outbreak of COVID-19 in March 2020 (occurring as the interviews and data collection for this report were underway) swiftly reversed the financial gains made by hospitals in the preceding years and resulted in the temporary shuttering of many health centers and smaller physician practices. Moreover, the region's relatively less healthy and poorer population is more vulnerable to both the health effects and the economic fallout caused by COVD-19. According to interviewees, however, there have been some silver linings, with increasing adoption of telehealth and a renewed focus on the social determinants of health potentially offering long-lasting health benefits after the pandemic subsides.

In May 2020, Riverside and San Bernardino were each directly allocated more than \$400 million from the federal government under the CARES (Coronavirus Aid, Relief, and Economic Security) Act. The counties reportedly spent the majority of this funding on further preparation for the pandemic — including additional medical supplies and personal protective equipment, construction of temporary facilities, testing, contact tracing, and financial assistance to hospitals — while much of the remainder was used to assist small businesses. While the pandemic drove up unemployment rates across the state, its impact on the Inland Empire's economy was less than in other regions, with an unemployment rate that peaked at 14.3% in June, less than the statewide 15.1% rate (see Table 8).

TABLE 8. COVID-19 Impacts: Inland Empire vs. California

	Inland Empire	California
UNEMPLOYMENT RATE		
► Pre-pandemic (FEBRUARY 2020)	4.0%	4.3%
► Mid-pandemic (OCTOBER 2020)	9.0%	9.3%
MEDI-CAL ENROLLMENT		
► Percentage change (FEBRUARY TO OCTOBER 2020)	3.8%	4.0%
CARES ACT, PER CAPITA (AUGUST 2020)		
► Provider Relief Funds	\$92	\$148
► High Impact Funds	\$16	\$16

Sources: Employment by Industry Data," State of California Employment Development Department; "Month of Eligibility, Dual Status, by County, Medi-Cal Certified Eligibility," California Health and Human Services, Open Data; and "HHS Provider Relief Fund," Centers for Disease Control and Prevention. CARES Act data accessed August 31, 2020; all other data accessed September 30, 2020.

Providers Face Ongoing Financial Pressures

Respondents noted that while nearly all physician practices and health centers faced revenue losses as COVID-19 forced them to reduce in-person visits, providers relying predominantly on fee-for-service payment have fared worse than others (although additional reimbursement from Proposition 56 funds available to Medi-Cal providers may have alleviated some financial pressure). Providers who rely on up-front capitated payments, which continued even in the absence of in-person medical visits, have been better able to maintain their revenue as patient visits declined. On the other hand, as nonessential visits, such as annual physicals, were halted for weeks or months, providers reported substantial worries about whether health plans will relax quality metrics needed to earn P4P incentives.

Interviewees noted that although claims-based revenues decreased while lockdown orders were in effect, Medi-Cal providers received a boost from IEHP. Under the plan's Physician Specialist Compensation Program, established in May 2020, physicians received up to 90% of the difference between the claims paid during the pandemic and the claims paid during the same period in 2019. IEHP introduced a similar relief measure for hospitals. Some commercial health plans also implemented initiatives to support providers in the

pandemic. For example, Blue Shield of California provided advanced payments to providers and financing guarantees to help them weather the pandemic.⁴⁵

CARES Act relief funds, administered through the US Department of Health and Human Services, further mitigated the pandemic's financial impact. The county-run hospital systems were major beneficiaries, together receiving more than \$70 million of the \$343 million distributed to hospitals and other providers throughout the region.

Telehealth Gets a Boost

As in other markets, the pandemic forced a rapid transition in the Inland Empire toward use of telehealth services for patients' primary, specialty care, and behavioral health needs. Responding providers were generally supportive of this added flexibility, although some smaller providers reported technical challenges associated with adding this capability. Interviewees noted that telehealth may be particularly useful for behavioral health, even for the specialty mental health population served by county behavioral health departments. Though adoption had been slowed before the pandemic as a result of concerns that this population might have difficulty with telehealth, observers generally believe that both patients and providers have adapted well to telehealth, with one sign being lower "no-show" rates as fewer appointments are missed by patients. Some providers reported that they had already begun to develop the needed capacity for telehealth because of the region's historic difficulties with recruiting providers; this head start helped to facilitate the transition during the pandemic.

Interviewees noted that given the long travel times faced by Inland Empire patients, telehealth may be particularly important going forward. Following an initial transition period, some FQHCs were reporting that patient loads had climbed back to 60%–70% of pre-COVID-19 levels. Moreover, many specialist consultations do not require in-person visits.

While providers seem confident that telehealth is here to stay, concerns remain that the easing of restrictions on use of and payment for these services adopted during the pandemic may not be preserved in its aftermath. In addition, telehealth may not always reduce provider costs, to the extent that a telehealth visit takes longer than an in-person visit or requires a second, in-person visit as a follow-up after a telehealth visit.

Exacerbation of Provider Shortages

Across the state, the pandemic resulted in the delay of routine appointments and elective procedures. As clinics and hospitals fully reopen, respondents note that the Inland Empire's providers — already stretched thin by one of the lowest ratios of physicians to residents in the state — may find it difficult to meet pent-up demand, as patients seek to schedule the visits that had been delayed. Interviewees believe safety-net providers may bear the brunt of this impact, to the extent Medi-Cal rolls increase as the region's unemployment rate rises.

Fear of the virus could exacerbate the clinician shortage in other ways as well. As health center, physician practice, and hospital revenues fell during the initial wave of lockdowns, many health workers were laid off or furloughed. As providers reopen, some administrators noted that filling vacant positions could be difficult, given the infection risks faced by frontline staff.

Issues to Track

- ► How will the physician landscape evolve? Will the tendency of physicians to move from solo and small group practices to larger medical groups or FQHCs accelerate in the wake of financial pressures exacerbated by the COVID-19 pandemic?
- Will the hospital market move toward consolidation in the face of increasing cost pressures? If so, will consolidation increase economies of scale, give hospitals more leverage to negotiate higher payments from commercial insurers, or both?
- ▶ Will FQHC expansion continue and improve access to care for lower-income people and those with Medi-Cal coverage? Will telehealth play a larger role going forward in expanding access to specialty care, especially in the more rural, less affluent eastern areas of the Inland Empire?
- Will Manifest MedEx, the region's HIE, make inroads with providers, especially smaller physician practices, in overcoming obstacles to greater EHR system interoperability to harness the power of data analytics to transform clinical practice and improve outcomes and lower costs?
- Will efforts to integrate physical and behavior health services improve care coordination and ultimately health outcomes?
- ▶ What will result from the region's strategy of growing its own physicians through the opening of multiple new medical schools? As new medical school graduates enter practice, will opportunities in the Inland Empire outweigh potentially more attractive practice options elsewhere?
- ► How severe will the economic consequences of COVID-19 be for the region? How will safety-net services and initiatives fare in an era of budget cuts?

ENDNOTES

- 1. Information presented in this report is based on publicly available data sources as well as interviews with more than 20 local health care experts in the Inland Empire region.
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- 8. Estimates of the uninsured rate for each region are based on the Census Bureau's 2019 estimate of the uninsured rate in each county. The estimated share of the population enrolled in Medi-Cal is calculated as total Medi-Cal enrollment from California Dept. of Health Care Services data as of June 2019 (excluding those dually eligible for both Medi-Cal and Medicare) divided by US Census Bureau 2019 population estimates, aggregated for each region. Similarly, the estimated share of the population enrolled in Medicare is based on Medicare enrollment figures for 2019 published by the Centers for Medicare & Medicaid Services and US Census Bureau population estimates. The private insurance and all other insurance types category was calculated as the residual after accounting for those who were uninsured, enrolled in Medi-Cal, or enrolled in Medicare. See US Census, American Community Survey 1-Year Estimates, Table DP03, accessed June 2020 (for Census Bureau estimates of total county populations and uninsured rates); Dept. of Health Care Services, "Month of Eligibility, Medicare Status, and Age Group, by County, Medi-Cal Certified Eligibility," accessed June 2020 (for monthly Medi-Cal enrollment totals); and "Medicare Enrollment Dashboard." Centers for Medicare & Medicaid Services (CMS), accessed June 2020 (for Medicare enrollment data).
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- 21. "Health Center Program Look-Alikes," Bureau of Primary Health Care, Health Resources & Services Administration, accessed July 2020.
- 22. "Health Center Program Data," Health Resources & Services Administration, accessed August 2020.
- 23. A market's Herfindahl-Hirschman Index (HHI) is equal to the sum of the market share of each firm multiplied by 100 and squared. For instance, a market with two firms, each with 50% of the market, would yield an HHI of $50^2 + 50^2 = 5,000$. A market with four firms, each with 25% of the market, would yield an HHI of $25^2 + 25^2 + 25^2 = 2,500$. The HHI ranges from zero to 10,000, with higher scores indicating higher levels of concentration.
- 24. *Community Benefit Report 2019* (PDF), Loma Linda University Health, 2019.
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Background on Regional Markets Study: Inland Empire

Between January and August 2020, researchers from the Blue Sky Consulting Group conducted interviews with health care leaders in Riverside and San Bernardino Counties in the Inland Empire region of California to study the market's local health care system.

The Inland Empire is one of seven markets included in the Regional Markets Study funded by the California Health Care Foundation.

The purpose of the study is to gain key insights into the organization, financing, and delivery of care in communities across California and over time. This is the fourth round of the study; the first set of regional reports was released in 2009. This is the first time the Humboldt/Del Norte region was included in the study. The seven markets included in the project — Humboldt/Del Norte, Inland Empire, Los Angeles, Sacramento Area, San Diego, San Francisco Bay Area, and the San Joaquin Valley — reflect a range of economic, demographic, care delivery, and financing conditions in California.

Blue Sky Consulting Group interviewed nearly 200 respondents for this study with 21 specific to the
Inland Empire market. Respondents included executives from hospitals, physician organizations, community
health centers, Medi-Cal managed care plans, and other local health care leaders. Interviews with commercial
health plan executives and other respondents at the state level also informed this report. The onset of the COVID-19 pandemic
occurred as the research and data collection for the regional market study reports were already underway. While the authors
sought to incorporate information about the early stages of the pandemic into the findings, the focus of the reports remains the
structure and characteristics of the health care landscape in each of the studied regions.

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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.

California Health Care Almanac is an online clearinghouse for key data and analysis examining the state's health care system.