# An Evaluation of the Proposed USC Health System / Methodist Hospital of Southern California

# Affiliation

Richard M. Scheffler, Ph.D.

Daniel R. Arnold, Ph.D.

April 22, 2022

# Contents

1. QUALIFICATIONS AND SCOPE OF THE REPORT	7
1.1 Scope of the Report.	7
1.2 Qualifications	8
1.3 Our Analytic Approach	9
1.4 Outline of the Report	10
2. SUMMARY OF OPINIONS	11
3. OVERVIEW OF THE MARKET AND THE PROPOSED TRANSACTION	16
3.1 Terms of the Transaction	16
3.2 Reasons for the Transaction	17
3.3 San Gabriel Valley	18
3.3.1 Demographics	20
3.3.2 Health Access and Utilization	25
3.3.3 General Acute Care Hospitals in the SGV	31
4. METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	37
4.1 Utilization Trends	37
4.2 Payer Mix	39
4.3 Financial Profile	40
4.4 Quality Indicators and Performance Ratings	42
5. USC HEALTH SYSTEM	43
5.1 Utilization Trends	43
5.2 Payer Mix	45
5.3 Financial Profile	45
5.4 Quality Indicators and Performance Ratings	47
6. COMPETITIVE IMPACT	49
6.1 Market Overview	49
6.1.1 Product Market	49
6.1.2 Geographic Market	50
6.2 Horizontal Market Analysis	51
6.2.1 MHSC, Keck, and Verdugo PSAs and SSAs	52
6.2.2 Pre- and Post-Merger HHIs	

6.2.3 Diversion Analysis	65
6.2.4 Horizontal Market Conclusion	81
6.3 Cross-Market Analysis	81
6.3.1 Cross-Market Theory	82
6.3.2 Cross-Market Empirical Evidence	82
6.3.3 Health Plan Interviews	83
6.3.4 Willingness to Pay	84
6.3.5 High Prices	88
6.3.6 Cross-Market Conclusion	89
6.4 Competitive Impact Conclusion	90
7. HEALTH CARE IMPACT	91
7.1 Health Disparities in Access to Care	91
7.2 Emergency Services	94
7.3 Reproductive Services	97
7.4 LGBT+ Services	101
7.5 Mental Health Services	103
7.6 Maternity and Obstetric Services	106
7.7 Access for Vulnerable Populations Including Medi-Cal Members	108
7.8 Staffing and Employee Rights	110
7.9 Community Benefit and Charity Care	112
7.10 Health Impact Conclusion	113
8. EFFICIENCIES AND BENEFITS	117
9. CONCLUSION	119

List of Tables	
Table 3.1 Race/Ethnicity – MHSC Service Area and LA County	
Table 3.2 Languages Spoken at Home – MHSC Service Area and LA County	.22
Table 3.3 Educational Attainment of Persons 25 Years and Older – MHSC Service Area and L County	
Table 3.4 Household Income – MHSC Service Area and LA County	.24
Table 3.5 SGV Demographics	.25
Table 3.6 Health Access Indicators for the SGV	.26
Table 3.7 Adult Health Indicators for the SGV	.27
Table 3.8 Senior Health Indicators for the SGV	.28
Table 3.9 Summary of Health Access and Utilization Indicators	.29
Table 3.10 SGV Health Care Access	.30
Table 3.11 GAC Beds in the SGV	.33
Table 3.12 Low Acuity Commercial Discharges for Patients Residing in the SGV, 2018-2019	.34
Table 3.13 High Acuity Commercial Discharges for Patients Residing in the SGV, 2018-2019.	.35
Table 3.14 Very High Acuity Commercial Discharges for Patients Residing in the SGV, 2018-2019	
Table 4.1 MHSC Utilization Trends and Service Volumes, 2016-2020	
Table 4.2 MHSC Payer Mix by Discharges, 2016-2020	
Table 4.3 MHSC Financial Profile, 2016-2020	
Table 4.4 MHSC's Procedure and Conditions Scores, 2021	.42
Table 4.5 MHSC's Patient Experience Scores, 2021	.43
Table 5.1 Keck Utilization Trends and Service Volumes, 2016-2020	.44
Table 5.2 Keck Payer Mix Using Discharges, 2016-2020	.45
Table 5.3 Keck Financial Profile, 2016-2020.	.46
Table 5.4 Keck's Nationally Ranked Adult Specialties, 2021	.47
Table 5.5 Keck's Procedure and Conditions Scores, 2021	.48
Table 5.6 Keck's Patient Experience Scores, 2021	.48
Table 6.1 Commercial Market Shares in the SGV – Hospital Level, 2018-2019	.58

Table 6.2 Commercial Market Shares in the SGV West of Covina - Hospital Level, 2018-2019

Table 6.3 Commercial Market Shares in the SGV West of the 605 Freeway – Hospital Le 2018-2019	
Table 6.4 Commercial Market Shares in the SGV – High Acuity Services, 2018-2019	62
Table 6.5 Commercial Market Shares in the SGV West of Covina – High Acuity Service 2019	*
Table 6.6 Commercial Market Shares in the SGV West of the 605 Freeway – High Acuit Services, 2018-2019	•
Table 6.7 Commercial Diversion Estimates from MHSC, 2018-2019	68
Table 6.8 Commercial Diversion Estimates from Keck, 2018-2019	69
Table 6.9 Commercial Diversion Estimates from Verdugo, 2018-2019	71
Table 6.10 Medi-Cal Diversion Estimates from MHSC, 2018-2019	73
Table 6.11 Medi-Cal Diversion Estimates from Keck, 2018-2019	74
Table 6.12 Medi-Cal Diversion Estimates from Verdugo, 2018-2019	76
Table 6.13 Commercial Diversion Estimates from MHSC for High Acuity Services, 201	
Table 6.14 Commercial Diversion Estimates from Keck for High Acuity Services, 2018-	
Table 6.15 Hospital-Level Willingness to Pay Estimates, 2018-2019	
Table 6.16 System-Level Willingness to Pay Estimates, 2018-2019	
Table 6.17 System-Level Willingness to Pay Estimates, 2018-2019	
Table 6.18 Hospital Prices, 2019	
Table 7.1 SGV Emergency Commercial Discharges, 2018-2019	
Table 7.2 SGV Emergency Medi-Cal Discharges, 2018-2019	95
Table 7.3 SGV ED Visits, 2018-2019	96
Table 7.4 SGV Commercial Reproductive Discharges, 2018-2019	99
Table 7.5 SGV Medi-Cal Reproductive Discharges, 2018-2019	100
Table 7.6 SGV Commercial Mental Health Discharges, 2018-2019	104
Table 7.7 SGV Medi-Cal Mental Health Discharges, 2018-2019	105
Table 7.8 SGV Commercial Maternity and Obstetrics Discharges, 2018-2019	106
Table 7.9 SGV Medi-Cal Maternity and Obstetrics Discharges, 2018-2019	107
Table 7.10 SGV Medi-Cal Discharges, 2018-2019	110

List of Figures	
Figure 3.1 LA County's Service Planning Areas (SPAs)	19
Figure 3.2 Methodist's Hospital Service Area, 2018	20
Figure 3.3 GAC Hospitals in the SGV	32
Figure 6.1 MHSC's PSA and SSA – Commercial Discharges, 2018-2019	52
Figure 6.2 Keck's PSA and SSA – Commercial Discharges, 2018-2019	53
Figure 6.3 Verdugo's PSA and SSA – Commercial Discharges, 2018-2019	54
Figure 6.4 MHSC Primary and Secondary Service Areas – Medi-Cal Discharges, 2018-2019.	55
Figure 6.5 Keck Primary and Secondary Service Areas – Medi-Cal Discharges, 2018-2019	56
Figure 6.6 Keck Primary and Secondary Service Areas – Commercial Discharges, 2018-2019	57
Figure 7.1 Delayed Care Due to Cost or Lack of Insurance by Race/Ethnicity, 2020	92
Figure 7.2 Difficulty Finding a Doctor by Race/Ethnicity, 2020	93
Figure 7.3 LGBT+ People's Difficulty Paying Medical Bills	102
Figure 7.4 California's Registered Nurse Shortage Areas	111

### 1. QUALIFICATIONS AND SCOPE OF THE REPORT

# 1.1 Scope of the Report

We have been retained as independent experts by the Office of the California Attorney General (OCAG) to assess the potential impact of the proposed affiliation between USC Health System (USCHS)<sup>1</sup> and Methodist Hospital of Southern California (MHSC).<sup>2</sup> Specifically, we have been asked to analyze whether the transaction may substantially (1) lessen competition and (2) impact the availability or accessibility of existing health care services to the affected community.

These requests are pursuant to Corporations Code section 5920 and California Code of Regulations, title 11, section 999.5. We refer to our assessment (1) as the "competitive impact" in what follows and (2) as the "health care impact." This report is divided along these two lines. With respect to (2), California Code of Regulations, title 11, section 999.5, subdivision (e)(6), requires the independent health care impact statement to contain the following information:

- (A) An assessment of the effect of the agreement or transaction on emergency services, reproductive health services, and any other health care services that the hospital is providing.
- (B) An assessment of the effect of the agreement or transaction on the level and type of charity care that the hospital has historically provided.
- (C) An assessment of the effect of the agreement or transaction on the provision of health care services to Medi-Cal patients, county indigent patients, and any other class of patients.
- (D) An assessment of the effect of the agreement or transaction on any significant community benefit program that the hospital has historically funded or operated.
- (E) An assessment of the effect of the agreement or transaction on staffing for patient care areas as it may affect availability of care, on the likely retention of employees as it may affect continuity of care, and on the rights of employees to provide input on health quality and staffing issues.

<sup>&</sup>lt;sup>1</sup> USCHS provides medical care to patients in Los Angeles through its network of hospitals and outpatient clinics. USCHS is comprised of Keck Medical Center of USC, which includes two general acute care hospitals, Keck Hospital of USC ("Keck") and USC Norris Cancer Hospital ("Norris") and a general acute care hospital named USC Verdugo Hills Hospital ("Verdugo").

<sup>&</sup>lt;sup>2</sup> The written notice of the transaction is available at <a href="https://www.methodisthospital.org/documents/Notice-to-the-Attorney-General-by-MHSC-dated-11.18.2021.pdf">https://www.methodisthospital.org/documents/Notice-to-the-Attorney-General-by-MHSC-dated-11.18.2021.pdf</a> ("Written Notice") (November 18, 2021; accessed April 7, 2021).

- (F) An assessment of the effectiveness of any mitigation measure proposed by the applicant to reduce any potential adverse effect on health care services identified in the impact statement.
- (G) A discussion of alternatives to the proposed agreement or transaction including closure of the hospital.
- (H) Recommendations for additional feasible mitigation measures that would reduce or eliminate any significant adverse effect on health care services identified in the impact statement.

In addition to assessing the competitive and health care impacts we have been asked to opine, based on our findings, whether or not the affiliation should be approved, approved with conditions, or denied. This report sets forth our conclusions and the reasoning behind them.

## 1.2 Qualifications

Professor Richard Scheffler is the lead independent expert for this analysis. Dr. Scheffler is a Distinguished Professor of Health Economics and Public Policy in the Graduate School of Public Health and the Goldman School of Public Policy at the University of California, Berkeley (UC Berkeley). Professor Scheffler also directs the Petris Center on Health Care Markets and Consumer Welfare (petris.org) at UC Berkeley. He received his PhD in economics from New York University and has taught health economics at the undergraduate, Master's, and PhD levels. For over three decades his research has focused on how health care markets function and the impact of consolidation on health care prices, access, and affordability. He recently testified on the CVS-Aetna, Anthem-Cigna, and Centene-Health Net proposed acquisitions and was retained as an independent expert under the statute of the OCAG to assess the competitive and quality impact of Acadia Healthcare's proposed acquisition of Adventist Health Vallejo.<sup>3</sup>

Dr. Daniel Arnold is an assistant research economist at the UC Berkeley School of Public Health and research director of the Petris Center. Dr. Arnold obtained his PhD in economics from the

\_

<sup>&</sup>lt;sup>3</sup> Scheffler RM. 2018. Testimony Regarding CVS Health Corporation's Proposed Acquisition of Aetna Inc. <a href="http://www.insurance.ca.gov/01-consumers/110-health/60-resources/upload/Scheffler-CVS-Aetna-Testimony-06-19-18.pdf">http://www.insurance.ca.gov/01-consumers/110-health/60-resources/upload/Scheffler-CVS-Aetna-Testimony-06-19-18.pdf</a> (June 19, 2018; accessed April 7, 2022); Fulton BD, Scheffler RM, Arnold DR. 2016. Testimony Regarding Anthem, Inc.'s Proposed Acquisition of Cigna Corporation. <a href="http://www.insurance.ca.gov/01-consumers/110-health/60-resources/upload/CDI-Testimony-re-Anthem-and-Cigna-Fulton-Scheffler-and-Arnold-032916-final.pdf">http://www.insurance.ca.gov/01-consumers/110-health/60-resources/upload/CDI-Testimony-re-Anthem-and-Cigna-Fulton-Scheffler-and-Arnold-032916-final.pdf</a> (March 29, 2016; accessed April 7, 2022); Scheffler RM, Fulton BD. 2016. Testimony Regarding Centene Corporation's Proposed Acquisition of Health Net, Inc. <a href="http://www.insurance.ca.gov/0250-insurers/0500-legal-info/upload/FinalExhibitBinderHealthNetCenteneHearingPart-1.pdf">http://www.insurance.ca.gov/0250-insurers/0500-legal-info/upload/FinalExhibitBinderHealthNetCenteneHearingPart-1.pdf</a> (January 22, 2016; accessed April 7, 2022); Scheffler RM, Adams N, Arnold DR. 2021. The Competitive and Quality Impact of the Proposed Acquisition of Adventist Health Vallejo by Acadia Healthcare. <a href="https://oag.ca.gov/system/files/media/ahv-cqi.pdf">https://oag.ca.gov/system/files/media/ahv-cqi.pdf</a> (September 25, 2021; accessed April 7, 2022).

University of California, Santa Barbara and specializes in modeling big data. His recent paper, which found hospital mergers lead to lower wages for non-health-care workers, was chosen to be one of eight papers presented at the Federal Trade Commission's Thirteenth Annual Microeconomics Conference.<sup>4</sup> Dr. Arnold also assisted on the assessment of the competitive and quality impact of Acadia Healthcare's proposed acquisition of Adventist Health Vallejo.<sup>5</sup>

# 1.3 Our Analytic Approach

The economic theory and empirical evidence on the effects of hospital mergers on prices, quality, and access serve as the starting point for our analysis. We employ many of the analytic methods that are now commonplace in hospital merger analysis to assess this transaction. Importantly, we believe utilizing the tools and theory of hospital merger analysis is the appropriate approach despite the transaction being an affiliation rather than a merger. Ultimately, this transaction is a change in control where USCHS' Board will have the final say in all important MHSC decisions, particularly after the transition period has passed (see Section 3.1). As such, we view it as appropriate to use all the typical tools of hospital merger analysis to assess the potential impact of the transaction on competition and access. We use the terms merger and affiliation interchangeably throughout the report.

We analyzed data from the Department of Healthcare Access and Information (HCAI) (formerly the Office of Statewide Health Planning and Development (OSHPD) to assess both access and availability of services as well as competition. Specifically, the primary datasets we analyzed were the following:

- 2016-2020 HCAI Hospital Annual Financial Pivot Tables
- 2016-2020 HCAI Hospital Utilization Pivot Tables
- 2018-2019 HCAI Patient Discharge Data (PDD)

The 2016-2020 time period was selected for analysis as it was the most recent five years of data available at the time of this report. The 2016-2020 datasets are hospital-level datasets, whereas the 2018-2019 HCAI PDD is a discharge-level dataset. The HCAI PDD is a rich dataset that contains patient characteristics such as age, sex, race/ethnicity, and zip code, discharge

<sup>&</sup>lt;sup>4</sup> <u>https://www.ftc.gov/news-events/events-calendar/thirteenth-annual-federal-trade-commission-microeconomics-conference</u> (November 5, 2020; accessed April 7, 2022).

<sup>&</sup>lt;sup>5</sup> Scheffler RM, Adams N, Arnold DR. 2021. The Competitive and Quality Impact of the Proposed Acquisition of Adventist Health Vallejo by Acadia Healthcare. <a href="https://oag.ca.gov/system/files/media/ahv-cqi.pdf">https://oag.ca.gov/system/files/media/ahv-cqi.pdf</a> (September 25, 2021; accessed April 7, 2022).

<sup>&</sup>lt;sup>6</sup> The Written Notice refers to the first five years after the closing of the transaction as the transition period.

characteristics such as diagnosis, type of admission (e.g., emergency, urgent, elective), charge, payer, and the name and location (zip code) of the admitting hospital.

Analyzing the 2016-2020 period is complicated by the impact of the COVID-19 pandemic in 2020. Hospital utilization numbers differ in 2020 compared to 2016-2019. However, most health economists and health service researchers are predicting a "return to trend" as the effect of the pandemic wanes. For instance, the recently released national health expenditures projections put out by the Centers for Medicare & Medicaid Services (CMS) state "2024 health care use is expected to normalize after the declines observed in 2020, health insurance enrollments are assumed to evolve toward their prepandemic distributions." It is our opinion that typical service volume and financial well-being should be judged on the 2016-2019 period, as we likewise expect this period to be much more predictive of the future. Every trend we discuss in the report is a 2016-2019 trend. We show 2020 measures in the report's tables, but do not comment on them. Our decision to use 2018-2019 PPD data (instead of 2019-2020) was specifically made out of concern that the preferences patients showed for hospitals might have been quite different in 2020.

## 1.4 Outline of the Report

The report proceeds as follows: Section 2 summarizes our opinions. Section 3 presents an overview of the transaction and the market for inpatient general acute care (GAC) hospital services in the San Gabriel Valley (SGV) region of Los Angeles County (LA County). Sections 4 and 5 profile MHSC and USCHS, respectively. Section 6 contains our competitive impact analysis while Section 7 provides our health care impact analysis. In Section 8 we discuss the potential efficiencies and benefits that the transaction could generate. Section 9 concludes.

\_

<sup>&</sup>lt;sup>7</sup> Poisal JA, Sisko AM, Cuckler GA, Smith SD, Keehan SP, Fiore JA, Madison AJ, Rennie KE. National Health Expenditure Projections, 2021–30: Growth to Moderate as COVID-19 Impacts Wane: Study examines National Health Expenditure Projections, 2021-30 and the impact of declining federal supplemental spending related to the COVID-19 pandemic. Health Affairs. 2022 Apr 1:10-377.

#### 2. SUMMARY OF OPINIONS

#### Competitive Impact

Based on our analysis, we conclude the transaction poses no significant horizontal concern. Our opinion was based on analyses of service area overlap, pre- and post-merger Herfindahl-Hirschman Indexes (HHIs), and diversion analyses. While the merging parties' service areas overlap, differences in pre- and post-merger HHIs and diversion estimates do not rise to the level that would require any further action. We predict HHI increases to be 78, 90, or 126, depending on the geographic market analyzed. Diversion analyses predict which hospitals patients would flow to if their preferred hospital was no longer in-network and available to them. High diversion estimates between merging parties would indicate the parties are in direct competition with one another and allowing the parties to merge poses a significant risk to horizontal competition. We estimated diversions in both directions (from MHSC to USCHS and vice versa) to be below 5%. Diversion estimates of this magnitude do not indicate a risk to horizontal competition. When we analyzed high acuity services in particular, the predicted HHI changes and diversion estimates we calculated suggested a greater horizontal concern, but they were still insufficient to warrant a recommendation to block the transaction. However, they add support to the cross-market conditions we recommend. However, they add support to the cross-market conditions we recommend.

In our opinion, the transaction creates a risk of cross-market effects. Specifically, we see the likelihood that there will be price increases at the merging hospitals absent any conditions imposed on the transaction. USCHS has substantial market power. We confirmed this in three ways. First, the health plans we interviewed identified USCHS as a "must-have" in-network provider. USCHS' "must-have" status is derived from its position as a leading provider of tertiary and quaternary care services in LA County. Second, we calculated measures of "willingness to pay" (WTP) for GAC hospitals in LA County. These measures seek to quantify the relative importance of hospitals to health plans. Hospitals with higher WTPs are more important to health plans and thus have more market power. USCHS was near the top of our lists that ranked hospitals in LA County by WTP. Third, USCHS' prices are some of the highest in LA County. <sup>11</sup>

\_

<sup>&</sup>lt;sup>8</sup> See Section 6.1.2 for the three geographic markets analyzed.

<sup>&</sup>lt;sup>9</sup> The predicted HHI change was 114, 129, or 168 for high acuity services depending on the geographic market. The commercial diversion estimate from MHSC to Keck was 10.1%. See Section 6.2.

<sup>&</sup>lt;sup>10</sup> See Section 6.2 for our horizontal market analysis. We define high acuity services as inpatient discharges with an MS-DRG weight above 2 throughout this report.

<sup>&</sup>lt;sup>11</sup> See Section 6.3 for our cross-market market analysis.

The conditions we recommend the OCAG impose to reduce the risk of anticompetitive effects arising from the transaction are as follows. <sup>12</sup> USCHS shall:

- 1. Not condition the participation of one of its controlled hospitals on the participation of any of its other controlled hospitals in contracts with payers. This includes:
  - a. Engaging a payer in "all-or-nothing" contracting whereby it explicitly or implicitly requires the payer to contract with all controlled hospitals.
  - b. Penalizing a payer for contracting with individual controlled hospitals, including setting significantly higher than existing contract prices or out-of-network fees for any or all controlled hospitals.
  - c. Interfering with the introduction or promotion of new narrow, tiered, steering, or value-based benefit designs for commercial or government-sponsored products.
- 2. Not increase MHSC's prices in renewed contracts with commercial or government-sponsored products by more than 4.8% per year for 5 years. <sup>13</sup>

# Health Care Impact

We are concerned that the transaction will reduce the access and availability of services in the SGV. MHSC is a larger provider of GAC hospital services to the SGV's commercially insured population than to its Medi-Cal insured population. There is a risk that USCHS will attempt to move some of the commercial patients treated at MHSC toward the same services at Keck. The commercial prices at Keck are much higher than those at MHSC and thus there is a financial incentive to move services from MHSC (and out of the SGV) to Keck.

The access concern we have for Medi-Cal beneficiaries arises from how USCHS negotiates Medi-Cal contracts. The health plans we interviewed indicated that USCHS requests Medi-Cal reimbursement be based on a percentage of billed charges as opposed to a percentage of the state's Medi-Cal rates. We are concerned that USCHS will negotiate MHSC's Medi-Cal contracts in the same nonstandard way it negotiates its own Medi-Cal contracts. This could lead to MHSC being left out-of-network by Medi-Cal managed care plans that deem reimbursement that is a percentage of billed charges as financially infeasible.

Our general recommendation based on our health care impact analysis is that services currently available at MHSC remain so post-transaction. However, MHSC is a much more critical

<sup>&</sup>lt;sup>12</sup> These conditions are written broadly. We leave the details of how these would be implemented and enforced to the OCAG.

<sup>&</sup>lt;sup>13</sup> These two conditions align with conditions 2 and 3 in the Cedars-Sinai/Huntington affiliation conditions. https://oag.ca.gov/system/files/media/nhft-huntington-ag-decision-071921.pdf (July 19, 2021; accessed April 7, 2022).

provider of some inpatient hospital services than others. In particular, MHSC provides a large share of the SGV's emergency and maternity/obstetrics services. In contrast, MHSC is a far less important provider of reproductive, LGBT+, and mental health services to the SGV. Given this, we have little reason to believe the transaction poses any significant risk to the access and availability of reproductive, LGBT+, and mental health services in the SGV. <sup>14</sup>

The conditions we recommend the OCAG impose to mitigate the risk of the transaction leading to a reduction in access and availability of services are listed below. We envision all the conditions applying for a period of 10 years. MHSC shall:

- 1. Maintain its existing services at current licensure and designation. This includes:
  - a. Keeping the number of licensed beds dedicated to particular services at or above their current levels:<sup>15</sup>
    - i. 202 medical/surgical beds,
    - ii. 26 emergency room beds, <sup>16</sup>
    - iii. 24 obstetrics beds,
    - iv. 29 intensive care beds,
    - v. 10 coronary care beds,
    - vi. 10 acute respiratory care,
    - vii. 17 neonatal intensive care beds, and
    - viii. 30 rehabilitation center beds.
  - b. Maintaining access to the services listed in the Written Notice: 17
    - i. Cancer Care,
    - ii. Emergency Services,
    - iii. Cardiology Services,
    - iv. Diagnostic Imaging,
    - v. Institute for Surgical Specialties,
    - vi. GYN Oncology Institute,
    - vii. Interventional Radiology,
    - viii. Maternity Services,
      - ix. Neurosciences,
      - x. Orthopedics,

<sup>&</sup>lt;sup>14</sup> See Section 7 for our health care impact analysis.

<sup>&</sup>lt;sup>15</sup> These are the bed totals reported to HCAI in calendar year 2020. See Section 4.1 of this report.

<sup>&</sup>lt;sup>16</sup> Reported on pg. 3 of MHSC's 2020 Community Benefits Plan <a href="https://www.methodisthospital.org/documents/2020-Community-Benefits-Plan.pdf">https://www.methodisthospital.org/documents/2020-Community-Benefits-Plan.pdf</a> (accessed April 7, 2022).

- xi. Physical Rehabilitation,
- xii. Stroke Care,
- xiii. Surgical Services,
- xiv. Weight Loss Services, and
- xv. Wound Healing Center and Hyperbaric Oxygen Center
- 2. Maintain Medi-Cal Managed Care and county contracts to provide the same types of services for Medi-Cal beneficiaries. This includes:
  - a. Being certified to participate in the Medi-Cal program.
  - b. Renewing contracts on the same terms and conditions unless the contract was terminated by a Medi-Cal Managed Care plan or county on its own initiative.
- 3. Maintain contracts with local governments or their subdivisions, departments, or agencies. These include: 18
  - a. MHSC's contract with LA County and bioMerieux for data collection services.
  - b. MHSC's contract with LA County's Child Support Services Department for the Paternity Opportunity Program.
  - c. MHSC's designation by LA County's Emergency Medical Services Agency as an ST-Elevation Myocardial Infarction Receiving Center.
  - d. MHSC's contract with LA County as a health facility with a Specialty Care Center Designation.
  - e. MHSC's contract with LA County as an LA County Comprehensive Stroke Center.
  - f. MHSC's contract with LA County whereby MHSC receives funds for "Participation in the Hospital Preparedness Program."
- 4. Provide a minimum of \$3.7 million in charity care in its first-year post-merger with the minimum required increasing annually by 3.3%. 19

\_

<sup>&</sup>lt;sup>18</sup> This list can be found on pg. 1013 (labeled MHSC-0001007) of the Written Notice.

<sup>19 \$3.7</sup> million is the 2018-2020 three-year average of community benefits provided by MHSC https://oag.ca.gov/charities/nonprofithosp#mhsc-supp (accessed April 7, 2021). The annual totals from 2018 to 2020 were \$3.2 million, \$4.1 million, and \$3.8 million https://www.methodisthospital.org/About-Us/Community-Reports.aspx (accessed April 7, 2022). 3.3% is the average annual increase in the Los Angeles-Long Beach-Anaheim, CA Medical Care Consumer Price Index (CPI) from 2018-2020. https://data.bls.gov/timeseries/CUURS49ASAM?amp%253bdata\_tool=XGtable&output\_view=data&include\_graph\_s=true\* (accessed April 7, 2022). The three annual measures of the Los Angeles-Long Beach-Anaheim, CA Medical Care CPI used to calculate this average annual increase were 475.7 (2018), 483.5 (2019), and 505.3 (2020). HCAI defines charity care in relation to bad debt. A patient's accounts receivable is written off as bad debt if he/she has the

- 5. Provide a minimum of \$44.4 million in community benefits in its first-year post-merger with the minimum required increasing annually by 3.3%.<sup>20</sup>
- 6. Be reimbursed for out-of-network emergency services at no more than 275% of the applicable Medicare DRG classification. <sup>21</sup>
- 7. Maintain language services currently available to patients. These include:
  - a. The hospital's Chinese language hot line. 22
  - b. Financial Assistance Program applications written in Cantonese, Mandarin, and Spanish. <sup>23</sup>
  - c. Languages spoken at MHSC either as a primary language or through translation services as indicated in the Written Notice.<sup>24</sup>
- 8. Maintain privileges for current medical staff at MHSC who are in good standing.
- 9. Maintain a community board that includes both physicians and community representatives.
- 10. Prohibit discrimination at MHSC on the basis of any protected personal characteristic identified in state and federal civil rights.
- 11. Obtain written confirmation that USCHS will invest \$200.7 million in MHSC and the details on how this money is intended to be spent.

It is our opinion that the transaction should be approved with the competitive and health impact conditions listed above.

<sup>&</sup>lt;sup>20</sup> \$44.4 million is the 2018-2020 three-year average of community benefits provided by MHSC. What counts as community benefits is detailed on HCAI's website <a href="https://hcai.ca.gov/data-and-reports/cost-transparency/hospital-community-benefit-plans/">https://hcai.ca.gov/data-and-reports/cost-transparency/hospital-community-benefit-plans/</a> (accessed April 7, 2022). The annual totals from 2018 to 2020 were \$44.1 million, \$42.6 million, and \$46.5 million <a href="https://www.methodisthospital.org/About-Us/Community-Reports.aspx">https://www.methodisthospital.org/About-Us/Community-Reports.aspx</a> (accessed April 7, 2022).

<sup>&</sup>lt;sup>21</sup> The 275% cap is the same as the out-of-network emergency services cap imposed as part of the Kaiser / St. Mary Medical Center affiliation conditions (see condition XXIV) and is meant to be toward the higher end of in-network rates. <a href="https://oag.ca.gov/system/files/media/smmc-conditions-packet-12172021.pdf">https://oag.ca.gov/system/files/media/smmc-conditions-packet-12172021.pdf</a> (December 17, 2021; accessed April 7, 2022).

<sup>&</sup>lt;sup>22</sup> Pg. 942 (labeled MHSC-0000936) of the Written Notice.

<sup>&</sup>lt;sup>23</sup> Pg. 903 (labeled MHSC-0000897) of the Written Notice.

<sup>&</sup>lt;sup>24</sup> Pg. 1787 (labeled MHSC-0001781) of the Written Notice. The languages listed are Albanian, Arabic, Bengali, Bosnian, Cambodian, Cantonese, Chinese, Farsi, French, French Creole, German, Greek, Haitian Creole, Hindi, Hmong, Italian, Japanese, Korean, Laotian, Mandarin, Polish, Portuguese, Punjabi, Russian, Somali, Spanish, Turkish, Urdu, and Vietnamese.

#### 3. OVERVIEW OF THE MARKET AND THE PROPOSED TRANSACTION

#### 3.1 Terms of the Transaction

On November 18, 2021, the OCAG received notice of the affiliation agreement under which USCHS would become MHSC's sole corporate member and as such MHSC would become part of USCHS' integrated healthcare delivery system. Notice was given pursuant to Corporations Code Section 5920, subdivision (a), which requires that any nonprofit corporation that operates or controls a health facility (defined in Section 1250 of the Health and Safety Code) provides written notice to and obtains the written consent of the OCAG prior to entering into any agreement that transfers control, responsibility, or governance of a material amount of assets or operations of the nonprofit corporation to another nonprofit corporation. Notice provided under subdivision (a)(1) gives the OCAG 90 days to determine whether to consent or to conditionally consent to the affiliation based on its impact on the public interest.

Key terms of the transaction include:

- USCHS will commit and invest \$200.7 million in MHSC over a five-year period following closing of the transaction.
- USCHS will annually reinvest capital from MHSC's operations into MHSC in an amount projected to be between \$8 million and \$12 million.
- Employees of MHSC will remain employed at closing.
- Within 18 months after closing, MHSC will become the exclusive provider of USCHS hospital-based clinical services within MHSC's primary service area (PSA).

A partial list of the post-closing rights of the parties include: 25

The MHSC Board will have the right to approve and/or take the following actions:

- Actions that result in a change of control of the Methodist Hospital Foundation.
- During the three-year period after closing, actions that remove or reduce the compensation and benefit plans of the incumbent members of MHSC's Executive Team, including the MHSC Chief Executive Officer.
- Nominate the first successor MHSC Chief Executive Officer.

<sup>&</sup>lt;sup>25</sup> See pgs. 11-13 (labeled MHSC-0000005- MHSC-0000007) of the Written Notice available at <a href="https://www.methodisthospital.org/documents/Notice-to-the-Attorney-General-by-MHSC-dated-11.18.2021.pdf">https://www.methodisthospital.org/documents/Notice-to-the-Attorney-General-by-MHSC-dated-11.18.2021.pdf</a> (November 18, 2021; accessed April 7, 2022) for the complete list.

For a period of 10 years after closing, the USCHS Board and the MHSC Board will jointly approve the following:

- Any change in structure of MHSC that affects its tax-exempt status.
- The discontinuation of any material clinical service line at MHSC.
- Any reduction or elimination of the services or operations listed in Section 12.6 of the affiliation agreement.

The USCHS Board will have the authority to approve or take the following actions:

- Develop an annual operating and capital budget for MHSC.
- Establish all capital expenditure thresholds for MHSC.
- After three years following closing, remove any MHSC Executive Team members.
- Hire or remove any successor members of MHSC's Executive Team, including the successor Chief Executive Officer.
- Appoint the members serving on the MHSC Board.
- Remove any member of the MHSC Board five years after closing.
- Develop or modify the strategic or business plan of MHSC.

#### 3.2 Reasons for the Transaction

According to the written notice delivered to the OCAG, on November 18, 2018 (Written Notice), MHSC's Board "instructed MHSC's management to engage in a deliberative evaluation of potential partnerships that would provide clinical expertise and resources, ensure financial stability, and enable MHSC to pursue its goal of delivering clinical excellence to its community into the future." Additionally, the Written Notice states MHSC's goal in seeking a partner was "to safeguard against a reduction in the availability or accessibility of its health services." <sup>27</sup>

MHSC did not undertake a formal Request for Proposals when deciding on a strategic partner. Instead MHSC considered various potential partners and selected USCHS. According to the Written Notice, MHSC affiliating with USCHS has the following significant advantages: <sup>28</sup>

- 1. New opportunities for growth and innovation through participation in a health system focused on common interest and need.
- 2. The ability for MHSC to gain access to significant clinical and research resources available at USCHS.

\_

<sup>&</sup>lt;sup>26</sup> Pg. 3 of the Written Notice.

<sup>&</sup>lt;sup>27</sup> Ibid.

<sup>&</sup>lt;sup>28</sup> Pg. 4 of the Written Notice.

3. Expansion and strengthening of local health services through USCHS' support of MHSC's existing and future clinical capabilities.



The Written Notice did not mention whether MHSC and USCHS discussed other forms of this affiliation, such as a version where the parties became clinically integrated but not financially integrated.<sup>30</sup>

# 3.3 San Gabriel Valley

GAC hospital services is the relevant product market for this transaction and the relevant geographic market is no larger than the San Gabriel Valley region of LA County. We perform a number of analyses to validate these assertions in the competitive impact portion of the report (Section 6), but for now we take these assertions at face value and proceed to present an overview of the SGV with special attention to MHSC's 20-zip code service area, which is completely contained in the SGV.

Los Angeles County (LA County) is divided into eight Service Planning Areas (SPAs) for the purposes of planning, statistical tracking, and providing health and social services (Figure 3.1). Throughout this report we use the terms SGV and SPA 3 interchangeably. That is, when referring to the SGV, we are referring to the geographic area defined by SPA 3. SPA 3 is situated between the San Gabriel Mountains to the north and the Whittier Hills to the south. The SPA's western border is defined by the western boundaries of the cities of Pasadena, South Pasadena, Alhambra, and Monterey Park. Its eastern boundary is the San Bernardino County line, which runs along the city boundaries of Claremont, Pomona, and Diamond Bar. MHSC defines its service area as the 20 zip codes shown in Figure 3.2. All 20 zip codes lie within the SGV.

<sup>&</sup>lt;sup>29</sup> Confidential documents provided to the OCAG.

<sup>&</sup>lt;sup>30</sup> Financial integration often leads to higher prices whereas clinical integration only has not been observed to be associated with higher prices. See, e.g., Neprash HT, Chernew ME, Hicks AL, Gibson T, McWilliams JM. Association of financial integration between physicians and hospitals with commercial health care prices. JAMA internal medicine. 2015 Dec 1:175(12):1932-9.



Figure 3.1 LA County's Service Planning Areas (SPAs)

Source: LA County Department of Health Services.

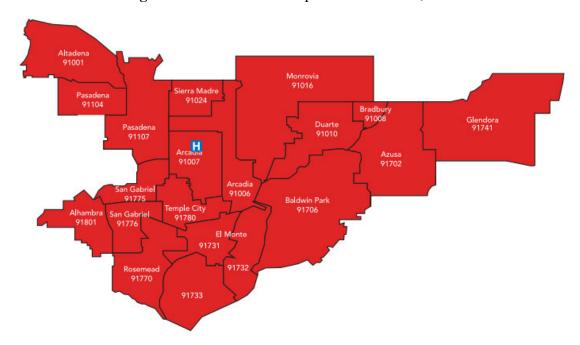


Figure 3.2 Methodist's Hospital Service Area, 2018

Source: MHSC's 2019 Community Needs Assessment

https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf (December 26, 2019; accessed April 7, 2022).

Notes: This is MHSC's hospital service area as defined in its 2019 Community Health Needs assessment. It was calculated using the Stark II definition – the lowest number of contiguous zip codes from which the hospital draws at least 75% of its inpatients – from 2018 inpatient data. It contains 20 zip codes, all of which lie in SPA 3. MHSC is located in zip code 91007.

# 3.3.1 Demographics

Table 3.1 shows the race/ethnicity breakdown for the MHSC service area shown in Figure 3.2 and compares it to the race/ethnicity profile of LA County. The MHSC service area has a much larger Asian population (33.0% vs. 14.7%) and smaller Hispanic (44.3% vs. 48.9%), Black (2.9% vs. 7.8%), and White (17.7% vs. 25.7%) populations than LA County.

**Table 3.1** Race/Ethnicity – MHSC Service Area and LA County

MHSC Service Area

Race/Ethnicity	Number of Persons	Percent of Total Population
White	138,406	17.7%
Black	22,599	2.9%
American Indian/Alaskan Native	1,125	0.1%
Asian	258,448	33.0%
Native Hawaiian/Pacific Islander	709	0.1%
Hispanic	347,150	44.3%
Some Other Race	1,310	0.2%
Two or More Races	13,644	1.7%
Total Population	783,391	100.0%

# LA County

Race/Ethnicity	Number of Persons		
White	2,632,928	25.7%	
Black	801,175	7.8%	
American Indian/Alaskan Native	18,963	0.2%	
Asian	1,505,394	14.7%	
Native Hawaiian/Pacific Islander	23,301	0.2%	
Hispanic	5,011,585	48.9%	
Some Other Race	25,916	0.3%	
Two or More Races	236,445	2.3%	
Total Population	10,255,707	100.0%	

Source: MHSC's 2019 Community Needs Assessment

 $\underline{https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf}$ 

(December 26, 2019; accessed April 7, 2022).

Notes: Data is from 2019.

Table 3.2 shows the languages spoken at home for people residing in the MHSC service area and LA County. Compared to LA County, a lower percentage of the MHSC service area population speaks only English at home (35.0% vs. 43.1%). Spanish is also spoken at home less frequently (33.9% vs. 39.4%). An Asian or Pacific Island language is spoken at home for many more people in the MHSC service area than in LA County (28.1% vs. 10.9%).

**Table 3.2** Languages Spoken at Home – MHSC Service Area and LA County

Languages Spoken at Home	Percent of Persons 5 Years and Older				
	MHSC Service Area	LA County			
English Only	35.0%	43.1%			
Spanish	33.9%	39.4%			
Asian or Pacific Island	28.1%	10.9%			
language					
European language	2.5%	5.4%			
Other language	0.5%	1.1%			
Total	100%	100%			

Source: MHSC's 2019 Community Needs Assessment

https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf

(December 26, 2019; accessed April 7, 2022).

Notes: Data is from 2019.

The educational attainment of persons 25 years and older in the MHSC service area and LA County is shown in Table 3.3. The educational attainment of the MHSC service area is lower than that of LA County, with 45.4% of the population having a high school diploma or less, compared to 42.8% for LA County.

**Table 3.3** Educational Attainment of Persons 25 Years and Older – MHSC Service Area and LA County

<b>Highest Level of Education</b>	Percent of Persons 25 Years and Older				
Completed	MHSC PSA	LA County			
Less than 9 <sup>th</sup> Grade	13.8%	13.0%			
Some High School, no	8.2%	8.9%			
Diploma					
High School Graduate (or	23.4%	20.9%			
GED)					
Some College, no Degree	16.9%	19.1%			
Associate's Degree	7.4%	6.9%			
Bachelor's Degree	20.0%	20.4%			
Master's Degree	7.1%	7.3%			
Professional Degree	1.8%	2.3%			
Doctorate Degree	1.4%	1.2%			
Total	100%	100%			

Source: MHSC's 2019 Community Needs Assessment

https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf

(December 26, 2019; accessed April 7, 2022).

Notes: Data is from 2019.

The household income of the MHSC service area and LA County is shown in Table 3.4. There is very little difference between the MHSC service area and LA County in terms of household income. Nearly 40% of households in both the MHSC service area and LA County have an income below \$50,000 (37.2% and 39.1%, respectively).

**Table 3.4** Household Income – MHSC Service Area and LA County

Indicator	Perc	ent
Indicator	Service Area	LA County
Household Income		
Under \$15,000	8.5%	10.2%
\$15,000 to \$24,999	9.1%	9.0%
\$25,000 to \$34,999	8.1%	8.3%
\$35,000 to \$49,999	11.5%	11.6%
\$50,000 to \$74,999	15.9%	15.4%
\$75,000 to \$99,999	12.1%	11.7%
\$100,000 to \$124,999	9.5%	9.1%
\$125,000 to \$149,999	7.0%	6.6%
\$150,000 to \$199,999	7.6%	7.3%
\$200,000 to \$249,999	3.9%	3.8%
\$250,000 to \$499,999	4.4%	4.4%
\$500,000 and over	2.1%	2.5%

Source: MHSC's 2019 Community Needs Assessment

https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf

(December 26, 2019; accessed April 7, 2022).

Notes: Data is from 2019.

Table 3.5 zooms out a bit and presents demographics for the SGV (instead of the MHSC service area) and compares them to LA County and national demographics. Many of the demographic characteristics we noted for the MHSC service area hold for the SGV as well. Important new bits of information can be gleaned from Table 3.5 by comparing the SGV demographics (dark green column) to the national demographics (pink column). For instance, Table 3.5 shows that 53% of the SGV is foreign born, which is in stark contrast to the 16% rate nationally. Additionally, 50% of adults in the SGV mostly speak English at home compared to 79% nationally. These are just two examples of how analyzing health care access in LA County (and in particular the SGV) is different in many ways. Adequate access to providers who speak the same language is a larger concern in LA County than in other parts of the country.

**Table 3.5** SGV Demographics

DEMOGRAPHICS	National	LACounty	Antelope Valley	San Fernando	San Gabriel	Metro SPA 4	West Vest	South Sby 9	SPA 7	8 P d South Bay
Gender				THE STATE OF						
Percent of population who are male <sup>1</sup>	49.2°	49.3	49.7	49.5	48.9	51.3	48.5	48.8	49.2	48.9
• Percent of population who are female	50.8°	50.7	50.3	50.5	51.1	48.7	51.5		50.8	51.1
Age Group	100000									
Percent of population ages 0-5 years <sup>1</sup>	7.5	7.5	8.4	7.0	6.8	7.1	6.0	9.7	8.2	7.6
• Percent of population ages 6-17 years <sup>1</sup>	15.6°	15.4	18.5	14.9	15.0	12.7	10.4	19.1	17.3	15.6
<ul> <li>Percent of population ages 18-39 years<sup>1</sup></li> </ul>	29.8°	32.5	32.1	31.1	30.9	35.6	34.7	35.3	32.7	30.9
<ul> <li>Percent of population ages 40-64 years¹</li> </ul>	32.7°	32.2	31.1	34.0	33.1	32.7	33.4	27.5	30.2	33.0
<ul> <li>Percent of population ages 65 years or older</li> </ul>	14.5	12.4	9.9	12.9	14.3	11.8	15.5	8.4	11.6	12.8
Race										
<ul> <li>Percent of population who are Latino¹</li> </ul>	17.8 <sup>AC</sup>	48.4	44.8	40.2	46.3	51.8	16.0	68.2	73.5	40.4
<ul> <li>Percent of population who are white<sup>1</sup></li> </ul>	63.5 <sup>1/2</sup>	28.3	34.6	44.6	21.2	24.8	64.0	2.4	14.0	28.4
<ul> <li>Percent of population who are African American¹</li> </ul>	12.6×	8.5	16.2	3.5	3.7	5.2	5.7	27.4	3.0	14.8
<ul> <li>Percent of population who are Asian¹</li> </ul>	<b>5.3</b> <sup>16</sup>	14.4	3.8	11.5	28.6	17.9	14.0	1.7	9.0	15.4
<ul> <li>Percent of population who are Native Hawaiian or Other Pacific Islander (NHOPI)</li> </ul>	0.2 <sup>xc</sup>	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.9
<ul> <li>Percent of population who are American Indian/Alaskan Native<sup>1</sup></li> </ul>	0.7∞	0.2	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.2
Foreign Born										
<ul> <li>Percent of adults who were not born in the United States<sup>2</sup></li> </ul>	16.3 <sup>16</sup>	45.0	24.1	43.6	53.0	54.6	29.4	51.9	49.8	34.2
<ul> <li>Percent of children who were not born in the United States<sup>2</sup></li> </ul>	3.4"	6.3	3.8*	7.0	8.6	8.7	9.4*	2.9*	4.4*	5.8
Language Used Most Often At Home										
<ul> <li>Percent of adults who mostly speak English at home<sup>2</sup></li> </ul>	79.0°	62.9	77.7	68.7	50.2	54.4	86.7	49.7	54.8	75.9
<ul> <li>Percent of adults who mostly speak Spanish at home<sup>2</sup></li> </ul>	12.5°	26.6	18.5	21.6	24.7	33.3	8.4	48.8	38.5	17.8
<ul> <li>Percent of adults who mostly speak an Asian language at home<sup>2a</sup></li> </ul>	3.6°	8.5	2.4**	4.2	24.4	11.6	1.7*	1.2*	5.0	6.0
<ul> <li>Percent of adults who mostly speak some other language at home<sup>2a</sup></li> </ul>	4.8**	2.0	1.4*	5.5	0.7*	0.7*	3.2	1 <del></del>	1.6*	0.3*

Source: LA County Department of Public Health – Key Indicators of Health (January 2017) <a href="http://publichealth.lacounty.gov/ha/docs/2015lachs/keyindicator/ph-kih 2017-sec%20updated.pdf">http://publichealth.lacounty.gov/ha/docs/2015lachs/keyindicator/ph-kih 2017-sec%20updated.pdf</a> (January 2017; accessed April 7, 2022).

## 3.3.2 Health Access and Utilization

This section compares measures of health care access and utilization in the SGV to the objectives set out by Healthy People 2020 (HP2020). The Healthy People Initiative (HPI) is run by the Office of Disease Prevention and Health Promotion (ODPHS) which is part of the U.S. Department of Health and Human Services (HHS). Every decade the initiative develops a set of objectives to improve the health of Americans. For each measure, the project establishes a

baseline and a target, and communicates its target-setting method. For instance, one measure in HP2020 is "the percent of persons who were unable to obtain or were delayed in obtaining medical care." HPI established a baseline of 4.7% for this measure, which was the percent of persons unable to obtain or were delayed in obtaining medical care in 2007 according to the Medical Expenditure Panel Survey (MEPS). The 2020 target for this measure was 4.2% or, stated in target-setting terms, a 10% improvement from the baseline. <sup>31</sup>

Table 3.6 shows how the SGV performs on three measures of health care access. The SGV does not meet the HP2020 objective in all three cases. The SGV is 6 percentage points below the universal coverage objective and 8 percentage points below the objective of 95% of the population having a usual source of ongoing care. In terms of delays in getting medical care, the percentage of people experiencing delays in the SGV (9.1%) is twice as high as the HP2020 objective of 4.2%.

Table 3.6 Health Access Indicators for the SGV

Indicator	Healthy People 2020 Objective	SPA 3 San Gabriel Valley
Health Access		
Insured All or Part of Year Age 0 to 64 Years	100%	94%
Usual Source of Ongoing Care All Ages	95%	87%
Delays in Getting Medical Care All Ages	4.2%	9.1%

Source: MHSC's 2019 Community Needs Assessment

https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf

(December 26, 2019; accessed April 7, 2022).

Notes: Findings are based on the 2017 California Health Interview Survey for SPA3.

Table 3.7 presents indicators of adult health access and behaviors. The insured rate (91%) and usual source of ongoing care rate (83.3%) are lower than rates for all ages shown in Table 3.6. However, in terms of health behaviors, the SGV outperforms the HP2020 objectives. Specifically, the SGV's adult population is 9 percentage points higher on healthy weight (42.9%).

<sup>&</sup>lt;sup>31</sup> See <a href="https://www.healthypeople.gov/2020/leading-health-indicators/2020-LHI-Topics">https://www.healthypeople.gov/2020/leading-health-indicators/2020-LHI-Topics</a> for the full list of topics and indicators covered by Healthy People 2020. (last updated February 6, 2022; accessed April 7, 2022)

vs. 33.9%), 8 percentage points lower on obesity (22.3% vs. 30.5%), 5 percentage points lower on high blood pressure (21.7% vs. 26.9%), and 3 percentage points lower on smoking (9.3% vs. 12.0%).

Table 3.7 Adult Health Indicators for the SGV

Indicator	Healthy People 2020 Objective	SPA 3 San Gabriel Valley
Health Access		
Insured All or Part of Year	100%	91%
Usual Source of Ongoing Care	89.4%	83.3%
Health Behaviors		
Healthy Weight	33.9%	42.9%
Obese	30.5%	22.3%
Diagnosed with High Blood Pressure	26.9%	21.7%
Currently Smoke Cigarettes	12.0%	9.3%

Source: MHSC's 2019 Community Needs Assessment

https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf

(December 26, 2019; accessed April 7, 2022).

Notes: Findings are based on the 2017 California Health Interview Survey for SPA3.

Turning to senior health, SGV seniors underperformed the flu shot objective (67% vs. 90%), outperformed the health weight objective (35.8% vs. 33.9%), and significantly underperformed the high blood pressure objective (26.9% vs. 67.9%) (Table 3.8).

**Table 3.8** Senior Health Indicators for the SGV

Indicator	Healthy People 2020 Objective	SPA 3 San Gabriel Valley
Health Access (2016)		
Flu Shot in Past Year	90%	67%
Health Behaviors		
Healthy Weight	33.9%	35.8%
Diagnosed with High Blood Pressure	26.9%	67.9%

Source: MHSC's 2019 Community Needs Assessment

https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf

(December 26, 2019; accessed April 7, 2022).

Notes: Findings are based on the 2016 and 2017 California Health Interview Survey for SPA3.

Table 3.9 summarizes health access and utilization measures in the SGV and compares them to LA County, California, and HP2020 target rates. The red cells in Table 3.9 indicate that the SGV did not meet the HP2020 target rate. The gray cells indicate that the SPA 3 estimate is statistically unstable so caution should be used when comparing it to the LA County, California, and HP2020 rates. As indicated previously, the SGV underperforms the HP2020 target rate for insured, usual source of care, and delays in getting medical care. The magnitude of the underperformance for the SGV is similar to that of LA County and California.

**Table 3.9** Summary of Health Access and Utilization Indicators

Indiantes.	SI	PA 3	County	California	Target Rate	
Indicator	Rate	Status	Rate	Rate		
Health Access (2017)						
Insured All or Part of Year Age 0 to 64 Years	94%		94%	94%	100%	
Usual Source of Ongoing Care All Ages	87%		85%	87%	95%	
Delays in Getting Medical Care All Ages	9.1%	( <b>4</b> )	9.5%	10.3%	4.2%	
Delays in Getting Medicines All Ages	5.2%	*	8.2%	8.5%	2.8%	
Health Utilization (2016)						
Mammogram in Past Two Years Females 50 to 74 Years	88.2%	*	84.7%	83.2%	81.1%	

Source: MHSC's 2019 Community Needs Assessment

https://www.methodisthospital.org/documents/METHODIST-HOSPITAL-2019-CHNA-FINAL-122619.pdf

(December 26, 2019; accessed April 7, 2022). Notes: Target rate is the HP2020 objective.

We again zoom out to show how health access and utilization compares to national health access and utilization (Table 3.10). The rates shown in Table 3.10 were statistically tested against each other. Cells highlighted in black indicate that the SPA was statistically worse than the other seven SPAs in LA County. Cells highlighted in white indicate that the SPA was statistically better than the other seven SPAs. As one example, the SGV (SPA 3, dark green column) had the lowest percent of children insured among all SPAs at 94.2%. That 94.2% is statistically less than the rate for the other seven SPAs, which is closer to the overall LA County rate of 96.6%. Another useful comparison is to compare the 94.2% in the SGV to the national rate (95.5%) and the HP2020 objective rate (100%). Making these latter two comparisons confirm that the SGV is indeed underperforming when it comes to insuring its children.

Scanning for the white and black cells in Table 3.10 allows us to quickly determine if the SGV is better or worse than the other seven SPAs in terms of health care access. The second black cell in the SGV column occurs for the "percent of children ages 0-17 years who have difficulty accessing medical care." The rate is 14.9% on this measure for the SGV, which is statistically higher than the rate for the other seven SPAs which is closer to the LA County average of 11.0%.

Unfortunately, there is no corresponding national or HP2020 rate for this measure, but 14.9% does appear quite high especially when compared to the West SPA (blue column, fourth to last) rate of 4.3%.

Table 3.10 SGV Health Care Access

HEALTH CARE ACCESS	HP 2020	National	LACounty	Antelope Valley	San Fernando	San Gabriel	Metro	West	South	East	South Bay
				SPA 1	SPA 2	SPA 3	SPA 4	SPA 5	SPA 6	SPA 7	SPA 8
Insurance											
<ul> <li>Percent of children ages 0-17 years who are insured<sup>2</sup></li> </ul>	100.0	95.5	96.6	94.9	97.6	94.2	98.1	97.0	97.0	96.9	96.7
<ul> <li>Percent of adults ages 18-64 years who are insured<sup>2</sup></li> </ul>	100.0	87.2 <sup>n</sup>	88.3	88.9	88.4	88.7	84.8	95.3	82.2	88.9	90.5
Regular Source of Care											
<ul> <li>Percent of children ages 0-17 years with a regular source of health care<sup>2</sup></li> </ul>	100.0	95.6"	94.3	95.0	94.8	94.0	89.4	93.4	95.8	93.6	96.7
<ul> <li>Percent of adults ages 18-64 years with a regular source of health care<sup>2</sup></li> </ul>	89.4	N/A	77.7	79.7	79.1	78.3	74.3	78.8	74.3	76.0	80.3
Access to Medical Care											
<ul> <li>Percent of children ages 0-17 years who have difficulty accessing medical care<sup>2</sup></li> </ul>	N/A	N/A	11.0	11.9	9.4	14.9	14.5	4.3	15.0	9.5	7.0
<ul> <li>Percent of adults who reported difficulty accessing medical care<sup>2</sup></li> </ul>	N/A	N/A	23.6	28.0	21.6	25.5	28.6	13.1	32.5	22.9	19.1
<ul> <li>Percent of children ages 0-17 years who did not see a doctor when needed in the past year because they could not afford it<sup>2</sup></li> </ul>	N/A	1.4"	6.4	6.7*	6.2	5.9	8.0	6.3*	7.4	7.2	4.6
Access to Dental Care											
<ul> <li>Percent of adults who did not see a dentist or go to a dental clinic in the past year<sup>2</sup></li> </ul>	N/A	34.7°	40.7	43.4	34.9	41.8	40.3	28.9	56.9	46.9	37.6
<ul> <li>Percent of children ages 3-17 years who did not obtain dental care (including check-ups) in the past year because they could not afford it<sup>2</sup></li> </ul>	N/A	N/A	11.5	14.2	10.3	9.9	15.5	13.3	10.4	11.5	11.9
Access to Mental Health Care											
<ul> <li>Percent of children ages 3-17 years whose parents tried to get them mental or behavioral health care in the past year<sup>2</sup></li> </ul>	N/A	N/A	7.4	7.4	10.2	5.5	8.0	7.9	5.6*	8.2	6.3
<ul> <li>Percent of adults who tried to get mental health care in the past year<sup>2</sup></li> </ul>	N/A	N/A	8.5	10.1	7.0	5.4	12.3	14.2	8.1	7.9	9.3

Source: LA County Department of Public Health – Key Indicators of Health (January 2017) <a href="http://publichealth.lacounty.gov/ha/docs/2015lachs/keyindicator/ph-kih 2017-sec%20updated.pdf">http://publichealth.lacounty.gov/ha/docs/2015lachs/keyindicator/ph-kih 2017-sec%20updated.pdf</a> (January 2017; accessed April 7, 2022).

Notes: Cells highlighted in black mean the SPA was statistically worse than the other SPAs. Cells highlighted in white mean the SPA was statistically better than the other SPAs. The blue diamonds at the end of the last two rows indicate that the data was not statistically tested for those rows.

# 3.3.3 General Acute Care Hospitals in the SGV

Figure 3.3 presents a map of the 13 non-Kaiser GAC hospitals located in the SGV.<sup>32</sup> We exclude Kaiser from most of our analyses because it is a closed system that is generally not available to patients that do not subscribe to Kaiser insurance. Only 3 GAC hospitals (including MHSC) in the SGV are currently independent.<sup>33</sup> The remaining 10 hospitals are all part of systems. The 5 hospitals in and around Alhambra are part of Advanced Healthcare Management Corporation (AHMC). Emanate Health controls 3 hospitals in and around Covina. San Dimas Community Hospital is part of Prime Healthcare and Huntington Memorial Hospital – the market leader in most respects – is controlled by Cedars-Sinai. AHMC and Prime are for-profit systems while Emanate and Cedar-Sinai are non-profit systems.

In the horizontal market analysis section of this report (Section 6.2) we make the case that the relevant geographic market for this transaction is likely smaller than the SGV. In that section we test the sensitivity of our horizontal market conclusions to three different geographic market definitions: the SGV, the SGV west of Covina, and the SGV west of the 605 freeway. The latter two definitions are demarcated on the Figure 3.3 map.

<sup>&</sup>lt;sup>32</sup> The one Kaiser hospital in the SGV is located in Baldwin Park.

<sup>&</sup>lt;sup>33</sup> The other two are West Covina Medical Center and Pomona Valley Hospital Medical Center.

Independent AHMC Emanate Health Prime Healthcare Cedars-Sinai West of the 605 Freeway West of Covina PASADENA MHSC FP CLAREM WIN PARK COVINA IC ROSEMEAD MCPARK MP DIAMOND BAR

@ OpenStreetMap contributors

Figure 3.3 GAC Hospitals in the SGV

#### Notes:

A = Alhambra Hospital Medical Center

FP = Foothill Presbyterian Hospital

GEM = Greater El Monte Community Hospital

GMC = Garfield Medical Center

H = Huntington Memorial Hospital

IC = Inter-Community Hospital

MHSC = Methodist Hospital of Southern California

MP = Monterey Park Hospital

PV = Pomona Valley Hospital Medical Center

QV = Queen of the Valley Hospital

SD = San Dimas Community Hospital

SGV = San Gabriel Valley Medical Center

WC = West Covina Medical Center

Excludes the Kaiser - Baldwin Park GAC hospital.

Table 3.11 gives a sense of the importance of MHSC to the SGV. MHSC accounts for 348 of the 2,740 (13%) of beds available in the region. Table 3.11 breaks this out by bed type. Of MHSC's 348 beds, 228 (66%) are medical/surgical beds. The rest of MHSC's beds are reserved for more specialized services. Among SGV GAC hospitals, MHSC accounts for 8% of the obstetrics beds, 15% of the intensive care beds, 14% of the coronary care beds, 100% of the acute respiratory care beds, 9% of the neonatal intensive care beds, and 27% of rehabilitation center beds.

Table 3.11 GAC Beds in the SGV

	San	MHSC	MHSC
	Gabriel		% of
	Valley		San
			Gabriel
			Valley
Medical/Surgical	1,752	228	13%
Obstetrics	314	24	8%
Pediatric Acute	99	0	0%
Intensive Care	190	29	15%
Coronary Care	71	10	14%
Acute Respiratory Care	10	10	100%
Neonatal Intensive Care	193	17	9%
Rehabilitation Center	111	30	27%
Total	2,740	348	13%

Source: HCAI Calendar Year 2016-2020 Hospital Utilization Pivot Tables.

While the USCHS facilities do not lie in the SGV, that does not mean they are unimportant to residents of the SGV. Later in this report we show the estimated diversions from MHSC to Keck and Verdugo are low. And similarly, the estimated diversions from Keck and Verdugo to MHSC are low. However, this masks what really makes the UCSHS important to SGV residents – the tertiary and quaternary services at Keck. Tables 3.12 and 3.13 make it clear that while Keck is relatively unimportant as a provider of low acuity GAC hospital services to commercially insured SGV residents, it is very important provider of high acuity services. Keck ranks only behind Huntington Memorial Hospital as the top provider of high acuity GAC hospital services to commercially insured residents of the SGV (Table 3.13).<sup>34</sup> Table 3.14 shows the top providers

<sup>34</sup> Low acuity is defined as an admission with an MS-DRG weight below 2. High acuity is defined as admissions with an MS-DRG weight at or above 2. At or above 2 is a commonly used threshold for defining "tertiary" services.

33

-

of very high acuity GAC hospital services to SGV residents.<sup>35</sup> Again, Keck ranks second to Huntington, but this time with a smaller gap between first and second. Notably, Keck provides more than twice as many high acuity services to SGV residents than Cedars-Sinai and UCLA—the two hospitals health plans identified as the only hospitals capable of replacing the tertiary and quaternary care that Keck provides. Keck's considerably larger share than these two hospitals shows that SGV residents have a strong preference for obtaining these services locally.

Table 3.12 Low Acuity Commercial Discharges for Patients Residing in the SGV, 2018-2019

Rank	Hospital	Discharges	% of Total Discharges
1	HUNTINGTON MEMORIAL HOSPITAL	10,304	32.5%
2	QUEEN OF THE VALLEY HOSPITAL	3,053	9.6%
3	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	2,887	9.1%
4	GARFIELD MEDICAL CENTER	1,656	5.2%
5	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	1,328	4.2%
6	INTER-COMMUNITY HOSPITAL	1,312	4.1%
7	SAN GABRIEL VALLEY MEDICAL CENTER	1,213	3.8%
8	FOOTHILL PRESBYTERIAN HOSPITAL	1,102	3.5%
9	POMONA VALLEY HOSPITAL MEDICAL CENTER	997	3.1%
10	KECK HOSPITAL OF USC	617	1.9%
11	ST. JUDE MEDICAL CENTER	593	1.9%
12	CEDARS SINAI MEDICAL CENTER	543	1.7%
13	SAN DIMAS COMMUNITY HOSPITAL	533	1.7%
14	USC VERDUGO HILLS HOSPITAL	489	1.5%
15	GOOD SAMARITAN HOSPITAL-LOS ANGELES	437	1.4%
16	SAN ANTONIO REGIONAL HOSPITAL	432	1.4%
17	ADVENTIST HEALTH GLENDALE	400	1.3%
	Total *	31,699	100%

Source: HCAI 2018-2019 PDD.

 $<sup>^{35}</sup>$  We define very high acuity as admissions with MS-DRG weights at or above 4.

Notes: Low acuity discharges are defined as those with an MS-DRG weight below 2. Commercial discharges exclude non-GAC services (i.e., newborns and services related to behavioral health, substance abuse treatment, and rehabilitation). Also excluded are emergency admissions, admissions to Kaiser hospitals, admissions with invalid patient zip codes, and admissions with invalid or ungroupable DRGs. See Section 6 for details. \*Includes all commercial discharges, not just those from the hospitals shown in the table. Only hospitals with shares greater than or equal to 1% are included in the table.

Table 3.13 High Acuity Commercial Discharges for Patients Residing in the SGV, 2018-2019

Rank	Hospital	Discharges	% of Total Discharges
1	HUNTINGTON MEMORIAL HOSPITAL	1,768	30.6%
2	KECK HOSPITAL OF USC	553	9.6%
3	INTER-COMMUNITY HOSPITAL	465	8.1%
4	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	321	5.6%
5	GARFIELD MEDICAL CENTER	304	5.3%
6	QUEEN OF THE VALLEY HOSPITAL	246	4.3%
7	CEDARS SINAI MEDICAL CENTER	245	4.2%
8	POMONA VALLEY HOSPITAL MEDICAL CENTER	201	3.5%
9	RONALD REAGAN UCLA MEDICAL CENTER	190	3.3%
10	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	166	2.9%
11	GOOD SAMARITAN HOSPITAL-LOS ANGELES	123	2.1%
12	FOOTHILL PRESBYTERIAN HOSPITAL	101	1.7%
13	ST. VINCENT MEDICAL CENTER	87	1.5%
14	ST. JUDE MEDICAL CENTER	68	1.2%
15	SAN ANTONIO REGIONAL HOSPITAL	66	1.1%
16	SAN GABRIEL VALLEY MEDICAL CENTER	60	1.0%
17	UNIVERSITY OF CALIFORNIA IRVINE MEDICAL CENTER	58	1.0%
	Total	5,766	100%

Source: HCAI 2018-2019 PDD.

Notes: High acuity discharges are defined as those with an MS-DRG weight at or above 2. Commercial discharges exclude non-GAC services (i.e., newborns and services related to behavioral health, substance abuse treatment, and rehabilitation). Also excluded are emergency admissions, admissions to Kaiser hospitals, admissions with invalid patient zip codes, and admissions with invalid or ungroupable DRGs. See Section 6 for details. \* Includes all

commercial discharges, not just those from the hospitals shown in the table. Only hospitals with shares greater than or equal to 1% are included in the table.

**Table 3.14** Very High Acuity Commercial Discharges for Patients Residing in the SGV, 2018-2019

Rank	Hospital	Discharges	% of Total Discharges
1	HUNTINGTON MEMORIAL HOSPITAL	585	29.8%
2	KECK HOSPITAL OF USC	264	13.4%
3	INTER-COMMUNITY HOSPITAL	155	7.9%
4	GARFIELD MEDICAL CENTER	107	5.4%
5	CEDARS SINAI MEDICAL CENTER	101	5.1%
6	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	85	4.3%
7	RONALD REAGAN UCLA MEDICAL CENTER	85	4.3%
8	POMONA VALLEY HOSPITAL MEDICAL CENTER	70	3.6%
9	QUEEN OF THE VALLEY HOSPITAL	55	2.8%
10	GOOD SAMARITAN HOSPITAL-LOS ANGELES	52	2.6%
11	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	48	2.4%
12	ST. JUDE MEDICAL CENTER	29	1.5%
13	ST. VINCENT MEDICAL CENTER	25	1.3%
14	UNIVERSITY OF CALIFORNIA IRVINE MEDICAL CENTER	24	1.2%
15	SAN ANTONIO REGIONAL HOSPITAL	23	1.2%
16	FOOTHILL PRESBYTERIAN HOSPITAL	20	1.0%
	Total	1,964	100%

Source: HCAI 2018-2019 PDD

Notes: Very high acuity discharges are defined as those with an MS-DRG weight at or above 4. Commercial discharges exclude non-GAC services (i.e., newborns and services related to behavioral health, substance abuse treatment, and rehabilitation). Also excluded are emergency admissions, admissions to Kaiser hospitals, admissions with invalid patient zip codes, and admissions with invalid or ungroupable DRGs. See Section 6 for details. \* Includes all commercial discharges, not just those from the hospitals shown in the table. Only hospitals with shares greater than or equal to 1% are included in the table.

### 4. METHODIST HOSPITAL OF SOUTHERN CALIFORNIA

MHSC is a nonprofit public benefit corporation that owns and operates a 348-bed licensed GAC hospital located at 300 W. Huntington Drive, Arcadia, California, 91007, which serves the SGV. MHSC has approximately 2,000 employees and a medical staff with over 700 physicians. It is a full-service hospital with clinical services that include cancer care, diagnostic imaging, emergency services, gynecology, cardiac care, inpatient and outpatient surgery, interventional radiology, maternity services, neurosciences, stroke care, orthopedics, and physical rehabilitation.

MHSC's current board includes 17 directors, of whom 4 must be residents of Arcadia, at least 12 must be residents of the Southern California area, at least 2 must be practicing physicians in good standing at MHSC, and at least 50% must be members of the United Methodist Women of the California-Pacific Conferences of the United Methodist Church, with one of these directors a minister of the United Methodist Church.

MHSC's community services are supported by the Methodist Hospital Foundation, a California nonprofit public benefit corporation, of which MHSC is the sole corporate member. The Methodist Hospital Foundation is a separate legal entity and is governed by its own, separate board of directors.<sup>36</sup>

### 4.1 Utilization Trends

Table 4.1 presents utilization at MHSC from 2016-2020. Patient days at MHSC increased 7% between 2016 and 2019 (72,279 vs. 77,123). There was considerable variation in the increase across different types of care. Patient days increased by 5% for medical/surgical care (52,518 vs. 55,097), decreased by 13% for obstetrics care (4,889 vs. 4,254), increased by 2% for intensive care (2,850 vs. 2,900), increased by 9% for coronary care (2,667 vs. 2,906), increased by 30% for acute respiratory care (2,260 vs. 2,949), increased by 41% for neonatal intensive care (41%), and increased by 25% at the rehabilitation center (6,331 vs. 7,943).

Notable patient days went up on average at MHSC while discharges went down on average. Between 2016 and 2019 discharges decreased by 4% (16,185 vs. 15,460). Discharges decreased by 6%, 13%, and 13% for medical/surgical, obstetrics, and intensive care, respectively. Discharges increased by 19%, 24%, 28%, and 38% for coronary care, acute respiratory care, neonatal intensive care, and the rehabilitation center. Patient days up and discharges down on average implies the average length of stay increased at MHSC. This can be seen explicitly in the

<sup>&</sup>lt;sup>36</sup> See Written Notice pgs. 8 and 9.

third set of results in Table 4.1. The average length of stay overall at MHSC increased by 11% from 2016 to 2019 (4.5 days vs. 5.6 days).

The last two sections of Table 4.1 show the licensed beds and licensed bed occupancy rate at MHSC. The number of licensed beds overall and by care type did not change at all over the 2016-2020 period. The occupancy rate increased overall by 15% from 2016 to 2019. The occupancy rate decreased for obstetrics (-13%) and the rehabilitation center (-11%), stayed the same for intensive care (0%), and increased for all other types of care (ranging from 10-42%).

Table 4.1 MHSC Utilization Trends and Service Volumes, 2016-2020

	2016	2017	2018	2019	2020	% Change (2016-
Patient Days	72,279	72,617	74,602	77,123	71,653	2019) 7%
Medical/Surgical	52,518	52,704	53,472	55,097	50,535	5%
Obstetrics	4,889	4,389	4,014	4,254	3,359	-13%
Intensive Care	2,850	2,875	3,042	2,900	3,826	2%
Coronary Care	2,667	2,768	2,496	2,906	2,327	9%
Acute Respiratory Care	2,260	2,492	2,581	2,949	2,663	30%
Neonatal Intensive Care	764	1,115	1,097	1,074	981	41%
Rehabilitation Center	6,331	6,274	7,900	7,943	7,962	25%
Discharges	16,185	15,721	15,478	15,460	12,903	-4%
Medical/Surgical	13,309	13,001	12,717	12,567	10,293	-6%
Obstetrics	1,843	1,676	1,491	1,599	1,351	-13%
Intensive Care	158	161	175	137	226	-13%
Coronary Care	134	142	164	159	114	19%
Acute Respiratory Care	113	115	153	140	124	24%
Neonatal Intensive Care	113	136	134	145	90	28%
Rehabilitation Center	515	490	644	713	705	38%
Average Length of Stay	4.5	4.6	4.8	5.0	5.6	11%
Medical/Surgical	3.9	4.1	4.2	4.4	4.9	13%
Obstetrics	2.7	2.6	2.7	2.7	2.5	0%
Intensive Care	5.1	5.5	5.4	6.9	5.5	35%
Coronary Care	4.7	5.3	4.3	5.1	4.6	9%
Acute Respiratory Care	4.8	6.2	5.3	6.3	6.7	31%
Neonatal Intensive Care	3.5	4.5	4.6	4.1	6.1	17%
Rehabilitation Center	12.3	12.8	12.3	11.1	11.3	-10%
Licensed Beds	348	348	348	348	348	0%
Medical/Surgical	228	228	228	228	228	0%
Obstetrics	24	24	24	24	24	0%
Intensive Care	29	29	29	29	29	0%

Coronary Care	10	10	10	10	10	0%
Acute Respiratory Care	10	10	10	10	10	0%
Neonatal Intensive Care	17	17	17	17	17	0%
Rehabilitation Center	30	30	30	30	30	0%
Licensed Beds	53%	57%	59%	61%	56%	15%
Occupancy Rate (%)						
Medical/Surgical	55%	63%	64%	66%	61%	20%
Obstetrics	56%	50%	46%	49%	38%	-13%
Intensive Care	27%	27%	29%	27%	36%	0%
Coronary Care	73%	76%	68%	80%	64%	10%
Acute Respiratory Care	62%	68%	71%	81%	73%	31%
Neonatal Intensive Care	12%	18%	18%	17%	16%	42%
Rehabilitation Center	82%	57%	72%	73%	73%	-11%

Source: HCAI Calendar Year 2016-2020 Hospital Utilization Pivot Tables.

## 4.2 Payer Mix

Table 4.2 presents the payer mix at MHSC using discharges from 2016-2020. Medicare discharges increased by 4% (8,794 vs. 9,105) while Medi-Cal discharges decreased by 18% from 2016 to 2019 (2,574 vs. 2,102). Commercial discharges ("other third parties" in the table) were down 16% during this time period (4,387 vs. 3,698). "All other / indigent" discharges were up 29% over the same time period (429 vs. 555). These changes meant that by 2019 the payer mix at MHSC (measured in terms of discharges) was 59% Medicare, 14% Medi-Cal, 24% commercial, and 4% all other / indigent.

Table 4.2 MHSC Payer Mix by Discharges, 2016-2020

	2016	2017	2018	2019	2020	% Change (2016- 2019)
Medicare	8,794	8,855	8,860	9,105	7,450	4%
Traditional	6,028	5,731	5,875	6,067	4,701	1%
Managed Care	2,766	3,124	2,985	3,038	2,749	10%
Medi-Cal	2,574	2,362	2,361	2,102	1,823	-18%
Traditional	989	751	700	669	643	-32%
Managed Care	1,585	1,611	1,661	1,433	1,180	-10%
Other Third Parties	4,387	4,010	3,817	3,698	3,340	-16%
Traditional	197	172	196	192	1,445	-3%
Managed Care	4,190	3,838	3,621	3,506	1,895	-16%
All Other / Indigent	429	494	440	555	291	29%
County Indigent Programs	0	0	0	0	0	12)
Other Indigent	42	38	34	43	23	2%
All Other Payers	387	456	406	512	268	32%
Total	16,184	15,721	15,478	15,460	12,904	-4%

Source: HCAI 2016-2020 Hospital Financial Pivot Tables.

Notes: Pivot tables use hospital annual financial data for the report period ended in January 1-December 31 of the corresponding year.

### 4.3 Financial Profile

Table 4.3 presents a financial profile of MHSC from 2016-2020. Net income has bounced around from year to year, but overall is up 207% over the 2019-2020 period (13,727,684 vs. 42,187,173). MHSC's operating margin was in the 3-5% range in every year from 2016 to 2019. It was up 34% over this time period (3.2% vs. 4.3%).

MHSC's net patient revenue was down 2% from 2016 to 2019 (\$294 million vs. \$288 million). Its net inpatient revenue per day was down 8% over this period (\$3,073 vs. \$2,819) while its net inpatient revenue per discharge was up 2% (\$13,725 vs. \$14,064).

MHSC's net outpatient revenue per visit was up 3% from 2016 to 2019 (\$889 vs. \$918). Its non-operating revenue, while highly variable from year to year, was up 590% between 2016 and 2019 (\$4.3 million vs. \$29.5 million). Operating expenses were down 3% over this time period (\$288 million vs. \$279 million).

Table 4.3 MHSC Financial Profile, 2016-2020

	2016	2017	2018	2019	2020	% Change (2016- 2019)
Income						
Net Income	13,727,684	30,966,618	-13,552,520	42,187,173	42,722,233	207%
Operating Margin	3.2%	4.9%	3.8%	4.3%	-3.2%	34%
Revenue						
Net Patient Revenue	293,527,424	291,580,420	297,182,307	287,972,259	276,329,342	-2%
Net IP Rev Per Day	3,073	3,035	3,019	2,819	2,983	-8%
Net IP Rev Per Discharge	13,725	14,019	14,553	14,064	16,568	2%
Net OP Rev Per Visit	889	917	938	918	1,007	3%
Non- Operating Revenue	4,281,005	16,657,669	-4,808,916	29,528,774	51,514,541	590%
Expenses	Î					
Operating Expenses	287,552,562	280,833,457	289,337,816	279,282,893	288,253,630	-3%
Non- Operating Expenses	0	0	20,065,728	0	0	
Utilization						
Patient Days	72,283	72,617	74,602	77,123	71,671	7%
Discharges	16,184	15,721	15,478	15,460	12,904	-4%
Visits	80,363	77,642	76,696	76,811	62,116	-4%

Source: HCAI 2016-2020 Hospital Financial Pivot Tables.

Notes: Pivot tables use hospital annual financial data for the report period ended in January 1-December 31 of the corresponding year.

# 4.4 Quality Indicators and Performance Ratings

As of January 26, 2022, CMS reports MHSC's overall star rating as 3 out of 5 stars and its patient survey rating as 2 out of 5 stars.<sup>37</sup> CMS' overall star rating is based on how well hospitals performed across a number of different areas of quality such as treating heart attacks and pneumonia, readmission rates, and safety of care. CMS' patient survey rating covers topics such as how well nurses and doctors communicated, how responsive hospital staff were to patients' needs, and the cleanliness and quietness of the hospital environment.

In 2021, MHSC was ranked the 50<sup>th</sup> best hospital in California and the 25<sup>th</sup> best hospital in Los Angeles by U.S. News.<sup>38</sup> Additionally, U.S. News scored MHSC as "higher performing" for 7 procedures/conditions (Table 4.4). MHSC received 2 out of 5 stars for its patient experience scores from U.S. News (Table 4.5).

Table 4.4 MHSC's Procedure and Conditions Scores, 2021

Score	Procedure / Condition
High Performing (Score = $5/5$ )	- Heart Attack
	- Heart Failure
	- Diabetes
	- Kidney Failure
	- Stroke
	- Chronic Obstructive Pulmonary
	Disease (COPD)
	- Pneumonia
Average (Score = $3/5$ )	- Colon Cancer Surgery
	- Abdominal Aortic Aneurysm Repair
	- Heart Bypass Surgery
	- Hip Fracture
	- Back Surgery (Spinal Fusion)
	- Hip Replacement
	- Knee Replacement

Source: U.S. News Best Hospitals 2021 <a href="https://health.usnews.com/best-hospitals/area/ca/methodist-hospital-of-southern-california-6931630#rankings">https://health.usnews.com/best-hospitals/area/ca/methodist-hospital-of-southern-california-6931630#rankings</a> (accessed April 7, 2022).

<sup>38</sup> https://health.usnews.com/best-hospitals/area/ca/methodist-hospital-of-southern-california-6931630 (accessed April 7, 2022).

<sup>&</sup>lt;sup>37</sup> <u>https://www.medicare.gov/care-compare/details/hospital/050238?city=Los%20Angeles&state=CA&zipcode=</u> (last updated January 26, 2022; accessed April 16, 2022).

Table 4.5 MHSC's Patient Experience Scores, 2021

<b>Overall Patient Experience Score</b>	2 stars out of 5
Satisfaction with the hospital overall	3 out of 5
Willingness to recommend	3 out of 5
Satisfaction with doctors' communications	2 out of 5
Satisfaction with nurses' communications	2 out of 5
Satisfaction with efforts to prevent medication harm	2 out of 5
Satisfaction with quality of discharge information	3 out of 5
Satisfaction with involvement in recovery	3 out of 5
Satisfaction with staff responsiveness	1 out of 5
Satisfaction with hospital room cleanliness	3 out of 5
Satisfaction with noise volume	2 out of 5

Source: U.S. News Best Hospitals 2021 <a href="https://health.usnews.com/best-hospitals/area/ca/methodist-hospital-of-southern-california-6931630#patient">https://health.usnews.com/best-hospitals/area/ca/methodist-hospital-of-southern-california-6931630#patient</a>. (accessed April 7, 2022).

### 5. USC HEALTH SYSTEM

USCHS is a nonprofit public benefit corporation and wholly-owned subsidiary of the University of Southern California ("USC"). USCHS provides medical care to patients in Los Angeles through its network of hospitals and outpatient clinics. USCHS is the sole corporate member of Keck, which includes two GAC hospitals, Keck and Norris, and is the sole corporate member of Verdugo. We focus on Keck in what follows. Verdugo is also a GAC hospital, but does not have the market power that Keck has (see Section 6). We believe any potential anticompetitive effects that this transaction could generate would arise from USCHS leveraging the market power that Keck has as a provider of highly specialized services. Norris, while licensed by HCAI as a GAC hospital, is classified as a specialty cancer hospital by the American Hospital Association (AHA). As a specialty hospital, it is outside the relevant product market for this transaction.

### **5.1 Utilization Trends**

Table 5.1 presents utilization trends at Keck. Patient days at Keck increased 1% between 2016 and 2019 (83,759 vs. 84.447). There was variation across different types of care. Patient days decreased by 1% for medical/surgical care (56,066 vs. 55,490), increased by 2% for intensive care (23,721 vs. 24,237), and increased by 19% at the rehabilitation center (3,972 vs. 4,720).

Discharges also increased slightly over the period. Between 2016 and 2019 discharges increased by 2% (12,051 vs. 12,308). The average length of stay overall at Keck decreased by 1% from 2016 to 2019 (7.0 days vs. 6.9 days).

The last two sections of Table 5.1 show the licensed beds and licensed bed occupancy rate at Keck. The number of licensed beds overall and by care type did not change at all over the period. The occupancy rate increased by 2% from 2016 to 2019. The occupancy rate decreased for medical/surgical (-2%) and increased for intensive care (3%) and the rehabilitation center (18%).

Table 5.1 Keck Utilization Trends and Service Volumes, 2016-2020

	2016	2017	2018	2019	2020	% Change (2016- 2019)
Patient Days	83,759	84,873	83,600	84,447	74,917	1%
Medical/Surgical	56,066	54,904	53,883	55,490	51,303	-1%
Intensive Care	23,721	24,394	24,015	24,237	23,614	2%
Rehabilitation Center	3,972	5,575	5,702	4,720	0	19%
Discharges	12,051	12,496	12,096	12,308	10,274	2%
Medical/Surgical	11,093	11,358	10,892	11,175	9,538	1%
Intensive Care*	**	4,736	4,877	4,949	4,464	**
Rehabilitation Center	281	428	469	369	0	31%
Average Length of Stay	7.0	6.8	6.9	6.9	7.3	-1%
Medical/Surgical	5.1	4.8	4.9	5.0	5.4	-2%
Intensive Care	**	5.2	4.9	4.9	5.3	**
Rehabilitation Center	14.1	13.0	12.2	12.8	To the second	-9%
Licensed Beds	401	401	401	401	401	0%
Medical/Surgical	285	285	285	285	285	0%
Intensive Care	84	84	84	84	84	0%
Rehabilitation Center	32	32	32	32	32	0%
Licensed Beds	57%	58%	57%	58%	51%	2%
Occupancy Rate (%)	ž		8			
Medical/Surgical	54%	53%	52%	53%	49%	-2%
Intensive Care	77%	80%	78%	79%	77%	3%
Rehabilitation Center	34%	48%	49%	40%	0%	18%

Source: HCAI Calendar Year 2016-2020 Hospital Utilization Pivot Tables.

Notes: \* Includes intra-hospital transfers from critical care. \*\* Suspected data errors are suppressed. HCAI reports this as 2,602 which is half of the value in 2017 and is a lot lower than the patient days would indicate.

### 5.2 Payer Mix

Table 5.2 presents the payer mix at Keck using discharges. Medicare discharges decreased by 2% (5,787 vs. 5,685) while Medi-Cal discharges increased by 43% from 2016 to 2019 (1,717 vs. 2,403). Commercial discharges ("other third parties" in the table) were down 16% during this time period (4,507 vs. 3,808). "All other / indigent" discharges were down 10% over the same time period (71 vs. 64). These changes meant that by 2019 the payer mix at Keck was 47% Medicare, 20% Medi-Cal, 32% commercial, and 1% all other / indigent.

Table 5.2 Keck Payer Mix Using Discharges, 2016-2020

	2016	2017	2018	2019	2020	% Change (2016- 2019)
Medicare	5,787	5,927	5,724	5,685	5,314	-2%
Traditional	4,440	4,572	4,383	4,324	4,010	-3%
Managed Care	1,347	1,355	1,341	1,361	1,304	1%
Medi-Cal	1,717	2,094	2,387	2,457	2,403	43%
Traditional	628	609	608	648	687	3%
Managed Care	1,089	1,485	1,779	1,809	1,716	66%
Other Third Parties	4,507	4,286	4,144	3,808	3,458	-16%
Traditional	187	187	71	162	99	-13%
Managed Care	4,320	4,099	4,073	3,646	3,359	-16%
All Other / Indigent	71	32	67	64	57	-10%
County Indigent	0	0	0	0	0	<del>19</del> )
Programs						
Other Indigent	6	25	23	17	22	183%
All Other Payers	65	7	44	47	35	-28%
Total	12,082	12,339	12,322	12,014	11,232	-1%

Source: HCAI 2016-2020 Hospital Financial Pivot Tables.

Notes: Pivot tables use hospital annual financial data for the report period ended in January 1-December 31 of the corresponding year.

#### 5.3 Financial Profile

Table 5.3 presents a financial profile of Keck from 2016-2020. Net income was positive in the early part of the period and turned negative in 2018. Net patient revenue rose steadily over the period and increased by 34% overall between 2016 and 2019 (\$0.9 billion vs. \$1.2 billion).

Keck's net inpatient revenue per discharge was up 19% between 2016 and 2019 (\$52,450 vs. \$62,377) and its net outpatient revenue per visit was up 50% (\$807 vs. \$1,214).

Keck's operating expenses rose steadily over the period for a total increase of 33% from 2016 to 2019 (\$0.9 billion vs. \$1.2 billion).

Table 5.3 Keck Financial Profile, 2016-2020

	2016	2017	2018	2019	2020	% Change (2016-2019)
Income						
Net Income	1,836,221	2,811,869	-8,071,972	-12,069,842	-3,923,993	-757%
Operating Margin	0.2%	0.3%	-0.8%	-1.1%	-0.3%	-650%
Revenue						
Net Patient Revenue	893,255,194	918,686,634	1,060,809,018	1,179,458,988	1,195,380,502	32%
Net IP Rev Per Day	7,404	7,808	8,410	9,084	9,095	23%
Net IP Rev Per Discharge	52,450	52,241	58,401	62,377	62,545	19%
Net OP Rev Per Visit	807	894	1,018	1,214	1,633	50%
Non- Operating Revenue	0	7,715	0	494,738	0	*
Expenses						
Operating Expenses	899,246,680	926,871,154	1,077,147,156	1,198,246,038	1,273,850,652	33%
Non- Operating Expenses	0	0	0	38,058	1,911	3-95
Utilization					2	
Patient Days	85,594	82,561	85,566	82,496	77,241	-4%
Discharges	12,082	12,339	12,322	12,014	11,232	-1%
Visits	321,562	306,523	335,135	354,352	301,849	10%

Source: HCAI 2016-2020 Hospital Financial Pivot Tables.

Notes: Pivot tables use hospital annual financial data for the report period ended in January 1-December 31 of the corresponding year.

## 5.4 Quality Indicators and Performance Ratings

As of January 26, 2022, CMS reports Keck's overall star rating as 4 out of 5 stars and its patient survey rating as 3 out of 5 stars.<sup>39</sup>

In 2021, Keck was nationally ranked in 12 adult specialties by U.S. News (Table 5.4). Additionally, U.S. News ranked Keck as the 5<sup>th</sup> best hospital in California, the 3<sup>rd</sup> best hospital in Los Angeles, and high performing in 14 procedures/conditions (Table 5.5).<sup>40</sup> It obtained a 3 out of 5 stars overall patient experience score (Table 5.6).

Table 5.4 Keck's Nationally Ranked Adult Specialties, 2021

Specialty	National Rank
Cancer	20
Cardiology & Heart Surgery	14
Diabetes & Endocrinology	48
Ear, Nose & Throat	35
Gastroenterology & GI	12
Surgery	
Geriatrics	11
Gynecology	25
Neurology & Neurosurgery	36
Ophthalmology	13
Orthopedics	34
Pulmonology & Lung	21
Surgery	
Urology	10

Source: U.S. News Best Hospitals 2021 <a href="https://health.usnews.com/best-hospitals/area/ca/keck-hospital-of-usc-6930042#rankings">https://health.usnews.com/best-hospitals/area/ca/keck-hospital-of-usc-6930042#rankings</a>. (accessed April 7, 2022).

<sup>&</sup>lt;sup>39</sup> https://www.medicare.gov/care-compare/details/hospital/050696?city=Los%20Angeles&state=CA&zipcode=.

<sup>&</sup>lt;sup>40</sup> Top 5 in California were 1) UCLA, 2) Cedar-Sinai, 3) UCSF, 4) Stanford, and 5) Keck and UCSD (tie). https://health.usnews.com/best-hospitals/area/ca.

Table 5.5 Keck's Procedure and Conditions Scores, 2021

Score	Procedure / Condition
High Performing (Score = $5/5$ )	- Colon Cancer Surgery
	- Lung Cancer Surgery
	- Abdominal Aortic Aneurysm Repair
	- Heart Attack
	- Aortic Valve Surgery
	- Heart Bypass Surgery
	- Heart Failure
	- Transcatheter Aortic Valve
	Replacement (TAVR)
	- Kidney Failure
	- Back Surgery (Spinal Fusion)
	- Stroke
	- Hip Replacement
	- Knee Replacement
	- Pneumonia
Average (Score = $3/5$ )	- Diabetes
	- Hip Fracture
Below Average (Score = 2/5)	- Chronic Obstructive Pulmonary
	Disease (COPD)

Source: U.S. News Best Hospitals 2021 <a href="https://health.usnews.com/best-hospitals/area/ca/keck-hospital-of-usc-6930042#rankings">https://health.usnews.com/best-hospitals/area/ca/keck-hospital-of-usc-6930042#rankings</a>. (accessed April 7, 2022).

Table 5.6 Keck's Patient Experience Scores, 2021

Overall Patient Experience Score	3 stars out of 5
Satisfaction with the hospital overall	4 out of 5
Willingness to recommend	4 out of 5
Satisfaction with doctors' communications	4 out of 5
Satisfaction with nurses' communications	3 out of 5
Satisfaction with efforts to prevent medication harm	2 out of 5
Satisfaction with quality of discharge information	3 out of 5
Satisfaction with involvement in recovery	4 out of 5
Satisfaction with staff responsiveness	3 out of 5
Satisfaction with hospital room cleanliness	2 out of 5
Satisfaction with noise volume	3 out of 5

Source: U.S. News Best Hospitals 2021 <a href="https://health.usnews.com/best-hospitals/area/ca/keck-hospital-of-usc-6930042#patient">https://health.usnews.com/best-hospitals/area/ca/keck-hospital-of-usc-6930042#patient</a>. (accessed April 7, 2022).

### 6. COMPETITIVE IMPACT

This section provides our competitive impact analysis of the transaction. Section 6.1 presents a market overview for this transaction and contains the reasoning behind our determination that the relevant product market for this transaction is inpatient GAC hospital services and the relevant geographic market is no larger than the SGV.

Section 6.2 contains our assessment of whether the transaction poses any risks to horizontal competition. We present three levels of analysis for whether the merger is likely to impact horizontal competition. First, we measure the overlap in the service areas of the merging parties. Considerable overlap suggests the parties are direct competitors and allowing the merger to proceed would reduce horizontal competition. Second, we calculate pre- and post-merger HHIs for the defined market. The larger the difference in pre- and post-merger HHIs, the greater the risk to horizontal competition. The final level is a diversion analysis. Diversion analyses predict which hospitals patients would flow to if a hospital was suddenly out-of-network and no longer available. Large diversion estimates from one merging party to the other would indicate that the merging parties are likely strong competitors of one another and allowing the merger to proceed would reduce competition.

Section 6.3 presents our assessment of the cross-market concerns created by the merger. Cross-market analyses rely on the same insurer-hospital bargaining theory that underpins horizontal analyses. We discuss how cross-market analysis works in Section 6.4 and then proceed to present evidence on the market power of the merging parties. The more market power that one (or both) of the merging parties has, the greater the cross-market concern. We assess the market power of the merging parties three ways. First, we provide estimates of WTP. Higher WTP estimates indicate more market power. Second, we estimate prices for GAC hospitals in LA County. Third, we report on how the health plans we interviewed assessed the market power of the merging parties.

Section 6.4 offers our conclusion on the likely competitive impact of the transaction and includes a list of conditions for the OCAG to consider imposing.

## **6.1 Market Overview**

We begin with an overview of the market for inpatient GAC services in the SGV. In sections 6.1.1 and 6.1.2 we discuss the relevant product and geographic markets for the transaction, respectively.

### 6.1.1 Product Market

Inpatient GAC hospital services is the relevant service market for assessing the transaction's effects on competition. This service market includes a broad cluster of medical and surgical diagnostic and treatments offered at both MHSC and USCHS that require an overnight hospital stay. Inpatient GAC hospital services include, but are not limited to, emergency services, internal

medicine services, and surgical procedures that are offered at both MHSC and USCHS under similar competitive conditions.

Absent indications that a merger might have a specialized impact on a particular service, hospital mergers are generally analyzed across a cluster of inpatient GAC hospital services. We follow this approach and define the product market as a cluster of inpatient GAC hospital services, but we also went further and analyzed the impact of the transaction on high acuity services in particular.<sup>41</sup>

Outpatient services are not included in the product market because commercial insurers and patients cannot substitute outpatient services for inpatient GAC hospital services. Additionally, there is a different set of competitors (operating under different competitive conditions) when it comes to outpatient services.

Lastly, the product market does not include psychiatric care, substance abuse treatment, and rehabilitation services. Again, these services are offered by a different set of competitors under different competitive conditions and are not substitutes for inpatient GAC hospital services.

# 6.1.2 Geographic Market

The relevant geographic market for this transaction is no larger than the San Gabriel Valley. The appropriate geographic market for analyzing transactions such as this one should be determined based on whether a hypothetical monopolist of the hospitals located in these areas could profitably impose a small but significant and non-transitory increase of price (SSNIP) on the relevant services.

Patients receiving inpatient GAC hospital services in the SGV strongly prefer to obtain these services close to where they live. The health plan representatives we interviewed confirmed this preference of their members. Additionally, the patient discharge data we analyzed shows patients have a strong preference for obtaining care in their community. About 1.8 million people live in the SGV which makes it roughly equivalent in population to West Virginia and larger than 11 states. It would be exceedingly difficult for a commercial insurer to successfully market a health plan provider network that excluded all hospitals located within the SGV. Because a significant number of patients in the SGV would not view hospitals outside the SGV as a practical alternative, a hypothetical monopolist of all the GAC hospitals within the SGV could profitably impose a SSNIP.

50

\_

<sup>&</sup>lt;sup>41</sup> High acuity is defined the same way as in Section 3, that is, inpatient discharges with an MS-DRG weight above 2.

The health plans we talked to all mentioned Huntington and the AHMC hospitals as the main alternatives to MHSC in the SGV. The plans were mixed on whether they considered the Emanate hospitals as alternatives to MHSC. None of the plans mentioned San Dimas Community Hospital (SDHC) or Pomona Valley Hospital Medical Center (PVHMC) (in the eastern part of the SGV) as alternatives to MHSC. These statements suggested two geographic markets smaller than the SGV – the SGV west of Covina (excludes SDHC and PVHMC, but not the Emanate hospitals) and the SGV west of the 605 freeway (excludes SDHC, PVHMC, and the Emanate hospitals) (see Figure 3.3). In Section 6.2.2 we calculate pre- and post-merger HHIs using these two geographic market definitions as well as the entire SGV. Our preferred geographic market among the three would be the SGV west of Covina based on our commercial diversion estimates in Section 6.2.3 which indicate a considerable diversion from MHSC to the Emanate hospitals, but little diversion to SDHC and PVHMC. But ultimately, the three geographic market definitions lead to a similar horizontal market conclusion so choosing a preferred geographic market is immaterial.

# **6.2 Horizontal Market Analysis**

In this section, we analyze the competitive impact of the acquisition by focusing on whether the merging firms are "direct competitors" engaged in what is known as "horizontal competition." Direct competition exists when firms compete in the same market and are viewed as potential substitutes to each other. We conduct three analyses to test for potential horizontal competition concerns: overlapping primary service areas (Section 6.2.1), differences in pre- vs. post-merger HHIs (Section 6.2.2), and a diversion analysis (Section 6.2.3). In Section 6.2.4 we detail our conclusion on what the results from these three analyses mean for the level of horizontal concern created by the transaction. Among these three analyses, we put most weight on the results of the diversion analysis in making our conclusion.

Commercial discharges are important to consider as the literature has found consistently that commercial prices increase post-merger. However, we repeat each analysis in this section using Medi-Cal discharges in place of commercial discharges. Medi-Cal rates are set by the state, but hospitals aren't bound by the rates the state sets. Hospitals can negotiate higher Medi-Cal rates with managed care plans. Some do this by negotiating a multiplier for the state rates, while others have more nonstandard negotiations such as deviating from state rates and requesting carve-outs for certain services. Through our interviews with health plans, we've learned that USCHS uses carve-outs and requests Medi-Cal plans to reimburse them using a percentage of billed charges instead of a percentage of the state's Medi-Cal rates. Because higher Medi-Cal

\_

<sup>&</sup>lt;sup>42</sup> See e.g., Cooper Z, Craig SV, Gaynor M, Van Reenen J. The price ain't right? Hospital prices and health spending on the privately insured. The Quarterly Journal of Economics. 2019 Feb 1;134(1):51-107.

rates as a result of this transaction are a possibility, all our forthcoming competitive effects analyses are done twice – once using commercial discharges and once using Medi-Cal discharges.

# 6.2.1 MHSC, Keck, and Verdugo PSAs and SSAs

Our first analysis for potential horizontal concerns is service area overlap. Primary service areas are defined as the smallest number of zip codes that account for 75% of a hospital's discharges. Secondary service areas (SSAs) include the set of zip codes that cover 90% of a hospital's discharges. Service areas are frequently calculated in market impact analyses as an initial step in assessing the overlap in the patient bases of facilities proposing to merge.

We calculate PSAs and SSAs two ways as mentioned above. First, we include only commercial discharges.

Figure 6.1 shows the zip codes that make up MHSC's PSA (red) and SSA (blue). Figure 6.1 and all the following service areas show the location of MHSC, Los Angeles, Glendale, and Pomona to make it easier to compare service overlap between figures.

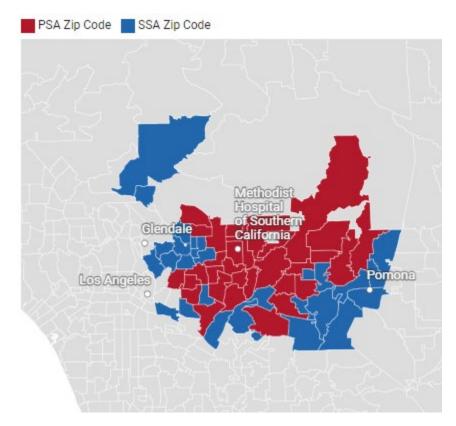


Figure 6.1 MHSC's PSA and SSA – Commercial Discharges, 2018-2019

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: PSA = primary service area (red), SSA = secondary service area (blue).

Keck's PSA and SSA are shown in Figure 6.2. Keck's service area is very expansive as it draws patients from all over Los Angeles County. By comparing Figure 6.2 to Figure 6.1 it is easy to see that the MHSC and Keck service areas overlap.

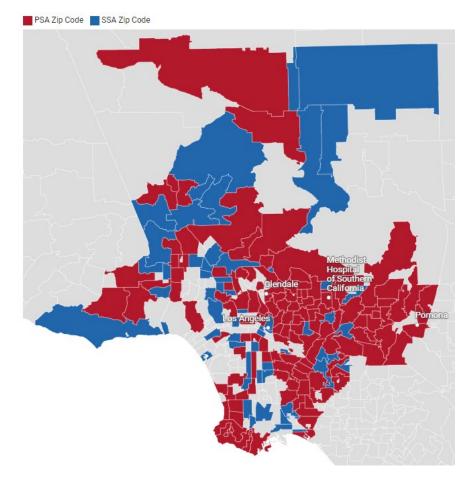


Figure 6.2 Keck's PSA and SSA – Commercial Discharges, 2018-2019

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: PSA = primary service area (red), SSA = secondary service area (blue).

Verdugo's PSA and SSA are shown in Figure 6.3. Verdugo's service area is centered around Glendale and is more similar in size to MHSC's service area than Keck's. Comparing Figure 6.3 and Figure 6.1 indicates there is some overlap between Verdugo's and MHSC's service areas, but most of the overlap is due to the SSA zip codes. The PSAs do not overlap to a considerable extent with MHSC's PSA centered around Arcadia and Verdugo's PSA centered around Glendale.

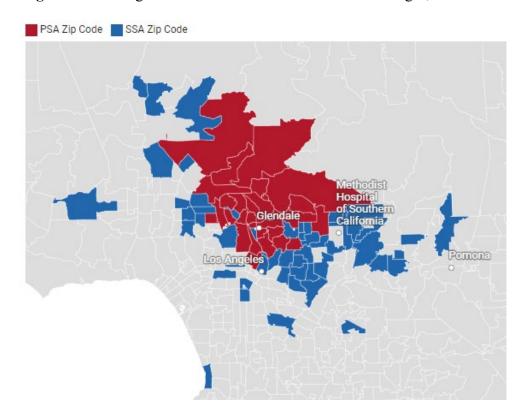
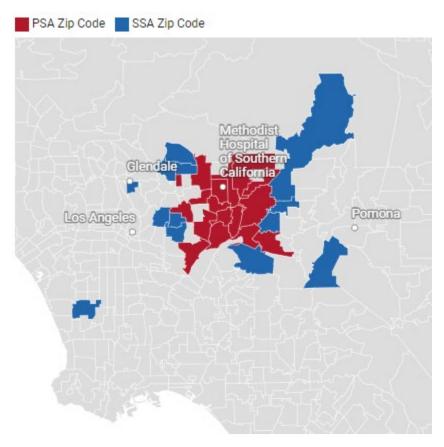


Figure 6.3 Verdugo's PSA and SSA – Commercial Discharges, 2018-2019

Notes: PSA = primary service area (red), SSA = secondary service area (blue).

Figures 6.4-6.6 recalculate the PSAs and SSAs for MHSC, Keck, and Verdugo using Medi-Cal discharges. We draw the same conclusion from these figures. There is overlap between MHSC and Keck's service areas. Keck's very large service area means its service area overlaps with most hospitals in LA County. There is some overlap between MHSC and Verdugo's service area, but that is mainly due to their SSA zip codes. Overall, our first analysis indicates a potential horizontal concern as the service areas of the merging parties overlap.

Figure 6.4 MHSC Primary and Secondary Service Areas – Medi-Cal Discharges, 2018-2019



Source: Authors' analysis of 2018-2019 HCAI PDD. Notes: PSA = primary service area (red), SSA = secondary service area (blue).

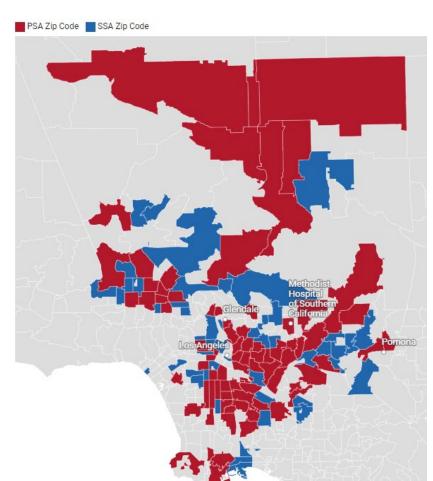


Figure 6.5 Keck Primary and Secondary Service Areas – Medi-Cal Discharges, 2018-2019

Source: Authors' analysis of 2018-2019 HCAI PDD. Notes: PSA = primary service area (red), SSA = secondary service area (blue).

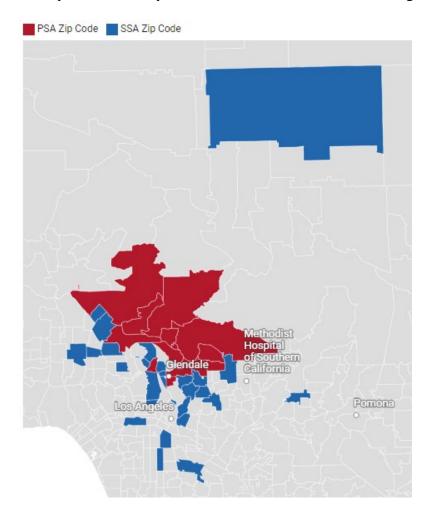


Figure 6.6 Keck Primary and Secondary Service Areas – Commercial Discharges, 2018-2019

Notes: PSA = primary service area (red), SSA = secondary service area (blue).

### 6.2.2 Pre- and Post-Merger HHIs

For our second horizontal analysis, we calculate pre- and post-merger HHIs for the SGV. Table 6.1 shows the commercial market shares by hospital for patients residing in the SGV. Huntington Memorial Hospital has the largest market share at 32.2%. Emanate's Queen of the Valley Hospital is second at 8.8% while MHSC is third at 8.6%. Keck and Verdugo have 3.1% and 1.4% market shares in the SGV, respectively. In order to calculate pre- and post-merger HHIs for the SGV we first calculated market shares at the system level (e.g., 3.1% + 1.4% = 4.5% market share for USCHS) and then used the system level market shares to calculate a pre-merger HHI for the SGV. Our post-merger HHI was calculated by assuming MHSC was a part of USCHS (i.e., 8.6% + 3.1% + 1.4% = 13.1% market share for USCHS). The result of these calculations

was a pre-merger HHI of 1,714 and a post-merger HHI of 1,792 – an increase of 78 HHI. It is our opinion that a 78 HHI increase does not warrant a significant horizontal market concern. <sup>43</sup>

Table 6.1 Commercial Market Shares in the SGV - Hospital Level, 2018-2019

Rank	Hospital	Owner	Market Share
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS-SINAI MEDICAL CENTER	32.2%
2	QUEEN OF THE VALLEY HOSPITAL	EMANATE HEALTH	8.8%
3	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	8.6%
4	GARFIELD MEDICAL CENTER	AHMC	5.2%
5	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	4.7%
6	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	PIH HEALTH, INC.	4.0%
7	SAN GABRIEL VALLEY MEDICAL CENTER	AHMC	3.4%
8	FOOTHILL PRESBYTERIAN HOSPITAL	EMANATE HEALTH	3.2%
9	POMONA VALLEY HOSPITAL MEDICAL CENTER	POMONA VALLEY HOSPITAL MEDICAL CENTER	3.2%
10	KECK HOSPITAL OF USC	UNIVERSITY OF SOUTHERN CALIFORNIA	3.1%
11	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	2.1%
12	ST. JUDE MEDICAL CENTER	ST. JOSEPH HEALTH SYSTEM	1.8%
13	GOOD SAMARITAN HOSPITAL- LOS ANGELES	GOOD SAMARITAN HOSPITAL	1.5%
14	SAN DIMAS COMMUNITY HOSPITAL	PRIME HEALTHCARE SERVICES, INC.	1.5%

-

<sup>&</sup>lt;sup>43</sup> The U.S. Department of Justice and the Federal Trade Commission's 2010 Horizontal Merger Guidelines (which are currently in the process of being revised) also consider HHI increases of this magnitude to be unlikely to impact horizontal competition.

15	USC VERDUGO HILLS HOSPITAL	UNIVERSITY OF SOUTHERN CALIFORNIA	1.4%
16	SAN ANTONIO REGIONAL HOSPITAL	SAN ANTONIO REGIONAL HOSPITAL	1.3%
17	RONALD REAGAN UCLA MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	1.3%
18	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	1.2%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with market shares of 1% or more are listed in the table.

Tables 6.2 and 6.3 repeat our HHI calculations using discharges from patients residing in the SGV west of Covina and the SGV west of the 605 freeway, respectively. Huntington Memorial Hospital again has the top market share under both geographic market definitions (37.5% and 51.7%). MHSC now ranks second in both cases at 9.4% and 11.1%, respectively. USCHS' SGV west of Covina market share of 4.8% is only slightly above its market share measured over the entire SGV (4.5%). USCHS' SGV west of the 605 freeway market share increases to 5.7%. The combination of MHSC and USCHS having their highest market shares in the SGV west of the 605 freeway scenario implies a larger HHI change for this geographic market. We calculated the pre- and post-merger HHIs in the SGV west of the 605 freeway region to be 3,287 and 3,413, respectively, for a 126 HHI increase. For the SGV west of Covina region we calculated pre- and post-merger HHIs of 2,106 and 2,196, respectively, for a 90 HHI increase. While these increases of 126 HHI and 90 HHI are larger than the 78 HHI increase we calculated over the entire SGV, they still do not reach levels that would lead us to a conclusion that the merger poses a significant risk to horizontal competition.

Table 6.2 Commercial Market Shares in the SGV West of Covina - Hospital Level, 2018-2019

Rank	Hospital	Owner	Market Share
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS-SINAI MEDICAL CENTER	37.5%
2	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	9.4%
3	QUEEN OF THE VALLEY HOSPITAL	EMANATE HEALTH	9.3%
4	GARFIELD MEDICAL CENTER	AHMC	6.1%
5	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	4.8%
6	SAN GABRIEL VALLEY MEDICAL CENTER	AHMC	3.9%
7	KECK HOSPITAL OF USC	UNIVERSITY OF SOUTHERN CALIFORNIA	3.1%
8	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	PIH HEALTH HOSPITAL	2.7%
9	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	2.1%
10	FOOTHILL PRESBYTERIAN HOSPITAL	EMANATE HEALTH	1.8%
11	USC VERDUGO HILLS HOSPITAL	UNIVERSITY OF SOUTHERN CALIFORNIA	1.7%
12	GOOD SAMARITAN HOSPITAL- LOS ANGELES	GOOD SAMARITAN HOSPITAL	1.6%
13	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	1.4%
14	RONALD REAGAN UCLA MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	1.3%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with market shares of 1% or more are listed in the table.

**Table 6.3** Commercial Market Shares in the SGV West of the 605 Freeway – Hospital Level, 2018-2019

Rank	Hospital	Owner	Market Share
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS-SINAI MEDICAL CENTER	51.7%
2	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	11.1%
3	GARFIELD MEDICAL CENTER	AHMC	7.3%
4	SAN GABRIEL VALLEY MEDICAL CENTER	AHMC	4.3%
5	KECK HOSPITAL OF USC	UNIVERSITY OF SOUTHERN CALIFORNIA	3.3%
6	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	2.4%
7	USC VERDUGO HILLS HOSPITAL	UNIVERSITY OF SOUTHERN PITAL CALIFORNIA	
8	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	1.9%
9	GOOD SAMARITAN HOSPITAL- LOS ANGELES	GOOD SAMARITAN HOSPITAL	1.9%
10	QUEEN OF THE VALLEY HOSPITAL	EMANATE HEALTH	1.4%
11	RONALD REAGAN UCLA MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	1.3%
12	BEVERLY HOSPITAL	BEVERLY COMMUNITY HOSPITAL ASSOCIATION	1.1%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with market shares of 1% or more are listed in the table.

All the pre- and post-merger HHIs calculated in this section thus far consider inpatient GAC services to be the product market. The next set of tables we present calculate HHIs using high acuity inpatient GAC services as the product market.

As mentioned in our product market discussion in Section 6.1.1, inpatient GAC services is the relevant product market for determining the horizontal concern that this transaction creates. As such, our conclusion is that the risk to horizontal competition created by the merger is minimal. However, within this broader group of inpatient GAC services, there can still be particular service lines where MHSC and USCHS are strong direct competitors to one another.

Tables 6.4 shows the commercial market shares of high acuity discharges in the SGV. This is the same table that was shown earlier in Section 3.3.3 of the report. Keck ranks second with a 9.6% market share of high acuity discharges while MHSC ranks fourth at 5.6%. The pre- and post-merger HHIs we calculate for high acuity services in the SGV are 1,675 and 1,789, respectively, for an increase of 114 HHI. Tables 6.5 and 6.6 repeat Table 6.4 for the SGV west of the Covina and SGV west of the 605 freeway regions. The pre- and post-merger HHIs we calculated from the market shares in Table 6.5 were 1,972 and 2,101, respectively, for an increase of 129 HHI. The pre- and post-merger HHIs we calculated from the market shares in Table 6.6 were 2,970 and 3,138, respectively, for an increase of 168 HHI. In all three cases the predicted HHI increase for high acuity services is larger than it was for inpatient GAC services, indicating that USCHS and MHSC are more in direct competition with respect to high acuity services than they are for the broad basket of inpatient GAC services. Although this higher HHI change for high acuity services indicates a greater concern, it is still insufficient to warrant a recommendation to block the transaction. However, it adds support to the cross-market conditions we have recommended in Section 6.4.

Table 6.4 Commercial Market Shares in the SGV – High Acuity Services, 2018-2019

Rank	Hospital	Owner	Market Share
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS-SINAI MEDICAL CENTER	30.6%
2	KECK HOSPITAL OF USC	UNIVERSITY OF SOUTHERN CALIFORNIA	9.6%
3	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	8.1%
4	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	5.6%
5	GARFIELD MEDICAL CENTER	AHMC	5.3%
6	QUEEN OF THE VALLEY HOSPITAL	EMANATE HEALTH	4.3%
7	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	4.2%

8	POMONA VALLEY HOSPITAL MEDICAL CENTER	POMONA VALLEY HOSPITAL MEDICAL CENTER	3.5%
9	RONALD REAGAN UCLA MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	3.3%
10	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	PIH HEALTH HOSPITAL	2.9%
11	GOOD SAMARITAN HOSPITAL-LOS ANGELES	PIH HEALTH, INC.	2.1%
12	FOOTHILL PRESBYTERIAN HOSPITAL	EMANATE HEALTH	1.7%
13	ST. VINCENT MEDICAL CENTER	VERITY HEALTH SYSTEM	1.5%
14	ST. JUDE MEDICAL CENTER	ST. JOSEPH HEALTH SYSTEM	1.2%
15	SAN ANTONIO REGIONAL HOSPITAL	SAN ANTONIO REGIONAL HOSPITAL	1.1%
16	SAN GABRIEL VALLEY MEDICAL CENTER	AHMC	1.0%
17	UNIVERSITY OF CALIFORNIA IRVINE MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	1.0%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with market shares of 1% or more are listed in the table.

**Table 6.5** Commercial Market Shares in the SGV West of Covina – High Acuity Services, 2018-2019

Rank	Hospital	Owner	Market Share
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS-SINAI MEDICAL CENTER	35.4%
2	KECK HOSPITAL OF USC	UNIVERSITY OF SOUTHERN CALIFORNIA	9.7%
3	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	7.2%
4	GARFIELD MEDICAL CENTER	AHMC	6.4%
5	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	6.2%

6	QUEEN OF THE VALLEY HOSPITAL	EMANATE HEALTH	4.6%
7	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	3.7%
8	RONALD REAGAN UCLA MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	3.3%
9	GOOD SAMARITAN HOSPITAL- LOS ANGELES	GOOD SAMARITAN HOSPITAL	2.3%
10	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	PIH HEALTH, INC.	2.2%
11	POMONA VALLEY HOSPITAL MEDICAL CENTER	POMONA VALLEY HOSPITAL MEDICAL CENTER	1.7%
12	ST. VINCENT MEDICAL CENTER	VERITY HEALTH SYSTEM	1.6%
13	SAN GABRIEL VALLEY MEDICAL CENTER	AHMC	1.2%
14	FOOTHILL PRESBYTERIAN HOSPITAL	EMANATE HEALTH	1.2%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with market shares of 1% or more are listed in the table.

**Table 6.6** Commercial Market Shares in the SGV West of the 605 Freeway – High Acuity Services, 2018-2019

Rank	Hospital	Owner	Market Share
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS-SINAI MEDICAL CENTER	47.2%
2	KECK HOSPITAL OF USC	UNIVERSITY OF SOUTHERN CALIFORNIA	10.4%
3	GARFIELD MEDICAL CENTER	AHMC	7.6%
4	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	7.3%
5	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	4.3%

6	RONALD REAGAN UCLA MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	2.9%
7	GOOD SAMARITAN HOSPITAL- LOS ANGELES	PIH HEALTH, INC.	2.5%
8	ST. VINCENT MEDICAL CENTER	VERITY HEALTH SYSTEM	1.6%
9	SAN GABRIEL VALLEY MEDICAL CENTER	AHMC	1.4%
10	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	1.1%
11	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	1.1%
12	USC VERDUGO HILLS HOSPITAL	UNIVERSITY OF SOUTHERN CALIFORNIA	1.0%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with market shares of 1% or more are listed in the table.

## 6.2.3 Diversion Analysis

A diversion analysis served as our third and final horizontal analysis. Diversion analyses are used frequently in the context of hospital mergers and typically involve estimating a patient choice model that takes patient and hospital characteristics as inputs; outputs are the probabilities that each patient will choose a particular hospital. This creates a ranking of hospitals for each patient. The ranking is then used to calculate where patients would go (i.e., divert to) in the event that their first-choice hospital became unavailable. The greater the diversion between two merging hospitals, the stronger the case that they are close substitutes to one another and thus in direct competition.

We modeled the choice of commercial enrollees as a function of five patient characteristics — county, zip code, type of admission (urgent or elective), age, and sex. We excluded emergency admissions as there is little to no patient choice for those admissions. Additionally, we excluded Kaiser and specialty hospitals (e.g., children's, cancer) from the choice set. We kept city/county owned hospitals as part of the choice set, but the results are similar if they are excluded from commercial enrollees' choice set. We repeated this analysis for Medi-Cal enrollees instead of commercial enrollees. In that case the decision to include city/county hospitals in Medi-Cal enrollees' choice set does have an impact as these hospitals are used much more frequently by Medi-Cal enrollees than commercial enrollees.

Research has generally shown that patient location is the strongest predictor of hospital choice followed by diagnosis and then patient demographics. We follow the approach of Raval et al. (2017) by using an iterative procedure to first group patients having the same c characteristics and then compute choice probabilities for the group. We maintain the minimum group size of 25. For patients not assigned to groups, we repeat this procedure using only the first c-1 characteristic. The excluded characteristic is determined by the predetermined ordering of characteristics. This predetermined ordering is based on which characteristics are most likely to predict choices. We iterate on this procedure by reducing the number of characteristics by one each time until all patients are allocated into groups. For each iteration the characteristic that is least likely to predict choices from the set of remaining characteristics is eliminated. The predetermined order we use is similar to that in Raval et al. (2017).

- 1. Patient Location
  - a. Zip code
- 2. Admission type
  - a. Major Diagnostic Category (MDC)
  - b. Admission type (urgent vs. elective)
  - c. Diagnosis Related Group (DRG) type (medical vs. surgical)
  - d. DRG weight quartile
  - e. DRG
- 3. Patient demographics
  - a. Age group (19 and under, 20-44, 45-59, 60+)
  - b. Sex

The above ordering meets two criteria. First, each type of variable is put in descending order of its likely importance in determining hospital choice. This way, patients who differ with respect to less important types of variables are pooled together first. Just as in Raval et al. (2017), we assume patient location is the most important predictor followed by admission type and patient demographics. The second criterion is that within each variable type, the characteristics are ordered from least to most detail. This allows a finer measure (e.g., DRG) to be used when group sizes are large and a coarser measure (e.g., MDC) to be used for smaller groups.

Tables 6.7-6.9 display the estimates from our diversion analysis. Table 6.7 estimates which hospitals MHSC's commercial patients would flow to if MHSC were no longer an option. Tables 6.8 and 6.9 do the same for Keck and Verdugo. The hospitals at the top of Tables 6.7-6.9 are the strongest competitors to MHSC, Keck, and Verdugo, respectively.

<sup>&</sup>lt;sup>44</sup> Raval D, Rosenbaum T, Tenn SA. A semiparametric discrete choice model: An application to hospital mergers. Economic Inquiry. 2017 Oct;55(4):1919-44.

Table 6.7 estimates that 2.4% and 1.3% of MHSC's commercial patients would flow to Keck and Verdugo, respectively (3.7% in total to USCHS). This makes Keck the ninth strongest direct competitor to MHSC and Verdugo the fifteenth. Huntington is clearly the strongest competitor to MHSC according to our analysis with a 39.6% estimated diversion. We estimate Emanate's Queen of the Valley Hospital in West Covina to be MHSC's second strongest competitor with an estimated diversion of 7.2% and San Gabriel Valley Medical Center to be its third strongest competitor with an estimated diversion of 6.1%.

Table 6.8 estimates that 2.1% of Keck's commercial patients would flow to MHSC. This makes MHSC the twelfth strongest direct competitor to Keck. Huntington is the strongest competitor to Keck according to our analysis with a 14.6% estimated diversion. We estimate Cedars-Sinai to be Keck's second strongest competitor with an estimated diversion of 6.7% and UCLA to be its third strongest competitor with an estimated diversion of 4.8%.

Table 6.9 estimates that 1.9% of Verdugo's commercial patients would flow to MHSC. This makes MHSC the twelfth strongest direct competitor to Verdugo. Huntington is the strongest competitor to Verdugo with a 30.7% estimated diversion. We estimate Adventist Health Glendale to be Verdugo's second strongest competitor with an estimated diversion of 15.6% and Providence Saint Joseph Medical Center to be its third strongest competitor with an estimated diversion of 6.9%.

The diversions from MHSC to Keck and Verdugo are low (2.4% and 1.3%). The diversions from Keck and Verdugo to MHSC are also low (2.1% and 1.9%). Based on these diversion estimates, Keck and Verdugo are not significant direct competitors to MHSC with respect to GAC services. We repeated our diversion analysis using Medi-Cal patients in Tables 6.10-6.12 to check if perhaps Keck and Verdugo were in direct competition with MHSC with respect to Medi-Cal patients, but Tables 6.10-6.12 make it clear that is not the case. Tables 6.10-6.12 only includes hospitals with diversion estimates greater than 1%. The USCHS facilities do not make the list on diversions from MHSC (Table 6.10) and MHSC doesn't make the list on the diversions from USCHS (Tables 6.11 and 6.12).

We estimated a larger diversion from MHSC to Keck for high acuity services. <sup>45</sup> While Huntington is still first with a diversion of 35.2% for high acuity services to the commercial population, Keck is now second with an estimated diversion of 10.1% (Table 6.13). This again confirms what the pre- and post-merger HHIs told us – MHSC and Keck are stronger direct competitors for high acuity services than GAC services. Table 6.14 shows the opposite direction – diversion from Keck to MHSC – and shows that it is more likely that Keck's high acuity

\_

<sup>&</sup>lt;sup>45</sup> The diversion for high acuity services from MHSC to Verdugo is minimal (<1%) so we ignore Verdugo for this part of the diversion analysis.

patients would divert to Huntington, Cedars-Sinai, or UCLA, which confirms what we learned in interviews that Cedars-Sinai and UCLA are Keck's strongest direct competitors.

Table 6.7 Commercial Diversion Estimates from MHSC, 2018-2019

Rank	Facility	Owner	City	Diversion from MHSC
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS~SINAI MEDICAL CENTER	PASADENA	39.6%
2	QUEEN OF THE VALLEY HOSPITAL	EMANATE HEALTH	WEST COVINA	7.2%
3	SAN GABRIEL VALLEY MEDICAL CENTER	АНМС	SAN GABRIEL	6.1%
4	GARFIELD MEDICAL CENTER	АНМС	MONTEREY PARK	5.6%
5	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	LOS ANGELES	3.1%
6	GOOD SAMARITAN HOSPITAL-LOS ANGELES	GOOD SAMARITAN HOSPITAL	LOS ANGELES	3.1%
7	FOOTHILL PRESBYTERIAN HOSPITAL	EMANATE HEALTH	GLENDORA	2.6%
8	SAN DIMAS COMMUNITY HOSPITAL	PRIME HEALTHCARE SERVICES, INC.	SAN DIMAS	2.5%
9	KECK HOSPITAL OF USC	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	2.4%
10	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	PIH HEALTH HOSPITAL	WHITTIER	2.3%
11	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	GLENDALE	1.9%
12	POMONA VALLEY HOSPITAL MEDICAL CENTER	POMONA VALLEY HOSPITAL MEDICAL CENTER	POMONA	1.7%
13	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	COVINA	1.6%
14	ADVENTIST HEALTH WHITE MEMORIAL	ADVENTIST HEALTH	LOS ANGELES	1.4%

15	USC VERDUGO HILLS HOSPITAL	UNIVERSITY OF SOUTHERN CALIFORNIA	GLENDALE	1.3%
16	RONALD REAGAN UCLA MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	LOS ANGELES	1.3%
17	PROVIDENCE SAINT JOSEPH MEDICAL CENTER	PROVIDENCE HEALTH AND SERVICES	BURBANK	1.1%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with diversion estimates of 1% or more are listed in the table.

Table 6.8 Commercial Diversion Estimates from Keck, 2018-2019

Rank	Facility	Owner	City	Diversion from Keck
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS~SINAI MEDICAL CENTER	PASADENA	14.6%
2	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	LOS ANGELES	6.7%
3	RONALD REAGAN UCLA MEDICAL CENTER	REGENTS OF THE UNIVERSITY OF CALIFORNIA	LOS ANGELES	4.8%
4	ST. VINCENT MEDICAL CENTER	VERITY HEALTH SYSTEM	LOS ANGELES	4.2%
5	GOOD SAMARITAN HOSPITAL-LOS ANGELES	GOOD SAMARITAN HOSPITAL	LOS ANGELES	4.1%
6	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	PIH HEALTH HOSPITAL	WHITTIER	4.1%
7	TORRANCE MEMORIAL MEDICAL CENTER	CEDARS~SINAI MEDICAL CENTER	TORRANCE	3.3%
8	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	GLENDALE	3.2%

9	SOUTHERN CALIFORNIA HOSPITAL AT CULVER CITY	SOUTHERN CALIFORNIA HOSPITAL AT CULVER CITY	CULVER CITY	2.7%
10	USC VERDUGO HILLS HOSPITAL	UNIVERSITY OF SOUTHERN CALIFORNIA	GLENDALE	2.4%
11	PIH HOSPITAL - DOWNEY	PIH HEALTH HOSPITAL	DOWNEY	2.3%
12	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	ARCADIA	2.1%
13	LONG BEACH MEMORIAL MEDICAL CENTER	MEMORIAL HEALTH SERVICES	LONG BEACH	2.1%
14	GARFIELD MEDICAL CENTER	АНМС	MONTEREY PARK	2.0%
15	QUEEN OF THE VALLEY HOSPITAL	EMANATE HEALTH	WEST COVINA	1.9%
16	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	COVINA	1.9%
17	PROVIDENCE SAINT JOSEPH MEDICAL CENTER	PROVIDENCE HEALTH AND SERVICES	BURBANK	1.8%
18	SANTA MONICA - UCLA MEDICAL CENTER AND ORTHOPAEDIC HOSPITAL	REGENTS OF THE UNIVERSITY OF CALIFORNIA	SANTA MONICA	1.8%
19	LAKEWOOD REGIONAL MEDICAL CENTER	TENET HEALTHCARE CORPORATION	LAKEWOOD	1.8%
20	PROVIDENCE SAINT JOHN'S HEALTH CENTER	PROVIDENCE HEALTH AND SERVICES	SANTA MONICA	1.7%
21	PROVIDENCE LITTLE COMPANY OF MARY MEDICAL CENTER TORRANCE	PROVIDENCE HEALTH AND SERVICES	TORRANCE	1.7%
22	VALLEY PRESBYTERIAN HOSPITAL	VALLEY PRESBYTERIAN HOSPITAL	VAN NUYS	1.6%

	NORTHRIDGE HOSPITAL			
23	MEDICAL CENTER	DIGNITY HEALTH	NORTHRIDGE	1.6%
		BEVERLY		
		COMMUNITY		
		HOSPITAL		
24	BEVERLY HOSPITAL	ASSOCIATION	MONTEBELLO	1.5%
	HENRY MAYO NEWHALL	HENRY MAYO		
25	HOSPITAL	NEWHALL HOSPITAL	VALENCIA	1.4%
	ANTELOPE VALLEY	ANTELOPE VALLEY		
26	HOSPITAL	HOSPITAL DISTRICT	LANCASTER	1.3%
		PROVIDENCE		
	PROVIDENCE HOLY CROSS	HEALTH AND	MISSION	
27	MEDICAL CENTER	SERVICES	HILLS	1.3%
	ADVENTIST HEALTH			
28	WHITE MEMORIAL	ADVENTIST HEALTH	LOS ANGELES	1.3%
	MISSION COMMUNITY			
	HOSPITAL - PANORAMA	DEANCO	PANORAMA	
29	CAMPUS	HEALTHCARE, LLC	CITY	1.2%
		PROVIDENCE		
	PROVIDENCE TARZANA	HEALTH AND		
30	MEDICAL CENTER	SERVICES	TARZANA	1.2%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with diversion estimates of 1% or more are listed in the table.

Table 6.9 Commercial Diversion Estimates from Verdugo, 2018-2019

				Diversion from
Rank	Facility	Owner	City	Verdugo
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS~SINAI MEDICAL CENTER	PASADENA	30.7%
2	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	GLENDALE	15.6%
3	PROVIDENCE SAINT JOSEPH MEDICAL CENTER	PROVIDENCE HEALTH AND SERVICES	BURBANK	6.9%

		CEDARS-SINAI	LOS	4.50/
4	CENTER	MEDICAL CENTER UNIVERSITY OF	ANGELES	4.7%
		SOUTHERN	LOS	
5	KECK HOSPITAL OF USC	CALIFORNIA	ANGELES	4.7%
C.	GOOD SAMARITAN	GOOD SAMARITAN	LOS	7
6	HOSPITAL-LOS ANGELES	HOSPITAL	ANGELES	4.6%
	PROVIDENCE HOLY	NU	B1,00 101 11	
40	CROSS MEDICAL	PROVIDENCE HEALTH	MISSION	Book Indiana
7	CENTER	AND SERVICES	HILLS	2.6%
		REGENTS OF THE		
	RONALD REAGAN UCLA	UNIVERSITY OF	LOS	
8	MEDICAL CENTER	CALIFORNIA	ANGELES	2.5%
2.2	GLENDALE MEMORIAL		5.2.	
	HOSPITAL AND HEALTH			
9	CENTER	DIGNITY HEALTH	GLENDALE	2.4%
	ST. VINCENT MEDICAL	VERITY HEALTH	LOS	
10	CENTER	SYSTEM	ANGELES	2.3%
02.		VALLEY		2.0
	VALLEY PRESBYTERIAN	PRESBYTERIAN		
11	HOSPITAL	HOSPITAL	VAN NUYS	2.2%
	METHODIST HOSPITAL	METHODIST HOSPITAL		
	OF SOUTHERN	OF SOUTHERN	and the second second	0.000
12	CALIFORNIA	CALIFORNIA	ARCADIA	1.9%
	PROVIDENCE TARZANA	PROVIDENCE HEALTH		
13	MEDICAL CENTER	AND SERVICES	TARZANA	1.6%
	MISSION COMMUNITY			
	HOSPITAL - PANORAMA	DEANCO	PANORAMA	
14	CAMPUS	HEALTHCARE, LLC	CITY	1.3%
	HENRY MAYO	HENRY MAYO		
15	NEWHALL HOSPITAL	NEWHALL HOSPITAL	VALENCIA	1.3%

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with diversion estimates of 1% or more are listed in the table.

Table 6.10 Medi-Cal Diversion Estimates from MHSC, 2018-2019

Rank	Facility	Owner	City	Diversion from MHSC
Kank	QUEEN OF THE	- CWIEI	City	WHISC
1	VALLEY HOSPITAL	EMANATE HEALTH	WEST COVINA	24.5%
	SAN GABRIEL VALLEY		,,EST CO , II (II	21.270
2	MEDICAL CENTER	AHMC	SAN GABRIEL	12.9%
	GARFIELD MEDICAL		MONTEREY	
3	CENTER	AHMC	PARK	12.3%
	HUNTINGTON	CEDARS~SINAI		
4	MEMORIAL HOSPITAL	MEDICAL CENTER	PASADENA	12.2%
	LAC+USC MEDICAL	COUNTY OF LOS		
5	CENTER	ANGELES	LOS ANGELES	4.9%
		BEVERLY COMMUNITY		
	DELVEDI II II GOVE II	HOSPITAL	MONTEDELLO	2.70/
6	BEVERLY HOSPITAL	ASSOCIATION	MONTEBELLO	3.5%
_	ADVENTIST HEALTH	ADVENTION HEALTH	LOG ANGELEG	2.70/
7	WHITE MEMORIAL	ADVENTIST HEALTH	LOS ANGELES	2.7%
8	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	GLENDALE	2.2%
0		ADVENTIST HEALTH	GLENDALE	2.270
	FOOTHILL PRESBYTERIAN			
9	HOSPITAL	EMANATE HEALTH	GLENDORA	2.1%
	GLENDALE MEMORIAL			
	HOSPITAL AND			
10	HEALTH CENTER	DIGNITY HEALTH	GLENDALE	2.1%
	POMONA VALLEY	POMONA VALLEY		
	HOSPITAL MEDICAL	HOSPITAL MEDICAL		
11	CENTER	CENTER	POMONA	2.1%
	MONTEREY PARK		MONTEREY	
12	HOSPITAL	AHMC	PARK	2.0%
	CALIFORNIA HOSPITAL			
12	MEDICAL CENTER -	DICNITY HEAT TH	LOS ANCELES	1.4%
13	LOS ANGELES	DIGNITY HEALTH	LOS ANGELES	1.4%
	HOLLYWOOD PRESBYTERIAN	CHA HOLLYWOOD PRESBYTERIAN		
14	MEDICAL CENTER	MEDICAL CENTER, LP	LOS ANGELES	1.4%

	GREATER EL MONTE			
	COMMUNITY		SOUTH EL	
15	HOSPITAL	AHMC	MONTE	1.4%

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: Analysis includes patients with Medi-Cal insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with diversion estimates of 1% or more are listed in the table.

Table 6.11 Medi-Cal Diversion Estimates from Keck, 2018-2019

Rank	Facility	Owner	City	Diversion from Keck
1	LAC+USC MEDICAL CENTER	COUNTY OF LOS ANGELES	LOS ANGELES	7.3%
2	ADVENTIST HEALTH WHITE MEMORIAL	ADVENTIST HEALTH	LOS ANGELES	6.7%
3	CALIFORNIA HOSPITAL MEDICAL CENTER - LOS ANGELES	DIGNITY HEALTH	LOS ANGELES	5.6%
4	LAC/HARBOR-UCLA MEDICAL CENTER	COUNTY OF LOS ANGELES	TORRANCE	5.5%
5	LOS ANGELES COUNTY OLIVE VIEW-UCLA MEDICAL CENTER	COUNTY OF LOS ANGELES	SYLMAR	5.4%
6	BEVERLY HOSPITAL	BEVERLY COMMUNITY HOSPITAL ASSOCIATION	MONTEBELLO	4.8%
7	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	GLENDALE	3.9%
8	GARFIELD MEDICAL CENTER	AHMC	MONTEREY PARK	3.6%
9	ANTELOPE VALLEY HOSPITAL	ANTELOPE VALLEY HOSPITAL DISTRICT	LANCASTER	3.4%
10	HUNTINGTON MEMORIAL HOSPITAL	CEDARS~SINAI MEDICAL CENTER	PASADENA	3.2%

		VALLEY		
	VALLEY PRESBYTERIAN	PRESBYTERIAN		
11	HOSPITAL	HOSPITAL	VAN NUYS	3.0%
11	QUEEN OF THE VALLEY	HOSHIAL	VAIVIOIS	3.070
12	HOSPITAL	EMANATE HEALTH	WEST COVINA	3.0%
12			WEST COVINA	3.070
13	ST. FRANCIS MEDICAL CENTER	VERITY HEALTH SYSTEM	LYNWOOD	2.7%
13			LINWOOD	2.7/0
14	GOOD SAMARITAN HOSPITAL-LOS ANGELES	GOOD SAMARITAN HOSPITAL	LOS ANGELES	2.7%
14	HOSFITAL-LOS ANGELES		LOS ANGELES	2.7/0
15	PIH HOSPITAL - DOWNEY	PIH HEALTH HOSPITAL	DOWNEY	2.4%
13		HUSPITAL		2.4%
16	MONTEREY PARK HOSPITAL	AHMC	MONTEREY PARK	2.2%
10		Anvic	PARK	2.270
17	ST. MARY MEDICAL	DIGNITY HEALTH	LONG DEACH	2.20/
17	CENTER - LONG BEACH		LONG BEACH	2.2%
	DONALD DE ACANTICIA	REGENTS OF THE		
18	RONALD REAGAN UCLA MEDICAL CENTER	UNIVERSITY OF CALIFORNIA	LOS ANGELES	2.0%
10		CALIFORNIA	LOS ANGELES	2.0%
19	NORTHRIDGE HOSPITAL MEDICAL CENTER	DIGNITY HEALTH	NORTHRIDGE	1 00/
19		DIGNITY HEALTH	NORTHRIDGE	1.9%
	PRESBYTERIAN			
20	INTERCOMMUNITY HOSPITAL	PIH HEALTH HOSPITAL	WHITTIER	1.9%
20			WIIIIIEK	1.9/0
	HOLLYWOOD PRESBYTERIAN MEDICAL	CHA HOLLYWOOD		
21	CENTER CENTER	MEDICAL CENTER, LP	LOS ANGELES	1.6%
21		WIEDICAL CENTER, LI	LOS ANGELES	1.070
22	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	COVINA	1.3%
		EMANATE HEALTH	COVINA	1.370
	SOUTHERN CALIFORNIA HOSPITAL AT	ALTA HOSPITALS		
23	HOLLYWOOD	SYSTEM, LLC	HOLLYWOOD	1.2%
23		,	ITOLL I WOOD	1.4/0
24	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	LOS ANGELES	1.2%
		WILDICAL CENTER	LOS ANGELES	1.4/0
25	SAN GABRIEL VALLEY MEDICAL CENTER	AHMC	SAN CADDIEI	1 20/
25		AHMC	SAN GABRIEL	1.2%
26	LONG BEACH MEMORIAL	MEMORIAL HEALTH	LONG DE ACH	1 10/
26	MEDICAL CENTER	SERVICES	LONG BEACH	1.1%

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: Analysis includes patients with Medi-Cal insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with diversion estimates of 1% or more are listed in the table.

Table 6.12 Medi-Cal Diversion Estimates from Verdugo, 2018-2019

Rank	Facility	Owner	City	Diversion from Verdugo
1	ADVENTIST HEALTH GLENDALE	ADVENTIST HEALTH	GLENDALE	26.5%
2	LOS ANGELES COUNTY OLIVE VIEW-UCLA MEDICAL CENTER	COUNTY OF LOS ANGELES	SYLMAR	16.1%
3	HUNTINGTON MEMORIAL HOSPITAL	CEDARS~SINAI MEDICAL CENTER	PASADENA	13.8%
4	VALLEY PRESBYTERIAN HOSPITAL	VALLEY PRESBYTERIAN HOSPITAL	VAN NUYS	5.1%
5	ADVENTIST HEALTH WHITE MEMORIAL	ADVENTIST HEALTH	LOS ANGELES	4.4%
6	GLENDALE MEMORIAL HOSPITAL AND HEALTH CENTER	DIGNITY HEALTH	GLENDALE	2.5%
7	LAC+USC MEDICAL CENTER	COUNTY OF LOS ANGELES	LOS ANGELES	2.4%
8	SHERMAN OAKS HOSPITAL	PRIME HEALTHCARE SERVICES FOUNDATION, INC.	SHERMAN OAKS	2.1%
9	SOUTHERN CALIFORNIA HOSPITAL AT HOLLYWOOD	ALTA HOSPITALS SYSTEM, LLC	HOLLYWOOD	2.0%
10	CALIFORNIA HOSPITAL MEDICAL CENTER - LOS ANGELES	DIGNITY HEALTH	LOS ANGELES	1.8%
11	PROVIDENCE HOLY CROSS MEDICAL CENTER	PROVIDENCE HEALTH AND SERVICES	MISSION HILLS	1.7%

10	WEOK HOGDITAL OF LIGO	UNIVERSITY OF SOUTHERN	LOG ANGELEG	1 40/
12	KECK HOSPITAL OF USC	CALIFORNIA	LOS ANGELES	1.4%
13	PROVIDENCE SAINT JOSEPH MEDICAL CENTER	PROVIDENCE HEALTH AND SERVICES	BURBANK	1.3%
14	BEVERLY HOSPITAL	BEVERLY COMMUNITY HOSPITAL ASSOCIATION	MONTEBELLO	1.3%
15	SAN GABRIEL VALLEY MEDICAL CENTER	AHMC	SAN GABRIEL	1.2%
16	PACIFICA HOSPITAL OF THE VALLEY	PACIFICA OF THE VALLEY CORPORATION	SUN VALLEY	1.2%

Source: Authors' analysis of 2018-2019 HCAI Patient Discharge Data (PDD).

Notes: Analysis includes patients with Medi-Cal insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. All hospitals with diversion estimates of 1% or more are listed in the table.

Table 6.13 Commercial Diversion Estimates from MHSC for High Acuity Services, 2018-2019

Rank	Hospital	Owner	City	Diversion from MHSC
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS-SINAI MEDICAL CENTER	PASADENA	35.2%
2	KECK HOSPITAL OF USC	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	10.1%
3	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	LOS ANGELES	6.3%
4	GARFIELD MEDICAL CENTER	АНМС	MONTEREY PARK	5.6%
5	INTER-COMMUNITY HOSPITAL	EMANATE HEALTH	COVINA	4.4%

		1	,	
	QUEEN OF THE VALLEY			
6	HOSPITAL	EMANATE HEALTH	WEST COVINA	4.0%
		REGENTS OF THE		
	RONALD REAGAN UCLA	UNIVERSITY OF	LOG ANGELEG	2.40/
7	MEDICAL CENTER	CALIFORNIA	LOS ANGELES	3.4%
	ST. VINCENT MEDICAL	VERITY HEALTH	LOG ANGELEG	2.70/
8	CENTER	SYSTEM	LOS ANGELES	2.7%
	POMONA VALLEY	POMONA VALLEY		
	HOSPITAL MEDICAL	HOSPITAL	POMONIA.	2 40/
9	CENTER	MEDICAL CENTER	POMONA	2.4%
10	GOOD SAMARITAN		LOG ANGELES	1 70/
10	HOSPITAL-LOS ANGELES	PIH HEALTH, INC.	LOS ANGELES	1.7%
	PRESBYTERIAN			
11	INTERCOMMUNITY HOSPITAL	DILLIEALTH INC	WHITTIER	1.5%
11		PIH HEALTH, INC.	WHITTIER	1.5%
10	FOOTHILL PRESBYTERIAN		CLENDOD A	1 50/
12	HOSPITAL	EMANATE HEALTH	GLENDORA	1.5%
1.0	GOOD SAMARITAN	GOOD SAMARITAN	LOG ANGELEG	1 20/
13	HOSPITAL-LOS ANGELES	HOSPITAL	LOS ANGELES	1.3%
	ADVENTIST HEALTH	ADVENTIST	CLEVID ALE	1.00/
14	GLENDALE	HEALTH	GLENDALE	1.2%
	SAN GABRIEL VALLEY			
15	MEDICAL CENTER	AHMC	SAN GABRIEL	1.2%
	ADVENTIST HEALTH WHITE			
16	MEMORIAL	HEALTH	LOS ANGELES	1.2%
	SANTA MONICA - UCLA	REGENTS OF THE		
	MEDICAL CENTER AND	UNIVERSITY OF	SANTA	
17	ORTHOPAEDIC HOSPITAL	CALIFORNIA	MONICA	1.2%
		BEVERLY		
		COMMUNITY		
10	DEVEDI V HOGDITAL	HOSPITAL	MONTEDELLO	1 00/
18	BEVERLY HOSPITAL	ASSOCIATION	MONTEBELLO	1.0%

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. High acuity services are defined those with MS-DRG weights above 2. All hospitals with diversion estimates of 1% or more are listed in the table.

Table 6.14 Commercial Diversion Estimates from Keck for High Acuity Services, 2018-2019

Dank	Hagnital	Owner	City	Diversion from Keck
Kank	Hospital	TRUE LINES AND STREET SPECIAL CONTRACT	City	Irom Keck
1	HUNTINGTON MEMORIAL HOSPITAL	CEDARS-SINAI MEDICAL CENTER	PASADENA	14.4%
			FASADENA	14.470
2	CEDARS SINAI MEDICAL CENTER	CEDARS-SINAI MEDICAL CENTER	LOS ANGELES	9.8%
	CENTER		LOS ANGELES	9.6%
	RONALD REAGAN UCLA	REGENTS OF THE UNIVERSITY OF		
3	MEDICAL CENTER	CALIFORNIA	LOS ANGELES	7.2%
3	ST. VINCENT MEDICAL	VERITY HEALTH	LOS ANGLLES	7.270
4	CENTER MEDICAL	SYSTEM	LOS ANGELES	4.2%
-		SISILM	LOS ANGLLES	4.270
	PRESBYTERIAN INTERCOMMUNITY			
5	HOSPITAL	PIH HEALTH, INC.	WHITTIER	3.7%
	TORRANCE MEMORIAL	CEDARS-SINAI	WIIIIIII	3.770
6	MEDICAL CENTER	MEDICAL CENTER	TORRANCE	3.1%
	LONG BEACH MEMORIAL	MEMORIAL HEALTH	Torduniez	3.170
7	MEDICAL CENTER	SERVICES	LONG BEACH	2.9%
e e	GOOD SAMARITAN	DETTITUES	Dorro BErrerr	
8	HOSPITAL-LOS ANGELES	PIH HEALTH, INC.	LOS ANGELES	2.7%
	ADVENTIST HEALTH			
9	GLENDALE	ADVENTIST HEALTH	GLENDALE	2.6%
1000	INTER-COMMUNITY			
10	HOSPITAL	EMANATE HEALTH	COVINA	2.4%
100000	GOOD SAMARITAN	GOOD SAMARITAN		
11	HOSPITAL-LOS ANGELES	HOSPITAL	LOS ANGELES	2.2%
		UNIVERSITY OF		
	METHODIST HOSPITAL OF	SOUTHERN		
12	SOUTHERN CALIFORNIA	CALIFORNIA	ARCADIA	2.0%
		PROVIDENCE		
	PROVIDENCE SAINT	HEALTH AND		
13	JOSEPH MEDICAL CENTER	SERVICES	BURBANK	2.0%
	GARFIELD MEDICAL		MONTEREY	
14	CENTER	AHMC	PARK	2.0%
		TENET		
	LAKEWOOD REGIONAL	HEALTHCARE	- 900 - 900	
15	MEDICAL CENTER	CORPORATION	LAKEWOOD	2.0%

	CANTEL MONITOR LIGHT	DECENIES OF THE		
	SANTA MONICA - UCLA	REGENTS OF THE		
	MEDICAL CENTER AND	UNIVERSITY OF	SANTA	
16	ORTHOPAEDIC HOSPITAL	CALIFORNIA	MONICA	1.9%
		VALLEY		
	VALLEY PRESBYTERIAN	PRESBYTERIAN		
1.7			VANI NILIVO	1.70/
17	HOSPITAL	HOSPITAL	VAN NUYS	1.7%
		SOUTHERN		
	SOUTHERN CALIFORNIA	CALIFORNIA		
	HOSPITAL AT CULVER	HOSPITAL AT		
18	CITY	CULVER CITY	CULVER CITY	1.7%
			002 (210 011 1	11,,,,
		PROVIDENCE	Magron	
	PROVIDENCE HOLY CROSS		MISSION	
19	MEDICAL CENTER	SERVICES	HILLS	1.6%
	ANTELOPE VALLEY	ANTELOPE VALLEY		
20	HOSPITAL	HOSPITAL DISTRICT	LANCASTER	1.5%
	NORTHRIDGE HOSPITAL			<del>-</del>
21		DICNITY HE ALTH	NODTHDIDGE	1.50/
21	MEDICAL CENTER	DIGNITY HEALTH	NORTHRIDGE	1.5%
		PROVIDENCE		
	PROVIDENCE SAINT	HEALTH AND	SANTA	
22	JOHN'S HEALTH CENTER	SERVICES	MONICA	1.3%
23	PIH HOSPITAL - DOWNEY	PIH HEALTH, INC.	DOWNEY	1.3%
	PROVIDENCE LITTLE			
	COMPANY OF MARY	PROVIDENCE		
		HEALTH AND		
2.4	MEDICAL CENTER		TODDANGE	1 20/
24	TORRANCE	SERVICES	TORRANCE	1.3%
		HENRY MAYO		
	HENRY MAYO NEWHALL	NEWHALL		
25	HOSPITAL	HOSPITAL	VALENCIA	1.3%
	QUEEN OF THE VALLEY			
26	HOSPITAL	EMANATE HEALTH	WEST COVINA	1.2%
20	HOBITIAL		WEST COVINA	1.2/0
		BEVERLY		
		COMMUNITY		
		HOSPITAL		
27	BEVERLY HOSPITAL	ASSOCIATION	MONTEBELLO	1.2%
	POMONA VALLEY	POMONA VALLEY		
	HOSPITAL MEDICAL	HOSPITAL MEDICAL		
28	CENTER	CENTER	POMONA	1.2%
20		CENTER	I OMONA	1.470
	ADVENTIST HEALTH			_
29	WHITE MEMORIAL	ADVENTIST HEALTH	LOS ANGELES	1.1%

		UNIVERSITY OF		
	USC VERDUGO HILLS	SOUTHERN		
30	HOSPITAL	CALIFORNIA	GLENDALE	1.1%

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. High acuity services are defined those with MS-DRG weights above 2. All hospitals with diversion estimates of 1% or more are listed in the table.

#### 6.2.4 Horizontal Market Conclusion

On net our three horizontal analyses indicate the transaction poses no significant horizontal concern. While MHSC's service area overlap with Keck and Verdugo suggests a horizontal concern, predicted changes in HHI and a diversion analysis suggest there is no significant horizontal concern. Our comparison of pre- and post-merger HHIs predicted an HHI increase of 78 in the SGV, an increase of 90 HHI in the SGV west of Covina, and an increase of 126 HHI in the SGV west of the 605 freeway. For high acuity services, our predicted HHI increases for these three geographic markets were 114, 129, and 168, respectively.

The diversion analyses we conducted for GAC services predicted very few commercial patients would flow to Keck (2.4%) or Verdugo (1.3%) if MHSC were no longer an option. The diversion in the other direction (from the USCHS hospitals to MHSC) was similarly low as was the diversion when Medi-Cal discharges were analyzed instead of commercial discharges. However, the estimated diversion from MHSC to Keck for high acuity services was a much higher 10.1%, indicating again the horizontal concern is greater for high acuity services than GAC services.

The results of the HHI and diversion analyses lead us to the conclusion that the transaction poses no significant horizontal concern. Although the higher HHI change and diversions for high acuity services indicate a greater horizontal concern, they are still insufficient to warrant a recommendation to block the transaction. However, they add support to the cross-market conditions we have recommended in Section 6.4.

# **6.3 Cross-Market Analysis**

In this section, we assess the potential cross-market effects of the acquisition. We begin by briefly reviewing the theory of cross-market effects and the empirical literature documenting them (Sections 6.3.1 and 6.3.2). We then utilize a combination of willingness to pay estimates (Section 6.3.3), price comparisons (Section 6.3.4), and health plan interviews (Section 6.3.5) to determine the extent of MHSC and USCHS' market power. In Section 6.3.6 we present our assessment of the extent of the cross-market concern that the transaction creates.

## 6.3.1 Cross-Market Theory

There are three principal mechanisms by which the proposed acquisition might cause cross-market effects: tying, common customer/insurer, and change in control.<sup>46</sup> Tying occurs when a firm with market power in its primary market ties its sales in its primary market to its sales in a secondary market in a way that allows it to leverage its market power from its primary market in the secondary market.

Tying typically assumes a firm has market power in one, but not both, of the markets being considered. The common customer/insurer theory can apply when the firm has market power in both markets. The common customer is often thought to be an employer, but the theory does not require a common customer,<sup>47</sup> which is why we refer to it more generally as the common customer/insurer theory. Cross-market effects under the common customer/insurer theory could emerge if a hospital system in multiple markets were able to credibly threaten to create multiple holes in an insurer's provider network. The more holes a multi-market system can create, the more likely its exclusion from the insurer's provider network would diminish the viability of the insurer's product, and thus the more market power for the system.

The change in control theory posits that post-acquisition, the acquired hospital changes its objective, information, or bargaining skills in a way that leads to post-acquisition price increases. One example of a change in objective would be if the hospital being acquired had shown an unwillingness to use its existing market power prior to the acquisition. For instance, if the hospital's nonprofit status had led it to set price below the profit-maximizing level. Converting to a for-profit hospital after an acquisition could lead this hospital to start tapping into its market power and increase price.

### 6.3.2 Cross-Market Empirical Evidence

Two recent academic papers have found evidence that hospital prices are higher for hospitals that are part of a cross-market system. The magnitude of the effects is substantial in each case. Harvard economist Leemore Dafny and colleagues found price increases of 7-10%, <sup>48</sup> while Lewis and Pflum (2017) found increases of 17%. <sup>49</sup> Dafny et al. (2019) compared the price

\_

<sup>&</sup>lt;sup>46</sup> See Vistnes GS. Competitive Effects Analysis of the Proposed Cedars-Sinai Health System / Huntington Memorial Hospital Affiliation. <a href="https://oag.ca.gov/sites/all/files/agweb/pdfs/charities/nonprofithosp/ag-decision-huntington-121020.pdf">https://oag.ca.gov/sites/all/files/agweb/pdfs/charities/nonprofithosp/ag-decision-huntington-121020.pdf</a>? (December 4, 2020, accessed April 7, 2022) for more details on each.

<sup>&</sup>lt;sup>47</sup> See the section entitled "Common insurer' effects with no common customer" (pg. 317) in the Dafny et al. (2019) paper referenced in Section 6.2.

<sup>&</sup>lt;sup>48</sup> Dafny L, Ho K, Lee RS. 2019. The price effects of cross-market mergers: theory and evidence from the hospital industry. *The RAND Journal of Economics* 50 (2): 286-325.

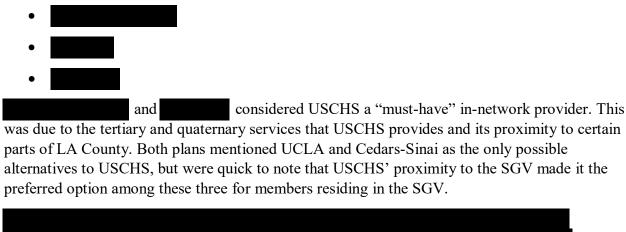
<sup>&</sup>lt;sup>49</sup> Lewis MS, Pflum KE. 2017. Hospital systems and bargaining power: evidence from out-of-market acquisitions. *The RAND Journal of Economics* 48 (3): 579-610.

changes at hospitals that became part of a cross-market system to price changes at a control group of hospitals that were not involved in a cross-market merger. Lewis and Pflum (2017) similarly compared prices at hospitals involved in cross-market mergers to prices at hospitals that were not exposed to any merger.

Cross-market concerns were raised in a recent competitive effects analysis of the Cedars-Sinai Health System / Huntington Memorial Hospital affiliation. <sup>50</sup> That analysis confirmed the presence of common customers/insurers in LA County and reached very similar conclusions to ours in terms of which hospitals/hospital systems in LA County have market power.

### 6.3.3 Health Plan Interviews

We interviewed three health plans (payers) in the course of our investigation. The plans indicated that they viewed the San Gabriel Valley as a region distinct from Los Angeles County for the purposes of network design. They also noted that broad coverage in SGV is important both for (1) the marketability of their plans and (2) satisfying California's within 30 minutes or 15 miles network adequacy standards. <sup>51</sup> The three health plans we interviewed were:



However, noted that USCHS requested its Medi-Cal reimbursement be based on a

<sup>&</sup>lt;sup>50</sup> Vistnes GS. Competitive Effects Analysis of the Proposed Cedars-Sinai Health System / Huntington Memorial Hospital Affiliation. <a href="https://oag.ca.gov/sites/all/files/agweb/pdfs/charities/nonprofithosp/ag-decision-huntington-121020.pdf">https://oag.ca.gov/sites/all/files/agweb/pdfs/charities/nonprofithosp/ag-decision-huntington-121020.pdf</a>? (December 4, 2020, accessed April 7, 2022). Cross-market concerns were all raised in the assessment of Acadia Healthcare's proposed acquisition of Adventist Health Vallejo. See Scheffler RM, Adams N, Arnold DR. 2021. The Competitive and Quality Impact of the Proposed Acquisition of Adventist Health Vallejo by Acadia Healthcare. <a href="https://oag.ca.gov/system/files/media/ahv-cqi.pdf">https://oag.ca.gov/system/files/media/ahv-cqi.pdf</a> (September 25, 2021; accessed April 7, 2022). <a href="https://www.chcf.org/wp-">https://www.chcf.org/wp-</a>

<sup>&</sup>lt;u>content/uploads/2021/12/NetworkAdequacyStandardsHowTheyWorkWhyTheyMatter.pdf.</u> (December 2021; accessed April 7, 2022).

percentage of its billed charges, which would generate a reimbursement much higher than what a percentage of the state's Medi-Cal rates would generate.

The plans confirmed USCHS' rates are considerably higher than those of MHSC. They generally expected USCHS to request higher rates at MHSC post-transaction. The plans confirmed they'd be likely to accept a 5% price increase at MHSC in order to keep USCHS in-network.

## 6.3.4 Willingness to Pay

We calculated WTP to assess the incremental attractiveness of a hospital to individuals in an area, and thus the importance of the hospital to a health plan. The larger a hospital's WTP, the greater its likely market power. The units of the WTP measure are in something economists call "utils," so the absolute level of the WTP estimates (e.g. 1,000 utils) is rather meaningless. What's important is the relative position of the hospitals in the ranking of WTP estimates and the degree to which one hospital's WTP is higher than another's in percentage terms (e.g., 50% higher rather than 1,000 utils higher). WTP analyses are particularly useful because they (1) do not require a geographic market to be defined and (2) implicitly take hospital characteristics such as reputation or teaching status (to the extent they're important to patients) into account.

Table 6.15 presents the WTP estimates for the hospitals in our analysis. Keck, MHSC, and Verdugo place eighth, twenty-second, and twenty-ninth, respectively. The importance of Table 6.8 with respect to measuring market power is in how far hospitals are above others in the table. Consider the difference between Huntington (first) and Providence Holy Cross Medical Center (fifteenth). The WTP estimate for Huntington (39,474) is over five times greater than the WTP estimate for Providence Holy Cross Medical Center (7,198) which indicates it is five times as important to health plans. The WTP difference between Keck (11,908) and MHSC (5,371) indicates Keck is over twice as important to health plans as MHSC.

**Table 6.15** Hospital-Level Willingness to Pay Estimates, 2018-2019

Rank	Hospital	WTP
1	HUNTINGTON MEMORIAL HOSPITAL	39,474
2	CEDARS SINAI MEDICAL CENTER	38,142
3	RONALD REAGAN UCLA MEDICAL CENTER	19,444
4	ANTELOPE VALLEY HOSPITAL	15,703
5	TORRANCE MEMORIAL MEDICAL CENTER	14,621
6	GOOD SAMARITAN HOSPITAL-LOS ANGELES	13,164
7	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	12,761
8	KECK HOSPITAL OF USC	11,908

9	HENRY MAYO NEWHALL HOSPITAL	10,986
10	ST. VINCENT MEDICAL CENTER	10,623
11	PROVIDENCE SAINT JOHN'S HEALTH CENTER	10,254
12	LONG BEACH MEMORIAL MEDICAL CENTER	7,616
13	SANTA MONICA - UCLA MEDICAL CENTER AND ORTHOPAEDIC HOSPITAL	7,590
14	PROVIDENCE LITTLE COMPANY OF MARY MEDICAL CENTER TORRANCE	7,252
15	PROVIDENCE HOLY CROSS MEDICAL CENTER	7,198
16	SOUTHERN CALIFORNIA HOSPITAL AT CULVER CITY	7,116
17	VALLEY PRESBYTERIAN HOSPITAL	6,464
18	PROVIDENCE SAINT JOSEPH MEDICAL CENTER	6,375
19	ADVENTIST HEALTH GLENDALE	6,245
20	PROVIDENCE TARZANA MEDICAL CENTER	5,930
21	NORTHRIDGE HOSPITAL MEDICAL CENTER	5,742
22	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	5,371
23	LAKEWOOD REGIONAL MEDICAL CENTER	4,858
24	QUEEN OF THE VALLEY HOSPITAL	4,816
25	INTER-COMMUNITY HOSPITAL	3,984
26	MISSION COMMUNITY HOSPITAL - PANORAMA CAMPUS	3,958
27	PIH HOSPITAL – DOWNEY	3,911
28	GARFIELD MEDICAL CENTER	3,773
29	USC VERDUGO HILLS HOSPITAL	3,340

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. WTP estimates are case mix adjusted.

In Table 6.16 we present the WTP estimates calculated at the system-level as opposed to the hospital-level. The Cedars-Sinai system controls the hospitals that showed up first, second, and fifth in the hospital-level WTP analysis. Thus, we would expect Cedars-Sinai to have a very high WTP estimate in our system-level analysis. That is exactly what Table 6.16 shows. Cedars-Sinai

has a WTP estimate of 180,164 which is significantly higher than the WTP estimates of all other systems. USCHS ranks seventh at 22,115 and MHSC ranks eighteenth at 5,371.

Table 6.16 System-Level Willingness to Pay Estimates, 2018-2019

Rank	System	WTP
1	CEDARS-SINAI MEDICAL CENTER	180,164
2	PROVIDENCE HEALTH AND SERVICES	113,629
3	REGENTS OF THE UNIVERSITY OF CALIFORNIA	60,043
4	PIH HEALTH, INC.	47,754
5	EMANATE HEALTH	30,004
6	TENET HEALTHCARE CORPORATION	25,373
7	UNIVERSITY OF SOUTHERN CALIFORNIA	22,115
8	AHMC	20,810
9	ANTELOPE VALLEY HOSPITAL DISTRICT	15,703
10	VERITY HEALTH SYSTEM	15,026
11	DIGNITY HEALTH	14,162
12	MEMORIAL HEALTH SERVICES	13,324
13	ADVENTIST HEALTH	12,945
14	HENRY MAYO NEWHALL HOSPITAL	10,986
15	SOUTHERN CALIFORNIA HOSPITAL AT CULVER CITY	7,116
16	VALLEY PRESBYTERIAN HOSPITAL	6,464
17	GOOD SAMARITAN HOSPITAL	6,099
18	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	5,371
19	ST. JOSEPH HEALTH SYSTEM	4,526
20	HCA HEALTHCARE CORPORATION	4,382

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non-GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. WTP estimates are case mix adjusted.

In Table 6.17 we present the WTP estimates calculated at the system level again, but this time under the assumption that MHSC is part of USCHS. This assumption leads USCHS' WTP increase to nearly double from 22,115 to 38,325. To put this in perspective, without MHSC, USCHS is roughly as important to health plans as AHMC (22,115 vs. 20,810). The results of Table 6.17 suggest that should MHSC join USCHS, USCHS would become twice as important to health plans – a considerable increase in leverage. The transaction would also make USCHS the fifth most important system to health plans in LA County.

Table 6.17 System-Level Willingness to Pay Estimates, 2018-2019

Rank	System	WTP
1	CEDARS-SINAI MEDICAL CENTER	180,164
2	PROVIDENCE HEALTH AND SERVICES	113,629
3	REGENTS OF THE UNIVERSITY OF CALIFORNIA	60,043
4	PIH HEALTH, INC.	47,754
5	UNIVERSITY OF SOUTHERN CALIFORNIA	38,325
6	EMANATE HEALTH	30,004
7	TENET HEALTHCARE CORPORATION	25,373
8	AHMC	20,810
9	ANTELOPE VALLEY HOSPITAL DISTRICT	15,703
10	VERITY HEALTH SYSTEM	15,026
11	DIGNITY HEALTH	14,162
12	MEMORIAL HEALTH SERVICES	13,324
13	ADVENTIST HEALTH	12,945
14	HENRY MAYO NEWHALL HOSPITAL	10,986
15	SOUTHERN CALIFORNIA HOSPITAL AT CULVER CITY	7,116
16	VALLEY PRESBYTERIAN HOSPITAL	6,464
17	GOOD SAMARITAN HOSPITAL	6,099
18	ST. JOSEPH HEALTH SYSTEM	4,526
19	HCA HEALTHCARE CORPORATION	4,382
20	DEANCO HEALTHCARE, LLC	3,958

Source: Authors' analysis of 2018-2019 HCAI PDD.

Notes: Analysis includes patients with commercial insurance residing in LA County and excludes non- GAC services (i.e., excludes newborn and services related to behavioral health, substance abuse treatment, and

rehabilitation). Analysis also excludes admissions to Kaiser hospitals and admissions with invalid patient zip codes, services with invalid or ungroupable DRGs, and emergency admissions. WTP estimates are case mix adjusted.

# 6.3.5 High Prices

The ability to price above competitive levels is another indicator of market power. Table 6.18 uses the 2019 HCAI Hospital Annual Financial data to calculate commercial hospital prices as net inpatient revenue from third party payers divided by case mix adjusted discharges. This measure indicates Keck has the fourth highest commercial hospital prices in LA County. Notably, MHSC (not shown) was calculated to have a hospital price of \$12,437, which is about half Keck's prices. There is potentially a risk of price increases at MHSC if USCHS exercises its market power.

Keck having high prices was confirmed by a recent RAND report which estimated Keck's prices to be the third highest in the Los Angeles-Long Beach-Anaheim MSA at 305% of Medicare. <sup>52</sup>

Table 6.18 Hospital Prices, 2019

Rank	Hospital	Price (\$)
1	RONALD REAGAN UCLA MEDICAL CENTER	32,149
2	CEDARS SINAI MEDICAL CENTER	28,083
3	GARFIELD MEDICAL CENTER	26,534
4	KECK HOSPITAL OF USC	23,623
5	ST. MARY MEDICAL CENTER - LONG BEACH	20,031
6	SANTA MONICA - UCLA MEDICAL CENTER AND ORTHOPAEDIC HOSPITAL	18,909
7	LONG BEACH MEMORIAL MEDICAL CENTER	18,692
8	NORTHRIDGE HOSPITAL MEDICAL CENTER	18,452
9	HENRY MAYO NEWHALL HOSPITAL	18,106
10	LAKEWOOD REGIONAL MEDICAL CENTER	17,922
11	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	17,408

Whaley CM, Briscombe B, Kerber R, O'Neill B, Kofner A. Nationwide evaluation of health

<sup>&</sup>lt;sup>52</sup> Whaley CM, Briscombe B, Kerber R, O'Neill B, Kofner A. Nationwide evaluation of health care prices paid by private health plans. 2020. <a href="https://employerptp.org/wp-content/uploads/2020/09/RAND-3.0-Report-9-18-20.pdf">https://employerptp.org/wp-content/uploads/2020/09/RAND-3.0-Report-9-18-20.pdf</a>. (September 18, 2020; accessed April 7, 2022).

12	CALIFORNIA HOSPITAL MEDICAL CENTER - LOS ANGELES	16,761
13	PROVIDENCE HOLY CROSS MEDICAL CENTER	16,695
14	PROVIDENCE SAINT JOSEPH MEDICAL CENTER	16,510
15	ADVENTIST HEALTH GLENDALE	16,137
16	SOUTHERN CALIFORNIA HOSPITAL AT HOLLYWOOD	16,103
17	PROVIDENCE SAINT JOHN'S HEALTH CENTER	15,534
18	WEST HILLS HOSPITAL AND MEDICAL CENTER	15,009
19	GOOD SAMARITAN HOSPITAL-LOS ANGELES	14,800
20	MARINA DEL REY HOSPITAL	14,768

Source: Authors' analysis of 2019 HCAI Hospital Annual Financial data.

Notes: Excludes non-GAC hospitals, Kaiser hospitals, and hospitals with fewer than 1,000 commercial discharges. Price is calculated as net inpatient revenue from third party payers divided by case mix adjusted discharges.

### 6.3.6 Cross-Market Conclusion

We conclude that the proposed acquisition creates the potential of cross-market effects. Specifically, we conclude that in that absence of conditions, post-acquisition prices are likely to increase at USCHS, MHSC, or both even though few patients (or health plans) would likely consider the hospitals to be good substitutes for each other. The evidence we presented in Section 6.3 shows USCHS has considerable market power, which makes cross-market effects particularly likely. The hospital-level WTP estimates rank Keck as the eighth most important hospital in LA County from the perspective of health plans. Keck's WTP is double that of MHSC's which suggests that MHSC being tied with Keck would improve its bargaining leverage. Additionally, system-level WTP estimates suggest that USCHS' WTP would nearly double as a result of acquiring MHSC. This increase suggests the transaction would increase USCHS' importance to health plans from being roughly in line with Tenet – a for-profit hospital system with its own market power – to being twice as important to health plans as Tenet. This level of predicted WTP increase, combined with statements from payers that USCHS is a "must-have" and our finding that Keck has the fourth highest prices in LA County, lead us to the conclusion that the transaction creates a significant cross-market concern.

# **6.4 Competitive Impact Conclusion**

It is our opinion that the merger creates no significant horizontal concern, but a significant cross-market concern. The conditions we recommend the OCAG impose to reduce the risk of anticompetitive effects arising from the transaction are as follows.<sup>53</sup> USCHS shall:

- 1. Not condition the participation of one of its controlled hospitals on the participation of any of its other controlled hospitals in contracts with payers. This includes:
  - a. Engaging a payer in "all-or-nothing" contracting whereby it explicitly or implicitly requires the payer to contract with all controlled hospitals.
  - b. Penalizing a payer for contracting with individual controlled hospitals, including setting significantly higher than existing contract prices or out-of-network fees for any or all controlled hospitals.
  - c. Interfering with the introduction or promotion of new narrow, tiered, steering, or value-based benefit designs for commercial or government-sponsored products.
- 2. Not increase MHSC's prices in renewed contracts with commercial or government-sponsored products by more than 4.8% per year for 5 years.<sup>54</sup>

The first condition is intended to prevent USCHS from leveraging its market power at Keck to obtain higher reimbursement rates at MHSC. If the negotiations are truly separate than the threat of excluding both MHSC and Keck in negotiations with payers can't be used to obtain higher prices at MHSC, Keck, or both. While this is a good first step, we believe the second condition is necessary in order to ensure the first condition is met. Even if the negotiators responsible for MHSC's contracts are separate from the negotiators at Keck and Verdugo, it seems difficult to ensure that the MHSC negotiators do not try to leverage their connection to USCHS. There could be an implicit understanding between USCHS' executives and the MHSC negotiating team that the negotiating team try to bring MHSC's reimbursement rates up to the levels received by the rest of the USCHS system. Our second condition ensures this scenario doesn't arise by directly capping the price growth of MHSC's current commercial and Medi-Cal contracts at 4.8%.

The 4.8% cap is the same cap in the Cedars-Sinai / Huntington affiliation conditions. The timing of USCHS partnering with MHSC shortly after the Cedars-Sinai / Huntington affiliation does not seem coincidental. Our data analysis shows that affiliating with MHSC is a way for USCHS to

<sup>&</sup>lt;sup>53</sup> These conditions are written broadly. We leave the details of how these would be implemented and enforced to the OCAG.

<sup>&</sup>lt;sup>54</sup> These two conditions align with conditions 2 and 3 in the Cedars-Sinai/Huntington affiliation conditions. https://oag.ca.gov/system/files/media/nhft-huntington-ag-decision-071921.pdf (July 19, 2021; accessed April 7, 2022).

increase its market power, which in turn makes it a stronger competitor to the Cedars system, which itself has considerable market power as can be gleaned from our system-level WTP estimates (Table 6.15), Cedars-Sinai Medical Center having the second-highest prices in LA County (Table 6.16), and the competitive effects analysis of the Cedars-Sinai / Huntington affiliation. <sup>55</sup>

<sup>56</sup> Under these

circumstances it seems prudent to impose a price cap similar to the one imposed by the Cedars-Sinai / Huntington affiliation conditions.<sup>57</sup>

#### 7. HEALTH CARE IMPACT

This section provides our assessment of the potential impact of the transaction on the availability or accessibility of health care services in the SGV. We begin with an overview of the access and availability of services issues facing Californians in Section 7.1. During this overview we pay particular attention to the health disparities by race and ethnicity that exist throughout the state. This background is particularly relevant to our assessment of the health care impact of this transaction, as nearly 80% of SGV residents are non-white.

Sections 7.2-7.6 consider the impact of the transaction on access service by service. Section 7.2 considers access to emergency services. Sections 7.3-7.6 address reproductive services, services for the LGBT+ community, mental health services, and maternity and obstetrics services, respectively. In Section 7.7 we discuss the impact on access for vulnerable populations, including Medi-Cal members. Section 7.8 provides our assessment of the transaction's likely impact on community benefits and charity care. Section 7.9 concludes our health care impact analysis with a summary of our findings and conditions the OCAG might consider imposing in light of these findings.

### 7.1 Health Disparities in Access to Care

Any reduction in access caused by the transaction will have a greater impact on minority races/ethnicities. Recent California data is clear that minorities experience worse access to health

<sup>&</sup>lt;sup>55</sup> Vistnes GS. Competitive Effects Analysis of the Proposed Cedars-Sinai Health System / Huntington Memorial Hospital Affiliation. <a href="https://oag.ca.gov/sites/all/files/agweb/pdfs/charities/nonprofithosp/ag-decision-huntington-121020.pdf">https://oag.ca.gov/sites/all/files/agweb/pdfs/charities/nonprofithosp/ag-decision-huntington-121020.pdf</a>? (December 4, 2020, accessed April 7, 2022).

<sup>&</sup>lt;sup>56</sup> Confidential documents submitted to the OCAG.

<sup>&</sup>lt;sup>57</sup> We considered the competitive impact analysis submitted by the merging parties as part of their notice and it does not change our conclusions here.

care. The purpose of this section is to present this information as context for our assessment of the access issues that this transaction could create. All else equal, access concerns created by the transaction are greater simply because the transaction is occurring in a region with a large minority population.

Based on data from the California Health Interview Survey (CHIS), Figure 7.1 shows the percentage of respondents by race/ethnicity who cited cost or lack of insurance as the reason they delayed care. White people cited this reason 27.4% of the time, which was the lowest frequency among the five groups surveyed. Latinx people cited cost or lack of insurance as the reason they delayed care the most at 38.2%.

29.0%

29.0%

30.2%

31.9%

White Multiracial Asian Black Latinx California

Figure 7.1 Delayed Care Due to Cost or Lack of Insurance by Race/Ethnicity, 2020

Source: CHCF. Health Disparities by Race and Ethnicity in California, 2021: Pattern of Inequity. <a href="https://www.chcf.org/wp-content/uploads/2021/10/DisparitiesAlmanacRaceEthnicity2021.pdf">https://www.chcf.org/wp-content/uploads/2021/10/DisparitiesAlmanacRaceEthnicity2021.pdf</a> (October 2021; accessed April 7, 2022).

Figure 7.2 shows the percentage of respondents who reported having difficulty finding a doctor. Every race/ethnicity reported having more difficulty finding a specialist doctor than a primary care doctor. Among White people, 11.7% reported difficulty finding a specialist doctor. This measure was highest for Black people with 17.3% reporting difficulty finding a specialist doctor.

29.0%

29.0%

White Multiracial Asian Black Latinx California

Figure 7.2 Difficulty Finding a Doctor by Race/Ethnicity, 2020

Source: CHCF. Health Disparities by Race and Ethnicity in California, 2021: Pattern of Inequity. <a href="https://www.chcf.org/wp-content/uploads/2021/10/DisparitiesAlmanacRaceEthnicity2021.pdf">https://www.chcf.org/wp-content/uploads/2021/10/DisparitiesAlmanacRaceEthnicity2021.pdf</a>. (October 2021; accessed April 7, 2022).

# 7.2 Emergency Services

MHSC is a particularly important provider of Emergency Department (ED) services to the SGV. In 2019, MHSC had 48,368 ED visits of which 7,363 (15%) led to an admission. <sup>58</sup> Nearly 65% of MHSC's ED visits were classified as severe acuity. <sup>59</sup> The level of severity at MHSC lies in stark contrast to 49% of ED visits being severe across all hospitals in the SGV.

Table 7.1 shows the emergency commercial discharges for residents of the SGV in 2018-2019. MHSC is the number one provider of these services accounting for 29.4% of the discharges. Note that this analysis includes Kaiser facilities. While it is our understanding that Kaiser tries to dissuade out-of-network services, even through the ED, we view it as more likely that Kaiser is an out-of-network option for emergency services than other GAC services. Nevertheless, Kaiser being included or not makes no difference to our conclusion that MHSC is the preeminent provider of commercial emergency services to the SGV.

Table 7.1 SGV Emergency Commercial Discharges, 2018-2019

Rank	Hospital	Emergency Discharges	% of SGV Emergency Discharges
1	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	5,730	29.4%
2	KAISER FOUNDATION HOSPITAL - BALDWIN PARK	2,407	12.3%
3	POMONA VALLEY HOSPITAL MEDICAL CENTER	1,294	6.6%
4	HUNTINGTON MEMORIAL HOSPITAL	1,074	5.5%
5	FOOTHILL PRESBYTERIAN HOSPITAL- JOHNSTON MEMORIAL	862	4.4%
6	SAN DIMAS COMMUNITY HOSPITAL	846	4.3%
7	SAN GABRIEL VALLEY MEDICAL CENTER	756	3.9%
8	KAISER FOUNDATION HOSPITAL - LOS ANGELES	669	3.4%
9	WHITTIER HOSPITAL MEDICAL CENTER	616	3.2%

<sup>59</sup> Defined as CPT 99284 (Severe without threat) and 99285 (Severe with threat).

<sup>58 2019</sup> HCAI Hospital Utilization Data (Pivot Table).

	Total *	19,492	100%
17	GREATER EL MONTE COMMUNITY HOSPITAL	214	1.1%
16	RONALD REAGAN UCLA MEDICAL CENTER	262	1.3%
15	LAC+USC MEDICAL CENTER	295	1.5%
14	ST. JUDE MEDICAL CENTER	313	1.6%
13	ALHAMBRA HOSPITAL MEDICAL CENTER	428	2.2%
12	KAISER FOUNDATION HOSPITAL – FONTANA	429	2.2%
11	CEDARS SINAI MEDICAL CENTER	482	2.5%
10	CITRUS VALLEY MEDICAL CENTER - QV CAMPUS	568	2.9%

Notes: \* Includes discharges to hospitals not shown in the table. Only hospitals with a 1% or greater share of emergency discharges are shown.

Table 7.2 shows that MHSC isn't the dominant provider of Medi-Cal emergency services. While still important, MHSC is the sixth largest provider of emergency services to Medi-Cal enrollees residing in the SGV with 6.3% share of discharges.

Table 7.2 SGV Emergency Medi-Cal Discharges, 2018-2019

Rank	Hospital	Emergency Discharges	% of SGV Emergency Discharges
1	POMONA VALLEY HOSPITAL MEDICAL CENTER	3,954	15.6%
2	LAC+USC MEDICAL CENTER	3,679	14.5%
3	GREATER EL MONTE COMMUNITY HOSPITAL	2,626	10.4%
4	CITRUS VALLEY MEDICAL CENTER - QV CAMPUS	1,999	7.9%
5	SAN GABRIEL VALLEY MEDICAL CENTER	1,913	7.6%
6	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	1,589	6.3%

	ALHAMBRA HOSPITAL MEDICAL		
7	CENTER	1,558	6.2%
	FOOTHILL PRESBYTERIAN HOSPITAL-		
8	JOHNSTON MEMORIAL	1,042	4.1%
	WHITTIER HOSPITAL MEDICAL		
9	CENTER	1,018	4.0%
10	HUNTINGTON MEMORIAL HOSPITAL	586	2.3%
	KAISER FOUNDATION HOSPITAL -		
11	BALDWIN PARK	546	2.2%
	MONTCLAIR HOSPITAL MEDICAL		
12	CENTER	509	2.0%
13	SAN DIMAS COMMUNITY HOSPITAL	469	1.9%
	LOS ANGELES COMMUNITY		
14	HOSPITAL	384	1.5%
	Total *	25,326	100%

Notes: \* Includes discharges to hospitals not shown in the table. Only hospitals with a 1% or greater share of emergency discharges are shown.

Table 7.3 steps back and looks at total ED visits (as opposed to admissions) by SGV GAC hospitals in 2019. The table is sorted from high to low by the number of ED visits per treatment station at the hospital. A treatment station is defined as a specific place within the ED adequate to treat one patient at a time. The ED-visits-per-treatment-station ratio is a measure of the burden on the ED with higher ratios indicating a higher burden. In 2019, this ratio ranged between 168 and 4,139 visits per station across California hospitals. The statewide median was 1,558 visits per station. Table 7.3 shows that 9 of the 13 GAC hospitals in the SGV were above this median indicating EDs in the SGV are significantly burdened. MHSC's position as one of the few SGV GAC hospitals below the statewide median makes maintaining emergency services particularly important at MHSC as it is in one of the best positions to handle additional ED volume according to Table 7.3.

**Table 7.3** SGV ED Visits, 2018-2019

	ED Visits	Treatment Stations	
Monterey Park Hospital	23,767	6	3,961
Queen of the Valley Hospital	65,177	24	2,716
Kaiser - Baldwin Park	80,151	30	2,672

Greater El Monte Community Hospital	22,084	9	2,454
Alhambra Hospital Medical Center	16,391	8	2,049
San Dimas Community Hospital	14,926	8	1,866
San Gabriel Valley Medical Center	21,559	12	1,797
Inter-Community Hospital	33,528	20	1,676
Foothill Presbyterian Hospital	36,739	22	1,670
Statewide Median		»	1,558
Methodist Hospital of Southern California	38,809	26	1,493
Pomona Valley Hospital Medical Center	80,920	70	1,156
Huntington Memorial Hospital	53,979	50	1,080
Garfield Medical Center	18,672	21	889

Notes: \* Includes discharges to hospitals not shown in the table. Only hospitals with a 1% or greater share of emergency discharges are shown.

# 7.3 Reproductive Services

"Reproductive services" refers to a range of services related to the reproductive system such as contraception, abortion, sterilization, assisted reproduction, and sexually transmitted infection (STI) prevention and treatment. Access to these services has profound impact on people's lives. <sup>60</sup>

Adequate access to reproductive services is a concern nationally. According to the Kaiser Family Foundation (KFF)'s 2020 Women's Health Survey:<sup>61</sup>

 One in five women are not using their preferred method of contraception and a quarter say it is because they can't afford it.

<sup>&</sup>lt;sup>60</sup> Ranji U et al. Beyond the numbers: access to reproductive health care for low-income women in five communities. <a href="https://www.kff.org/report-section/beyond-the-numbers-access-to-reproductive-health-care-for-low-income-women-in-five-communities-executive-summary/">https://www.kff.org/report-section/beyond-the-numbers-access-to-reproductive-health-care-for-low-income-women-in-five-communities-executive-summary/</a> (November 14, 2019; accessed April 7, 2022).

<sup>&</sup>lt;sup>61</sup> Frederisksen B, Ranji U, Salganicoff A, Long M. Women's sexual and reproductive health services: key finding from the 2020 KFF women's health suryey. <a href="https://www.kff.org/womens-health-policy/issue-brief/womens-sexual-and-reproductive-health-services-key-findings-from-the-2020-kff-womens-health-survey/">https://www.kff.org/womens-health-policy/issue-brief/womens-sexual-and-reproductive-health-services-key-findings-from-the-2020-kff-womens-health-survey/</a> (April 21, 2021; accessed April 7, 2022).

- Nearly one-third of oral contraceptive users say they have missed taking their birth control because they were not able to get their next supply in time.
- While the Affordable Care Act (ACA) required most private plans to cover all of the 18 FDA-approved methods of contraception without cost-sharing, one in five privately insured women said their insurance only covered part of the cost of their contraceptive care.

California provides legal protection for reproductive health care access and coverage in several ways. First, the state's Family Planning Access Care and Treatment (FPACT) program covers these services for Medi-Cal beneficiaries. The FPACT program also ensures coverage for family planning services to uninsured women earning up to 200% of the federal poverty level (FPL). The state also requires both Medi-Cal and private insurance plans to cover abortion services.

Despite these protections, access to these services can still be limited. Part of this is due to hospitals that prohibit some women's reproductive health services based on the Ethical and Regional Directives for Catholic Health Care Services. In the SGV, only one GAC hospital (Queen of the Valley Hospital) is listed in the Catholic Health Association of the United States' directory, 62 so the Ethical and Regional Directives for Catholic Health Care Services wouldn't be a prime cause of limited access to reproductive services in the SGV.

It is difficult for us to estimate the full extent of any potential impact on reproductive service access that the transaction creates because many reproductive services are provided at clinics or in physician offices. As we do not have data for these sites of care, we can only comment on the extent that the transaction could impact inpatient reproductive services.

Table 7.4 shows inpatient reproductive services provided to commercially insured residents of the SGV.<sup>63</sup> Table 7.5 is the Medi-Cal version of Table 7.4. From Table 7.4 MHSC is behind Huntington, but appears to be in line with other GAC hospitals in the SGV in terms of the provision of inpatient reproductive services to the SGV. MHSC doesn't show up in Table 7.5 indicating that it isn't an important provider of these services for Medi-Cal beneficiaries.

<sup>62</sup> https://www.chausa.org/for-members/directories/catholic-health-care-directory (accessed April 7, 2022). Queen of the Valley does provide at least one of the reproductive DRGs we analyzed as it appears in Table 7.4.

<sup>&</sup>lt;sup>63</sup> Reproductive services are defined as discharges with any of the following DRG codes: 770 (Abortion with D&C Aspiration Curettage or Hysterectomy), 779 (Abortion without D&C), 796 (Vaginal Delivery with Sterilization/D&C with MCC), 797 (Vaginal Delivery with Sterilization/D&C with CC), 798 (Vaginal Delivery with Sterilization/D&C without CC/MCC). This list of DRGs isn't meant to be an exhaustive list of inpatient reproductive services, but hopefully insightful into which hospitals provide inpatient reproductive services.

Table 7.4 SGV Commercial Reproductive Discharges, 2018-2019

Hospital	Reproductive Discharges	Percent of SGV Reproductive Discharges
HUNTINGTON MEMORIAL HOSPITAL	36	31.6%
SAN GABRIEL VALLEY MEDICAL CENTER	10	8.8%
GARFIELD MEDICAL CENTER	9	7.9%
PRESBYTERIAN INTERCOMMUNITY HOSPITAL	9	7.9%
METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	9	7.9%
POMONA VALLEY HOSPITAL MEDICAL CENTER	9	7.9%
QUEEN OF THE VALLEY HOSPITAL	7	6.1%
FOOTHILL PRESBYTERIAN HOSPITAL	4	3.5%
SAN DIMAS COMMUNITY HOSPITAL	4	3.5%
BEVERLY HOSPITAL	2	1.8%
SAN ANTONIO REGIONAL HOSPITAL	2	1.8%
ST. JUDE MEDICAL CENTER	2	1.8%
GREATER EL MONTE COMMUNITY HOSPITAL	2	1.8%
ADVENTIST HEALTH GLENDALE	2	1.8%
Total *	114	100%

Notes: \* Includes discharges to hospitals not shown in the table. Only hospitals with a 1% or greater share of emergency discharges are shown. Reproductive discharges defined as those with DRGs 770, 779, 796, 797, or 798.

Table 7.5 SGV Medi-Cal Reproductive Discharges, 2018-2019

Hospital	I	Percent of SGV Reproductive Discharges
POMONA VALLEY HOSPITAL MEDICAL CENTER	49	17.8%
GARFIELD MEDICAL CENTER	46	16.7%
HUNTINGTON MEMORIAL HOSPITAL	30	10.9%
QUEEN OF THE VALLEY HOSPITAL	27	9.8%
SAN GABRIEL VALLEY MEDICAL CENTER	22	8.0%
LAC+USC MEDICAL CENTER	14	5.1%
GREATER EL MONTE COMMUNITY HOSPITAL	12	4.3%
PRESBYTERIAN INTERCOMMUNITY HOSPITAL	11	4.0%
BEVERLY HOSPITAL	9	3.3%
MONTEREY PARK HOSPITAL	8	2.9%
FOOTHILL PRESBYTERIAN HOSPITAL	8	2.9%
ADVENTIST HEALTH WHITE MEMORIAL	8	2.9%
WHITTIER HOSPITAL MEDICAL CENTER	7	2.5%
SAN DIMAS COMMUNITY HOSPITAL	7	2.5%
CHINO VALLEY MEDICAL CENTER	4	1.4%
UNIVERSITY OF CALIFORNIA IRVINE MEDICAL CENTER	3	1.1%
Total *	276	100%

Notes: \* Includes discharges to hospitals not shown in the table. Only hospitals with a 1% or greater share of emergency discharges are shown. Reproductive discharges defined as those with DRGs 770, 779, 796, 797, or 798.

We dug further into the availability of reproductive services in the SGV by analyzing HCAI's Ambulatory Surgery (AS) data. <sup>64</sup> We found 14 ambulatory surgery sites in the SGV that provided contraception services in 2019. <sup>65</sup> Pomona Valley Medical Center, Monterey Park Hospital, and Kaiser Baldwin Park accounted for 58% of the AS encounters at these 14 sites. Additionally, Planned Parenthood Pasadena and San Gabriel Valley operates four facilities in the SGV which offer a wide range of reproductive services. <sup>66</sup> Overall, we conclude that the transaction is likely to have little to no impact on the availability of reproductive services in the SGV.

## 7.4 LGBT+ Services

A recent report by KFF describes LGBT+ people's health and experiences accessing health care. <sup>67</sup> The report's findings included:

- LGBT+ people more commonly report that they or a household family member has had problems paying medical bills in the past 12 months than non-LGBT+ people.
- LGBT+ people more commonly report being in fair or poor health than non-LGBT+ people, despite being a younger population, and report higher rates of ongoing health conditions and disability or chronic disease.
- LGBT+ people were more likely to report a range of negative provider experiences, including being blamed for health problems or having their concerns dismissed.

Figure 7.3 details the trouble LGBT+ people report paying their medical bills in the past 12 months. Compared to non-LGBT+ people, LGBT+ people are much more likely to report having difficulty paying medical bills in the past 12 months (30% vs. 19%). Among LGBT+ people, women have more difficulty than men (35% vs. 24%) and younger people have more difficulty than older people (33% vs. 20%). Lastly, 41% of LGBT+ people who consider themselves to be in poor/fair health report having trouble paying their medical bills in the past 12 months.

<sup>&</sup>lt;sup>64</sup> https://hcai.ca.gov/data-and-reports/healthcare-utilization/ambulatory-surgery/ (accessed April 7, 2022).

<sup>&</sup>lt;sup>65</sup> These were identified by searching for ICD-10 codes that began with "Z30." See pg. 3 "Contraception" <a href="https://rhntc.org/sites/default/files/resources/fpntc">https://rhntc.org/sites/default/files/resources/fpntc</a> icd10 codes.pdf (accessed April 7, 2022) for the full list of codes this includes.

<sup>&</sup>lt;sup>66</sup> The four facilities are in Alhambra, Baldwin Park, El Monte, and Pasadena.

<sup>&</sup>lt;sup>67</sup> Dawsom L, Frederiksen B, Long M, Ranji U, Kates J. LGBT+ people's health and experiences accessing care. <a href="https://www.kff.org/womens-health-policy/report/lgbt-peoples-health-and-experiences-accessing-care/">https://www.kff.org/womens-health-policy/report/lgbt-peoples-health-and-experiences-accessing-care/</a>. (July 22, 2021; accessed April 7, 2022).

Figure 10 Three in ten LGBT+ people have had trouble paying their medical bills in the past 12 months Share of people ages 18-64 who say they have had problems paying medical bills in the past 12 months or whose household family member has ALL Sexual Orientation\* LGBT+ Non-LGBT+ LGBT+ Gender Women 24% Men Age\* 33% 18-44 45-64 **Health Status\*** Excellent/Very Good/Good Fair/Poor NOTE: \*Estimates are statistically different within group (p < 0.05). KFF SOURCE: KFF Women's Health Survey 2020 (Nov. 19-Dec. 17, 2020)

Figure 7.3 LGBT+ People's Difficulty Paying Medical Bills

Source: Dawsom L, Frederiksen B, Long M, Ranji U, Kates J. LGBT+ people's health and experiences accessing care. <a href="https://www.kff.org/womens-health-policy/report/lgbt-peoples-health-and-experiences-accessing-care/">https://www.kff.org/womens-health-policy/report/lgbt-peoples-health-and-experiences-accessing-care/</a>. (July 22, 2021; accessed April 7, 2022).

As part of our assessment of the access and availability of LGBT+ services in the SGV we looked into whether gender-affirming health care services are available at MHSC and USCHS. Specifically, we looked for any discharges in the PDD that had the following ICD-10 codes:

- F64.0 Transsexualism
- F64.2 Gender identity disorder of childhood
- F64.8 Other gender identity disorders
- F64.9 Gender identity disorder, unspecified

We did not find any discharges matching these ICD-10 codes at MHSC, USCHS, or any of the GAC hospitals in the SGV from 2018-2019. Nearly 85% of discharges that had these ICD-10 codes came from three hospitals – Kaiser West Los Angeles (38%), Cedars-Sinai (36%), and Southern California Hospital at Hollywood (11%).

We again consulted the AS data to check the availability of services matching these ICD-10 codes at AS sites in the SGV. In 2019 we found AS encounters in the SGV matching these ICD-10 codes at Huntington and Kaiser Baldwin Park. We also found AS encounters at Keck and Verdugo during this time.

Subsequent to our data analysis we confirmed that MHSC does not offer gender-affirming services. Hence, the transaction will not negatively impact access to these services. In fact, we see potential for the transaction to increase access to gender-affirming services for residents of the SGV. MHSC could easily refer any of its patients who seek these services to Keck. While we did not find many discharges or AS encounters at Keck associated with the five ICD-10 codes we searched for, we were able to confirm through an internet search that a broad range of gender-affirming services are available at Keck. Keck's Gender-Affirming Care Program lists the following services on its website: <sup>68</sup>

- Affirming primary care and chronic disease management
- Gender-affirming surgical care
- Gynecologic care
- Hormone therapy
- Mental health care
- Occupational therapy
- Physical therapy
- Sexual health
- STI testing/treatment, HIV care, PrEP, PEP
- Telemedicine
- Urologic services
- Voice therapy

### 7.5 Mental Health Services

A full assessment of the availability of inpatient acute mental health care in the SGV should include acute psychiatric hospitals in the market. <sup>69</sup> There were 21 discharges for residents of the

<sup>&</sup>lt;sup>68</sup> https://www.keckmedicine.org/centers-and-programs/gender-affirming-care/ (accessed April 7, 2022).

<sup>&</sup>lt;sup>69</sup> See Scheffler RM, Adams N, Arnold DR. The competitive and quality impact of the proposed acquisition of Adventist Health Vallejo and Acadia Healthcare. for the full explanation of why it is appropriate to exclude

SGV in 2018-2019, 53% of which were from an acute psychiatric hospital and 47% were from a GAC hospital. Accounting for 47% of the discharges means GAC hospitals are still a critical provider of inpatient acute mental health care.

Our task in this section is to find out how critical MHSC is to that 47%. The market for inpatient psychiatric services is generally considered a "seller's market." Health plans generally want to contract with as many hospital providers of these services as they can as psychiatric beds are generally limited. Given the shortage of psychiatric beds, any reduction in access to inpatient acute mental health care is cause for concern.

Table 7.6 shows the commercial mental health discharges from residents of the SGV. Among the top 10 providers of these services to the SGV, 8 are acute psychiatric hospitals. MHSC had 27 discharges which amounts to a 0.6% market share. Table 7.7 repeats the analysis using Medi-Cal discharges. GAC hospitals are a larger provider of these services as they account for 6 of the top 10 spots. MHSC had 5 discharges which amounts to a less than 0.1% market share (not shown in table). The results of Table 7.6 and 7.7 give us little concern that the transaction will have any significant impact on acute mental health services available in the SGV. Our only recommendation to OCAG is to require the services continue to be made available at MHSC because acute mental health care services are generally in short supply and any additional supply – however small – is helpful.

Table 7.6 SGV Commercial Mental Health Discharges, 2018-2019

Damle	Hamital	Hospital	Disabausas	Chana
Kank	Hospital	Type	Discharges	Share
1	AURORA CHARTER OAK	Psych	1,234	25.4%
2	BHC ALHAMBRA HOSPITAL	Psych	930	19.2%
3	AURORA LAS ENCINAS HOSPITAL	Psych	482	9.9%
4	COLLEGE HOSPITAL	Psych	440	9.1%
5	CANYON RIDGE HOSPITAL	Psych	421	8.7%
6	DEL AMO HOSPITAL	Psych	407	8.4%
7	HUNTINGTON MEMORIAL HOSPITAL	GAC	235	4.8%
	RESNICK NEUROPSYCHIATRIC HOSPITAL AT			
8	UCLA	Psych	85	1.8%

psychiatric health facilities (PHFs) from this market. <a href="https://oag.ca.gov/system/files/media/ahv-cqi.pdf">https://oag.ca.gov/system/files/media/ahv-cqi.pdf</a>. (September 25, 2021; accessed April 7, 2022).

<sup>&</sup>lt;sup>70</sup> Ibid.

	Total *		4,850	100%
14	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	GAC	27	0.6%
13	ST. JOSEPH HOSPITAL - ORANGE	GAC	31	0.6%
12	ADVENTIST HEALTH GLENDALE	GAC	41	0.8%
11	INTER-COMMUNITY HOSPITAL	GAC	41	0.8%
10	NORTHRIDGE HOSPITAL MEDICAL CENTER	GAC	56	1.2%
9	LOMA LINDA UNIVERSITY BEHAVIORAL MEDICINE CENTER	Psych	68	1.4%

Notes: Psych = Acute Psychiatric Hospital. \* Includes discharges to hospitals not shown in the table. Only hospitals with a share greater than 0.5% are shown in the table. Mental health discharges defined as those with DRG 876 or 880-887.

Table 7.7 SGV Medi-Cal Mental Health Discharges, 2018-2019

Rank	Hospital	Hospital Type	Discharges	Share
1	INTER-COMMUNITY HOSPITAL	GAC	1,482	18.0%
2	AURORA CHARTER OAK	Psych	1,333	16.2%
3	DEL AMO HOSPITAL	Psych	601	7.3%
4	BHC ALHAMBRA HOSPITAL	Psych	538	6.5%
5	SILVER LAKE MEDICAL CENTER - DOWNTOWN CAMPUS	GAC	489	5.9%
6	COLLEGE MEDICAL CENTER	GAC	480	5.8%
7	HUNTINGTON MEMORIAL HOSPITAL	GAC	385	4.7%
8	CANYON RIDGE HOSPITAL	Psych	264	3.2%
9	MISSION COMMUNITY HOSPITAL - PANORAMA CAMPUS	GAC	259	3.1%
10	GLENDALE MEMORIAL HOSPITAL AND HEALTH CENTER	GAC	239	2.9%
11	LAC+USC MEDICAL CENTER	GAC	182	2.2%
12	PACIFICA HOSPITAL OF THE VALLEY	GAC	168	2.0%
13	SOUTHERN CALIFORNIA HOSPITAL AT HOLLYWOOD	GAC	166	2.0%

	Total *		8,232	100%
20	ST. FRANCIS MEDICAL CENTER	GAC	100	1.2%
19	LOS ANGELES COMMUNITY HOSPITAL AT BELLFLOWER	GAC	100	1.2%
18	GATEWAYS HOSPITAL AND MENTAL HEALTH CENTER	Psych	128	1.6%
17	COLLEGE HOSPITAL COSTA MESA	GAC	137	1.7%
16	COLLEGE HOSPITAL	Psych	143	1.7%
15	SOUTHERN CALIFORNIA HOSPITAL AT CULVER CITY	GAC	158	1.9%
14	ADVENTIST HEALTH WHITE MEMORIAL	GAC	159	1.9%

Notes: Psych = Acute Psychiatric Hospital. \* Includes discharges to hospitals not shown in the table. Only hospitals with a share greater than 1% are shown in the table. Mental health discharges defined as those with DRG 876 or 880-887.

## 7.6 Maternity and Obstetric Services

MHSC is a critical provider of maternity and obstetrics services to the SGV as can be seen from Table 7.8. MHSC had the second most commercial maternity and obstetrics discharges from 2018-2019 with a 15.9% market share. Table 7.8 is also indicative of patients' preferences for receiving these services close to home. Among the top 10 hospitals serving SGV residents, 8 of them are located in the SGV and account for a combined 77% of discharges.

Table 7.9 shows the market shares using Medi-Cal maternity and obstetrics discharges. MHSC is a much less important provider of these services on the Medi-Cal side as they accounted for only 1% of Medi-Cal maternity and obstetrics discharges from 2018-2019.

Our recommendation to the OCAG is to ensure that maternity and obstetrics services remain available at MHSC post-merger as it is a critical provider of these services to the SGV, particularly for the commercially insured population.

Table 7.8 SGV Commercial Maternity and Obstetrics Discharges, 2018-2019

Rank	Hospital	Discharges	Share
1	HUNTINGTON MEMORIAL HOSPITAL	3,013	27.5%
2	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	1,743	15.9%
3	QUEEN OF THE VALLEY HOSPITAL	1,118	10.2%
4	SAN GABRIEL VALLEY MEDICAL CENTER	804	7.3%

	Total *	10,957	100%
15	GOOD SAMARITAN HOSPITAL-LOS ANGELES	138	1.3%
14	WHITTIER HOSPITAL MEDICAL CENTER	140	1.3%
13	ADVENTIST HEALTH GLENDALE	169	1.5%
12	SAN ANTONIO REGIONAL HOSPITAL	189	1.7%
11	CEDARS SINAI MEDICAL CENTER	258	2.4%
10	FOOTHILL PRESBYTERIAN HOSPITAL	347	3.2%
9	ST. JUDE MEDICAL CENTER	367	3.3%
8	SAN DIMAS COMMUNITY HOSPITAL	370	3.4%
7	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	404	3.7%
6	GARFIELD MEDICAL CENTER	493	4.5%
5	POMONA VALLEY HOSPITAL MEDICAL CENTER	594	5.4%

Notes: \* Includes discharges to hospitals not shown in the table. Only hospitals with a 1% or more discharges are shown. Maternity & obstetrics discharges defined as those with DRG 768-788, 796-798, 805-807, 817-819, or 831-833.

Table 7.9 SGV Medi-Cal Maternity and Obstetrics Discharges, 2018-2019

Rank	Hospital	Discharges	Share
1	QUEEN OF THE VALLEY HOSPITAL	4,617	32.1%
2	POMONA VALLEY HOSPITAL MEDICAL CENTER	2,439	17.0%
3	SAN GABRIEL VALLEY MEDICAL CENTER	1,731	12.0%
4	GARFIELD MEDICAL CENTER	1,133	7.9%
5	HUNTINGTON MEMORIAL HOSPITAL	974	6.8%
6	WHITTIER HOSPITAL MEDICAL CENTER	523	3.6%
7	FOOTHILL PRESBYTERIAN HOSPITAL	447	3.1%
8	LAC+USC MEDICAL CENTER	406	2.8%
9	ADVENTIST HEALTH WHITE MEMORIAL	225	1.6%
10	GREATER EL MONTE COMMUNITY HOSPITAL	204	1.4%
11	PRESBYTERIAN INTERCOMMUNITY HOSPITAL	177	1.2%
12	MONTEREY PARK HOSPITAL	154	1.1%
13	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	142	1.0%

	Total	14,385	100%
15	BEVERLY HOSPITAL	135	0.9%
14	ADVENTIST HEALTH GLENDALE	137	1.0%

Notes: \* Includes discharges to hospitals not shown in the table. Only hospitals with a 1% or more discharges are shown. Maternity & obstetrics discharges defined as those with DRG 768-788, 796-798, 805-807, 817-819, or 831-833.

## 7.7 Access for Vulnerable Populations Including Medi-Cal Members

Medi-Cal beneficiaries face far greater difficulty accessing health care than the commercially insured. A recent study by the UCLA Center for Health Policy Research found:<sup>71</sup>

- Medi-Cal enrollees differ considerably from commercially insured Californians in terms
  of socioeconomic factors and health status. Yet even after adjusting for these factors,
  adults in Medi-Cal were still more likely than those with employer-sponsored insurance
  to:
  - o report no usual source of care,
  - o be told a doctor wouldn't accept their health insurance,
  - o have trouble finding a specialist that would see them,
  - o have had no doctor visit in the last year, and
  - o have had more than one ED visit in the last year.
- Children in Medi-Cal generally experience comparable access to care as children with employer-sponsored insurance, with one exception: They are more likely to report no usual source of care other than the ED, even after adjusting for health and socioeconomic factors.

We are particularly concerned about the transaction's potential impact on access for Medi-Cal members. This concern arises mainly through what we heard from payers in regard to how USCHS negotiates Medi-Cal contracts (see Section 6.X). The health plans are generally used to contracting with hospitals for the provision of Medi-Cal services at rates at or near those set by the state. If the hospital won't accept the state rates, the health plans generally are able to come to terms on an agreement where reimbursement is based on a simple multiplier of the state's rates (e.g., 105% of the state's rates). The health plans indicated to us that this is not the way

-

<sup>&</sup>lt;sup>71</sup> UCLA Center for Health Policy Research. Measuring up? Access to care in Medi-Cal compared to other types of health insurance (2018). CHCF Report. <a href="https://www.chcf.org/publication/measuring-up-access-care-medi-cal-compared-other-types-health-insurance-2018/">https://www.chcf.org/publication/measuring-up-access-care-medi-cal-compared-other-types-health-insurance-2018/</a>. (August 27, 2021; accessed April 7, 2022).

USCHS negotiates Medi-Cal contracts. Instead, USCHS requests Medi-Cal reimbursement be based on a percentage of billed charges. Additionally, we're told, USCHS requests carve outs for certain services. One of the plans we spoke with indicated that they'd be more than happy to contract with USCHS for Medi-Cal, but the percentage of billed charges request made it financially infeasible to add USCHS to its Medi-Cal provider network. Our concern as it relates to this transaction is that USCHS will negotiate MHSC's Medi-Cal contracts in the same way. This could lead to MHSC being left out of network by Medi-Cal managed care plans that deem a percentage-of-billed-charges reimbursement as financially infeasible.

A second related concern stems from the fact that MHSC is currently a much more important provider of services to the SGV's commercially insured population than its Medi-Cal population. This can be seen repeatedly throughout the preceding sections. There is always a financial incentive to perform more services for the commercially insured than the Medi-Cal insured given how much higher commercial reimbursement rates are.<sup>72</sup> Given MHSC's strong performance on the commercial side, USCHS could try to build on that by prioritizing commercial patients over Medi-Cal patients and, prioritize the services that are demanded relatively more by commercial patients than Medi-Cal patients.

The most direct way to deal with this concern is to require that the reimbursement rate for each of MHSC's current Medi-Cal contracts increase by no more than a certain percentage per year. Our recommendation is to set this percentage as the most recently available five-year average annual growth rate of the medical care CPI at the time the contract is renewed.

The remainder of this section is meant to show where MHSC stands among top providers of GAC hospital services to SGV Medi-Cal beneficiaries. While MHSC's 4.4% Medi-Cal market share isn't as large as its commercial market share, it is still a top 10 provider of Medi-Cal GAC hospital services to the SGV (Table 7.10).

<sup>72</sup> Chernew ME, Hicks AL, Shah SA. Wide State-Level Variation in Commercial Health Care Prices Suggests Uneven Impact Of Price Regulation: An examination of state-level price variation in the commercial market, relative to Medicare, for a broader set of states and a wider set of services than had been previously examined Health Affairs. 2020 May 1;39(5):791-9 showed that commercial prices in California are 2-3 times higher than Medicare

Table 7.10 SGV Medi-Cal Discharges, 2018-2019

Rank	Hospital	Discharges	Share
1	QUEEN OF THE VALLEY HOSPITAL	7,416	18.4%
2	SAN GABRIEL VALLEY MEDICAL CENTER	4,935	12.3%
3	HUNTINGTON MEMORIAL HOSPITAL	3,755	9.3%
4	GARFIELD MEDICAL CENTER	3,559	8.8%
5	LAC+USC MEDICAL CENTER	3,361	8.3%
6	GREATER EL MONTE COMMUNITY HOSPITAL	3,213	8.0%
7	METHODIST HOSPITAL OF SOUTHERN CALIFORNIA	1,771	4.4%
8	FOOTHILL PRESBYTERIAN HOSPITAL	1,465	3.6%
9	INTER-COMMUNITY HOSPITAL	1,363	3.4%
10	ALHAMBRA HOSPITAL MEDICAL CENTER	1,058	2.6%
11	BEVERLY HOSPITAL	786	2.0%
12	ADVENTIST HEALTH WHITE MEMORIAL	774	1.9%
13	MONTEREY PARK HOSPITAL	742	1.8%
14	POMONA VALLEY HOSPITAL MEDICAL CENTER	526	1.3%
15	ADVENTIST HEALTH GLENDALE	502	1.2%
	Total	40,276	100%

Source: HCAI 2018-2019 PDD.

Notes: \* Includes discharges to hospitals not shown in the table. Only hospitals with a 1% or more discharges are shown.

### 7.8 Staffing and Employee Rights

As mentioned previously, MHSC has about 2,000 employees and a medical staff with over 700 physicians. Part of our task for this report is to provide an assessment of the effect of the agreement or transaction on (1) staffing for patient care areas as it may affect availability of care, on (2) the likely retention of employees as it may affect continuity of care, and on (3) the rights of employees to provide input on health quality and staffing issues. With respect to (1) we have the general concern that the state already faces severe health workforce shortages. For example, Figure 7.4 shows HCAI's Registered Nurse Shortage Areas (RNSAs) as of June 2020. Among the 72 areas shown in the map, 19 are classified as having a high RN shortage, 19 are classified as having a medium RN shortage, 20 are classified as having a low RN shortage, and 14 are classified as having no RN shortage. The Pomona/Pasadena area, the area most directly

mappable to the SGV, is one of the low shortage areas. Generally, areas in LA County are classified as having a low or no RN shortage. The exception being the Los Angeles/East Lost Angeles area which is classified as having a high RN shortage.

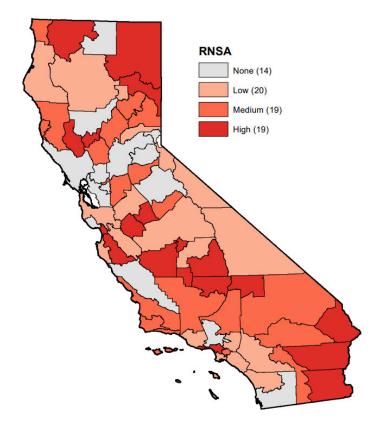


Figure 7.4 California's Registered Nurse Shortage Areas

Source: HCAI. <a href="https://data.chhs.ca.gov/dataset/registered-nurse-shortage-areas-in-california">https://data.chhs.ca.gov/dataset/registered-nurse-shortage-areas-in-california</a> (June 2020; accessed April 7, 2022).

Note: Shortage areas are as of June 2020.

Our ultimate assessment of (1) is tied to (2). A retention of employees will alleviate both continuity of care concerns and availability of care concerns. The Written Notice stipulates that "employees of MHSC will remain employed at Closing and MHSC will retain a separate, independent Medical Staff." The Written Notice proceeds to state "Medical Staff membership status and clinical privileges will remain the same, subject to a joint evaluation of MHSC's clinical programs and MHSC's hospital-based providers and opportunity for MHSC and its

\_

 $<sup>^{73}</sup>$  Pg. 14 (labeled MHSC-0000008) of the Written Notice.

providers to meet USCHS' quality, outcome, or other performance standards."<sup>74</sup> The end of this sentence, particularly the "other performance standards" part, is vague. It is difficult for us to tell what criteria would be used to determine whether these standards are met. Certainly standards related to measurable quality performance should be met to retain employment, but we are a bit concerned with the lack of specificity in "other performance standards." Our proposed condition on maintaining access to services at current licensure and designation is meant to also indirectly ensure MHSC doesn't face a significant employment reduction post-merger.

Finally, with respect to (3) we think it is likely that MHSC employees will have less input on health quality and staffing issues post-merger than they currently do. Assuming otherwise would be equivalent to assuming USCHS will have no input on these matters, which seems highly unlikely.

# 7.9 Community Benefit and Charity Care

MHSC is a nonprofit hospital and would remain one if the transaction is approved. Nonprofit hospitals are exempt from most federal, state, and local taxes. Additionally, nonprofit hospitals can receive tax-exempt bond financing, and any charitable contributions they receive are tax-deductible to the donors. This preferential tax treatment comes with the expectation that nonprofit hospitals provide a "community benefit."

Part of the role of community benefit (which includes charity care) is to provide care for the uninsured and insured who have difficulty covering the cost-sharing or premiums required of them. In its most recent community benefit report, MHSC listed two objectives it had while creating its community benefit plan: <sup>75</sup>

- 1. To continue to increase access to health care services for the community, with a focus on adults.
- 2. To continue to provide health education, support, and screening services for the public based on important health conditions, such as diabetes, heart disease, and cancer.

MHSC listed the following programs and services it provides to support these objectives:

- 1. Operating a 26-bed ED 24-hours a day
- 2. Providing charity care for patients without the ability to pay for necessary treatment
- 3. Absorbing the unpaid costs of care for patients with Medi-Cal
- 4. Absorbing the unpaid costs of care for patients with Medicare
- 5. Operating essential community services, such as maternity and NICU, at a loss

<sup>74</sup> Ibid

<sup>75</sup> https://www.methodisthospital.org/documents/2020-Community-Benefits-Plan.pdf (accessed April 7, 2022).

- 6. Providing free physician referrals to the community
- 7. Providing health education
- 8. Support and screening programs on a variety of topics
- 9. Information and website services in English and Chinese (Mandarin)
- 10. Conducting free blood pressure and Body Mass Index screenings, including access to a local mall kiosk
- 11. A dedicated Senior Services program of health education and screenings
- 12. A Health Ministries program that assists local congregations to provide guidance, support, and resources to parish nurses and health cabinet

The economic value of these community benefits in fiscal year 2020 was estimated to be \$46,495,112. The details of the value of each benefit are shown in Table 7.9. Given MHSC's continued nonprofit status post-transaction, and the importance of these community benefits to residents of the SGV little able to afford health care, we believe it is appropriate to require these benefits be maintained at or near current levels post-transaction. The way we recommend implementing this is to require the economic value of community benefits at MHSC in the first-year post-transaction to be at a minimum the average economic value of community benefits at MHSC over the most recent five years. We recommend the economic value of community benefits then increase annually by the average annual growth rate in the medical care CPI calculated using the five most recent years of data – the method used to compute our recommended price growth cap in Section 6.

# 7.10 Health Impact Conclusion

The concern we have that the transaction will reduce the access and availability of services in the SGV stems from the anticompetitive price effects that we assessed as likely to arise from the transaction in Section 6. As prices increase, care becomes more unaffordable, and care becomes inaccessible due to cost.

Throughout this section, we showed that MHSC is a larger provider of GAC hospital services to those with commercial insurance than it is to those covered by Medi-Cal. There is a risk that USCHS may attempt to move some of the commercial patients treated at MHSC toward the same services at Keck. As was documented in Section 6, the commercial prices at Keck are much higher than those at MHSC and thus there is a financial incentive to move services out of MHSC and out of the SGV.

The access concern we have for Medi-Cal beneficiaries arises from how USCHS negotiates Medi-Cal contracts. The health plans we interviewed indicated that USCHS requests Medi-Cal reimbursement be based on a percentage of billed charges as opposed to the state's Medi-Cal rates. Again, this access concern arises directly from what we showed in Section 6. Hospitals with market power can negotiate contracts in ways that hospitals without market power can't. We are concerned that USCHS will negotiate MHSC's Medi-Cal contracts in the same

nonstandard way it negotiates its own Medi-Cal contracts. This could lead to MHSC being left out-of-network by Medi-Cal managed care plans that deem a percentage of billed charges reimbursement as financially infeasible.

Our general recommendation based on the findings in this section is that services currently available at MHSC remain so post-transaction. However, MHSC is a much more critical provider of some inpatient hospital services than others. In particular, MHSC provides a large share of the SGV's emergency and maternity/obstetrics services. MHSC is a far less important provider of reproductive, LGBT+, and mental health services to the SGV. Given this, we have little reason to believe the transaction poses any significant risk to the access and availability of reproductive, LGBT+, and mental health services in the SGV.

The conditions we believe the OCAG should consider to mitigate the risk of the transaction leading to a reduction in access and availability of services are listed below. We envision all the conditions applying for a period of 10 years. MHSC shall:

- 1. Maintain its existing services at current licensure and designation. This includes:
  - a. Keeping the number of licensed beds dedicated to particular services at or above their current levels:<sup>76</sup>
    - i. 202 medical/surgical beds,
    - ii. 26 emergency room beds, <sup>77</sup>
    - iii. 24 obstetrics beds.
    - iv. 29 intensive care beds,
    - v. 10 coronary care beds,
    - vi. 10 acute respiratory care,
    - vii. 17 neonatal intensive care beds, and
    - viii. 30 rehabilitation center beds.
  - b. Maintaining access to the services listed in the Written Notice: <sup>78</sup>
    - i. Cancer Care,
    - ii. Emergency Services,
    - iii. Cardiology Services,
    - iv. Diagnostic Imaging,
    - v. Institute for Surgical Specialties,
    - vi. GYN Oncology Institute,

https://www.methodisthospital.org/documents/2020-Community-Benefits-Plan.pdf (accessed April 7, 2022).

<sup>78</sup> These can be found on pgs. 990-992 (labeled MHSC-0000984-MHSC-0000986) of the Written Notice.

<sup>&</sup>lt;sup>76</sup> These are the bed totals reported to HCAI in calendar year 2020. See Section 4.1 of this report.

<sup>&</sup>lt;sup>77</sup> Reported on pg. 3 of MHSC's 2020 Community Benefits Plan

- vii. Interventional Radiology,
- viii. Maternity Services,
  - ix. Neurosciences,
  - x. Orthopedics,
- xi. Physical Rehabilitation,
- xii. Stroke Care,
- xiii. Surgical Services,
- xiv. Weight Loss Services, and
- xv. Wound Healing Center and Hyperbaric Oxygen Center
- 2. Maintain Medi-Cal Managed Care and county contracts to provide the same types of services for Medi-Cal beneficiaries. This includes:
  - a. Being certified to participate in the Medi-Cal program.
  - b. Renewing contracts on the same terms and conditions unless the contract was terminated by a Medi-Cal Managed Care plan or county on its own initiative.
- 3. Maintain contracts with local governments or their subdivisions, departments, or agencies. These include: <sup>79</sup>
  - a. MHSC's contract with LA County and bioMerieux for data collection services.
  - b. MHSC's contract with LA County's Child Support Services Department for the Paternity Opportunity Program.
  - c. MHSC's designation by LA County's Emergency Medical Services Agency as an ST-Elevation Myocardial Infarction Receiving Center.
  - d. MHSC's contract with LA County as a health facility with a Specialty Care Center Designation.
  - e. MHSC's contract with LA County as an LA County Comprehensive Stroke Center.
  - f. MHSC's contract with LA County whereby MHSC receives funds for "Participation in the Hospital Preparedness Program."
- 4. Provide a minimum of \$3.7 million in charity care in its first-year post-merger with the minimum required increasing annually by 3.3%. 80

<sup>&</sup>lt;sup>79</sup> This list can be found on pg. 1013 (labeled MHSC-0001007) of the Written Notice.

<sup>80 \$3.7</sup> million is the 2018-2020 three-year average of community benefits provided by MHSC <a href="https://oag.ca.gov/charities/nonprofithosp#mhsc-supp">https://oag.ca.gov/charities/nonprofithosp#mhsc-supp</a> (accessed April 7, 2021). The annual totals from 2018 to 2020 were \$3.2 million, \$4.1 million, and \$3.8 million <a href="https://www.methodisthospital.org/About-Us/Community-Reports.aspx">https://www.methodisthospital.org/About-Us/Community-Reports.aspx</a> (accessed April 7, 2022). 3.3% is the average annual increase in the Los Angeles-Long Beach-Anaheim, CA Medical Care Consumer Price Index (CPI) from 2018-2020. <a href="https://data.bls.gov/timeseries/CUURS49ASAM?amp%253bdata">https://data.bls.gov/timeseries/CUURS49ASAM?amp%253bdata</a> tool=XGtable&output view=data&include graph

- 5. Provide a minimum of \$44.4 million in community benefits in its first-year post-merger with the minimum required increasing annually by 3.3%.<sup>81</sup>
- 6. Be reimbursed for out-of-network emergency services at no more than 275% of the applicable Medicare DRG classification. 82
- 7. Maintain language services currently available to patients. These include:
  - a. The hospital's Chinese language hot line. 83
  - b. Financial Assistance Program applications written in Cantonese, Mandarin, and Spanish. 84
  - c. Languages spoken at MHSC either as a primary language or through translation services as indicated in the Written Notice. 85
- 8. Maintain privileges for current medical staff at MHSC who are in good standing.
- 9. Maintain a community board that includes both physicians and community representatives.
- 10. Prohibit discrimination at MHSC on the basis of any protected personal characteristic identified in state and federal civil rights.
- 11. Obtain written confirmation that USCHS will invest \$200.7 million in MHSC and the details on how this money is intended to be spent.

Care CPI used to calculate this average annual increase were 475.7 (2018), 483.5 (2019), and 505.3 (2020). HCAI defines charity care in relation to bad debt. A patient's accounts receivable is written off as bad debt if he/she has the ability to pay but is unwilling to pay off the account. The inability to pay defines charity care. <a href="https://hcai.ca.gov/wp-content/uploads/2020/10/Chpt1000-1.pdf">https://hcai.ca.gov/wp-content/uploads/2020/10/Chpt1000-1.pdf</a> (May 1992; accessed April 7, 2022).

<sup>81 \$44.4</sup> million is the 2018-2020 three-year average of community benefits provided by MHSC. What counts as community benefits is detailed on HCAI's website <a href="https://hcai.ca.gov/data-and-reports/cost-transparency/hospital-community-benefit-plans/">https://hcai.ca.gov/data-and-reports/cost-transparency/hospital-community-benefit-plans/</a> (accessed April 7, 2022). The annual totals from 2018 to 2020 were \$44.1 million, \$42.6 million, and \$46.5 million <a href="https://www.methodisthospital.org/About-Us/Community-Reports.aspx">https://www.methodisthospital.org/About-Us/Community-Reports.aspx</a> (accessed April 7, 2022)

<sup>&</sup>lt;sup>82</sup> The 275% cap is the same as the out-of-network emergency services cap imposed as part of the Kaiser / St. Mary Medical Center affiliation conditions (see condition XXIV) and is meant to be toward the higher end of in-network rates. <a href="https://oag.ca.gov/system/files/media/smmc-conditions-packet-12172021.pdf">https://oag.ca.gov/system/files/media/smmc-conditions-packet-12172021.pdf</a> (December 17, 2021; accessed April 7, 2022).

<sup>83</sup> Pg. 942 (labeled MHSC-0000936) of the Written Notice.

<sup>&</sup>lt;sup>84</sup> Pg. 903 (labeled MHSC-0000897) of the Written Notice.

<sup>&</sup>lt;sup>85</sup> Pg. 1787 (labeled MHSC-0001781) of the Written Notice. The languages listed are Albanian, Arabic, Bengali, Bosnian, Cambodian, Cantonese, Chinese, Farsi, French, French Creole, German, Greek, Haitian Creole, Hindi, Hmong, Italian, Japanese, Korean, Laotian, Mandarin, Polish, Portuguese, Punjabi, Russian, Somali, Spanish, Turkish, Urdu, and Vietnamese.

#### 8. EFFICIENCIES AND BENEFITS

Efficiencies can promote competition and improve consumer welfare through the creation of a consolidated entity that can compete more effectively or through cost savings that can be passed on to consumers in the form of lower prices or improved quality.

The U.S. Department of Justice (DOJ) and the Federal Trade Commission (FTC)'s 2010 Horizontal Merger Guidelines are clear about what should count as efficiencies and how these efficiencies should be weighed against any potential anticompetitive effects likely to arise because of the merger. While state regulators have no obligation to follow these guidelines, it is our belief that they correctly outline what should count as an efficiency. The Guidelines recommend that the DOJ/FTC only credit efficiencies "likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects." These efficiencies are termed merger-specific efficiencies.

The Guidelines place the burden on the merging parties to demonstrate efficiencies and explain why each efficiency is merger-specific. The DOJ/FTC are most likely to recognize what they term "cognizable efficiencies," in other words, merger-specific efficiencies that have been verified and do not arise from anticompetitive reductions in output or service.

The literature on whether hospital mergers lead to cost savings is mixed. On net, the evidence doesn't support strong claims of systematic cost savings from mergers. The studies find cost savings for some subset of studied mergers, but overall the evidence is mixed.<sup>88</sup> The best recent study addressing this question finds cost savings in the realm of 4-7% on average. This magnitude of cost savings is well below the estimated magnitude of price increases generated by mergers, including cross-market mergers where the price effect has been estimated to be in the range of 7-17%.<sup>89</sup>

<sup>88</sup> See Schmitt M. Do hospital mergers reduce costs? Journal of health economics. 2017 Mar 1;52:74-94 and references therein.

<sup>&</sup>lt;sup>86</sup> https://www.justice.gov/atr/horizontal-merger-guidelines-08192010#10 (August 19, 2010; accessed April 7, 2022).

<sup>87</sup> Ibid.

<sup>&</sup>lt;sup>89</sup> Dafny L, Ho K, Lee RS. The price effects of cross-market mergers: theory and evidence from the hospital industry. The RAND Journal of Economics. 2019 Jun;50(2):286-325; Lewis MS, Pflum KE. Hospital systems and bargaining power: evidence from out-of-market acquisitions. The RAND Journal of Economics. 2017 Aug;48(3):579-610.

We read closely the Written Notice of the USCHS-MHSC affiliation for efficiency claims. The main claim to efficiency in the Written Notice is that the affiliation will improve "quality and patient experience through care coordination." While care coordination has the potential to generate cost savings, it is not merger-specific. Care coordination can be achieved through clinical integration agreements among hospitals. It does not require the financial integration that is part of this affiliation agreement and the main reason anticompetitive price effects are a concern.

USCHS' commitment to investing \$200.7 million in MHSC over a five-year period following closing of the transaction is in our view the greatest potential benefit of this transaction. The Written Notice states:<sup>90</sup>

USCHS will commit and invest \$200.7 million to MHSC over a five-year period following Closing, which will be for strategic investments that are mutually agreed upon by the parties, as described in the Affiliation Agreement, and which shall include certain information technology infrastructure. In addition, USCHS will annually reinvest capital from MHSC's operations into MHSC in an amount projected to be between \$8 million and \$12 million subject to the provisions of the Affiliation Agreement.

This commitment is too vague for us to judge the potential efficiencies that it could generate. Better information technology infrastructure could in theory create efficiencies but we have no way of estimating the magnitude of the cost savings based on what is stated in the Written Notice. One of the conditions we're recommending to the OCAG is to ensure this \$200.7 million is committed to MHSC and cannot be decreased post-transaction. Additionally, if detail could be provided as to how this \$200.7 million will be spent that would enable us to make a better assessment of the potential efficiencies that this transaction could generate.

118

\_

<sup>&</sup>lt;sup>90</sup> https://www.methodisthospital.org/documents/Notice-to-the-Attorney-General-by-MHSC-dated-11.18.2021.pdf (November 18, 2021; accessed April 7, 2022).

#### 9. CONCLUSION

It is our opinion that the transaction should be approved with the following conditions.

The conditions we recommend the OCAG impose to reduce the risk of anticompetitive effects arising from the transaction are as follows. 91 USCHS shall:

- 1. Not condition the participation of one of its controlled hospitals on the participation of any of its other controlled hospitals in contracts with payers. This includes:
  - a. Engaging a payer in "all-or-nothing" contracting whereby it explicitly or implicitly requires the payer to contract with all controlled hospitals.
  - b. Penalizing a payer for contracting with individual controlled hospitals, including setting significantly higher than existing contract prices or out-of-network fees for any or all controlled hospitals.
  - c. Interfering with the introduction or promotion of new narrow, tiered, steering, or value-based benefit designs for commercial or government-sponsored products.
- 2. Not increase MHSC's prices in renewed contracts with commercial or government-sponsored products by more than 4.8% per year for 5 years. 92

The conditions we recommend the OCAG impose to mitigate the risk of the transaction leading to a reduction in access and availability of services are listed below. We envision all the conditions applying for a period of 10 years. MHSC shall:

- 1. Maintain its existing services at current licensure and designation. This includes:
  - a. Keeping the number of licensed beds dedicated to particular services at or above their current levels:<sup>93</sup>
    - i. 202 medical/surgical beds,
    - ii. 26 emergency room beds, 94
    - iii. 24 obstetrics beds.
    - iv. 29 intensive care beds,
    - v. 10 coronary care beds,

<sup>&</sup>lt;sup>91</sup> These conditions are written broadly. We leave the details of how these would be implemented and enforced to the OCAG.

<sup>&</sup>lt;sup>92</sup> These two conditions align with conditions 2 and 3 in the Cedars-Sinai/Huntington affiliation conditions. <a href="https://oag.ca.gov/system/files/media/nhft-huntington-ag-decision-071921.pdf">https://oag.ca.gov/system/files/media/nhft-huntington-ag-decision-071921.pdf</a> (July 19, 2021; accessed April 7, 2022).

<sup>&</sup>lt;sup>93</sup> These are the bed totals reported to HCAI in calendar year 2020. See Section 4.1 of this report.

<sup>&</sup>lt;sup>94</sup> Reported on pg. 3 of MHSC's 2020 Community Benefits Plan https://www.methodisthospital.org/documents/2020-Community-Benefits-Plan.pdf (accessed April 7, 2022).

- vi. 10 acute respiratory care,
- vii. 17 neonatal intensive care beds, and
- viii. 30 rehabilitation center beds.
- b. Maintaining access to the services listed in the Written Notice: 95
  - i. Cancer Care,
  - ii. Emergency Services,
  - iii. Cardiology Services,
  - iv. Diagnostic Imaging,
  - v. Institute for Surgical Specialties,
  - vi. GYN Oncology Institute,
  - vii. Interventional Radiology,
  - viii. Maternity Services,
  - ix. Neurosciences,
  - x. Orthopedics,
  - xi. Physical Rehabilitation,
  - xii. Stroke Care,
  - xiii. Surgical Services,
  - xiv. Weight Loss Services, and
  - xv. Wound Healing Center and Hyperbaric Oxygen Center
- 2. Maintain Medi-Cal Managed Care and county contracts to provide the same types of services for Medi-Cal beneficiaries. This includes:
  - a. Being certified to participate in the Medi-Cal program.
  - b. Renewing contracts on the same terms and conditions unless the contract was terminated by a Medi-Cal Managed Care plan or county on its own initiative.
- 3. Maintain contracts with local governments or their subdivisions, departments, or agencies. These include: 96
  - a. MHSC's contract with LA County and bioMerieux for data collection services.
  - b. MHSC's contract with LA County's Child Support Services Department for the Paternity Opportunity Program.
  - c. MHSC's designation by LA County's Emergency Medical Services Agency as an ST-Elevation Myocardial Infarction Receiving Center.
  - d. MHSC's contract with LA County as a health facility with a Specialty Care Center Designation.

-

<sup>95</sup> These can be found on pgs. 990-992 (labeled MHSC-0000984-MHSC-0000986) of the Written Notice.

<sup>&</sup>lt;sup>96</sup> This list can be found on pg. 1013 (labeled MHSC-0001007) of the Written Notice.

- e. MHSC's contract with LA County as an LA County Comprehensive Stroke Center.
- f. MHSC's contract with LA County whereby MHSC receives funds for "Participation in the Hospital Preparedness Program."
- 4. Provide a minimum of \$3.7 million in charity care in its first-year post-merger with the minimum required increasing annually by 3.3%. 97
- 5. Provide a minimum of \$44.4 million in community benefits in its first-year post-merger with the minimum required increasing annually by 3.3%. 98
- 6. Be reimbursed for out-of-network emergency services at no more than 275% of the applicable Medicare DRG classification. <sup>99</sup>
- 7. Maintain language services currently available to patients. These include:
  - a. The hospital's Chinese language hot line. 100
  - b. Financial Assistance Program applications written in Cantonese, Mandarin, and Spanish. 101
  - c. Languages spoken at MHSC either as a primary language or through translation services as indicated in the Written Notice. 102

<sup>97 \$3.7</sup> million is the 2018-2020 three-year average of community benefits provided by MHSC <a href="https://oag.ca.gov/charities/nonprofithosp#mhsc-supp">https://oag.ca.gov/charities/nonprofithosp#mhsc-supp</a> (accessed April 7, 2021). The annual totals from 2018 to 2020 were \$3.2 million, \$4.1 million, and \$3.8 million <a href="https://www.methodisthospital.org/About-Us/Community-Reports.aspx">https://www.methodisthospital.org/About-Us/Community-Reports.aspx</a> (accessed April 7, 2022). 3.3% is the average annual increase in the Los Angeles-Long Beach-Anaheim, CA Medical Care Consumer Price Index (CPI) from 2018-2020.

https://data.bls.gov/timeseries/CUURS49ASAM?amp%253bdata\_tool=XGtable&output\_view=data&include\_graph\_s=true (accessed April 7, 2022). The three annual measures of the Los Angeles-Long Beach-Anaheim, CA Medical Care CPI used to calculate this average annual increase were 475.7 (2018), 483.5 (2019), and 505.3 (2020). HCAI defines charity care in relation to bad debt. A patient's accounts receivable is written off as bad debt if he/she has the ability to pay but is unwilling to pay off the account. The inability to pay defines charity care. https://hcai.ca.gov/wp-content/uploads/2020/10/Chpt1000-1.pdf (May 1992; accessed April 7, 2022).

<sup>&</sup>lt;sup>98</sup> \$44.4 million is the 2018-2020 three-year average of community benefits provided by MHSC. What counts as community benefits is detailed on HCAI's website <a href="https://hcai.ca.gov/data-and-reports/cost-transparency/hospital-community-benefit-plans/">https://hcai.ca.gov/data-and-reports/cost-transparency/hospital-community-benefit-plans/</a> (accessed April 7, 2022). The annual totals from 2018 to 2020 were \$44.1 million, \$42.6 million, and \$46.5 million <a href="https://www.methodisthospital.org/About-Us/Community-Reports.aspx">https://www.methodisthospital.org/About-Us/Community-Reports.aspx</a> (accessed April 7, 2022).

<sup>&</sup>lt;sup>99</sup> The 275% cap is the same as the out-of-network emergency services cap imposed as part of the Kaiser / St. Mary Medical Center affiliation conditions (see condition XXIV) and is meant to be toward the higher end of in-network rates. <a href="https://oag.ca.gov/system/files/media/smmc-conditions-packet-12172021.pdf">https://oag.ca.gov/system/files/media/smmc-conditions-packet-12172021.pdf</a> (December 17, 2021; accessed April 7, 2022).

<sup>&</sup>lt;sup>100</sup> Pg. 942 (labeled MHSC-0000936) of the Written Notice.

<sup>&</sup>lt;sup>101</sup> Pg. 903 (labeled MHSC-0000897) of the Written Notice.

<sup>&</sup>lt;sup>102</sup> Pg. 1787 (labeled MHSC-0001781) of the Written Notice. The languages listed are Albanian, Arabic, Bengali, Bosnian, Cambodian, Cantonese, Chinese, Farsi, French, French Creole, German, Greek, Haitian Creole, Hindi, Hmong, Italian, Japanese, Korean, Laotian, Mandarin, Polish, Portuguese, Punjabi, Russian, Somali, Spanish, Turkish, Urdu, and Vietnamese.

- 8. Maintain privileges for current medical staff at MHSC who are in good standing.
- 9. Maintain a community board that includes both physicians and community representatives.
- 10. Prohibit discrimination at MHSC on the basis of any protected personal characteristic identified in state and federal civil rights.
- 11. Obtain written confirmation that USCHS will invest \$200.7 million in MHSC and the details on how this money is intended to be spent.