GENERAL ACUTE CARE BED ACCESS BEFORE AND AFTER THE IMPLEMENTATION OF THE DIAGNOSIS RELATED GROUP REIMBURSEMENT METHODOLOGY

Medi-Cal fee-for-service (FFS) general acute care inpatient services play an important role in assuring that individuals who are eligible for Medi-Cal and whose needs are, typically, more complex than those of managed care Medi-Cal eligibles, receive care. Even though in Fiscal Year 2014-15, only 25.83[1] percent of all Medi-Cal beneficiaries were FFS eligible, it is important to ensure that these typically more medically fragile individuals have access to the care they need. As a result, the Department of Health Care Services (DHCS) regularly analyzes utilization among these individuals and performs analyses to determine whether those who are eligible for FFS Medi-Cal can access care.

Per the approved State Plan, DHCS reports on 23 access measures annually and a subset of four access measures quarterly. DHCS regularly compiles and reports on data obtained from Medi-Cal beneficiary calls to the Ombudsman's Office to determine whether FFS Medi-Cal beneficiaries are able to access services in a timely manner.[2] DHCS' reports on inpatient hospital service days per thousand FFS Medi-Cal eligibles by aid code categories are measures of realized access. These reports are made available on DHCS' website and the public has the ability to provide feedback. In addition, these reports are provided to the Centers for Medicare and Medicaid Services (CMS) for review.

There is a formalized process whereby DHCS is notified of closures/terminations. DHCS has an interagency agreement (IA) in place with the California Department of Public Health (CDPH). According to the terms in the IA, "CDPH is delegated the authority to collect, maintain, and transmit to DHCS copies of provider agreements with health facilities and agencies it certifies as meeting federal requirements for participation in Medi-Cal and to impose sanctions authorized under federal law or under state law, as well as to terminate the provider agreement for a Medi-Cal provider's noncompliance with applicable standards and regulations."

CDPH notifies DHCS when health facilities are placed under temporary management or receivership and/or are fined, or closed. This information is then shared throughout DHCS. As part of that process, the Provider Master File (PMF) is updated with pertinent information that appropriate Licensing and Certification employees have read-

[1] Department of Health Care Services, "Estimated Monthly Certified Eligibles: May 2015", accessed June 10, 2015.
[2] For the most recent example of this study, please refer to Medi-Cal Access to Care, Quarterly Monitoring Report: Beneficiary Feedback, accessed June 11, 2015.

access to. The PMF is regularly used to inform program of provider activities including termination, closure, change of ownership and/or change of provider number.

Upon receiving this information from CDPH, DHCS will quarterly compile a report that lists, by county, the number of active Medi-Cal DRG reimbursed hospitals, psychiatric hospitals, and rehabilitation hospitals and the number of providers that have been closed and/or terminated from the Medi-Cal program and of any decrease or termination of any services. DHCS will analyze that information for any impact to access using data available through the Office of Statewide Health Planning and Development (OSHPD) both for overall access and service line item access.

DHCS monitors inpatient hospital's utilization and payments to DRG hospitals by Medicaid Care Category (MCC) and applies policy adjustors when necessary. For example, for Fiscal Year (FY) 2015-16, DHCS proposes to implement an obstetrics policy adjustor since it was determined that payments for stays in this MCC in FY 2013-14 were among the lowest when compared to other care categories. This is significant because approximately 28 percent of DRG claims are for obstetric stays and overall payments for stays in this MCC are approximately 10 percent. The lower percentages in payments compared to the other care categories are typical because obstetric stays tend to be less complicated and thus require fewer hospital resources. However, the average DRG payment per obstetric stay compared to the pre-determined baseline prior to DRG implementation which was simulated using the 2009 FFS Medi-Cal dataset and was trended forward to DRG implementation year was lower than anticipated: $3,366 per stay (on average) compared to $3,602 per stay (baseline). Stays in other low-cost MCCs tend to be offset by stays in related MCCs as shown in Table A. For example, a normal newborn claim (which is likewise reimbursed at a lower rate) can be offset by a neonate claim which is reimbursed at a higher rate. Claims in the obstetric MCC are not offset in this manner. It was therefore determined that the low reimbursement in the obstetric category could compromise service line access, especially in remote areas. As a result, DHCS proposes a policy adjustor that would increase obstetrics reimbursement.

Table A: DRG Characteristics by MCC

Medicaid Care Category	DRG Stays[1]	DRG Avg Casemix[1]	DRG Pmt[1,2]	DRG Avg Pmt[1,2]	Baseline Avg Pmt[3]
OBSTETRICS	111,586	0.41	$ 376	$ 3,366	$ 3,602
NEWBORNS					
NORMAL	101,179	0.12	$ 101	$ 995	$ 1,259
NEONATE	16,819	2.95	$ 604	$ 35,882	$ 32,316
Sub-Total	**117,998**		**$ 704**		
PEDIATRIC					
MISCELLANEOUS	41,406	1.39	$ 645	$ 15,586	$ 11,856
RESPIRATORY	9,491	1.01	$ 108	$ 11,353	$ 9,814
Sub-Total	**50,897**		**$ 753**		
ADULT					
MISCELLANEOUS	58,085	1.64	$ 843	$ 14,513	$ 11,845
GASTROENTOLOGY	23,055	1.16	$ 218	$ 9,474	$ 8,866
CIRCULATORY	17,910	1.33	$ 191	$ 10,670	$ 8,185
RESPIRATORY	12,375	1.22	$ 125	$ 10,118	$ 10,253
Sub-Total	**111,425**		**$ 1,378**		
OTHER	1,810	0.66	**$ 10**	$ 5,502	$ 18,075
Grand Total	**393,716**	**0.88**	**$ 3,541**	**$ 8,993**	**$ 6,636**

Note: [1]Data is for FY 2013-14 DRG admissions through paid date 9/22/2014 taken from Medi-Cal DRG Project: Review of FY 2013-14 Utilization and Payment. [2]Figures are in millions. [3]FY 2013-14 Baseline Payment is generated from Summary Analytical Dataset Table 4.2.2. These articles are posted on DHCS's website.

DHCS regularly monitors whether hospital closures could have an adverse impact on FFS Medi-Cal beneficiaries' access to care. There were seven hospitals that would have been paid under the DRG methodology that had discontinued inpatient services (due to closures or suspensions) as shown in Table B.

Table B: Hospital that discontinued inpatient services

OSHPD ID	Name	County	Bed Count[1]	Year 1 DRG Base Rate	Year 2 DRG Base Rate	DRG Claims[2]	DRG Days[2]	DRG Paid[2]
106370705	Fallbrook Hosp Dist	San Diego	47	$5,911	$6,149	182	336	$461,831
106070904	Doctors Med Ctr San Pablo	Contra Costa	189	$5,219	$5,516	366	1796	$2,424,728
106190066	Bellflower Med Ctr.	Los Angeles	112	$5,186	$5,434	0	0	$0
106190854	LA Metro Med Ctr.	Los Angeles	115	$6,241	$6,537	0	0	$0
106301097	Anaheim Gen Hosp.	Orange	7	$7,213	N/A	0	0	$0
106160702	Corcoran Dist. Hosp.	Kings	32	N/A	N/A	0	0	$0
106100745	Kingsburg Dist. Hosp.	Fresno	35	N/A	N/A	0	0	$0

Notes:[1]The listed bed count includes only general acute care (GAC) beds.[2]The number of claims, days and paid amounts are for all inpatient services paid by the DRG reimbursement methodology, through April 2015.

DHCS analyzed the impact these closures could have on patient access by reviewing availability of general acute care (GAC) beds in nearby hospitals. For example, Fallbrook's 47 licensed beds consisted of thirty-five GAC beds, four intensive care beds, four nursery, and four coronary beds. The two hospitals closest to Fallbrook are Temecula Valley Hospital at approximately 14.6 miles or 20 minutes away and Tri-City Medical Center at 17.2 miles or 29 minutes away. Based on the licensed bed classification and occupancy rates shown in Table C, it was determined that Temecula Valley Hospital could absorb all of Fallbrook's GAC and intensive care patients while Tri-City Medical Center could absorb Fallbrook's coronary and nursery services and that access would therefore not be impaired.

Prior to DRG implementation, several hospitals offering inpatient services closed or had their licenses suspended; Corcoran District Hospital with 32 beds in rural Kings County and Kingsburg Medical Center with 35 beds in Fresno County. In addition, Bellflower Medical Center, LA Metro Medical Center, and Anaheim General Hospital had their licenses to operate general acute care beds suspended on 4/22/2013, 3/26/2013, and 1/31/2013 respectively. As a result, these hospitals were not able to bill Medi-Cal when DRG implemented. DHCS had loaded a rate for those hospitals that are in suspense, so that if the suspension was lifted the providers could submit claims and be reimbursed under the DRG methodology. No DRG claims were received and the hospitals' general acute care beds remain in suspension.

Table C: Bed Utilization among Fallbrook, Temecula and Tri-City Hospitals

2013 Inpatient Bed Utilization	FALLBROOK			TEMECULA			TRI-CITY MEDICAL		
Licensed Bed Classification / Designation	Patient Days	Bed Days	Occ Rate (%)	Patient Days	Avail. Days	Occ Rate (%)	Patient Days	Bed Days	Occ Rate (%)
Medical/Surgical Acute	4,347	12,775	34%	1,074	10,080	11%	41,529	99,148	42%
Perinatal	896	1,460	61%	0	0	0%	7,162	13,870	52%
Pediatric Acute	0	0	0%	0	0	0%	33	132	25%
Intensive Care	391	1,460	27%	265	1,680	16%	2,863	5,110	56%
Coronary Care	0	1,460	0%	0	0	0%	2,863	5,110	56%
Acute Respiratory Care	0	0	0%	0	0	0%	0	0	0%
Burn Center	0	0	0%	0	0	0%	0	0	0%
Intensive Care Newborn Nursery	0	0	0%	0	0	0%	5,366	7,300	74%
Rehabilitation Center	0	0	0%	0	0	0%	1,957	3,650	54%
Sub-Total GAC	**5,634**	**17,155**	**33%**	**1,339**	**11,760**	**11%**	**61,773**	**134,320**	**46%**

Similar analyses as Fallbrook were performed on Bellflower, LA Metro, Anaheim General, Doctors Medical Center San Pablo, Corcoran District Hospitals and Kingsburg. Appendix D shows occupancy rates for these hospitals by bed type and nearby hospitals that are less than 35 miles away. The three nearby hospitals that could absorb patient days or provide additional services are listed in Appendix D.

DHCS reviews OSHPD's information on general utilization and licensure. According to the latest information received from 11/1/2014 through 4/21/2015, Doctor's Medical Center-San Pablo had one hundred and twenty-four licensed beds which were comprised of twenty-two critical care and one hundred and two unspecified GAC beds. During calendar year 2013, Doctors Medical Center San Pablo operated one hundred and eighty nine licensed beds which were comprised of thirty five critical care and one hundred and fifty four unspecified GAC beds. OSHPD utilization report contains additional details about bed classifications and bed designations. DHCS used the OSHPD report together with paid inpatient FFS Medi-Cal claims to determine pediatric/adult service access based on review of submitted claims and bed utilization information. DHCS receives information from CDPH on closures, suspensions and ownership changes. DHCS then reviews whether there is an impact on access to inpatient services. Service line reduction can be seen based on OSHPD's operating license beds. For example, the operating licensed bed number immediately prior to Doctor's Medical Center-San Pablo's suspension is 124 whereas previously it was 189.

Doctors Medical Center-San Pablo's unspecified GAC beds were in Medical/Surgical category. According to a report prepared by Contra Costa Emergency Medical Services Agency that evaluated impact of Doctors Medical Center San Pablo's suspension[3], children hospital pediatric beds are reported under the Medical/Surgical category. The three hospitals closest to Doctor's San Pablo are Kaiser Richmond at approximately 2.4 miles or ten minutes away, Alta Bates Summit Medical Center, Alta Bates Campus at 10.9 miles or nineteen minutes away, Children's Hospital at Oakland at 12.4 miles or eighteen minutes away. Based on the licensed bed classification and occupancy rates shown in Appendix D, it was determined that Kaiser Richmond and Alta Bates Summit could absorb all of Doctor San Pablo's GAC and intensive care patients while Children's Hospital at Oakland provides additional services such as pediatric acute care.

Bellflower's one hundred twelve licensed beds were comprised of eighty five GAC beds, ten critical care beds and seventeen perinatal beds. The three nearby hospitals closest to Bellflower are Lakewood at approximately two miles and six minutes away, Kaiser-Downey at approximately 3.4 miles and 11 minutes away, and Saint Francis at approximately 9.5 miles and 14 minutes away. Based on the licensed bed classifications and occupancy rates, it appeared that Lakewood hospital could have absorbed all of Bellflower's Medical/Surgical Patients and critical care patients while Kaiser Downey and Saint Francis could have absorbed all of Bellflower's perinatal patients.

[3] According to information DHCS had confirmed by a Contra Costa representative, Doctors Medical Center beds are suspended for one year and negotiations with the Contra Costa County Board of Supervisors are ongoing.

LA Metro's one hundred and fifteen licensed beds consisted of ninety-one GAC beds, eight critical care beds, and sixteen perinatal beds. The three nearby hospitals closest to LA Metro are Hollywood Presbyterian at approximately 5.1 miles and seventeen minutes away, California Medical Center at approximately 3.0 miles and seven away, and Kaiser-West Los Angeles at approximately 4.0 miles and six minutes away. Based on the licensed bed classifications and occupancy rates, it appeared that Hollywood Presbyterian, California Medical Center, and Kaiser-West Los Angeles hospitals could have absorbed all of LA Metro's GAC, perinatal and critical care patients.

Anaheim General's one hundred and one licensed beds consisted of seventy GAC beds, twelve critical care beds, fourteen perinatal beds nursery, and five pediatric beds. The three nearby hospitals closest to Anaheim are AHMC Anaheim Regional Hospital at approximately 7.7 miles and fifteen minutes away, Garden Grove Hospital at approximately 10.2 miles and eighteen minutes away, and Fountain Valley Regional Hospital at approximately 12.7 miles and twenty-three minutes away. Based on the licensed bed classifications and occupancy rates, it appeared that AHMC and Garden Grove hospitals could have absorbed all of Anaheim General Hospital's GAC, perinatal and critical care patients while Fountain Valley could have absorbed all of Anaheim General's pediatric patients.

Kingsburg had thirty-five licensed beds which were only in the Medical/Surgical category. The three nearby hospitals closest to Kingsburg are Adventist Medical Center-Reedley at approximately 12.8 miles and twenty-four minutes away, Adventist Medical Center at approximately 20.3 miles and twenty-eight minutes away and Kaweah Delta Medical Center at approximately 22.3 miles and twenty-five minutes away. Based on the licensed bed classifications and occupancy rates, it appeared that these three hospitals which have 639 GAC beds in total could have absorbed all of Kingsburg's GAC patients.

Corcoran had thirty-two licensed beds which were only in the Medical/Surgical category. The three nearby hospitals closest to Corcoran are Tulare Regional Medical Center at approximately 20.1 miles and thirty-three minutes away, Adventist Medical Center at approximately 21.3 miles and twenty-nine minutes away and Kaweah Delta Medical Center at approximately 30.5 miles and forty-two minutes away. Based on the licensed bed classifications and occupancy rates, it appeared that these three hospitals which have a total of 660 GAC beds between them could have absorbed all of Corcoran's GAC patients.

It is also important to note that non-designated public hospitals (NDPH) with active licenses for general acute care beds were not considered in the calculation of GAC bed availability presented in this report. This is due to the fact that NDPHs began to be

reimbursed under the DRG methodology on January 1, 2014 or after the time period for which OSHPD data is available.

However, if we consider access without regard to payment methodology, it would appear that Tulare County residents, for example, have adequate access to general acute care beds. This is the case even though Tulare County is one of the counties not listed in Appendices A and B.

In calendar year 2013, Kaweah Delta Medical Center, Sierra View District Hospital, and Tulare Regional Medical Center operated a total of 692 licensed general acute care beds, reported 252,580 general acute care bed day availability and 115,367 bed day utilization. As a result, in calendar year 2013, Tulare County's hospitals reported, in total, an occupancy rate of 46% and a vacancy rate of 54%.

It should further be noted that Tulare County adjoins Fresno, Kings, and Kern counties:

as indicated in Appendices A and B:

In FY 2012-13:

- Fresno County had 553,390 general acute care bed days available and a vacancy rate of 35%,
- Kern County had 455,810 general acute care bed days available and a vacancy rate of 44%, and
- Kings County had 51,972 general acute care bed days available and a vacancy rate of 25%.

In FY 2013-14:

- Fresno County had 568,263 general acute care bed days available and a vacancy rate of 36%,
- Kern County had 451,663 general acute care bed days available and a vacancy rate of 46%, and
- Kings County had 51,830 general acute care bed days available and a vacancy rate of 21%.

In addition to regularly utilizing OSHPD data sources for occupancy and vacancy information, DHCS performs ad-hoc analyses when it receives information from various sources such as local newspapers and external stakeholders about potential impacts to inpatient services, such as a potential pediatric service line reduction in Doctors Medical Center - San Pablo. None of these hospital closures/potential service line reductions were the result of DRG implementation nor resulted in an adverse impact to access.

DHCS monitors DRG provider reimbursement and availability on an ongoing basis and annually publishes a hospital characteristics file[4]. The hospital characteristics file contains DRG rates for all DRG and non-DRG hospitals. Excluding non-DRG providers, the total DRG hospital count in FY 2013-14, FY 2014-15 and FY 2015-16 are relatively similar at 346, 348 and 348, respectively. The list of DRG hospitals in each FY are provided as Appendix E, under separate cover.

In addition to the reviews described above, DHCS will conduct reviews of access on an annual basis. The reviews will be similar to the one presented in this report and will be based on availability of GAC beds to overall utilization.

DHCS' overall findings indicate that overall availability of GAC beds in CY 2013 when DRG was implemented remained relatively constant to the prior year. A detailed breakdown of GAC bed availability and utilization by county for hospitals that are reimbursed under the DRG methodology can be found in Appendices A and B. A description of the data, methods and data's limitations can be found in Appendix C.

Vacancy Rates: DHCS determined that the unweighted average vacancy rate[5] among DRG hospitals was 47 percent in 2012 and 49 percent in 2013 and that DRG bed availability increased from 10,509,520 in 2012 to 11,009,545 in 2013.

The ratio of vacant bed days to FFS Medi-Cal eligibles[6] serves as an early gauge of access. If we divide the number of vacant DRG bed days by the number of FFS Medi-Cal eligibles[7], it appears that, in addition to the bed days they utilized in that year, each FFS Medi-Cal eligible has available, on average an additional:

- 5.2 bed days per FFS Medi-Cal eligible in 2012
- 5.5 bed days per FFS Medi-Cal eligible in 2013 and
- 3.9 bed days per FFS Medi-Cal eligible in 2014.

The ratio of beds available in addition to the beds FFS Medi-Cal beneficiaries utilize per FY increased slightly in 2013 as a result of a slight decrease in inpatient stays and decreased slightly as a result of the addition of ACA beneficiaries. The calculations for

[4] DHCS published Hospital Characteristics files for FY 2013-14, FY 2014-15, and FY 2015-16, i.e., every year that DRG has been implemented.
[5] The formula for the occupancy rate is taken from Johns, Merida, *Health Information Management Technology: An Applied Approach*, Chicago, Illinois: AHIMA Press, 2011, p. 551. The vacancy rate is derived by subtracting the occupancy rate from 100%.
[6] In FY 2012-13 there were 1,732,336 FFS Medi-Cal eligibles; in FY 2013-14 there were 1,992,158 FFS Medi-Cal eligibles; in FY 2014-15 there were 2,809,681.
[7] In FY 2012-13 there were 1,732,336 FFS Medi-Cal eligibles; in FY 2013-14 there were 1,992,158 FFS Medi-Cal eligibles; in FY 2014-15 there were 2,809,681.

CY 2013 and CY 2014 assume the same number of vacant bed days in CY 2014[8] as in 2013. The slight decrease in inpatient days and ACA implementation were both independent of DRG. The current GAC bed day availability indicates that the system, as a whole, is capable of absorbing additional patients should there be an increase of Medi-Cal FFS eligibles.

DHCS' record of service utilization among FFS Medi-Cal beneficiaries indicates that they used 1,854,990 GAC bed days in fiscal year 2013-14[9] and 1,732,336 GAC bed days in fiscal year 2009-10[10]. Although OSHPD and DHCS measure utilization in different time periods, (calendar year vs. state fiscal year), according to both data sets service and bed utilization has remained relatively constant after DRG implementation.

Finally, currently DHCS pays hospitals under the DRG payment methodology at the federal maximum upper payment limit, through the combination of DRG payments and multiple supplemental payments. Given that these payments are at the federal upper payment limits, DHCS cannot pay hospitals more than is currently paid under the state plan.

The current analysis only examined hospitals that were reimbursed under the DRG methodology. For example, data on psychiatric and rehabilitation hospitals was omitted in this report but will be provided in future reports.

Psychiatric hospitals are administered in partnership with the counties. DHCS administers a Freedom of Choice Waiver under Section 1915(b) of the Social Security Act that allows California to provide Specialty Mental Health Services (SMHS), which include psychiatric inpatient hospital services, for Medi-Cal beneficiaries who meet medical necessity criteria for SMHS and require treatment by licensed mental health professionals through the County Mental Health Plans (MHP). MHPs are responsible for providing, or arranging for the provision of SMHS, including psychiatric inpatient hospital services.

As such, MHPs are responsible for approving the treatment for eligible Medi-Cal beneficiaries in inpatient psychiatric facilities whether or not those inpatient facilities are MHP-contracted. MHPs may not require prior authorization of emergency services, including psychiatric inpatient hospital services. DHCS conducts oversight of the MHP including access to all SMHS.

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[8] 2014 hospital utilization data is expected to be available by the end of September 2015. Source: Personal communication with OSHPD staff June 15, 2015.

[9] Department of Health Care Services, Medi-Cal DRG Project: Review of FY 2013-14 Utilization and Payment, Sacramento, CA: 2015

[10] Department of Health Care Services, Medi-Cal DRG Project: Summary of Analytical Dataset, Sacramento, California: 2011.

Psychiatric inpatient hospital services include acute psychiatric inpatient hospital services, psychiatric inpatient hospital professional services, and administrative day services provided in a hospital. Acute psychiatric inpatient hospital services are those services provided by a hospital to beneficiaries for whom the facilities, services, and equipment are medically necessary for diagnosis or treatment of a mental disorder. Psychiatric inpatient hospital professional services are specialty mental health services provided to a beneficiary by a licensed mental health professional with hospital admitting privileges while the beneficiary is in a hospital receiving psychiatric inpatient hospital services. Psychiatric inpatient hospital professional services do not include all specialty mental health services that may be provided in an inpatient setting. Psychiatric inpatient hospital professional services include only those services provided for the purpose of evaluating and managing the mental disorder that resulted in the need for psychiatric inpatient hospital services and do not include routine hospital services or hospital-based ancillary services. Administrative day services are psychiatric inpatient hospital services provided to a beneficiary who has been admitted to the hospital for acute psychiatric inpatient hospital services, and the beneficiary's stay at the hospital must be continued beyond the beneficiary's need for acute psychiatric inpatient hospital services due to a temporary lack of residential placement options and non-acute residential treatment facilities that meet the needs of the beneficiary.

California Code of Regulations, Title 9, Section 1820.225 specifies in relevant part that, "the hospital providing emergency psychiatric hospital services shall assure that the beneficiary meets the criteria for medical necessity...and that "the MHP shall not require a hospital to obtain prior MHP payment authorization for an emergency admission, whether voluntary or involuntary."

Psychiatric inpatient hospitals are licensed by the California Department of Public Health.

Conclusion: Based on this preliminary analysis of access of hospitals funded under the DRG methodology, DHCS does not find that an access issue exists. This is due to various factors, among them: an increase in overall increase in GAC beds, an increase in hospital vacancy rates, as well as a concerted effort on the part of DHCS to enroll FFS Medi-Cal beneficiaries into Medi-Cal managed care plans. Taken together, these factors appear to have more than offset the negative pressures on GAC access which include increased Medi-Cal enrollment as a result of the Affordable Care Act and increasing poverty rates. And finally, again as noted above, hospitals are already paid at the federal upper payment limits.

DHCS is committed to ensuring that FFS beneficiaries receive the care they need. As a result, DHCS will continue to monitor FFS Medi-Cal population's access to services and

monitor utilization and payment and apply policy adjustors when necessary to meet the goal of adequate access.

APPENDIX A: General Acute Care Utilization in Hospitals Reimbursed by DRG in FY 2012-13[11]

County	Number of Hospitals	Number of Beds	Licensed Bed Days per Year	Patient Days per Year	Occupancy Rate	Vacancy Rate
Alameda	10	1,888	651,358	328,678	50%	50%
Amador	1	52	19,032	7,993	42%	58%
Butte	5	525	192,150	121,076	63%	37%
Calaveras	1	48	17,568	4,540	26%	74%
Colusa	1	42	15,372	2,816	18%	82%
Contra Costa	8	1,596	589,954	278,905	47%	53%
Del Norte	1	49	18,244	6,926	38%	62%
El Dorado	2	162	56,788	28,134	50%	50%
Fresno	7	1,551	553,390	361,166	65%	35%
Glenn	1	47	17,202	1,175	7%	93%
Humboldt	4	302	110,532	41,988	38%	62%
Kern	9	1,241	455,810	254,235	56%	44%
Kings	1	142	51,972	38,826	75%	25%
Lake	2	81	29,646	13,038	44%	56%
Lassen	1	38	13,908	4,197	30%	70%
Los Angeles	87	19,327	7,049,550	3,816,502	54%	46%
Madera	2	454	166,164	104,383	63%	37%
Marin	3	223	81,618	43,224	53%	47%
Mendocino	2	116	42,456	17,632	42%	58%
Merced	2	232	84,912	46,155	54%	46%
Monterey	2	341	124,806	48,087	39%	61%
Napa	2	305	111,630	55,619	50%	50%
Nevada	1	104	38,064	17,304	45%	55%
Orange	33	5,543	1,987,314	991,345	50%	50%
Placer	3	713	261,471	163,288	62%	38%
Riverside	15	2,864	1,048,224	557,792	53%	47%
Sacramento	10	2,219	812,184	445,703	55%	45%
San Bernardino	19	3,461	1,250,421	725,113	58%	42%
San Diego	18	4,542	1,646,139	916,916	56%	44%
San Francisco	8	1,819	665,754	260,630	39%	61%
San Joaquin	7	998	363,609	171,240	47%	53%
San Luis Obispo	4	465	170,190	69,181	41%	59%
San Mateo	8	1,055	386,130	163,046	42%	58%
Santa Barbara	4	870	318,420	112,431	35%	65%
Santa Clara	8	2,528	920,158	527,241	57%	43%
Santa Cruz	3	339	127,434	62,845	49%	51%
Shasta	4	579	211,608	101,183	48%	52%
Siskiyou	2	61	22,326	7,519	34%	66%
Solano	5	594	217,404	120,373	55%	45%
Sonoma	4	666	243,756	121,850	50%	50%
Stanislaus	6	1,225	447,940	244,870	55%	45%
Sutter	2	146	53,436	7,392	14%	86%
Tehama	1	76	27,816	8,200	29%	71%
Tuolumne	2	84	30,744	18,016	59%	41%
Ventura	8	1,092	399,672	203,352	51%	49%
Yolo	2	136	49,776	17,636	35%	65%
Yuba	1	173	63,318	48,089	76%	24%
Grand Total	**332**	**61,114**	**22,217,370**	**11,707,850**	**53%**	**47%**

[11] The data does not include NDPHs which did not participate in DRG reimbursement in CY 2013.

APPENDIX B: General Acute Care Utilization in Hospitals Reimbursed by DRG in FY 2013-14[12]

County	Number of Hospitals	Number of Beds	Licensed Bed Days per Year	Patient Days per Year	Occupancy Rate	Vacancy Rate
Alameda	10	1,888	848,990	344,158	41%	59%
Amador	1	52	18,980	8,230	43%	57%
Butte	5	525	191,625	125,830	66%	34%
Calaveras	1	48	17,520	4,397	25%	75%
Colusa	1	42	15,330	2,393	16%	84%
Contra Costa	8	1,554	567,210	258,828	46%	54%
Del Norte	1	49	17,885	7,286	41%	59%
El Dorado	2	162	59,130	27,982	47%	53%
Fresno	7	1,566	568,263	362,711	64%	36%
Glenn	1	47	17,155	537	3%	97%
Humboldt	4	266	100,330	44,373	44%	56%
Kern	9	1,235	451,663	242,652	54%	46%
Kings	1	142	51,830	40,696	79%	21%
Lake	2	62	22,630	12,000	53%	47%
Lassen	1	38	13,870	4,570	33%	67%
Los Angeles	88	19,403	7,107,678	3,682,852	52%	48%
Madera	2	462	166,198	95,942	58%	42%
Marin	3	223	81,395	40,094	49%	51%
Mendocino	2	105	38,996	17,061	44%	56%
Merced	2	232	84,680	46,721	55%	45%
Monterey	2	340	124,353	50,521	41%	59%
Napa	2	305	111,325	50,103	45%	55%
Nevada	1	104	37,960	16,426	43%	57%
Orange	33	5,517	2,015,359	990,878	49%	51%
Placer	3	710	259,600	161,011	62%	38%
Riverside	15	2,934	1,031,570	555,968	54%	46%
Sacramento	10	2,234	810,793	454,529	56%	44%
San Bernardino	19	3,775	1,348,987	709,773	53%	47%
San Diego	18	4,542	1,657,830	908,395	55%	45%
San Francisco	8	1,818	663,831	249,685	38%	62%
San Joaquin	7	998	364,270	159,055	44%	56%
San Luis Obispo	4	456	154,556	68,080	44%	56%
San Mateo	8	1,134	413,910	185,481	45%	55%
Santa Barbara	4	843	314,526	113,960	36%	64%
Santa Clara	8	2,528	922,720	532,384	58%	42%
Santa Cruz	3	359	128,775	65,213	51%	49%
Shasta	4	579	211,335	101,361	48%	52%
Siskiyou	2	61	22,265	7,776	35%	65%
Solano	5	672	227,684	124,387	55%	45%
Sonoma	4	666	243,090	115,295	47%	53%
Stanislaus	6	1,225	447,125	255,369	57%	43%
Sutter	2	74	29,602	7,427	25%	75%
Tehama	1	76	27,740	8,724	31%	69%
Tuolumne	2	84	30,660	19,212	63%	37%
Ventura	8	1,122	436,995	201,229	46%	54%
Yolo	2	125	48,122	17,430	36%	64%
Yuba	1	173	63,145	46,931	74%	26%
Grand Total	**333**	**61,555**	**22,589,486**	**11,545,916**	**51%**	**49%**

[12] The data does not include NDPHs which did not participate in DRG reimbursement in CY 2013.

APPENDIX C: Study Data and Limitations

Study Data and Methods

Data: For this study, the DHCS collected demographic, hospital and FFS data for each county from several resources including: California Department of Finance[13], US Census Bureau[14], Office of Statewide Health Planning and Development[15], and data in the Management Information System/Decision Support System (MIS/DSS). The occupancy and vacancy rates of GAC inpatient services were determined using industry accepted standards as noted in the literature.[16]

Data on all but 13 of California's hospitals with GAC beds was made available to DHCS. Those 13 hospitals are excluded[17] from this analysis.

Methods: The ratio of bed days to FFS Medi-Cal eligibles was based on OSHPD's total patient census days divided by the average number of eligibles over a three-month period during calendar years (CY) 2012 and 2013 from MIS/DSS. Individuals who were dually eligible for Medi-Cal and Medicare Part A were excluded from the analysis as Medicare Part A specifically covers hospitalization. All other FFS Medi-Cal eligibles were included. The data on the FFS eligibles was extracted from the MIS/DSS system eight or more months after it was initially submitted to DHCS by the 58 counties, providing sufficient time for all counties to report the data and to make any corrections necessary.

Limitations: OSHPD collects hospitalization rates on an annual (calendar year) basis and publishes those rates once all, or almost all, hospitals have submitted their data[18].

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[13] Population estimates for each county were obtained from the California Department of Finance, "E-2. California County Population Estimates and Components of Change" which was accessed on June 8, 2015.

[14] Poverty information for each county was obtained for the US Census Bureau, Small Income and Poverty Estimates tables which were accessed on June 8, 2015.

[15] The number of hospitals with licensed general acute care beds was downloaded from the Office of Statewide Health Planning and Development's Hospital Annual Utilization Data on June 8-10, 2015. Occupancy and vacancy figure findings were discussed in a personal telephone call with the Office on June 10, 2015.

[16] The formula for the occupancy rate is taken Johns, Merida, *Health Information Management Technology: An Applied Approach*, Chicago, Illinois: AHIMA Press, 2011, p. 551. The vacancy rate is derived by subtracting the occupancy rate from 100%.

[17] Data was partially or wholly unavailable for the following hospitals: Adventist Medical Center-Medical Community Center in Fresno County; Valley Memorial Hospital-Livermore, Alameda County; Valley Care Medical Center, Alameda County; Kaiser-San Leandro, Alameda County; Central Valley General Hospital, Kings County; Martin Luther King, Jr. Community Hospital, Los Angeles County; Silver Lake Medical Center, Mission, Los Angeles County; Fountain Valley Regional Hospital, Orange County; Kaiser Hospital at Lakeview, Orange County; Loma Linda University Children's Hospital, San Bernardino County; Fallbrook Hospital, San Diego County; Santa Rosa Memorial Hospital at Sotoyome, Sonoma County; and Kaweah Delta Rehabilitation Center, Tulare County.

As a result, there is an annual lag in reporting and the last data set that was readily available to DHCS was for CY 2013 or right after the DRG payment methodology was implemented. Further, hospitals regularly place their GAC beds "in suspense", either due to low demand or for other reasons. The data on beds placed in suspense is also lagging by one year and is often not reported at the same time as other hospital utilization data. To the extent possible, beds so placed have been excluded from the analysis[19].

The calculation for vacancy rates assumes that the GAC hospital beds are staffed and operated 24 hours per day, seven days per week during the reporting CY. This number may be overstated if hospital beds are not fully staffed during that time frame.

Non-designated public hospitals (NDPHs) began to receive payment under the DRG payment methodology on January 1, 2014. As a result, this analysis did not use NDPH data to calculate DRG bed availability. It should be noted however, that NDPHs play a vital role in ensuring that FFS Medi-Cal eligibles have access to care, especially in rural counties.

[18] To somewhat compensate for this, OSHPD typically publishes a preliminary data set followed by a final data set. However, the preliminary data set tends to be incomplete and the data is un-audited. As a result, OSHPD's preliminary data does not constitute part of this report.

[19] It is also worth noting that bed day availability is reported differently by different kinds hospitals with larger hospitals that are typically located in the more urban areas utilizing in-house coders and, as a consequence, reporting actual bed availability for that year. The more rural and smaller hospitals tend to utilize off-site coders and, as a consequence, tend to report bed day availability by multiplying the number of beds by 365 or 366 in a leap year.

Appendix D: Bed Utilization of Closed/Suspended Hospitals and Nearby Hospitals

2013	DOCTORS SAN PABLO			KAISER RICHMOND			ALTA BATES SUMMIT - ALTA BATES CAMPUS			CHILDRENS HOSP OAKLAND		
INPATIENT BED UTILIZATION Licensed Bed Classification/Designation	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)
Medical/Surgical[1]	20,046	56,210	36%	9,158	15,330	60%	34,705	53,290	65%	0	0	0%
Perinatal[2]	0	0	0%	0	0	0%	23,080	42,340	0%	0	0	0%
Pediatric Acute	0	0	0%	0	0	0%	0	0	0%	30,161	40,515	74%
Critical Care[3]	4,266	12,775	33%	1,872	2,920	64%	4,825	10,950	44%	5,712	8,395	68%
Acute Respiratory Care	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Burn Center	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Intensive Care Newborn Nursery	0	0	0%	0	0	0%	13,214	20,075	66%	8,916	16,060	56%
Rehabilitation Center	0	0	0%	0	0	0%	0	0	0%	2,902	4,380	66%
Sub-Total	**24,312**	**68,985**	**35%**	**11,030**	**18,250**	**60%**	**75,824**	**126,655**	**60%**	**47,691**	**69,350**	**69%**

2013	ANAHEIM GENERAL			AHMC ANAHEIM REGIONAL			GARDEN GROVE HOSPITAL			FOUNTAIN VALLEY		
INPATIENT BED UTILIZATION Licensed Bed Classification/Designation	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)
Medical/Surgical[1]	0	25,550	0%	35,514	55,845	64%	15,070	39,420	38%	56,208	66,795	84%
Perinatal[2]	0	5,110	0%	3,374	9,855	34%	3,386	12,775	27%	8,093	13,870	58%
Pediatric Acute	0	1,825	0%	0	0	0%	0	0	0%	4,291	4,745	90%
Critical Care[3]	0	4,380	0%	6,450	11,680	55%	2,963	4,380	68%	9,966	13,140	76%
Acute Respiratory Care	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Burn Center	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Intensive Care Newborn Nursery	0	0	0%	2,778	4,015	69%	1,485	4,380	34%	5,799	8,395	69%
Rehabilitation Center	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Sub-Total	**0**	**36,865**	**0%**	**48,116**	**81,395**	**59%**	**22,904**	**60,955**	**38%**	**84,357**	**106,945**	**79%**

Appendix D: Bed Utilization of Closed/Suspended Hospitals and Nearby Hospitals - Continued

2013	BELLFLOWER			LAKEWOOD			KAISER-DOWNEY			SAINT FRANCIS		
INPATIENT BED UTILIZATION Licensed Bed Classification/Designation	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)
Medical/Surgical[1]	0	31,025	0%	28,838	51,465	56%	46,366	66,430	70%	37,862	59,860	63%
Perinatal[2]	0	6,205	0%	0	0	0%	9,981	24,090	41%	11,668	25,915	45%
Pediatric Acute	0	0	0%	0	0	0%	3,037	6,205	49%	1,718	5,110	34%
Critical Care[3]	0	3,650	0%	9,243	11,315	82%	3,254	13,870	23%	9,341	13,140	71%
Acute Respiratory Care	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Burn Center	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Intensive Care Newborn Nursery	0	0	0%	0	0	0%	11,411	17,885	64%	7,389	10,585	70%
Rehabilitation Center	0	0	0%	0	0	0%	0	0	0.00%	0	0	0.00%
Sub-Total	**0**	**40,880**	**0%**	**38,081**	**62,780**	**61%**	**74,049**	**128,480**	**58%**	**67,978**	**114,610**	**59%**

2013	LA METRO[4]			HOLLYWOOD PRESBYTERIAN			CA HOSPITAL MED CTR			KAISER-WEST LA		
INPATIENT BED UTILIZATION Licensed Bed Classification/Designation	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)
Medical/Surgical[1]	6,227	33,215	19%	30,212	80,665	37%	32,230	64,240	50%	30,662	77,380	40%
Perinatal[2]	0	5,840	0%	11,520	12,410	93%	13,174	13,505	98%	4,511	10,220	44%
Pediatric Acute	0	0	0%	1,593	4,015	40%	2,232	4,380	51%	0	0	0%
Critical Care[3]	1,904	2,920	65%	6,133	13,140	47%	6,868	13,140	52%	3,782	11,315	33%
Acute Respiratory Care	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Burn Center	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Intensive Care Newborn Nursery	0	0	0%	4,776	5,475	87%	8,016	9,490	84%	2,342	6,205	38%
Rehabilitation Center	0	0	0%	5,373	10,220	53%	0	0	0%	0	0	0%
Sub-Total	**8,131**	**41,975**	**19%**	**59,607**	**125,925**	**47%**	**62,520**	**104,755**	**60%**	**41,297**	**105,120**	**39%**

Appendix D: Bed Utilization of Closed/Suspended Hospitals and Nearby Hospitals - Continued

2013	CORCORAN[5]			TULARE REGIONAL			ADVENTIST MEDICAL			KAWEAH DELTA		
INPATIENT BED UTILIZATION Licensed Bed Classification/Designation	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)
Medical/Surgical[1]	1,390	11,712	12%	11,198	25,550	44%	35,368	43,800	81%	52,893	89,790	59%
Perinatal[2]	0	0	0%	1,789	5,110	35%	0	0	0%	8,414	32,485	26%
Pediatric Acute	0	0	0%	392	3,650	11%	0	0	0%	1,397	4,380	32%
Critical Care[3]	0	0	0%	2,447	5,110	48%	5,328	8,030	66%	1,497	14,965	10%
Acute Respiratory Care	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Burn Center	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Intensive Care Newborn Nursery	0	0	0%	338	1,460	23%	0	0	0%	3,530	5,475	64%
Rehabilitation Center	0	0	0%	0	0	0%	0	0	0.00%	5,957	16,425	36%
Sub-total	**1,390**	**11,712**	**12%**	**16,164**	**40,880**	**40%**	**40,696**	**51,830**	**79%**	**73,688**	**163,520**	**45%**

2013	KINGSBURG			ADVENTIST-REEDLEY			ADVENTIST MEDICAL			KAWEAH DELTA		
INPATIENT BED UTILIZATION Licensed Bed Classification/Designation	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)	Patient Days	Licensed Bed Days	Lic. Bed Occupancy Rate (%)
Medical/Surgical[1]	0	12,775	0%	2,262	10,585	21%	35,368	43,800	81%	52,893	89,790	59%
Perinatal[2]	0	0	0%	1,869	7,300	26%	0	0	0%	8,414	32,485	26%
Pediatric Acute	0	0	0%	0	0	0%	0	0	0%	1,397	4,380	32%
Critical Care[3]	0	0	0%	0	0	0%	5,328	8,030	66%	1,497	14,965	10%
Acute Respiratory Care	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Burn Center	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Intensive Care Newborn Nursery	0	0	0%	0	0	0%	0	0	0%	3,530	5,475	64%
Rehabilitation Center	0	0	0%	0	0	0%	0	0	0%	5,957	16,425	36%
Sub-total	**0**	**12,775**	**0%**	**4,131**	**17,885**	**23%**	**40,696**	**51,830**	**79%**	**73,688**	**163,520**	**45%**

Notes:

[1]Medical/Surgical beds include Gynecology (GYN)/Definitive Observation Unit (DOU)

[2]Perinatal beds include LDRP, excludes nursery

[3]Per OSHPD, to maintain data integrity, critical care consisted of intensive care and coronary care beds

[4]Data for LA Metro is available only in 2011 and prior as the hospital closed at the end of that year

[5]Data for Corcoran is available only in 2012 and prior as the hospital closed at the end of that year