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San Joaquin Valley: Despite Poverty and Capacity Constraints, Health Care Access Improves

Summary of Findings

California's San Joaquin Valley is geographically and economically diverse. Known for rich irrigated farmland and agricultural output, the region is home to Fresno, a city of more than 500,000 residents. Across the region, which spans the counties of Mariposa, Madera, Fresno, Kings, and Tulare in the San Joaquin Valley, more than 20% of the 1.8 million residents have incomes below 100% of the federal poverty level (FPL). At the same time, there are pockets of affluence in the region, primarily in north Fresno, where providers vie for privately insured and Medicare patients.

In 2019, nearly half of the residents in the San Joaquin Valley were covered by Medi-Cal (44%), and 8% were uninsured. Despite the expansion of the safety net after implementation of the Affordable Care Act (ACA), including growth of Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs), the San Joaquin Valley continues to face problems with access to care, especially for behavioral health services, and struggles to recruit physicians and other health care professionals. The COVID-19 pandemic — which hit the region particularly hard, though later than the rest of California — has compounded these challenges.

The region has experienced a number of changes since the previous study in 2015–16 (see page 23 for more information about the Regional Markets Study).[1] Key developments include:

- **While financial performance improved in larger hospitals, some independent hospitals struggled.** Several smaller hospitals have struggled financially, leading one district hospital to close permanently and another to cede management to a larger hospital system after closing temporarily. Given the large and growing share of the region's Medi-Cal population, almost all hospitals play a significant role in the fabric of the region's safety net.
- **While many physicians continue to practice independently in solo or small practices, some are choosing to affiliate with hospitals.** The pace at which physician practices have aligned with hospitals has been slower than in other regions. However, the physician practice landscape continues to shift as financial pressures, market conditions, and demographics all combine to make independent practice less attractive.
- **FQHCs and RHCs continue to expand across the region, sparking competitive tensions in some areas.** FQHCs now provide services to more than half of the region's Medi-Cal enrollees. Both FQHCs and RHCs are working with hospitals to improve care integration and access to specialty services for Medi-Cal patients.
- **While several hospitals have taken a leap toward global risk contracts, the movement toward risk-based arrangements for other providers has been slow.** Most providers are developing the infrastructure to

manage risk-based payment, but the market, particularly for specialty care, remains heavily tied to fee-for-service (FFS) payment.

- **Shortages of physicians and other health care professionals continue to plague the region, even with scholarships, loan repayments, and other recruitment incentives.** Shortages exist across a range of specialties, notably psychiatry (especially pediatric psychiatry), dermatology, optometry, pain management, and orthopedics. The San Joaquin Valley's relatively low rankings on a range of quality-of-life measures may inhibit recruitment and retention of clinicians.

- **Data sharing among San Joaquin Valley providers remains challenging despite the presence of a health information exchange (HIE) serving the region's two largest counties, Fresno and Tulare.** While hospitals report participating in the HIE, many outpatient providers reported limited use. Barriers to adoption include perceived challenges of integrating practices' electronic health record (EHR) systems with the platform and a lack of staff resources.

- **Access to mental health and substance use disorder (SUD) services for Medi-Cal enrollees has been improving, though significant gaps in care remain.** Inpatient psychiatric beds are in short supply. This shortage may be offset by a new 128-bed inpatient psychiatric facility slated to open in Madera County in 2023. County specialty mental health plans in the region have adopted more holistic approaches to addressing behavioral health needs, developing partnerships with health plans and adding new services.

- **Health and income disparities, as well as other sociodemographic factors, have worsened the impact of the COVID-19 pandemic in the San Joaquin Valley.** The region's residents suffer disproportionately from risk factors, such as obesity and asthma, that can lead to worse outcomes if affected individuals contract the virus. The regional economy's heavy reliance on agriculture and food processing may have softened the pandemic's initial economic impact in the region but put workers at higher risk of contracting and spreading the virus.

Market Background

The San Joaquin Valley is a study in contrasts. Known for its bountiful farmland, the region also is home to the city of Fresno, where more than a quarter of the region's 1.8 million residents live (see Table 1, page 3). About halfway between Interstate 5 to the west and the Sierra Nevada mountain range to the east, Highway 99 runs through the heart of the region, connecting Fresno to the region's second-largest city — Visalia, with a population of about 134,000 — to the south in Tulare County. Just west of Visalia is Hanford, the largest Kings County city, with a population of about 53,000. North of Fresno, up Highway 99, the city of Madera, in the county of the same name, is home to about 61,000 people. Outside of these population centers, the region is predominantly rural farmland or undeveloped, including Yosemite National Park, which spans Madera and Mariposa Counties.

The region's economy is largely agricultural; nearly 400 different crops, ranging from fruits and vegetables to hay and cotton, are grown there. While composing less than 1% of the nation's farmland, the region's farms supply 8% of the nation's agricultural output, in a contribution valued at more than $17 billion annually. Against this backdrop of agricultural production, more than one in five people (21.5%) in the region had incomes in 2020 below the FPL of $26,200 for a family of four.[2] The share of people in the region living in poverty declined 6 percentage points from 2014 but remained 50% higher than the statewide average. Moreover, the Fresno metropolitan area has the second-highest concentrated poverty rate — a measure of families living in neighborhoods with a poverty rate exceeding 40% — in the nation.[3] Median household income in the region, at $52,621, is two-thirds of the statewide median. In the city of Fresno,

TABLE 1. Demographic Characteristics
San Joaquin Valley vs. California, 2018

	San Joaquin Valley	California
POPULATION STATISTICS		
Total population	1,786,770	39,557,045
Five-year population growth	3.2%	3.2%
AGE OF POPULATION, IN YEARS		
Under 18	28.6%	22.7%
18 to 64	59.2%	62.9%
65 and older	12.2%	14.3%
RACE/ETHNICITY		
Latinx	56.7%	39.3%
White, non-Latinx	29.9%	36.8%
Black, non-Latinx	3.7%	5.6%
Asian, non-Latinx	7.1%	14.7%
Other, non-Latinx	2.6%	3.6%
BIRTHPLACE		
Foreign-born	21.7%	25.5%
EDUCATION		
High school diploma or higher	74.3%	83.7%
College degree or higher	28.1%	42.2%
ECONOMIC INDICATORS		
Below 100% federal poverty level (FPL)	21.5%	12.8%
100% to 199% FPL	23.8%	17.1%
Household income $100,000+	22.6%	38.0%
Median household income	$52,621	$75,277
Unemployment rate	8.0%	4.2%
Able to afford median-priced home* (2019)	50.0%	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 (confidence intervals are large for Humboldt County and are included in the table); "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.

legacies of segregation and stark health differences remain between the more affluent and mostly White residents to the north and the poorer and mostly Black and Latinx residents to the south and southwest. From one zip code to another, life expectancy can drop by 20 years.[4]

While the region's population grew rapidly following the Great Recession, the pace has slowed in recent years. Of the seven study markets, Latinx residents account for the highest percentage of residents in the San Joaquin Valley — at 56.7%, well above the 39.3% statewide average. The region's population skews young, with nearly 29% of residents younger than age 18. Educational attainment in lower compared to the rest of the state: among San Joaquin Valley residents, 74.3% hold a high school diploma and 28.1% have college degrees. While these indicators have improved in recent years, they are still well below the statewide averages of 83.7% and 42.2%, respectively.

Despite sharing in the state's economic growth prior to the COVID-19 pandemic, high unemployment (8.1%) remains a major challenge, as it was nearly double the statewide unemployment rate (4.2%) in 2018. The region also lags on other quality-of-life measures. The five counties are ranked as having among the highest air pollution levels in the state. San Joaquin Valley residents benefit from relatively affordable housing stock: 50% of the region's households earn enough to purchase a median-priced home in the region, a measure 19 percentage points higher than the statewide statistic.[5]

San Joaquin Valley Reports Worse Health Status than Other Regions

The physical health of San Joaquin Valley residents is among the poorest in the state (see Table 2). When compared with averages for all Californians, San Joaquin Valley residents are more likely to report that they are in fair or poor health, have heart disease, or have asthma, in part because of the region's poor air quality, especially in and around the city of Fresno.[6] Both the obesity rate, above 41%, and the infant mortality rate, at 0.6% of all live births, are about 50% higher than corresponding rates statewide.[7]

TABLE 2. Physical Health Indicators
San Joaquin Valley vs. California, 2018

	San Joaquin Valley	California
Fair/poor health	21.5%	18.5%
Diagnosed with diabetes	11.5%	10.1%
Has asthma	21.4%	15.7%
Has heart disease	8.2%	6.8%
Preterm births*	9.4%	8.8%
Infant mortality rate*	0.6%	0.4%
Obesity	41.0%	27.3%

* "Preterm and Very Preterm Live Births" (2018), "Infant Mortality, Deaths Per 1,000 Live Births (LGHC Indicator)" (2017), California Dept. of Public Health, accessed September 1, 2020.

Source: California Health Interview Survey, 2018 data except where noted, accessed January 21, 2020.

Health and income disparities, as well as other sociodemographic factors, have likely worsened the impact of the COVID-19 pandemic in the San Joaquin Valley (see "After Delayed Impact, COVID-19 Spreads Rapidly" on page 18). The region's residents suffer disproportionately from key risk factors, such as obesity and asthma, that can lead to worse outcomes if affected individuals contract the virus. Moreover, the region's heavy reliance on agriculture and food processing apparently softened the pandemic's economic impact — the unemployment rate increased by a smaller amount in the San Joaquin Valley than statewide — but put many workers at higher risk of contracting and spreading the virus.

Medi-Cal Dominates Health Insurance Coverage

The expansion of Medi-Cal under the ACA, along with an improving economy, continued to reduce the share of San Joaquin Valley residents without health insurance. Between 2015 and 2019, the uninsured rate declined from 9.6% to 8.0% (see Table 3).[8] At 44.1%, the proportion of residents with Medi-Cal coverage is higher in the San Joaquin Valley than in any of the other markets studied and higher than the statewide rate of 28.7%. The share of people with private insurance also grew slightly from 33.6% in 2015 to 33.9% in 2019 — still well below the rate of 47.7% statewide. Another 14.0% of San Joaquin Valley residents are covered by Medicare, compared with 15.9% of Californians statewide.

TABLE 3. Trends in Health Insurance, by Coverage Source
San Joaquin Valley vs. California, 2015 and 2019

	SAN JOAQUIN VALLEY		CALIFORNIA	
	2015	2019	2015	2019
Medicare*	12.8%	14.0%	14.4%	15.9%
Medi-Cal	44.1%	44.1%	29.1%	28.7%
Private insurance†	33.6%	33.9%	47.8%	47.7%
Uninsured	9.6%	8.0%	8.6%	7.7%

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

† Includes any other insurance coverage (excluding 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.

Four of the region's five counties participate in Medi-Cal's Two-Plan Model, under which a public managed care plan, known as a local initiative, competes with a commercial plan. CalViva Health operates the local initiative plan for Fresno, Kings, and Madera Counties and subcontracts all services to Health Net, a subsidiary of Centene, a large national plan that specializes in Medicaid. CalViva covers 71% of the three counties' 518,000 Medi-Cal managed care enrollees, while Anthem Blue Cross, the commercial plan, serves the remainder.

Tulare also operates under the Two-Plan Model, with the local initiative contracted to Anthem Blue Cross. Unlike other local initiatives, Tulare's is not overseen by a county health authority; instead, the Tulare County Health and Human Services Agency has a contract with Anthem Blue Cross.

Health Net serves as the private plan and covers about 55% of the 210,000 Medi-Cal managed care enrollees. Mariposa County, where the total population is about 17,500, is part of the state's regional model for rural areas. Anthem covers about 85% of the county's 4,200 Medi-Cal managed care enrollees, while California Health & Wellness, another Centene subsidiary, serves the remainder.

Covered California, the state's health insurance exchange, accounts for a lower share of insurance coverage in the San Joaquin Valley than statewide (see Table 4). Silver plans for Covered California Region 11 — Madera, Fresno, and Kings Counties — are only slightly less expensive than the average plan cost statewide, while average incomes in the region are far lower than the state average. Across the Region 11 counties, Blue Shield of California accounts for most Covered Cal enrollees, with Kaiser Permanente — the only other plan available — covering a minority share.

In Region 10, which includes Tulare and Mariposa Counties — as well as the counties of San Joaquin, Stanislaus, and Merced — average premiums are far higher. In Mariposa County, Blue Shield holds the dominant share of the Covered California market. In Tulare County, Anthem Blue Cross has captured more than 80% of the market, with Blue Shield and Kaiser covering the remainder. According to a recent health care market analysis, the difference in premium costs between these two rating regions reflects an underlying difference in health care prices. Routine inpatient and outpatient hospital procedures in Region 11 cost less than in Region 10, at least on a wage-adjusted basis.[9]

For the one-third of the San Joaquin Valley's population with private insurance, the major commercial plans are Kaiser, Anthem Blue Cross, Blue Shield of California Promise Health Plan, Health Net, and Humana. For Medicare, only 29% of the region's beneficiaries are enrolled in Medicare Advantage (MA) managed care plans, compared with 44% statewide. However, San Joaquin Valley Medicare beneficiaries increasingly are choosing the MA option, with enrollment growing 5 percentage points since 2014. Kaiser is the dominant MA plan in Fresno and Madera Counties, accounting for nearly 40% and 60% of enrollees, respectively, in each county. In Mariposa, where Sierra Health is the plan for more than half of the MA market, Kaiser's share is 27%. Arcadian Health Plan, a subsidiary of national carrier Humana, accounts for 52% and 57% of the MA market, respectively, in Kings and Tulare Counties.

Hospital Sector Mostly Stable

Geographically segmented, mostly along county lines, the San Joaquin Valley hospital market has remained relatively stable since the previous study except for the financial struggles of several small district hospitals. The region is dominated by five hospitals or systems — Community Medical Centers (CMC), Saint Agnes Medical Center, Adventist Health, Kaweah Delta Medical Center, and Valley Children's Healthcare. Kaiser, which is a dominant player in many markets elsewhere in the state, operates a 169-bed hospital in Fresno and accounts for only a small fraction of all hospital discharges in the market. There are four district hospitals — one closed in 2018, and

TABLE 4. Covered California Premiums and Enrollment, San Joaquin Valley (Regions 10 and 11) vs. California, 2015 and 2019

	REGION 10*		REGION 11*		CALIFORNIA	
	2015	2019	2015	2019	2015	2019
Monthly premium* (Silver Plan on the exchange for a 40-year-old individual)	$299	$502	$315	$387	$312	$454
Percentage of population enrolled	2.2%	2.2%	1.9%	2.4%	3.0%	3.1%

* *Region 10* includes Mariposa and Tulare Counties, as well as Merced, San Joaquin, and Stanislaus Counties (which are not considered part of the San Joaquin Valley for purposes of this report). For this rating region, the weighted average monthly Silver Plan premium reflects premiums paid across all five counties (since the provided estimate of the percentage of the population enrolled is isolated to Mariposa and Tulare Counties). *Region 11* includes Fresno, Kings, and Madera Counties.

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.

another is managed by Adventist Health — but there are no county public hospitals. Given that more than half of the region's population is covered by Medi-Cal or uninsured, most hospitals play a significant safety-net role. Table 5 summarizes discharges across the region's hospitals. Major hospitals and systems in the region include the following:

Community Regional Medical Center (CRMC). As the region's largest hospital with 909 beds and the area's only Level I trauma center and burn unit, CRMC anchors the San Joaquin Valley safety net, especially for specialty services, and accounts for 52% of Medi-Cal discharges in Fresno County and 43% of Medi-Cal discharges across the region. Part of Fresno-based Community Medical Center Healthcare Network — an independent nonprofit system with two other acute care hospitals, a psychiatric hospital, a cancer institute, and several long-term care, outpatient, and other facilities — CRMC accounts for 62% of all Fresno County discharges and 38% of all discharges across the five counties.

Adventist Health. Part of a system with more than 20 hospitals across California, Hawaii, and Oregon, Adventist has three hospitals in the region; the largest is 230-bed Adventist Health Hanford in Kings County, followed by 57-bed Adventist Health Selma and 49-bed Adventist Health Reedley, both in Fresno County. Adventist also leases and operates Tulare Regional Medical Center, a district hospital, which is now known as Adventist Health Tulare. Medi-Cal accounted for nearly 40% of Adventist Health's discharges across the region in 2018.

Saint Agnes Medical Center. Part of Michigan-based Trinity Health, a large Catholic nonprofit health system with 92 hospitals and hundreds of other facilities across 22 states, Fresno-based Saint Agnes has 436 beds and offers a full range of services. In 2018, nearly half (49%) of Saint Agnes discharges were Medicare patients and 33% were Medi-Cal. Saint Agnes accounts for about 16% of all hospital discharges in the region.

Kaweah Delta Medical Center. Operated by the Kaweah Delta Health Care District, the hospital is licensed for 448 beds and is the only hospital in Visalia, the region's second largest city. Kaweah Delta offers a full range of services, including a Level III trauma center. Medi-Cal accounted for 39% of the hospital's discharges in 2018.

Valley Children's Hospital. Part of the extensive Valley Children's Healthcare system, the 358-bed Valley Children's Hospital in Madera is the only children's hospital in the San Joaquin Valley and also serves many central California coastal counties and the Sacramento area. Medi-Cal accounted for 76% of the hospital's discharges in 2018.

The region also is home to several smaller and independent hospitals. They include 106-bed Madera Community Hospital, two district hospitals in Tulare County — 167-bed Sierra View Medical Center in Porterville and 101-bed Adventist Health Tulare, which was formerly Tulare Regional Medical Center — and, in Mariposa County, an 18-bed critical access hospital, which is eligible for enhanced payments from Medicare and Medi-Cal, operated by the John C. Fremont Healthcare District.

TABLE 5. Acute Care Hospitals, by Share of Discharges, San Joaquin Valley, 2018

	Regional Discharges	County Discharges
Fresno		
► Adventist Health	1.2%	2.0%
► Community Medical Centers	37.6%	62.3%
► Kaiser Foundation Hospital	5.5%	9.1%
► Saint Agnes Medical Center (Trinity Health)	15.9%	26.3%
Kings		
► Adventist Health	6.4%	100.0%
Madera		
► Madera Community Hospital	2.6%	24.4%
► Valley Children's Healthcare	8.1%	75.6%
Mariposa		
► John C. Fremont Healthcare District	0.2%	100.0%
Tulare*		
► Kaweah Delta Health Care District	18.6%	83.1%
► Sierra View Local Health Care District	3.8%	16.9%

*Tulare Regional Medical Center was closed for most of 2018.

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

In part as a result of a slight reduction in beds, the region's inpatient occupancy rate increased substantially between 2014 and 2018, from 59.4% to 65.7%. The San Joaquin Valley's inpatient occupancy rate is now more than 10 percentage points higher than the statewide average. Concurrent with this shift, across the region, hospitals' financial conditions have improved, with the average operating margin at 6.2% in 2018, up from 2.3% in 2014 and well above the statewide rate of 4.4% (see Table 6). This increase was primarily driven by improved financial performance at the region's larger hospitals (see Table 7).

TABLE 6. Hospital Performance (Acute Care)
San Joaquin Valley vs. California, 2018

	San Joaquin Valley	California
Beds per 100,000 population	157	178
Operating margin*	6.2%	4.4%
Paid FTEs per 1,000 adjusted patient days*	12.2	15
Total operating expenses per adjusted patient day*	$2,696	$4,488

*Excludes Kaiser.
Note: *FTE* is full-time equivalent.

TABLE 7. Operating Margins at Select Hospitals
San Joaquin Valley, 2014 and 2018

	2014	2018
Community Regional Medical Center	2.8%	5.4%
Adventist Health	3.1%	11.9%
Kaweah Delta Medical Center	0.1%	4.9%
Saint Agnes Medical Center	2.3%	10.8%

TABLES 6 AND 7:
Source: "Hospital Annual Financial Data - Selected Data & Pivot Tables," California Office of Statewide Health Planning and Development, accessed June 1, 2020.

On a per-patient-day basis, net operating expense across the region's acute care hospitals is roughly 40% lower than the statewide average. And, according to one recent analysis of health care prices across California counties, the average prices for common procedures in the San Joaquin Valley — even on a wage-adjusted basis — are among the lowest in the state.[10]

District Hospitals Struggle Financially

While the financial status of most hospitals across the region has improved since 2014, respondents note that several district hospitals have struggled. Adventist Health now leases and operates Tulare Regional Medical Center, a district hospital, which closed due to bankruptcy in October 2017, but then reopening a year later under Adventist management. The move reportedly strengthened Adventist's market position in the southern part of the region, where Adventist also operates a hospital in Kings County. Another district hospital, Coalinga Regional Medical Center in southern Fresno County, also struggled financially and closed permanently in late 2018. Respondents noted that weak governance combined with the burden of financing repairs from earthquake damage contributed to Coalinga's deteriorating financial performance.

The three other district hospitals — Kaweah Delta, Sierra View, and John C. Fremont — had operating margins below the regional average in 2018,[11] with Sierra View reporting a negative operating margin, declining to –3.29 from in 2018 from 2.35 in 2014. In late 2018, Kaweah Delta and Sierra View entered into a joint powers agreement that allows the two districts to remain independent but partner on various activities, including purchasing drugs and other supplies, recruiting physicians, and operating clinics. This partnership has also fostered creation of an integrated delivery network to take global risk-based contracts, known as Sequoia Integrated Health.

The district hospitals have attempted to rely on voters to finance construction of new facilities that meet state seismic safety requirements. In 2016, voters rejected a bond measure to finance construction of a new Kaweah Delta hospital to meet 2030 seismic requirements.[12] On November 3, 2020, Mariposa County voters passed Measure N, a 1% countywide sales tax to fund a new facility that meets seismic requirements for the John C. Fremont Healthcare District.[13]

Some Hospitals Compete Across the Region

While hospital markets roughly follow county lines, interviewees stressed that patients, especially in the rural outlying areas, often travel significant distances and cross county boundaries for care. CRMC and Valley Children's were in negotiations to collaborate and avoid duplication of neonatal and pediatric intensive care, but the efforts failed. Instead, the two hospital systems ended their contractual relationship and began to compete for pediatric patients, with CRMC adding neonatal beds and constructing a pediatrics medical office building.[14] To compete for patients, hospitals have enlarged their outpatient primary care and specialty capacity by expanding their medical foundations (see the following section), affiliating with FQHCs, or adding RHCs.

Physicians Slowly Align with Hospitals

In recent years, San Joaquin Valley physicians and practices have continued to affiliate with hospitals, although the pace has been slower than in other regions. Absent strong market forces, such as widespread risk-based payment and high levels of managed care, that tend to spur physician consolidation, many primary care physicians, especially in Fresno and Tulare Counties, continue to practice in small groups and are significantly less consolidated than other counties statewide. Specialist consolidation in the region is, on average, in line with the statewide average, although in this context as well, the region's more populous counties tend to have less specialist consolidation.[15]

In 2018, Saint Agnes Medical Center created a medical foundation, Saint Agnes Medical Providers, a corporate subsidiary that owns and operates clinics offering numerous specialty services. The medical foundation partners with San Joaquin Valley Medical Providers (MedPro), a 700-physican independent physician association (IPA) serving Fresno and Madera Counties, to deliver integrated services, particularly for MA plans. Saint Agnes Medical Center established MedPro as an IPA in 2011.

Valley Children's Healthcare includes the Valley Children's Medical Foundation, which contracts with the two main groups: Valley Children's Specialty Medical Group and Valley Children's Primary Care Group. Valley Children's Specialty Medical Group also provides services at other hospitals in the region, such as Saint Agnes. The Valley Children's Primary Care Group provides primary care, obstetrical care, and regional hospitalist services. Valley Children's two medical groups added physicians by acquiring eight small pediatric practices from 2015 to 2018. ChildNet Medical Associates, an IPA with some 300 physicians and pediatric specialists in the region, also partners with Valley Children's Hospital.

Recently, Community Medical Centers established its own medical foundation, Community Health Partners, which includes neurosurgery, pediatric, and oncology clinics. The medical foundation is part of CMC's Community Provider Network (CPN), described as a physician support division within CMC. The CPN also contracts with medical groups, such as the Central California Faculty Medical Group (CCFMG), to deliver services to CMC patients and to members of CMC's health plan, Community Care Health (described in a later section). According to a regional expert, the creation of this foundation contributed to contract tensions with the CCFMG, which spilled over in September 2020 and threatened CRMC's Level I trauma center accreditation.[16]

CCFMG has 230 faculty physicians affiliated with the University of California, San Francisco School of Medicine's Fresno campus, UCSF Fresno, representing some 65 specialties, and CCFMG trains 300 medical residents and fellows each year. CCFMG provides physician services in outpatient centers as well as inpatient care at CMC hospitals and Saint Agnes Medical Center.

Kaweah Delta established its medical foundation in November 2016 and has about 50 physicians and plans to add staff. The foundation is part of the integrated provider network for Kaweah Delta Medical Center and, according to respondents, will also play a central role in the new Sequoia Integrated Health partnership.

A number of other IPAs operate in the market and provide administrative and contracting support for member practices. LaSalle Medical Associates, an IPA that contracts with all Medi-Cal managed care plans in the region, cares for about 160,000 Medi-Cal members, representing more than 95% of the IPA's total business in the San Joaquin Valley. LaSalle's network includes FQHCs, RHCs, and medical groups.

Santé Community Physicians, an IPA with some 1,200 physicians and nurse practitioners, is responsible for some 100,000 lives from Medi-Cal managed care plans CalViva Health and Anthem Blue Cross, as well as Medicare and commercial plans. Santé is a relative newcomer to contracting for Medi-Cal managed care lives. Its provider network includes Santé Health Foundation, FQHCs, LaSalle Medical Associates, and CCFMG.

FirstChoice Medical Group is an IPA with a network of some 1,100 physicians in central California providing services to 8,000 MA and 40,000 Medi-Cal members. FirstChoice was owned by agilon health, whose operating model supports IPA administration, risk-based contracting, disease management, specialty networks, and post-acute care services. A national firm backed by private equity, agilon health purchased FirstChoice in 2016 and through management practices restored financial stability to the IPA. In October 2020, agilon sold FirstChoice to Babylon Health, a global health technology company.

FQHCs Play Major Role in Care Delivery

Multiple large FQHC networks operate in the San Joaquin Valley, providing care primarily to Medi-Cal and uninsured patients as well as to Medicare beneficiaries and people with private insurance, including those insured through Covered California. Most FQHCs serve a single county. However, several FQHCs have sites across multiple counties, and some provide services via mobile clinics. Most FQHCs offer a range of services, including primary, specialty, dental, and behavioral health care. Across the five counties, FQHCs saw more than 400,000 Medi-Cal patients in 2018, providing over 2 million patient visits, an increase of 54% from 2014.[17] The largest FQHC networks include:

- **Family HealthCare Network (FHCN)**, the largest FQHC in the San Joaquin Valley, includes 36 service sites, primarily in Tulare County, and served more than 266,000 patients in 2018. FHCN also operates three clinics under contract with CRMC in Fresno.
- **United Health Centers of the San Joaquin Valley** is based in Fresno and also serves Kings and Tulare Counties, with 23 sites that served more than 94,000 patients in 2018.
- **Camarena Health** is the only FQHC in Madera County with 17 sites and served more than 58,000 patients, more than a third of the county's population.
- **Clinica Sierra Vista** has 13 sites in Fresno County, serving nearly 54,000 patients.
- **Valley Health Team** has 11 sites in Fresno and one in Tulare County, serving some 44,000 patients.
- **Altura Centers for Health**, with eight sites in Tulare County, served 44,000 patients in 2018.
- **Aria Community Health Center**, with 13 clinics in Kings County, served 26,000 patients in 2018.

There are several other FQHCs in the region. M.A.C.T. Health Board is an FQHC Look-Alike in Mariposa County, with one location. Omni Family Health is a large FQHC network located largely in Kern County but with two locations in southeastern Fresno County. San Joaquin Valley Indian Health has three clinics in Fresno County. Across the region, there are a small number of clinics that are not designated as FQHCs.

FQHCs Expand as Medi-Cal Coverage Grows

FQHCs continue to expand and play a growing role in increasing access to care in the San Joaquin Valley. The number of FQHC sites in the region, according to state records, increased from 63 to 85 between 2014 and 2018. Encounter volume and patient visits were also up (see Table 8). In 2018, there were 1.14 patient visits per capita at FQHCs in the region, compared with just 0.51 statewide. Between 2014 and 2018, patient encounters per capita increased by 55%, significantly more than the 28% statewide increase. In part, this growth is attributable to the ACA expansion, which drove Medi-Cal enrollment much higher in 2014 and 2015. This FQHC expansion and increases in FQHCs' caseload likely eased some of the increased service demand due to overall increases in the Medi-Cal population in the region.

Across the state, the Medi-Cal expansion under the ACA has reduced the amount of uncompensated care that FQHCs provide. Despite this trend, within the San Joaquin Valley, average FQHC operating margins decreased between 2014 and 2018, from 5.2% to 3.1%. About this decline, a clinic leader observed that revenues and operating margin increases in 2014 immediately after the ACA expansion were unprecedented, but then operating margins declined in subsequent years as clinics' capital expenses rose, largely as a result of building costs. Nonetheless, San Joaquin Valley FQHCs appear stronger financially compared with FQHCs statewide, which reported an average operating margin of 2.1%.

TABLE 8. Federally Qualified Health Centers

San Joaquin Valley vs. California, 2014 to 2018

	SAN JOAQUIN VALLEY		CALIFORNIA	
	2018	Change from 2014*	2018	Change from 2014*
Patients per capita	0.34	55%	0.15	29%
Encounters per capita	1.14	50%	0.51	35%
Operating margin	3.1%	–2.1%	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.

Hospital-FQHC Collaborations

Respondents noted that several hospitals collaborate with FQHCs to provide outpatient services and referrals to inpatient care. In Madera County, Camarena Health, the county's sole FQHC, is a referral source for Valley Children's and Madera Community Hospitals. In Fresno, FHCN took over two outpatient clinics on CRMC's campus, operating the clinics and billing Medi-Cal for services through the FQHC. FHCN contracts with the Central California Faculty Medical Group to provide some physicians services at FHCN sites clinics, again allowing the FQHC to receive its Medi-Cal cost-based reimbursements (discussed more below).

Regional experts believe this relationship serves both CRMC and FHCN. CRMC benefits by having outpatient services available on its campus at no financial risk while also relieving emergency department (ED) crowding and having outpatient services available for patients after discharge. Before developing the relationship with FHCN, CRMC reportedly struggled to make its outpatient clinics financially viable. Additionally, the clinics provide physician residency training locations. FHCN benefits by increasing patient access to physicians and residents across a broad scope of specialty services and improving continuity of care for patients discharged from the hospital. The relationship also allows FCHN an opportunity to recruit physicians to stay in the area after completing residency training.

Tensions Between FQHCs and RHCs

Along with FQHC expansions, the San Joaquin Valley has seen continuing growth of RHCs. As of August 2020, according to Health Resources and Services Administration (HRSA) data, there were 85 FQHC sites across the five counties and 82 RHC sites. RHCs are regulated by the Centers for Medicare & Medicaid Services and, unlike FQHCs, are not required to treat uninsured patients. RHCs must be located in a Census-defined "non-urbanized area" as well as in an HRSA-determined Health Professional Shortage Area (HPSA) or medically underserved area.[18]

While only FQHCs receive supplemental federal grants to serve the uninsured, both types of providers receive cost-based reimbursements payments for Medi-Cal patients set by the state Department of Health Care Services (DHCS). Medicare also pays FQHCs and RHCs cost-based reimbursement rates. These cost-based rates, known as prospective payment system (PPS) rates, are set prospectively when the clinic is licensed as a FQHC or RHC. Clinics can choose to have their rates set based on either the clinic's projected total costs of providing services or according to the average PPS rate across three comparable nearby clinics.[19]

As shown in Table 9, this rate-setting process can lead to highly divergent PPS rates among provider sites in the same counties. As of 2018, in four of the five counties in the region, the typical RHC earned more per visit than the average FQHC, and the most highly compensated clinic in the county — often by a substantial margin — is typically an RHC.

Respondents stated that many hospitals in the region, to expand their market reach and outpatient footprint, have acquired smaller local clinics and physician practices to incorporate into existing or new RHCs. This strategy also reportedly supports hospitals' ability to integrate services along a continuum of care from inpatient to outpatient services. For hospitals pursuing global risk contracts such as Adventist Health and Sequoia Integrated Health (the integrated delivery network of Kaweah Delta and Sierra View district hospitals), RHCs are an essential component.

According to some respondents interviewed for the study, hospital-affiliated RHCs may have higher reimbursement because their payment rates incorporate the higher operating costs of the parent hospital. Indeed, as based on the DHCS data, in each county, hospital-affiliated RHCs tend to receive higher rates than other RHCs and FQHCs. About half of RHCs in the San Joaquin Valley are operated by hospitals. Hospitals with affiliated RHCs include the following:

- Adventist Health operates 41 RHCs offering primary and specialty care across Fresno, Kings, Madera, and Tulare Counties.[20]
- Kaweah Delta operates four RHCs in Tulare County.
- Valley Children's in Madera County offers primary care, with access to several associated subspecialists, through the Charlie Mitchell Children's Center, an RHC.
- Madera Community Hospital has two RHCs in the county and a third set to open.
- CRMC operates one RHC in Fresno County.
- John C. Fremont Healthcare District operates three RHCs in Mariposa County.

Given the region's continuing challenges with access to both primary and specialty care, the growth of RHCs may improve access for Medi-Cal enrollees. A clinic respondent

TABLE 9. Prospective Payment System (PPS) Rates Per Encounter, Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs), by San Joaquin Valley County, 2018

	FQHCs		NON-HOSPITAL RHCs		HOSPITAL-RUN RHCs	
	Non-Weighted Average	Highest	Non-Weighted Average	Highest	Non-Weighted Average	Highest
Fresno	$161	$203	$96	$175	$335	$390
Kings	$180	$212	$81	$81	$284	$284
Madera	$167	$167	$94	$95	$249	$290
Mariposa	N/A	N/A	$86	$86	$186	$230
Tulare	$176	$339	$106	$134	$255	$289

*Represent the *non*-weighted average.

Source: *FQHC and RHC Current Rates* (PDF), California Dept. of Health Care Services, accessed August 1, 2020.

noted that several RHCs use their higher PPS rates to contract with specialist physicians to provide services to Medi-Cal patients, since non-PPS rates were insufficient to attract specialists to see Medi-Cal patients.

Nevertheless, some FQHC respondents view RHCs as direct competitors for Medi-Cal patients and lament RHCs' "encroachment" into FQHCs' service areas. Some respondents noted that RHCs are "popping up close to FQHCs" in areas that are not very rural. Since Medi-Cal managed care plans and their affiliated IPAs include both RHCs and FQHCs in their provider networks, Medi-Cal enrollees can select either as their primary care home or for specialty care, contributing to competitive tensions between FQHCs and RHCs. Furthermore, hospitals control where patients go upon discharge and often refer patients to their affiliated RHCs, even if the patients' primary care home is at another FQHC or physician's office.

Slow March to Risk-Based Contracting, Though Some Hospitals Leap Forward

According to interviewees, adoption of value-based payments, which typically put providers at financial risk for the cost of patient care, is proceeding slowly. Several experts noted that plans offer a limited number of insurance product types (e.g., health maintenance organizations, preferred provider organizations) in the region because many providers lack the infrastructure to manage risk. Additionally, in December 2017, the state Department of Managed Health Care (DMHC) ordered several health plans to end contracts with Employee Health Systems (EHS) Medical Group. DMHC found that EHS, which received capitated payments, and its management services organization, SynerMed, had engaged in profit-motivated schemes to restrict patients' access to care.[21]

CalViva, through its subcontractor Health Net, employs, with primary care providers, a mix of FFS and capitated payments, or fixed per-member per-month payments, while payment for specialty services and hospital care is largely FFS. Health Net delegates financial risk for professional services through capitated payments to four IPAs, which then use a mix of capitated and FFS payment arrangements with providers in their networks. CalViva and Health Net retain responsibility for institutional risk. Among the IPAs, LaSalle, Santé Community Physicians, and FirstChoice have professional risk contracts for Medi-Cal, Medicare, and commercial enrollees.

While some FQHCs and RHCs may take capitated payments from plans and their delegated IPAs, respondents note these payments are not truly risk based, because these clinics receive PPS "wrap payments" for all encounters. Medi-Cal managed care plans use "pay-for-performance" payments with providers to incentivize improvement in quality measures. One FQHC, Camarena Health, uses this incentive revenue to help cover the cost of investing in new initiatives such as case management, health education, and outreach. Plans also offer incentive payments to providers to submit clean encounter data with their claims.

Regional respondents stated that hospitals have assumed a leadership role in taking global risk contracts. While hospital revenue from risk arrangements remains a small fraction of overall revenues in the region, that revenue has increased. Overall, from 2014 to 2018, hospital revenue from capitation increased from $1.25 million to about $55 million, though this amount represents less than 2% of total hospital revenues. Adventist Health received $17 million in capitated revenue (5.1% of revenues), almost all attributable to Medi-Cal. Kaweah Delta had the highest percentage of revenue from capitation ($34 million in 2018, or 5.4% of operating revenue), almost all attributable to Medicare. Neither Madera Community Hospital nor Valley Children's Hospital takes risk-based contracts.

Adventist Health, which has a restricted Knox-Keene license, recently began accepting global risk contracts with CalViva for 16,000 Medi-Cal enrollees in all three counties. Adventist Health plans to expand its global risk contracting to Medicare Advantage (MA) and commercial plans. Saint Agnes has applied for a restricted Knox-Keene license to take risk-based contracts with MA plans. Saint Agnes Medical Center

has participated in Medicare's Bundled Payments for Care Improvement Initiative for several years. Community Medical Centers has a full-service Knox-Keene licensed health plan, Community Care Health (CCH), with about 11,000 commercial HMO members in Fresno, Madera, and Kings Counties. CMC currently accepts risk-based MA contracts and has plans to expand its risk-based payment contracting. Two district hospitals in Tulare County, Kaweah District and Sierra View, have created a corporate partnership to take global risk for MA plans. The corporate entity, Sequoia Integrated Health, has also applied for a restricted Knox-Keene license.

A component of the state's Medi-Cal 2020 Section 1115 waiver, the Public Hospital Redesign and Incentives in Medi-Cal (PRIME) program, began moving participating hospitals to adopt risk-sharing arrangements or alternative payment methodologies, such as capitation, in the hospitals' Medi-Cal managed care contracts starting in 2018.[22] PRIME provides incentives to move away from volume-driven FFS toward value-based payments. All four district hospitals in the region — Kaweah Delta, John C. Fremont, Sierra View, and Adventist Health Tulare Regional — participate in PRIME.

Provider Shortages Still Pose Access Problems

Shortages of physicians and other health care professionals continue to constrain access to care across the San Joaquin Valley. Of the seven markets studied, the San Joaquin Valley has the second-lowest overall ratio of physicians, at 130 per 100,000 people, compared with 191 per 100,000 people statewide (see Table 10). The region's specialist ratio is the lowest (83 per 100,000, compared with 131 per 100,000 statewide), while the primary care physician ratio (at 47 per 100,000 compared with 60 per 100,000 statewide) exceeds only the Inland Empire among the markets studied. More than 90% of people across the five counties live in HPSAs, which by definition means the supply of primary care physicians in the area is inadequate.

Respondents reported shortages across a range of specialties, including psychiatry (with a particularly acute shortage for pediatric psychiatry), dermatology, optometry, pain management, and orthopedics. And need is not limited to physicians: interviewees also stressed the region's challenges in attracting and retaining physician assistants, nurse practitioners, registered nurses, and behavioral health providers such as licensed clinical social workers.

The physician shortage in the San Joaquin Valley is particularly acute for Medi-Cal enrollees: of all Medi-Cal managed care plans statewide, CalViva's network of primary care physicians is the narrowest, at just two physicians per 2,000 enrollees.[23] For various types of subspecialists, Medi-Cal patients may have access to only a few physicians in the patients' county of residence. Medi-Cal managed care plans are required to meet federal and state standards demonstrating that their provider networks provide adequate access for enrollees in a timely manner and within reasonable travel distances. All Medi-Cal managed care plans in the San Joaquin Valley received "conditional" approvals for their provider network adequacy compliance, and each received approvals for "alternative access standards" for some primary and specialty care, hospital, pharmacy, and mental health services.[24]

TABLE 10. Physicians: San Joaquin Valley vs. California, 2020

	San Joaquin Valley	California	Recommended Supply*
Physicians per 100,000 population†	130.0	191.0	—
► Primary care	46.5	59.7	60–80
► Specialists	83.3	130.8	85–105
► Psychiatrists	6.5	11.8	—
% of population in HPSA (2018)	92.0%	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.

† 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.

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.

A variety of factors contribute to the shortages. The aging of the physician workforce in the San Joaquin Valley has been a drain on the provider supply, a trend affecting all of California and expected to continue in the coming years. However, the region also faces distinct disadvantages: for certain pediatric subspecialties, it is difficult to justify hiring physicians in remote areas, where demand for these narrower skills is lower. One respondent remarked that "it is horrifying how far away kids have to go" to access pediatric psychiatrists. Perhaps most important, regional experts note that the region's low rankings across a range of quality-of-life measures reflect an additional challenge to recruiting physicians from other cities or out of state. Even within the region, hospital and clinic administrators outside the Fresno metropolitan area noted the difficulty of attracting professionals away from that city to more rural areas, given Fresno's higher wages, more highly rated schools, and more urban infrastructure and amenities.

Plans and providers report employing a range of strategies to attract practitioners from outside the San Joaquin Valley. Some administrators noted the importance of the CalHealthCares program, which uses Proposition 56 funds to provide loan repayment assistance to physicians and dentists who devote at least 30% of their caseload to Medi-Cal patients. Additionally, because such a high percentage of the region's population lives within an HPSA, federal National Health Service Corps loan repayment and scholarships are available for primary care providers and dentists. CalViva further supports FQHC primary care recruitment efforts with grants to help repay physicians' student loans, helping to add 70 primary care providers in recent years. For hospitals, it is typically necessary to resort to offering sign-on bonuses and other incentives to attract clinicians.

Ultimately, many respondents believed, resolving the shortage will require developing a homegrown medical professional pipeline. Even when providers can recruit physicians from outside the San Joaquin Valley, including through H1-B and J-1 visas for international medical graduates, long-term retention is difficult. As one respondent put it, workforce "turnover is terrible — if [physicians] are just coming here for the incentives or loan repayment, they take it for a few years and then move out to Los Angeles or the Bay Area."

The University of California, San Francisco School of Medicine's Fresno campus trains more than 600 residents and rotating third- and fourth-year medical students at clinical sites across the region.[25] The school reports that more than 50% of residents and fellows remain in the San Joaquin Valley following their training. UCSF Fresno's signature workforce initiative is the San Joaquin Valley Program in Medical Education (SJV Prime), which offers education specific to the health care needs of the San Joaquin Valley along with clinical rotations and further training through the UCSF Fresno campus. The program's 2020 entering class has 12 medical school students, up from four in 2011.

Still, respondents report that recruiting remains difficult because of limited financial aid for students, a critical factor for those deciding where to attend medical school. Moreover, while many medical school graduates who complete their residency in the San Joaquin Valley remain in the region, it can be difficult to attract residents in the first place, given the lack of a single dedicated academic health center in the San Joaquin Valley. Moreover, the UCSF Fresno medical school program is only for third- and fourth-year students and does not offer the full four-year medical school experience.

A long-term goal is to have a full four-year medical school at UCSF Fresno. Recently, the University of California allocated some $15 million annually to further develop medical training at both UCSF Fresno and UC Merced. Most of these resources will support financial aid for students.

On the workforce development front, the College of Osteopathic Medicine of California Health Sciences University, a private, for-profit university in Clovis (in metropolitan Fresno), welcomed its first class of 75 students in July 2020. Thirty-four percent of the class is from the San Joaquin Valley, and the school's mission is to expand access to care for the region's underserved population.[26]

Other pipeline training programs include the Fresno DRIVE (Developing the Region's Inclusive and Vibrant Economy) Community Investment Plan, which aims to attract $4.2 billion in economic investment to the region over 10 years to support economic and human capital development. The bulk of investments through DRIVE will support workforce development, including job training for the underemployed and financial support for various education initiatives. Under the plan, a portion of the funding focused on human capital will support training of health care professionals, including investments in UCSF Fresno programs.

In the coming years, San Joaquin Valley officials also hope that increasing the adoption of remote access technologies — which the COVID-19 pandemic has spurred both statewide and nationally — could close the distance between patients and providers and connect more potential students to medical education. As one clinic administrator noted, the potential benefits of telehealth implementation are greatest in rural areas, where long travel times are a burden for patients and may drive higher appointment no-show rates. Because telehealth could significantly increase scheduling flexibility, providers may be able to provide care more efficiently without hiring more medical professionals.

Health Information Exchange Underdeveloped

The regional health information organization (RHIO) serving Fresno and Tulare Counties is Manifest MedEx, a platform connected to more than 500 health providers and plans in the Inland Empire, Los Angeles County, and Orange County, along with the two San Joaquin Valley counties.[27] Manifest MedEx has built a broad user base across its service area, including nearly all of the hospitals in Tulare and Fresno Counties. Despite this growth, the platform's features, and free services for physician practices and other outpatient settings, many local providers reported limited use of the RHIO platform. Barriers to adoption shared by respondents include perceived challenges of integrating practices' EHR systems with the platform and a lack of staff resources. In addition, one IPA expert noted that participants may limit data sharing to avoid revealing competitive data.

Hospitals and clinics tend to instead emphasize adoption of new EHR systems, such as Epic, with interoperability features that enable data-sharing partnerships or remote viewing privileges with other providers. One hospital administrator noted that even as the hospital has separate EHR connections with some providers, participation in the RHIO itself "has not been helpful." One large clinic network remotely accesses hospital EHRs, supplemented by daily reports from hospital EDs.

In the behavioral health sector, respondents characterized the sharing and use of data to track performance as insufficient, compromising the implementation of evidence-based practices. This situation is the result, in part, of multiple funding streams, archaic billing requirements, and siloed data systems. According to independent DHCS quality reviews, county mental health plans do not optimize the use of EHR systems to understand, report, and address issues of access and quality of care.[28] In addition, behavioral health providers that contract with the counties report delays and connectivity issues when working with county data systems.

Behavioral Health Services Improve, but Access Challenges Remain

San Joaquin Valley residents not only face more issues with their physical health but also have a higher prevalence and incidence of mental health conditions and SUDs than Californians statewide. San Joaquin Valley residents report higher levels of mental distress (13.6%) than the statewide average (11.0%).[29] Moreover, the suicide rate is 20% higher than the California average (see Table 11, page 16). While the San Joaquin Valley has fewer opioid deaths and ED visits than the state as a whole, hospitalizations due to amphetamine-related overdoses are more than twice the statewide rate. Hospitals are working to address opioid overprescribing using the statewide Controlled Substance Utilization Review and Evaluation System (CURES) database. Three hospitals

— Adventist Health Hanford, CRMC, and Kaweah Delta — participate in the California Bridge program, which addresses care for persons with opioid use disorders (OUDs) in the acute care setting by prescribing buprenorphine and connecting patients to community treatment services. Despite the Bridge program, buprenorphine to address OUDs is prescribed much less often in the San Joaquin Valley (8.2 prescriptions per 1,000 people) than statewide (14.5 prescriptions per 1,000 people).[30]

TABLE 11. Behavioral Health Measures (age-adjusted per 100,000 people)
San Joaquin Valley vs. California, 2018

	San Joaquin Valley	California
Suicide	12.3	10.4
Opioid deaths	3.05	5.82
Opioid ED visits	17.96	21.44
Amphetamine-related overdose hospitalizations	12.1	5.6

Source: County Health Status Profiles 2018, California Dept. of Public Health, accessed March 21, 2020; California Opioid Overdose Surveillance Dashboard (2018 figures), accessed November 10, 2020.

Numerous respondents reported that access to mental health and SUD services for Medi-Cal enrollees has improved in recent years, but significant gaps in care remain. Medi-Cal splits responsibility for behavioral health services between managed care plans, which provide services for less severe mental health conditions (also referred to as "mild-to-moderate" conditions) and county behavioral health departments, which are responsible for adults with serious mental illness, children with serious emotional disturbances, and SUD service needs. County behavioral health departments also provide care for uninsured people.

Severe Inpatient Behavioral Health Bed Shortage

Respondents noted that access to inpatient behavioral health services is a challenge in the San Joaquin Valley regardless of residents' source of insurance coverage, and many pointed to a shortage of inpatient psychiatric beds as a key factor. CMC and Kaweah Delta have acute inpatient psychiatric facilities, and the Fresno County Department of Behavioral Health also has facilities with 16 inpatient beds each for adults and teens; but according to a California Hospital Association study, the region is short an estimated 880 beds.[31] In Kings, Madera, and Mariposa Counties, there are no inpatient behavioral health beds for either adults or children and youth. Kaweah Delta has an adult inpatient mental health facility, but Tulare County has no inpatient beds for children and youth. Consequently, pediatric patients needing inpatient services are transferred out of county, often as far away as Los Angeles. A behavioral health leader also noted the insufficient capacity of step-down facilities (e.g., mental health rehabilitation centers) for patients leaving inpatient care.

This perceived shortage of inpatient psychiatric care may be offset through a plan for Universal Health Services, a national investor-owned provider of behavioral health services, to build and operate a 128-bed inpatient psychiatric facility on the campus of Valley Children's Hospital in Madera, with a planned 2023 opening date.[32] This new facility will serve the entire region and have 24 beds for pediatric patients, representing a 50% increase in regional pediatric beds.

Medi-Cal Expansion Brings More Benefits

Respondents agreed that Medi-Cal patients generally have better access to behavioral health services since the 2014 ACA expansion. In particular, access to services for less severe "mild-to-moderate" mental health conditions, which are a new benefit and the responsibility of managed care plans, has improved, but provider shortages hamper access, especially for children and teens. One observer noted that Mental Health Network, a Health Net subsidiary, has helped improve access with its provider network.

Some FQHCs are part of managed care plans' "mild-to-moderate" provider networks and are considered essential providers of mental health treatment. FQHC respondents noted that they will often provide these services even without reimbursement from plans because the FQHC may not be part of health plans' behavioral health networks. Both Camarena Health and FHCN also use mobile vans to provide mental health services to hard-to-reach populations. FQHCs

in the region, however, typically do not provide specialty mental health or SUD services under contract with county behavioral health departments.

Telehealth Fills Some Gaps

Given the chronic and often acute behavioral health workforce shortages in the San Joaquin Valley, regional respondents note that telepsychiatry is heavily utilized by hospitals and outpatient sites alike to address psychiatric needs. Telepsychiatry use in the San Joaquin Valley preceded the expansion of telehealth resulting from the COVD-19 pandemic. One behavioral health leader interviewed remarked that telehealth was a "game changer" and its expanded use would help mental health plans meet network adequacy requirements.

FQHC leadership reported that the pandemic more than doubled behavioral health services delivered by telehealth, an innovation that has reduced patient no-show and cancellation rates. In addition, FQHCs reported that care coordination for these patients has improved as telehealth offers faster referrals, more patient contact, and improved communication among providers.

County Behavioral Health Departments Partner with Other Agencies

Specialty mental health and SUD services — for Medi-Cal enrollees with more serious conditions — are the responsibility of county mental health plans and SUD programs. Medi-Cal managed care plans, FQHCs, and some hospitals praised county behavioral health departments in the region and their leadership in building stronger partnerships, improving communication and coordination, and implementing effective strategies to ease homelessness. Counties reportedly have expanded access to behavioral services through collaborations with local agencies including police and sheriff departments, the courts, and probation offices.

Experts note that mental health plans in the region have adopted approaches to addressing behavioral health needs by integrating and adding new services. Kings, Mariposa, and Tulare Counties are participating in Medi-Cal's Whole Person Care pilots, which coordinate behavioral and physical health care as well as social needs for vulnerable populations. Fresno and Tulare Counties have implemented the Drug Medi-Cal Organized Delivery System pilot, which provides a continuum of care for people with SUDs, many of whom have co-occurring mental illness.

All of the region's counties described significant initiatives to better serve the homeless, a population that disproportionately suffers from mental illness and SUDs. A behavioral health expert noted that the low inventory of affordable housing exacerbates treatment challenges for people experiencing homelessness. As Whole Person Care pilot participants, Kings and Mariposa Counties together received more than $2 million from DHCS to address housing. Fresno, Madera, Mariposa, and Tulare Counties all were awarded grants through the state No Place Like Home initiative, which supports permanent housing for people with mental illness who are homeless or at risk of homelessness. Together these counties were awarded over $50 million in 2018 and 2019, with Fresno County receiving some $31 million.[33]

Counties Face Financial and Capacity Constraints

Despite recent gains, regional experts were clear that county-delivered behavioral health services need improvement. County financial resources for behavioral health are reportedly thin, and mental health plans note difficulties recruiting staff. While collaboration with Medi-Cal managed care plans has improved, difficulties remain in coordinating services for enrollees receiving services from different provider networks and moving between the two systems. DHCS recently found that Fresno, Kings, Madera, and Tulare Counties were out of compliance for specialty mental health minimum provider-to-beneficiary ratio and timely access to care requirements and that the counties required corrective action plans.[34]

After Delayed Impact, COVID-19 Spreads Rapidly

After a relatively slow start to COVID-19 transmission — compared with the state's more urban regions — the pandemic spread rapidly through the San Joaquin Valley over the summer months of 2020, fueled in part by concentrated employment in the agricultural and meat-processing industries. Experts stated that while the pandemic strained inpatient capacity regionally in July 2020, hospitals were able to add intensive care unit beds to prevent being overrun. The region's unemployment rate only increased modestly compared to the statewide increase (Table 12). Medi-Cal enrollment also increased modestly, perhaps reflecting the already high percent of the region's population enrolled in the program.

TABLE 12. COVID-19 Impacts: San Joaquin Valley vs. California

	San Joaquin Valley	California
UNEMPLOYMENT RATE		
► Pre-pandemic (FEBRUARY 2020)	9.3%	4.3%
► Mid-pandemic (OCTOBER 2020)	9.6%	9.3%
MEDI-CAL ENROLLMENT		
► Percentage change (FEBRUARY TO OCTOBER 2020)	2.9%	4.0%
CARES ACT, PER CAPITA (SEPTEMBER 2020)		
► Provider Relief Funds	$115	$148
► High Impact Funds	$6	$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.

Impacts on Providers

San Joaquin Valley providers report struggling with a range of impacts — and seizing on a few key opportunities — resulting from the pandemic. The forced closure of clinical sites during the initial lockdown and deferrals of elective surgeries led to a large decline in provider revenues. While offices gradually reopened and routine service delivery resumed toward the summer and fall, providers, nevertheless, were forced to furlough some staff to reduce financial losses. The need for additional personal protective equipment (PPE) further strained resources.

As one respondent noted, the pandemic highlighted the potential benefits to FQHCs of receiving capitated payments, which provide a constant revenue stream even when services and FFS payments decline. By relying on FFS payments linked to visits, most FQHCs experienced significant declines in revenues. On the other hand, one health plan executive observed, medical groups and IPAs that take capitated payments will see a financial "windfall" in 2020 given reduced utilization by patients because of fears of contracting COVID-19 in the clinics and offices.

For behavioral health providers, particularly county mental health plans, the pandemic's economic impact will likely bring reduced public revenues for services at a time of increased service need. Multiple surveys of patients and providers in California and a large study from the Centers for Disease Control and Prevention (CDC) found significantly increased levels of adverse mental conditions, substance use, and suicidal ideation because of COVID-19.[35]

Once the region recovers from the pandemic's worst impacts, providers may face more difficulties moving forward. Many respondents believed that staff furloughs and new fears about virus transmission at hospitals and other sites may only worsen the region's severe shortage of health care professionals. Several respondents noted that achieving quality performance goals and pay-for-performance payments will be compromised by the decline in routine preventive care visits during the peak of the COVID-19 shelter-in-place orders.

Experts believe the crisis also has potential silver linings for lasting improvements in care delivery. Most important, as providers throughout the state came to appreciate, the adoption of telehealth occurred far more rapidly than predicted. Within just a few weeks, according to one respondent, there was a 2000% increase in the use of telehealth, including a 250% increase in remote treatment for behavioral health patients. Patients have largely favored this flexibility,

with cancellations and no-shows declining. One clinic leader noted that they will "have a hard time getting patients to come back in" to the clinic for in-person appointments once COVID recedes. Telehealth also has improved access for people with chronic conditions and those living in rural areas, at least for those with internet access. The lack of sufficient internet service and smart phones are serious barriers for some patients to access telehealth services. Furthermore, telehealth is not well suited for patients who benefit from the privacy offered by in-person visits.

More broadly, the magnitude of the testing, treatment, and prevention challenges posed by the virus reportedly forced a slow but eventually fruitful collaboration among hospitals, clinics, and county health officials, who shared best treatment practices, outlined responsibilities for testing and education and outreach, and coordinated PPE distribution.

Mitigation Efforts

A range of federal government relief efforts have helped mitigate the virus's impact. Under the federal CARES (Coronavirus Aid, Relief, and Economic Security) Act, state and local governments, as well as providers, were eligible for financial assistance to help combat the virus's spread. Fresno County received $98 million and, after setting aside $28 million for unforeseen costs, planned to spend $10 million helping providers expand telehealth services, $10 million for education and outreach, and $10 million for medical services and testing in jails.[36] In July 2020, responding to the region's worsening outbreak, Governor Newsom announced an additional $52 million in aid — taken from a total grant of $499 million issued to the state by the CDC — for San Joaquin Valley providers and prevention efforts.[37]

Finally, under the US Department of Health and Human Services Provider Relief Fund, the region's hospitals and clinics received nearly $180 million in aid. This program awarded providers assistance roughly proportional to their shares of net patient revenue related to Medicare and Medicaid. Behavioral health providers in the region reported not having as much access to these resources as hoped for. On a per capita basis, the fund provided just over $100 per San Joaquin Valley resident, well below the statewide per capita payment of $128. Because the San Joaquin Valley initially avoided high COVID caseloads, providers received little assistance from the High-Impact relief fund. Statewide, this fund has disbursed nearly $800 million, with the majority going to Los Angeles County.

Issues to Track

- Will the San Joaquin Valley be successful in diversifying economically and reducing the large share of people living in poverty? How will expected state budget shortfalls driven by the pandemic affect Medi-Cal, which covers almost half of the region's residents?
- Will the larger hospitals and systems continue to perform well financially? Will the financial struggles of district hospitals spur more consolidation?
- How will physician and hospital alignment evolve as medical foundations take stronger root in the region? Will pressure for providers to take risk-based payment increase? How will providers develop the infrastructure and data analytics to manage risk successfully?
- How will competitive tensions over patients and resources between FQHCs and RHCs be resolved?
- Will efforts to recruit and retain physicians and other health professionals take hold? Will the region see expansion of the UCSF Fresno medical school program to a full four-year program and an increase in trainees?
- Will emerging partnerships among county mental health plans, managed care plans, and other county agencies be sustained? How will these partnerships affect those with mental illness or SUDs?
- Will telehealth be integrated into delivery of routine care after the pandemic and improve access to care for some services?
- What will be the long-term impacts of the COVID-19 pandemic on the health and socioeconomic disparities in the region?

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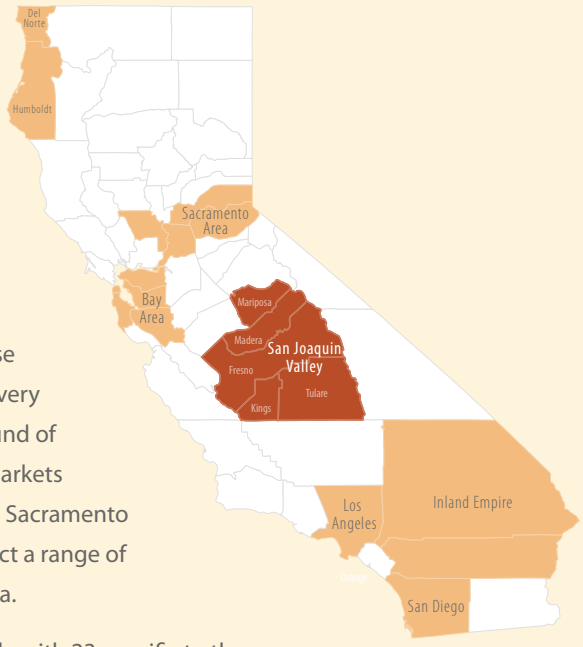
Background on Regional Markets Study: San Joaquin Valley

Between March and September 2020, researchers from Blue Sky Consulting Group conducted interviews with health care leaders in Fresno, Kings, Madera, Mariposa, and Tulare Counties in the San Joaquin Valley region of California to study the market's local health care system. The market encompasses the Census Bureau's metropolitan statistical areas of Fresno, Hanford-Corcoran, Madera, and Visalia.



The San Joaquin Valley 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. 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 23 specific to the San Joaquin Valley 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 AUTHORS

Len Finocchio, DrPH, principal consultant, and James Paci, JD, MPP, policy analyst, are with **Blue Sky Consulting Group**, a firm that helps government agencies, nonprofit organizations, foundations, and private-sector clients tackle complex policy issues with nonpartisan analytical tools and methods.

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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.