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IMPACT ANALYSIS OF SALE OF DAUGHTERS OF CHARITY HEALTH SYSTEM ON SANTA CLARA COUNTY

A POPULATION HEALTH PERSPECTIVE*

Henry W. Zaretsky, Ph.D.**

November 2014

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EXECUTIVE SUMMARY

The Daughters of Charity Health System (DCHS) is in the process of being sold. Santa Clara County is home to two DCHS hospitals – O'Connor Hospital and Saint Louise Regional Hospital. This study focuses on the likely impact of the sale on population health under three scenarios: (1) closure of both hospitals; (2) acquisition by an organization with the goal of "turning around" the hospitals to make them profitable, without the ability to consolidate and coordinate these hospitals' services and programs with other local hospitals and health systems; and (3) acquisition by a local health system with the ability to integrate these hospitals into the health system's operations, with the goal of improving county-wide population health with an emphasis on typically underserved communities and population groups.

The study divides Santa Clara County into hospital service areas accounting for 80 to 85 percent of O'Connor Hospital's and Saint Louise Regional Hospital's inpatient discharges, respectively. These two areas combined included two-thirds of the Santa Clara County population in 2010. An additional area analyzed is Downtown San Jose, which is considerably smaller than, and overlaps, the O'Connor Hospital Service Area. Downtown San Jose is included since: (1) it was already the focus of an earlier study of the impact of the closure of San Jose Medical Center in 2004; (2) its demographic characteristics point to a disadvantaged population in terms of income, educational attainment and English-speaking ability; (3) it is projected to experience higher rates of population growth than the other two areas and the county as a whole; and (4) O'Connor Hospital is in relatively close geographic proximity to the Downtown area.

For each service area and the county as a whole, hospital market shares according to payer mix are compared with respect to inpatient care and emergency services, and general-acute-care (GAC) bed needs are derived and projected to 2040 on a hospital-specific basis. This enables viewing the roles of O'Connor Hospital and Saint Louise Regional Hospital relative of those of the other hospitals serving the populations of each area. And this approach enables an assessment of the impact of changes in the DCHS hospitals' volume and payer mix on each area's population and other hospitals.

This report is divided into the following sections: I Service Areas – Definition and Description; II Hospital Market Shares; III Bed Need Projections; IV Impact of DCHS Sale – Three Scenarios; and V Conclusion. An update to the 2004 study of the impact of the closure of San Jose Medical Center is provided in Appendix B.

Service Areas

Major differences among the areas that stand out include: (1) the O'Connor Service Area is considerably larger than the other two areas, with roughly 10 times the population as the Saint Louise Service Area; and (2) the Downtown Area's population has the highest proportions of disadvantaged, vulnerable groups, including the lowest percentage of Non-Hispanic whites, the lowest educational attainment, the

highest percentage in the lowest income group, the lowest percentage in the highest income group, the highest percentage below 200 percent of the federal poverty level, the highest percentage speaking English less than "very well," and the highest percentage of uninsured.

The Downtown Area was not defined as a specific hospital service area. It considerably overlaps the O'Connor Service Area, and O'Connor Hospital's location is fairly close to the Downtown Area. Its socio-economic indicators suggest a disproportionate share of the Downtown population is at risk of being adversely affected by a major change in O'Connor's status.

The major differences among the three areas in terms of hospital-use patterns are with respect to Medi-Cal, where the Downtown Area has the highest percentage of patient days; Private Insurance, where the Downtown Area has the lowest percentage of patient days; and Self-Pay, County Indigent and Other Indigent, where the Downtown Area has the highest percentages.

Hospital Market Shares

In assessing an individual hospital's importance to an area's population, market share is a major indicator. Hospital market shares of patient days and emergency visits according to payer in each of the service areas and the county as a whole are presented.

The patient days and emergency service visits market-share data suggest that O'Connor Hospital and Saint Louise Regional Hospital play a major role in providing emergency care to Medi-Cal beneficiaries. O'Connor Hospital is an essential emergency-service provider in the county as a whole and in the Downtown Area and O'Connor Service Area. Its emergency care role, especially for Medi-Cal patients, is far more significant than its role as an inpatient hospital per se. In its own service area, Saint Louis Regional Hospital is an important Medi-Cal provider of inpatient services, but overwhelmingly the major provider of emergency services to all payer groups. Curtailing its emergency-service capacity would create an access problem for its service area residents of all financial classes, but especially Medi-Cal beneficiaries and self-pay patients, most of which would have to travel over 30 miles to Santa Clara Valley Medical Center (SCVMC). And for inpatient care, a large proportion of Medi-Cal and self-pay patients would be adversely affected if the new operator of Saint Louise restricted access, again having to travel to SCVMC. Reducing emergency services at O'Connor and Saint Louise would cause major problems for SCVMC's already heavily-impacted emergency service.

Bed Need Projections

The bed-need measurement and projection methodology is based on the following assumptions and calculations:

(1) Age-specific patient days-per-1,000 population in 2012 holds constant into the future in each of the three service areas and for the county as a whole;

(2) Use of Association of Bay Area Governments (ABAG) population projections according to age group for each service area and the county as a whole;

(3) Projected patient days according to age group and service area are obtained by multiplying 2012 patient days per thousand population by age-group population projections;

(4) Patient day counts are from the Office of Statewide Health Planning and Development (OSHPD) Discharge Data for 2012. Since ABAG population projections start in 2015, 2012 population is estimated as a linear interpolation (for each age group) of 2010 Census data and 2015 ABAG projections;

(5) Since population projections are at the census-tract level and patient days are at the zip-code level, the 2012 per-capita patient day rates have to be calculated at the zip-code level for each service area. These rates are then applied to the census-tract level population projections. (The 2012 population interpolation percentage, calculated from 2010 and 2015 census-tract data, is applied to the zip-code level to enable calculation of 2012 patient-day utilization rates.);

(6) For each service area and the county as a whole, patient day projections are summed across age groups and apportioned to hospitals based on each hospital's 2012 market share;

(7) Each hospital's bed need in each area is calculated as its projected patient days at 80-percent occupancy; and

(8) Out-migration and in-migration rates are assumed to remain constant.

The assumption of constant per-capita-age-adjusted patient-day rates follows from an assumption that the increased demand on the part of the newly insured generated by the Affordable Care Act (ACA) will be offset by initiatives in the ACA and related efforts independent of the ACA to coordinate care and deemphasize inpatient care. Moreover, according to a recent study,[1] much of the increased utilization on the part of the newly insured is due to pent up demand that is only temporary. In addition, since these utilization projections are age adjusted, the effect of an aging population is already taken into account.

County-wide Projections

County-wide bed-need projections suggest that SCVMC and O'Connor Hospital are not likely to experience an aggregate bed shortage (i.e., total GAC beds at 80-percent occupancy) for the foreseeable future (i.e., 2035 or later). By 2030, Regional Medical Center is projected to bump up against current capacity. It appears two hospitals, Kaiser-Santa Clara and Lucile Salter Packard-Children's, are likely to experience a bed shortage in the near future; Kaiser may be experiencing a shortage right now. Stanford Hospital is next in line. Besides Regional, Good Samaritan and Kaiser-San Jose, no other hospitals are projected to hit capacity prior to 2040. Obviously, these projections are only rough estimates at this time. Even assuming utilization rates remain constant, market shares are likely to change, 80-percent occupancy is generally considered an optimal target that few hospitals achieve, and some hospitals have more flexibility than others in shifting between various GAC bed classifications as needs arise. For some hospitals it may not be economically feasible to shift between certain bed types. For example, converting ICU beds, pediatric beds or obstetrics beds to medical/surgical could involve major changes to complete floors, and thus require an all-or-nothing scenario that may not be feasible or desirable. Moreover, certain bed types are more associated with emergency admissions than others, and thus require lower optimal occupancy rates.

[1] Lo, Nigel, Dylan H. Roby, Jessica Padilla, Xiao Chen, Erin N. Salce, Nadereh Pourat and Gerald F. Komiski, "Increased Service Use Following Medicaid Expansion Is Mostly Temporary: Evidence from California's Low Income Health Program," Health Policy Brief, UCLA Center for Health Policy Research, October 2014.

An important take-away is O'Connor's low occupancy rate (36 percent) and the likelihood, given these projections, it will be operating considerably below capacity for the foreseeable future. This has important implications concerning the actions a future operator will have to take, and how these actions would affect the local population and local hospitals.

Downtown Area

While the county-wide projections show total patient days increasing 63 percent from 2012 to 2040, Downtown Area patient days are projected to increase 148 percent; this compares to 68 percent and 51 percent for the O'Connor and Saint Louise Service Areas, respectively. The relatively high percentage growth in the Downtown Area reflects the "Northern Corridor," which extends into North San Jose, and has experienced, and is projected to experience further, rapid growth.

Of the four primary hospitals serving the Downtown population, only Kaiser-Santa Clara will experience a bed shortage prior to 2030; in fact it already appears to have an aggregate bed shortage. Thus, other than for Kaiser Health Plan members, the Downtown Area is projected to have sufficient bed capacity for the foreseeable future.

O'Connor Service Area

O'Connor is not the major inpatient provider serving its service area. It is, however, a major emergency care provider in this area. The O'Connor Service Area accounts for 84 percent of O'Connor's total patient days on behalf of Santa Clara County residents. And O'Connor ranks fifth in market share, behind SCVMC, Regional, Kaiser-Santa Clara and Good Samaritan, but substantially above sixth ranked Kaiser-San Jose.

County-wide bed-need projections suggest that SCVMC and O'Connor Hospital are not likely to experience an aggregate bed shortage (i.e., total GAC beds at 80-percent occupancy) for the foreseeable future (i.e., 2035 or later). By 2030, Regional is projected to bump up against current capacity. Of the five primary hospitals serving the O'Connor area population (SCVMC, Regional, Kaiser-Santa Clara, Good Samaritan and O'Connor), only Kaiser-Santa Clara is expected to experience a bed shortage prior to 2030. Thus, other than for Kaiser Health Plan members, the O'Connor Service Area is projected to have sufficient bed capacity for the foreseeable future.

Saint Louise Regional Hospital Service Area

Saint Louise is the major hospital serving this area, which is a considerable distance from the other hospitals. Given the county-wide bed-need projections and current capacity, as long as Saint Louise, Kaiser-San Jose, SCVMC and Good Samaritan maintain their current capacity, this service area appears unlikely to experience bed shortages prior to 2030. When issues involving Medi-Cal access and emergency services are considered, however, the objectives of Saint Louise's new operator are of paramount importance. Curtailing or eliminating the emergency service or Medi-Cal participation would cause major access problems, especially given Saint Louise's considerable distance from the other major hospitals serving its Service Area population.

Impact of Daughters of Charity Sale on Santa Clara County Population – Three Scenarios

The major value to the local health system of O'Connor and Saint Louise is their crucial roles in providing emergency services, especially to the Medi-Cal and self-pay (i.e., largely uninsured) populations. The closest hospital to O'Connor is SCVMC – 1.5 miles away. If O'Connor's emergency services were curtailed, most of its emergency patients would likely be diverted to SVCMC, which is already heavily impacted. Saint Louise is located substantial distances from replacement hospitals. Thus, should Saint Louise curtail any of its services, many of its patients, especially Medi-Cal and uninsured, would be forced to travel some 30 miles to SCVMC for inpatient and emergency services.

1. O'Connor and Saint Louise Cease Operating

Closure of both hospitals would most likely have an adverse impact on Medi-Cal and uninsured patients, and would steer a large number of emergency patients to SCVMC, which is the closest hospital to O'Connor, has the highest volume emergency service in the county, and already has considerable bottlenecks in treating and admitting emergency patients.

2. O'Connor And Saint Louise Acquired By A Non-Local Organization With The Goal Of Maximizing Profits

A major factor affecting the business strategies of a new owner will be the low occupancy of O'Connor – slightly over one-third of its acute-care beds are filled – and the current county-wide excess bed situation in the aggregate. If the new owner does not have the ability to integrate O'Connor's services with those of other local hospitals and is seeking to "turn-around" O'Connor's financial condition, a likely strategy is to try to fill its empty beds. The only hospital in the county that currently does not have excess capacity is Kaiser-Santa Clara, which is not a competitor of O'Connor since it is restricted to Kaiser Health Plan members. Two other hospitals expected to hit capacity in the near term – the two Stanford Hospitals – compete for few if any of O'Connor's patients. Thus, either the new operator fills beds with patients that could better be treated in outpatient settings, or is able to successfully compete with other local hospitals, most of which already have surplus beds. And most likely, this competition will not be for Medi-Cal or uninsured patients. These actions would have an adverse effect on the local health system and population health.

3. O'Connor And Saint Louise Acquired By An Organization With A Long-Standing Commitment to the Community

Acquisition by a local health system with a track record in treating high volumes of Medi-Cal and uninsured patients, and with the ability to integrate and consolidate programs, has the most promise of avoiding access problems for the community while enhancing population health.

The Affordable Care Act encourages coordination of care, population health and care provided in the most appropriate settings. Inpatient acute care is receiving less emphasis as health-care delivery evolves in a manner consistent with the "Triple Aim" – better health, better care experience and lower per capita costs. The sale of O'Connor and Saint Louise provides an opportunity to enhance the ability of the local health care system to improve population health in a cost-effective manner, rather than further fragment the health care system.

Integrating O'Connor and Saint Louise into the SCVMC system has promise to improve services available to the community without adversely affecting other local hospitals. It would consolidate services where appropriate, and reduce future capital costs on the part of SVCMC. Moreover, as a county health system, SVMC is integrated with the county public health department and has relationships with county housing and other programs that contribute to population health. Major opportunities for integration and coordination of services and reducing future capital expenditures include:

(1) Consolidating O'Connor's and SCVMC's relatively low-volume cardiac surgery programs. An underutilized heart surgery program is a double-edged sword. Low volume is not conducive to quality care, and efforts to increase volume may involve inappropriate surgery, or divert surgeries from competing programs, thereby endangering the competitors' remaining patients;

(2) All three hospitals have busy emergency services. Coordination of the three emergency service programs would improve the flow of emergency visits and subsequent hospitalization if needed. SVCMC's emergency service has significant bottlenecks primarily due to the difficulty of placing some patients in appropriate level beds (i.e., a shortage of medical/surgical beds accompanied by a surplus of other types of GAC beds, such as obstetrics and pediatrics). SCVMC is also constrained by inadequate surgery space, which O'Connor's outpatient surgery center could help alleviate. Merger and coordination of the O'Connor and SCVMC emergency services would ease the bottlenecks. It is not known how an external owner would operate the O'Connor emergency service. If it is the source of admission primarily of low-paying patients, it could take actions that would adversely affect SCVMC's emergency service and its patients;

(3) SCVMC has planned the construction of a 104-bed replacement tower (Bed Building 2) to meet seismic-safety requirements. Current estimated capital costs for this project are $419 million. Access to O'Connor's seismically-compliant beds would eliminate the need for the Bed Building 2 project, thus saving over $400 million in capital expenditures; and

(4) SCVMC already coordinates programs with O'Connor and Saint Louise. SCVMC physicians perform deliveries at St. Louise, provide coverage for O'Connor's neonatal intensive care unit, and SVCMC's Gilroy clinic refers obstetrics cases to Saint Louise. SCVMC is also the logical new home for the O'Connor family practice residency program, the associated family practice clinic and the inpatient referral support O'Connor currently provides to community clinics.

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Introduction

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The study divides Santa Clara County into hospital service areas accounting for 80 to 85 percent of O'Connor Hospital's and Saint Louise Regional Hospital's inpatient discharges, respectively. These two areas combined included two-thirds of the Santa Clara County population in 2010. An additional area analyzed is Downtown San Jose, which is considerably smaller than, and overlaps, the O'Connor Hospital Service Area. Downtown San Jose is included since: (1) it was already the focus of an earlier study of the impact of the closure of San Jose Medical Center in 2004; (2) its demographic characteristics point to a disadvantaged population in terms of income, educational attainment and English-speaking ability; (3) it is projected to experience higher rates of population growth than the other two areas and the county as a whole; and (4) O'Connor Hospital is in relatively close geographic proximity to the Downtown area.

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I. Service Areas – Definition and Description

Definitions

Service areas for O'Connor Hospital and Saint Louise Regional Hospital were developed based on zip codes of residence of the preponderance of their general-acute-care (GAC) discharges in 2011. These zip codes account for 80-to-85 percent of each hospital's discharges. An additional service area (Downtown Area) was also developed. While the O'Connor and Saint Louise service areas do not overlap each other, the Downtown Area and the O'Connor Service Area share a large number of zip codes. The Downtown Area was defined pursuant to a study conducted in 2004 to assess the impact of the impending closure of the Downtown Area's only hospital – San Jose Medical Center (SJMC). The area was not intended to be SJMC's service area in terms of accounting for the bulk of its discharges. Rather, it was defined by the organizations sponsoring that study **--** Santa Clara County, the City of San Jose and the Save San Jose Medical Center Coalition, a community group established to try to prevent SJMC's closure.[2] Figure 1 contains a map highlighting these three areas and indicating where each general-acute-care (GAC) hospital in Santa Clara County is located. Note that the Downtown Area, highlighted in red, contains no hospital; the closest, Regional Medical Center, is just outside its eastern boundary. Also note that O'Connor and Santa Clara Valley Medical Center (SCVMC) are the other hospitals located near the Downtown Area.

[2] Henry W. Zaretsky & Associates, Inc., San Jose Medical Center Closure Study Final Report, November 15, 2004. ("2004 Report") The Report is available at http://henryzaretsky.com/downloads/SJMC_Closure_Impact_Study.pdf.

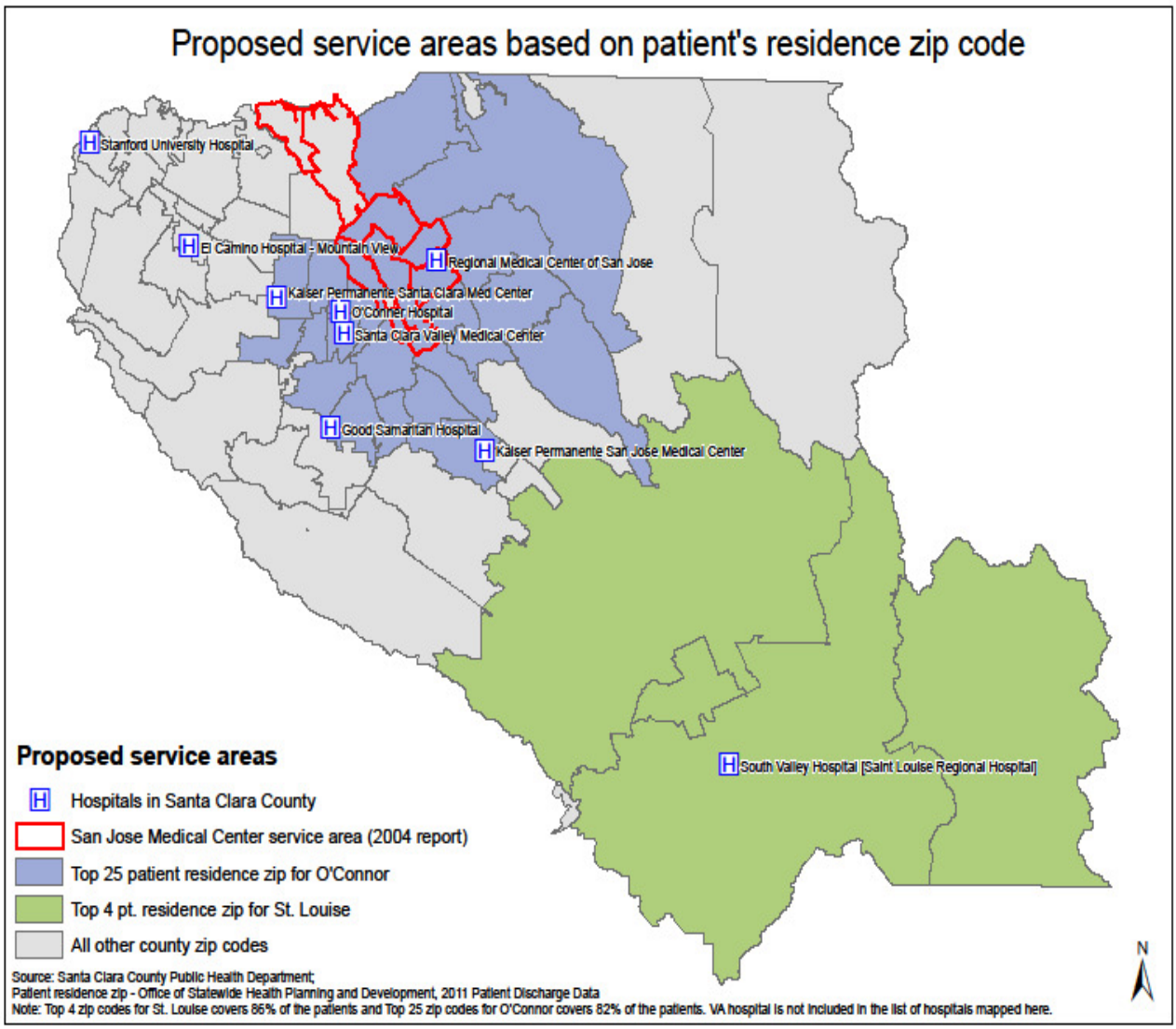

FIGURE 1

While the O'Connor and Saint Louise service areas were initially defined according to zip codes, the Downtown Area was initially defined according to census tracts. For all areas, both types of definitions are needed because: (1) the patient discharge data available from the Office of Statewide Health Planning and Development (OSHPD) include only zip codes; and (2) population projections generated by the Association of Bay Area Governments (ABAG) are only in terms of census tracts. The zip-code definitions of the three areas are shown in Appendix A, Table A1, and the census-tract definitions are in Appendix A, Table A2.

Table 1 below compares the age and ethnicity/race distribution of the population residing in the O'Connor Service Area, based on zip-code versus census-tract definitions for 2010. Note that population totals are extremely close between the two definitions, and the distributions are nearly identical.

TABLE 1
COMPARISON OF POPULATION AGE DISTRIBUTION AND RACE/ETHNICITY
ZIP-CODE AND CENSUS-TRACT DEFINITIONS
O'CONNOR HOSPITAL SERVICE AREA
2010

	Zip Codes		Census Tracts	
	Number	%	Number	%
Total Population	1,073,166	--	1,075,822	--
Age Distribution				
0-4 Years	78,049	7.3%	78,145	7.3%
5-19 Years	209,903	19.6%	210,439	19.6%
20-44 Years	413,460	38.5%	415,608	38.6%
45-64 Years	262,462	24.5%	262,019	24.4%
65 Or Older	109,292	10.2%	109,611	10.2%
Race/Ethnicity				
African American	30,613	2.9%	30,734	2.9%
American Indian Or Alaska Native	2,591	0.2%	2,594	0.2%
Asian/Pacific Islander	350,935	32.7%	352,046	32.7%
Latino	352,459	32.8%	352,461	32.8%
Non-Hispanic White	304,836	28.4%	306,050	28.4%
Some Other Race Or 2 Or More Races	31,732	3.0%	31,937	3.0%

Source: 2010 U.S. Census.

Table 2 shows equivalent data for the Downtown Area. Here, the zip-code population is 9 percent above that for the census-tract definition, but the age and race/ethnicity distributions are quite similar.

TABLE 2
COMPARISON OF POPULATION AGE DISTRIBUTION AND RACE/ETHNICITY
ZIP-CODE AND CENSUS-TRACT DEFINITIONS
DOWNTOWN SERVICE AREA
2010

	Zip Codes		Census Tracts	
	Number	%	Number	%
Total Population	198,357	--	181,287	--
Age Distribution				
0-4 Years	15,051	7.6%	13,686	7.5%
5-19 Years	36,380	18.3%	32,856	18.1%
20-44 Years	88,463	44.6%	82,014	45.2%
45-64 Years	42,341	21.3%	38,149	21.0%
65 Or Older	16,122	8.1%	14,582	8.0%
Race/Ethnicity				
African American	5,974	3.0%	5,538	3.1%

	Zip Codes		Census Tracts	
	Number	%	Number	%
American Indian Or Alaska Native	466	0.2%	436	0.2%
Asian/Pacific Islander	71,259	35.9%	65,729	36.3%
Latino	83,988	42.3%	74,756	41.2%
Non-Hispanic White	32,064	16.2%	30,462	16.8%
Some Other Race Or 2 Or More Races	4,606	2.3%	4,366	2.4%

Source: 2010 U.S. Census.

Table 3 provides equivalent data for the Saint Louise Service Area. Again, the distributions are fairly consistent. However, the zip-code population is considerably higher (43 percent) than the census-tract population. The reason for this is one zip code extends into San Benito County, and the corresponding census tracts do not.

TABLE 3
COMPARISON OF POPULATION AGE DISTRIBUTION AND RACE/ETHNICITY
ZIP-CODE AND CENSUS-TRACT DEFINITIONS
SAINT LOUISE SERVICE AREA
2010

	Zip Codes		Census Tracts	
	Number	%	Number	%
Population	158,186	--	110,301	--
Age Distribution				
0-4 Years	11,920	7.5%	8,258	7.5%
5-19 Years	38,427	24.3%	26,234	23.8%
20-44 Years	51,827	32.8%	35,833	32.5%
45-64 Years	40,796	25.8%	29,142	26.4%
65 Or Older	15,216	9.6%	10,834	9.8%
Race/Ethnicity				
African American	1,826	1.2%	1,523	1.4%
American Indian Or Alaska Native	585	0.4%	406	0.4%
Asian/Pacific Islander	9,971	6.3%	8,836	8.0%
Latino	78,911	49.9%	50,463	45.8%
Non-Hispanic White	63,191	39.9%	46,162	41.9%
Some Other Race Or 2 Or More Races	3,702	2.3%	2,911	2.6%

Source: 2010 U.S. Census.

Descriptions

Table 4 provides data on various demographic and socio-economic characteristics of each service area, based on census-tract definitions. Major differences among the areas that stand out include: (1) the O'Connor Service Area is considerably larger than the other two areas, with roughly 10 times the population as the Saint Louise Service Area; and (2) the Downtown Area's population has the highest

proportions of disadvantaged, vulnerable groups, including the lowest percentage of Non-Hispanic whites, the lowest educational attainment, the highest percentage in the lowest income group, the lowest percentage in the highest income group, the highest percentage below 200 percent of the federal poverty level, the highest percentage speaking English less than "very well," and the highest percentage of uninsured.

TABLE 4
DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS OF
DOWNTOWN, O'CONNOR AND SAINT LOUISE SERVICE AREAS
2010

	Hospital Service Area		
	Downtown	O'Connor	St. Louise
Total Population	181,287	1,075,822	110,301
Age Distribution			
0-4 Years	7.5%	7.3%	7.5%
5-19 Years	18.1%	19.6%	23.8%
20-44 Years	45.2%	38.6%	32.5%
45-64 Years	21.0%	24.4%	26.4%
65 Or Older	8.0%	10.2%	9.8%
Race/Ethnicity			
African American	3.1%	2.9%	1.4%
American Indian Or Alaska Native	0.2%	0.2%	0.4%
Asian/Pacific Islander	36.3%	32.7%	8.0%
Latino	41.2%	32.8%	45.8%
Non-Hispanic White	16.8%	28.4%	41.9%
Some Other Race Or 2 Or More Races	2.4%	3.0%	2.6%
Education Attainment (Ages > 25)			
High School Graduate Or Less	44.2%	36.5%	38.1%
Some College/Associate's Degree	23.1%	27.1%	32.1%
Bachelor's Degree Or Higher	32.7%	36.4%	29.8%
Economic Status			
Annual Household Income			
$0-$24,999	21.4%	15.0%	14.1%
$25,000-$49,999	19.1%	17.2%	15.1%
$50,000-$74,999	15.5%	15.5%	14.3%
$75,000 Or Higher	44.0%	52.3%	56.5%
Unemployment (Ages > 16)	11.4%	10.3%	11.2%

	Hospital Service Area		
	Downtown	O'Connor	St. Louise
Individuals Living In Poverty (Below 200% FPL)	36.3%	27.4%	27.4%
English-Speaking Status (Ages > 5)			
Speaks A Language Other Than English At Home	65.8%	54.9%	39.6%
Speaks English Less Than "Very Well"	32.6%	25.3%	16.0%
Health Insurance (Civilian Non-institutionalized Population)			
Has Health Insurance Coverage	82.3%	86.4%	85.7%
No Health Insurance Coverage	17.7%	13.6%	14.3%

Source: 2010 U.S. Census.

As indicated above, the Downtown Area was not defined as a specific hospital service area. It considerably overlaps the O'Connor Service Area, and O'Connor Hospital's location is fairly close to the Downtown Area. Its socio-economic indicators suggest a disproportionate share of the Downtown population is at risk of being adversely affected by a major change in O'Connor's status.

Table 5 shows how these demographic/socio-economic differences manifest themselves in hospital utilization. This table compares the percentage distribution of hospital discharges in terms of race/ethnicity among the three areas and the total county. Consistent with the population data in Table 4, the Downtown Area has the lowest percentage of discharges on the part of Non-Hispanic whites.

TABLE 5
PERCENTAGE DISTRIBUTION OF GENERAL-ACUTE DISCHARGES
ACCORDING TO RACE/ETHNICITY
AND HOSPITAL SERVICE AREA
2012

	Hospital Service Area			
Race/Ethnicity	Downtown	O'Connor	Saint Louise	Total County
Non-Hispanic White	20.3%	36.0%	49.2%	41.9%
Black	3.9%	3.6%	1.4%	3.5%
Native American/Eskimo/Aleut	0.1%	0.1%	0.1%	0.1%
Asian/Pacific Islander	28.5%	25.1%	5.6%	24.0%
Other Race	2.9%	3.6%	4.1%	3.6%
Hispanic	43.5%	30.8%	38.5%	26.0%
Total	100.0%	100.0%	100.0%	100.0%

Source: Office of Statewide Health Planning and Development, Hospital Discharge Data, 2012.

Table 6 compares the age distributions of discharges among the three areas and the county as a whole. As discussed below, discharges and patient days by age group are a major component of the

methodology used to project the need for GAC beds according to service area. As with the population differences presented in Table 4 above, the differences in discharges among the areas according to age groups does not appear to be major.

TABLE 6
PERCENTAGE DISTRIBUTION OF GENERAL-ACUTE DISCHARGES
ACCORDING TO AGE GROUP
AND HOSPITAL SERVICE AREA
2012

	Hospital Service Area			
Age groups	Downtown	O'Connor	Saint Louise	Total County
0-4 years	11.3%	9.9%	8.6%	9.8%
5-19 years	5.1%	4.6%	6.0%	4.5%
20-44 years	34.5%	31.8%	28.8%	30.9%
45-64 years	23.3%	22.2%	25.4%	21.6%
65 years or greater	25.8%	31.5%	31.2%	33.2%
Total	100.0%	100.0%	100.0%	100.0%

Source: Office of Statewide Health Planning and Development, Hospital Discharge Data, 2012.

Table 7 presents data on the distribution of patient days according to payer source among the three areas and the county as a whole. The major differences are with respect to Medi-Cal, where the Downtown Area has the highest percentage of patient days, Private Insurance, where the Downtown Area has the lowest percentage of patient days, and Self-Pay, County Indigent and Other Indigent, where the Downtown Area has the highest percentages.

TABLE 7
PERCENTAGE DISTRIBUTION OF GENERAL-ACUTE PATIENT DAYS
ACCORDING TO MAJOR PAYER
AND HOSPITAL SERVICE AREA
2012

	Expected Source of Payment							
Hospital Service Area	Medicare	Medi-Cal	Private Insurance	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Downtown	36.5%	24.7%	27.1%	4.0%	2.8%	1.5%	3.4%	100.0%
O'Connor	39.5%	18.8%	31.9%	2.9%	2.2%	1.1%	3.5%	100.0%
St. Louise	37.5%	18.1%	34.4%	2.9%	1.9%	0.6%	4.6%	100.0%
Total County	39.6%	16.5%	34.8%	3.1%	1.9%	0.9%	3.3%	100.0%

Source: Office of Statewide Health Planning and Development, Hospital Discharge Data, 2012.

II. Hospital Market Shares

In assessing an individual hospital's importance to an area's population, market share is a major indicator. In this section we discuss hospital market shares of patient days and emergency visits in each of the service areas and the county as a whole according to payer.

Total County

Table 8 shows county-wide patient days, on behalf of county residents, according to payer for all hospitals in Santa Clara County (the "all-other hospitals" category is comprised solely of out-of-county hospitals). Hospitals are ranked from high to low in terms of total patient days, where O'Connor ranks sixth. In terms of Medi-Cal, however, O'Connor ranks third, slightly behind Regional Medical Center, and in terms of Self Pay (which includes some uninsured) it ranks second to Stanford Hospital. Table 9 presents these data in terms of market-share percentages.

TABLE 8
PAYER MIX OF PATIENT DAYS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN SANTA CLARA COUNTY
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Insurance	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Santa Clara Valley Medical Center	14,668	49,442	5,609	^	9,571	3,621	783	83,694
Kaiser Fnd Hosp - Santa Clara	31,282	1,852	38,591	735	^	^	149	72,609
El Camino Hospital	28,859	3,530	30,607	780	^	^	1,339	65,120
Good Samaritan Hospital - San Jose	24,812	3,506	30,944	913	67	201	2,511	62,954
Regional Medical of San Jose	32,306	6,425	6,335	2,785	^	696	811	49,371
O'Connor Hospital - San Jose	**21,187**	**6,322**	**8,853**	**3,513**	**^**	**^**	**3,135**	**43,010**
Stanford Hospital	18,889	4,584	11,579	5,557	^	^	2,092	42,701
Kaiser Fnd Hosp - San Jose	20,730	956	17,077	523	^	^	89	39,375
Lucile Salter Packard Children's Hosp. at Stanford	94	4,970	16,985	^	^	^	5,499	27,579
St. Louise Regional Hospital	**4,715**	**1,968**	**2,583**	**564**	**^**	**^**	**157**	**9,987**
All other hospitals	12,097	3,636	14,870	1,052	332	^	747	32,806
Total	209,639	87,191	184,033	16,451	9,983	4,597	17,312	529,206
Percent	39.6%	16.5%	34.8%	3.1%	1.9%	0.9%	3.3%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD restrictions.
Source: Office of Statewide Health Planning and Development Discharge Data, restricted to general-acute-care (GAC) discharges originating in Santa Clara County, 2012.

TABLE 9
MARKET SHARE PERCENTAGES OF PATIENT DAYS
ACCORDING PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN SANTA CLARA COUNTY
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Insurance	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Santa Clara Valley Medical Center	7.0%	56.7%	3.0%	^	95.9%	78.8%	4.5%	15.8%
Kaiser Fnd Hosp - Santa Clara	14.9%	2.1%	21.0%	4.5%	^	^	0.9%	13.7%
El Camino Hospital	13.8%	4.0%	16.6%	4.7%	^	^	7.7%	12.3%
Good Samaritan Hospital - San Jose	11.8%	4.0%	16.8%	5.5%	0.7%	4.4%	14.5%	11.9%
Regional Medical Of San Jose	15.4%	7.4%	3.4%	16.9%	^	15.1%	4.7%	9.3%
O'Connor Hospital - San Jose	**10.1%**	**7.3%**	**4.8%**	**21.4%**	**^**	**^**	**18.1%**	**8.1%**
Stanford Hospital	9.0%	5.3%	6.3%	33.8%	^	^	12.1%	8.1%
Kaiser Fnd Hosp - San Jose	9.9%	1.1%	9.3%	3.2%	^	^	0.5%	7.4%
Lucile Salter Packard Children's Hosp. At Stanford	0.0%	5.7%	9.2%	^	^	^	31.8%	5.2%
St. Louise Regional Hospital	**2.2%**	**2.3%**	**1.4%**	**3.4%**	**^**	**^**	**0.9%**	**1.9%**
All Other Hospitals	5.8%	4.2%	8.1%	6.4%	3.3%	^	4.3%	6.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Office of Statewide Health Planning and Development Discharge Data, restricted to general-acute-care (GAC) discharges originating in Santa Clara County, 2012.

Table 10 shows county-wide emergency visits, on behalf of county residents, according to payer for all hospitals in Santa Clara County. And Table 11 shows the market shares in terms of each hospital's percentage of total visits according to payer group. Note that the top three hospitals in terms of Medi-Cal market share are SCVMC (28.5 percent), O'Connor (23.9 percent) and Saint Louise (11.7 percent). This indicates that while O'Connor is an important player with respect to Medi-Cal inpatient care, it may be indispensable with respect to emergency care of Medi-Cal patients. Saint Louise's high Medi-Cal emergency-care market share also raises access issues due to its distance from other hospitals. For example, if the new owner decided to curtail emergency-service capacity, or close its emergency service altogether, the closest non-Kaiser facility in Santa Clara County would be Good Samaritan Hospital, with a Medi-Cal-emergency-visits market share of less than 1 percent. The closest hospital with a significant market share is SCVMC, over 30 miles from Saint Louise.

TABLE 10
PAYER MIX OF EMERGENCY VISITS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN SANTA CLARA COUNTY
2012

	Expected Source of Payment										
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA Or CHAMPUS (Tricare)	Disability	Other Payer	Point Of Service	Title V	Workers Comp	Total
Santa Clara Valley Medical Center	8,459	24,256	6,352	12,817	57	^	15,584	^	^	566	68,091
Kaiser Fnd Hosp - Santa Clara	913	2,523	42,620	1,978	^	^	19	^	^	934	49,006
Regional Medical of San Jose	5,821	5,667	7,574	9,126	154	^	17,714	^	40	353	46,449
El Camino Hospital	7,544	8,072	20,097	4,990	240	^	477	24	^	1,400	42,844
O'Connor Hospital - San Jose	**5,428**	**20,356**	**9,799**	**5,464**	**176**	**^**	**153**	**^**	**^**	**1,040**	**42,416**
Kaiser Fnd Hosp - San Jose	1,098	3,665	32,278	3,429	16	^	31	^	^	579	41,102
Good Samaritan Hospital - San Jose	5,587	800	19,472	2,834	245	^	4,045	^	^	362	33,346
St. Louise Regional Hospital	**2,292**	**9,942**	**6,750**	**483**	**113**	**^**	**294**	**258**	**^**	**333**	**20,466**
Stanford Hospital	2,532	6,103	5,795	4,646	118	^	^	96	^	349	19,645
All other hospitals	2,098	3,816	13,400	4,812	144	^	1,972	155	^	688	27,094
Total	41,772	85,200	164,137	50,579	1,272	^	40,295	548	50	6,604	390,459
Percent	10.7%	21.8%	42.0%	13.0%	0.3%	^	10.3%	0.1%	0.0%	1.7%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

TABLE 11
MARKET SHARE PERCENTAGES OF EMERGENCY VISITS
ACCORDING PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN SANTA CLARA COUNTY
2012

	Expected Source of Payment										
Hospitals	Medicare	Medi-Cal	Private coverage	Self pay	VA or CHAMPUS (Tricare)	Disability	Other payer	Point of service	Title V	Workers comp	Total
Santa Clara Valley Medical Center	20.3%	28.5%	3.9%	25.3%	4.5%	^	38.7%	^	^	8.6%	17.4%
Kaiser Fnd Hosp - Santa Clara	2.2%	3.0%	26.0%	3.9%	^	^	0.0%	^	^	14.1%	12.6%
Regional Medical Of San Jose	13.9%	6.7%	4.6%	18.0%	12.1%	^	44.0%	^	80.0%	5.3%	11.9%
El Camino Hospital	18.1%	9.5%	12.2%	9.9%	18.9%	^	1.2%	4.4%	^	21.2%	11.0%
O'Connor Hospital - San Jose	**13.0%**	**23.9%**	**6.0%**	**10.8%**	**13.8%**	**^**	**0.4%**	**^**	**^**	**15.7%**	**10.9%**
Kaiser Fnd Hosp - San Jose	2.6%	4.3%	19.7%	6.8%	1.3%	^	0.1%	^	^	8.8%	10.5%
Good Samaritan Hospital - San Jose	13.4%	0.9%	11.9%	5.6%	19.3%	^	10.0%	^	^	5.5%	8.5%
St. Louise Regional Hospital	**5.5%**	**11.7%**	**4.1%**	**1.0%**	**8.9%**	**^**	**0.7%**	**47.1%**	**^**	**5.0%**	**5.2%**
Stanford Hospital	6.1%	7.2%	3.5%	9.2%	9.3%	^	^	17.5%	^	5.3%	5.0%
All Other Hospitals	5.0%	4.5%	8.2%	9.5%	11.3%	^	4.9%	28.3%	^	10.4%	6.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	^	100.0%	100.0%	100.0%	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

Downtown Area

Table 12 shows patient days, on behalf of Downtown Area residents, according to payer for all hospitals with discharges from this area. While O'Connor ranks third in Medi-Cal patient days, its volume is considerably less than SCVMC and even Regional Medical Center. With respect to total patient days, Regional Medical Center ranks first, with SCVMC a close second. O'Connor ranks a distant third. Table 13 shows the market share percentages. Regional Medical Center, SCVMC and O'Connor Hospital collectively account for a 64 percent market share of patient days originating in the Downtown Area. If Kaiser-Santa Clara is added, the collective market share is 75 percent.

TABLE 12
PAYER MIX OF PATIENT DAYS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN DOWNTOWN AREA
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Regional Medical of San Jose	10,574	2,274	1,666	1,001	^	239	310	16,071
Santa Clara Valley Medical Center	2,456	9,804	819	^	1,702	670	139	15,590
O' Connor Hospital - San Jose	**2,623**	**1,275**	**1,437**	**762**	**^**	**^**	**522**	**6,619**
Kaiser Fnd Hosp - Santa Clara	1,944	211	4,381	58	^	^	^	6,596
Good Samaritan Hospital - San Jose	695	426	2,037	46	^	^	139	3,350
El Camino Hospital	771	141	2,263	^	^	^	90	3,333
Kaiser Fnd Hosp - San Jose	1,111	71	1,234	^	^	^	^	2,457
Stanford Hospital	966	225	523	239	^	^	195	2,148
Lucile Salter Packard Children's Hosp. at Stanford	^	189	791	^	^	^	594	1,574
St. Louise Regional Hospital	**^**	**^**	**^**	**^**	**^**	**^**	**^**	**^**
All other hospitals	761	180	1,111	155	^	^	69	2,278
Total	21,907	14,809	16,274	2,378	1,709	918	2,066	60,061
%	36.5%	24.7%	27.1%	4.0%	2.8%	1.5%	3.4%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Discharge Data, restricted to general-acute-care (GAC) discharges originating in Downtown Area, 2012.

TABLE 13
MARKET SHARE PERCENTAGES OF PATIENT DAYS
ACCORDING PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN DOWNTOWN AREA
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Regional Medical of San Jose	48.3%	15.4%	10.2%	42.1%	^	26.0%	15.0%	26.8%
Santa Clara Valley Medical Center	11.2%	66.2%	5.0%	^	99.6%	73.0%	6.7%	26.0%
O' Connor Hospital - San Jose	**12.0%**	**8.6%**	**8.8%**	**32.0%**	**^**	**^**	**25.3%**	**11.0%**
Kaiser Fnd Hosp - Santa Clara	8.9%	1.4%	26.9%	2.4%	^	^	^	11.0%
Good Samaritan Hospital - San Jose	3.2%	2.9%	12.5%	1.9%	^	^	6.7%	5.6%
El Camino Hospital	3.5%	1.0%	13.9%	^	^	^	4.4%	5.5%

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Kaiser Fnd Hosp - San Jose	5.1%	0.5%	7.6%	^	^	^	^	4.1%
Stanford Hospital	4.4%	1.5%	3.2%	10.1%	^	^	9.4%	3.6%
Lucile Salter Packard Children's Hosp. at Stanford	^	1.3%	4.9%	^	^	^	28.8%	2.6%
St. Louise Regional Hospital	**^**	**^**	**^**	**^**	**^**	**^**	**^**	**^**
All other hospitals	3.5%	1.2%	6.8%	6.5%	^	^	3.3%	3.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Discharge Data, restricted to general-acute-care (GAC) discharges originating in Downtown Area, 2012.

Table 14 shows emergency visits on behalf of Downtown residents according to payer for all hospitals treating these patients. And Table 15 shows the market shares in terms of each hospital's percentage of total visits according to payer group. While O'Connor has substantially fewer Medi-Cal patient days than SCVMC, and even Regional, in terms of emergency visits it ranks a close second to SCVMC, and has more than double Regional's Medi-Cal emergency visits. Thus, notwithstanding SCVMC's Level I trauma center and Regional's Level II trauma center, O'Connor is an essential emergency services provider to the Downtown population, nearly tying SCVMC's Medi-Cal volume and more than doubling Regional's. That O'Connor has more than double the Medi-Cal emergency visits than Regional is surprising since: (1) Regional has nearly twice as many Medi-Cal patient days than O'Connor; and (2) Regional has been criticized for not having contracts to allow it to provide non-emergency inpatient care to Medi-Cal patients, and is required to refer its Medi-Cal inpatients (admitted as emergencies) to contracting hospitals once stabilized. Regional's status as a Level II trauma center could explain some of this discrepancy.

TABLE 14
PAYER MIX OF EMERGENCY VISITS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN DOWNTOWN AREA
2012

	Expected Source Of Payment										
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA Or CHAMPUS (Tricare)	Disability	Other Payer	Point Of Service	Title V	Workers Comp	Total
Regional Medical of San Jose	2,001	2,067	2,057	3,289	52	^	6,379	^	16	96	15,957
Santa Clara Valley Medical Center	1,874	5,360	874	2,516	^	^	2,937	^	^	108	13,679
O'Connor Hospital - San Jose	**1,016**	**4,684**	**1,653**	**1,191**	**35**	**^**	**37**	**^**	**^**	**181**	**8,797**
Kaiser Fnd Hosp - Santa Clara	47	327	4,665	207	^	^	^	^	^	124	5,371
Kaiser Fnd Hosp - San Jose	53	281	2,329	278	^	^	^	^	^	57	3,002

	Expected Source Of Payment										
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA Or CHAMPUS (Tricare)	Disability	Other Payer	Point Of Service	Title V	Workers Comp	Total
El Camino Hospital	203	422	863	328	^	^	20	^	^	94	1,937
Good Samaritan Hospital - San Jose	172	60	720	244	^	^	311	^	^	23	1,537
Stanford Hospital	124	223	220	200	^	^	^	^	^	31	811
St. Louise Regional Hospital	**^**	**57**	**35**	**^**	**^**	**^**	**^**	**^**	**^**	**^**	**124**
All other hospitals	212	364	878	491	^	^	36	^	^	66	2,076
Total	5,710	13,845	14,294	8,752	130	^	9,722	20	23	794	53,291
Percent	10.7%	26.0%	26.8%	16.4%	0.2%	^	18.2%	0.0%	0.0%	1.5%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

TABLE 15
MARKET SHARE PERCENTAGES OF EMERGENCY VISITS
ACCORDING PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN DOWNTOWN AREA
2012

	Expected Source Of Payment										
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA Or CHAMPUS (Tricare)	Disability	Other Payer	Point Of Service	Title V	Workers Comp	Total
Regional Medical of San Jose	35.0%	14.9%	14.4%	37.6%	40.0%	^	65.6%	^	69.6%	12.1%	29.9%
Santa Clara Valley Medical Center	32.8%	38.7%	6.1%	28.7%	^	^	30.2%	^	^	13.6%	25.7%
O'Connor Hospital - San Jose	**17.8%**	**33.8%**	**11.6%**	**13.6%**	**26.9%**	**^**	**0.4%**	**^**	**^**	**22.8%**	**16.5%**
Kaiser Fnd Hosp - Santa Clara	0.8%	2.4%	32.6%	2.4%	^	^	^	^	^	15.6%	10.1%
Kaiser Fnd Hosp - San Jose	0.9%	2.0%	16.3%	3.2%	^	^	^	^	^	7.2%	5.6%
El Camino Hospital	3.6%	3.0%	6.0%	3.7%	^	^	0.2%	^	^	11.8%	3.6%
Good Samaritan Hospital - San Jose	3.0%	0.4%	5.0%	2.8%	^	^	3.2%	^	^	2.9%	2.9%
Stanford Hospital	2.2%	1.6%	1.5%	2.3%	^	^	^	^	^	3.9%	1.5%
St. Louise	**^**	**0.4%**	**0.2%**	**^**	**^**	**^**	**^**	**^**	**^**	**^**	**0.2%**

	Expected Source Of Payment										
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA Or CHAMPUS (Tricare)	Disability	Other Payer	Point Of Service	Title V	Worker s Comp	Total
Regional Hospital											
All other hospitals	3.7%	2.6%	6.1%	5.6%	^	^	0.4%	^	^	8.3%	3.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	^	100.0%	^	100.0%	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

O'Connor Service Area

Table 16 presents market shares of patient days according to payer for discharges originating in the O'Connor Service Area. O'Connor ranks fifth in terms of total patient days, and third, behind Regional, in terms of Medi-Cal patient days. Table 17 presents the market share percentages. SCVMC accounts for 64 percent of the area's total Medi-Cal patient days; O'Connor's share is 9 percent. Table 18 presents data on each hospital's emergency visits originating in the O'Connor Service Area according to payer, and Table 19 presents the market-share percentages. Note that while O'Connor has a 9-percent share of Medi-Cal patient days, it has a 34-percent share of Medi-Cal emergency visits, only slightly behind SCVMC's 37-percent share, and considerably above Regional's 10-percent market share. As with respect to the Downtown Area, O'Connor appears to be an essential emergency provider for Medi-Cal beneficiaries. As with respect to the Downtown Area, the divergence between O'Connor's and Regional's Medi-Cal patient days and emergency visits is notable.

TABLE 16
PAYER MIX OF PATIENT DAYS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN O'CONNOR SERVICE AREA
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Santa Clara Valley Medical Center	12,143	38,993	4,145	^	7,138	2,791	576	65,786
Regional Medical of San Jose	30,336	6,084	5,670	2,525	^	668	737	46,033
Kaiser Fnd Hosp - Santa Clara	18,927	1,299	25,253	338	^	^	128	45,945
Good Samaritan Hospital - San Jose	15,803	3,054	20,969	626	^	149	2,168	42,816
O' Connor Hospital - San Jose	**17,731**	**5,513**	**7,146**	**3,168**	**^**	**^**	**2,674**	**36,232**
Kaiser Fnd Hosp - San Jose	14,520	690	11,879	382	^	^	66	27,537
El Camino Hospital	7,226	1,025	11,898	172	^	^	569	20,890
Stanford Hospital	6,450	1,305	4,648	1,536	^	^	1,049	14,988
Lucile Salter Packard	^	1,044	5,237	^	^	^	3,114	9,433

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Children's Hosp. at Stanford								
St. Louise Regional Hospital	**^**	**43**	**76**	**^**	**^**	**^**	**^**	**232**
All other hospitals	5,287	2,184	6,919	536	^	^	332	15,322
Total	128,526	61,234	103,840	9,331	7,218	3,652	11,413	325,214
%	39.5%	18.8%	31.9%	2.9%	2.2%	1.1%	3.5%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Discharge Data, restricted to general-acute-care (GAC) discharges originating in O'Connor Service Area, 2012.

TABLE 17
MARKET SHARE PERCENTAGES OF PATIENT DAYS
ACCORDING PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN O'CONNOR SERVICE AREA
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Santa Clara Valley Medical Center	9.4%	63.7%	4.0%	^	98.9%	76.4%	5.0%	20.2%
Regional Medical of San Jose	23.6%	9.9%	5.5%	27.1%	^	18.3%	6.5%	14.2%
Kaiser Fnd Hosp - Santa Clara	14.7%	2.1%	24.3%	3.6%	^	^	1.1%	14.1%
Good Samaritan Hospital - San Jose	12.3%	5.0%	20.2%	6.7%	^	4.1%	19.0%	13.2%
O' Connor Hospital - San Jose	**13.8%**	**9.0%**	**6.9%**	**34.0%**	**^**	**^**	**23.4%**	**11.1%**
Kaiser Fnd Hosp - San Jose	11.3%	1.1%	11.4%	4.1%	^	^	0.6%	8.5%
El Camino Hospital	5.6%	1.7%	11.5%	1.8%	^	^	5.0%	6.4%
Stanford Hospital	5.0%	2.1%	4.5%	16.5%	^	^	9.2%	4.6%
Lucile Salter Packard Children's Hosp. at Stanford	^	1.7%	5.0%	^	^	^	27.3%	2.9%
St. Louise Regional Hospital	**^**	**0.1%**	**0.1%**	**^**	**^**	**^**	**^**	**0.1%**
All other hospitals	4.1%	3.6%	6.7%	5.7%	^	^	2.9%	4.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Discharge Data, 2012.

TABLE 18
PAYER MIX OF EMERGENCY VISITS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN O'CONNOR SERVICE AREA
2012

	Expected Source of Payment										
Hospitals	Medicare	Medi-Cal	Private coverage	Self pay	VA or CHAMPUS (Tricare)	Disability	Other payer	Point of service	Title V	Workers comp	Total
Santa Clara Valley Medical Center	6,586	19,807	4,722	10,056	46	^	11,030	^	^	461	52,708
Regional Medical of San Jose	5,486	5,498	7,075	8,585	140	^	17,092	^	33	306	44,215
O'Connor Hospital - San Jose	**4,710**	**18,654**	**8,462**	**4,881**	**149**	**^**	**139**	**^**	**^**	**877**	**37,872**
Kaiser Fnd Hosp - Santa Clara	562	1,673	27,182	1,196	^	^	^	^	^	661	31,296
Kaiser Fnd Hosp - San Jose	807	2,879	22,968	2,643	^	^	23	^	^	435	29,768
Good Samaritan Hospital - San Jose	3,696	685	12,974	2,217	181	^	3,431	^	^	281	23,466
El Camino Hospital	2,080	2,062	6,679	1,521	60	^	158	^	^	568	13,142
Stanford Hospital	604	860	1,162	736	33	^	^	23	^	107	3,530
St. Louise Regional Hospital	**69**	**268**	**283**	**24**	**^**	**^**	**^**	**^**	**^**	**30**	**692**
All other hospitals	992	1,555	5,703	2,318	66	^	204	80	^	327	11,249
Total	25,592	53,941	97,210	34,177	689	^	32,102	135	38	4,053	247,938

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

TABLE 19
MARKET SHARE PERCENTAGES OF EMERGENCY VISITS
ACCORDING TO PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN O'CONNOR SERVICE AREA
2012

	Expected Source of Payment										
Hospitals	Medicare	Medi-Cal	Private coverage	Self pay	VA or CHAMPUS (Tricare)	Disability	Other payer	Point of service	Title V	Workers comp	Total
Santa Clara Valley Medical Center	25.7%	36.7%	4.9%	29.4%	6.7%	^	34.4%	^	^	11.4%	21.3%
Regional Medical Of San Jose	21.4%	10.2%	7.3%	25.1%	20.3%	^	53.2%	^	86.8%	7.5%	17.8%
O'Connor Hospital - San Jose	**18.4%**	**34.6%**	**8.7%**	**14.3%**	**21.6%**	**^**	**0.4%**	**^**	**^**	**21.6%**	**15.3%**

	Expected Source of Payment										
Hospitals	Medicare	Medi-Cal	Private coverage	Self pay	VA or CHAMPUS (Tricare)	Disability	Other payer	Point of service	Title V	Workers comp	Total
Kaiser Fnd Hosp - Santa Clara	2.2%	3.1%	28.0%	3.5%	^	^	^	^	^	16.3%	12.6%
Kaiser Fnd Hosp - San Jose	3.2%	5.3%	23.6%	7.7%	^	^	0.1%	^	^	10.7%	12.0%
Good Samaritan Hospital - San Jose	14.4%	1.3%	13.3%	6.5%	26.3%	^	10.7%	^	^	6.9%	9.5%
El Camino Hospital	8.1%	3.8%	6.9%	4.5%	8.7%	^	0.5%	^	^	14.0%	5.3%
Stanford Hospital	2.4%	1.6%	1.2%	2.2%	4.8%	^	^	17.0%	^	2.6%	1.4%
St. Louise Regional Hospital	**0.3%**	**0.5%**	**0.3%**	**0.1%**	**^**	**^**	**^**	**^**	**^**	**0.7%**	**0.3%**
All Other Hospitals	3.9%	2.9%	5.9%	6.8%	9.6%	^	0.6%	59.3%	^	8.1%	4.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	^	100.0%	100.0%	100.0%	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

Saint Louise Service Area

Table 20 presents patient days according to payer for the Saint Louise Service Area, and Table 21 presents the market-share percentages. Saint Louise has by far the largest market share for total patients and for Medicare. Its Medi-Cal market share is second only to SCVMC. Kaiser San Jose has the second largest share for all patients, closely followed by Good Samaritan. O'Connor has small market shares in this area.

TABLE 20
PAYER MIX OF PATIENT DAYS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN SAINT LOUISE SERVICE AREA
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
St. Louise Regional Hospital	**5,114**	**2,059**	**2,632**	**539**	**^**	**^**	**167**	**10,515**
Kaiser Fnd Hosp - San Jose	3,343	165	3,343	43	^	^	^	6,911
Santa Clara Valley Medical Center	**508**	**3,044**	**293**	**^**	**739**	**182**	**^**	**4,813**
Good Samaritan Hospital - San Jose	1,037	724	2,487	99	^	^	308	4,658

Hospitals	Expected Source of Payment							
	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Stanford Hospital	1,514	205	805	169	^	^	141	2,834
Kaiser Fnd Hosp - Santa Clara	500	113	1,270	^	^	^	^	1,907
Regional Medical of San Jose	564	304	416	152	^	^	^	1,507
El Camino Hospital	561	^	670	^	^	^	66	1,347
Lucile Salter Packard Children's Hosp. at Stanford	^	118	348	^	^	^	801	1,274
O' Connor Hospital - San Jose	**643**	**123**	**237**	**^**	**^**	**^**	**144**	**1,186**
All other hospitals	863	178	950	65	^	^	^	2,150
Total	14,654	7,081	13,451	1,129	755	230	1,802	39,102
%	37.5%	18.1%	34.4%	2.9%	1.9%	0.6%	4.6%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.

Source: Office of Statewide Health Planning and Development, Discharge Data, 2012.

TABLE 21
MARKET SHARE PERCENTAGES OF PATIENT DAYS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN SAINT LOUISE SERVICE AREA
2012

Hospitals	Expected Source of Payment							
	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
St. Louise Regional Hospital	**34.9%**	**29.1%**	**19.6%**	**47.7%**	**^**	**^**	**9.3%**	**26.9%**
Kaiser Fnd Hosp - San Jose	22.8%	2.3%	24.9%	3.8%	^	^	^	17.7%
Santa Clara Valley Medical Center	3.5%	43.0%	2.2%	^	97.9%	79.1%	^	12.3%
Good Samaritan Hospital - San Jose	7.1%	10.2%	18.5%	8.8%	^	^	17.1%	11.9%
Stanford Hospital	10.3%	2.9%	6.0%	15.0%	^	^	7.8%	7.2%
Kaiser Fnd Hosp - Santa Clara	3.4%	1.6%	9.4%	^	^	^	^	4.9%
Regional Medical of San Jose	3.8%	4.3%	3.1%	13.5%	^	^	^	3.9%
El Camino Hospital	3.8%	^	5.0%	^	^	^	3.7%	3.4%
Lucile Salter Packard Children's Hosp. at Stanford	^	1.7%	2.6%	^	^	^	44.5%	3.3%
O' Connor Hospital - San Jose	**4.4%**	**1.7%**	**1.8%**	**^**	**^**	**^**	**8.0%**	**3.0%**
All other hospitals	5.9%	2.5%	7.1%	5.8%	^	^	^	5.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.

Source: Office of Statewide Health Planning and Development, Discharge Data, 2012.

Table 22 provides data on emergency visits according to payer for patients residing in the Saint Louise Service Area, and Table 23 displays the market-share percentages. Saint Louise has the overwhelming market share in most payer categories, especially Medi-Cal and Medicare. It is obvious that if the sale of

Saint Louise results in reducing its emergency-service capacity, or closing it altogether, access to emergency services would be considerably restricted.

TABLE 22
PAYER MIX OF EMERGENCY VISITS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN SAINT LOUISE SERVICE AREA
2012

	Expected Source of Payment										
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA Or CHAMPUS (Tricare)	Disability	Other Payer	Point Of Service	Title V	Workers Comp	Total
St. Louise Regional Hospital	**2,221**	**9,586**	**6,665**	**472**	**113**	**^**	**294**	**257**	**^**	**333**	**19,942**
Kaiser Fnd Hosp - San Jose	111	264	5,257	198	^	^	^	^	^	73	5,914
Santa Clara Valley Medical Center	183	758	261	411	^	^	645	^	^	27	2,290
Good Samaritan Hospital - San Jose	126	23	785	63	16	^	64	^	^	25	1,102
Regional Medical of San Jose	37	45	116	133	^	^	80	^	^	25	445
O'Connor Hospital - San Jose	**54**	**125**	**112**	**47**	**^**	**^**	**^**	**^**	**^**	**36**	**380**
Kaiser Fnd Hosp - Santa Clara	^	^	330	20	^	^	^	^	^	^	380
El Camino Hospital	35	19	142	38	^	^	^	^	^	21	263
Stanford Hospital	39	60	90	48	^	^	^	^	^	16	255
All other hospitals	93	276	795	255	^	^	^	^	^	64	1,508
Total	2,904	11,167	14,553	1,685	162	^	1,108	262	^	634	32,479
Percent	8.9%	34.4%	44.8%	5.2%	0.5%	^	3.4%	0.8%	^	2.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

TABLE 23
MARKET SHARE PERCENTAGES OF EMERGENCY VISITS
ACCORDING PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN SAINT LOUIS SERVICE AREA
2012

	Expected Source of Payment										
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA Or CHAMPUS (Tricare)	Disability	Other Payer	Point Of Service	Title V	Workers Comp	Total
St. Louise Regional Hospital	**76.5%**	**85.8%**	**45.8%**	**28.0%**	**69.8%**	**^**	**26.5%**	**98.1%**	**^**	**52.5%**	**61.4%**
Kaiser Fnd Hosp - San Jose	3.8%	2.4%	36.1%	11.8%	^	^	^	^	^	11.5%	18.2%
Santa Clara Valley Medical Center	6.3%	6.8%	1.8%	24.4%	^	^	58.2%	^	^	4.3%	7.1%
Good Samaritan Hospital - San Jose	4.3%	0.2%	5.4%	3.7%	9.9%	^	5.8%	^	^	3.9%	3.4%
Regional Medical of San Jose	1.3%	0.4%	0.8%	7.9%	^	^	7.2%	^	^	3.9%	1.4%
O'Connor Hospital - San Jose	**1.9%**	**1.1%**	**0.8%**	**2.8%**	**^**	**^**	**^**	**^**	**^**	**5.7%**	**1.2%**
Kaiser Fnd Hosp - Santa Clara	^	^	2.3%	1.2%	^	^	^	^	^	^	1.2%
El Camino Hospital	1.2%	0.2%	1.0%	2.3%	^	^	^	^	^	3.3%	0.8%
Stanford Hospital	1.3%	0.5%	0.6%	2.8%	^	^	^	^	^	2.5%	0.8%
All other hospitals	3.2%	2.5%	5.5%	15.1%	^	^	^	^	^	10.1%	4.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	^	100.0%	100.0%	^	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

In conclusion, the patient days and emergency service visits market-share data reviewed above suggest that O'Connor Hospital and Saint Louise Regional Hospital play a major role in providing emergency care to Medi-Cal beneficiaries. O'Connor Hospital is an essential emergency-service provider in the county as a whole and in the Downtown Area and O'Connor Service Area. Its emergency care role, especially for Medi-Cal patients, is far more significant than its role as an inpatient hospital per se. In its own service area, Saint Louis Regional Hospital is an important Medi-Cal provider of inpatient services, but overwhelmingly the major provider of emergency services to all payer groups. Curtailing its emergency-service capacity would create an access problem for Service Area residents of all financial classes, but especially Medi-Cal beneficiaries, most of which would have to travel over 30 miles to SCVMC. And for inpatient care, a large proportion of Medi-Cal patients would be adversely affected if the new operator of Saint Louise restricted Medi-Cal access, again having to travel to SCVMC. Reducing emergency services at O'Connor and Saint Louise would cause major problems for SCVMC's already heavily-impacted emergency service.

III. Bed Need Projections

Methodology

The bed-need measurement and projection methodology is based on the following assumptions and calculations:

(1) Age-specific patient days-per-1,000 population in 2012 holds constant into the future in each of the three service areas and for the county as a whole;

(2) Use of Association of Bay Area Governments (ABAG) population projections according to age group for each service area and the county as a whole;

(3) Projected patient days according to age group and service area are obtained by multiplying 2012 patient days per thousand population by age-group population projections;

(4) Patient day counts are from the Office of Statewide Health Planning and Development (OSHPD) Discharge Data for 2012. Since ABAG population projections start in 2015, 2012 population is estimated as a linear interpolation (for each age group) of 2010 Census data and 2015 ABAG projections;

(5) Since population projections are at the census-tract level and patient days are at the zip-code level, the 2012 per-capita patient day rates have to be calculated at the zip-code level for each service area. These rates are then applied to the census-tract level population projections. (The 2012 population interpolation percentage, calculated from 2010 and 2015 census-tract data, is applied to the zip-code level to enable calculation of 2012 patient-day utilization rates.);

(6) For each service area and the county as a whole, patient day projections are summed across age groups and apportioned to hospitals based on each hospital's 2012 market share;

(7) Each hospital's bed need in each area is calculated as its projected patient days at 80-percent occupancy; and

(8) Out-migration and in-migration rates are assumed to remain constant.[3]

The assumption of constant per-capita-age-adjusted patient-day rates follows from an assumption that the increased demand on the part of the newly insured generated by the Affordable Care Act (ACA) will be offset by initiatives in the ACA and related efforts independent of the ACA to coordinate care and deemphasize inpatient care. Moreover, according to a recent study,[4] much of the increased utilization on the part of the newly insured is due to pent up demand that is only temporary. In addition, since these utilization projections are age adjusted, the effect of an aging population is already taken into account.

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[3] Out-migration is shown as patient days from "all other" hospitals, which are located in other counties. In-migration is taken into account in a later stage comparing each hospital's estimated 2012 bed need for in-area patients, with its total patient days which include patients residing in other areas (see Table 27 below).

[4] Lo, Nigel, Dylan H. Roby, Jessica Padilla, Xiao Chen, Erin N. Salce, Nadereh Pourat and Gerald F. Komiski, "Increased Service Use Following Medicaid Expansion Is Mostly Temporary: Evidence from California's Low Income Health Program," Health Policy Brief, UCLA Center for Health Policy Research, October 2014.

County-wide Projections

Table 24 presents the calculation of 2012 patient days per 1,000 population. It also shows calculations for 2003, available in the "2004 Report." (The 2003 calculation is also available from the "2004 Report" for the Downtown Area.) Note that for all but one age group (5-19) the 2012 utilization rates are below those for 2003. For both years, 2003 and 2012 population estimates are linear interpolations of 2000-2005 and 2010-2015 estimates, respectively. Besides the drop in utilization rates from 2003 to 2012, the total ABAG population projection available in 2003 for 2010 was 1,887,388,[5] which is 4 percent higher than the 2012 population in Table 24, and 6 percent higher than the actual 2010 population of 1,781,642 from the 2010 Census. It is all but certain that the lower-than-projected population growth and the reduction in utilization rates can be partially attributed to the Great Recession, officially lasting from December 2007 to June 2009.

TABLE 24
PATIENT DAYS AND DISCHARGES PER 1,000 POPULATION
AND LENGTH OF STAY
ACCORDING TO AGE GROUP
SANTA CLARA COUNTY
2003 AND 2012

2003						
	0-4 Years	5-19 Years	20-44 Years	45-64 Years	65 Years Or Greater	Total
Total Patient Days	69,006	17,071	140,918	121,029	219,593	567,617
Total Discharges	12,722	5,279	45,750	27,788	42,924	134,464
Population	125,238	362,657	706,102	383,264	168,752	1,746,013
PD/1000	**551.00**	**47.07**	**199.57**	**315.78**	**1,301.28**	**325.09**
Disch/1000	101.58	14.56	64.79	72.50	254.36	77.01
LOS	5.42	3.23	3.08	4.36	5.12	4.22

2012						
	0-4 Years	5-19 Years	20-44 Years	45-64 Years	65 Years Or Greater	Total
Total Patient Days	63,740	19,496	122,937	120,712	202,315	529,206
Total Discharges	12,226	5,650	38,519	27,024	41,412	124,834
Population	125,595	355,219	654,404	467,625	217,156	1,819,999
PD/1000	**507.50**	**54.88**	**187.86**	**258.14**	**931.66**	**290.77**
Disch/1000	97.34	15.91	58.86	57.79	190.70	68.59
LOS	5.21	3.45	3.19	4.47	4.89	4.24

Source: "2004 Report," Tables 13 and 15, pp. 36-37, Office of Statewide Health Planning and Development, 2012 Discharge Data, Association of Bay Area Governments population projections and 2010 Census.

Table 25 shows projections of total patient days according to hospital based on the patient-day utilization rates in Table 24 applied to population projections by age. This assumes each hospital's

[5] "2004 Report," Table 15, page 37.

market share remains at its 2012 level. From 2012 to 2040, total patient days are projected to increase by 63 percent.

TABLE 25
PROJECTION OF TOTAL PATIENT DAYS ACCORDING TO HOSPITAL*
SANTA CLARA COUNTY
2012-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040
Santa Clara Valley Medical Center	83,694	89,199	99,132	111,092	123,409	133,556	136,515
Kaiser Fnd Hosp - Santa Clara	72,609	77,385	86,002	96,378	107,064	115,867	118,434
El Camino Hospital	65,120	69,403	77,132	86,437	96,021	103,916	106,218
Good Samaritan Hospital - San Jose	62,954	67,095	74,566	83,562	92,827	100,460	102,685
Regional Medical of San Jose	49,371	52,618	58,478	65,533	72,799	78,784	80,530
O'Connor Hospital - San Jose	**43,010**	**45,839**	**50,943**	**57,089**	**63,419**	**68,634**	**70,154**
Stanford Hospital	42,701	45,510	50,577	56,679	62,964	68,141	69,650
Kaiser Fnd Hosp - San Jose	39,375	41,965	46,638	52,265	58,060	62,833	64,225
Lucile Salter Packard Children's Hosp. at Stanford	27,579	29,393	32,666	36,607	40,666	44,009	44,985
St. Louise Regional Hospital	**9,987**	**10,644**	**11,829**	**13,256**	**14,726**	**15,937**	**16,290**
All Other Hospitals	32,806	34,964	38,857	43,545	48,373	52,351	53,510
Total	529,206	564,015	626,821	702,443	780,330	844,486	863,197
% Increase from 2012		6.6%	18.4%	32.7%	47.5%	59.6%	63.1%

*Patient days on behalf of Santa Clara County residents.

Source: Office of Statewide Health Planning and Development 2012 Discharge Data, restricted to general-acute-care (GAC) discharges originating in Santa Clara County, 2012; estimated per-capita patient days from Table 24, 2012: and ABAG population projections.

Table 26 takes the next step, transforming the patient-day projections to required beds at 80-percent occupancy. This table shows projected bed need to serve county residents, 2012 licensed GAC beds and occupancy. To determine the sufficiency of current beds to meet future needs, at least one additional data element is necessary – the percentage of each hospital's current capacity allocated to patients that are county residents. As an example, compare bed needs, current capacity and current occupancy for both Stanford hospitals. Both hospitals draw a considerable number of patients from outside Santa Clara County. Both hospitals show relatively low future bed needs relative to current capacity, and have relatively high occupancy rates.

TABLE 26
BED NEED PROJECTIONS ACCORDING TO HOSPITAL
AT 80-PERCENT OCCUPANCY STANDARD
AND 2012 LICENSED GENERAL ACUTE CARE BEDS AND OCCUPANCY
SANTA CLARA COUNTY
2012-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Licensed Beds	2012 Occupancy

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Licensed Beds	2012 Occupancy
Santa Clara Valley Medical Center	286	305	339	380	423	457	466	524	50.8%
Kaiser Fnd Hosp - Santa Clara	248	265	294	330	367	397	404	327	74.3%
El Camino Hospital	222	238	263	296	329	356	363	418	49.3%
Good Samaritan Hospital - San Jose	215	230	255	286	318	344	351	377	51.5%
Regional Medical of San Jose	169	180	200	224	249	270	275	282	54.0%
O'Connor Hospital - San Jose	**147**	**157**	**174**	**196**	**217**	**235**	**240**	**334**	**36.2%**
Stanford Hospital	146	156	173	194	216	233	238	583	61.6%
Kaiser Fnd Hosp - San Jose	134	144	159	179	199	215	219	242	49.0%
Lucile Salter Packard Children's Hosp. at Stanford	94	101	112	125	139	151	154	311	70.5%
St. Louise Regional Hospital	**34**	**36**	**40**	**45**	**50**	**55**	**56**	**72**	**46.4%**
All Other Hospitals	112	120	133	149	166	179	183		
Total	1,807	1,932	2,141	2,406	2,672	2,892	2,948	3,470	

Source: Table 25 and OSHPD Annual Utilization Report of Hospitals, 2012.

Table 27 shows, for each hospital, current licensed beds, the percentage of its patient days originating in Santa Clara County and the licensed beds allocated to county residents (% county resident patient days X total beds). Note that both Stanford hospitals have in-county percentages of 32 to 33 percent, while all other hospitals have percentages of 80 and above.

TABLE 27
TOTAL PATIENT DAYS, PATIENT DAYS ON BEHALF OF SANTA CLARA COUNTY RESIDENTS, TOTAL LICENSED BEDS AND PERCENTAGE OF PATIENT DAYS ON BEHALF OF, AND BEDS ATTRIBUTED TO, SANTA CLARA COUNTY RESIDENTS
2012

Hospitals	Total Patient Days	County Resident Patient Days	% County Resident/Total Patient Days	Total Licensed Beds	In-County Beds*
	(1)	(2)	(3)	(4)	(5)
Santa Clara Valley Medical Center	91,024	83,694	91.9%	524	482
Kaiser Fnd Hosp - Santa Clara	91,088	72,609	79.7%	327	261
El Camino Hospital	74,589	65,120	87.3%	418	365
Good Samaritan Hospital - San Jose	72,485	62,954	86.9%	377	327
Regional Medical of San Jose	55,335	49,371	89.2%	282	252
O'Connor Hospital - San Jose	**46,285**	**43,010**	**92.9%**	**334**	**310**
Stanford Hospital	132,119	42,701	32.3%	583	188
Kaiser Fnd Hosp - San Jose	43,784	39,375	89.9%	242	218

Hospitals	Total Patient Days	County Resident Patient Days	% County Resident/Total Patient Days	Total Licensed Beds	In-County Beds*
	(1)	(2)	(3)	(4)	(5)
Lucile Salter Packard Children's Hosp. at Stanford	83,008	27,579	33.2%	311	103
St. Louise Regional Hospital	**12,223**	**9,987**	**81.7%**	**72**	**59**
All Other Hospitals					
Total	701,940	496,400	70.7%	3,470	2,565

*Column (3) x Column (4).
Source: Office of Statewide Health Planning and Development 2012 Discharge Data, Table 25 and OSHPD Annual Utilization Report of Hospitals, 2012.

Table 28 takes the Table 27 data into account in calculating projected bed shortages for each hospital to 2040. It shows, for each hospital, the difference between needed beds for each time period and in-county beds from Table 27. A negative shortage is a surplus.

TABLE 28
PROJECTED BED SHORTAGES FOR SANTA CLARA COUNTY RESIDENTS
2015-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040
Santa Clara Valley Medical Center	(196)	(176)	(143)	(101)	(59)	(24)	(16)
Kaiser Fnd Hosp - Santa Clara	(13)	4	33	69	106	136	144
El Camino Hospital	(143)	(127)	(102)	(69)	(36)	(9)	(2)
Good Samaritan Hospital - San Jose	(112)	(98)	(73)	(41)	(10)	17	23
Regional Medical of San Jose	(83)	(71)	(52)	(27)	(2)	18	23
O'Connor Hospital - San Jose	**(163)**	**(153)**	**(136)**	**(115)**	**(93)**	**(75)**	**(71)**
Stanford Hospital	(43)	(33)	(16)	6	27	45	49
Kaiser Fnd Hosp - San Jose	(83)	(74)	(58)	(39)	(19)	(2)	2
Lucile Salter Packard Children's Hosp. at Stanford	(9)	(3)	8	22	36	47	50
St. Louise Regional Hospital	**(25)**	**(22)**	**(18)**	**(13)**	**(8)**	**(4)**	**(3)**
All other hospitals							
Total	(870)	(753)	(557)	(309)	(58)	148	200

Source: Tables 26 and 27.

It appears two hospitals, Kaiser-Santa Clara and Lucile Salter Packard-Children's, are likely to experience a bed shortage in the near future; Kaiser may be experiencing a shortage right now. Stanford Hospital is next in line. Besides Regional, Good Samaritan and Kaiser-San Jose, no other hospitals are projected to hit capacity prior to 2040. Obviously, these projections are only rough estimates at this time. Even assuming utilization rates remain constant, market shares are likely to change, 80-percent occupancy is generally considered an optimal target that few hospitals achieve, and some hospitals have more flexibility than others in shifting between various GAC bed classifications as needs arise. For some hospitals it may not be economically feasible to shift between certain bed types. For example,

converting ICU beds, pediatric beds or obstetrics beds to medical/surgical could involve major changes to complete floors, and thus require an all-or-nothing scenario that may not be feasible or desirable. Moreover, certain bed types are more associated with emergency admissions than others, and thus require lower optimal occupancy rates.

An important take-away is O'Connor's low occupancy rate and the likelihood, given these projections, that it will be operating considerably below capacity for the foreseeable future. This has important implications concerning the actions a future operator will likely take, and how these actions would affect the local population and local hospitals. The remainder of this section breaks down projected bed needs to the three service areas.

Downtown Area

Table 29 shows patient days per 1,000 population for 2003 and 2012 according to age. For both years, 2003 and 2012 population estimates are linear interpolations of 2000-2005 and 2010-2015 estimates, respectively.

Note that in every age group except 5-19 years, patient days and discharges per 1,000 population have dropped from 2003 to 2012. Note also that in every age group except 20 to 44, length of stay has also fallen.

Using the patient-days-per-1,000-population calculations in Table 29, patient days by age group are projected to 2040 using ABAG population projections. These are then transformed to bed need based on an optimal occupancy rate of 80 percent. The bed need is then allocated to each hospital based on 2012 market shares.

As with the county-wide projections, the projections presented here are based on holding constant the 2012 patient-days-per-1,000-population estimates within each age group.

TABLE 29
PATIENT DAYS AND DISCHARGES PER 1,000 POPULATION
AND LENGTH OF STAY
ACCORDING TO AGE GROUP
DOWNTOWN AREA
2003 AND 2012

	2003					
	0-4 years	5-19 years	20-44 years	45-64 years	65 years or greater	Total
Total Patient Days	9,974	2,308	17,841	15,490	23,034	68,647
Total Discharges	1,707	707	5,700	3,298	3,831	15,243
Population	16,202	43,973	92,220	35,795	14,544	202,734
PD/1000	**615.6**	**52.5**	**193.5**	**432.7**	**1,583.7**	**338.6**
Disch/1000	105.4	16.1	61.8	92.1	263.4	75.2
LOS	5.84	3.26	3.13	4.70	6.01	4.50
	2012					
	0-4 years	5-19 years	20-44 years	45-64 years	65 years or greater	Total
Total Patient Days	7,199	2,194	15,803	15,501	19,364	60,061
Total Discharges	1,635	738	5,019	3,386	3,751	14,529
Population	16,211	38,828	91,367	45,960	18,718	211,084
PD/1000	**444.08**	**56.51**	**172.96**	**337.27**	**1,034.51**	**284.54**
Disch/1000	100.86	19.01	54.93	73.67	200.40	68.83
LOS	4.40	2.97	3.15	4.58	5.16	4.13

Source: "2004 Report," Table 12, p. 35, Office of Statewide Health Planning and Development 2012 Discharge Data, Association of Bay Area Governments population projections and 2010 Census.

Table 30 shows projections of total patient days according to hospital, based on the patient-day utilization rates in Table 29, applied to population projections by age. This assumes each hospital's market share remains at its 2012 level. Note that while the county-wide projections in Table 26 showed total patient days increasing 63 percent from 2012 to 2040, Downtown Area patient days are projected to increase 147.7 percent; this compares to 68 percent and 51 percent for the O'Connor and Saint Louise Service areas, respectively, as will be discussed below. The relatively high percentage growth in the Downtown Area reflects the "Northern Corridor," which extends into North San Jose, and has experienced, and is projected to experience further, rapid growth.

TABLE 30
PROJECTION OF TOTAL PATIENT DAYS ACCORDING TO HOSPITAL*
DOWNTOWN AREA
2012-2040

Hospitals	2012**	2012	2015	2020	2025	2030	2035	2040
Regional Medical of San Jose	16,071	14,626	16,467	19,827	23,764	28,376	32,924	36,226
Santa Clara Valley Medical	15,590	14,188	15,974	19,234	23,052	27,527	31,939	35,142

Hospitals	2012**	2012	2015	2020	2025	2030	2035	2040
Center								
O' Connor Hospital - San Jose	**6,619**	**6,024**	**6,782**	**8,166**	**9,787**	**11,687**	**13,560**	**14,920**
Kaiser Fnd Hosp - Santa Clara	6,596	6,003	6,758	8,138	9,753	11,646	13,513	14,868
Good Samaritan Hospital - San Jose	3,350	3,049	3,433	4,133	4,954	5,915	6,863	7,551
El Camino Hospital	3,333	3,033	3,415	4,112	4,928	5,885	6,828	7,513
Kaiser Fnd Hosp - San Jose	2,457	2,236	2,518	3,031	3,633	4,338	5,034	5,538
Stanford Hospital	2,148	1,955	2,201	2,650	3,176	3,793	4,401	4,842
Lucile Salter Packard Children's Hosp. at Stanford	1,574	1,432	1,613	1,942	2,327	2,779	3,225	3,548
St. Louise Regional Hospital	**45**	**41**	**46**	**56**	**67**	**79**	**92**	**101**
All other hospitals	2,278	2,073	2,334	2,810	3,368	4,022	4,667	5,135
Total	60,061	54,659	61,541	74,099	88,810	106,048	123,045	135,384
% Increase from 2012			12.6%	35.6%	62.5%	94.0%	125.1%	147.7%

*Patient days on behalf of Downtown Area residents.

**In terms of zip-code area definition. The second 2012 column and all subsequent years are based on the census-tract definition of the Downtown Area, using the patient-days-per-1,000 population calculations from Table 29 according to age group.

Source: Office of Statewide Health Planning and Development 2012 Discharge Data, restricted to general-acute-care (GAC) discharges originating in Downtown Area, 2012; and ABAG population projections.

Table 31 transforms the patient-day projections to required beds to serve area residents at 80-percent occupancy.

TABLE 31

BED NEED PROJECTIONS ACCORDING TO HOSPITAL
AT 80-PERCENT OCCUPANCY STANDARD
AND 2012 LICENSED GENERAL ACUTE CARE BEDS AND OCCUPANCY
DOWNTOWN AREA
2012-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Licensed Beds	2012 Occupancy
Regional Medical of San Jose	50	56	68	81	97	113	124	282	54.0%
Santa Clara Valley Medical Center	48	55	66	79	94	109	120	524	50.8%
O' Connor Hospital - San Jose	**21**	**23**	**28**	**34**	**40**	**46**	**51**	**334**	**36.2%**
Kaiser Fnd Hosp - Santa Clara	21	23	28	33	40	46	51	327	74.3%
Good Samaritan Hospital - San Jose	10	12	14	17	20	24	26	377	51.5%

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Licensed Beds	2012 Occupancy
El Camino Hospital	10	12	14	17	20	23	26	418	49.3%
Kaiser Fnd Hosp - San Jose	8	9	10	12	15	17	19	242	49.0%
Stanford Hospital	7	8	9	11	13	15	17	583	61.6%
Lucile Salter Packard Children's Hosp. at Stanford	5	6	7	8	10	11	12	311	70.5%
St. Louise Regional Hospital	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72**	**46.4%**
All other hospitals	7	8	10	12	14	16	18		
Total	187	211	253	304	363	421	462	3,470	55.1%

Source: Table 30 and Office of Statewide Health Planning and Development Annual Utilization Report of Hospitals, 2012.

As discussed in the section immediately above, county-wide bed-need projections suggest that SCVMC and O'Connor Hospital are not likely to experience an aggregate bed shortage (i.e., total GAC beds at 80-percent occupancy) for the foreseeable future (i.e., 2035 or later). By 2030, Regional is projected to bump up against current capacity. Of the four primary hospitals serving the Downtown population, only Kaiser-Santa Clara is projected to experience a bed shortage prior to 2030; in fact it already appears to have an aggregate bed shortage. Thus, other than for Kaiser Health Plan members, the Downtown Area is projected to have sufficient bed capacity for the foreseeable future.

Table 32 presents data on the three primary non-Kaiser hospitals serving the Downtown Area – Regional Medical Center, SCVMC and O'Connor Hospital – in terms of their estimated need for beds to serve Downtown as a percentage of their estimated beds needed to serve their share of the county as a whole. The latter is from Table 26 above. Table 32 also shows their Downtown bed need estimated for 2012, current licensed GAC beds and 2012 GAC occupancy percentage. Regional has the highest occupancy rate and percentage of bed need deriving from the Downtown Area. For all three hospitals, the increasing percentages of county-wide bed need over time deriving from the Downtown Area reflects the relatively greater population and utilization-rate growth forecasted for that area (i.e., 147.7 percent versus 63.1 percent from 2012 to 2040).

TABLE 32
ESTIMATED DOWNTOWN-AREA BED NEED
AS A PERCENTAGE OF COUNTY-WIDE BED NEED
REGIONAL MEDICAL CENTER, SANTA CLARA VALLEY MEDICAL CENTER
AND O'CONNOR HOSPITAL
2012-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Bed Need*	2012 Licensed Beds	2012 Occupancy
Regional Medical of San Jose	29.6%	31.3%	33.9%	36.3%	39.0%	41.8%	45.0%	50	282	54.0%
Santa Clara Valley Medical Center	17.0%	17.9%	19.4%	20.8%	22.3%	23.9%	25.7%	48	524	50.8%
O' Connor Hospital - San Jose	**14.0%**	**14.8%**	**16.0%**	**17.1%**	**18.4%**	**19.8%**	**21.3%**	**21**	**334**	**36.2%**

*Downtown Area.
Source: Tables 26 and 31.

O'Connor Service Area

Table 33 shows the 2012 patient days per 1,000 population according to age for the O'Connor Service Area. Unlike for the county as a whole and the Downtown Area, 2003 calculations are not available.

TABLE 33
PATIENT DAYS AND DISCHARGES PER 1,000 POPULATION
AND LENGTH OF STAY
ACCORDING TO AGE GROUP
O'CONNOR SERVICE AREA
2012

	0-4 Years	5-19 Years	20-44 Years	45-64 Years	65 Years Or Greater	Total
Total Patient Days	39,357	11,585	77,086	76,896	120,285	325,214
Total Discharges	7,606	3,531	24,312	16,977	24,072	76,500
Population	78,783	213,307	411,283	273,718	121,282	1,098,373
PD/1000	**499.56**	**54.31**	**187.43**	**280.93**	**991.78**	**296.09**
Disch/1000	96.54	16.55	59.11	62.02	198.48	69.65
LOS	5.17	3.28	3.17	4.53	5.00	4.25

Source: Office of Statewide Health Planning and Development 2012 Discharge Data, Association of Bay Area Governments population projections and 2010 Census.

Using the patient-days-per-1,000-population calculations in Table 33, patient days by age group are projected to 2040 using ABAG population projections. These are then transformed to bed need based on an optimal occupancy rate of 80 percent. The bed need is then allocated to each hospital based on 2012 market shares.

As with the county-wide and Downtown Area projections, the projections presented here are based on holding constant the 2012 patient-days-per-1,000-population estimates within each age group.

Table 34 shows projections of total patient days according to hospital, based on the patient-day utilization rates in Table 33 applied to population projections by age. This assumes each hospital's market share remains at its 2012 level. Total GAC patient days are projected to increase 68 percent from 2012 to 2040, compared to the Downtown Area's 148 percent (much of which is included in the O'Connor Service Area), and the county-wide increase of 63 percent.

TABLE 34
PROJECTION OF TOTAL PATIENT DAYS ACCORDING TO HOSPITAL*
O'CONNOR SERVICE AREA
2012-2040

Hospitals	2012**	2012	2015	2020	2025	2030	2035	2040
Santa Clara Valley Medical Center	65,786	65,927	70,546	78,854	88,658	98,911	107,736	111,007
Regional Medical of San Jose	46,033	46,131	49,364	55,177	62,037	69,212	75,387	77,676
Kaiser Fnd Hosp - Santa Clara	45,945	46,043	49,270	55,072	61,919	69,079	75,243	77,527
Good Samaritan Hospital - San Jose	42,816	42,907	45,914	51,321	57,702	64,375	70,119	72,247
O' Connor Hospital - San Jose	**36,232**	**36,309**	**38,854**	**43,429**	**48,829**	**54,476**	**59,336**	**61,138**
Kaiser Fnd Hosp - San Jose	27,537	27,596	29,530	33,007	37,111	41,403	45,097	46,466
El Camino Hospital	20,890	20,935	22,402	25,040	28,153	31,409	34,211	35,250
Stanford Hospital	14,988	15,020	16,073	17,965	20,199	22,535	24,545	25,291
Lucile Salter Packard Children's Hosp. at Stanford	9,433	9,453	10,116	11,307	12,713	14,183	15,448	15,917
St. Louise Regional Hospital	**232**	**232**	**249**	**278**	**313**	**349**	**380**	**391**
All other hospitals	15,322	15,355	16,431	18,366	20,649	23,037	25,092	25,854
Total	325,214	325,909	348,747	389,815	438,281	488,967	532,594	548,764
% Increase from 2012			7.0%	19.6%	34.5%	50.0%	63.4%	68.4%

*Patient days on behalf of O'Connor Service Area residents.
**In terms of zip-code area definition. The second 2012 column and all subsequent years are based on the census-tract definition of the O'Connor Service Area, using the patient-days-per-1,000 population calculations from Table 33 according to age group.
Source: OSHPD Discharge Data, restricted to general-acute-care (GAC) discharges originating in O'Connor Service Area, 2012; and ABAG population projections.

As discussed in Section II above, O'Connor is not the major inpatient provider serving its service area. It is, however, a major emergency care provider in this area. The O'Connor Service Area accounts for 84 percent of O'Connor's total patient days on behalf of Santa Clara County residents, and O'Connor ranks fifth in market share, substantially above sixth ranked Kaiser-San Jose.

Table 35 transforms the patient-day projections to required beds to serve area residents at 80-percent occupancy.

TABLE 35
BED NEED PROJECTIONS ACCORDING TO HOSPITAL
AT 80-PERCENT OCCUPANCY STANDARD
AND 2012 LICENSED GENERAL ACUTE CARE BEDS AND OCCUPANCY
O'CONNOR SERVICE AREA
2012-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Licensed Beds	2012 Occupancy
Santa Clara Valley Medical Center	225	242	269	304	339	369	379	524	50.8%
Regional Medical of San Jose	158	169	188	212	237	258	265	282	54.0%
Kaiser Fnd Hosp - Santa Clara	157	169	188	212	237	258	265	327	50.8%
Good Samaritan Hospital - San Jose	147	157	175	198	220	240	247	377	51.5%
O' Connor Hospital - San Jose	**124**	**133**	**148**	**167**	**187**	**203**	**209**	**334**	**36.2%**
Kaiser Fnd Hosp - San Jose	94	101	113	127	142	154	159	242	49.0%
El Camino Hospital	71	77	86	96	108	117	120	418	49.3%
Stanford Hospital	51	55	61	69	77	84	86	583	61.6%
Lucile Salter Packard Children's Hosp. at Stanford	32	35	39	44	49	53	54	311	70.5%
St. Louise Regional Hospital	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**72**	**46.4%**
All other hospitals	52	56	63	71	79	86	88		
Total	1,113	1,194	1,331	1,501	1,675	1,824	1,874	3,470	55.1%

Source: Table 34 and OSHPD Annual Utilization Report of Hospitals, 2012.

As discussed in above, county-wide bed-need projections suggest that SCVMC and O'Connor Hospital are not likely to experience an aggregate bed shortage (i.e., total GAC beds at 80-percent occupancy) for the foreseeable future (i.e., 2035 or later). By 2030, Regional is projected to bump up against current capacity. Of the five primary hospitals serving the O'Connor area population (SCVMC, Regional, Kaiser-Santa Clara, Good Samaritan and O'Connor), only Kaiser-Santa Clara is expected to experience a bed shortage prior to 2030. Thus, other than for Kaiser Health Plan members, the O'Connor Service Area is projected to have sufficient bed capacity for the foreseeable future.

Saint Louise Regional Hospital Service Area

Table 36 shows the 2012 patient days per 1,000 population according to age for The O'Connor Service Area. As with the O'Connor Service Area, 2003 utilization data are not readily available.

TABLE 36
PATIENT DAYS AND DISCHARGES PER 1,000 POPULATION
AND LENGTH OF STAY
ACCORDING TO AGE GROUP
SAINT LOUISE SERVICE AREA
2012

	0-4 Years	5-19 Years	20-44 Years	45-64 Years	65 Years Or Greater	Total
Total Patient Days	4,756	1,780	8,439	9,997	14,130	39,102
Total Discharges	797	551	2,653	2,338	2,877	9,216
Population	11,555	37,921	51,924	41,818	17,174	160,392
PD/1000	**411.59**	**46.94**	**162.53**	**239.06**	**822.76**	**243.79**
Disch/1000	68.97	14.53	51.09	55.91	167.52	57.46
LOS	5.97	3.23	3.18	4.28	4.91	4.24

Source: Office of Statewide Health Planning and Development 2012 discharge data, Association of Bay Area Governments population projections and 2010 Census.

Using the patient-days-per-1,000-population calculations in Table 36, patient days by age group are projected to 2040 using ABAG population projections. These are then transformed to bed need based on an optimal occupancy rate of 80 percent. The bed need is then allocated to each hospital based on 2012 market shares.

As with the county-wide and the other areas projections, the projections presented here are based on holding constant the 2012 patient-days-per-1,000-population estimates within each age group.

Table 37 shows projections of total patient days according to hospital based on the patient-day utilization rates in Table 36 applied to population projections by age. This assumes each hospital's market share remains at its 2012 level. Total GAC patient days are projected to increase 51 percent from 2012 to 2040, compared to the Downtown Area's 148 percent, the O'Connor Service Area's 68 percent, and the county-wide increase of 63 percent. Saint Louise is the major hospital serving this area, which is a considerable distance from the other hospitals.

TABLE 37
PROJECTION OF TOTAL PATIENT DAYS ACCORDING TO HOSPITAL*
SAINT LOUISE SERVICE AREA
2012-2040

Hospitals	2012**	2012	2015	2020	2025	2030	2035	2040
St. Louise Regional Hospital	**10,515**	**7,408**	**7,897**	**8,842**	**9,858**	**10,750**	**11,326**	**11,189**
Kaiser Fnd Hosp - San Jose	6,911	4,869	5,190	5,811	6,479	7,066	7,444	7,354
Santa Clara Valley Medical Center	4,813	3,391	3,614	4,047	4,512	4,921	5,184	5,121
Good Samaritan Hospital - San Jose	4,658	3,281	3,498	3,917	4,367	4,762	5,017	4,956
Stanford Hospital	2,834	1,997	2,128	2,383	2,657	2,897	3,052	3,016
Kaiser Fnd Hosp - Santa Clara	1,907	1,343	1,432	1,604	1,788	1,950	2,054	2,029
Regional Medical of San Jose	1,507	1,062	1,132	1,267	1,413	1,541	1,623	1,604

Hospitals	2012**	2012	2015	2020	2025	2030	2035	2040
El Camino Hospital	1,347	949	1,012	1,133	1,263	1,377	1,451	1,433
Lucile Salter Packard Children's Hosp. at Stanford	1,274	898	957	1,071	1,194	1,302	1,372	1,356
O' Connor Hospital - San Jose	**1,186**	**836**	**891**	**997**	**1,112**	**1,213**	**1,277**	**1,262**
All other hospitals	2,150	1,515	1,615	1,808	2,016	2,198	2,316	2,288
Total	39,102	27,547	29,365	32,880	36,660	39,977	42,117	41,607
% Increase from 2012			6.6%	19.4%	33.1%	45.1%	52.9%	51.0%

*Patient days on behalf of Saint Louise Service Area residents.

**In terms of zip-code area definition. The second 2012 column and all subsequent years are based on the census-tract definition of the Saint Louise Service Area, using the patient-days-per-1,000 population calculations from Table 36 according to age group.

Source: Office of Statewide Health Planning and Development data, restricted to general-acute-care (GAC) discharges originating in the Saint Louise Service Area, 2012; and Association of Bay Area Governments population projections.

Table 38 transforms the patient-day projections to required beds to serve area residents at 80-percent occupancy. Given the county-wide bed-need projections and current capacity, as long as Saint Louise, Kaiser-San Jose, SCVMC and Good Samaritan maintain their current capacity, this service area appears unlikely to experience aggregate bed shortages prior to 2030. When issues involving Medi-Cal access and emergency services are considered, however, the objectives of Saint Louise's new operator are of paramount importance. Curtailing or eliminating the emergency service or Medi-Cal participation would cause major access problems, especially given Saint Louise's considerable distance from the other major hospitals serving its Service Area population.

TABLE 38
BED NEED PROJECTIONS ACCORDING TO HOSPITAL
AT 80-PERCENT OCCUPANCY STANDARD
AND 2012 LICENSED GENERAL ACUTE CARE BEDS AND OCCUPANCY
SAINT LOUISE SERVICE AREA
2012-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Licensed Beds	2012 Occupancy
St. Louise Regional Hospital	**25**	**27**	**30**	**34**	**37**	**39**	**38**	**72**	**46.4%**
Kaiser Fnd Hosp - San Jose	17	18	20	22	24	25	25	242	49.0%
Santa Clara Valley Medical Center	12	12	14	15	17	18	17	524	50.8%
Good Samaritan Hospital - San Jose	11	12	13	15	16	17	17	377	51.5%
Stanford Hospital	7	7	8	9	10	10	10	583	61.6%
Kaiser Fnd Hosp - Santa Clara	5	5	5	6	7	7	7	327	74.3%
Regional Medical of San Jose	4	4	4	5	5	6	5	282	54.0%

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Licensed Beds	2012 Occupancy
El Camino Hospital	3	3	4	4	5	5	5	418	49.3%
Lucile Salter Packard Children's Hosp. at Stanford	3	3	4	4	4	5	5	311	70.5%
O' Connor Hospital - San Jose	**3**	**3**	**3**	**4**	**4**	**4**	**4**	**334**	**36.2%**
All other hospitals	5	6	6	7	8	8	8		
Total	94	101	112	126	137	144	142	3,470	55.1%

Source: Table 37 and OSHPD Annual Utilization Report of Hospitals, 2012.

IV. Impact of Daughters of Charity Sale on Santa Clara County Population – Three Scenarios

1. O'Connor and Saint Louise Cease Operating

If Saint Louise ceased operations, 27 percent of the service area's inpatients would be diverted to other hospitals – 48 percent of self-pay patients, 35 percent of Medicare patients and 29 percent of Medi-Cal patients. A large number of the diverted self-pay and Medi-Cal patients would likely have to travel to the closest hospital that would not restrict its uninsured and Medi-Cal volume – SCVMC, over 30 miles away. For emergency visits, the situation is considerably more disturbing – 61 percent of all emergency patients would have to travel to other hospitals, including 77 percent of Medicare, 86 percent of Medi-Cal and 28 percent of self-pay emergency patients. The absence of the Saint Louise emergency service would also put strains on the other hospitals serving the Saint Louise Service Area, especially SCVMC, which is already impacted, thus increasing waiting times for all emergency patients. See Tables 21 and 23 for the source of these percentages of patients diverted out of the service area. Travel times from Gilroy to any replacement hospital, whether in Santa Clara County or other counties (i.e., San Benito, Monterey or Santa Cruz) are all 30 minutes or more.

If O'Connor ceased operations, the bulk of its Medi-Cal and self-pay patients would most likely be diverted to the closest hospital, and the one unlikely to restrict non-commercially-insured patients – SCVMC. O'Connor's emergency service has a major presence (ranking closely behind only SCVMC) in both the Downtown Area and the O'Connor Service Area (see Tables 15 and 19).

Table 39 presents a list of services provided by O'Connor, Saint Louise and SCVMC during 2012. It also shows licensed beds and occupancy by bed category, emergency visits and emergency stations, and cardiac capabilities and volume. Note that with respect to emergency services, O'Connor has only one less station than SCVMC. Table 40 provides data on emergency services for all hospitals in Santa Clara County. Note that the three hospitals with the largest number of visits per station are Saint Louise, SCVMC and O'Connor. For both O'Connor and Saint Louise, their provision of emergency care is a vital service to the community. A recent study of emergency department closures in California found that such closures were associated with a 5 percent increase in the probability of inpatient mortality at the remaining hospitals in the closure hospital's service area.[6]

[6] Liu, C., T. Srebotnjak and R.Y. Hsia, 2014, "California Emergency Department Closures Are Associated With Increased Inpatient Mortality At Nearby Hospitals," Health Affairs 33(8):1323-1329.

TABLE 39
FACILITIES AND SERVICES
O'CONNOR HOSPITAL, SAINT LOUISE REGIONAL HOSPITAL
AND SANTA CLARA VALLEY MEDICAL CENTER
2012

SERVICE	O'Connor	St. Louise Regional	Santa Clara Valley Medical Center
M/S LICENSED BEDS	210	48	234
M/S OCCUPANCY	34.5%	50.9%	62.4%
PERINATAL LICENSED BEDS	65	16	80
PERINATAL OCCUPANCY	36.0%	24.1%	33.2%
PEDIATRIC LICENSED BEDS	27	-	40
PEDIATRIC OCCUPANCY	15.5%	NA	26.6%
ICU LICENSED BEDS	14	4	44
ICU OCCUPANCY	61.6%	117.1%	47.3%
CCU LICENSED BEDS	8	4	8
CCU OCCUPANCY	92.5%	12.0%	76.8%
BURN LICENSED BEDS	-	-	8
BURN OCCUPANCY	NA	NA	78.9%
NICU LICENSED BEDS	10	-	40
NICU OCCUPANCY	48.6%	NA	39.7%
REHAB LICENSED BEDS	-	-	70
REHAB OCCUPANCY	NA	NA	48.2%
GEN ACUTE LICENSED BEDS	334	72	524
GEN ACUTE OCCUPANCY	36.2%	46.4%	50.8%
SKILLED NURSING LICENSED BEDS	24	21	-
SKILLED NURSING OCCUPANCY	52.6%	0.0%	-
PSYCH LICENSED BEDS	-	-	50
PSYCH OCCUPANCY	-	-	91.8%
EMS VISITS NOT ADMITTED	46,755	24,111	60,920
EMS VISITS ADMITTED	6,419	2,339	10,325
EMS VISITS TOTAL	53,174	26,450	71,245
EMS STATIONS	23	8	24
VISITS PER STATION	2,311.9	3,306.3	2,968.5
AMB SURG PROGRAM	Yes		Yes
LIVE BIRTHS	3,298	634	3,985
CV SURGERY LICENSURE	CV SURG	NEITHER	CV SURG
CV SURGERY TOTAL	86		219
CABG TOTAL	66	-	103
CATH DX VISITS	866	0	696

SERVICE	O'Connor	St. Louise Regional	Santa Clara Valley Medical Center
CATH THERAPUTIC VISITS	547	0	289

Source: Office of Statewide Health Planning and Development, Annual Hospital Utilization Report, 2012.

TABLE 40
EMERGENCY-SERVICE VISITS AND EMERGENCY STATIONS
SANTA CLARA COUNTY HOSPITALS
2012

Hospital	EMS Visits Not Admitted	EMS Visits Admitted	Total EMS Visits	EMS Stations	Vis/Station
Santa Clara Valley Medical Center	**60,920**	**10,325**	**71,245**	**24**	**2,968.5**
Kaiser Fnd Hosp - Santa Clara	54,063	8,915	62,978	32	1,968.1
Regional Medical Of San Jose	44,251	12,126	56,377	31	1,818.6
Stanford Hospital	43,527	10,373	53,900	54	998.1
O'Connor Hospital - San Jose	**46,755**	**6,419**	**53,174**	**23**	**2,311.9**
Kaiser Fnd Hosp - San Jose	44,801	5,962	50,763	28	1,813.0
Good Samaritan Hospital-San Jose	36,192	8,485	44,677	29	1,540.6
El Camino Hospital	36,054	6,569	42,623	28	1,522.3
St. Louise Regional Hospital	**24,111**	**2,339**	**26,450**	**8**	**3,306.3**
El Camino Hospital Los Gatos	10,401	1,019	11,420	10	1,142.0
Lucile Salter Packard Children's Hosp. At Stanford	-	-	-	-	-
Total	401,075	72,532	473,607	267	1,773.8

Source: Office of Statewide Health Planning and Development, Annual Hospital Utilization Report, 2012.

A further consequence of O'Connor's closure would be closure or relocation of its family practice residency program, affiliated with Stanford, and its Family Practice Health Center. While the former is a major source of attracting new primary care physicians to the San Jose area, the latter supports the area's community clinics.

2. O'Connor And Saint Louise Acquired By A Non-Local Organization With The Goal Of Maximizing Profits

While profit maximization is a primary driver of our economic system, and is in general an acceptable and expected goal, in the Santa Clara County health-care environment the transformation of O'Connor and Saint Louise into profit-maximizing entities could cause major repercussions that could harm the local health system and its ability to meet the needs of the population. And such repercussions are exacerbated if the new owner is not an established local provider with the ability to integrate and coordinate services across a network of local providers.

There are three factors in the local health system that stand out: (1) the essential roles played by O'Connor and St. Louise in the emergency medical system, especially with respect to the Medi-Cal and self-pay (i.e., uninsured) populations; (2) the low occupancy of O'Connor – slightly over one-third of its

acute-care beds are filled – and the current excess bed situation in the aggregate; and (3) the geographic location of Saint Louise, which is a relatively long distance from replacement facilities.

If a new owner determines that these hospitals' high-volume emergency services are contributing to economic losses, their capacity could be curtailed or the emergency services closed altogether. This would have major adverse effects on other hospitals, especially SCVMC and, more importantly, emergency patients that would have to travel greater distances and experience longer waiting times.

An obvious way to "fix" a low-occupancy hospital is to fill empty beds. The only hospital that currently does not have excess capacity is Kaiser-Santa Clara, which is not a competitor of O'Connor since it is restricted to Kaiser Health Plan members. Two other hospitals expected to hit capacity in the near term – the two Stanford Hospitals – compete for few if any of O'Connor's patients. Thus, either the new operator fills beds with inappropriate inpatient care and/or is able to successfully compete with other local hospitals, most of which already have surplus beds. And most likely, this competition will not be for Medi-Cal or unsponsored patients.

As discussed above, if Saint Louise restricts its Medi-Cal and self-pay patient load, many of these patients will be forced to travel over 30 miles to SCVMC. This will cause a particular hardship for Saint Louise's diverted emergency patients. As shown in Table 23, of its Service Area residents, Saint Louise has market shares of 77 percent of Medicare visits, 86 percent of Medi-Cal visits and 61 percent of total emergency visits.

Thus, if sold to a hospital operator without a local presence, most likely unable to coordinate and consolidate services with other local hospitals, and with the goal of "turning-around" these two hospitals, the consequences for the local health system in its ability to serve the population are likely to be highly negative.

3. O'Connor And Saint Louise Acquired By An Organization With A Long-standing Commitment to the Community

The Affordable Care Act (ACA) encourages coordination of care, population health and care provided in the most appropriate settings. Inpatient acute care is receiving less emphasis as health-care delivery evolves in a manner consistent with the "Triple Aim" – better health, better care experience and lower per capita costs.[7] The sale of O'Connor and Saint Louise provides an opportunity to enhance the ability of the local health care system to improve population health in a cost-effective manner, rather than further fragment the health care system, which option 2 above would likely do.

Integrating O'Connor and Saint Louise into the SCVMC system has promise to improve services available to the community without adversely affecting other local hospitals. It would consolidate services where appropriate and reduce future capital costs on the part of SVCMC. Moreover, as a county health system, SVMC is integrated with the county public health department and has relationships with county housing and other programs that contribute to population health. Major opportunities for integration and coordination of services and reducing future capital expenditures include the following:

[7] Berwick, D.M., T.W. Nolan, and J. Whittington, 2008, "The Triple Aim: Care, Health and Cost," Health Affairs, 27(3):759-769.

(1) Both O'Connor and SCVMC operate below optimal-volume cardiac surgery programs. As seen in Table 39 above, in 2012 only 86 cardiac surgeries were performed at O'Connor, including 66 coronary-artery-bypass procedures – far below professionally-accepted volume minimums to ensure patient safety. SCVMC performed only 103 coronary-artery-bypass procedures, also a low volume. Integrating these programs has the potential to improve both hospitals' quality indicators. This type of opportunity would not be readily available to an out-of-area owner. An underutilized heart surgery program is a double-edged sword. Low volume is not conducive to quality care, and efforts to increase volume may involve inappropriate surgery, or divert surgeries from competing programs, thereby endangering the competitors' remaining patients;

(2) Table 39 also shows that all three hospitals have busy emergency services. Coordination of the three programs would improve the flow of emergency visits and subsequent hospitalization if needed. SCVMC is the highest volume emergency provider in Santa Clara County (see Table 39), and is one of two Level I trauma centers in the county. It has significant bottlenecks primarily due to the difficulty of placing some patients in appropriate level beds (i.e., a shortage of medical/surgical beds accompanied by a surplus of other types of GAC beds, such as obstetrics and pediatrics). SCVMC is also constrained by inadequate surgery space, which O'Connor's outpatient surgery center could help alleviate. Merger and coordination of the O'Connor and SCVMC emergency services would ease the bottlenecks. On the other hand, it is not known how an external owner would operate the O'Connor emergency service. If it is the source of admission primarily of low-paying patients, it could take actions that would adversely affect SCVMC's emergency service and the patients it serves;

(3) SCVMC has planned the construction of a 104-bed replacement tower (Bed Building 2) to meet seismic-safety requirements. Current estimated capital costs for this project are $419 million. Access to O'Connor's seismically-compliant beds would eliminate the need for the Bed Building 2 project; and

(4) SCVMC already coordinates programs with O'Connor and Saint Louise. SCVMC physicians perform deliveries at St. Louise, provide coverage for O'Connor's neonatal intensive care unit, and SVCMC's Gilroy clinic refers obstetrics cases to Saint Louise. SCVMC is also the logical new home for the O'Connor family practice residency program, the associated family practice clinic and the referral support O'Connor currently provides to community clinics.

V. Conclusion

Through analysis of market shares according to payer, and projected bed needs for specific geographic service areas, the roles of the two Daughters of Charity hospitals were identified and the likely impact of their sale assessed.

The major value to the local health system of O'Connor and Saint Louise is their crucial roles in providing emergency services, especially to the Medi-Cal and self-pay (i.e.,mainly uninsured) populations. The closest hospital to O'Connor is SCVMC – 1.5 miles away. If O'Connor's emergency services were curtailed, most of its emergency patients would likely be diverted to SVCMC, which is already heavily impacted. Saint Louise is located substantial distances from competing hospitals. Thus, should Saint

Louise curtail any of its services, many of its patients, especially Medi-Cal and self-pay, would be forced to travel some 30 miles to SCVMC for inpatient and emergency services.

Three alternatives were discussed: (1) outright closure of both hospitals; (2) acquisition by an out-of-area owner with the goal of making the hospitals profitable, and without the ability to coordinate their programs with other local hospitals; and (3) acquisition by a local health system with the ability to consolidate programs and with a track record in providing care to underserved populations.

Closure of both hospitals would most likely have an adverse impact on Medi-Cal and uninsured patients, and would steer a large number of emergency patients to SCVMC, which is the closest hospital to O'Connor, has the highest volume emergency service in the county, and already has considerable bottlenecks in treating and admitting emergency patients.

A major factor affecting the business strategies of a new owner will be the low occupancy of O'Connor – slightly over one-third of its acute-care beds are filled – and the current county-wide excess bed situation in the aggregate. If the new owner does not have the ability to integrate O'Connor's services with those of other local hospitals and is seeking to "turn-around" O'Connor's financial condition, a likely strategy is to try to fill its empty beds. The only hospital in the county that currently does not have excess capacity is Kaiser-Santa Clara, which is not a competitor of O'Connor since it is restricted to Kaiser Health Plan members. Two other hospitals expected to hit capacity in the near term – the two Stanford Hospitals – compete for few if any of O'Connor's inpatients. Thus, either the new operator fills beds with patients that could better be treated in outpatient settings, or is able to successfully compete with other local hospitals, most of which already have surplus beds. And most likely this competition will not be for Medi-Cal or uninsured patients. These actions would have an adverse effect on the local health system and population health.

Acquisition by a local health system with a track record in treating high volumes of Medi-Cal and uninsured patients, and with the ability to integrate and consolidate programs, has the most promise of avoiding access problems for the community while enhancing population health.

The Affordable Care Act encourages coordination of care, population health and care provided in the most appropriate settings. Inpatient acute care is receiving less emphasis as health-care delivery evolves in a manner consistent with the "Triple Aim" – better health, better care experience and lower per capita costs. The sale of O'Connor and Saint Louise provides an opportunity to enhance the ability of the local health care system to improve population health in a cost-effective manner, rather than further fragment the health care system.

Integrating O'Connor and Saint Louise into the SCVMC system has promise to improve services available to the community without adversely affecting other local hospitals. It would consolidate services where appropriate, and reduce future capital costs on the part of SVCMC. Major opportunities for integration and coordination of services and reducing future capital expenditures include:

(1) Consolidating O'Connor's and SCVMC's relatively low-volume cardiac surgery programs. An underutilized heart surgery program is a double-edged sword. Low volume is not conducive

to quality care, and efforts to increase volume may involve inappropriate surgery, or divert surgeries from competing programs, thereby endangering the competitors' remaining patients;

(2) All three hospitals have busy emergency services. Coordination of the three emergency service programs would improve the flow of emergency visits and subsequent hospitalization if needed. Merger of the O'Connor and SCVMC emergency services would ease bottlenecks. It is not known how an external owner would operate the O'Connor emergency service. If it is the source of admission primarily of low-paying patients, it could take actions that would adversely affect SCVMC's emergency service;

(3) SCVMC has planned the construction of a 104-bed replacement tower (Bed Building 2) to meet seismic-safety requirements. Current estimated capital costs for this project are $419 million. Access to O'Connor's seismically-compliant beds would eliminate the need for the Bed Building 2 project, thus saving over $400 million in capital expenditures; and

(4) SCVMC already coordinates programs with O'Connor and Saint Louise. SCVMC physicians perform deliveries at St. Louise, provide coverage for O'Connor's neonatal intensive care unit, and SVCMC's Gilroy clinic refers obstetrics cases to Saint Louise. SCVMC is also the logical new home for the O'Connor family practice residency program, the associated family practice clinic and the inpatient referral support O'Connor currently provides to community clinics.

APPENDIX A

TABLE A1
ZIP-CODE DEFINITIONS OF SERVICE AREAS

O'Connor Hospital	Downtown	Saint Louise Regional Medical Center
95008	95002	95020
95035	95110	95023
95050	95112	95037
95051	95113	95046
95110	95116	
95111	95131	
95112	95133	
95116	95134	
95117		
95118		
95121		
95122		
95123		
95124		
95125		
95126		
95127		
95128		
95129		
95131		
95132		
95133		
95135		
95136		
95148		

TABLE A2
CENSUS-TRACT DEFINITIONS OF SERVICE AREAS
AS DEFINED IN 2010 U.S. CENSUS

O'Connor Hospital	Downtown	Saint Louise Regional Medical Center
500100	500100	512100
500200	500200	512200
500300	500800	512305

O'Connor Hospital	Downtown	Saint Louise Regional Medical Center
500400	500901	512307
500500	500902	512308
500600	501000	512309
500800	501101	512310
500901	501102	512311
500902	501200	512312
501000	501300	512313
501101	501401	512314
501102	501402	512401
501200	501501	512402
501300	501502	512503
501401	501600	512505
501402	501700	512506
501501	503112	512508
501502	503113	512509
501600	503601	512510
501700	503602	512602
501800	503710	512603
501900	503711	512604
502001	503712	513500
502002	503713	
502101	503707	
502102	503708	
502201	503709	
502202	504322	
502301	504323	
502302	504311	
502400	504316	
502500	504317	
502601	504318	
502603	504319	
502604	504410	
502701	504602	
502702	505008	
502800	505009	
502901	505006	
502902	505100	
502903		
502906		
502907		

O'Connor Hospital	Downtown	Saint Louise Regional Medical Center
502908		
502909		
502910		
503001		
503002		
503003		
503105		
503108		
503110		
503111		
503112		
503113		
503115		
503116		
503117		
503118		
503121		
503122		
503123		
503204		
503207		
503208		
503210		
503211		
503212		
503213		
503214		
503217		
503218		
503304		
503305		
503306		
503312		
503313		
503315		
503321		
503322		
503323		
503324		
503325		

O'Connor Hospital	Downtown	Saint Louise Regional Medical Center
503326		
503327		
503329		
503330		
503331		
503332		
503333		
503336		
503337		
503401		
503402		
503504		
503506		
503507		
503508		
503509		
503510		
503511		
503601		
503602		
503703		
503707		
503708		
503709		
503710		
503711		
503712		
503713		
503802		
503803		
503804		
503902		
503903		
504001		
504002		
504101		
504102		
504201		
504202		
504307		

O'Connor Hospital	Downtown	Saint Louise Regional Medical Center
504308		
504311		
504314		
504315		
504316		
504317		
504318		
504319		
504320		
504321		
504322		
504323		
504410		
504411		
504412		
504413		
504414		
504415		
504416		
504417		
504418		
504420		
504421		
504422		
504423		
504504		
504505		
504506		
504507		
505006		
505100		
505202		
505203		
505301		
505302		
505303		
505304		
505305		
505401		
505402		

O'Connor Hospital	Downtown	Saint Louise Regional Medical Center
505403		
505500		
505600		
505700		
505800		
505900		
506000		
506101		
506102		
506103		
506202		
506203		
506204		
506301		
506302		
506304		
506305		
506401		
506402		
506501		
506502		
506503		
506601		
506603		
506606		
506701		
506702		
506703		
506802		
506803		
507903		
507904		
507905		
507906		
508102		
508507		
511915		
511916		
512005		
512017		

O'Connor Hospital	Downtown	Saint Louise Regional Medical Center
512019		
512020		
512021		
512022		
512023		
512024		
512025		
512026		
512027		
512029		
512030		
512031		
512036		
512037		
512042		
512043		
512045		
512047		
512052		
512053		
513500		

Source: Santa Clara County Public Health Department.

APPENDIX B

SAN JOSE MEDICAL CENTER CLOSURE STUDY UPDATE

Introduction

This update is included in the Impact Analysis of the Daughters of Charity hospital sale due to the importance of the Downtown San Jose area in terms of the relatively high number of Medi-Cal and uninsured, indigent consumers residing in this area, the relatively high projected population growth in this area, and the proximity of this geographic area to both O'Connor Hospital and Santa Clara Valley Medical Center. This update begins with a discussion of the situation during 2004, immediately preceding the closure of San Jose Medical Center, in terms of hospital services and other health-care concerns, and projected population growth and need for hospital beds. It follows with a discussion of the current environment in terms of hospital utilization and capacity, and projections to 2040.

I. The Situation In Late 2004

In 2004 Santa Clara County and the City of San Jose commissioned a study of the impact of the pending closure of San Jose Medical Center (SJMC) on the residents of the Downtown Area. SJMC was the only hospital located within the Downtown Area, as defined by Santa Clara County, the City of San Jose and the Save San Jose Medical Center Coalition, a community group established to try to prevent SJMC's closure.[8]

At the time the study commenced, it was expected that closure would occur in 2007. Most of SJMC's services were to be relocated to Regional Medical Center (both hospitals were owned by HCA Healthcare), including its Level II trauma center. Regional Medical Center, which is located some 2.5 miles from the SJMC site, planned to add approximately 75 general-acute-care beds by 2007. The planned consolidation of both hospitals resulted in a net reduction of 252 licensed general-acute-care (GAC) beds and 26 skilled-nursing beds.

The 2007 closure target date would have allowed Regional's modifications and SJMC's closure to be fully coordinated. On September 8, 2004, however, HCA accelerated SJMC's closure date from 2007 and gave 90-days' notice of its closure. SJMC's primary value to the community was its trauma center and emergency service in general, and non-hospital services (such as its Family Practice Center, the Stanford-affiliated family practice residency program, and numerous private physician offices and medical support businesses located near the hospital that were relocated with the hospital's closure). Its payer mix was not conducive to profitability, let alone accumulating the reserves necessary to keep its plant and equipment state of the art. Yet for medical emergencies occurring in the Downtown Area, SJMC was a valued resource.

[8] Henry W. Zaretsky & Associates, Inc., San Jose Medical Center Closure Study Final Report, November 15, 2004. ("2004 Report") The Report is available at http://henryzaretsky.com/downloads/SJMC_Closure_Impact_Study.pdf.

HCA had reduced or relocated many of SJMC's programs years prior to its planned closure, and thus its volume of service had been reduced considerably; its obstetrics program was moved to Regional Medical Center in 2000 and its geriatric-psychiatric program was moved to Good Samaritan Hospital (also an HCA hospital) in 1998. Only about one-third of its licensed beds were filled in 2004. At least partly due to relocation of services, SJMC had a relatively low market share of total discharges and patient days originating in the Downtown Area.

The hospitals located closest to SJMC, and therefore expected to absorb most of its displaced inpatients, were Santa Clara Valley Medical Center (SCVMC), O'Connor Hospital and Regional Medical Center.

At the time of the 2004 study, substantial population growth was expected in the Downtown Area, especially among the middle-aged and elderly age groups, which have the highest hospital use rates. The City of San Jose had recently approved an incentive program for downtown market-rate housing, and this market-rate-housing population was expected to grow substantially over the coming few years. According to population projections generated by the Association of Bay Area Governments (ABAG) subsequent to the 2000 Census, between 2003 and 2030, while total downtown-area population was projected to increase by 74 percent, the 65-and-over and 45-64 populations were expected to grow 308 percent and 147 percent, respectively. This growth mix was projected in the "2004 Report" to increase the demand for GAC beds in the Downtown Area by 151 percent over this period; double the rate of growth of the total population.

During the year just prior to its closure, SJMC was licensed for 302 GAC beds, 32 percent of which were filled. If SJMC had remained in operation and maintained its 2004 market share in each age group, it was projected that by 2020 demand for its services would warrant a 200-bed hospital (out of 2004 licensed GAC beds of 302). Depending on a variety of factors, including available capacity at nearby facilities, financial feasibility and transportation patterns, projected demand would warrant either a 200-bed hospital located in the Downtown Area, or equivalent capacity in hospitals accessible to the downtown population. Maintaining SJMC's market share, however, would have been unlikely given Regional's 75-bed expansion.

Given the population and patient-day projections, if SJMC were to remain in operation, (SCVMC) was projected to reach capacity (defined as 80-percent occupancy of licensed GAC beds) by 2015.[9] O'Connor Hospital, however, was projected to continue to have excess capacity beyond 2030.[10]

In 2004 Regional Medical Center operated at 71-percent occupancy (prior to SJMC's closure). By 2020, after its planned expansion, it was projected to bump up against capacity.[11]

Many residents of the community surrounding SJMC regularly used SJMC's emergency room and outpatient services (i.e., outpatient surgery; physical, occupational and speech therapy; and radiological and laboratory tests) and nearby physician offices. Elderly residents of the Downtown Area had used these services for many years. They expressed that they, "feel at home there." Many of their physicians

[9] "2004 Report," Table 21A, p. 43.
[10] Op. cit., Table 22A, p. 45.
[11] Op. cit., Table 23A, p. 46.

were located near SJMC, as was SJMC's cancer clinic and a nursing home. They feared that when the hospital closed, the physicians would relocate and the SJMC cancer center will close. People dependent on public transit would have more difficulty accessing physician services, and many elderly people do not have access to an automobile.

Indigent consumers without Medi-Cal coverage (i.e., unsponsored) generally obtain non-emergency care at SCVMC regardless of their area of residence within Santa Clara County. This was also the case for unsponsored residents of the Downtown Area. They generally did not have access to SJMC or nearby physicians for non-emergency care. Thus, SJMC's closure would primarily affect their access to nearby emergency services only.

Given SJMC's payer mix, which was skewed toward Medicare and away from private insurance, closure was likely to affect the three remaining major hospitals as follows: (1) virtually all non-trauma Medicare and non-trauma privately-insured patients would go to O'Connor or Regional; (2) the bulk of Medi-Cal patients would go to SCVMC; and (3) virtually all unsponsored patients would go to SCVMC. This scenario was expected to result in roughly a proportional split of SJMC's former patients among these three hospitals. In 2003, SJMC incurred some $2 million in costs for caring for unsponsored patients. While these unreimbursed costs would be shifted to SCVMC, they would be at least partially offset by increased Medi-Cal volume and associated disproportionate share revenues. Trauma patients that would have gone to SJMC would now be diverted to other trauma centers irrespective of payer source. SJMC's trauma center was replaced at Regional in 2005.

Both Regional and O'Connor planned to add physician-office space on or near their campuses. This would further encourage an exit of physicians from the Downtown Area. In 2004, O'Connor opened a primary care clinic just south of the Downtown Area, which has since closed. This only partially, and temporally, eased an access problem.

The Gardner Family Health Network provided primary care services through five community clinics, three of which are located in the Downtown Area. The Gardner clinics were likely to experience a major increase in volume of uninsured and Medi-Cal outpatients as SJMC physicians leave the Downtown Area.

SCVMC did not have a health center in the Downtown Area, although one was called for in its strategic facilities plan adopted in 2000. There was an interest on the part of SCVMC in opening a health center and an urgent care center in the Downtown Area, and in taking over the SJMC family practice residency program. The family practice residency program, however, moved to O'Connor Hospital, as did the Family Health Center (staffed by the residents) and Family Practice Medical Associates (the faculty practice plan), both formerly located across the street from SJMC.

In 2012, SCVMC opened a health center adjacent to the SJMC site – Downtown Health Center. It is managed by Gardner Family Health Network. While it does not yet include an urgent care center, the option will be considered if demand warrants. Extrapolating from the July 1, 2013-March 31, 2014

period,[12] the Downtown Health Center should generate approximately 3,900 visits for the fiscal year ending June 30, 2014.

Of SJMC's non-trauma outpatient volume during 2003, 17,533 visits originated in the Downtown Area.[13] Over 10,000 of these visits were through the emergency room. The remainder represented outpatient surgeries, various x-ray and laboratory tests and physical-therapy and radiation treatments. If we assume half the downtown population's non-trauma emergency visits were in fact not emergencies, SJMC had about 12,000 routine outpatient visits by Downtown Area patients in 2003. These routine visits would be diverted to other hospitals and to physician offices and clinics upon SJMC's closure. The emergency visits would be shifted to other hospital emergency rooms. This does not include visits to physician offices that would be relocated.

It was believed that outpatient visits to private physicians in the area adjacent to SJMC and to the Family Health Center and Family Practice Medical Associates totaled about 30,000 per year. Relocation of these offices, combined with elimination of SJMC's outpatient services, would require the local population to obtain over 40,000 non-emergency visits outside the immediate area, which include physician office visits, clinic visits, outpatient surgeries, laboratory and x-ray tests and various types of therapies.

Travel times between SJMC and its three closest hospitals – Regional, SCVMC, and O'Connor – for automobile transport during non-rush hours and ambulance transport (six to 10 minutes) do not create additional burdens for patients able to use these modes. During rush hour, however, and for patients without access to an automobile, travel times for emergency conditions could range from 30 minutes to over one hour. This had the potential to increase demand for costly 911 transports for non-trauma emergencies.

II. Projections Made in 2004 versus Current Situation

Projections made in 2004 of future bed needs, which formed part of the basis for inferences regarding the likely impact of SJMC's closure on the Downtown population, relied on calculations of historical patient-day utilization rates according to age group and population projections by age group from 2005 to 2030. The latter were obtained from the Association of Bay Area Governments (ABAG). The former were derived from age-specific patient days on behalf of residents of the Downtown Area, divided by ABAG population estimates according to age group for the same geographic area, obtained from the Office of Statewide Health Planning and Development (OSHPD) discharge data.

Definition of Service Area

The Downtown Service Area was not defined according to SJMC's utilization patterns. It was defined as "the area encompassing San Jose City Council Districts 3 and 5 east to Route 680, north end of District 7, south end of District 4 and Alviso"[14]. The area was defined in terms of census tracts. A zip-code

[12] "Gardner Clinic and Patient Mix," memorandum from Amy Carta, Assistant Director, Santa Clara Valley Hospital and Health System, May 16, 2014.
[13] "2004 Report," Table 36, p. 63.
[14] "2004 Report," page 22.

approximation was made to enable use of OSHPD discharge data. Figure 1 shows the Downtown Service Area, along with two other service areas (O'Connor Hospital and St. Louise Regional Hospital), that are discussed in Section I of the "Impact Analysis."

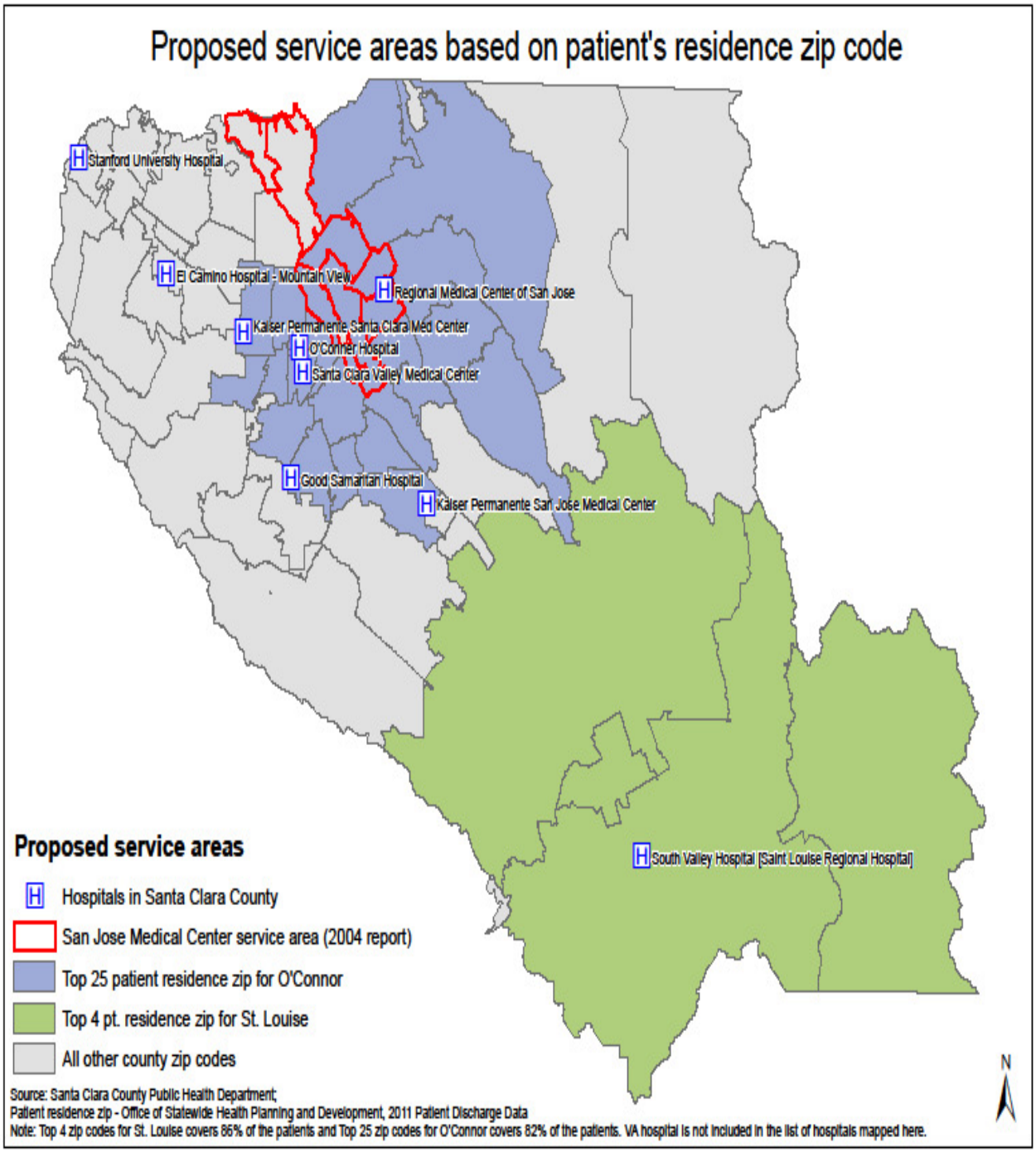


FIGURE 1

Changes Since 2004

Table 1 presents data on the market shares of discharges of hospitals for patients originating in the Downtown Area, comparing 2003 with 2012. It appears that O'Connor Hospital gained the greatest number of patients since SJMC's closure; adding 508 patients notwithstanding a drop in total discharges originating in the area of 715, and notwithstanding Regional Medical Center's relative proximity to SJMC.

TABLE 1
MARKET SHARES OF ACUTE-CARE DISCHARGES
PATIENTS RESIDING IN DOWNTOWN AREA
2003 AND 2012

	Total Discharges		
Hospitals	2012	2003	% Change
Santa Clara Valley Medical Center	4,013	3,987	0.7%
Regional Medical of San Jose	3,232	3,028	6.7%
O'Connor Hospital - San Jose	1,895	1,387	36.6%
Kaiser Fnd Hosp - Santa Clara	1,729	1,739	-0.6%
El Camino Hospital	881	808	9.0%
Good Samaritan Hospital - San Jose	778	563	38.2%
Kaiser Fnd Hosp - San Jose	641	941	-31.9%
Stanford Hospital	449	314	43.0%
Lucile Salter Packard Children's Hosp. at Stanford	334	259	29.0%
St. Louise Regional Hospital	^	0	
San Jose Medical Center*	-	1,794	-100.0%
All Other Hospitals	562	424	32.5%
Total	14,529	15,244	-4.7%

*Closed in December 2004.
^ Less than 15 discharges. Data disclosure restricted by Office of Statewide Health Planning and Development.

Sources: (1) 2003 data – "2004 Report," Table 10, p. 29; and (2) 2012 data – Office of Statewide Health Planning and Development, Discharge Data Base, 2012.

Table 2 provides 2010 data on population by age group for both zip-code and census-tract definitions of the Downtown Area. Note that while the zip-code definition has a higher population count than the census-tract definition, the age distributions are similar. This is also the case using 2000 population. For comparison purposes, it is interesting to note that as of the writing of the "2004 Report," the ABAG population projection for 2010 was 213,024 based on the census-tract definition of the Downtown

area.[15] Thus, the earlier ABAG projection was 17.5 percent above what actually occurred. As will be discussed below, this over-projection fed into excessively high projections of future bed need.

TABLE 2
POPULATION ACCORDING TO AGE GROUP
ZIP-CODE AND CENSUS-TRACT DEFINITIONS OF DOWNTOWN AREA
2010

Downtown	Zip Codes		Census Tracts	
Age Group	Population	%	Number	%
Total	198,357	100.0%	181,287	100.0%
0-4 years	15,051	7.6%	13,686	7.5%
5-19 years	36,380	18.3%	32,856	18.1%
20-44 years	88,463	44.6%	82,014	45.2%
45-64 years	42,341	21.3%	38,149	21.0%
65 or older	16,122	8.1%	14,582	8.0%

Source: 2010 Census.

Table 3 shows patient days per 1,000 population for 2003 and 2012 according to age. For both years, 2003 and 2012 population estimates are linear interpolations of 2000-2005 and 2010-2015 estimates, respectively. Patient-day rates were calculated using total area acute patient days from the OSHPD 2012 discharge data based on patients residing in the Downtown zip codes, and zip-code-area population estimates for 2012. The 2003 and 2012 zip-code definition population estimates were based on a linear interpolation of census-tract area population, where the percent changes from 2000 to 2003 and 2010 to 2012 were applied to the zip-code populations for 2000 and 2010. This was necessary since the discharge data are in terms of zip codes. These per-capita patient-day rates are then applied to census-tract definitions when projecting patient days, since the ABAG population projections are only in terms of census tracts.

TABLE 3
PATIENT DAYS AND DISCHARGES PER 1,000 POPULATION
AND LENGTH OF STAY
ACCORDING TO AGE GROUP
DOWNTOWN AREA
2003 AND 2012

	2003					
	0-4 Years	5-19 Years	20-44 Years	45-64 Years	65 Years Or Greater	Total
Total Patient Days	9,974	2,308	17,841	15,490	23,034	68,647

[15] "2004 Report," Table 14, p. 37.

	2003					
	0-4 Years	5-19 Years	20-44 Years	45-64 Years	65 Years Or Greater	Total
Total Discharges	1,707	707	5,700	3,298	3,831	15,243
Population	16,202	43,973	92,220	35,795	14,544	202,734
PD/1000	**615.6**	**52.5**	**193.5**	**432.7**	**1,583.7**	**338.6**
Disch/1000	105.4	16.1	61.8	92.1	263.4	75.2
LOS	5.84	3.26	3.13	4.70	6.01	4.50
	2012					
	0-4 Years	5-19 Years	20-44 Years	45-64 Years	65 Years Or Greater	Total
Total Patient Days	7,199	2,194	15,803	15,501	19,364	60,061
Total Discharges	1,635	738	5,019	3,386	3,751	14,529
Population	16,211	38,828	91,367	45,960	18,718	211,084
PD/1000	**444.08**	**56.51**	**172.96**	**337.27**	**1,034.51**	**284.54**
Disch/1000	100.86	19.01	54.93	73.67	200.40	68.83
LOS	4.40	2.97	3.15	4.58	5.16	4.13

Source: "2004 Report," Table 12, p. 35, Office of Statewide Health Planning and Development 2012 Discharge Data, Association of Bay Area Governments population projections and 2010 Census.

Note that in every age group except 5-19 years, patient days and discharges per 1,000 population have dropped from 2003 to 2012. Note also that in every age group except 20 to 44, length of stay has also fallen. These reduced utilization rates, combined with lower population growth than expected in 2004, combine to make the bed-need projections generated in 2004 greater than what is projected at this time. It is all but certain that the lower-than-projected population growth and the reduction in utilization rates can be partially attributed to the Great Recession, officially lasting from December 2007 to June 2009.

Fresh Projections

Using the patient-days-per-1,000-population calculations in Table 3, patient days by age group are projected to 2040 using ABAG population projections. These are then transformed to bed need based on an optimal occupancy rate of 80 percent. The bed need is then allocated to each hospital based on 2012 market shares.

Notwithstanding the drop in utilization rates since 2003, the projections presented here are based on holding constant the 2012 patient-days-per-1,000-population estimates within each age group. The assumption of constant utilization rates is based on the assumption that the expected increase in demand for health-care services facilitated by the Affordable Care Act (ACA) will be offset by ACA and private-sector initiatives encouraging coordination of care and payment incentives discouraging

inpatient care. Moreover, according to a recent study,[16] much of the increased utilization on the part of the newly insured is due to pent up demand that is only temporary. In addition, since these utilization projections are age adjusted, the effect of an aging population is already taken into account.

Table 4 shows projections of total patient days according to hospital, based on the patient-day utilization rates in Table 3, applied to population projections by age. This assumes each hospital's market share remains at its 2012 level. While in Table 1 above SCVMC has the highest market share of discharges, Regional Medical Center has the highest market share of patient days. O'Connor ranks a distant third behind SCVMC.

TABLE 4
PROJECTION OF TOTAL PATIENT DAYS ACCORDING TO HOSPITAL
DOWNTOWN AREA
2012-2040

Hospitals	2012*	2012	2015	2020	2025	2030	2035	2040
Regional Medical of San Jose	16,071	14,626	16,467	19,827	23,764	28,376	32,924	36,226
Santa Clara Valley Medical Center	15,590	14,188	15,974	19,234	23,052	27,527	31,939	35,142
O' Connor Hospital - San Jose	6,619	6,024	6,782	8,166	9,787	11,687	13,560	14,920
Kaiser Fnd Hosp - Santa Clara	6,596	6,003	6,758	8,138	9,753	11,646	13,513	14,868
Good Samaritan Hospital - San Jose	3,350	3,049	3,433	4,133	4,954	5,915	6,863	7,551
El Camino Hospital	3,333	3,033	3,415	4,112	4,928	5,885	6,828	7,513
Kaiser Fnd Hosp - San Jose	2,457	2,236	2,518	3,031	3,633	4,338	5,034	5,538
Stanford Hospital	2,148	1,955	2,201	2,650	3,176	3,793	4,401	4,842
Lucile Salter Packard Children's Hosp. at Stanford	1,574	1,432	1,613	1,942	2,327	2,779	3,225	3,548
St. Louise Regional Hospital	45	41	46	56	67	79	92	101
All Other Hospitals	2,278	2,073	2,334	2,810	3,368	4,022	4,667	5,135
Total	60,061	54,659	61,541	74,099	88,810	106,048	123,045	135,384
% Increase from 2012			12.6%	35.6%	62.5%	94.0%	125.1%	147.7%

*In terms of zip-code area definition. The second 2012 column and all subsequent years are based on the census-tract definition of the Downtown Area, using the patient-days-per-1,000 population calculations from Table 3 according to age group.

Source: OSHPD Discharge Data, restricted to general-acute-care (GAC) discharges originating in Downtown Area, 2012; and ABAG population projections.

[16] Lo, Nigel, Dylan H. Roby, Jessica Padilla, Xiao Chen, Erin N. Salce, Nadereh Pourat and Gerald F. Komiski, "Increased Service Use Following Medicaid Expansion Is Mostly Temporary: Evidence from California's Low Income Health Program," Health Policy Brief, UCLA Center for Health Policy Research, October 2014.

Regional Medical Center, SCVMC and O'Connor Hospital collectively account for a 64 percent market share of patient days originating in the Downtown Area. If Kaiser-Santa Clara is added, the collective market share is 75 percent.

Table 5 takes the next step, transforming the patient-day projections to required beds at 80-percent occupancy.

TABLE 5
BED NEED PROJECTIONS ACCORDING TO HOSPITAL
AT 80-PERCENT OCCUPANCY STANDARD
AND 2012 LICENSED GENERAL ACUTE CARE BEDS AND OCCUPANCY
DOWNTOWN AREA
2012-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Licensed Beds	2012 Occupancy
Regional Medical of San Jose	50	56	68	81	97	113	124	282	54.0%
Santa Clara Valley Medical Center	48	55	66	79	94	109	120	524	50.8%
O' Connor Hospital - San Jose	21	23	28	34	40	46	51	334	36.2%
Kaiser Fnd Hosp - Santa Clara	21	23	28	33	40	46	51	327	74.3%
Good Samaritan Hospital - San Jose	10	12	14	17	20	24	26	377	51.5%
El Camino Hospital	10	12	14	17	20	23	26	418	49.3%
Kaiser Fnd Hosp - San Jose	8	9	10	12	15	17	19	242	49.0%
Stanford Hospital	7	8	9	11	13	15	17	583	61.6%
Lucile Salter Packard Children's Hosp. at Stanford	5	6	7	8	10	11	12	311	70.5%
St. Louise Regional Hospital	0	0	0	0	0	0	0	72	46.4%
All Other Hospitals	7	8	10	12	14	16	18		
Total	187	211	253	304	363	421	462	3,470	55.1%

Source: Table 4 and OSHPD Annual Utilization Report of Hospitals, 2012.

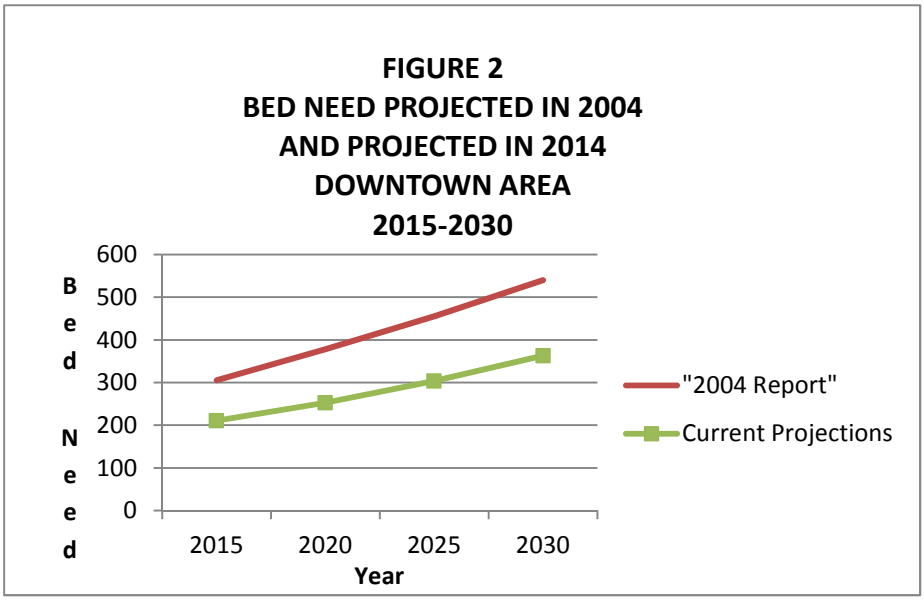
Table 6 compares the Table 5 total bed-need projections with those in those in the "2004 Report." The considerably lower projections in Table 5 are the result of two changes since 2004: (1) lower current ABAG population projections relative to those generated in the previous decade; and (2) lower patient-day utilization rates in 2012 relative to 2003. These differences render the conclusions in the "2004 Report" of projected bed shortages in the Downtown Area no longer applicable. Figure 2 illustrates the widening gap over time. Notwithstanding the lower utilization and population growth than projected in the "2004 Report," patient days are projected in Table 4 to increase 148 percent between 2012 and 2040 in the Downtown Area. This compares to county-wide patient day projections of 63 percent for

the county as a whole.[17] The relatively high percentage growth in the Downtown Area reflects the "Northern Corridor," which extends into North San Jose, and has experienced, and is projected to experience further, rapid growth.

TABLE 6
COMPARISON OF BED-NEED PROJECTIONS GENERATED IN 2004
WITH THOSE CURRENTLY GENERATED
DOWNTOWN AREA
2015-2030

	Year			
Source of Projections	2015	2020	2025	2030
"2004 Report"	305	378	455	540
Current Projections	211	253	304	363

Sources: "2004 Report," Table 16, p. 38; and Table 5 above.



As discussed in Section II of the "Impact Analysis," county-wide bed-need projections suggest that SCVMC and O'Connor Hospital are not likely to experience an aggregate bed shortage (i.e., total GAC beds at 80-percent occupancy) for the foreseeable future (i.e., by 2035). By 2030, Regional is projected to bump up against current capacity. Of the four primary hospitals serving the Downtown population, only Kaiser-Santa Clara will experience a bed shortage prior to 2030; in fact it apparently already has an aggregate bed shortage. Thus, other than for Kaiser Health Plan members, the Downtown Area is projected to have sufficient bed capacity for the foreseeable future.

[17] Table 25, "Analysis."

Table 7 presents data on the three primary non-Kaiser hospitals serving the Downtown Area – Regional Medical Center, SCVMC and O'Connor Hospital – in terms of their estimated need for beds to serve Downtown as a percentage of their estimated beds needed to serve their share of the county as a whole. The latter is from Table 26 in the "Impact analysis." The table also shows their Downtown bed need estimated for 2012, current licensed GAC beds and 2012 GAC occupancy percentage. Regional has the highest occupancy rate and percentage of bed need deriving from the Downtown Area. The increasing percentages over time reflect the Downtown Area's higher projected growth rates.

TABLE 7
ESTIMATED DOWNTOWN-AREA BED NEED
AS A PERCENTAGE OF COUNTY-WIDE BED NEED
REGIONAL MEDICAL CENTER, SANTA CLARA VALLEY MEDICAL CENTER
AND O'CONNOR HOSPITAL
2012-2040

Hospitals	2012	2015	2020	2025	2030	2035	2040	2012 Bed Need	2012 Licensed Beds	2012 Occupancy
Regional Medical of San Jose	29.6%	31.3%	33.9%	36.3%	39.0%	41.8%	45.0%	50	282	54.0%
Santa Clara Valley Medical Center	17.0%	17.9%	19.4%	20.8%	22.3%	23.9%	25.7%	48	524	50.8%
O' Connor Hospital - San Jose	14.0%	14.8%	16.0%	17.1%	18.4%	19.8%	21.3%	21	334	36.2%

Source: Table 5 above and Table 26 in Section III, "Impact Analysis."

Table 8 presents 2012 data on patient days according to major payer. The primary Medicare provider by far is Regional Medical Center. With respect to Medi-Cal, SCVMC ranks first, Regional ranks second and O'Connor third; all other hospitals trail considerably. Table 9 shows the market share percentages of patient days.

TABLE 8
PAYER MIX OF PATIENT DAYS ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN DOWNTOWN AREA
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Regional Medical of San Jose	10,574	2,274	1,666	1,001	^	239	310	16,071
Santa Clara Valley Medical Center	2,456	9,804	819	^	1,702	670	139	15,590
O' Connor Hospital - San Jose	2,623	1,275	1,437	762	^	^	522	6,619
Kaiser Fnd Hosp - Santa Clara	1,944	211	4,381	58	^	^	^	6,596
Good Samaritan Hospital - San Jose	695	426	2,037	46	^	^	139	3,350

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
El Camino Hospital	771	141	2,263	^	^	^	90	3,333
Kaiser Fnd Hosp - San Jose	1,111	71	1,234	^	^	^	^	2,457
Stanford Hospital	966	225	523	239	^	^	195	2,148
Lucile Salter Packard Children's Hosp. at Stanford	^	189	791	^	^	^	594	1,574
St. Louise Regional Hospital	^	^	^	^	^	^	^	^
All Other Hospitals	761	180	1,111	155	^	^	69	2,278
Total	21,907	14,809	16,274	2,378	1,709	918	2,066	60,061

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development Discharge Data, restricted to general-acute-care (GAC) discharges originating in Downtown Area, 2012.

TABLE 9
MARKET SHARE PERCENTAGES OF PATIENT DAYS
ACCORDING PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN DOWNTOWN AREA
2012

	Expected Source of Payment							
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	County Indigent Program	Other Indigent	Other Payer	Total
Regional Medical of San Jose	48.3%	15.4%	10.2%	42.1%	^	26.0%	15.0%	26.8%
Santa Clara Valley Medical Center	11.2%	66.2%	5.0%	^	99.6%	73.0%	6.7%	26.0%
O' Connor Hospital - San Jose	12.0%	8.6%	8.8%	32.0%	^	^	25.3%	11.0%
Kaiser Fnd Hosp - Santa Clara	8.9%	1.4%	26.9%	2.4%	^	^	^	11.0%
Good Samaritan Hospital - San Jose	3.2%	2.9%	12.5%	1.9%	^	^	6.7%	5.6%
El Camino Hospital	3.5%	1.0%	13.9%	^	^	^	4.4%	5.5%
Kaiser Fnd Hosp - San Jose	5.1%	0.5%	7.6%	^	^	^	^	4.1%
Stanford Hospital	4.4%	1.5%	3.2%	10.1%	^	^	9.4%	3.6%
Lucile Salter Packard Children's Hosp. at Stanford	^	1.3%	4.9%	^	^	^	28.8%	2.6%
St. Louise Regional Hospital	^	^	^	^	^	^	^	^
All other hospitals	3.5%	1.2%	6.8%	6.5%	^	^	3.3%	3.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Discharge Data, restricted to general-acute-care (GAC) discharges originating in Downtown Area, 2012.

Table 10 shows emergency-room visits according to payer, and Table 11 shows the market-share percentages. In terms of patient days, O'Connor's Medi-Cal market share is 9 percent, while its market share of Medi-Cal emergency visits is 34 percent. SCVMC and O'Connor together account for 73 percent of Medi-Cal visits. While, as seen in Table 9 above, Regional Medical Center accounts for 78 percent more Medi-Cal patient days than does O'Connor, the latter accounts for more than double Regional's Medi-Cal emergency visits, notwithstanding Regional's status as a Level II trauma center.

TABLE 10
PAYER MIX OF EMERGENCY DEPARTMENT VISITS
ACCORDING TO HOSPITAL
PATIENTS ORIGINATING IN DOWNTOWN AREA
2012

	Expected Source of Payment									
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA or CHAMPUS (Tricare)	Other Payer	Point Of Service	Title V	Workers Comp	Total
Regional Medical of San Jose	2,001	2,067	2,057	3,289	52	6,379	^	16	96	15,957
Santa Clara Valley Medical Center	1,874	5,360	874	2,516	^	2,937	^	^	108	13,679
O'Connor Hospital - San Jose	1,016	4,684	1,653	1,191	35	37	^	^	181	8,797
Kaiser Fnd Hosp - Santa Clara	47	327	4,665	207	^	^	^	^	124	5,371
Kaiser Fnd Hosp - San Jose	53	281	2,329	278	^	^	^	^	57	3,002
El Camino Hospital	203	422	863	328	^	20	^	^	94	1,937
Good Samaritan Hospital - San Jose	172	60	720	244	^	311	^	^	23	1,537
Stanford Hospital	124	223	220	200	^	^	^	^	31	811
St. Louise Regional Hospital	^	57	35	^	^	^	^	^	^	124
All other hospitals	212	364	878	491	^	36	^	^	66	2,076
Total	5,710	13,845	14,294	8,752	130	9,722	20	23	794	53,291

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

TABLE 11
MARKET SHARE PERCENTAGES OF EMERGENCY VISITS
ACCORDING PAYER MIX AND HOSPITAL
PATIENTS ORIGINATING IN DOWNTOWN AREA
2012

	Expected Source Of Payment										
Hospitals	Medicare	Medi-Cal	Private Coverage	Self Pay	VA Or CHAMPUS (Tricare)	Disability	Other Payer	Point Of Service	Title V	Worker s Comp	Total
Regional Medical of San Jose	35.0%	14.9%	14.4%	37.6%	40.0%	^	65.6%	^	69.6%	12.1%	29.9%
Santa Clara Valley Medical Center	32.8%	38.7%	6.1%	28.7%	^	^	30.2%	^	^	13.6%	25.7%
O'Connor Hospital - San Jose	17.8%	33.8%	11.6%	13.6%	26.9%	^	0.4%	^	^	22.8%	16.5%
Kaiser Fnd Hosp - Santa Clara	0.8%	2.4%	32.6%	2.4%	^	^	^	^	^	15.6%	10.1%
Kaiser Fnd Hosp - San Jose	0.9%	2.0%	16.3%	3.2%	^	^	^	^	^	7.2%	5.6%
El Camino Hospital	3.6%	3.0%	6.0%	3.7%	^	^	0.2%	^	^	11.8%	3.6%
Good Samaritan Hospital - San Jose	3.0%	0.4%	5.0%	2.8%	^	^	3.2%	^	^	2.9%	2.9%
Stanford Hospital	2.2%	1.6%	1.5%	2.3%	^	^	^	^	^	3.9%	1.5%
St. Louise Regional Hospital	^	0.4%	0.2%	^	^	^	^	^	^	^	0.2%
All other hospitals	3.7%	2.6%	6.1%	5.6%	^	^	0.4%	^	^	8.3%	3.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	^	100.0%	^	100.0%	100.0%	100.0%

^ indicates too few observations in cell (i.e., <15) to disclose per OSHPD.
Source: Office of Statewide Health Planning and Development, Emergency Department Data, 2012.

III. Conclusion

The "2004 Report" was prompted by major concerns on the part of organized consumers in the Downtown Area over the expected adverse impact of SJMC's impending closure on access to health services. That Report, which was an attempt to assess the likely impact of SJMC's closure on the Downtown population, found that bed shortages were likely to commence around 2020. There were also concerns that Regional Medical Center, the hospital closest to the Downtown Area, would not proceed with its planned expansion. At that time Regional Medical Center had recently cancelled its Medi-Cal contract and many SJMC physicians expressed a preference for O'Connor Hospital over Regional. In fact, Regional did go ahead with its planned expansion. It appears, however, that much of

the gap left by SJMC's closure was filled by O'Connor Hospital, which in 2004 had substantial excess capacity (and still does).

Updating the 2004 projections of bed need with currently available utilization data and population projections suggests that bed shortages are far from imminent; the three major non-Kaiser hospitals serving downtown residents – Regional, SCVMC and O'Connor – appear to have sufficient capacity to serve the downtown population for the foreseeable future, although by 2030 Regional could hit capacity. The new, lower bed need projections are the result of two factors: (1) lower per-capita patient-day rates for all age groups in 2012 versus 2003; and (2) lower actual population in 2010 than projected in 2003. These two factors combine to lower projected bed needs by approximately 30 percent from those set forth in the "2004 Report." Notwithstanding, however, the lower utilization and population growth than projected in the "2004 Report," patient days are now projected to increase 148 percent between 2012 and 2040 in the Downtown Area, compared to county-wide patient day projections of 63 percent. The relatively high percentage growth in the Downtown Area reflects the "Northern Corridor," which extends into North San Jose, and has experienced, and is projected to experience further, rapid growth.

While O'Connor Hospital now ranks third in total and Medi-Cal patient days on behalf of Downtown residents (with a 9 percent market share) , it ranks a close second to SCVMC (34 percent market share) with respect to Medi-Cal emergency visits on the part of Downtown residents, and both Regional and SCVMC have trauma centers. This suggests if O'Connor's emergency service were cut back, or completely eliminated, it would cause serious access problems with life-risk implications for the Downtown population, and major problems for Regional and SCVMC, which would be expected to fill the gap. These risks are particularly serious given SCVMC's overcrowded emergency service. A recent study of emergency department closures in California found that such closures were associated with a 5 percent increase in the probability of inpatient mortality at the remaining hospitals in the closure hospital's service area.[18]

[18] Liu, C., T. Srebotnjak and R.Y. Hsia, 2014, "California Emergency Department Closures Are Associated With Increased Inpatient Mortality At Nearby Hospitals," Health Affairs 33(8):1323-1329.