

California Workers' Compensation Aggregate Medical Payment Trends

Updated through Calendar Year 2020

Released | September 2021



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Report Summary: California Workers' Compensation Aggregate Medical Payment Trends in Calendar Year (CY) 2020

General Trends in the Medical Payments and Transactions in CY2020

- Overall medical payments declined significantly, largely driven by a sharp drop in the number of claims during the COVID-19 pandemic.
- Average medical payment per claim and the number of transactions per claim started to increase despite the continuous declines in prior years, potentially due to a decrease in the number of smaller medical-only claims in 2020.
- Utilization of telehealth services increased sharply, in particular, during the pandemic.

Fastest Growing Physician Services Procedures and Therapeutic Group

- Physical Medicine and Rehabilitation procedures continued to grow and are the fastest growing physician services.
- Use of Analgesics Anti-Inflammatory increased more significantly than that of any other therapeutic groups.

Opioid and Physical Medicine Utilization and Costs

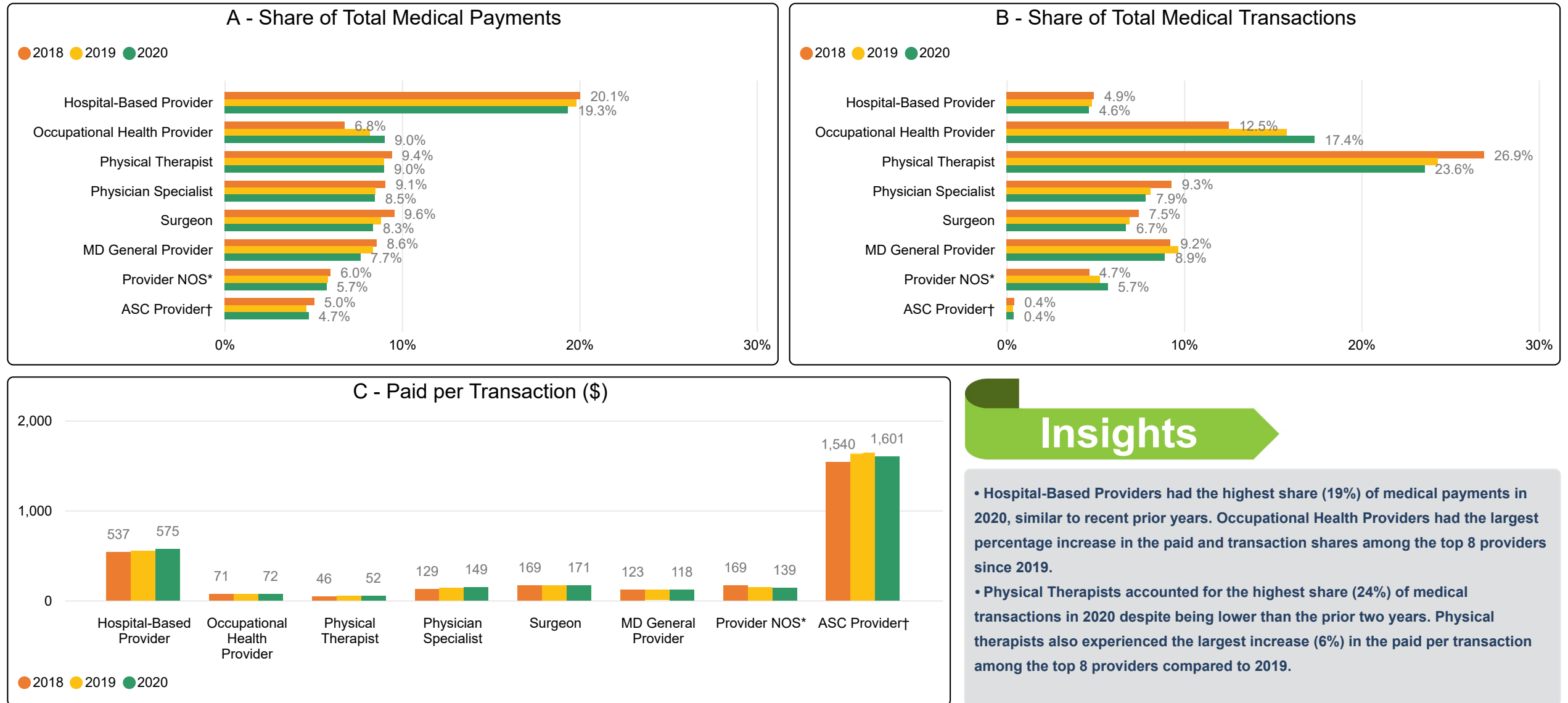
- The share of claims that involve opioid prescriptions continued to decrease. Suburban and rural areas have seen higher shares of claims involving opioid prescriptions, while urban areas generally have lower shares.
- On the contrary, the share of claims that involve physical medicine services increased steadily. Urban areas had a higher share of claims involving physical medicine services, while more suburban and rural areas had lower shares.

Note: COVID-19 claims are excluded from CY2020 data.

Summary Data

CY2020	% Change CY2019 - CY2020
\$1.8B Medical Payments	-9.4%
559K Number of Claims	-14.5%
13M Paid Medical Transactions	-11.4%
\$139 Paid per Transaction	2.2%
\$3,198 Paid per Claim	5.9%
23 Transactions per Claim	3.6%

Report 1 – Medical Payments and Transactions by Leading Provider Types

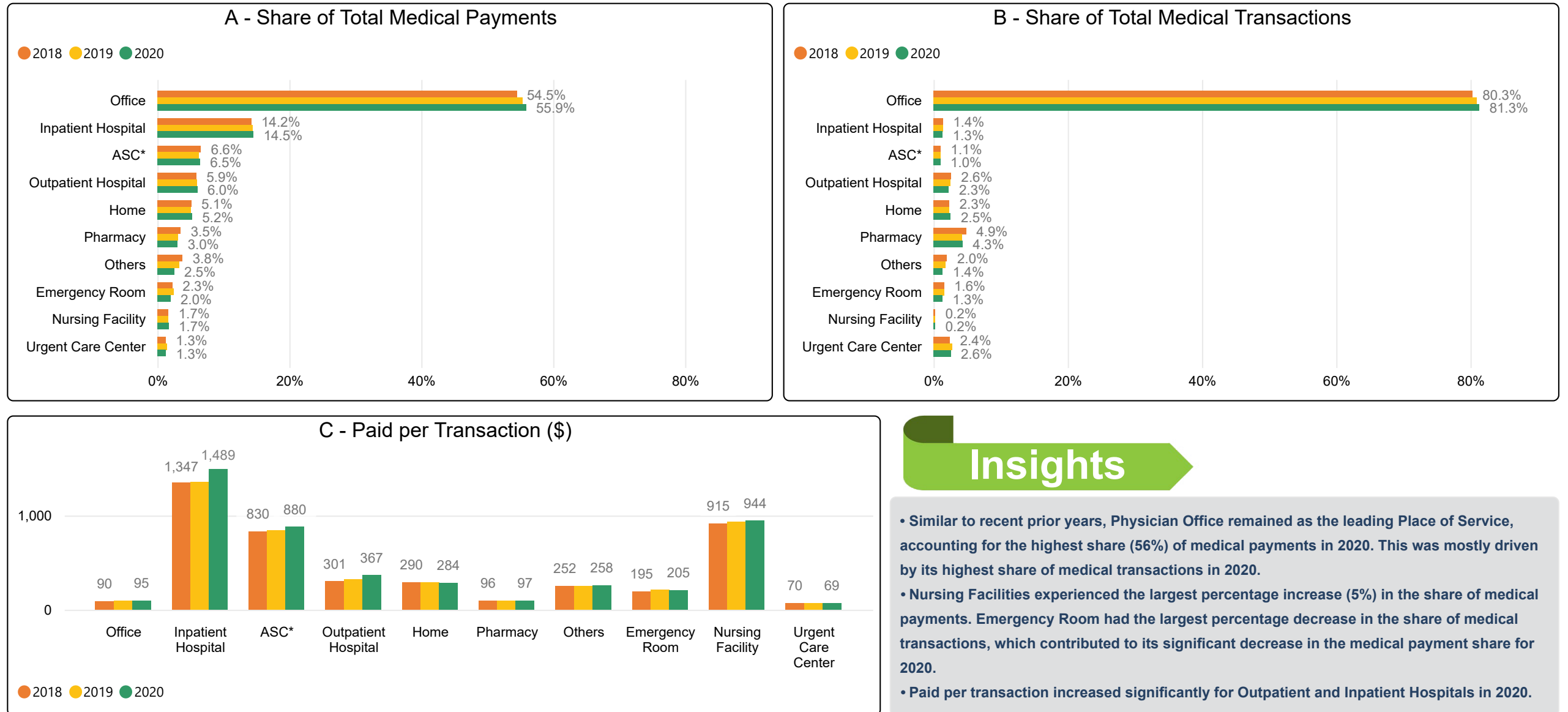


* NOS - Not Otherwise Specified. Taxonomy Code Reported as 174400000X.

† ASC - Ambulatory Surgery Center

Note: See Appendix for more information on methodology and updates to this report.

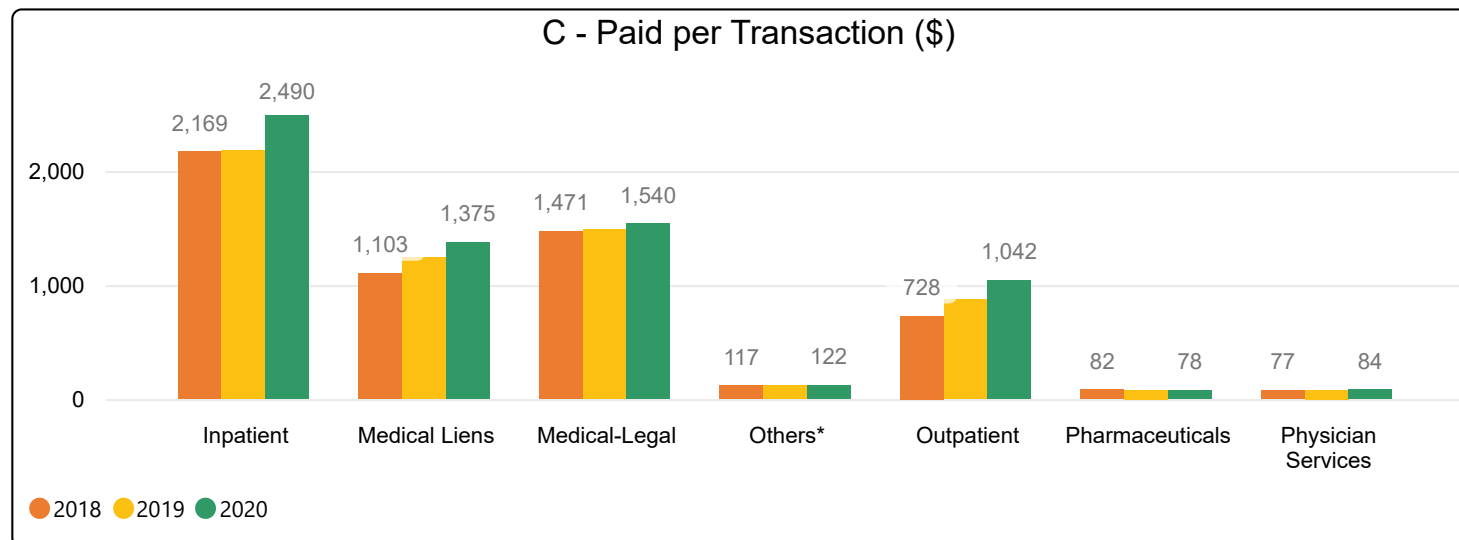
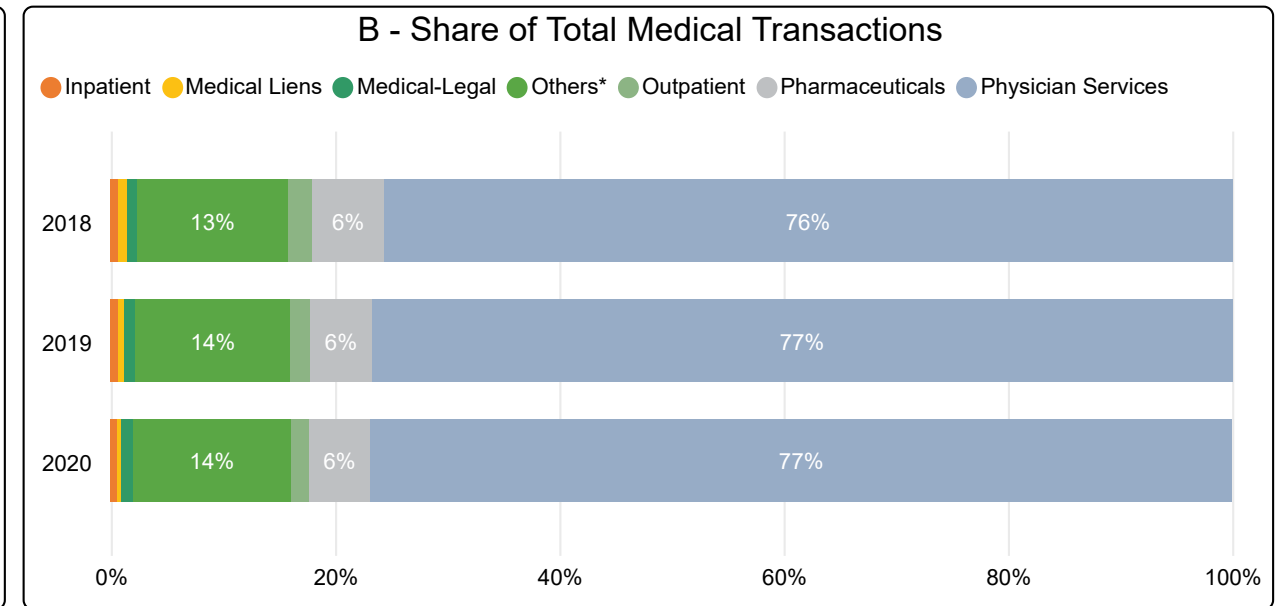
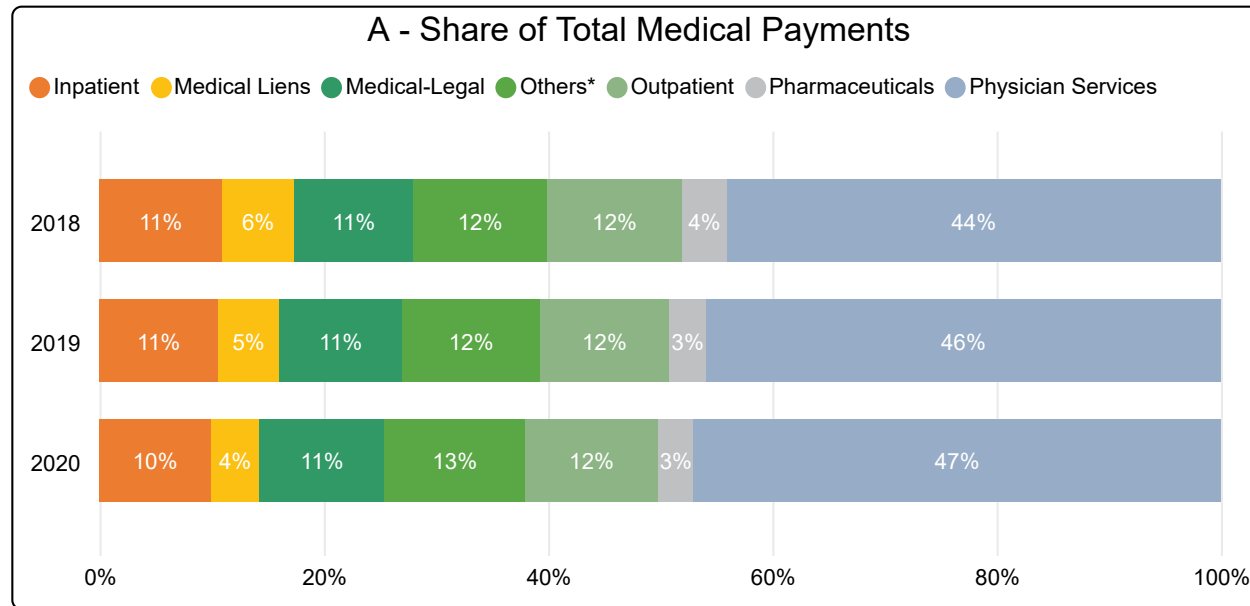
Report 2 – Medical Payments and Transactions by Place of Service (Top 10)



* ASC - Ambulatory Surgery Center

Note: See Appendix for more information on methodology and updates to this report.

Report 3 – Medical Payments and Transactions by Procedure Type



Insights

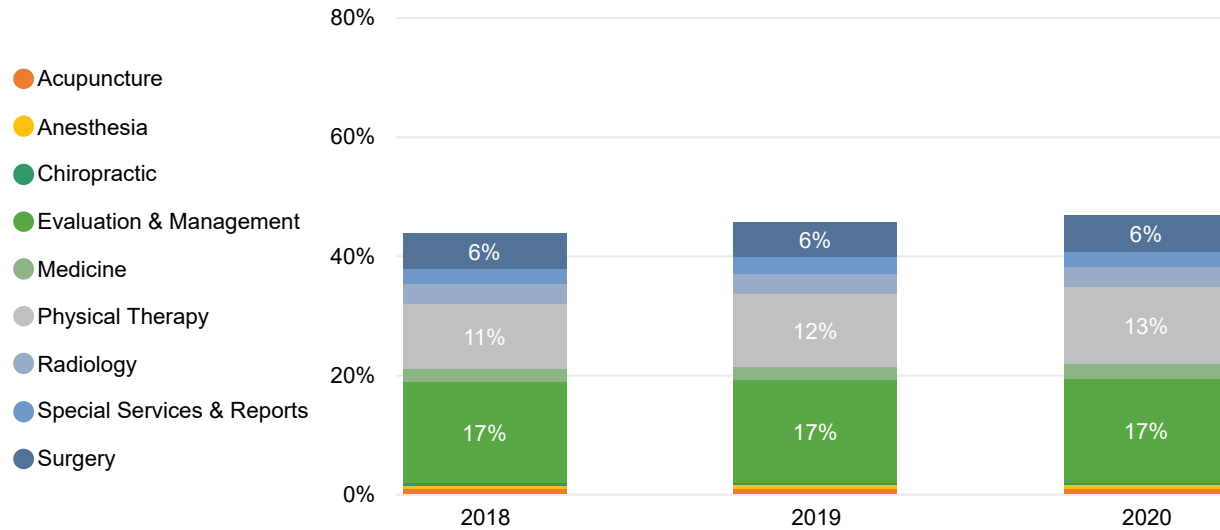
- The share of payments for Medical Liens and Pharmaceuticals decreased significantly by about 33% and 21%, respectively, from 2018 to 2020. Key drivers of the decrease in Pharmaceutical payment share include legislation and policies intended to restrict inappropriate prescribing, use of CURES† database to monitor prescriptions of controlled substances and anti-fraud efforts.
- The paid per transaction increased for most service types except for Pharmaceuticals. Despite decreases in the share of transactions for Outpatient and Inpatient care, their average payment per transaction had a large increase. These patterns partly reflect the impacts of the pandemic and the shelter-in-place orders.

* Others includes Health Care Procedure Code System (HCPCS) codes, Dental and Copy services, and Pathology and Laboratory testing.

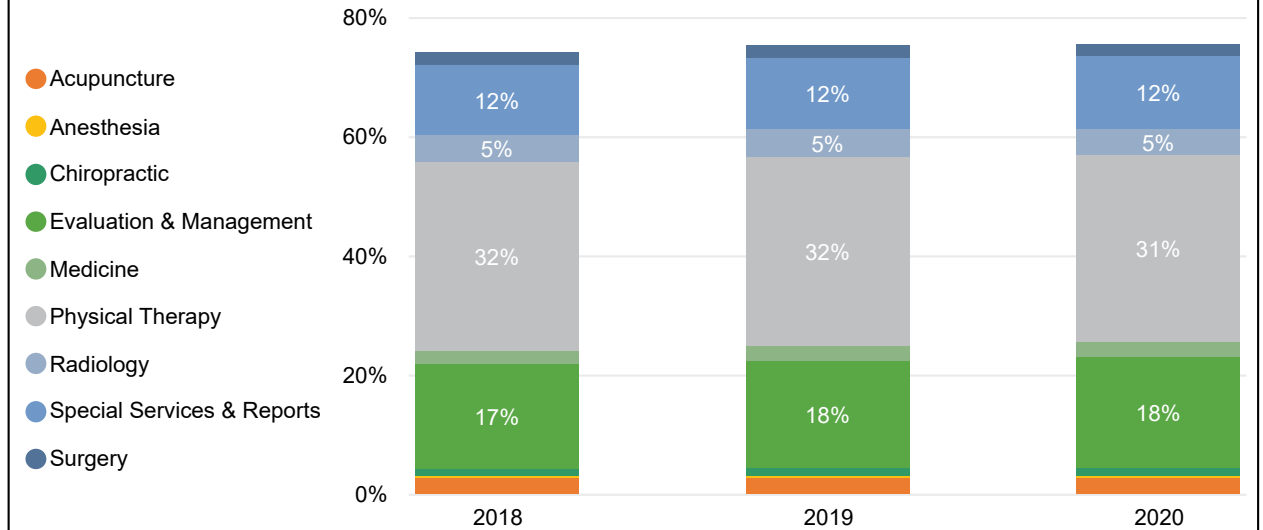
† CURES - Controlled Substance Utilization Review and Evaluation System.

Report 4 – Medical Payments and Transactions for Physician Services

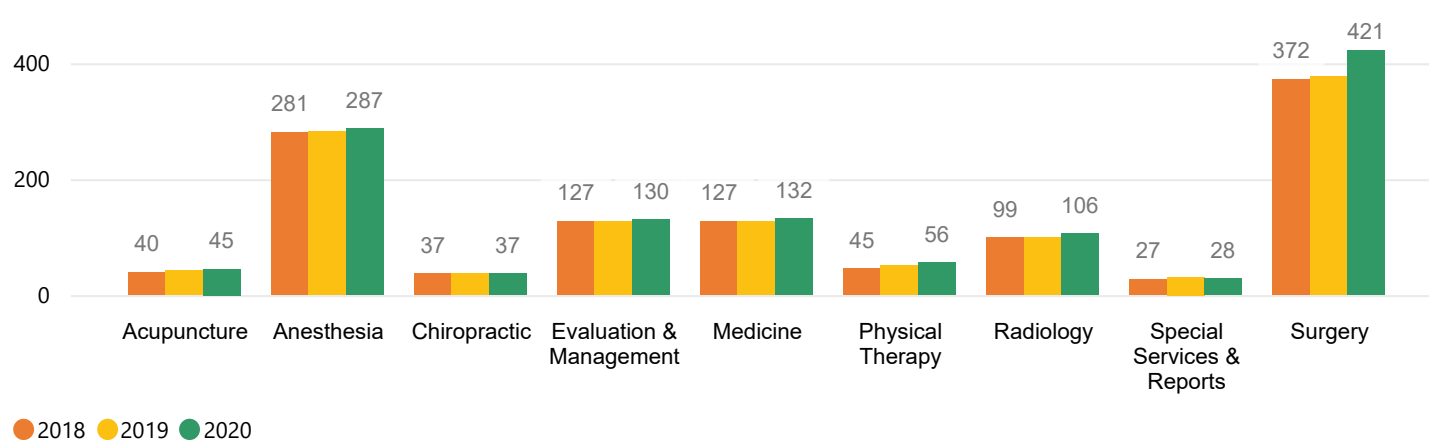
A - Share of Total Medical Payments



B - Share of Total Medical Transactions



C - Paid per Transaction (\$)

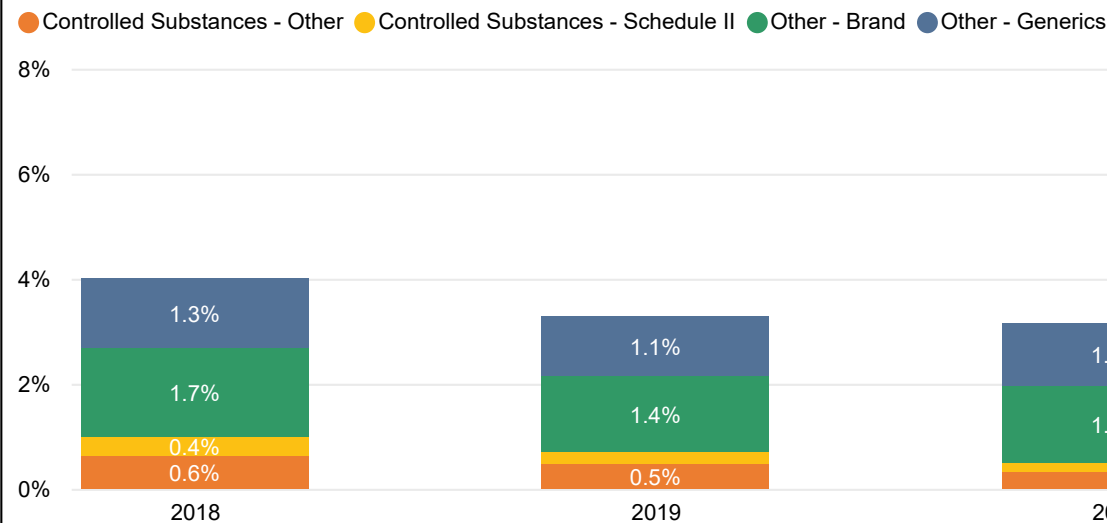


Insights

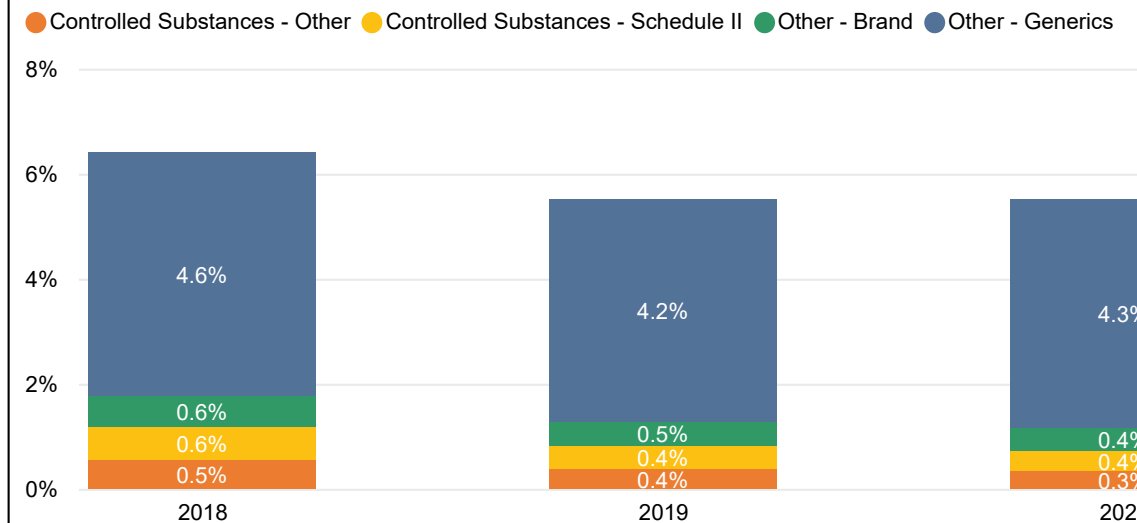
- Physical Therapy services experienced the largest percentage increase in the share of medical payments in 2020 compared to the prior two years. The increased share of medical payments for Physical Therapy was driven mostly by increases in the paid per transaction.
- The paid per transaction for Surgery increased significantly in 2020, potentially indicative of more complex surgeries performed on active claims in 2020 than prior years associated with the impact of the pandemic.

Report 5 – Medical Payments and Transactions for Pharmaceuticals

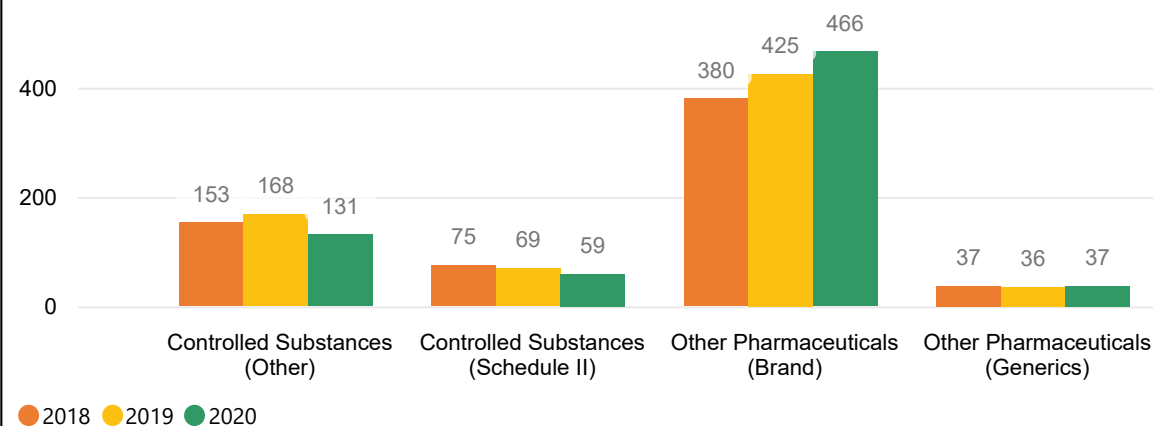
A - Share of Total Medical Payments



B - Share of Total Medical Transactions



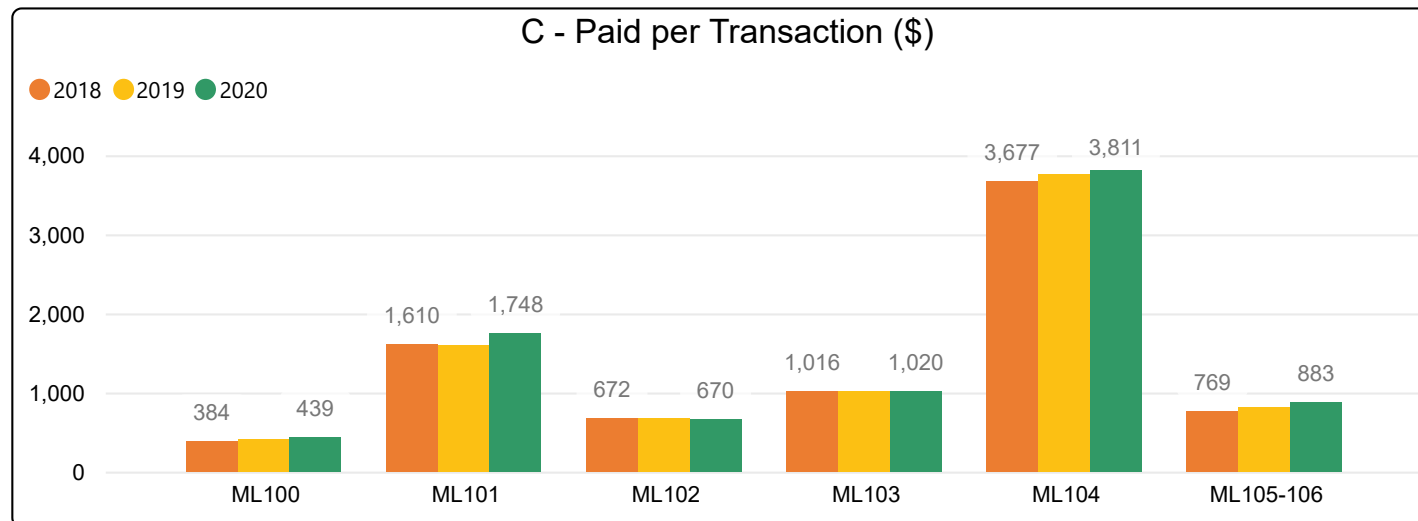
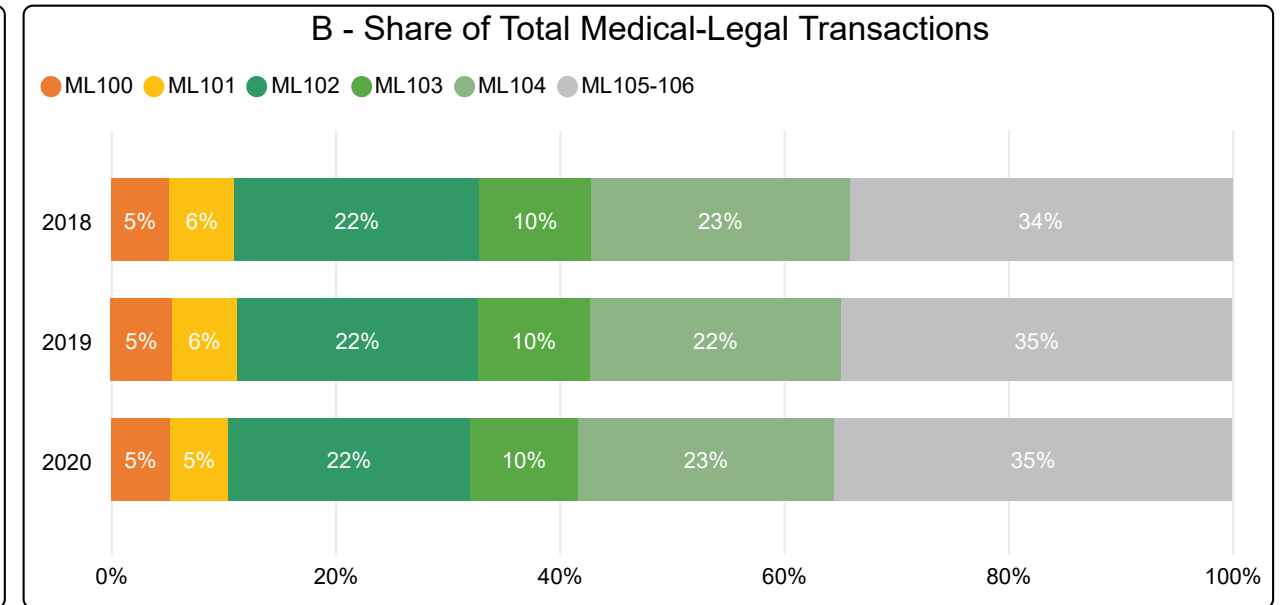
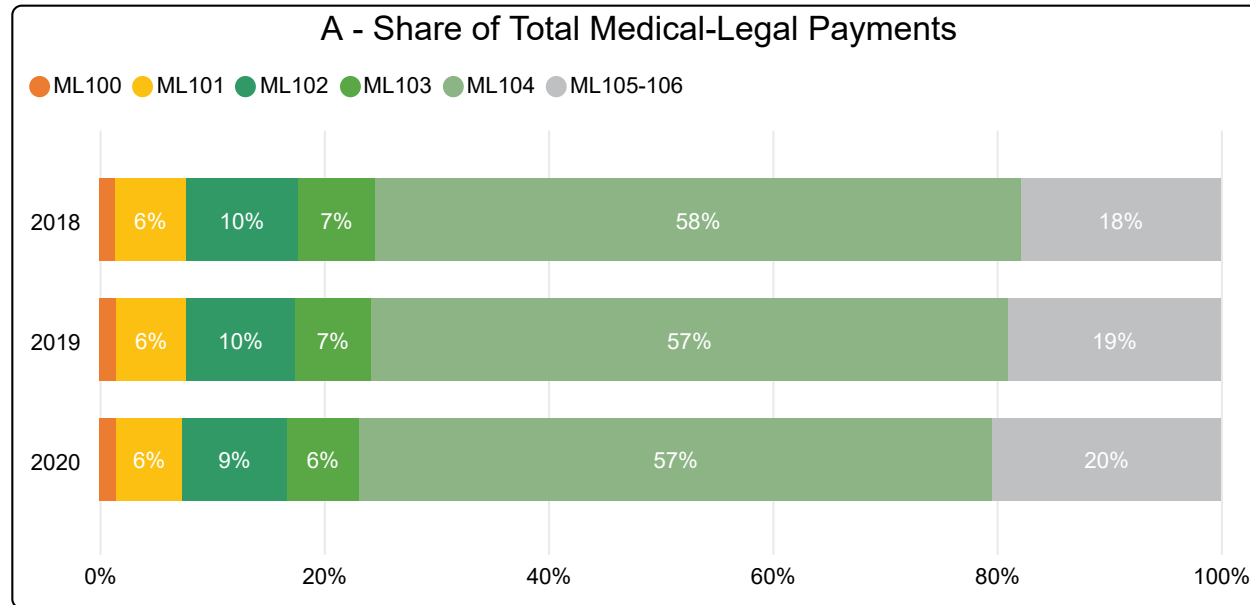
C - Paid per Transaction (\$)



Insights

- The share of medical payments for Pharmaceuticals continued to decline. The share of payments for Controlled Substances, in particular, dropped from 1% in 2018 to 0.5% in 2020.
- Paid per transaction for brand name drugs increased significantly (23%) in 2020 compared to the prior two years, while that for generics stayed about the same. However, since brand name drugs accounted for only 8% of all prescriptions, the overall paid per prescription decreased in 2020.
- The decreases in both Pharmaceutical transactions and overall paid per transaction were due to: (1) reduction in opioid prescribing (see Report 8 for more details); (2) the continued effects of Senate Bill No. 863 provisions including independent medical review; (3) anti-fraud efforts; and (4) the Drug Formulary, which went into effect January 1, 2018.

Report 6 – Medical Payments and Transactions for Medical-Legal Evaluations



Note: See Appendix for descriptions of Medical-Legal procedure codes.

Insights

- The share of total medical payments and transactions remained stable in 2020 for all Medical-Legal services except for ML105-106 (testimony and supplemental evaluations), which increased slightly.
- The paid per transaction for ML105-106 and ML100 (missed appointment) had the largest percentage increase (15% and 14%, respectively) in the past two years.

Report 7 – Fastest Growing Procedure Code Sets and Therapeutic Groups

A - Fastest Growing Procedure Code Sets, CY2020 vs. CY2019

Growth Rank	Procedure Code Set	Procedure Code Range	Percentage Point Change in Medical Payment Share	Medical Payment Share (CY2020)	Medical Transaction Share (CY2020)	Paid per Transactions (\$) (CY2020)
1	Physical Medicine and Rehabilitation	97010-97799	0.81	27.15%	40.66%	\$56
2	Preventive Medicine Services	99381-99429	0.80	0.89%	0.14%	\$517
3	Surgical Procedures on the Musculoskeletal System	20005-29999	0.48	9.27%	1.49%	\$522
4	Non-Face-to-Face Services	99441-99452	0.37	0.40%	0.50%	\$67
5	Other Evaluation & Management Services*	99217-99499	0.32	1.67%	0.76%	\$186
6	Prolonged Services	99354-99416	0.14	1.78%	1.07%	\$139
7	Psychiatry	90785-90899	0.07	1.14%	0.68%	\$141
8	Surgical Procedures†	10021-69990	0.03	0.87%	0.36%	\$202
9	Home Health Services and Medication Therapy Management	99500-99607	0.01	0.12%	0.05%	\$196
10	Acupuncture	97810-97814	0.00	1.89%	3.52%	\$45
Total				45.18%	49.24%	

B - Fastest Growing Therapeutic Groups, CY2020 vs. CY2019

Growth Rank	Therapeutic Group	Therapeutic Group Code	Percentage Point Change in Medical Payment Share	Pharmaceutical Payment Share (CY2020)	Pharmaceutical Transaction Share (CY2020)	Paid per Transactions (\$) (CY2020)
1	Analgesics Anti-Inflammatory	66	5.68	21.44%	32.51%	\$52
2	Musculoskeletal Therapy Agents	75	0.56	4.92%	6.71%	\$58
3	Anticoagulants	83	0.53	2.28%	0.41%	\$438
4	Dermatologicals	90	0.51	16.14%	7.87%	\$161
5	Ulcer Drugs	49	0.46	7.30%	5.21%	\$110
6	Migraine Products	67	0.32	1.07%	0.28%	\$303
7	Antipsychotics Antimanic Agents	59	0.21	1.65%	0.45%	\$285
8	Endocrine and Metabolic Agents - Misc	30	0.21	1.05%	0.07%	\$1,256
9	Antidiabetics	27	0.19	2.45%	0.47%	\$413
10	Assorted Classes	99	0.17	0.27%	0.06%	\$374
Total				58.57%	54.03%	

Insights

• The procedure code set related to **Physical Medicine and Rehabilitation** continued to be the greatest gainer between 2019 and 2020. These procedures received the largest share (27%) of medical payments for Physician Services.

• **Analgesics Anti-Inflammatory** were the fastest-growing therapeutic group in 2020. This therapeutic group received the largest share of medical payments (21%) and prescriptions (33%) among all Pharmaceuticals. Anti-inflammatory drugs also had a significant increase in the paid per transaction from \$38 in 2019 to \$52 in 2020.

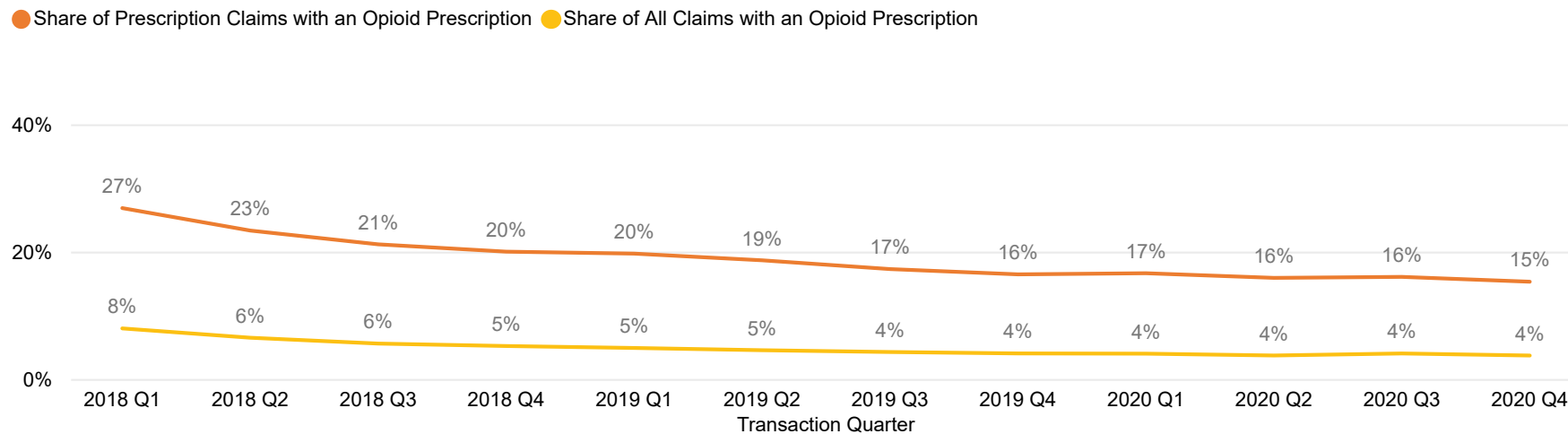
* Other Evaluation & Management Services exclude procedure codes 99281-99288, 99354-99360, 99415-99416 and 99381-99452.

† Surgical Procedures exclude procedure codes 10030-29999 and 61000-64999.

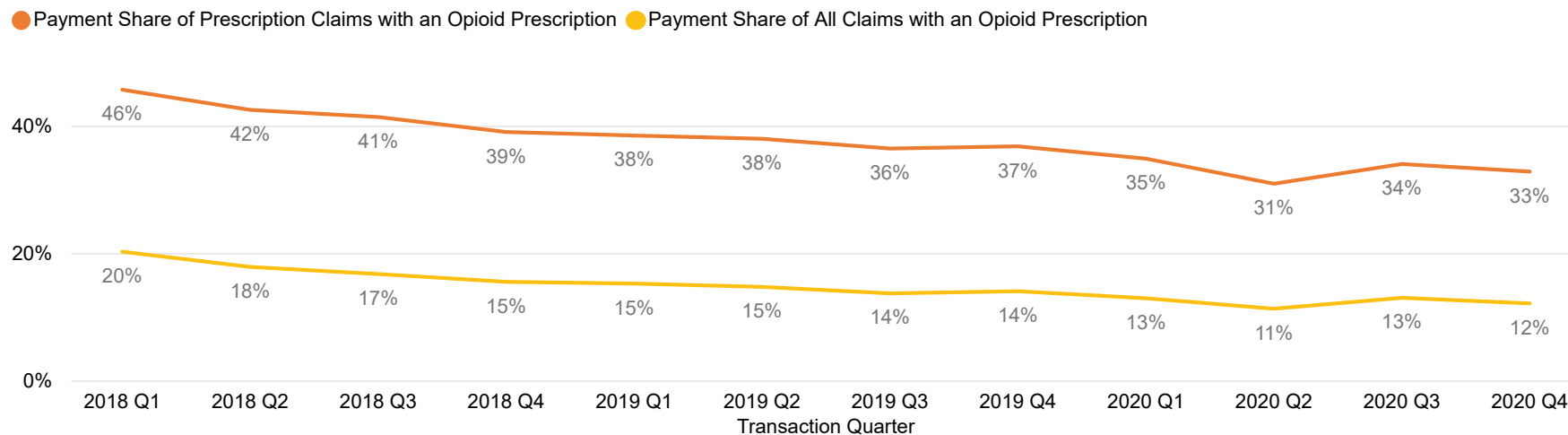
Note: See Appendix for more information on updates to Report 7A.

Report 8 – Prescriptions and Payments for Opioids (2018 - 2020)

A - Claims with Any Opioid Prescription



B - Medical Payments for Claims with Any Opioid Prescription



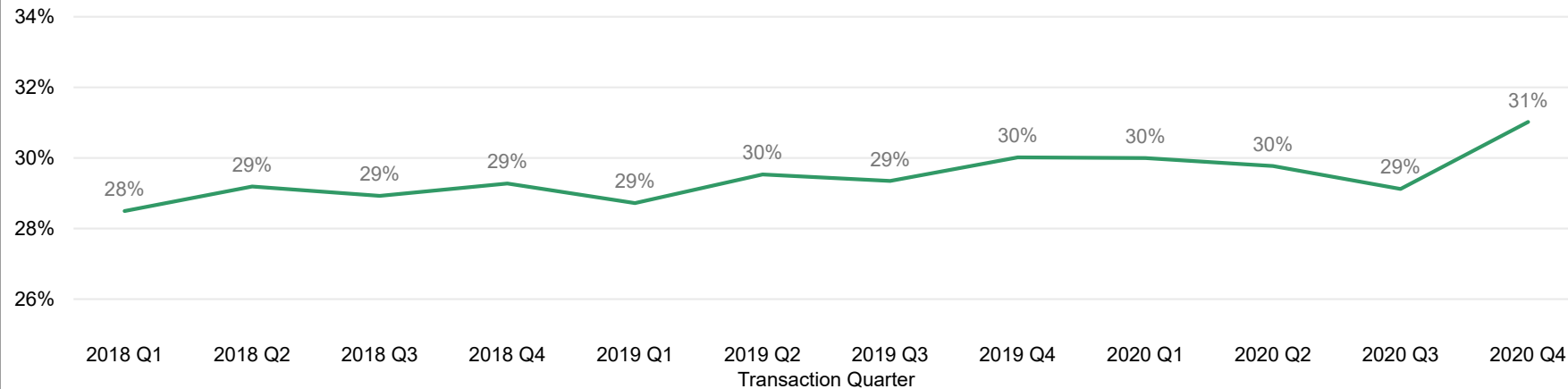
Note: See Appendix for more information on the methodology.

Insights

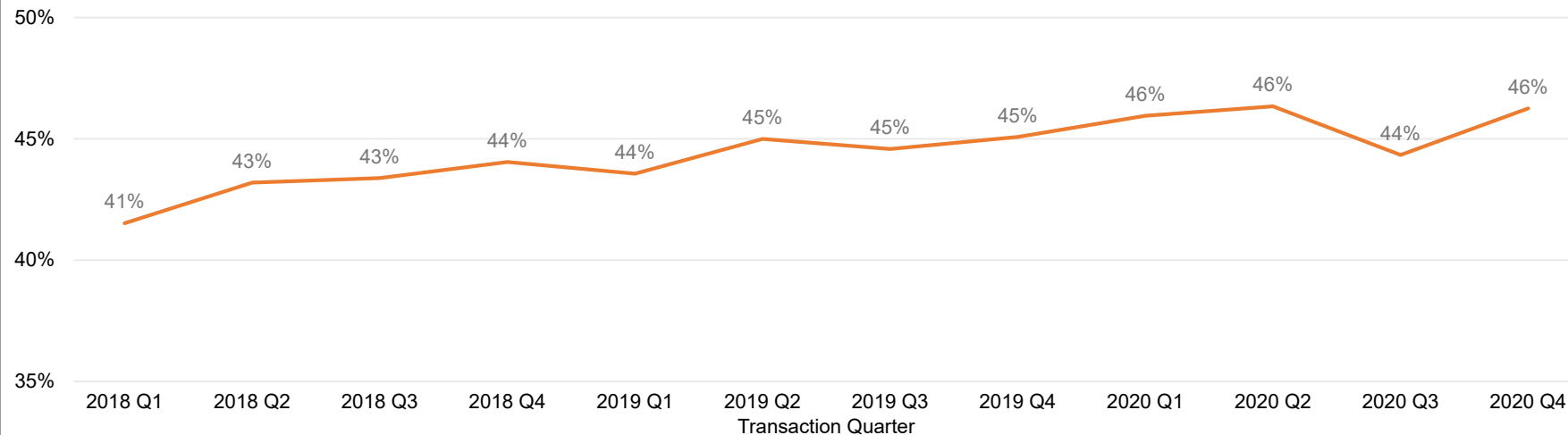
- The share of all claims with at least one opioid prescription declined significantly by 54% from early 2018 to late 2020. Even among claims with drug prescriptions, those with at least one opioid prescription declined by about 43%.
- The share of medical payments for claims involving opioid prescriptions also decreased steadily by 40% in the same time period; among claims with drug prescriptions, the payment share decreased by 28%.

Report 9 – Transactions and Payments for Physical Medicine (2018 - 2020)

A - Share of Claims Involving Physical Medicine Over All Claims



B - Medical Payment Share for Claims Involving Physical Medicine



Note: Physical Medicine procedures include physical therapy, acupuncture and chiropractic services.

See Appendix for more information on the methodology.

Insights

- The share of overall claims involving physical medicine increased by 9% from early 2018 to the end of 2020. Prior WCIRB research showed that early use of physical therapy is associated with a lower likelihood of opioid use and lower doses of opioid use among soft tissue claims in the workers' compensation system. The research finding indicated that use of physical medicine might have been substituting for opioid prescriptions.
- The share of medical payments for claims involving physical medicine also increased steadily by 11% in the same time period. The drop in the payment share in the third quarter of 2020 was largely driven by a decrease in the share of claims involving physical medicine services.

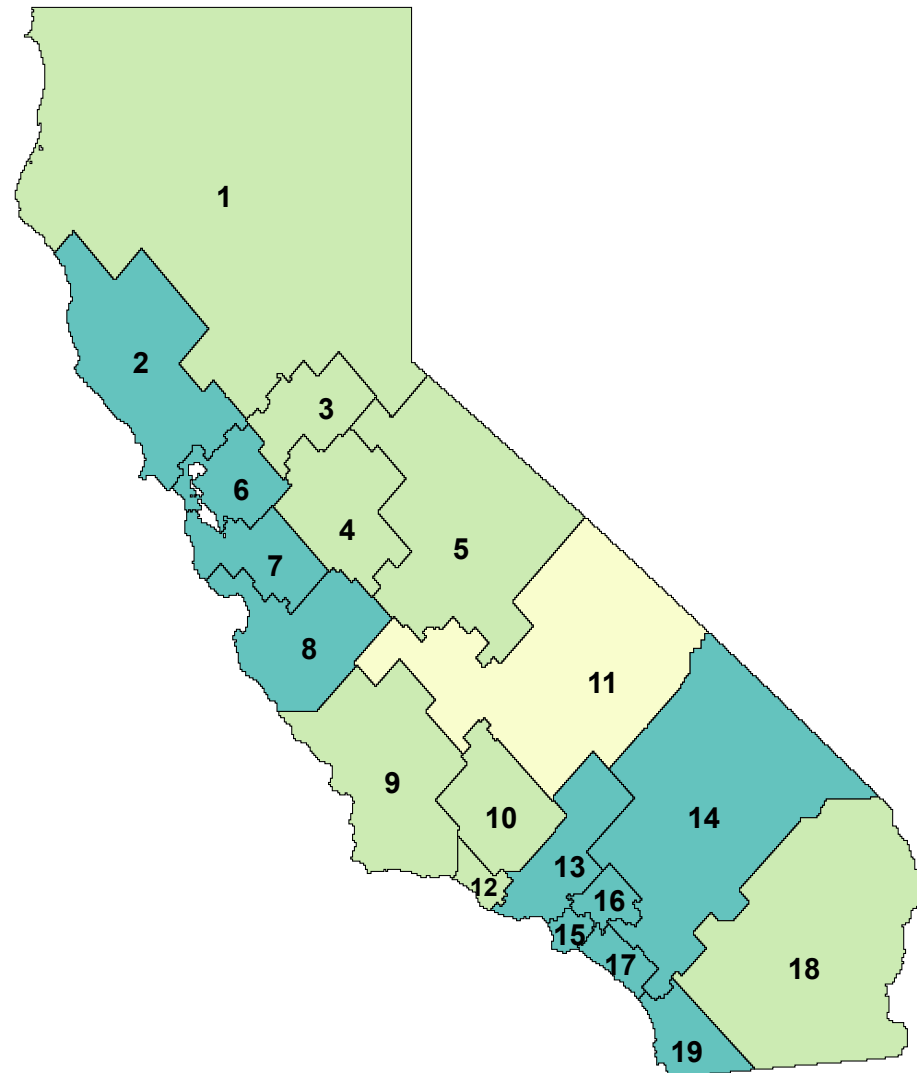
Report 10 – Regional Variations in the Share of Claims Involving Opioid Prescriptions (2018*)

Share of Claims Involving Opioid Prescriptions

- 5.0% - 7.5%
- 7.5% - 10.0%
- 10.0% - 12.5%

Region

- 01 - Yuba City / Redding / Far North
- 02 - Sonoma / Napa
- 03 - Sacramento
- 04 - Stockton / Modesto / Merced
- 05 - Fresno / Madera
- 06 - Bay Area
- 07 - Peninsula / Silicon Valley
- 08 - Santa Cruz / Monterey / Salinas
- 09 - SLO / Santa Barbara
- 10 - Bakersfield
- 11 - Tulare / Inyo
- 12 - Ventura
- 13 - Santa Monica / San Fernando Valley
- 14 - San Bernardino / West Riverside
- 15 - LA / Long Beach
- 16 - San Gabriel Valley / Pasadena
- 17 - Orange County
- 18 - Imperial / Riverside
- 19 - San Diego



Insights

- Overall, the share of claims involving opioid prescriptions continued to decline across all regions of California in 2018 compared to 2017.
- The Tulare / Inyo area had the highest share of claims involving opioid use in 2018. Conversely, the Los Angeles Basin and Peninsula / Silicon Valley areas had the lowest shares, and the only regions with shares below 6%.
- Rural and suburban areas tend to have a higher share of claims involving opioid use, while urban areas have lower shares, which contrasts with the distribution of share of physical medicine claims by region in Report 11.

* The latest calendar year that the WCIRB has the complete geo-located claims in the medical transaction data.

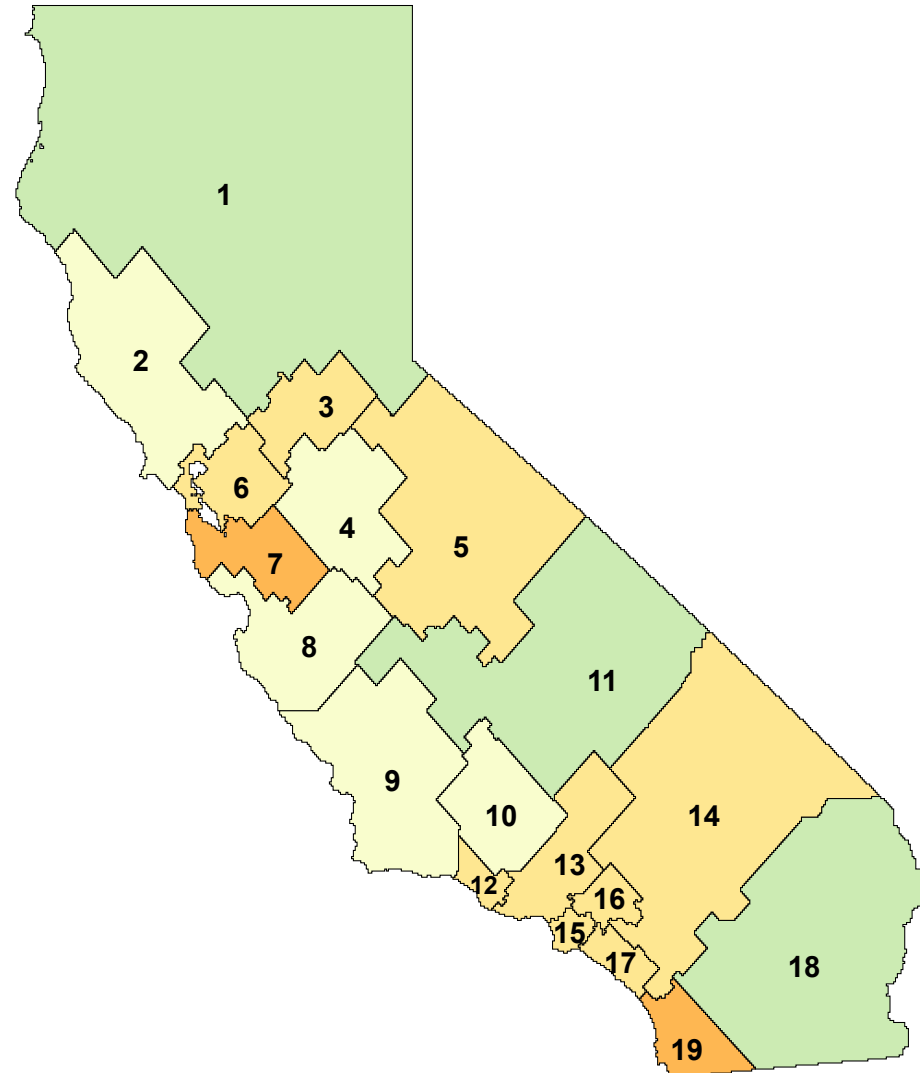
Report 11 – Regional Variations in the Share of Claims Involving Physical Medicine Services (2018*)

Share of Claims Involving Physical Medicine Services

- 25.0% - 30.0%
- 30.0% - 35.0%
- 35.0% - 40.0%
- 40.0% - 45.0%

Region

- 01 - Yuba City / Redding / Far North
- 02 - Sonoma / Napa
- 03 - Sacramento
- 04 - Stockton / Modesto / Merced
- 05 - Fresno / Madera
- 06 - Bay Area
- 07 - Peninsula / Silicon Valley
- 08 - Santa Cruz / Monterey / Salinas
- 09 - SLO / Santa Barbara
- 10 - Bakersfield
- 11 - Tulare / Inyo
- 12 - Ventura
- 13 - Santa Monica / San Fernando Valley
- 14 - San Bernardino / West Riverside
- 15 - LA / Long Beach
- 16 - San Gabriel Valley / Pasadena
- 17 - Orange County
- 18 - Imperial / Riverside
- 19 - San Diego



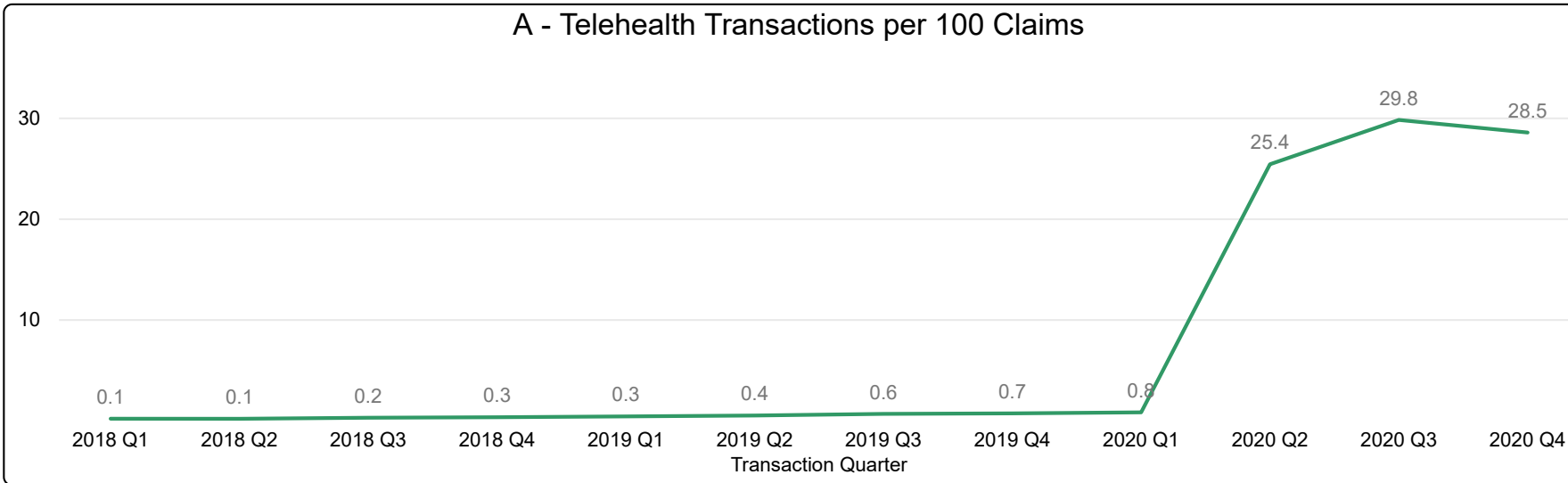
Insights

- Urban areas of California, such as Peninsula / Silicon Valley and San Diego areas, had a higher share of claims involving physical medicine services in 2018, while more suburban and rural areas had lower shares. This is in contrast to the distribution of claims involving opioid prescriptions by region in Report 10.
- The San Bernardino / West Riverside and Bakersfield region had the largest increase in the share of physical medicine claims from 2017.

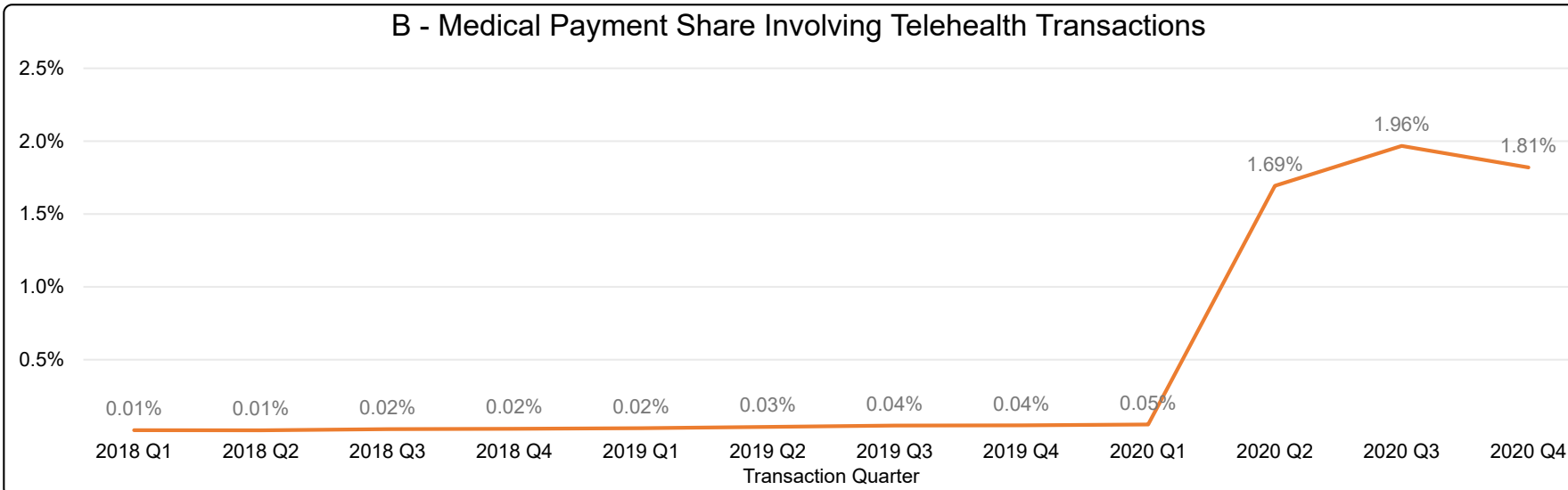
* The latest calendar year that the WCIRB has the complete geo-located claims in the medical transaction data.

Report 12 – Transactions and Payments for Telehealth Services (2018 - 2020)

A - Telehealth Transactions per 100 Claims



B - Medical Payment Share Involving Telehealth Transactions



Note: See appendix for more information on the definition of Telemedicine.

Insights

- Since the beginning of the pandemic, an expanded list of telehealth services has been adopted by the California Division of Workers' Compensation (DWC) in the Official Medical Fee Schedule during the COVID-19 public health emergency. As a result, use of telehealth services per 100 claims increased by over 32-fold from 2020Q1 to 2020Q2. The high level of utilization remained for the rest of 2020.

- Medical payment shares involving telehealth services also increased by more than 33-fold. Despite the dramatic increase in the medical payment share, telehealth services remain to account for only a small share of overall medical payments in the workers' compensation system.

Appendix

All reports:

- Based on the reported WCIRB medical transaction data with transaction dates from January 1, 2018 through December 31, 2020. The medical transaction data does not include: (a) medical payments made directly to injured workers; or (b) payments made to any known third-party who may be assigned medical management. COVID-19 claims are excluded from all Calendar Year 2020 data.

Report 1:

Provider Types are based on taxonomy codes derived from the provider identification number reported to the WCIRB medical transaction data. Based on insurer feedback, the WCIRB has re-evaluated and updated the provider type groupings for this year's report.

Report 2:

Place of Services are based on the two-digit place of service codes defined by the Centers for Medicare & Medicaid Services (CMS). Based on insurer feedback, the WCIRB has re-evaluated and updated the place of service groupings for this year's report.

Report 3:

Procedure Types are based on the primary procedure code reported in each medical transaction. Physician Services are reported with Current Procedural Terminology (CPT) Codes or Health Care Procedure Code System (HCPCS) Codes. Pharmaceuticals are reported with National Drug Codes (NDC). Outpatient Services are reported with Revenue Codes. Inpatient Services are reported with Diagnosis Related Group (DRG) Codes. Medical-Legal services are reported with ML- codes. Medical Liens are reported with MDO-/MDS- codes.

Reports 4-5:

- Denominators for the medical payment share and transaction share are for all medical procedure codes.

Report 6:

- Categories for the Medical-Legal evaluations are as follows:
 - ML100 - Missed appointment for a comprehensive or follow-up medical-legal evaluation
 - ML101 - Follow-up medical-legal evaluation
 - ML102 - Basic comprehensive medical-legal evaluation
 - ML103 - Complex comprehensive medical-legal evaluation
 - ML104 - Complex comprehensive medical-legal evaluation involving extraordinary circumstances
 - ML105-106 - Fees for medical-legal testimony or supplemental medical-legal evaluations

Report 7:

- Procedure code sets are the aggregated grouping of similar medical procedures based on the (CPT) subsections. Based on insurer feedback, the WCIRB has re-evaluated and updated the procedure code set groupings for this year's report.
- Therapeutic group codes are the higher level grouping of therapeutic classes. Denominators used for the payment and transaction shares are pharmaceutical payments and transactions.

Report 8:

- Numerators used for the claim and payment shares are based on claims with any paid opioid prescription in each quarter. Denominators are based on claims with any paid medical service or drug prescription in each quarter.

Report 9:

- Numerators used for the claim and payment shares are based on claims with any paid physical medicine service in each quarter. Denominators are based on claims with any paid medical service in each quarter.
- Zhang, J., Yu, Y., and Sabiniano, E., [Physical Medicine Treatments and Their Impact on Opioid Use and Lost Time in California Workers' Compensation](#). WCIRB, 2020.

Appendix (cont.)

Report 10:

- Claims involving opioid prescriptions were mapped to an employer's location based on the [2020 WCIRB Geo Study](#). The study located approximately 72% of all claims.
- Numerators used for the claim share are located claims with any paid opioid prescription for each region in 2018. Denominators are located claims with any paid medical service for each region in 2018.

Report 11:

- Similar to Report 10, claims involving physical medicine services were mapped to an employer's location based on the [2020 WCIRB Geo Study](#). Numerators used for the claim share are located claims with any paid physical medicine service for each region in 2018. Denominators are located claims with any paid medical service for each region in 2018.

Report 12:

- Pre-pandemic telehealth services are defined as any procedures with Place of Service 02 or modifier 95 (excluding Special Services & Reports, Medical Legal, Copy Services, and Interpreter Services). For telehealth services on or after March 1, 2020, only services from the CMS list of telehealth services are included pursuant to the Division of Workers' Compensation (DWC) rules.

Conditions and Limitations

The WCIRB completed this study using medical transaction data, which reflects approximately 92% of the experience of insured employers in California. The following should be noted:

1. This report reflects a compilation of individual insurer submissions of medical transaction data to the WCIRB. While an insurer's medical data submissions are regularly checked for consistency and comparability with other data submitted by the insurer, as well as with other insurers' medical data submissions, the source information underlying each insurer's data submission is not verified by the WCIRB.
2. This study is based solely on the experience of insured employers. No self-insured employer experience is reflected in the study.

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1221 Broadway, Suite 900
Oakland, CA 94612
888.CA.WCIRB (888.229.2472)