



### News Release

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### Study Released on Community Impact from Closure of San José Medical Center

City-County joint study finds potential risk to community health and shows future need for downtown hospital

*San José* ---- A study of the likely impacts of closing San Jose Medical Center has found that there may be greater risk to community health and forecasts the need for another downtown hospital within sixteen years.

The \$100,000 study, jointly funded by the City of San Jose and the County of Santa Clara, was released today by Mayor Ron Gonzales and Pete McHugh, Chair of the County Board of Supervisors. It was originally prompted by the announcement two years ago by Hospital Corporation of America that the company intended to close the downtown hospital by 2007.

In September this year HCA suddenly announced that it would close San Jose Medical Center in just 90 days, shuttering its doors on December 9, 2004, more than two years sooner than first planned.

According to Dr. Henry Zaretsky, who prepared the study, San Jose will need either a downtown 200-bed hospital by 2020 or equivalent capacity in nearby hospitals with accessible transportation for downtown residents to keep up with the anticipated growth in the community.

[more]

#### Impact Study of San Jose Medical Center Closure

"There is clearly growing need for medical services and urgent medical care in downtown San Jose and throughout our region, and the abrupt closure of San Jose Medical Center has only put our residents at greater risk," said Mayor Ron Gonzales.

"The closure of San Jose Medical Center shifts many of the costs of medical care from private to public dollars," said Supervisor Pete McHugh. "The County will have the immediate responsibility to provide or arrange medical services for many of the nearly 35,000 emergency room patients and 1,900 trauma patients abandoned by San Jose Medical Center."

The study also looked at the impact of the closure on serious trauma cases because San Jose Medical Center is one of three designated trauma centers in Santa Clara County. Its closure will put a greater demand on the remaining two trauma centers at Santa Clara Valley Medical Center and Stanford Hospital.

According to the study, most trauma patients arrive by ambulance or car rather than by helicopter. Some of these patients could face significant increases to their travel time to reach the other two trauma centers. The closure of the San José Medical Center could possibly affect the health of patients in the most critical medical emergencies.

"We have developed contingency plans to meet patient needs associated with the closure of SJMC. The Board of Supervisors also approved \$15 million to add 205 new clinical positions at Santa Clara Valley Medical Center," continued McHugh. "We will continue to plan for the longer term medical needs of our community."

The study also found that the patients most likely to be affected by the closure of SJMC include elderly residents, people without access to private transportation, and low-income residents.

"I am especially worried that our residents who will pay the greatest price of reduced access to medical care and emergency rooms are those who don't have any other good options," said Gonzales.

The closure of San Jose Medical Center may also have an impact on San José police and fire responses to emergency medical situations. The city and county are working together to address these issues.

The study was developed in cooperation with residents in the downtown San Jose area who participated in the technical advisory committee. The TAC provided feedback and information to the study consultant and provided a community addendum to the report.

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Other highlights of the closure impact study include:

- SCVMC should establish a downtown Valley Health Center to provide a full range of primary and urgent care services.
- The City of San Jose should hold the SJMC site available for hospital development until June 30, 2007 or until Regional Medical Center demonstrates its commitment to expand, including establishing a Level II Trauma Center.
- Patient groups most affected by the SJMC closure are elderly residents in the downtown area; low-income residents who do not have access to an automobile; and patients of local physicians who will relocate due to the closure.
- People from downtown San Jose in need of emergency services will face additional travel time to other hospitals and increased waiting times at nearby emergency departments with greater demand, which could result in death or disability

Dr. Zaretsky will present the study at the January 12, 2005 meeting of the Santa Clara County Board of Supervisors' Health and Hospital Committee meeting. Additional meetings for the community also will be scheduled.

To see the entire report of the San Jose Medical Center Closure Impact Study, go to **www.sjmayor.org** or **www.sccgov.org**.

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#### SAN JOSE MEDICAL CENTER CLOSURE STUDY<sup>\*</sup> FINAL REPORT

November 15, 2004

<sup>\*</sup> Prepared in association with pmpm® Consulting Group, Inc., Sacramento, California. The study upon which this report is based was jointly funded by Santa Clara County and the City of San Jose. The findings and opinions contained herein are the authors', and do not necessarily represent those of Santa Clara County or the City of San Jose.

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#### SAN JOSE MEDICAL CENTER CLOSURE STUDY FINAL REPORT\*

#### November 15, 2004

#### Henry W. Zaretsky & Associates, Inc.

#### **EXECUTIVE SUMMARY**

This report was commissioned by Santa Clara County and the City of San Jose to assess the expected impacts of HCA's closure of San Jose Medical Center (SJMC) on the residential, business and medical community surrounding the hospital. Following HCA's 1999 announced closure of San Jose Medical Center, the Save San Jose Medical Center Coalition was formed. The Save San Jose Medical Center Coalition presented its concerns regarding healthcare access for downtown residents to the Health and Hospital Committee of the County of Santa Clara, and proposed that the City and County undertake a study to evaluate the impact of the closure of San Jose Medical Center. The issues of the closure were discussed on multiple occasions with the Save San Jose Medical Center Coalition within the Health and Hospital Committee. The Save San Jose Medical Center Coalition secured the support of the City of San Jose to fund one-half of the study, followed by a matching commitment from the County of Santa Clara. From this point, the County and City, along with a Technical Advisory Committee comprised of interested community representatives, undertook engagement of a consultant to study the impact of the San Jose Medical Center closure. This report is the product of that engagement.

The Scope of Services for this study was jointly determined by Santa Clara County, the City of San Jose, the Save San Jose Medical Center Coalition and this study's Technical Advisory Committee. 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 are owned by HCA Healthcare), including its Level II trauma center. Regional Medical Center, which is located some 2.5 miles from SJMC, plans to add approximately 75 general-acute-care beds to its facility at Regional Medical Center by 2007. The planned consolidation of both hospitals will result in a net reduction of 252 licensed general-acute-care (GAC) beds and 26 skillednursing beds. The 2007 closure target date would have allowed Regional's modifications and SJMC's closure to be fully coordinated.

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On September 8, 2004, however, HCA accelerated SJMC's closure date from 2007 and gave 90-days notice of its closure. This unexpected announcement complicates planning for the closure and makes the short-term impact more severe than it would have been, especially with respect to trauma and emergency services in general. As this report makes clear, the long-term impact of this closure will also likely be significantly affected. The short closure notice period is likely to hamper Regional Medical Center's ability to recruit SJMC's physicians, and absorb its services and programs. As used here, "long term" refers to the next decade and beyond.

San Jose Medical Center opened in 1923 as a general-acute-care hospital. Its services include a Level II trauma center, rehabilitation, pediatric intensive care, cardiovascular surgery, a cancer center, a distinct-part-skilled-nursing facility and a family-practice residency program affiliated with Stanford University.<sup>1</sup> It is currently licensed for 302 general-acute-care (GAC) beds, and 26 skilled-nursing beds.<sup>2</sup> Until SJMC was acquired by Columbia/HCA (now HCA Healthcare) in 1996, it operated as a not-for-profit hospital. Since its acquisition, HCA has reduced or relocated programs, and its volume of service has 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 onethird of its licensed beds are filled. Its current primary value to the community is its trauma center and emergency service in general, and non-hospital services (such as the Family Practice Center, the Stanford-affiliated family practice residency program, and numerous private physician offices and medical support businesses) located near the hospital that would likely be relocated with the hospital's closure). Its payer mix is 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 near the hospital, SJMC is a valued resource.

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

Substantial population growth is expected in the downtown area, especially among the middle-aged and elderly groups, which have the highest hospital use rates. The City of San Jose has recently approved an incentive program for downtown marketrate housing, and this market-rate-housing population is expected to grow substantially over the next few years.

<sup>&</sup>lt;sup>1</sup> Under this affiliation, the residents and the faculty are paid by the hospital, and the faculty members have clinical-faculty status at Stanford.

<sup>&</sup>lt;sup>2</sup> Its skilled-nursing facility closed in September 2004.

At least partly due to relocation of services, SJMC has a relatively low market share of total discharges and patient days originating in the downtown area. It has, however, relatively large shares in the two older age groups (45-64 and 65 and over). And, not only are use rates higher among these groups, their populations are projected to grow at much higher rates than younger groups. Between 2003 and 2030, while total downtown-area population is projected to increase by 74 percent, the 65-and-over and 45-64 populations are expected to grow 308 percent and 147 percent, respectively. This growth mix is expected to increase the demand for GAC beds by 151 percent over this period; double the rate of growth of the total population.

SJMC is currently licensed for 302 GAC beds, 32 percent of which are filled. It should be noted that available beds are often a better indicator of actual capacity than licensed beds, as the latter only have to be on the license, and may not even exist. The problem with the former, however, is that the designation is far less objective than that for licensed beds. Counts of available beds can vary from year to year based on demand. Sometimes, "unavailable" licensed beds can be made available through minor alterations; other times such availability could require major construction. For these reasons, the bed-need projections discussed throughout this report are presented both in terms of licensed beds and currently available beds. In general, available beds are 80 to 90 percent of licensed beds. When currently-available beds are used, as opposed to licensed beds, bed shortage projections are generally moved up about five years.

If SJMC were to remain in operation and maintain its current market share in each age group, by 2020 demand for its services would warrant a 200-bed hospital. 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 be more difficult if Regional pursues its 75-bed expansion.

Given the population and patient-day projections, if SJMC were to remain in operation, Santa Clara Valley Medical Center (SCVMC) will reach capacity (defined as 80-percent occupancy of licensed general-acute-care beds) by 2015. O'Connor Hospital, however, will have excess capacity beyond 2030.

Regional currently operates at a 71-percent occupancy rate (prior to SJMC's closure). Without its planned 75-bed expansion in 2007, it is projected to reach capacity by 2010. By 2020, after the expansion, the hospital would again bump up against capacity.

If, after closure, SJMC's downtown patients were equally apportioned among SCVMC, O'Connor and Regional:

(1) SCVMC would have a bed shortage between 2010 and 2015;

(2) O'Connor's bed shortage would not materialize until about 2025;

(3) Regional would have a bed shortage, without its planned expansion, by 2010. With the 75-bed expansion, the shortage would not occur until after 2015; and

(4) If currently-available beds rather than licensed beds are used as the capacity measure, the bed shortages are moved up about five years. In addition, should Regional terminate its participation in the Medi-Cal program (which is under consideration as this report is being written), potential bed shortages at SCVMC and O'Connor could be moved up further.

Based on these projections, SJMC's closure could result in a bed shortage as early as mid next decade. Of greater urgency is the increased travel time for many local residents dependent on the hospital's outpatient services and affiliated physicians with offices located adjacent to the hospital. The projection of an adequate bed supply until 2015, however, is contingent on two assumptions: (1) O'Connor, which currently has substantial excess capacity, will make that capacity available to downtown residents; and (2) Regional Medical Center will proceed with its 2007 expansion plans. If either of these assumptions is not borne out, the community surrounding SJMC is likely to experience a bed shortage within the next few years.

It should be noted that the bed-need projections presented here deal with total general-acute beds, not specific bed categories (e.g., intensive-care, perinatal, pediatrics). It is reasonable to assume that hospitals having excess capacity in some bed services, and shortages in others, would, over time, make the necessary adjustments. In the short term, however, such adjustments cannot be assumed. Closure of SJMC could result in an immediate shortage of intensive-care (ICU) beds. This would be offset, however, by Regional's planned addition of ICU beds immediately upon SJMC's closure.

In general, physicians and physician organizations expressed concerns regarding difficulties in fitting in with Regional's medical staff, Regional's ability to operate a trauma center, and that the closure of SJMC would overwhelm SCVMC's emergency service, which they believe already has excessive waiting times. Many local residents use SJMC's emergency room as their primary source of care. The physicians also indicated many would move their offices from the SJMC area, and expressed a preference for O'Connor over Regional. This would cause major problems for their current patients who do not have access to automobile transportation.

Many residents of the community surrounding SJMC regularly use 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 have used these services for many years. They expressed that they, "feel at home there." Many physicians they see are located near SJMC, as is SJMC's cancer clinic and a nursing home. They fear that when the hospital closes, the physicians are likely to relocate and the SJMC cancer center will close. People dependent on public transit will have more difficulty accessing physician services, and many elderly people do not have access to an automobile.

According to the Valley Transportation Authority, it appears the only direct bus route between SJMC and Regional is Line 81, which stops one block from each hospital. It currently runs every 15-20 minutes on weekdays, and every 30 minutes on weekends. Service is less frequent in the evening, ceasing altogether at 10 pm. There is one other option that involves transferring from one bus to another. Bus service to SCVMC or O'Connor involves taking two buses. The Capital Light Rail line is some distance from Regional and is expected to offer only minor solutions to the transportation problem. Indigent consumers without Medi-Cal coverage (i.e., unsponsored) generally obtain nonemergency care at SCVMC, regardless of their area of residence within Santa Clara County. This is also the case for unsponsored residents of the downtown area. They generally do not have access to SJMC or nearby physicians for non-emergency care. Thus, SJMC's closure will affect their access to nearby emergency services only.

Emergency medical technicians and a representative of the San Jose Police Officers' Association stressed injuries from violence are relatively more prevalent in the downtown area than other parts of San Jose, and therefore SJMC is the emergency room of choice for injured police officers. The importance of travel time to an emergency room was stressed, especially for severe injuries. It is not possible, however, to quantify the impact of added travel time to Regional or SCVMC on the outcomes of such emergencies. Assaults from blunt objects, knives or gunshots accounted for 14 percent of SJMC's trauma cases. It is likely that these injuries did not all occur in areas where travel time to SJMC was significantly shorter than to other hospitals.

San Jose State University, located near SJMC, will be adding substantial student housing on campus in 2005. This is not expected, however, to generate substantial additional demand for hospital services in this area because: (1) the hospital-use rate for this age group is quite low; and (2) San Jose State students currently make relatively little use of SJMC or its physicians. It should be noted, however, that some of this new housing will be for faculty, large numbers of non student/non faculty work on campus, and the University plans for a second phase of new housing as soon as the first phase is occupied. This latter project will add about the same number of new students as the phase now nearing completion.

Tourism can be affected by SJMC's closure. According to the Convention and Visitors Bureau staff, large groups, in selecting a convention site, consider medical response time to be an important issue. Proximity to medical facilities is among the factors that make a city competitive in attracting large groups, and there are plans to

greatly expand convention facilities, involving a doubling in exhibit halls and meetingroom capacity. Thus, all things being equal, the City would be more competitive in attracting large groups with, rather than without, a hospital located near the major convention sites. This effect, however, cannot be quantified.

Given SJMC's payer mix, which is skewed toward Medicare and away from private insurance, closure will likely affect the three remaining 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 is 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 will now be diverted to other trauma centers irrespective of payer source.

Both Regional and O'Connor plan to add physician-office space on or near their campuses. This will further encourage an exit of physicians from the downtown area. O'Connor recently opened a primary care clinic just south of the downtown area. This will partially ease an impending access problem.

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

SCVMC does not have a health center in the downtown area, although one is called for in its most recent strategic plan. There is 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. It was recently announced, however, that the family practice residency program will move to O'Connor Hospital. Thus, in all likelihood, the Family Health Center (staffed by the residents) and the Family Practice Medical Associates (the faculty practice plan of the faculty), both located across the street from SJMC, will be relocated adjacent to O'Connor. On July 1, 2005, the Family Health Center will relocate to O'Connor. Eventually, the Family Practice Medical Associates will follow, most likely when the remaining two years on its lease on its current space expires.

Of SJMC's non-trauma outpatient volume during 2003, 17,533 visits originated in the downtown area. Over 10,000 of these visits are through the emergency room. The remainder represents outpatient surgeries, various x-ray and laboratory tests and physical-therapy and radiation treatments. If we assume half the downtown population non-trauma emergency visits are in fact not emergencies, SJMC had about 12,000 routine

outpatient visits (in addition to the outpatient surgeries, tests and treatments mentioned above, this would include urgent-care and primary-care visits to the emergency room) 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 current visits to physician offices that would be relocated. In the highly unlikely event that no physician offices were relocated, approximately 12,000 routine visits would have to be accommodated by downtown providers (i.e., clinics or physician offices) to enable residents to receive outpatient services without having to travel out of the immediate area.

It is believed that outpatient visits to private physicians in the area adjacent to SJMC and to the Family Health Center and Family Practice Medical Associates total 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 nonemergency visits outside the immediate area, which include physician office visits, clinic visits, outpatient surgeries, laboratory and x-ray tests and various types of therapies.

Loss of SJMC's trauma center and its emergency services in general will put a major strain on the countywide trauma system, and particular strain on SCVMC, since the county's only other trauma center (Stanford University Hospital) is located some 24 miles from SJMC. In recognition of the strain that will be placed on SCVMC, the Board of Supervisors recently authorized \$15 million in expenditures to immediately increase SCVMC's trauma capacity. While trauma cases are fairly evenly distributed among the county's current three trauma centers, SJMC has slightly higher volume, especially with respect to trauma caused by violence. Approximately 25 percent of SJMC's trauma cases arrive by helicopter, and thus could have been diverted to the other trauma centers without significant increases in travel time. For the remaining 75 percent, however, this may not be the case.

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) should 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 will most likely increase demand for costly 911 transports for non-trauma emergencies.

Since SCVMC will bear the brunt of SJMC's closure in terms of trauma, efforts to reduce strain on its emergency department are essential. It is likely its trauma cases would increase from the current 1,800 to over 3,000. And these patients will have priority over other patients waiting in the emergency department. Currently, average waiting time for emergent patients from arrival to being placed in a treatment room is 40 minutes, not including the time until the patient is actually seen by a physician. During this 40-minute period, however, they are seen by nursing personnel. For non-emergent

cases, the waiting time from arrival to being placed in a treatment room is doubled. These waiting-time averages exclude patients who give up and leave the emergency room before they are seen. It is likely most of the latter could more appropriately be treated in one of the SCVMC health centers. The bulk of these patients are most likely uninsured individuals, using the emergency room as their primary source of care. If the SJMC trauma center is not replaced, establishment of a SCVMC outpatient clinic and urgent care center in the downtown area would be a cost-effective method to reduce pressure on the emergency room and prevent an upsurge in 911 calls.

#### **Findings and Recommendations**

SJMC has a long history in the downtown San Jose area, since 1923. Since its acquisition by Columbia/HCA in 1996 (now HCA Healthcare), its service scope (its obstetrics program was moved to Regional), capacity and volume have been reduced. While it now has low occupancy and a relatively low market share in the downtown area, it is an important provider to some population groups and quite possibly an important infrastructure for many of San Jose's downtown revitalization efforts such as the Convention Center and high rise housing. And it is one of three trauma centers in Santa Clara County, treating about 2,000 cases annually.

The current groups most affected by its closure will be the following:

(1) Elderly residents of the downtown area, particularly those without access to an automobile;

(2) Low-income residents of the area in general that do not have access to an automobile;

(3) Particularly affected among these groups will be patients of local physicians who will relocate due to the closure; and

(4) Those in need of emergency services for whom additional travel time to other hospitals, coupled with the increased waiting times at nearby emergency departments, could result in death or disability. The magnitude of the effect on this group is impossible to quantify. In population-based terms it is likely to be insignificant statistically. In terms of individuals and their loved ones, however, statistical significance is not relevant. There is a widespread perception in the community that waiting times at SCVMC's emergency department are excessive. These problems will undoubtedly be exacerbated with SJMC's closure, without sufficient increases in emergency treatment capacity at SCVMC.

Because of SJMC's low occupancy and low market penetration, its closure is not expected to result in a bed shortage until about mid next decade. O'Connor Hospital has considerable excess capacity and has recently opened a primary care clinic not far from SJMC. The planned addition at Regional would further delay the onset and degree of bed shortages. If, however, O'Connor does not make its excess bed capacity available to downtown residents, and/or Regional does not go ahead with its planned 2007 expansion, a bed shortage could materialize within the next few years. SJMC's closure could result in an immediate shortage of intensive-care (ICU) beds. This would be offset, however, by Regional's planned conversion of 12 pediatric beds to ICU upon SJMC's closure.

Public transportation is insufficient. Traveling by bus between SJMC and Regional could be accomplished without having to transfer to a second bus, but involves a short walk at each end. After 10 p.m., bus transportation is not an option. Traveling to SCVMC or O'Connor requires transferring to a second bus. For obtaining routine care during the day, this may only be a degree of inconvenience for healthy individuals. For individuals in poor health or parents with young children, however, it is more appropriately viewed as a level of hardship.

Physicians on SJMC's medical staff that were interviewed indicated a preference for O'Connor over Regional. This suggests a likelihood that physician offices adjacent to SJMC will move to sites near the O'Connor campus. O'Connor is interested in establishing more medical-office space near its campus. Regional also plans to build medical-office space, in addition to an urgent-care center, on or near its campus. It is in Regional's interests to attract as many SJMC physicians as possible, and in so doing it would have to address these physicians' concerns. In any event, neither hospital plans to maintain medical offices near SJMC beyond a short-term adjustment period.

Besides losing SJMC's basic emergency service, the community would also lose SJMC's other outpatient services, including laboratory, radiology, physical and occupational therapy, and its cancer clinic. HCA plans to move these services to its facility at Regional Medical Center. As noted above, the closure is also likely to result in a serious loss of physicians' offices, the family practice center, and impacts on numerous medical support businesses.

Loss of SJMC's trauma center and its emergency services in general will put a major strain on the countywide trauma system, and particular strain on SCVMC, since the county's only other trauma center (Stanford University Hospital) is located some 24 miles from SJMC. SCVMC and Stanford are currently taking actions to immediately increase trauma capacity.

#### <u>Recommendations</u>

To minimize the adverse impact on the downtown community, the following actions are recommended:

1. In line with its strategic plan, SCVMC should establish a health center in the downtown area, providing a full range of primary care, and including the ability to arrange for specialty care on a scheduled basis—"Valley Health Center-Downtown." Given SJMC's imminent closure, this Center should be fast tracked.

2. Integrated with this health center should be an urgent care center. If demand warrants, consideration should be given to its being operated on a 24-hourseven-day-a-week basis.

3. HCA should be do the following:

(1) Recognize that an orderly transition from SJMC to an expanded Regional Medical Center is in its own best interests in terms of physician and community support. As such, it should consider moving SJMC's closure date back from December 8, 2004 to June 30, 2005;

(2) Maintain medical office space near the current SJMC site;

(3) Provide a grant to Gardner Family Health Network for the capital costs necessary to expand capacity at its downtown clinics; and

(4) Contribute funding toward the transportation costs occasioned by the closure.

4. SCVMC and Gardner clinics should jointly plan for outpatient services and coordinate services in the downtown area.

5. Improvements in the public transportation system could alleviate much of the adverse impact of SJMC's closure, expecially for patients of physicians that may relocate due to the closure. The City of San Jose and Santa Clara County should convene a taskforce to assess public transportation in the downtown area in terms of medical needs, and develop a plan and secure funding to minimize the impact of the SJMC closure on vulnerable groups. As part of this process it should bring together the major provider groups (e.g., SCVMC, HCA, O'Connor, large physician groups, ambulance companies), voluntary transportation organizations (e.g., Outreach, American Cancer Society, Heart of the Valley), the Valley Transportation Authority, and taxicab companies. Failure to adequately deal with this issue may be more costly than the remedy, in terms of added health care costs and avoidable 911 calls. It is essential that this issue make it to the front burner of local public officials.

6. SCVMC will bear the brunt of the closure of SJMC's trauma center. Emergency-room waiting times at SCVMC are already perceived by many as excessive. Use of the emergency room by unsponsored patients for non-emergency care is a major contributor to overcrowding. If a third trauma center is not approved, establishing the "Valley Health Center-Downtown" as both a health center and urgent care center is even more vital. Besides minimizing the adverse impact on downtown residents dependent on SJMC's emergency room and/or nearby physicians for nonemergent treatment, this center will alleviate pressure on the SCVMC emergency room and prevent an upsurge in costly 911 transports.

7. While, under reasonable assumptions, it appears that a bed shortage is not imminent (assuming either O'Connor maintains its current licensed capacity and makes much of this capacity available to former SJMC patients, or Regional proceeds with its 2007 expansion plans), by 2015 bed shortages are likely. Local elected officials should seize on this "early warning" by establishing a planning process and an implementation strategy to ensure such a bed shortage does not materialize. Among the considerations to be addressed through this process should be coordination among the three remaining hospitals, economic feasibility of constructing a new hospital (including desirable sites, an operator and financing) versus expansion of existing hospitals, and the extent to which such a hospital would sufficiently enhance the City's attractiveness as a major convention site to warrant establishing a new funding mechanism. As part of this planning process it is important to compare and contrast hospitals and hospital systems in terms of their commitment to the community. For example, in response to HCA's unexpected announcement of SJMC's closure, SCVMC is making substantial efforts to fill the void in terms of trauma capacity, and both SCVMC and O'Connor are making substantial efforts to increase emergency-room and inpatient capacity. At the same time, HCA is threatening Regional's cancellation of its Medi-Cal contracts.

8. The City should require that the current SJMC site remain available for hospital development until June 30, 2007, or until HCA demonstrates its commitment to proceed substantially with its expansion plans at Regional Medical Center, including establishment of a Level II trauma center. In light of the City of San Jose's aggressive downtown redevelopment efforts and ongoing high-density development projects, future site availability is a vital component of the planning process recommended above to avoid a potential bed shortage by 2015.

#### I. Introduction

This report was commissioned by Santa Clara County and the City of San Jose to assess the expected impacts of HCA's closure of San Jose Medical Center (SJMC) on the residential, business and medical community surrounding the hospital. Following HCA's 1999 announced closure of San Jose Medical Center, the Save San Jose Medical Center Coalition was formed. The Save San Jose Medical Center Coalition presented its concerns regarding healthcare access for downtown residents to the Health and Hospital Committee of the County of Santa Clara, and proposed that the City and County undertake a study to evaluate the impact of the closure of San Jose Medical Center. The issues of the closure were discussed on multiple occasions with the Save San Jose Medical Center Coalition within the Health and Hospital Committee. The Save San Jose Medical Center Coalition secured the support of the City of San Jose to fund one-half of the study, followed by a matching commitment from the County of Santa Clara. From this point, the County and City, along with a Technical Advisory Committee comprised of interested community representatives, undertook engagement of a consultant to study the impact of the San Jose Medical Center closure. This report is the product of that engagement.

Appendix A provides the Scope of Services as jointly determined by Santa Clara County, the City of San Jose, the Save San Jose Medical Center Coalition and this study's Technical Advisory Committee. 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 are owned by HCA Healthcare), including its Level II trauma center. Regional Medical Center, which is located some 2.5 miles from SJMC, plans to add approximately 75 general-acute-care beds by 2007. The planned consolidation of both hospitals will result in a net reduction of 252 licensed general-acute-care (GAC) beds and 26 skilled-nursing beds. The 2007 target date would have allowed Regional's modifications and SJMC's closure to be fully coordinated.

On September 8, 2004, however, HCA accelerated its closure date from 2007 and gave 90 days notice of SJMC's closure. This complicates planning for the closure and makes the short-term impact more severe than it would have been, especially with respect to trauma and emergency services in general. The long-term impact is also likely to be significantly affected. The short closure notice period is likely to hamper Regional Medical Center's ability to recruit SJMC's physicians, and absorb its services and programs. As used here, "long term" refers the next decade and beyond.

This report begins with a profile of San Jose Medical Center in terms of its history, community role and service offerings. It next discusses current and future health care needs of the population living closest to SJMC. It assesses current capacity and utilization of SJMC and its closest hospitals – Santa Clara Valley Medical Center (SCVMC), O'Connor Hospital, and Regional Medical Center. SCVMC and O'Connor are located 4.9 and 5.7 miles, respectively, from SJMC. Bed needs on behalf of the

downtown area population are estimated based on age-specific use rates and population projections to 2030. Capacity among the four hospitals is evaluated in terms of patientday projections, and the impact of the closure on the remaining three hospitals is assessed. Based on these projections, SJMC's closure should not result in a bed shortage until about mid-next decade, although closure will immediately increase travel time for many local residents dependent of the hospital's outpatient services and affiliated physicians with offices located adjacent to the hospital. The projection of an adequate bed supply, however, is contingent on two assumptions: (1) O'Connor, which currently has substantial excess capacity, will make that capacity available to downtown residents; and (2) Regional Medical Center will proceed with its 2007 expansion plans. If either of these assumptions is not born out, the community surrounding SJMC is likely to experience a bed shortage within the next few years.

Section IV summarizes interviews with physicians and physician organizations affected by the closure. They appear to indicate a preference for O'Connor over Regional, suggesting further increases in travel time for their downtown patients.

In Section V community concerns are discussed, based on numerous interviews and public meetings. There is a major concern regarding access to emergency and other hospital and outpatient services, including physician offices, primarily on the part of people without access to an automobile. The public transportation system serving this area is insufficient.

Public and private payer relationships are discussed in Section VI. It is expected that virtually all of SJMC's charity patients and the bulk of its Medi-Cal patients will end up at SCVMC, and its private-insurance and Medicare patients will go primarily to O'Connor and Regional.

Accessibility to other providers is discussed in Section VII, and trauma and emergency services are dealt with in Section VIII.

The report concludes with findings and recommendations.

#### II. Profile of San Jose Medical Center

#### History and Scope of Service

SJMC opened in 1923 as a general-acute-care hospital. Its services include a Level II trauma center, rehabilitation, pediatric intensive care, cardiovascular surgery, a cancer center and a family-practice residency program affiliated with Stanford University.<sup>3</sup> It is currently licensed for 302 general-acute-care (GAC) beds, and 26 skilled-nursing beds (which were closed in September 2004). Until SJMC was acquired by Columbia/HCA (now HCA Healthcare) in 1996, it operated as a not-for-profit hospital. Since its acquisition, its volume of service has 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. On September 8, 2004, it unexpectedly announced closure effective in 90 days.

#### <u>Services</u>

Table 1 shows volume and licensed capacity for each licensed service for 2002. Note its low occupancy in all bed services other than intensive care and skilled nursing.<sup>4</sup> Note also its low volume of cardiovascular surgeries (56). Besides being an inefficient level, this volume is not conducive to quality care.

#### TABLE 1 SAN JOSE MEDICAL CENTER LICENSED CAPACITY AND UTILIZATION 2002

SERVICE	UTILIZATION AND CAPACITY LEVELS			
M/S LICENSED BEDS	183			
M/S PATIENT DAYS	24,817			
M/S OCCUPANCY	37%			
PERINATAL LICENSED BEDS	28			
PERINATAL PATIENT DAYS	0			
PERINATAL OCCUPANCY	0%			
PEDIATRICS LICENSED BEDS	29			
PEDIATRICS PATIENT DAYS	1,637			
PEDIATRICS OCCUPANCY	15%			
ICU LICENSED BEDS	15			
ICU PATIENT DAYS	4,940			
ICU OCCUPANCY	90%			
CCU LICENSED BEDS	10			
CCU PATIENT DAYS	-			
CCU OCCUPANCY	0%			
NICU_LICENSED BEDS	7			
NICU PATIENT DAYS	-			
NICU OCCUPANCY	0%			
REHAB LICENSED BEDS	30			

<sup>&</sup>lt;sup>3</sup> Under this affiliation, both residents and faculty are paid by the hospital, and faculty have clinical-faculty status at Stanford.

<sup>&</sup>lt;sup>4</sup> Prior to its overall closure notice, SJMC announced its skilled-nursing unit would be closed.

SERVICE	UTILIZATION AND CAPACITY LEVELS
REHAB PATIENT DAYS	3,711
REHAB OCCUPANCY	34%
GAC LICENSED BEDS SUBTOTL	302
GAC PATIENT DAYS	35,105
GAC OCCUPANCY	32%
SN LICENSED BEDS	26
SN PATIENT DAYS	7,710
SN OCCUPANCY	81%
EMS VISITS	29,293
EMS STATIONS	19
EMS VISITS PER STATION	1,542
SURGERIES INPATIENT	1,906
SURGERIES OUTPATIENT	3,631
CARDIAC CATH ROOMS	1
CARDIOVASCULAR SURGERIES	56

Source: Office of Statewide Health Planning and Development, Annual Hospital Utilization Report, Calendar-Year 2002.

#### <u>Trends</u>

Table 2 shows the trend in volume and capacity for SJMC, and the three major hospitals serving its community, from 1993 to 2003. Note that in all categories of inpatient volume (discharges and patient days) and capacity (licensed beds and available beds), there have been marked reductions since 1996. Its current occupancy rate is about one-third of licensed beds.

# TABLE 2SAN JOSE MEDICAL CENTER AND COMPETING HOSPITALSSELECTED VOLUME INDICATORS1993-2003

YEAR	SAN JOSE CEN	-	REGIONAL CENTER OF	-	O'CONNOR	HOSPITAL	SANTA CLA MEDICAL		тот	⊺AL
				SHOR	T-TERM DISC	CHARGES				
		Annual		Annual		Annual		Annual		Annual
	Discharges	Change %	Discharges	Change %	Discharges	Change %	Discharges	Change %	Discharges	Change %
1993	10,115		11,092		11,531		16,196		48,934	
1994	10,102	-0.1%	10,959	-1.2%	11,168	-3.1%	15,060	-7.0%	47,289	-3.4%
1995	9,898	-2.0%	11,011	0.5%	11,048	-1.1%	15,208	1.0%	47,165	-0.3%

YEAR	SAN JOSE ME CENTE		REGIONAL N		O'CONNOR H	OSPITAL	SANTA CLARA MEDICAL CE		TOTAL	
1996	11,274	13.9%	11,030	0.2%	10,988	-0.5%	15,153	-0.4%	48,445	2.7%
1997	9,795	-13.1%	11,545	4.7%	12,223	11.2%	15,469	2.1%	49,032	1.2%
1998	9,075	-7.4%	11,763	1.9%	12,228	0.0%	16,433	6.2%	49,499	1.0%
1999	8,801	-3.0%	11,304	-3.9%	11,100	-9.2%	17,883	8.8%	49,088	-0.8%
2000	7,788	-11.5%	10,912	-3.5%	11,047	-0.5%	20,664	15.6%	50,411	2.7%
2001	7,407	-4.9%	11,057	1.3%	11,450	3.6%	20,598	-0.3%	50,512	0.2%
2002	7,250	-2.1%	10,389	-6.0%	11,773	2.8%	21,599	4.9%	51,011	1.0%
2003	7,078	-2.4%	11,909	14.6%	11,665	-0.9%	22,862	5.8%	53,514	4.9%
1993- 2003 Change	-3,037	-30.0%	817	7.4%	134	1.2%	6,666	41.2%	4,580	9.4%

#### AVAILABLE BEDS

	Beds	Annual Change %	Beds	Annual Change %						
1993	274	·	204	C C	276	C C	388	-	1,142	-
1994	298	8.8%	204	0.0%	289	4.7%	383	-1.3%	1,174	2.8%
1995	271	-9.1%	204	0.0%	283	-2.1%	377	-1.6%	1,135	-3.3%
1996	294	8.5%	204	0.0%	283	0.0%	377	0.0%	1,158	2.0%
1997	285	-3.1%	204	0.0%	283	0.0%	377	0.0%	1,149	-0.8%
1998	176	-38.2%	204	0.0%	283	0.0%	381	1.1%	1,044	-9.2%
1999	176	0.0%	199	-2.5%	283	0.0%	429	12.6%	1,087	4.2%
2000	176	0.0%	204	2.5%	283	0.0%	483	12.5%	1,146	5.4%
2001	176	0.0%	199	-2.5%	283	0.0%	504	4.5%	1,162	1.4%
2002	176	0.0%	184	-7.5%	283	0.0%	507	0.6%	1,150	-1.0%
2003	176	0.0%	184	0.0%	306	8.1%	506	-0.2%	1,172	1.9%
1993- 2003 Change	-98	-35.8%	-20	-9.8%	30	10.9%	118	30.4%	30	2.6%

LICENSED BEDS

		Annual		Annual		Annual		Annual		Annual
	Beds	Change %	Beds	Change %						
1993	529		204		360		588		1,681	
1994	529	0.0%	204	0.0%	360	0.0%	441	-25.0%	1,534	-8.7%
1995	529	0.0%	204	0.0%	360	0.0%	441	0.0%	1,534	0.0%
1996	529	0.0%	204	0.0%	360	0.0%	446	1.1%	1,539	0.3%
1997	529	0.0%	204	0.0%	360	0.0%	447	0.2%	1,540	0.1%
1998	348	-34.2%	204	0.0%	360	0.0%	447	0.0%	1,359	-11.8%
1999	348	0.0%	204	0.0%	360	0.0%	748	67.3%	1,660	22.2%
2000	348	0.0%	204	0.0%	360	0.0%	737	-1.5%	1,649	-0.7%

YEAR	SAN JOSE MEI CENTER	DICAL	REGIONAL CENTER OF		O'CONNOR H		SANTA CLARA MEDICAL C		TOTAL	-
2001	348	0.0%	204	0.0%	360	0.0%	731	-0.8%	1,643	-0.4%
2002	328	-5.7%	204	0.0%	360	0.0%	613	-16.1%	1,505	-8.4%
2003	328	0.0%	204	0.0%	358	-0.6%	574	-6.4%	1,464	-2.7%
1993- 2003 Change	-201	-38.0%	0	0.0%	-2	-0.6%	-14	-2.4%	-217	-12.9%

#### TOTAL PATIENT DAYS

	Appuol		Appual		Appual		Appual		Annual
Patient Dave		Patient Dave		Patient Dave		Patient Dave		Patient Dave	Change %
,	•	-	-	-	Change 70	-	Change 70	•	Change 70
55,088		47,860		48,787		94,111		245,846	
53,170	-3.5%	42,342	-11.5%	48,577	-0.4%	90,920	-3.4%	235,009	-4.4%
48,602	-8.6%	42,927	1.4%	48,522	-0.1%	93,005	2.3%	233,056	-0.8%
6 46,738	-3.8%	42,538	-0.9%	45,809	-5.6%	90,783	-2.4%	225,868	-3.1%
46,617	-0.3%	43,970	3.4%	49,556	8.2%	86,871	-4.3%	227,014	0.5%
43,879	-5.9%	45,752	4.1%	52,912	6.8%	86,679	-0.2%	229,222	1.0%
43,661	-0.5%	44,419	-2.9%	50,937	-3.7%	95,858	10.6%	234,875	2.5%
44,310	1.5%	45,484	2.4%	50,038	-1.8%	118,668	23.8%	258,500	10.1%
42,519	-4.0%	45,399	-0.2%	51,464	2.8%	117,890	-0.7%	257,272	-0.5%
42,815	0.7%	43,467	-4.3%	52,312	1.6%	125,847	6.7%	264,441	2.8%
43,350	1.2%	50,463	16.1%	55,633	6.3%	124,960	-0.7%	274,406	3.8%
-11,738	-21.3%	2,603	5.4%	6,846	14.0%	30,849	32.8%	28,560	11.6%
			LICENSED	BEDS OCCU		ſE			
0 0 E 0/		64 20/						40 40/	
	55,088 53,170 48,602 46,738 46,617 43,879 43,661 44,310 42,519 42,815 43,350 -11,738 28.5%	53,170 -3.5% 48,602 -8.6% 46,738 -3.8% 46,617 -0.3% 43,879 -5.9% 43,661 -0.5% 44,310 1.5% 42,519 -4.0% 42,815 0.7% 43,350 1.2% -11,738 -21.3%	Patient DaysChange %Patient Days55,08847,86053,170-3.5%42,34248,602-8.6%42,92746,738-3.8%42,53846,617-0.3%43,97043,879-5.9%45,75243,661-0.5%44,41944,3101.5%45,48442,519-4.0%45,39943,3501.2%50,463-11,738-21.3%2,60328.5%64.3%	Patient Days         Change %         Patient Days         Change %           55,088         47,860         -11.5%           53,170         -3.5%         42,342         -11.5%           48,602         -8.6%         42,927         1.4%           46,738         -3.8%         42,538         -0.9%           46,617         -0.3%         43,970         3.4%           43,879         -5.9%         45,752         4.1%           43,661         -0.5%         44,419         -2.9%           44,310         1.5%         45,484         2.4%           42,519         -4.0%         45,399         -0.2%           43,350         1.2%         50,463         16.1%           -11,738         -21.3%         2,603         5.4%           28.5%         64.3%         54.3%         54.3%	Patient Days         Change %         Patient Days         Change %         Patient Days           55,088         47,860         48,787           53,170         -3.5%         42,342         -11.5%         48,577           48,602         -8.6%         42,927         1.4%         48,522           46,738         -3.8%         42,538         -0.9%         45,809           46,617         -0.3%         43,970         3.4%         49,556           43,879         -5.9%         45,752         4.1%         52,912           43,661         -0.5%         44,419         -2.9%         50,937           44,310         1.5%         45,484         2.4%         50,038           42,519         -4.0%         45,399         -0.2%         51,464           42,815         0.7%         43,467         -4.3%         52,312           43,350         1.2%         50,463         16.1%         55,633           -11,738         -21.3%         2,603         5.4%         6,846           -28.5%         64.3%         37.1%         37.1%	Patient Days         Change %         Patient Days         Change %         Patient Days         Change %         Patient Days         Change %         Change %         Stander %	Patient DaysChange %Patient DaysChange %Patient DaysChange %Patient Days55,08847,86048,787-0.4%94,11153,170-3.5%42,342-11.5%48,577-0.4%90,92048,602-8.6%42,9271.4%48,522-0.1%93,00546,738-3.8%42,538-0.9%45,809-5.6%90,78346,617-0.3%43,9703.4%49,5568.2%86,87143,879-5.9%45,7524.1%52,9126.8%86,67943,661-0.5%44,419-2.9%50,937-3.7%95,85844,3101.5%45,4842.4%50,038-1.8%118,66842,519-4.0%45,399-0.2%51,4642.8%117,89042,8150.7%43,467-4.3%52,3121.6%125,84743,3501.2%50,46316.1%55,6336.3%124,960-11,738-21.3%2,6035.4%6,84614.0%30,84928.5%64.3%37.1%43.9%43.9%	Patient Days       Change %       Patient Days       Patient Days       Patient Days       Change %       Patient Days       Patient Days       Patient Days       Change %       Patient Days       Pat	Patient Days         Change %         Patient Days         Change %         Patient Days         Change %         Patient Days           55,088         47,860         48,787         94,111         245,846           53,170         -3.5%         42,342         -11.5%         48,577         -0.4%         90,920         -3.4%         235,009           48,602         -8.6%         42,927         1.4%         48,522         -0.1%         93,005         2.3%         233,056           46,617         -0.3%         42,538         -0.9%         45,809         -5.6%         90,783         -2.4%         225,868           46,617         -0.3%         43,970         3.4%         49,556         8.2%         86,871         -4.3%         227,014           43,879         -5.9%         45,752         4.1%         52,912         6.8%         86,679         -0.2%         229,222           43,661         -0.5%         44,419         -2.9%         50,937         -3.7%         95,858         10.6%         238,875           44,310         1.5%         45,348         2.4%         50,038         -1.8%         117,809         -0.7%         257,272           42,815         0.7%         43

1994	27.5%	56.9%	37.0%	56.5%	42.0%
1995	25.2%	57.7%	36.9%	57.8%	41.6%
1996	24.2%	57.1%	34.9%	55.8%	40.2%
1997	24.1%	59.1%	37.7%	53.2%	40.4%
1998	34.5%	61.4%	40.3%	53.1%	46.2%
1999	34.4%	59.7%	38.8%	35.1%	38.8%
2000	34.9%	61.1%	38.1%	44.1%	42.9%
2001	33.5%	61.0%	39.2%	44.2%	42.9%
2002	35.8%	58.4%	39.8%	56.2%	48.1%
2003	36.2%	67.8%	42.6%	59.6%	51.4%

Source: Office of Statewide Health Planning and Development, Quarterly Hospital Utilization and Financial Reports, calendar years 1993-2003. Beds and volume include non-GAC categories.

#### Service Area

Figure 1 contains a map of SJMC's service area as defined by the hospital. According to 2002 Office of Statewide Health Planning and Development (OSHPD) discharge data, 88 percent of SJMC's 7,246 discharges are on behalf of residents of Santa Clara County. The second-ranked county, Alameda, accounts for only 1.8 percent of SJMC's discharges. The service area designated for this study (downtown area), which is defined in Section III below, accounts for 28.3 percent of SJMC's discharges. In terms of outpatient volume, of SJMC's non-trauma visits during 2003 (which totaled 51,454), 34.1 percent originated in the designated service area. These outpatient visits include nontrauma emergency-room visits, outpatient surgeries, various tests (laboratory and x-ray) and therapy visits.

#### Market Share

Table 3 shows the 1998 market shares of the major hospitals serving the downtown service area. SJMC, with a 15.5 percent market share is the third ranked hospital. Table 4 provides equivalent data for 2002, and includes the change from 1998 to 2002. Both SJMC and Regional Medical Center experienced drops in number of discharges originating in the downtown area and drops in market share. By 2002, SJMC's rank dropped to fourth, and its market share fell from15.5 percent to 11.6 percent.

#### TABLE 3 MARKET SHARES OF DISCHARGES RESIDENTS OF DOWNTOWN SAN JOSE AREA 1998

Hospital	Discharges	Market Share
Santa Clara Valley Med Ctr	4,405	24.9%
Columbia Regional Med Ctr	4,203	23.8%
Columbia San Jose Med Ctr	2,742	15.5%
Kaiser Foundation - Santa		
Clara	1,642	9.3%
O'Connor Hospital	1,618	9.1%
Columbia Good Samaritan	932	5.3%
Santa Teresa Comm Hosp	863	4.9%
Camino Healthcare	528	3.0%
Stanford Health Services	291	1.6%
Community Hosp/Los Gatos	224	1.3%
Children's/Stanford	217	1.2%
Columbia South Vly Hosp	13	0.1%
Saint Louise Hospital	13	0.1%

Hospital	Discharges	Market Share
Total	17,691	100.0%

Source: Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-Year 1998. Includes discharges only from hospitals located in Santa Clara County.

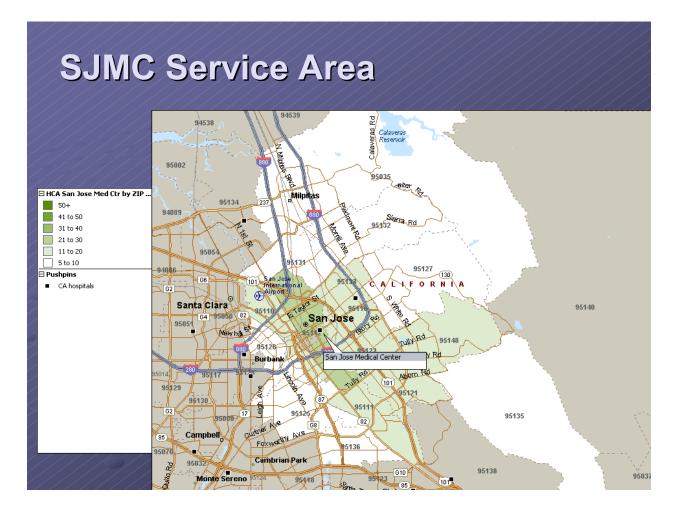


Figure 1

Legend relates to market shares within each zip code.

#### TABLE 4 MARKET SHARES OF DISCHARGES RESIDENTS OF DOWNTOWN SAN JOSE AREA 2002 AND CHANGE FROM 1998 TO 2002

Hospital	Discharges	Market Share	Change from 1998
SCVMC	4,684	26.6%	279
Regional Medical Of San Jose	3,440	19.5%	-763
Kaiser Fnd Hosp - Santa Clara	2,179	12.4%	537
San Jose Medical Center	2,048	11.6%	-694
O'Connor Hospital - San Jose	1,831	10.4%	213
Kaiser Fnd Hosp - Santa Teresa Community Hospital	1,152	6.5%	289
El Camino Hospital	738	4.2%	210
Good Samaritan Hospitals	734	4.2%	-198
Stanford Hospital	288	1.6%	-3
Lucile Salter Packard Children's Hosp At Stanford	251	1.4%	34
Community Hospital Of Los Gatos	243	1.4%	19
St. Louise Regional Hospital – Gilroy	11	0.1%	-2
Total	17,599	100.0%	

Source: Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-Year 2002. Includes discharges only from hospitals located in Santa Clara County.

#### Payer Mix

The SJMC payer mix in terms of gross revenue for 2002 is shown in Table 5. Fifty seven percent of its gross revenue is derived from Medicare and Medi-Cal, in addition to a significant self-pay component. That barely over one-third of its gross revenue is attributed to private insurance suggests a payer mix that is highly questionable in terms of financial viability. As a general rule, a hospital without a major teaching program can at best expect to break even on Medicare, without accounting for necessary accumulation of reserves to meet capital needs. Unless it is designated a disproportionate share hospital (which SJMC is not), Medi-Cal payments fall far short of costs. And the "other" category is often comprised of uninsured patients, many of which are unable to share significantly in their costs of care.

#### TABLE 5 SAN JOSE MEDICAL CENTER PAYER MIX IN TERMS OF PERCENTAGE OF GROSS REVENUE 2002

	Medicare	Medi-Cal	Private Insurance	Other*	Total
Percent of Gross Revenue	37.3	19.6	34.2	8.9	100.0
Kevenue					

\* Other includes self-pay, some of which (but not all) are low-income, uninsured. Source: Office of Statewide Health Planning and Development, Annual Hospital Financial Disclosure Report, Calendar-Year 2002.

#### Age Distribution

Table 6 shows the age distribution of SJMC's patients originating in the downtown area. Note the high percentage of the 65 and over group. It is this demographic group, which is less mobile than younger groups, that will be most impacted by the hospital's closure, at least in terms of general-acute services, and most likely by restricted access to hospital-based and freestanding outpatient services. Some of the latter will likely relocate near other hospitals.

## TABLE 6SAN JOSE MEDICAL CENTER DISCHARGES FROM DOWNTOWN AREAIN TERMS OF AGE GROUP2003

Age Group	Discharges* Percent						
0-4	68	4.0%					
5-19	59	3.5%					
20-44	272	16.1%					
45-64	468	27.7%					
65+	820	48.6%					
Total	1,687	100.0%					

\* Excludes discharges where age group was not identified. Source: Office of Statewide Health Planning and Development, Discharge Data base, Calendar-year 2003.

#### <u>Trauma</u>

In 2003, SJMC had 31,515 emergency-department visits, of which 1,922 (6.1 percent) were trauma cases. Table 7 breaks out the trauma cases according to mechanism. Note that 52 percent are motor vehicle accidents, suggesting many could appropriately be treated at other nearby trauma centers. Of the other trauma causes, to

the extent they occurred in the downtown area, the medical efficacy of transporting them to another trauma center would obviously depend on the severity of the injury.

#### TABLE 7 SAN JOSE MEDICAL CENTER TRAUMA PATIENTS ACCORDING TO TRAUMA MECHANISM 2003

Mechanism	Patients	Percent
MVC/Motorcycle	938	52%
Fall	259	14%
Blunt assault	95	5%
Pedestrian	124	7%
Bicycle	99	5%
Knife assault	108	6%
Gunshot related	48	3%
Total Reporting a Mechanism	1,803	
* Source: Hospital records.		

Summary

Since its acquisition by HCA, SJMC's operations have been substantially downsized. Its primary value to the community is its trauma center and emergency service in general, and non-hospital services (such as physician offices and the family practice clinic) located near the hospital that would be likely to relocate with the hospital's closure. SJMC does not provide obstetrics services and only one-third of its beds are occupied. Its payer mix is 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 near the hospital, SJMC is a valued resource.

#### III. Current and Future Health Care Needs of Service-Area Population

#### Definition of Service Area

The service area for this project is 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".<sup>5</sup> The area is defined in terms of census tracts. A map of this area is provided as Figure 2. From this map, a zip-code approximation was made to enable use of the Office of Statewide Health Planning and Development (OSHPD) discharge data. Tables B1 and B2 in Appendix B provide a list of the census tracts comprising the

<sup>&</sup>lt;sup>5</sup> "Scope of Services," reproduced in Appendix A.

designated service area and the zip-code approximation, respectively. Table 8 shows comparisons between both definitions in terms of race and ethnicity. While the area population is greater using the zip-code approximation, the racial/ethnic groups are nearly identically distributed between both area definitions.

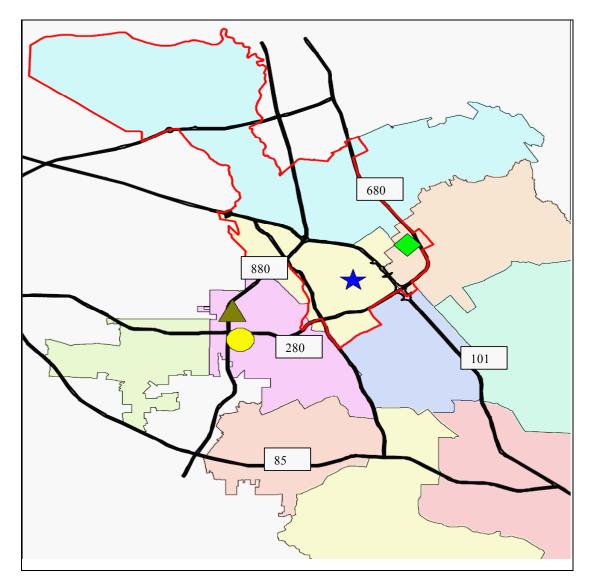
#### TABLE 8 DOWNTOWN SERVICE AREA COMPARISON BETWEEN CENSUS-TRACT AND ZIP-CODE DEFINITIONS IN TERMS OF RACE AND ETHNICITY 2000

Ethnic Group	Population Census Tracts	Population Zip Codes	Census Tract Percent	Zip Code Percent
Total	171,282	186,915	100.0%	100.0%
White	60,829	64,556	35.5%	34.5%
Black	6,208	6,582	3.6%	3.5%
Indian	1,849	2,038	1.1%	1.1%
Asian	50,382	55,828	29.4%	29.9%
Pacific	650	719	0.4%	0.4%
Other	42,814	47,979	25.0%	25.7%
Multi-	8,550	9,213	5.0%	4.9%
Hispanic*	77,304	85,257	45.1%	45.6%

\* Hispanic is not a distinct group in this table, since it is comprised of various racial groups. Source: U.S. Census, 2000.

Table 9 provides a comparison of both area definitions in terms of age. Note again, that in terms of distribution, the areas are nearly identical. Note also the total population counts based on census tract definitions differ slightly between the two tables. This reflects the fact that Association of Bay Area Governments (ABAG) is the source for the population counts based on age, and the latter had a slightly different population count in one census tract than the U.S. Census count.

FIGURE 2 DOWNTOWN AREA\* INDICATING HOSPITAL AND MAJOR HIGHWAY LOCATIONS



 $\bigstar$ 

 $\bigcirc$ 

\* Border in Red.

Regional Medical

San Jose Medical Center

Santa Clara Valley Medical Center

O'Connor Hospital

#### TABLE 9 DOWNTOWN SERVICE AREA COMPARISON BETWEEN CENSUS-TRACT AND ZIP-CODE DEFINITIONS IN TERM OF AGE GROUP. 2000

Age Group	Population Census Tracts	Population Zip Codes	Census Tract Percent	Zip Code Percent
0-4 Yrs	14,991	13,782	8.0%	8.0%
5-19 Yrs	40,181	36,466	21.5%	21.3%
20-44 Yrs	87,186	80,793	46.6%	47.1%
45-64 Yrs	31,236	28,290	16.7%	16.5%
65 Or Older	13,321	12,195	7.1%	7.1%
Total	186,915	171,526	100.0%	100.0%

Source: (1) Zip-Codes – U.S. Census; (2) Census Tracts – Association of Bay Area Governments, "Projections 2003."

#### Methodology

The first step in developing bed-need estimates is to estimate patient days per 1,000 population for specific age groups for residents of the downtown area. The two data sources for this effort are: (1) OSHPD Discharge Data covering calendar-year 2003, restricted to general-acute discharges (i.e., excluding psychiatric and long-term-care discharges and normal newborns [which do not occupy licensed beds]). In this database, patient residence is defined in terms of zip code; and (2) Association of Bay Area Governments (ABAG) population projections on a census-tract basis, generated in 2003, according to age group. Patient days per 1,000 population are estimated for each age group as follows:

(1) There is a relatively large "age unknown/not disclosed" group (9 percent of all discharges originating in the downtown area). This is due to confidentiality requirements promulgated in the Health Insurance Portability and Accountability Act (HIPAA). In an effort to prevent the possibility of identifying any individual, OSHPD "masks" some age groups in zip codes, preventing identification of age in some cases. Patient days and discharges for the unidentified age groups are apportioned to each age group based on the age group's proportions of patient days and discharges relative to the total for all identified age groups;

(2) Total patient days in each age group (after apportioning the unidentified patient days) are divided by area population in each age group. In this stage, area population is in terms of population for the zip codes approximating the downtown area (which is defined in terms of census

tracts) for the year 2000. This population is projected to 2003 through a linear interpolation of area population (for each age group), based on the growth in population for each age group from 2000 to 2005, using ABAG projections for the area based on census tracts. The rate of growth from 2000 to 2003 for the census tract area is applied to the zip-code population totals for each age group. This results in 2003 population estimates by age group for the area defined in terms of zip codes. These population estimates are then divided into the age-specific patient day totals for the same zip-code area. This results in patient days per 1,000 population for the zip code area for 2003 according to age group;

(3) These patient day rates are applied to the age-group population totals for the census-tract definitions of the downtown area, yielding patient days by age for the downtown area;

(4) The 2003 patient day rates are applied to ABAG population projections for the downtown area for five year intervals, from 2005 through 2030; and

(5) Patient day rates are also calculated for the entire county using the same procedure, except that the transformation from zip codes to census tracts was not necessary.

The next step is to estimate bed-need for the downtown population, as follows:

(1) Bed needs for the downtown area are calculated for each year based on projected patient days at 80-percent occupancy; and

(2) Recognizing that the downtown area is not self-contained (i.e., downtown residents use hospitals in other areas, and people residing in other areas use the two local hospitals [SJMC and Regional]), the bed-need estimates are apportioned to specific hospitals based on 2003 market shares.

The final step is to project patient days for each hospital (SJMC, SCVMC, O'Connor and Regional):

(1) Patient days for each hospital originating outside the downtown area are assumed to grow with total county population minus downtown population;

(2) These projections (downtown plus rest-of-county) are compared to current GAC licensed bed capacity; and

(3) The hospital-specific projections can be altered based on different assumptions regarding market share. In addition, total bed need projections can be altered based on different patient-day rate assumptions.

#### Hospital-Specific Utilization and Capacity According to Service

Table B3 in Appendix B provides data on available beds and occupancy for 2002 according to bed category for the major hospitals serving the downtown area (SJMC, SCVMC, Regional Medical Center and O'Connor Hospital). Available beds are a better indicator of actual capacity at a point in time than licensed beds, as the latter only have to be on the license, and may not even exist. The problem with the former, however, is that the designation is far less objective than that for licensed beds. Counts of available beds can vary from year to year based on demand. Sometimes, "unavailable" licensed beds can be made available through minor alterations; other times such availability could require major construction. For these reasons, the bed-need projections discussed throughout this report are presented first in terms of licensed beds and then in terms of currently available beds. In general, available beds are 80 to 90 percent of licensed beds.

In Table B3 the few areas where SJMC's closure could create a capacity problem are highlighted – intensive care and "other acute." The latter most likely is not a problem since medical/surgical capacity appears abundant. Here, the focus is on service capacity in each hospital, not on particular problems that might be faced by area residents in terms of travel time.

For each bed category, occupancy is calculated based on available beds, for each hospital, for all four hospitals combined and for the three remaining hospitals, assuming all of SJMC's patient days are diverted to the other three hospitals. Obviously, some patient days would go to other hospitals (e.g., Good Samaritan, Stanford), and they would not be proportionally shifted to the three remaining downtown hospitals. The only categories where SJMC's closure causes occupancy to exceed 80 percent is ICU and "other acute."

Total general-acute "excess beds" for each hospital is also estimated, defined as beds that could be filled without causing the hospital to exceed 80-percent occupancy, on an available-beds basis. Note that SJMC has the greatest number of excess beds, due to its 35-percent occupancy rate. With SJMC included, total general-acute excess beds among the four hospitals are 351 (i.e., these currently empty beds could be filled without causing total occupancy to exceed 80 percent). SJMC's closure would reduce the excess to 152 beds.

Table B3 also shows the distance between SJMC and the three closest hospitals. Distance from SJMC to Regional is 2.5 miles; to O'Connor, it is 5.7 miles; and to SCVMC it is 4.9 miles.

Table B4 in Appendix B displays similar information, but in terms of licensed capacity, and from a different data source that uses licensure definitions. It also includes data on inpatient and outpatient surgeries, emergency room visits by level of severity and number of cardiovascular surgical procedures. Based on licensed capacity, the removal of SJMC's beds would not result in a capacity shortage among the other three hospitals collectively, naturally assuming all displaced patients don't shift to only one hospital.

Table B5 in Appendix B provides a summary of the impact of SJMC's closure on the SJMC-Regional Medical Center system. It shows, for each hospital, the following:

(1) Current licensed beds and patient days according to bed category;

(2) Current EMS visits, EMS stations, surgeries, catheterization rooms and cardiovascular surgeries;

(3) The current combined totals for the above categories;

(4) Changes proposed for Regional to be effective upon SJMC's closure (December 2004);

(5) Changes proposed for Regional to be effective in 2007;

(6) A comparison of the current and 2007 system totals; and

(7) At 2007 planned bed-capacity levels, occupancy assuming combined current SJMC and Regional patient days.

The planned consolidation of both hospitals (when fully implemented in 2007) is projected to result in a net reduction of 252 licensed GAC beds and 26 skilled-nursing beds. If all current SJMC patients would be diverted to Regional and the latter's current patient volume were to remain at present levels, Regional's GAC licensed-bed occupancy would be 87 percent. The only bed category with unmanageable occupancy would be medical/surgical (91 percent). It also appears that Regional's planned emergency service expansion would result in a manageable ER visits per station. These occupancy calculations do not account for population growth between 2004 and 2007; nor do they account for the likelihood many SJMC patients will not be shifted to Regional. These calculations clearly show what could have been achieved under an orderly consolidation had SJMC adhered to its 2007 closure plan.

Planned GAC capacity at Regional effective December 2004, combined with SJMC plus Regional estimated patient days for 2004, result in an occupancy rate of 109 percent. That is, if all SJMC's GAC patient days would be shifted to Regional right after closure, and the latter would maintain its current volume, occupancy would hit 109 percent. Clearly, HCA does not contemplate accommodating all of SJMC's patients, at

least until 2007. On the positive side, the 12-bed ICU expansion scheduled for the end of 2004 should alleviate any potential short-term ICU bed shortage identified in Table B3.

#### Service Area Utilization

Table 10 presents data on market shares of discharges and patient days according to age group, on behalf of residents of the downtown area. In this and all subsequent tables, discharges and patient days relate to general-acute care (GAC) only. That is, they exclude acute psychiatric and long-term care patients, and they exclude normal newborns, since the latter do not occupy licensed beds. For all ages, SCVMC has the largest market share of discharges (26%), followed by Regional Medical Center (20%). SJMC ranks a distant third (12%). Note that Kaiser patients are included in these marketshare calculations. Although Kaiser treats its own population and its non-emergency services are not available to the general population, it provides care for a large segment of the downtown population and must be included in assessing hospital-care demand. We do not have the ability to exclude from the calculations the Kaiser population residing in the service area.

Among children (less than five years old and five to 19), SCVMC has the largest share, followed by Regional. For both age groups, SCVMC has double the market share of Regional. In both groups, SJMC has a low market share.

For the age 20-44 group, SCVMC again has the largest share (32%), again followed by Regional (19%). SJMC ranks near the bottom at 5%. Only in the middle-age group (45-64) and the elderly group (65+) does SJMC rank as high as second. In no age group is SJMC the dominant hospital serving the downtown population.

#### TABLE 10 MARKET SHARES OF GENERAL-ACUTE-CARE\* DISCHARGES AND PATIENT DAYS ON BEHALF OF DOWNTOWN RESIDENTS ACCORDING TO AGE GROUP 2003

#### ALL AGES

ID	NAME	D	ISCHARG	SES	DAYS	6	ADC	LOS
430883 SANTA CLARA VALLEY MEDICAL CEN	ITER	:	3,987	26.2%	17,231 2	25.1%	47.21	4.32
430705 REGIONAL MEDICAL OF SAN JOSE		:	3,028	19.9%	14,817 2	21.6%	40.59	4.89
430879 SAN JOSE MEDICAL CENTER			1,794	11.8%	9,581 <i>°</i>	14.0%	26.25	5.34
430805 KAISER FND HOSP - SANTA CLARA			1,739	11.4%	7,073 ´	10.3%	19.38	4.07
430837 O'CONNOR HOSPITAL - SAN JOSE			1,387	9.1%	5,123	7.5%	14.04	3.69
431506 KAISER FND HOSP - SANTA TERESA	COMM HOSPITAL		941	6.2%	3,138	4.6%	8.60	3.33

430763 EL CAMINO HOSPITAL	602	3.9%	2,379	3.5%	6.52	3.95
430779 GOOD SAMARITAN & MISSION OAKS HOSPITALS	563	3.7%	2,612	3.8%	7.16	4.64
430905 STANFORD HOSPITAL	314	2.1%	1,635	2.4%	4.48	5.21
434040 LUCILE SALTER PACKARD CHILDREN'S HOSP AT STANFORD	259	1.7%	1,591	2.3%	4.36	6.14
430743 COMMUNITY HOSPITAL OF LOS GATOS	206	1.4%	1,170	1.7%	3.21	5.68
ALL OTHER	424	2.8%	2,297	3.3%	6.29	5.42
TOTAL	15,244		68,647		188.07	4.50

#### 0-4 YRS

ID	NAME	DISCH	ARGES	DA	ŕS	ADC	LOS
430883 SANTA CLARA VALLEY MEDICAL	CENTER	574	37.1%	3,712	42.1%	10.17	6.47
430705 REGIONAL MEDICAL OF SAN JOS	SE	276	17.8%	996	11.3%	2.73	3.61
430805 KAISER FND HOSP - SANTA CLA	RA	150	9.7%	874	9.9%	2.39	5.83
430837 O'CONNOR HOSPITAL - SAN JOS	E	134	8.7%	404	4.6%	1.11	3.01
431506 KAISER FND HOSP - SANTA TER	ESA COMM HOSPITAL	107	6.9%	344	3.9%	0.94	3.21
434040 LUCILE SALTER PACKARD CHILE	DREN'S HOSP AT STANFORD	100	6.5%	972	11.0%	2.66	9.72
430763 EL CAMINO HOSPITAL		71	4.6%	436	4.9%	1.19	6.14
430879 SAN JOSE MEDICAL CENTER		68	4.4%	181	2.1%	0.50	2.66
430779 GOOD SAMARITAN & MISSION O	AKS HOSPITALS	55	3.6%	775	8.8%	2.12	14.09
ALL OTHER		13	0.8%	117	1.3%	0.32	9.00
TOTAL		1,548		8,811		24.14	5.69

#### 5-19 YRS

ID	NAME	DISCH	ARGES	DAY	S	ADC	LOS
430883 SANTA CLARA VAL	LEY MEDICAL CENTER	250	39.0%	829	40.7%	2.27	3.32
430705 REGIONAL MEDIC/	AL OF SAN JOSE	129	20.1%	337	16.5%	0.92	2.61
430805 KAISER FND HOSF	P - SANTA CLARA	92	14.4%	293	14.4%	0.80	3.18
430879 SAN JOSE MEDICA	L CENTER	59	9.2%	171	8.4%	0.47	2.90
434040 LUCILE SALTER PA	ACKARD CHILDREN'S HOSP AT STANFORD	46	7.2%	237	11.6%	0.65	5.15
431506 KAISER FND HOSF	- SANTA TERESA COMM HOSPITAL	31	4.8%	74	3.6%	0.20	2.39
430837 O'CONNOR HOSPI	TAL - SAN JOSE	22	3.4%	45	2.2%	0.12	2.05
ALL OTHER		12	1.9%	53	2.6%	0.15	4.42
TOTAL		641		2,039		5.59	3.18

#### 20-44 YRS

ID	NAME	DISCH	ARGES	DAY	S	ADC	LOS
430883 SANTA CLARA VALLEY	MEDICAL CENTER	1,675	32.4%	5,821	36.9%	15.95	3.48
430705 REGIONAL MEDICAL OF	SAN JOSE	958	18.5%	2,536	16.1%	6.95	2.65
430805 KAISER FND HOSP - SA	NTA CLARA	614	11.9%	1,543	9.8%	4.23	2.51
430837 O'CONNOR HOSPITAL -	SAN JOSE	568	11.0%	1,478	9.4%	4.05	2.60
431506 KAISER FND HOSP - SA	NTA TERESA COMM HOSPITAL	328	6.3%	800	5.1%	2.19	2.44

430763 EL CAMINO HOSPITAL	294	5.7%	782	5.0%	2.14	2.66
430879 SAN JOSE MEDICAL CENTER	272	5.3%	1,131	7.2%	3.10	4.16
430779 GOOD SAMARITAN & MISSION OAKS HOSPITALS	227	4.4%	734	4.7%	2.01	3.23
430905 STANFORD HOSPITAL	81	1.6%	374	2.4%	1.02	4.62
434040 LUCILE SALTER PACKARD CHILDREN'S HOSP AT STANFORD	54	1.0%	159	1.0%	0.44	2.94
ALL OTHER	98	1.9%	403	2.6%	1.10	4.11
TOTAL	5,169		15,761		43.18	3.05

#### 45-64 YRS

ID	NAME	DISCH	ARGES	DAY	S	ADC	LOS
430883 SANTA CLARA VALLEY M	IEDICAL CENTER	1,002	33.5%	4,602	33.6%	12.61	4.59
430879 SAN JOSE MEDICAL CEN	ITER	468	15.6%	2,452	17.9%	6.72	5.24
430705 REGIONAL MEDICAL OF	SAN JOSE	449	15.0%	2,303	16.8%	6.31	5.13
430805 KAISER FND HOSP - SAN	ITA CLARA	425	14.2%	1,737	12.7%	4.76	4.09
431506 KAISER FND HOSP - SAN	ITA TERESA COMM HOSPITAL	193	6.5%	705	5.2%	1.93	3.65
430779 GOOD SAMARITAN & MIS	SION OAKS HOSPITALS	120	4.0%	381	2.8%	1.04	3.18
430837 O'CONNOR HOSPITAL - S	SAN JOSE	117	3.9%	570	4.2%	1.56	4.87
430905 STANFORD HOSPITAL		88	2.9%	471	3.4%	1.29	5.35
430763 EL CAMINO HOSPITAL		58	1.9%	204	1.5%	0.56	3.52
430743 COMMUNITY HOSPITAL	OF LOS GATOS	29	1.0%	96	0.7%	0.26	3.31
ALL OTHER		42	1.4%	163	1.2%	0.45	3.88
TOTAL		2,991		13,684		37.49	4.58

#### 65 OR OLDER

ID	NAME	DISCHAR	GES	DAY	/S	ADC	LOS
430705 REGIONAL MEDICAL OF SAN JOSE		1,116	32.1%	8,273	40.7%	22.67	7.41
430879 SAN JOSE MEDICAL CENTER		820	23.6%	4,538	22.3%	12.43	5.53
430837 O'CONNOR HOSPITAL - SAN JOSE		438	12.6%	2,196	10.8%	6.02	5.01
430883 SANTA CLARA VALLEY MEDICAL CENTE	ER	390	11.2%	1,720	8.5%	4.71	4.41
430805 KAISER FND HOSP - SANTA CLARA		332	9.6%	1,501	7.4%	4.11	4.52
431506 KAISER FND HOSP - SANTA TERESA CO	DMM HOSPITAL	161	4.6%	733	3.6%	2.01	4.55
430905 STANFORD HOSPITAL		67	1.9%	356	1.7%	0.98	5.31
430763 EL CAMINO HOSPITAL		55	1.6%	308	1.5%	0.84	5.60
430779 GOOD SAMARITAN & MISSION OAKS HO	DSPITALS	42	1.2%	193	0.9%	0.53	4.60
430743 COMMUNITY HOSPITAL OF LOS GATOS		40	1.2%	446	2.2%	1.22	11.15
ALL OTHER		13	0.4%	85	0.4%	0.23	6.54
TOTAL		3,474		20,349		55.75	5.86

#### AGE UNKNOWN OR NOT DISCLOSED

ID	NAME	DISCHAF	RGES	DAY	/S	ADC	LOS
430805 KAISER F	ND HOSP - SANTA CLARA	126	8.9%	1,125	14.1%	3.08	8.93
430763 EL CAMIN	NO HOSPITAL	121	8.5%	642	8.0%	1.76	5.31
431506 KAISER F	ND HOSP - SANTA TERESA COMM HOSPITAL	121	8.5%	482	6.0%	1.32	3.98
430779 GOOD SA	AMARITAN & MISSION OAKS HOSPITALS	114	8.0%	516	6.4%	1.41	4.53
430837 O'CONNO	OR HOSPITAL - SAN JOSE	108	7.6%	430	5.4%	1.18	3.98
430879 SAN JOS	E MEDICAL CENTER	107	7.5%	1,108	13.8%	3.04	10.36
430705 REGIONA	AL MEDICAL OF SAN JOSE	100	7.0%	372	4.6%	1.02	3.72
430883 SANTA C	LARA VALLEY MEDICAL CENTER	96	6.8%	547	6.8%	1.50	5.70
430743COMMUN	ITY HOSPITAL OF LOS GATOS	88	6.2%	423	5.3%	1.16	4.81
430905 STANFOR	RD HOSPITAL	78	5.5%	434	5.4%	1.19	5.56
434040 LUCILE S	ALTER PACKARD CHILDREN'S HOSP AT STANFORD	59	4.2%	223	2.8%	0.61	3.78
410804 KAISER F	ND HOSP - REDWOOD CITY	43	3.0%	128	1.6%	0.35	2.98
10987 WASHING	GTON HOSPITAL - FREMONT	36	2.5%	95	1.2%	0.26	2.64
381154 UCSF ME	DICAL CENTERS	34	2.4%	228	2.8%	0.62	6.71
410891 SEQUOIA	A HOSPITAL	17	1.2%	59	0.7%	0.16	3.47
410852 MILLS-PE	ENINSULA MEDICAL CENTERS	16	1.1%	56	0.7%	0.15	3.50
ALL OTH	ER	157	11.0%	1,135	14.2%	3.11	7.23
TOTAL		1,421		8,003		21.93	5.63

\*General-acute-care excludes normal newborns, acute psychiatric and long-term care.

Source: Office of Statewide Health Planning and Development, Discharge Data Base, calendar-year 2003.

Table 11 provides market share data according to major payer source. With respect to Medicare, Regional ranks first (29%), followed by SJMC (21%). As expected, SCVMC has the largest Medi-Cal share (60%), followed by Regional (20%), and SJMC (8%). With respect to private coverage (i.e., private insurance), Kaiser ranks first (23%), followed by Regional (16%). SJMC has only a 7-percent share, behind El Camino and Good Samaritan, which are less geographically accessible, as is Kaiser-Santa Clara.

SCVMC accounts for virtually all indigent patients. SJMC has the largest share of self-pay patients (43%). It also has the largest share of "all other."

In summary, while SJMC is not the major provider of acute care to the downtown area as a whole, it plays an important role for some segments of the population (i.e., middle age and elderly).

#### TABLE 11 MARKET SHARES OF GENERAL-ACUTE-CARE\* DISCHARGES AND PATIENT DAYS ON BEHALF OF DOWNTOWN RESIDENTS ACCORDING TO PAYER SOURCE 2003

#### MEDICARE

ID	NAME	DISCHAR	GES	DAYS		ADC	LOS
430705 REGION	IAL MEDICAL OF SAN JOSE	1,134	28.7%	8,441	34.7%	23.13	7.44
430879 SAN JO	SE MEDICAL CENTER	835	21.1%	5,150	21.2%	14.11	6.17
430837 O'CONN	IOR HOSPITAL - SAN JOSE	449	11.4%	2,234	9.2%	6.12	4.98
430805 KAISER	FND HOSP - SANTA CLARA	444	11.2%	2,354	9.7%	6.45	5.30
430883 SANTA (	CLARA VALLEY MEDICAL CENTER	395	10.0%	2,243	9.2%	6.15	5.68
431506 KAISER	FND HOSP - SANTA TERESA COMM HOSPITAL	221	5.6%	981	4.0%	2.69	4.44
430905 STANFC	ORD HOSPITAL	116	2.9%	607	2.5%	1.66	5.23
430763 EL CAM	INO HOSPITAL	102	2.6%	677	2.8%	1.85	6.64
430779 GOOD S	SAMARITAN & MISSION OAKS HOSPITALS	87	2.2%	409	1.7%	1.12	4.70
430743COMMU	NITY HOSPITAL OF LOS GATOS	72	1.8%	697	2.9%	1.91	9.68
ALL OTH	IER	94	2.4%	511	2.1%	1.40	5.44
TOTAL		3,949		24,304		66.59	6.15

#### MEDI-CAL

ID	NAME	DISCHAR	GES	DAYS		ADC	LOS
430883 SANTA CLAI	RA VALLEY MEDICAL CENTER	2,628	59.6%	11,687	59.1%	32.02	4.45
430705 REGIONAL	MEDICAL OF SAN JOSE	866	19.6%	3,158	16.0%	8.65	3.65
430879 SAN JOSE N	IEDICAL CENTER	358	8.1%	2,035	10.3%	5.58	5.68
430837 O'CONNOR	HOSPITAL - SAN JOSE	320	7.3%	1,065	5.4%	2.92	3.33
434040 LUCILE SAL	TER PACKARD CHILDREN'S HOSP AT STANFORD	87	2.0%	710	3.6%	1.95	8.16
430905 STANFORD	HOSPITAL	42	1.0%	174	0.9%	0.48	4.14
ALL OTHER		112	2.5%	936	4.7%	2.56	8.36
TOTAL		4,413		19,765		54.15	4.48

#### PRIVATE COVERAGE

ID	NAME	DISCHA	RGES	DAYS		ADC	LOS
430805 KAISER FND H	IOSP - SANTA CLARA	1,265	22.9%	4,647	23.2%	12.73	3.67
430705 REGIONAL ME	DICAL OF SAN JOSE	876	15.9%	2,731	13.6%	7.48	3.12
431506 KAISER FND H	IOSP - SANTA TERESA COMM HOSPITAL	708	12.8%	2,103	10.5%	5.76	2.97
430837 O'CONNOR HO	OSPITAL - SAN JOSE	593	10.8%	1,749	8.7%	4.79	2.95
430763 EL CAMINO HO	DSPITAL	456	8.3%	1,578	7.9%	4.32	3.46

430779 GOOD SAMARITAN & MISSION OAKS HOSPITALS	415	7.5%	1,688	8.4%	4.62	4.07
430879 SAN JOSE MEDICAL CENTER	381	6.9%	1,592	8.0%	4.36	4.18
430883 SANTA CLARA VALLEY MEDICAL CENTER	177	3.2%	926	4.6%	2.54	5.23
434040 LUCILE SALTER PACKARD CHILDREN'S HOSP AT STANFORD	155	2.8%	793	4.0%	2.17	5.12
430743 COMMUNITY HOSPITAL OF LOS GATOS	125	2.3%	442	2.2%	1.21	3.54
430905 STANFORD HOSPITAL	120	2.2%	751	3.8%	2.06	6.26
ALL OTHER	243	4.4%	1,010	5.0%	2.77	4.16
TOTAL	5,514		20,010		54.82	3.63

#### COUNTY INDIGENT PROGRAMS

ID	NAME	DISCHA	RGES	S DAYS		ADC	LOS
430883 SANTA CL	ARA VALLEY MEDICAL CENTER	519	99.8%	1,542	99.9%	4.22	2.97
ALL OTHE	R	1	0.2%	2	0.1%	0.01	2.00
TOTAL		520		1,544		4.23	2.97

#### OTHER INDIGENT

ID	NAME	DISCH	ARGES	DAYS	DAYS		LOS
430883 SANTA CLARA VA	ALLEY MEDICAL CENTER	208	96.3%	573	95.0%	1.57	2.75
430705 REGIONAL MEDIO	CAL OF SAN JOSE	6	2.8%	16	2.7%	0.04	2.67
ALL OTHER		2	0.9%	14	2.3%	0.04	7.00
TOTAL		216		603		1.65	2.79

#### SELF PAY

ID	NAME	DISCH	ARGES	DAY	′S	ADC	LOS
430879 SAN JOSE MEDICAL	CENTER	170	43.0%	671	49.3%	1.84	3.95
430705 REGIONAL MEDICAL	OF SAN JOSE	119	30.1%	380	27.9%	1.04	3.19
430883 SANTA CLARA VALL	EY MEDICAL CENTER	23	5.8%	42	3.1%	0.12	1.83
430805 KAISER FND HOSP -	SANTA CLARA	17	4.3%	37	2.7%	0.10	2.18
430763 EL CAMINO HOSPITA	AL	13	3.3%	44	3.2%	0.12	3.38
430837 O'CONNOR HOSPITA	AL - SAN JOSE	10	2.5%	44	3.2%	0.12	4.40
430779 GOOD SAMARITAN 8	MISSION OAKS HOSPITALS	9	2.3%	20	1.5%	0.05	2.22
10987 WASHINGTON HOSF	PITAL - FREMONT	7	1.8%	18	1.3%	0.05	2.57
431506 KAISER FND HOSP -	SANTA TERESA COMM HOSPITAL	6	1.5%	33	2.4%	0.09	5.50
10805 EDEN MEDICAL CEN	TER & LAUREL GROVE HOSPITAL	4	1.0%	6	0.4%	0.02	1.50
ALL OTHER		17	4.3%	65	4.8%	0.18	3.82
TOTAL		395		1,360		3.73	3.44

#### ALL OTHER PAYERS (INCLUDING UNKNOWN/NOT REPORTED)

ID	NAME	DISCH	ARGES	DAY	(S	ADC	LOS
430879 SAN JOSE ME	DICAL CENTER	50	21.1%	133	12.5%	0.36	2.66
430883 SANTA CLARA	VALLEY MEDICAL CENTER	37	15.6%	218	20.5%	0.60	5.89

430905 STANFORD HOSPITAL	36	15.2%	103	9.7%	0.28	2.86
430705 REGIONAL MEDICAL OF SAN JOSE	27	11.4%	91	8.6%	0.25	3.37
430779 GOOD SAMARITAN & MISSION OAKS HOSPITALS	23	9.7%	312	29.4%	0.85	13.57
434040 LUCILE SALTER PACKARD CHILDREN'S HOSP AT STANFORD	17	7.2%	88	8.3%	0.24	5.18
430837 O'CONNOR HOSPITAL - SAN JOSE	15	6.3%	31	2.9%	0.08	2.07
430763 EL CAMINO HOSPITAL	9	3.8%	22	2.1%	0.06	2.44
10987 WASHINGTON HOSPITAL - FREMONT	5	2.1%	8	0.8%	0.02	1.60
381154 UCSF MEDICAL CENTERS	4	1.7%	4	0.4%	0.01	1.00
410891 SEQUOIA HOSPITAL	3	1.3%	11	1.0%	0.03	3.67
380939 SAN FRANCISCO GENERAL HOSPITAL	3	1.3%	5	0.5%	0.01	1.67
ALL OTHER	8	3.4%	35	3.3%	0.10	4.38
TOTAL	237		1,061		2.91	4.48

\*General-acute-care excludes normal newborns, acute psychiatric and long-term care.

Source: Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-year 2003.

#### **Bed Need Projections**

Table 12 illustrates the calculation of patient days per 1,000 population for the downtown area. It shows the apportionment of unspecified age data on patient days and discharges to each age group. It shows the estimation of 2003 population for the area defined in terms of census tracts through interpolation of 2000-2005 population estimates, and the application of that interpolation to the population defined in terms of zip codes. Finally, it shows the resulting discharges and patient days per 1,000 population – 75.2 and 338.6, respectively. The age-specific rates are later applied to the downtown area defined in terms of census tracts.

## TABLE 12ESTIMATION OF GENERAL-ACUTE-CARE PATIENT-DAYAND DISCHARGE RATES PER 1,000 POPULATIONDOWNTOWN AREA2003

		Population					Population					
	Repo	rted	Apportio	ned (1)	Zip Codes	Populatior	n Census	Tracts	Zip Codes	Disch/1000	PD/1000	
Age	Disch	PD	Disch	PD	2000	2000	2005	2003 (2)	2003 (2)	2003	2003	
0-4 Yrs	1,548	8,811	1,707	9,974	14,991	13,782	15,637	14,895	16,202	105.4	615.6	
5-19 Yrs	641	2,039	707	2,308	40,181	36,466	42,202	39,908	43,973	16.1	52.5	
20-44 Yrs	5,169	15,761	5,700	17,841	87,186	80,793	88,568	85,458	92,220	61.8	193.5	
45-64 Yrs	2,991	13,684	3,298	15,490	31,236	28,290	35,172	32,419	35,795	92.1	432.7	
65 +	3,474	20,349	3,831	23,034	13,321	12,195	14,061	13,315	14,544	263.4	1,583.8	
Unknown	1,421	8,003										
Total	15,244	68,647	15,244	68,647	186,915	171,526	195,640	185,994	202,734	75.2	338.6	

(1) Unknown/undisclosed patient days and discharges according to age are apportioned to age groups based on each age group's proportion of discharges and patient days relative to total for disclosed age groups.

(2) 2003 population for census tracts and zip codes based on linear interpolation between 2005 and 2000. Source: Zip-code population 2000, U.S. Census. Census-tract population 2000 and 2005, Association of Bay Area Governments (ABAG), 2004. Discharges and patient days, Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-Year 2003, based on zip-code approximation to downtown area. General-acute care excludes normal newborns, acute psychiatric and long-term care.

Table 13 shows the apportionment of unspecified age data to age groups for the county as a whole – the first step in estimating countywide age-specific utilization rates. These rates are used for two purposes: (1) as a basis of comparison for downtown utilization rates; and (2) to project countywide utilization, used in projecting occupancy for each hospital.

#### TABLE 13 GENERAL-ACUTE-CARE DISCHARGES AND PATIENT DAYS ACCORDING TO AGE GROUP SANTA CLARA COUNTY 2003

	All Ages	0-4 Yrs	5-19 Yrs	20-44 Yrs	45-64 Yrs	65 +	Age Unknown Or Not Disclosed
Discharges	134,464	11,439	4,747	41,136	24,985	38,595	13,562
Patient Days	567,617	60,561	14,982	123,672	106,217	192,719	69,466
Apportioned (1)							
Discharges	134,464	12,722	5,279	45,750	27,788	42,924	
Patient Days	567,617	69,006	17,071	140,918	121,029	219,593	

(1) Unknown/undisclosed patient days and discharges according to age are apportioned to age groups based on each age group's proportion of discharges and patient days relative to total for disclosed age groups. Source: Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-Year 2003.

Table 14 provides population projections by age group for the downtown area to 2030. Note that the greatest absolute and percentage growth in population are in the 44-64 and 65 and older age groups. Between 2003 and 2030, total population is projected to increase from 186,000 to 323,000 (74%). The 65+ age group is projected to triple, and the 44-64 age group is projected increase 147 percent. Noting the patient day rates from Table 12, this type of growth suggests increased per-capita utilization over time.

## TABLE 14PROJECTED POPULATION BY AGE GROUPDOWNTOWN AREA2000-2030

Age	2000	2003*	2005	2010	2015	2020	2025	2030	Change 2003- 2030	% Change 2003- 2030
0-4 Yrs	13,782	14,895	15,637	15,505	15,171	16,244	18,611	19,973	5,078	34.1%
5-19 Yrs	36,466	39,908	42,202	47,518	51,141	53,019	52,887	55,329	15,421	38.6%
20-44 Yrs	80,793	85,458	88,568	88,138	91,804	100,360	105,939	112,986	27,528	32.2%
45-64 Yrs	28,290	32,419	35,172	45,192	56,856	71,196	78,390	80,136	47,717	147.2%
65 +	12,195	13,315	14,061	16,671	21,950	29,873	40,534	54,277	40,962	307.7%
*Li	,	185,994 rpolation	,	,	,	270,6922	296,361	322,701	136,707	73.5%

Table 15 provides equivalent data for the county as a whole. While the growth rates are substantially less than the downtown area, the 45-64 and 65+ age groups are also projected to experience the greatest growth.

## TABLE 15PROJECTED POPULATION BY AGE GROUPSANTA CLARA COUNTY2000-2030

	Year										
Age Group	2000	2003*	2005	2010	2015	2020	2025	2030	Change 2003- 2030	% Change 2003- 2030	
0-4	119,418	125,238	129,118	126,007	125,806	128,213	134,953	137,227	11,989	9.6%	
5-19	340,194	362,657	377,633	399,543	405,074	403,311	394,149	399,654	36,997	10.2%	
20-44	708,713	706,102	704,361	691,438	683,843	698,529	716,302	742,510	36,408	5.2%	
45-64	353,733	383,264	402,951	465,741	510,341	545,445	538,237	516,196	132,932	34.7%	
65+	160,527	168,752	174,236	204,659	252,623	313,870	392,126	478,576	309,824	183.6%	
Total	1,682,585	1,746,013	1,788,299	1,887,388	1,977,687	2,089,368	2,175,767	2,274,163	528,150	30.2%	

\*Linear interpolation between 2000 and 2005.

Source: ABAG.

Table 16 applies the patient-days per 1,000 population estimates from Table 12 to project patient days by age group to 2030 for the downtown area. Note that the aging of the population raises the total patient-days per 1,000 population rate from 338 in 2003 to 489 in 2030, a 45 percent increase. Total patient days are projected to increase 151 percent over this period.

The bottom line in Table 16 shows bed need for these patient days at an 80percent occupancy standard. If all residents of the downtown area were to be served by local hospitals, 215 beds would be required in 2003. By 2030, 540 beds would be required. This geographic area, however, is far from self-contained. In fact, based on Table 10, more than two-thirds of downtown residents obtain hospital care outside the area. The two in-area hospitals (SJMC and Regional) have a combined market share of discharges of 32 percent. The purpose of this table, however, is to show the demand for beds generated by the downtown area population.

#### TABLE 16 PROJECTED PATIENT DAYS\* ACCORDING TO AGE GROUP DOWNTOWN AREA AND POPULATION-BASED BED NEED AT 80% OCCUPANCY 2000-2030

Age	2000	2003	2005	2010	2015	2020	2025	2030	% Change 2003- 2030
0-4 Yrs	8,484	9,169	9,626	9,545	9,339	10,000	11,457	12,295	34.1%
5-19 Yrs	1,914	2,095	2,215	2,494	2,684	2,783	2,776	2,904	38.6%
20-44 Yrs	15,630	16,533	17,134	17,051	17,760	19,416	20,495	21,858	32.2%
45-64 Yrs	12,242	14,029	15,220	19,556	24,604	30,809	33,922	34,678	147.2%
65 +	19,314	21,087	22,269	26,403	34,764	47,312	64,197	85,963	307.7%
Total	57,585	62,913	66,465	75,050	89,151	110,320	132,847	157,698	150.7%
PD/1000	336	338	340	352	376	408	448	489	44.5%
Beds @ 80%	197	215	228	257	305	378	455	540	150.7%

\* Based on 2003 patient-day rate by age group applied to census-tract population projections.

Table 17 shows discharges and patient days per 1,000 population for the county as a whole in 2003. Table 18 applies these patient day rates to project countywide patient days according to age group to 2030.

# TABLE 17GENERAL-ACUTE-CARE DISCHARGES AND PATIENT DAYS PER 1,000POPULATIONACCORDING TO AGE GROUPSANTA CLARA COUNTY2003

	Total	0-4 Yrs	5-19 Yrs	20-44 Yrs	45-64 Yrs	65 +
Discharges	77.0	101.6	14.6	64.8	72.5	254.4
Patient Days	325.1	551.0	47.1	199.6	315.8	1301.3

Source: Population: Linear interpolation of 2000-2005 ABAG data. Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-Year 2003.

## TABLE 18PROJECTED GENERAL ACUTE PATIENT DAYS\*ACCORDING TO AGE GROUPSANTA CLARA COUNTY2000-2030

									Change 2003-	% Change 2003-
Age Group	2000	2003	2005	2010	2015	2020	2025	2030	2030	2030
0-4	65,799	69,006	71,144	69,430	69,319	70,645	74,359	75,612	6,606	9.6%
5-19	16,014	17,071	17,776	18,808	19,068	18,985	18,554	18,813	1,742	10.2%
20-44	141,439	140,918	140,570	137,991	136,476	139,406	142,953	148,184	7,266	5.2%
45-64	111,703	121,029	127,246	147,074	161,158	172,243	169,967	163,007	41,978	34.7%
65+	208,890	219,593	226,729	266,318	328,732	408,431	510,264	622,759	403,166	183.6%
Total	543,845	567,617	583,465	639,620	714,752	809,711	916,097	1,028,374	460,757	81.2%
		* Based on 20	003 natient_de	w rate by age	group applied	to ARAG no	mulation pro	iections		

\* Based on 2003 patient-day rate by age group applied to ABAG population projections.

Tables 19 through 23 are an attempt to estimate the impact of downtown area and rest-of-county population growth on each of the four major non-Kaiser hospitals serving the downtown area. Each hospital's in-area patient days are assumed to grow with total downtown patient days, holding 2003 market share constant. Each hospital's out-of-area patient days are assumed to grow with total rest-of-county patient days. Occupancy rates are projected based on current general-acute licensed beds. The numbers of beds needed to accommodate total demand (downtown and rest-of-county) are calculated for each year at 80-percent occupancy.

SJMC projections are shown in Table 19. SJMC currently derives 25 percent of its patient days from the downtown area. Because of the relatively higher downtown

growth rate, by 2030, 32 percent of its patient days would come from downtown. Its current occupancy based on licensed beds is 32 percent. By 2030, occupancy would grow to 62 percent. Note that this analysis assumes current market share remains unchanged. Obviously a hospital's market share changes due to many factors (e.g., changing service mix, marketing, competition, area-wide payer mix).

#### **TABLE 19**

#### PROJECTION OF SAN JOSE MEDICAL CENTER PATIENT DAYS DRAWN FROM DOWNTOWN AREA AND REMAINDER OF COUNTY 2003-2030

	2003	2005	2010	2015	2020	2025	2030
SJMC Downtown PD @ 2003 Mkt Shr (1)	8,781	9,277	10,475	12,443	15,397	18,541	22,010
% of total SJMC PD	24.6%						
SJMC Total; PD (2)	35,720						
SJMC Out of Area PD	26,939						
2003 Licensed GAC Beds	302						
Occupancy @ 2003 Licensed Beds	32.4%	33.5%	36.8%	41.6%	47.8%	54.7%	62.1%
Total County PD	567,617	583,465	639,620	714,752	809,711	916,097	1,028,374
Total Non-Downtown PD	504,704	517,000	564,570	625,601	699,391	783,250	870,676
SJMC Out-of-Area PD (3)	26,939	27,596	30,135	33,392	37,331	41,807	46,474
@ non-Downtown Growth rate							
Total SJMC PD	35,720	36,872	40,609	45,835	52,728	60,348	68,483
Beds Needed @ 80% Occ	122.33	126.27	139.07	156.97	180.58	206.67	234.53
% PD Drawn from Downtown	24.6%	25.2%	25.8%	27.1%	29.2%	30.7%	32.1%

(1) Assumes hospital's downtown patient days increase at same rate as downtown area, holding constant 2003 market share.

(2) Total general-acute-care patient days and licensed beds for 2003 from OSHPD Automated Licensing Information and Tracking System (ALIRTS).

(3) Assumes hospital's non-downtown patient days increase at same rate as remainder of County.

This analysis does not take into account age-specific market shares. Since SJMC has relatively higher market shares in the 45-64 and 65+ age groups (see Table 10), and these age groups are projected to increase substantially more than other groups, it is reasonable to expect its total market share would increase (assuming its service emphasis remains unchanged). This analysis is presented in Table 19A. Even using the age-specific-market-share approach, by 2030, SJMC's occupancy rate is projected to only be 67 percent, rather than the 62 percent using the aggregate approach. Note that base-year-2003 in-area and out-of-area patient day totals differ slightly from those in Table 19. This is due to the inability to account for the age-specific market share for the unreported age group.

#### TABLE 19A

#### PROJECTION OF SAN JOSE MEDICAL CENTER PATIENT DAYS DRAWN FROM DOWNTOWN AREA AND REMAINDER OF COUNTY BASED ON AGE-SPECIFIC MARKET SHARES 2003-2030

Age	2003 Mkt Share	2003	2005	2010	2015	2020	2025	2030
0-4 Yrs	2.1%	188	198	196	192	205	235	253
5-19 Yrs	8.4%	176	186	209	225	233	233	244
20-44 Yrs	7.2%	1,186	1,230	1,224	1,274	1,393	1,471	1,569
45-64 Yrs	17.9%	2,514	2,727	3,504	4,409	5,521	6,078	6,214
65 +	22.3%	4,703	4,966	5,888	7,753	10,551	14,316	19,170
All Ages	13.9%	8,767	9,307	11,021	13,853	17,904	22,334	27,449
Total County PD		567,617	583,465	639,620	714,752	809,711	916,097	1,028,374
Total Non-Downtown PI	D	504,704	517,000	564,570	625,601	699,391	783,250	870,676
SJMC Out-of-Area PD		26,953	27,610	30,150	33,409	37,350	41,829	46,497
SJMC Total PD		35,720	36,916	41,171	47,262	55,254	64,162	73,946
ADC		97.86	101.14	112.80	129.49	151.38	175.79	202.59
Occupancy		32.4%	33.5%	37.4%	42.9%	50.1%	58.2%	67.1%
Beds Needed @ 80%		122.33	126.43	141.00	161.86	189.23	219.73	253.24

The aggregate-market-share and the age-specific approaches are next applied to SCVMC, O'Connor and Regional. For these hospitals, individual-hospital bed shortages and surpluses are expressed in terms of both licensed beds and available beds. While the former is the most objective measure of inpatient capacity, in many cases licensed beds are not all available for use. In some cases they can be made available for use on relatively short notice. But in other cases, to do so would require major modifications in the hospital's plant. On the other hand, available beds can be ready for use on relatively short notice. The available bed count, however, can vary from year to year based on fluctuations in demand. For these reasons, we make use of both definitions through first presenting bed shortages (surpluses) in terms of licensed beds, and then qualifying these estimates by calling attention to the difference between both counts in 2003. Table 20 compares licensed and available general-acute beds for the three hospitals in 2003.

#### TABLE 20 GENERAL-ACUTE-CARE BEDS AVAILABLE VERSUS LICENSED SANTA CLARA VALLEY MEDICAL CENTER, O'CONNOR HOSPITAL AND REGIONAL MEDICAL CENTER 2003

	SCVMC	O'Connor	Regional	Total
Available Beds	456	260	188	904
Licensed Beds	524	312	204	1,040
Available % of Licensed	87.0%	83.3%	92.2%	86.9%

Source: Office of Statewide Health Planning and Development, Annual Hospital Financial Disclosure Reports, 2003; and ALIRTS, 2003.

Table 21 applies the aggregate market-share approach to SCVMC. This hospital is projected to reach 80 percent occupancy before 2015. Table 21A applies the age-specific approach. The results show, relative to the Table 21 projections, fewer patient days demanded past 2015, due to SVMC's relatively low market shares in the older age groups. On a licensed-beds basis, a shortage is projected by 2015. In terms of currently available beds, however, the shortage develops prior to 2010.

#### TABLE 21 PROJECTION OF SANTA CLARA VALLEY MEDICAL CENTER PATIENT DAYS DRAWN FROM DOWNTOWN AREA AND REMAINDER OF COUNTY 2003-2030

	2003	2005	2010	2015	2020	2025	2030
SCVMC Downtown PD @ 2003 Mkt Shr (1)	15,792	16,683	18,838	22,378	27,691	33,346	39,584
% of Total SCVMC PD	12.6%						
SCVMC Total PD (2)	125,028						
SCVMC Out-of Area PD	109,236						
2003 Licensed GAC Beds	524						
Occupancy @ 2003 Licensed Beds	65.4%	67.2%	73.7%	82.5%	93.6%	106.1%	119.2%
Total County PD	567,617	583,465	639,620	714,752	809,711	916,097	1,028,374
Total Non-Downtown PD	504,704	517,000	564,570	625,601	699,391	783,250	870,676
SCVMC Out-of-Area PD	109,236	111,898	122,194	135,403	151,374	169,524	188,446
@ non-Downtown Growth rate (3)							
Total SCVMC PD	125,028	128,581	141,032	157,781	179,065	202,869	228,030
Beds Needed @ 80% Occ	428.18	440.35	482.99	540.34	613.24	694.76	780.92
% PD Drawn from Downtown	12.6%	13.0%	13.4%	14.2%	15.5%	16.4%	17.4%
2003 GAC Licensed Beds	524	524	524	524	524	524	524

2003	2005	2010	2015	2020	2025	2030
456	456	456	456	456	456	456

2003 GAC Available Beds

(1) Assumes hospital's downtown patient days increase at same rate as downtown area, holding constant 2003 market share.

(2) Total general-acute-care patient days and licensed beds for 2003 from OSHPD Automated Licensing Information and Tracking System (ALIRTS).

(3) Assumes hospital's non-downtown patient days increase at same rate as remainder of County.

#### TABLE 21A

#### PROJECTION OF SANTA CLARA VALLEY MEDICAL CENTER PATIENT DAYS DRAWN FROM DOWNTOWN AREA AND REMAINDER OF COUNTY BASED ON AGE-SPECIFIC MARKET SHARES 2003-2030

Age	2003 Mkt Share	2003	2005	2010	2015	2020	2025	2030
0-4 Yrs	42.1%	3,863	4,055	4,021	3,935	4,213	4,827	5,180
5-19 Yrs	40.7%	852	901	1,014	1,091	1,131	1,129	1,181
20-44 Yrs	36.9%	6,106	6,328	6,298	6,559	7,171	7,569	8,073
45-64 Yrs	33.6%	4,718	5,119	6,577	8,274	10,361	11,408	11,662
65 +	8.5%	1,782	1,882	2,232	2,938	3,999	5,426	7,266
All Ages	27.5%	17,321	18,285	20,141	22,798	26,875	30,359	33,362
Total County PD		567,617	583,465	639,620	714,752	809,711	916,097	1,028,374
Total Non-Downtown PD		504,704	517,000	564,570	625,601	699,391	783,250	870,676
SCVMC Out-of-Area PD		107,707	110,331	120,483	133,507	149,254	167,150	185,808
SCVMC Total PD		125,028	128,616	140,624	156,305	176,130	197,510	219,169
ADC		342.54	352.37	385.27	428.23	482.55	541.12	600.46
Occupancy		65.4%	67.2%	73.5%	81.7%	92.1%	103.3%	114.6%
Beds Needed @ 80%		428.18	440.47	481.59	535.29	603.18	676.40	750.58
2003 GAC Licensed Bed	S	524	524	524	524	524	524	524
2003 GAC Available Bed	S	456	456	456	456	456	456	456

Table 22 applies the analysis to O'Connor Hospital. By 2030, its occupancy is projected to reach 75 percent. The age-specific approach, shown in Table 22A, results in slightly higher future occupancy rates. While on a licensed-beds basis no shortage is projected for the time horizon considered here, in terms of currently available beds, a shortage appears by 2025.

### TABLE 22PROJECTION OF O'CONNOR HOSPITAL PATIENT DAYSDRAWN FROM DOWNTOWN AREA AND REMAINDER OF COUNTY2003-2030

	2003	2005	2010	2015	2020	2025	2030
O'Connor Downtown PD @ 2003 Mkt Shr (1)	4,695	4,960	5,601	6,653	8,233	9,914	11,769
% of Total O'Connor PD	9.9%						
O'Connor PD (2)	47,489						
O'Connor Out-of Area PD	42,794						
2003 Licensed GAC Beds	312						
Occupancy @ 2003 Licensed Beds	41.7%	42.8%	47.0%	52.4%	59.3%	67.0%	75.2%
Total County PD	567,617	583,465	639,620	714,752	809,711	916,097	1,028,374
Total Non-Downtown PD	504,704	517,000	564,570	625,601	699,391	783,250	870,676
O'Connor Out-of-Area PD (3)	42,794	43,836	47,870	53,045	59,301	66,412	73,825
@ non-Downtown Growth rate							
Total O'Connor PD	47,489	48,797	53,471	59,698	67,534	76,326	85,593
Beds Needed @ 80% Occ	162.63	167.11	183.12	204.45	231.28	261.39	293.13
% PD Drawn from Downtown	9.9%	10.2%	10.5%	11.1%	12.2%	13.0%	13.7%
2003 GAC Licensed Beds	312	312	312	312	312	312	312
2003 GAC Available Beds	260	260	260	260	260	260	260

(1) Assumes hospital's downtown patient days increase at same rate as downtown area, holding constant 2003 market share.

(2) Total general-acute-care patient days and licensed beds for 2003 from OSHPD Automated Licensing Information and Tracking System (ALIRTS).

(3) Assumes hospital's non-downtown patient days increase at same rate as remainder of County.

#### TABLE 22A

#### PROJECTION OF O'CONNOR HOSPITAL PATIENT DAYS DRAWN FROM DOWNTOWN AREA AND REMAINDER OF COUNTY BASED ON AGE-SPECIFIC MARKET SHARES 2003-2030

	2003 Mkt							
Age	Share	2003	2005	2010	2015	2020	2025	2030
0-4 Yrs	4.6%	420	441	438	428	459	525	564
5-19 Yrs	2.2%	46	49	55	59	61	61	64
20-44 Yrs	9.4%	1,550	1,607	1,599	1,665	1,821	1,922	2,050
45-64 Yrs	4.2%	584	634	815	1,025	1,283	1,413	1,444
65 +	10.8%	2,276	2,403	2,849	3,752	5,106	6,928	9,277
All Ages	7.8%	4,877	5,134	5,756	6,929	8,730	10,849	13,399
Total County PD		567,617	583,465	639,620	714,752	809,711	916,097	1,028,374
Total Non-Downtown PD		504,704	517,000	564,570	625,601	699,391	783,250	870,676
O'Connor Out-of-Area PI	)	42,612	43,650	47,666	52,819	59,049	66,129	73,511
O'Connor Total PD		47,489	48,784	53,422	59,749	67,779	76,979	86,910

	2003 Mkt							
Age	Share	2003	2005	2010	2015	2020	2025	2030
ADC		130.11	133.66	146.36	163.69	185.70	210.90	238.11
Occupancy		41.7%	42.8%	46.9%	52.5%	59.5%	67.6%	76.3%
Beds Needed @ 80%		162.63	167.07	182.95	204.62	232.12	263.63	297.64
2003 GAC Licensed Bed	S	312	312	312	312	312	312	312
2003 GAC Available Bec	ls	260	260	260	260	260	260	260

Regional Medical Center's projections are provided in Table 23. It is projected to reach 80-percent occupancy of licensed beds by 2010. Using the age-specific approach (Table 23A), it reaches 80-percent occupancy at the same time, but for the out years, patient-day demand is considerably higher than that derived using the aggregate-market-share approach, reflecting Regional's relatively high market share of the older age groups. Not reflected in these tables is Regional's plan to add approximately 75 beds by 2007. This would increase its total licensed beds to 279. If this expansion occurs on schedule, Regional would have sufficient licensed beds through 2020. In terms of currently available beds, the shortage starts to appear in 2005.

### TABLE 23PROJECTION OF REGIONAL MEDICAL CENTER PATIENT DAYSDRAWN FROM DOWNTOWN AREA AND REMAINDER OF COUNTY2003-2030

	2003	2005	2010	2015	2020	2025	2030
Regional Downtown PD @ 2003 Mkt Shr (1)	13,579	14,346	16,199	19,243	23,812	28,674	34,038
% of Total Regional PD	25.9%						
Regional PD (2)	52,490						
Regional Out-of Area PD	38,911						
2003 Licensed GAC Beds	204						
Occupancy @ 2003 Licensed Beds	70.5%	72.8%	80.2%	90.6%	104.4%	119.6%	135.9%
Total County PD	567,617	583,465	639,620	714,752	809,711	916,097	1,028,374
Total Non-Downtown PD	504,704	517,000	564,570	625,601	699,391	783,250	870,676
Regional Out-of-Area PD (3)	38,911	39,859	43,526	48,231	53,920	60,385	67,126
@ non-Downtown Growth rate							
Total Regional PD	52,490	54,205	59,725	67,474	77,732	89,059	101,164
Beds Needed @ 80% Occ	179.76	185.63	204.54	231.08	266.21	305.00	346.45
% PD Drawn from Downtown	25.9%	26.5%	27.1%	28.5%	30.6%	32.2%	33.6%
2003 GAC Licensed Beds	204	204	204	204	204	204	204
2003 GAC Available Beds	188	188	188	188	188	188	188

1) Assumes hospital's downtown patient days increase at same rate as downtown area, holding constant 2003 market share.

(2) Total general-acute-care patient days and licensed beds for 2003 from OSHPD Automated Licensing Information and Tracking System (ALIRTS).

(3) Assumes hospital's non-downtown patient days increase at same rate as remainder of County.

#### TABLE 23A

#### PROJECTION OF REGIONAL MEDICAL CENTER PATIENT DAYS DRAWN FROM DOWNTOWN AREA AND REMAINDER OF COUNTY BASED ON AGE-SPECIFIC MARKET SHARES 2003-2030

Age	2003 Mkt Share	2003	2005	2010	2015	2020	2025	2030
0-4 Yrs	11.3%	1,037	1,088	1,079	1,056	1,130	1,295	1,390
5-19 Yrs	16.5%	346	366	412	444	460	459	480
20-44 Yrs	16.1%	2,660	2,757	2,744	2,858	3,124	3,298	3,517
45-64 Yrs	16.8%	2,361	2,562	3,291	4,141	5,185	5,709	5,836
65 +	40.7%	8,573	9,054	10,734	14,133	19,235	26,100	34,949
All Ages	23.8%	14,977	15,827	18,260	22,631	29,135	36,860	46,172
Total County PD		567,617	583,465	639,620	714,752	809,711	916,097	1,028,374
Total Non-Downtown PD		504,704	517,000	564,570	625,601	699,391	783,250	870,676
Regional Out-of-Area PD		37,513	38,427	41,963	46,499	51,983	58,216	64,714
Regional Total PD		52,490	54,253	60,223	69,130	81,118	95,076	110,886
ADC		143.81	148.64	164.99	189.40	222.24	260.48	303.80
Occupancy		70.5%	72.9%	80.9%	92.8%	108.9%	127.7%	148.9%
Beds Needed @ 80%		179.76	185.80	206.24	236.75	277.80	325.60	379.75
2003 GAC Licensed Bed	S	204	204	204	204	204	204	204
2003 GAC Available Bed	S	188	188	188	188	188	188	188

Table 24 compares patient-days-per-thousand population rates between the downtown area and the county as a whole. An "expected" patient day rate is calculated for the downtown area using the age-specific county rates (i.e., if the downtown age-specific patient-day-utilization rates were equal to the county rates, what would the aggregate downtown rate be?). Given the current age distribution in the downtown area, if age-specific utilization patterns were the same as the county as a whole, the former's overall patient-days-per-thousand population rate would be 294, rather than the actual 338. The downtown age index is then 90 percent (i.e., given the downtown age distribution, its overall patient-day rate should be 90 percent of the county's). But, rather than 90 percent of the county's rate, the area's rate is 104 percent of the county's rate – 15 percent above what would be expected.

#### TABLE 24 COMPARISON OF DOWNTOWN AND COUNTY PATIENT DAYS PER 1,000 POPULATION CALCULATION OF EXPECTED DOWNTOWN PATIENT DAYS AT COUNTY AGE-SPECIFIC RATES 2003

	Total	0-4 Yrs	5-19 Yrs 2	20-44 Yrs 4	5-64 Yrs	65 +
County PD/1000 Population	325.1	551.0	47.1	199.6	315.8	1301.3
Downtown Population	185,994	14,895	39,908	85,458	32,419	13,315
Expected Downtown PD @ County Rates	54,704	8,207	1,879	17,055	10,237	17,326
Actual Downtown PD	62,913	9,169	2,095	16,533	14,029	21,087
Expected Downtown PD/1000 All Ages	294.1					
Downtown Age Index	0.90					
Downtown Actual PD/1000 Rate	338.6	615.6	52.5	193.5	432.7	1,583.8
Downtown Rate % of County	104.2%	111.7%	111.5%	96.9%	137.0%	121.7%
Downtown Rate % of Expected	115.1%					

This higher utilization rate appears to be explained by the downtown payer mix, which is substantially lower in private coverage, and higher in Medi-Cal, as seen in Table 25.<sup>6</sup> The lower private-coverage percentage suggests less managed-care penetration in the downtown area versus the county as a whole. If there were expectations this payer mix difference would diminish over time, it would be appropriate to reduce the downtown area patient-day demand projections below those shown in Tables 19-23. If the downtown payer mix were expected to be similar to the county payer mix, the patient-day-demand projections should be reduced by approximately 15 percent. At this time, however, there is little reason to expect such a convergence.

#### TABLE 25 COMPARISON OF PAYER MIX DOWNTOWN AREA VERSUS SANTA CLARA COUNTY 2003

	All Payers	Medicare	Medi-Cal	Private Coverage	County Indigent	Other Indigent	Self Pay	All Other
	-		County	-	-	-		
Discharges	134,464	41,103	22,792	62,191	2,694	1,123	2,314	2,247
Patient Days	567,617	217,290	100,729	220,596	8,202	3,404	7,697	9,699
Disch %	100.0%	30.6%	17.0%	46.3%	2.0%	0.8%	1.7%	1.7%

<sup>&</sup>lt;sup>6</sup> Higher downtown utilization rates could also be explained by the downtown population having different health-status levels than the county as a whole. At this time sufficient data are not readily available to examine this possibility.

	All	Medicare	Medi-Cal	Private	County	Other	Self Pay	All
	Payers			Coverage	Indigent	Indigent		Other
PD %	100.0%	38.3%	17.7%	38.9%	1.4%	0.6%	1.4%	1.7%
LOS	4.22	5.29	4.42	3.55	3.04	3.03	3.33	4.32
			Downtown					
Discharges	15,244	3,949	4,413	5,514	520	216	395	237
Patient Days	68,647	24,304	19,765	20,010	1,544	603	1,360	1,061
Disch %	100.0%	25.9%	28.9%	36.2%	3.4%	1.4%	2.6%	1.6%
PD %	100.0%	35.4%	28.8%	29.1%	2.2%	0.9%	2.0%	1.5%
LOS	4.50	6.15	4.48	3.63	2.97	2.79	3.44	4.48

Source: Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-Year 2003.

Table 26 presents ABAG projections of employment as a percent of population for both the downtown area and the county as a whole. While the area's percentage of employment to population is growing relative to the county, the growth is too small to warrant an assumption of increasing private coverage in the downtown area relative to the county.

#### TABLE 26 PROJECTED EMPLOYMENT AS PERCENT OF TOTAL POPULATION DOWNTOWN AREA AND SANTA CLARA COUNTY 2000-2030

Area	2000	2005	2010	2015	2020	2025	2030
Downtown	51.2%	48.5%	47.3%	51.7%	52.3%	53.0%	53.3%
County	57.0%	53.7%	52.2%	56.9%	57.1%	57.6%	57.8%
Source: ABA	AG.						

Table 27 shows ABAG projections of average household income for both areas. Downtown income is growing at a slightly greater rate than that for the county. There is still not enough information, however, to warrant an assumption of growing privateinsurance coverage relative to other sources of payment.

There are plans, however, to expand high-density housing geared toward uppermiddle-income groups and to expand commercial, hotel and convention facilities in the downtown area.<sup>7</sup> It is certainly possible these developments would increase the privately-insured population residing in the service area beyond that suggested by the ABAG income and employment projections. Moreover, San Jose State University, located in the downtown area, plans to increase enrollment and student housing

<sup>&</sup>lt;sup>7</sup> Strategy 2000, San Jose Redevelopment Agency, 2001.

considerably. Although this age group has the lowest hospital utilization rate, this would add to the privately insured population. While a shift in payer mix toward privately insured should lead to lower per-capita hospital use rates, it could also enhance the financial viability of hospitals serving this population – assuming the current health care financing system remains in its current form.

#### **TABLE 27**

#### PROJECTED AVERAGE HOUSEHOLD INCOME DOWNTOWN AREA AND SANTA CLARA COUNTY 2000-2030

Annual Rate of 2000 2005 2010 2015 2020 2025 Area 2030 Increase\* Downtown \$74,644 \$73,910 \$77,332 \$82,366 \$89,494 \$94,523 \$100,154 1.1% \$105,301 \$105,356 \$110,555 \$116,184 \$121,896 \$128,091 \$134,306 0.9% County 70.9% 70.2% 69.9% 70.9% 73.4% 73.8% Downtown % of County 74.6% \* Calculated by a semi-logarithmic regression. Source: ABAG.

Tables 28 through 30 provide a preliminary analysis of the impact of SJMC's closure on SCVMC, O'Connor and Regional, respectively, assuming each hospital receives one-third of SJMC's patient days originating in the downtown area.

According to Table 28, if SCVMC receives one-third of SJMC's downtown patient days, it would have a shortage of 27 licensed beds by 2015, 16 of which would be due to SJMC's closure. (This assumes 80-percent occupancy represents full operational capacity.) Of SCVMC's projected capacity shortfall from 2015 to 2030, only a small portion is attributed to SJMC's closure. If measured on currently available beds, capacity is reduced by 68 beds, and a bed shortage would materialize upon SJMC's closure.

O'Connor would not hit licensed capacity until after 2025, as shown in Table 29. It thus has sufficient capacity to handle patients from SJMC for the foreseeable future. In terms of currently available beds, however, it will encounter a shortage by 2020.<sup>8</sup>

Regional will hit a capacity problem sometime between 2005 and 2010 (Table 29). By 2010, it will have a 15-bed shortage, assuming it does not expand with SJMC's closure. In later years the shortage grows, but SJMC's contribution to this shortage becomes a smaller and smaller proportion of the projected shortage. For example, by

Average

<sup>&</sup>lt;sup>8</sup> The O'Connor Chief Executive Officer, Rob Curry, has indicated that all licensed beds can be made available for use.

2015, of Regional's projected 49-bed shortage, 16 are attributed to SJMC; by 2020, SJMC accounts for 20 percent of a projected 100-bed shortage. Its planned 75-bed expansion by 2007 would provide sufficient capacity through 2015. In terms of currently available beds, the bed shortage is projected to occur immediately upon SJMC's closure.

This analysis does not account for SJMC's out-of-area patients (both trauma and non-trauma). It is likely they would be distributed throughout the county, and beyond, and thus would not have a material effect on any individual hospital, other than the three hospitals considered here. If, however, only two trauma centers remain in Santa Clara County after SJMC's closure (SCVMC and Stanford), the impact on Stanford could be relatively greater than the impacts on other out-of-area hospitals.

#### TABLE 28 IMPACT OF SJMC CLOSURE ON SANTA CLARA VALLEY MEDICAL CENTER ASSUMING IT RECEIVES ONE-THIRD OF SJMC PATIENT DAYS ORIGINATING IN DOWNTOWN AREA

	2003	2005	2010	2015	2020	2025	2030
Patient Days Plus							
1/3 SJMC Downtown		131,718	144,298	160,923	182,098	204,954	228,319
ADC		360.87	395.34	440.88	498.90	561.52	625.53
Occupancy		68.9%	75.4%	84.1%	95.2%	107.2%	119.4%
Beds Needed @ 80%		451.09	494.17	551.11	623.62	701.90	781.91
2003 Licensed Beds	524	524	524	524	524	524	524
2003 Available Beds	456	456	456	456	456	456	456
Licensed Bed Surplus		73	30	(27)	(100)	(178)	(258)
Available Beds Surplus		5	(38)	(95)	(168)	(246)	(326)
Additional Beds Needed							
Due to SJMC Closure		11	13	16	20	25	31

#### TABLE 29 IMPACT OF SJMC CLOSURE ON O'CONNOR HOSPITAL ASSUMING IT RECEIVES ONE-THIRD OF SJMC PATIENT DAYS ORIGINATING IN DOWNTOWN AREA

	2003	2005	2010	2015	2020	2025	2030
Patient Days Plus 1/3 SJMC Downtown		51,887	57,096	64,366	73,747	84,423	96,059
ADC		142.15	156.43	176.35	202.05	231.30	263.18
Occupancy		45.6%	50.1%	56.5%	64.8%	74.1%	84.4%
Beds Needed @ 80%		177.69	195.53	220.43	252.56	289.12	328.97
2003 Licensed Beds	312	312	312	312	312	312	312

	2003	2005	2010	2015	2020	2025	2030
2003 Available Beds	260	260	260	260	260	260	260
Licensed Bed Surplus		134	116	92	59	23	(17)
Available Beds Surplus		82	64	40	7	(29)	(69)
Additional Beds Needed		11	13	16	20	25	31
Due to SJMC Closure							

#### TABLE 30 IMPACT OF SJMC CLOSURE ON REGIONAL MEDICAL CENTER ASSUMING IT RECEIVES ONE-THIRD OF SJMC PATIENT DAYS ORIGINATING IN DOWNTOWN AREA

	2003	2005	2010	2015	2020	2025	2030
Patient Days Plus 1/3 SJMC Downtown		57,356	63,897	73,748	87,086	102,521	120,036
ADC		157.14	175.06	202.05	238.59	280.88	328.86
Occupancy		77.0%	85.8%	99.0%	117.0%	137.7%	161.2%
Beds Needed @ 80%		196.42	218.82	252.56	298.24	351.10	411.08
2003 Licensed Beds	204	204	204	204	204	204	204
2003 Available Beds	188	188	188	188	188	188	188
Licensed Bed Surplus		8	(15)	(49)	(94)	(147)	(207)
Available Beds Surplus		(8)	(31)	(65)	(110)	(163)	(223)
Additional Beds Needed		11	13	16	20	25	31
Due to SJMC Closure							

Table 31 aggregates the results of Tables 28-30, providing an estimate of overall bed shortages (surpluses) for all three hospitals combined. It shows that in terms of licensed beds, a shortage will develop by 2015, assuming Regional does not proceed with its planned expansion. If it is does proceed, the shortage would be pushed back a few years. On an available-beds basis, however, the shortage appears before 2010. If Regional adds 75 beds in 2007 as planned, a shortage, on an available-bed basis, is projected at about 2015.

The lack of a projected licensed-bed shortage until 2015, and absence of a current available-bed shortage, owes to substantial excess capacity at O'Connor. Should that hospital's apparent ability or willingness to absorb considerably more patients change (e.g., due to an unfavorable payer mix and/or a preference to target its services to the population west of the downtown area), the projected lack of a shortage would not materialize. That, combined with a failure on the part of Regional to proceed with its

2007 expansion plans, could result in a severe bed shortage for the downtown population. Given the consequences of these possibilities, it is incumbent upon local elected officials to quickly initiate a planning process involving these three hospitals, to assure such a shortage does not develop.

#### TABLE 31 IMPACT OF SJMC CLOSURE ON THE THREE NEIGHBORING HOSPITALS COMBINED ASSUMING EACH RECEIVES ONE-THIRD OF SJMC PATIENT DAYS ORIGINATING IN DOWNTOWN AREA

	2005	2010	2015	2020	2025	2030
Patient Days Plus 1/3 SJMC Downtown	240,960	265,290	299,036	342,930	391,899	444,414
ADC	660.17	726.82	819.28	939.53	1,073.69	1,217.57
Occupancy	63.5%	69.9%	78.8%	90.3%	103.2%	117.1%
Beds Needed @ 80%	825.21	908.53	1,024.10	1,174.42	1,342.12	1,521.97
2003 LicensedBeds	1,040	1,040	1,040	1,040	1,040	1,040
2003 Available Beds	904	904	904	904	904	904
Licensed Bed Surplus	215	131	16	(134)	(302)	(482)
Available Beds Surplus	79	(5)	(120)	(270)	(438)	(618)
Additional Beds Needed Due to SJMC						
Closure	32	38	47	61	76	94

#### <u>Summary</u>

Substantial population growth is expected in the downtown area, especially among the middle-aged and elderly groups, which have the highest hospital use rates.

While SJMC has a relatively low market share of total discharges and patient days originating in the downtown area, it has relatively large shares in the two older age groups. And, not only are use rates higher among these groups, their population is projected to grow at much higher rates than younger groups.

SJMC is currently licensed for 302 GAC beds, 32 percent of which are filled. If it were to remain in operation and maintain its current market share in each age group, by 2020 demand for its services would warrant a 200-bed hospital. 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 be more difficult if Regional pursues its 75-bed expansion.

Given the population and patient-day projections, SCVMC will reach licensed capacity by 2015 without SJMC's closure, and a few years earlier with SJMC's closure. O'Connor, however, will have excess licensed capacity beyond 2030 without closure, and up to 2025 with closure. To the extent licensed beds cannot be made available for use, SCVMC's projected bed shortage would be moved up approximately five years.

Regional currently operates at a 71-percent occupancy rate. Without its planned 75-bed expansion in 2007, it is projected to reach capacity by 2010 (2005, based on available beds). By 2020, after the expansion, the hospital would again bump up against capacity. It will reach capacity a few years earlier with SJMC's closure.

If, after closure, SJMC's downtown patients were equally apportioned among SCVMC, O'Connor and Regional:

(1) SCVMC would have a bed shortage between 2010 and 2015;

(2) O'Connor's bed shortage would not materialize until about 2025;

(3) Regional would have a bed shortage, without its planned expansion, by 2010. With the 75-bed expansion, the shortage would not occur until between 2015 and 2020; and

(4) To the extent currently available beds are a more realistic measure, bed shortages would be advanced by about five years. In addition, should Regional terminate its participation in the Medi-Cal program (which is under consideration as this report is being written), potential bed shortages at SCVMC and O'Connor could be moved up further.

In general, SJMC's closure would not generate a bed shortage until about 2015. If Regional adds its planned 75 beds in 2007, the projected shortage would be pushed back a few years beyond 2015. This, again, assumes virtually all licensed beds can be made available for use as demand warrants. It also assumes virtually all O'Connor's excess capacity will be available to downtown-area patients. The consequences of these two important assumptions (Regional's expansion and O'Connor's capacity being available) not being fulfilled could be severe.

Local public officials have the opportunity of this "early warning" (i.e., under reasonably optimistic assumptions, a bed shortage could materialize by 2015) and should soon begin a planning process to assure significant shortages do not develop.

#### **IV.** Physician Practice Patterns

Physicians and physician organizations likely to be directly affected by SJMC's closure were queried regarding their opinions on the impact on their patients, practice and the community. The following individuals were interviewed.

Ernie Wallerstein, CEO, San Jose Medical Group Larry Bonham, M.D., CEO, Santa Clara County Individual Practice Association and Pacific Partners Management Services, Inc. James Hinsdale, M.D. Chief of Staff, San Jose Medical Center Linda Keningsberg, CEO, Excel MSO, LLC Sydney Choslovsky, M.D., Pulmonologist and Critical Care Physician, San Jose Medical Center Robert Norman, M.D., Chief, Family Practice Residency Program, San Jose Medical Center.

These individuals were each asked to describe their current relationship with San Jose Medical Center (SJMC), their current practice office location in relationship to SJMC, and if they would relocate their practice upon closure of SJMC.

We also discussed their opinions on where physicians would likely move if they left their offices next to SJMC, the transportation and other consumer concerns, as well as "fitting in" at another hospital system.

Since all participants said similar things, and some preferred that their comments not be directly attributed to them, the following sets forth the major issues, concerns and recommendations made by this group.

The concerns and recommendations set forth below are those obtained through interviews, and do not necessarily reflect our findings.

#### Physician Concerns

Closure of SJMC will have minimal impact on the medical groups with HMO contracts because HCA has limited HMO contracts.

Regional Medical Center is geographically more convenient for physicians and patients who drive. There is freeway access and parking is readily available.

HCA does not subsidize radiology, so radiology charges are full fee-for-service. Most other hospitals subsidize hospital-based physicians, making their services more accessible to low-income populations. Closing SJMC will be a major hardship on those who live in downtown San Jose who currently ride a bus or walk, and are treated by physicians in the area.

The emergency room at SJMC also provides a great deal of care to neighborhood people. Closure will impact that population severely.

It is expected that most SJMC physicians will move west and go to O'Connor, which is viewed as a friendlier and higher-quality facility than Regional. The perception is strong that O'Connor is a preferred facility and that Regional will retain very little from SJMC.

Ambulance diversion will be a big problem. SCVMC already has very long waits in the emergency department, and it will get worse.

Physicians believe that quality and nursing care are better at SJMC, and that physician leadership will not transfer as a group to Regional. Regional has its own culture and leadership, and will not necessarily welcome the SJMC physicians and staff.

Some physicians who own their own buildings probably will not move. Those who rent from HCA are already relocating to Los Gatos, O'Connor and other places. HCA is not a friendly landlord. Some physicians just closed their offices and walked away because of the HCA decision. Few physicians will remain in the neighborhood. It has a snowball effect when a hospital is designated for closure.

Rezoning around Regional has not yet been approved by the City Council to convert agricultural land for hospital use. The ability of Regional to expand and add tertiary-care services is being questioned.

Population growth in the downtown area will be substantial and there will be insufficient health care services remaining in the area.

The SJMC Cancer Center has already reduced services. It no longer provides mammography.

Obstetrics services have already moved to Regional. SJMC has the best neurosurgery program in San Jose. Regional does not have a neurosurgery program.

Regional does not have experience as a Trauma Center. Trauma services require highly skilled sub-specialists and support staff, which Regional does not currently have. It is likely that this lack of trauma experience will cause trauma patients to be sent elsewhere. That Regional will need to upgrade the emergency department was mentioned several times. The family practice residency program provides 15,000 patient visits per year. The majority of the visits are Medi-Cal and Medicare. It has the equivalent of four fulltime equivalents providing service to these patients.

Currently, the residency program provides a great deal of care to the chronically mentally ill patients living downtown. If the residency program moves to Regional, the patient population will have considerable difficulty accessing medical care.

The Family Health Center (which houses the residency program) takes Medi-Cal, has bilingual physicians, including several female physicians, and is very well received. Moving will be a hardship on the population it serves. The greatest impact will be on Medi-Cal patients, the chronically mentally ill, the elderly, and those without their own transportation.

#### Physician Recommendations

HCA should be required to maintain outpatient physician and diagnostic services in the neighborhood.

The Cancer Center, an outpatient diagnostic facility, should remain open and mammography should be returned to that facility.

An oversight committee should be established to monitor the Regional emergency department and ambulance diversion to assess waiting times and outcomes.

Office rental for those physicians who wish to remain as tenants in an HCAowned office complex should be accommodated for as long as they wish to remain.

#### V. Community Concerns

A large number of residents of the service area were interviewed in various settings including:

A monthly meeting of representatives of neighborhood associations A meeting held in a private residence A senior housing center A church A homeless shelter A large public meeting convened by a coalition of neighborhood groups Telephone conversations with various interested persons

Some elderly residents of the downtown area have used SJMC and its affiliated physicians for many years. They expressed that they, "feel at home there." Many

physicians they see are located near SJMC, as is SJMC's cancer clinic and a nursing home. They fear that when the hospital closes, the physicians are likely to relocate and the SJMC cancer center will close. People dependent on public transit will have more difficulty accessing physician services, and many elderly people do not have access to an automobile. According to one person, who timed her bus travel from a location near SJMC to Regional Medical Center, waiting, walking and riding the bus took about an hour; light rail took 1.5 hours; and driving to Regional during rush hour took 35 minutes. There are fears Regional's emergency room will be overcrowded. There is a widespread perception that waiting times in SCVMC's emergency room are excessive.

Residents of a nearby homeless shelter use SJMC's emergency room as their primary source of care, using it as a walk-in clinic at all hours. They cannot afford bus fare.

For people without access to an automobile, travel time for non-emergency services (emergency visits would most likely require an ambulance or a taxi cab), is measured in terms of walking time or public transit time. According to the Transportation for Healthy Communities Collaborative, acceptable walking distance is one-half mile, and acceptable public transit time is 30 minutes, on a 24-hour basis. A 2002 report by that organization found that 62 percent of residents of two neighborhoods, roughly approximating our downtown definition, have acceptable walking/public-transit access to a hospital.<sup>9</sup> SJMC's closure would cut that percentage in half. The two neighborhoods include only two hospitals – SJMC and Regional.

By defining transit access on a 24-hour basis, the Communities Collaborative ignores the fact that a late-night hospital visit would most likely be an emergency, and a cab or ambulance would most likely be employed.

According to the Valley Transportation Authority, it appears the only direct bus route between SJMC and Regional is Line 81, which stops one block from each hospital. It currently runs every 15-20 minutes on weekdays, and every 30 minutes on weekends. Service is less frequent in the evening, ceasing altogether at 10 pm. There is one other option that involves transferring from one bus to another. It is doubtful this would meet the Healthy Communities Collaborative's 30-minute standard. Bus service to SCVMC or O'Connor involves taking two buses. The Capital Light Rail line is some distance from Regional and is expected to offer only minor solutions to the transportation problem. Indigent consumers without Medi-Cal coverage generally obtain non-emergency care at SCVMC, regardless of their area of residence within Santa Clara County. This is also the case for unsponsored residents of the downtown area. They generally do not have access to SJMC or nearby physicians for non-emergency care. Thus, SJMC's closure will mainly affect their access to nearby emergency services only.

<sup>&</sup>lt;sup>9</sup> "Roadblocks to Health: Transportation Barriers to Healthy Communities," Transportation for Healthy Communities Collaborative, 2002.

Two emergency medical technicians and a representative of the San Jose Police Officers' Association were interviewed. They stressed injuries from violence are relatively more prevalent in the downtown area than other parts of San Jose, and SJMC is therefore the emergency room of choice for injured police officers. The importance of travel time to an emergency room was stressed, especially for severe injuries. It is not possible, however, to quantify the impact of added travel time to Regional or SCVMC on the outcomes of such emergencies. In Section II above, data were cited on the nature of trauma cases treated by SJMC. Assaults from blunt objects, knives or gunshots accounted for 14 percent of trauma cases. And it is likely that these injuries did not all occur in areas where travel time to SJMC was significantly shorter than to other hospitals.

The impact of SJMC's closure on non-English-speaking patients will not be significant in terms of ability of patients to communicate with hospital personnel. SJMC uses Cyracom phone service for translation, while SCVMC has translators on staff, in addition to contracted telephone translation services.

It was mentioned above that San Jose State University is adding substantial student housing in the downtown area. This is not expected, however, to generate substantial additional demand for health care services in this area for two reasons:

(1) The per-capita hospital use rate for this age group (52.5 patient days per 1,000 population) is only 15.5 percent of that for all age groups. Thus, 10,000 students would generate 525 patient days, requiring less than two beds. Moreover, those two beds would not all have to be located in the downtown area; and

(2) Currently, San Jose State students make little use of SJMC or its physicians. Since 1997, of all referrals from the Student Health Center, 6 percent were to physicians located close to SJMC, 13 percent were to SCVMC. Direct referrals to SJMC accounted for 2 percent, and were for X-ray.<sup>10</sup>

It should be noted that some of this new housing will be for faculty, large numbers of non-student/non-faculty work on campus, and the University plans for a second phase of new housing as soon as the first phase is occupied. This latter project will add about the same number of new students as the phase now nearing completion.

Tourism can be affected by SJMC's closure. According to Convention and Visitors Bureau staff, large groups, in selecting a convention site, consider medical response time to be an important issue. Proximity to medical facilities is among the factors that make a city competitive in attracting large groups. There are plans to greatly

<sup>&</sup>lt;sup>10</sup> Interview with Beth Pugliese, Director of Real Estate, San Jose State University.

expand convention facilities, involving a doubling of exhibit halls and meeting room capacity. Thus, all things being equal, the City would be more competitive in attracting large groups with, rather than without, a hospital located near the major convention sites. This effect, however, cannot be quantified.<sup>11</sup>

#### VI. Public and Private Payer Relationships

Table 32 shows the service area payer mix for SJMC for patients residing in the downtown area, in terms of patient days. Table 33 provides equivalent information for residents of the area hospitalized anywhere. The most notable differences between SJMC and all hospitals combined are: (1) a relatively higher Medicare patient load; and (2) a relatively lower private coverage percentage.

#### TABLE 32 SAN JOSE MEDICAL CENTER PATIENT DAYS ACCORDING TO PAYER SOURCE DOWNTOWN AREA\* 2003

Payer	Patient Days	Percent
Medicare	5,150	53.8%
Medi-Cal	2,035	21.2%
Private Coverage	1,592	16.6%
County Indigent	-	0.0%
Other Indigent	-	0.0%
Self-Pay	671	7.0%
All Other	133	1.4%
Total	9,581	100.0%

\* Defined in terms of zip-code approximation.

Source: Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-year 2003.

<sup>&</sup>lt;sup>11</sup> Interview with Dan Fenton, President and CEO, San Jose Convention and Visitors Bureau.

#### TABLE 33 ALL HOSPITALS PATIENT DAYS ACCORDING TO PAYER SOURCE DOWNTOWN AREA\* 2003

Payer	Patient Days	Percent
Medicare	24,304	35.4%
Medi-Cal	19,765	28.8%
Private Coverage	20,010	29.1%
County Indigent	1,544	2.2%
Other Indigent	603	0.9%
Self-Pay	1,360	2.0%
All Other	1,061	1.5%
Total	68,647	100.0%

\* Defined in terms of zip-code approximation.

Source: Office of Statewide Health Planning and Development, Discharge Data Base, Calendar-year 2003.

SJMC's closure will most likely result in non-trauma Medicare and privatecoverage patients going primarily to O'Connor and Regional, and most of the others (i.e., Medi-Cal and unsponsored) to SCVMC. This scenario is not inconsistent with that employed in Tables 28-30, which apportioned SJMC's patients equally among the three remaining hospitals. Medicare plus private coverage accounts for 65 percent of SJMC's patients. If Medicare and private-insurance patients were split equally between Regional and O'Connor, each would receive about one-third of SJMC's total patients. It is unlikely SCVMC would receive all the Medi-Cal patients, some of which would go to O'Connor and Regional, but should receive most.<sup>12</sup> Trauma patients that would have gone to SJMC will now be diverted to other trauma centers irrespective of payer source.

Table 34 shows the trend in indigent and charity costs from 1993 to 2003 for the four hospitals. And Table 35 shows the shares of these costs among the hospitals. Note that these are estimates of the costs incurred in treating these patients, not billed charges; and these costs were incurred in treating all charity and indigent patients at each hospital, not just those residing in the downtown area. It is likely that SJMC's closure will result in approximately \$2 million in added indigent-care and charity costs for SCVMC, which will not be reimbursed. This will be offset, however, by SJMC's Medi-Cal patients that are shifted to SCVMC, and their associated disproportionate share payments.

<sup>&</sup>lt;sup>12</sup> As of this writing, Regional has served notice of its intent to cancel its Medi-Cal contracts. If these cancellations are effected, its Medi-Cal patient load will be restricted to emergency admissions.

#### TABLE 34 SAN JOSE MEDICAL CENTER AND COMPETING HOSPITALS CHARITY AND COUNTY INDIGENT COSTS 1993-2003

YEAR	SAN JOSE CENT	-	REGIONAL CENTER OF		O'CONNOR	HOSPITAL	SANTA CLAF MEDICAL		TOT	AL
	Costs	Annual	Costs	Annual	Costs	Annual	Costs	Annual	Costs	Annual
	(thousands)	Change %	(thousands)	Change %	(thousands)	Change %	(thousands)	Change %	(thousands)	Change %
1993	\$1,781.8		\$624.8		\$960.4		\$64,878.0		\$68,244.9	
1994	\$1,381.3	-22.5%	\$575.3	-7.9%	\$723.2	-24.7%	\$64,282.0	-0.9%	\$66,961.7	-1.9%
1995	\$553.4	-59.9%	\$764.6	32.9%	\$606.1	-16.2%	\$71,923.0	11.9%	\$73,847.1	10.3%
1996	\$330.1	-40.3%	\$594.0	-22.3%	\$683.9	12.8%	\$71,158.3	-1.1%	\$72,766.3	-1.5%
1997	\$742.2	124.8%	\$866.7	45.9%	\$387.4	-43.4%	\$74,550.1	4.8%	\$76,546.4	5.2%
1998	\$515.4	-30.5%	\$1,210.5	39.7%	\$367.8	-5.0%	\$70,866.3	-4.9%	\$72,960.0	-4.7%
1999	\$910.2	76.6%	\$780.7	-35.5%	\$295.1	-19.8%	\$74,671.7	5.4%	\$76,657.6	5.1%
2000	\$483.0	-46.9%	\$627.4	-19.6%	\$451.6	53.1%	\$89,759.9	20.2%	\$91,322.0	19.1%
2001	\$1,042.0	115.7%	\$641.7	2.3%	\$301.7	-33.2%	\$95,480.0	6.4%	\$97,465.5	6.7%
2002	\$1,721.7	65.2%	\$489.5	-23.7%	\$326.0	8.1%	\$91,084.8	-4.6%	\$93,622.0	-3.9%
2003 1993- 2003	\$2,096.1	21.7%	\$643.0	31.4%	\$362.2	11.1%	\$85,984.8	-5.6%	\$89,086.1	-4.8%
Change	\$314.4	17.6%	\$18.2	2.9%	-\$598.2	-62.3%	\$21,106.8	32.5%	\$20,841.2	30.5%

Source: Office of Statewide Health Planning and Development, Quarterly Hospital Utilization and Financial Reports, calendar years 1993-2003.

#### TABLE 35 SAN JOSE MEDICAL CENTER AND COMPETING HOSPITALS SHARES OF CHARITY AND COUNTY INDIGENT COSTS 1993-2003

YEAR	SAN JOSE MEDICAL CENTER	REGIONAL MEDICAL CENTER OF SAN JOSE	O'CONNOR HOSPITAL	SANTA CLARA VALLEY MEDICAL CENTER	TOTAL
1993	2.6%	0.9%	1.4%	95.1%	100.0%
1994	2.1%	0.9%	1.1%	96.0%	100.0%
1995	0.7%	1.0%	0.8%	97.4%	100.0%
1996	0.5%	0.8%	0.9%	97.8%	100.0%
1997	1.0%	1.1%	0.5%	97.4%	100.0%
1995 1996	0.7% 0.5%	1.0% 0.8%	0.8% 0.9%	97.4% 97.8%	100.0 100.0

	SAN JOSE MEDICAL	REGIONAL MEDICAL CENTER OF	O'CONNOR	SANTA CLARA VALLEY MEDICAL	
YEAR	CENTER	SAN JOSE	HOSPITAL	CENTER	TOTAL
1998	0.7%	1.7%	0.5%	97.1%	100.0%
1999	1.2%	1.0%	0.4%	97.4%	100.0%
2000	0.5%	0.7%	0.5%	98.3%	100.0%
2001	1.1%	0.7%	0.3%	98.0%	100.0%
2002	1.8%	0.5%	0.3%	97.3%	100.0%
2003	2.4%	0.7%	0.4%	96.5%	100.0%

Source: Office of Statewide Health Planning and Development, Quarterly Hospital Utilization and Financial Reports, calendar years 1993-2003.

#### VII. Accessibility to Alternative Providers

There are a substantial number of physicians and other providers located adjacent to SJMC, many of which are likely to relocate.

Of O'Connor's medical staff, 25 percent are also on SJMC's medical staff, and as indicated by the physicians interviewed, many view O'Connor as preferable to Regional. As discussed in Section III above, O'Connor has considerable excess capacity. It has 360 licensed beds. According to the hospital's CEO, all these beds could be made available for occupancy, and this capacity will be maintained. O'Connor has a heart program that provides a high volume of cardiovascular surgeries (629 versus SJMC's 56 in 2002). O'Connor is interested in increasing medical office space near its campus, which would draw physicians away from downtown. On the other hand O'Connor recently opened a primary-care clinic just south of the downtown area (on Story Road across from Kelly Park), and is willing to work with the City to facilitate bus service between the clinic and the hospital

Regional plans on building three medical office buildings on its campus, which would further draw physicians from the downtown area. It also plans to open an urgent care center, and plans on moving SJMC's outpatient surgery facility to the Regional campus. Until it can move the SJMC cancer center, it will continue to operate it at the current location, which is adjacent to SJMC. It was recently announced that the family practice residency program will move to O'Connor Hospital. Thus, in all likelihood, the Family Health Center (staffed by the residents) and the Family Practice Medical Associates (the faculty practice plan of the faculty), both located across the street from SJMC, will be relocated adjacent to O'Connor. On July 1, 2005, the Family Health Center will relocate to O'Connor. Eventually, the Family Practice Medical Associates will follow, most likely when the remaining two years on its lease on its current space expires.

The Gardner Family Health Network provides primary care services through five community clinics, three of which are located in the downtown area – Alviso Health Center, Gardner Health Center and St. James Health Center. It also has four behavioral health/substance abuse clinics in the downtown area. The Gardner clinics are likely to experience a major increase in volume of uninsured and Medi-Cal outpatients as SJMC physicians leave the downtown area.

SCVMC does not have a health center in the downtown area, although one is called for in its most recent strategic plan. There is an interest on the part of SCVMC in opening a health center and an urgent care center in the downtown area.

Table 36 provides data on SJMC's and Regional's non-trauma outpatient volume during 2003.<sup>13</sup> Of 17,533 SJMC visits originating in the downtown area, over 10,000 are through the emergency room. If we assume half of these non-trauma emergency visits are in fact not emergencies, SJMC had about 12,000 routine outpatient visits by downtown area residents 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 current visits to physician offices that would be relocated. In the highly unlikely event that no physician offices would be relocated, approximately 12,000 routine visits would have to be accommodated by downtown providers (i.e., clinics or physician offices) to enable residents to receive outpatient services without having to travel out of the immediate area.

Note that Regional has a greater share of outpatient visits originating in the downtown area.

#### TABLE 36 SAN JOSE MEDICAL CENTER AND REGIONAL MEDICAL CENTER NON-TRAUMA OUTPATIENT VISITS TOTAL, AND THOSE ORIGINATING IN THE DOWNTOWN AREA 2003

	۱ Non-Trauma ER a	Total Outpatient		
	Visits	Visits*	Surgeries	Visits
SJMC				
Total	25,931	20,283	5,240	51,454
From Downtown	10,080	6,424	1,029	17,533

<sup>13</sup> SJMC had approximately 2,000 trauma visits in 2003.

	N Non-Trauma ER a Visits	Ion-ER Tests nd Treatment Visits*	Outpatient Surgeries	Total Outpatient Visits
Downtown %	38.9%	31.7%	19.6%	34.1%
Regional				
Total	40,056	36,047	7,218	83,321
From Downtown	11,332	9,619	1,691	22,642
Downtown %	28.3%	26.7%	23.4%	27.2%
Regional + SJMC Downtown	21,412	16,043	2,720	40,175
Downtown Relative Shares				
SJMC	47.1%	40.0%	37.8%	43.6%
Regional	52.9%	60.0%	62.2%	56.4%

\* Primarily laboratory and x-ray tests, and physical, occupational and speech therapy. Source: Hospital Records.

Table 37 provides estimates of physician requirements to replace the outpatient capacity lost due to SJMC's closure, based on an assumption that 45,000 visits would have to be replaced. This includes 15,000-17,000 visits to the Family Practice Clinic (i.e., the Family Health Center and the Family Practice Medical Associates), and an equivalent amount to nearby physicians' offices, in addition to SJMC's estimated non-emergency visits on behalf of downtown residents (i.e., 12,000). Assuming an average workload of 4,000 visits per full-time-equivalent (FTE) primary-care physician, approximately 11 FTEs would be required. For example, if SCVMC would establish a clinic and urgent-care center near the SJMC location, to fully fill the non-emergency outpatient services gap, that clinic/center would be staffed by approximately 11 FTE physicians.

The timing and extent of outpatient services exiting the area is not known at present. What is known, however, is that the Family Health Center (about 10,000 visits) will move to O'Connor on July 1, 2005; the Family Practice Medical Associates (about 5,000 visits) should remain for about two years, unless it is able to renegotiate its lease, in which case it will leave sooner; and the SJMC radiation-oncology facility will remain until it can be accommodated on the Regional campus.

#### TABLE 37 PHYSICIAN REQUIREMENTS TO FILL GAP IF ALL LOCAL PHYSICIANS LEAVE (INCLUDING FAMILY PRACTICE CLINIC)

Total OP Visits*	45,000
FTE Physicians @ 4,000	
Visits**	11.25

\* According to Dale Rai, MD, Associate Director, Family Practice Program, the latter's 15,000-17,000 visits represent about one-third of the area total. SJMC accounts for another third, and other physicians located near SJMC account for one third (San Jose Medical Group and a cardiology group).

\*\* Medical Group Management Association (MGMA) data for average family practice physician workload, 2003.

#### VIII. Emergency Medical and Trauma Services

A considerable portion of this section draws from draft materials provided by the Santa Clara County Emergency Medical Services Agency.<sup>14</sup>

SJMC is currently one of three trauma enters located in Santa Clara County. SJMC has a Level II designation, while both other centers (SCVMC and Stanford University Hospital) are Level I. HCA plans to move SJMC's trauma center designation to Regional upon the former's closure. Given the short closure notice period, however, approval by December 8 is highly unlikely. Table 38 shows the distribution of trauma cases among the three hospitals for calendar-year 2003, according to mechanism of injury.

TABLE 38
DISTRIBUTION OF TRAUMA CASES AMONG SANTA CLARA
<b>COUNTY'S THREE TRAUMA CENTERS</b>
ACCORDING TO MECHANISM OF INJURY
2003

Mechanism of Injury	Total	SJMC	SCVMC	Stanford Medical Center
Traffic related	2,876	1,005	988	883
Falls	890	268	277	345
Bicycle	449	100	127	222
Other	400	137	115	148

<sup>14</sup> "Impact Evaluation Report on the Closure of Emergency Services at San Jose Medical Center," Santa Clara County Emergency Medical Services Agency, November 2, 2004.

Mechanism of Injury	Total	SJMC	SCVMC	Stanford Medical Center
Pedestrian	326	124	99	103
Blunt Assault	266	104	88	74
Knife Assault	229	110	75	44
Gunshot Related	135	49	21	65
TOTAL	5,571	1,897	1,790	1,884
%	100.0%	34.1%	32.1%	33.8%

Source: Santa Clara County Emergency Medical Services Agency.

Trauma cases are fairly evenly distributed among the three hospitals, with SJMC, however, experiencing slightly more volume than the other two hospitals. This is especially the case with respect to assaults.

Table 39 compares median trauma injury severity scores, average trauma length of stay and average trauma ICU length of stay among the three hospitals. Note that SJMC has the highest severity score and the highest ICU length of stay. Combining the observations from Tables 38 and 39 points to the strain that will be placed on the two remaining trauma centers due to SJMC's closure, if a third center at Regional is not approved.

Table 40 displays the distribution of 911 transports to each of the hospital emergency departments in Santa Clara County. While 911 transports include far more than trauma cases, SJMC ranks second in number of 911 transports, with a 13-percent share. This is further evidence of the importance of SJMC as an emergency services provider.

#### TABLE 39 MEDIAN TRAUMA INJURY SEVERITY SCORE, TOTAL TRAUMA AVERAGE LENGTH OF STAY AND TRAUMA ICU LENGTH OF STAY 2003

Median Score	Total	SJMC	SCVMC	Stanford Medical Center
Injury Severity Score	6.52	6.92	6.31	6.40
Average Hospital Length of Stay	3.21	3.04	3.38	3.19
Average ICU Length of Stay	6.19	6.89	6.01	5.63

Source: Santa Clara County Emergency Medical Services Agency.

TABLE 40
911 TRANSPORTS TO ALL EMERGENCY DEPARTMENTS
IN SANTA CLARA COUNTY
2003

Hospital	911 Transports	Percentage
Santa Clara Valley	11,663	20.3%
San Jose Medical Center	7,555	13.1%
Kaiser Santa Clara	7,302	12.7%
Kaiser Santa Teresa	6,477	11.3%
El Camino	5,885	10.2%
<b>Regional Medical Center</b>	5,277	9.2%
Good Samaritan	4,292	7.5%
O'Connor	3,347	5.8%
St. Louise	2,403	4.2%
Stanford	1,469	2.6%
Los Gatos	1,448	2.5%
Palo Alto Veterans	341	0.6%
Total	57,459	100.0%
~ ~ ~ ~		

Source: Santa Clara County Emergency Medical Services Agency.

Table 41 provides information of SJMC's emergency visits in terms of mode of arrival. Note that 73 percent of emergency patients are walk-in. That 528 are helicopter, suggests over 25 percent of its trauma cases arrive by helicopter. For these cases, the differentials in travel time between SJMC and the other two trauma centers should not be significant (assuming sufficient capacity). For other modes of arrival, however, this may not be the case.

# TABLE 41MODES OF PATIENT ARRIVALSJMC EMERGENCY DEPARTMENT2003

Visits	Percentage
22,985	72.9%
7,978	25.3%
528	1.7%
22	0.1%
2	0.0%
31,515	100.0%
	22,985 7,978 528 22 2

Source: Santa Clara County Emergency Medical Services Agency.

Table 42 shows the distance and Code-3 (lights and siren) travel times between SJMC and the other two trauma centers, under both rush-hour and non-rushhour conditions. Rush-hour or not, Stanford University Hospital is so far away from SJMC that it is not a realistic alternative for other than helicopter transport, or in situations where the patient is stable, for injuries occurring near SJMC. Obviously, SCVMC's emergency department will bear the brunt of SJMC's closure in terms of trauma.

### TABLE 42DISTANCE AND CODE-3 TRAVEL TIMES BETWEEN SAN JOSEMEDICAL CENTER AND THE OTHER TWO TRAUMA CENTERS

		Code-3 Travel Time (non-rush	Code-3 Travel Time (rush hour)
Facility	Distance (Miles)	hour) Minutes	Minutes
SCVMC	4.9	10	25
Stanford	24.0	40	90
a a			

Source: Santa Clara County Emergency Medical Services Agency.

The three closest emergency departments to SJMC are Regional Medical Center, O'Connor Hospital and SCVMC. Table 43 shows the travel times between SJMC and these hospitals under four conditions: (1) ambulance; (2) non-rush-hour car; (3) rush-hour car; and (4) bus. It is apparent that ambulance and non-rush-hour automobile travel times should not, in most case, pose substantial added risks compared to the current situation. Rush-hour travel and bus travel, however, will represent a major worsening in the status quo for patients requiring emergency care. Note that the average bus travel time of 22-25 minutes does not include waiting time, which ranges from 10 minutes to one hour (and is not available after 10 pm). Thus, SJMC's closure is likely to increase demand for costly 911 transports for non-trauma emergencies. Clearly, a new trauma center located at Regional could be a close substitute for SJMC's trauma center.

#### TABLE 43 DISTANCE AND TRAVEL TIMES FROM SAN JOSE MEDICAL CENTER TO CLOSEST THREE HOSPITALS UNDER VARIOUS CONDITIONS

		Travel Time by		Travel Time by Car Rush-	
Hospital	Miles from SJMC	Ambulance	Rush-Hour	Hour	boarded)*
Regional Medical Center	2.5	6 Minutes	6 Minutes	30 Minutes	25 Minutes
SCVMC	4.9	10 Minutes	10 Minutes	35 Minutes	22 Minutes
O'Connor	5.7	10 Minutes	10 Minutes	35 Minutes	22-25 Minutes

\* Waiting times for bus range from 10 minutes to one hour, with no service after 10 pm. Source: Santa Clara County Emergency Medical Services Agency.

If a new trauma center is not approved, SCVMC will bear the brunt of SJMC's closure, and will likely see its trauma load increased from its approximately 1,800 current cases to in excess of 3,000. In anticipation of the need to expand SCVMC's trauma capacity on short notice, on October 19, 2004 the Board of Supervisors approved a request for expenditure authority of \$15 million to increase staffing on a phased basis.<sup>15</sup> The first phase is intended to provide staffing to accommodate an increase in average daily census of 20 patients per day and 9,000 emergency/urgent care visits annually. This will be reassessed in February 2005, based on experience to that point. The county's other trauma center, Stanford University Hospital, also has the flexibility to expand treatment capacity on short notice. It recently announced plans to hire additional staff and add emergency-room beds to handle an increase of 800 trauma patients annually.<sup>16</sup>

Considerable concern has been expressed by physicians and the community at large regarding waiting times at SCVMC's emergency department. Table 44 provides data on average waiting times at SCVMC's emergency department according to type of visit for the first seven months of 2004. Here, waiting time is defined as commencing at the time the patient presents in the emergency room, until he or she is placed in a treatment room. It does not include the time until seen by a physician. Note that patients classified as emergent are, on average, placed in a treatment room within 40 minutes of arrival. During this waiting time, however, they are seen by nursing personnel. Less emergent patients, on average, encounter twice the waiting time. These averages exclude data for patients that leave before being seen. The latter patients' experiences are most likely the source of anecdotal reports of very long waiting times. It is also likely that these patients' conditions do not represent emergencies. Most likely, the majority of these "long-wait" patients do not have a regular source of care other than the emergency of very nom, and would thus be more appropriately treated in one the SCVMC health centers.

Under a two-trauma-center scenario (SCVMC and Stanford), establishing a SCVMC outpatient clinic and urgent care center in the downtown area would pay major dividends in terms of relieving pressure on SCVMC's emergency room, and preventing a large increase in 911 transports.

<sup>&</sup>lt;sup>15</sup> Memorandum from Robert Sillen to Board of Supervisors, "Various Actions Related to Activity and Staffing Increases at Santa Clara Valley Medical Center (VMC) and the Closure of San Jose Medical Center (SJMC)," October 19, 2004.

<sup>&</sup>lt;sup>16</sup> "Stanford to Fill Looming Gap in Trauma Care Pending Closure of San Jose Medical Center," <u>SFGATE.com</u>, November 12, 2004.

#### TABLE 44 SANTA CLARA VALLEY MEDICAL CENTER EMERGENCY DEPARTMENT AVERAGE WAITING TIMES\* JANUARY 1, 2004-JULY 31, 2004

Type of Visit	Average Waiting Time
Emergent	40
Urgent	79
Non-Urgent	81

\* From arrival to being placed in a treatment room. Excludes patients that leave before being seen.

Source: Hospital records.

#### <u>Summary</u>

Loss of SJMC's trauma center and its emergency services in general will put a major strain on the countywide trauma system, and particular strain on SCVMC, since the county's only other trauma center (Stanford University Hospital) is located some 24 miles from SJMC. While trauma cases are fairly evenly distributed among the county's current three trauma centers, SJMC has slightly higher volume, especially with respect to trauma caused by violence. Approximately 25 percent of SJMC's trauma cases arrive by helicopter, and thus could have been diverted to the other trauma centers without significant increases in travel time. For the remaining 75 percent, however, this may not be the case.

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) should 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 will most likely increase demand for costly 911 transports for non-trauma emergencies.

Since SCVMC will bear the brunt of SJMC's closure in terms of trauma, efforts to reduce strain on its emergency department are essential, and SCVMC is taking actions to immediately increase its trauma capacity. It is likely its trauma cases would increase from the current 1,800 to over 3,000. And these patients will have priority over other patients waiting in the emergency department. If the SJMC trauma center is not replaced, establishment of a SCVMC outpatient clinic and urgent care center in the downtown area would be a cost-effective method to reduce pressure on the emergency room and prevent an upsurge in 911 calls.

#### IX. Findings and Recommendations

#### <u>Findings</u>

SJMC has a long history in the downtown San Jose area, since 1923. Since its acquisition by HCA in 1996, its service scope (its obstetrics program was moved to Regional), capacity and volume have been reduced. While it has low occupancy and a relatively low market share in the downtown area, it is an important provider to some population groups. And it is one of three trauma centers in Santa Clara County, treating about 2,000 cases annually.

The groups most affected by its closure will be the following:

(1) Elderly residents of the downtown area, particularly those without access to an automobile;

(2) Low-income residents of the area in general that do not have access to an automobile;

(3) Particularly affected among these groups will be patients of local physicians who will relocate due to the closure; and

(4) Those in need of emergency services for whom additional travel time to other hospitals could result in death or disability. The magnitude of this group is impossible to quantify. In population-based terms it is likely to be insignificant statistically. In terms of individuals and their loved ones, however, statistical significance is not relevant. There is a widespread perception in the community that waiting times at SCVMC's emergency department are excessive. These problems will undoubtedly be exacerbated with SJMC's closure, without sufficient additions by SCVMC to its emergency-treatment capacity.

Because of SJMC's low occupancy and low market penetration, its closure is not expected to result in a bed shortage until about the middle of the next decade. O'Connor Hospital has considerable excess capacity and has recently opened a primary clinic not far from SJMC. The planned addition at Regional would further delay the onset and degree of bed shortages. If, however, O'Connor cannot be counted on to maintain its current licensed capacity, and to make a large portion of that capacity available to downtown residents, that crucial safety valve would be eliminated. If, in addition, Regional does not proceed with its planned expansion, the downtown area could be facing a bed shortage within the next few years. The ability of the community to rely on Regional's expansion plans is called into question by HCA's unexpected announcement of SJMC's closure by December 8, 2004.

It should be noted that the bed-need projections presented here deal with total general-acute beds, not specific bed categories (e.g., ICU, perinatal, pediatrics). It is reasonable to assume that hospitals having excess capacity in some bed services, and shortages in others, would, over time, make the necessary adjustments. In the short term, however, such adjustments cannot be assumed. In Table B3, it was shown that closure of SJMC could result in an immediate shortage of ICU beds. As shown in Table B5, Regional plans to convert 12 pediatric beds to ICU by the time SJMC closes. This would prevent an ICU bed shortage in the near term.

SJMC's moving up its planned closure by two-to-three years makes an orderly transition impossible. The most troubling problems will relate to trauma and other emergency services, and outpatient services in general. A notice period of only six additional months (i.e., to June 30, 2005), could have provided valuable lead time to enable minimization of some of these transition problems, such as, for example, designation of Regional's trauma center and establishment of a SCVMC urgent-care center in the downtown area.

Public transportation is insufficient. Traveling by bus between SJMC and Regional could be accomplished without having to transfer to a second bus, but involves a short walk at each end. After 10 p.m., bus transportation is not an option. Traveling to SCVMC or O'Connor requires transferring to a second bus. For obtaining routine care during the day, this may only represent a degree of inconvenience for healthy individuals. For those in poor health or with young children, however, it is more appropriately viewed as a level of a hardship.

Physicians on SJMC's medical staff that were interviewed indicated a preference for O'Connor over Regional. This suggests a likelihood that physician offices adjacent to SJMC will move to sites near the O'Connor campus. O'Connor is interested in establishing more medical-office space near its campus. Regional also plans to build medical-office space on or near its campus. It is certainly in Regional's interests to attract as many SJMC physicians as possible, and in so doing it would have to address these physicians' concerns. In any event, neither hospital plans to maintain medical offices near SJMC, beyond a short transition period.

Besides losing SJMC's basic emergency service, the community would also lose SJMC's other outpatient services, including laboratory, x-ray, physical and occupational therapy, and its cancer clinic. Regional plans to move these services to its facility.

Loss of SJMC's trauma center and its emergency services in general will put a major strain on the countywide trauma system, and particular strain on SCVMC, since the county's only other trauma center (Stanford University Hospital) is located some 24 miles from SJMC.

#### **Recommendations**

To minimize the adverse impact on the downtown community, the following actions are recommended:

1. In line with its strategic plan, SCVMC should establish a health center in the downtown area, providing a full range of primary care, and including the ability to arrange for specialty care on a scheduled basis—"Valley Health Center-Downtown." Given SJMC's imminent closure, this Center should be fast tracked.

2. Integrated with this health center should be an urgent care center. If demand warrants, consideration should be given to its being operated on a 24-hourseven-day-a-week basis.

*3. HCA should be do the following:* 

(1) Recognize that an orderly transition from SJMC to an expanded Regional Medical Center is in its own best interests in terms of physician and community support. As such, it should consider moving SJMC's closure date back from December 8, 2004 to June 30, 2005;

(2) Maintain medical office space near the current SJMC site;

(3) Provide a grant to Gardner Family Health Network for the capital costs necessary to expand capacity at its downtown clinics; and

(4) Contribute funding toward the transportation costs occasioned by the closure.

4. SCVMC and Gardner clinics should jointly plan for outpatient services and coordinate services in the downtown area.

5. Improvements in the public transportation system could alleviate much of the adverse impact of SJMC's closure, expecially for patients of physicians that may relocate due to the closure. The City of San Jose and Santa Clara County should convene a taskforce to assess public transportation in the downtown area in terms of medical needs, and develop a plan and secure funding to minimize the impact of the SJMC closure on vulnerable groups. As part of this process it should bring together the major provider groups (e.g., SCVMC, HCA, O'Connor, large physician groups, ambulance companies), voluntary transportation organizations (e.g., Outreach, American Cancer Society, Heart of the Valley), the Valley Transportation Authority, and taxicab companies. Failure to adequately deal with this issue may be more costly than the remedy, in terms of added health care costs and avoidable 911 calls. It is essential that this issue make it to the front burner of local public officials. 6. SCVMC will bear the brunt of the closure of SJMC's trauma center. Emergency-room waiting times at SCVMC are already perceived by many as excessive. Use of the emergency room by unsponsored patients for non-emergency care is a major contributor to overcrowding. If a third trauma center is not approved, establishing the "Valley Health Center-Downtown" as both a health center and urgent care center is even more vital. Besides minimizing the adverse impact on downtown residents dependent on SJMC's emergency room and/or nearby physicians for nonemergent treatment, this center will alleviate pressure on the SCVMC emergency room and prevent an upsurge in costly 911 transports.

7. While, under reasonable assumptions, it appears that a bed shortage is not imminent (assuming either O'Connor maintains its current licensed capacity and makes much of this capacity available to former SJMC patients, or Regional proceeds with its 2007 expansion plans), by 2015 bed shortages are likely. Local elected officials should seize on this "early warning" by establishing a planning process and an implementation strategy to ensure such a bed shortage does not materialize. Among the considerations to be addressed through this process should be coordination among the three remaining hospitals, economic feasibility of constructing a new hospital (including desirable sites, an operator and financing) versus expansion of existing hospitals, and the extent to which such a hospital would sufficiently enhance the City's attractiveness as a major convention site to warrant establishing a new funding mechanism. As part of this planning process it is important to compare and contrast hospitals and hospital systems in terms of their commitment to the community. For example, in response to HCA's unexpected announcement of SJMC's closure, SCVMC is making substantial efforts to fill the void in terms of trauma capacity, and both SCVMC and O'Connor are making substantial efforts to increase emergency-room and inpatient capacity. At the same time, HCA is threatening Regional's cancellation of its Medi-Cal contracts.

8. The City should require that the current SJMC site remain available for hospital development until June 30, 2007, or until HCA demonstrates its commitment to proceed substantially with its expansion plans at Regional Medical Center, including establishment of a Level II trauma center. In light of the City of San Jose's aggressive downtown redevelopment efforts and ongoing high-density development projects, future site availability is a vital component of the planning process recommended above to avoid a potential bed shortage by 2015.

#### **APPENDIX A**

#### SCOPE OF SERVICES

#### JOINTLY DETERMINED BY SANTA CLARA COUNTY, THE CITY OF SAN JOSE, THE SAVE SAN JOSE MEDICAL CENTER COALITION AND THE TECHNICAL ADVISORY COMMITTEE

With the impending closing of San Jose Medical Center (SJMC), the County seeks the assistance of a Consultant to undertake a comprehensive study of SJMC's closing. Specifically, the Consultant will provide the following services:

1. A detailed profile of San Jose Medical Center, including its history two years prior to the acquisition by HCA, services offered, market share, patient origin, payor mix, patient population it serves, utilization volume by service, and specifically the utilization profile of its trauma services.

Note: Evaluation of the history prior to HCA shall be limited to changes in licensure and available beds. Patient origin will show location for all inpatients for patients admitted to SJMC.

2. A description of the current and future inpatient healthcare (medical) needs of the population living in San Jose downtown area, (the area encompassing SJ City Council Districts 3 and 5 east to Route 680, north end of District 7, south end of District 4 and Alviso), including the demographics, healthcare-seeking pattern of the population, utilization profile of SJMC as compared to other facilities such as O'Connor Hospital, SCVMC and Regional Medical Center (formerly Alexian Brothers Hospital), and the overlaps of service utilization among these facilities.

Note: Accomplishment of this section will be done by use of available databases to describe healthcare-seeking patterns of the population, and future inpatient needs will be accomplished in conjunction with bed projections in #3.

Within the evaluation of the San Jose downtown area, (the area encompassing SJ City Council Districts 3 And 5 east to Route 680, east to Route 680, north end of District 7, south end of District 4 and Alviso), the following populations/issues will specifically be addressed:

- Care for seniors
- Care for children
- Access for low-income, unsponsored individuals
- Language and cultural barriers to care
- Transportation utilization
- Greater San Jose downtown area (the area encompassing SJ City Council Districts 3 and 5 east to Route 680) working population
- Care for business, tourist and other visiting populations
- Students living on campus (projected to be about 8,000) and commuting students

Note: Evaluate within the context of available databases and reports. The Transportation and Land Use Coalition study may be of use here.

- 3. A projected profile of the future demographics in the San Jose downtown area as identified in Section 2, including the future healthcare needs of the current and projected residents in the downtown area. A projection of the (medical) need for inpatient beds to serve this area should be developed and compared with the estimated capacity of the community.
- 4. An examination of the current physician practice pattern in the downtown area, specifically the relationships of primary physicians and specialists to SJMC, future practice location predicated on the relocation of SJMC trauma center to Regional Medical center campus, inquiring of downtown primary physicians as to where they plan to hospitalize their patients if SJMC is no longer present.

Note: The study of physicians should be limited to a reasonable sample.

- 5. A study of public and private payor relationships comparison of the past and current and projected relationships between SJMC and other hospitals and payors as well as low-income and unsponsored activity (i.e. payor mix profile).
- 6. A discussion of the accessibility of the downtown San Jose current and future patient residents to other alternative healthcare providers in the San Jose area. Accessibility should also consider obstacles: financial, geographical location, availability, service delivery capacity of other providers, and travel time. The discussion should create an estimate/projection

of the patient population's behavior and transportation pattern from the downtown area to other providers. The projection should include the expansion of Regional Medical Center in East San Jose and how it would meet or underserve the needs of the current and future SJMC catchment area.

Note: Alternative healthcare providers is not "alternative medicine" rather other hospitals and physicians.

The discussion should include, but not be limited to, the following services:

Primary Care Outpatient Specialty Care Inpatient Services Urgent Care Emergency Room Care

7. An assessment of the impact of the closing of SJMC's Trauma Center on the community in general and on the other two trauma centers: Stanford and SCVMC.

**APPENDIX B** 

### TABLE B1CENSUS TRACTS COMPRISING DEFINED SERVICE AREA

Census Tracts	Population
5001.00	5,360
5002.00	5,068
5008.00	1,932
5009.01	2,859
5009.02	3,696
5010.00	5,544
5011.00	7,903
5012.00	4,792
5013.00	4,165
5014.00	6,532
5015.01	4,232
5015.02	4,392
5016.00	7,435
5017.00	5,671
5031.12	3,530
5031.13	4,980
5036.01	3,128
5036.02	4,745
5037.02	8,349
5037.06	7,354
5037.07	6,273
5037.08	3,013
5037.09	6,235
5043.10	9,271
5043.11	7,126
5043.16	4,868
5043.17	4,717
5043.18	4,312
5043.19	5,516
5044.10	4,398
5046.02	2,135
5050.05	5,914
5050.06	3,699
5051.00	2,138

Census Tracts	Population
Total	171,282
* Source: U.S. Ce	ensus, 2000.

### TABLE B2ZIP CODES APPROXIMATING DEFINED SERVICE AREA

Zip	o Code	Population
	95110	18,180
	95112	52,331
	95113	543
	95116	51,688
	95131	26,384
	95133	26,018
	95134	9,643
	95002	2,128
	Total	186,915
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\* Source: U.S. Census, 2000.

# TABLE B3AVAILABLE BEDS AND OCCUPANCY ACCORDING TO SERVICESAN JOSE MEDICAL CENTER AND COMPETING HOSPITALS2002

	Medical/Surgical	Medical/Surgical		Coronary	Coronary	
	Intensive Care	Intensive Care	ICU	Care	Care PD	CCU
HOSPITAL NAME	Avail	PD Adult	Occupancy	Avail	Adult	Occupancy
SAN JOSE MEDICAL CENTER	17	4,940	79.6%			NA
REGIONAL MEDICAL CENTER	12	3,937	89.9%			NA
O'CONNOR HOSPITAL	22	4,384	54.6%			NA
SANTA CLARA VALLEY	24	5,223	59.6%	8	2,458	84.2%
Total	75	18,484	67.5%	8	2,458	84.2%
Excluding SJMC	58	18,484	87.3%	8	2,458	84.2%

	Dedictric	Dedictric		Neonatal		
	Pediatric	Pediatric		Intensive		
	Intensive Care	Intensive Care		Care	Care PD	
HOSPITAL NAME	Avail	PD Ped	PICU Occ	Avail	Ped	NICU Occ
SAN JOSE MEDICAL CENTER	8	705	24.1%	7		0.0%
REGIONAL MEDICAL CENTER			NA	6	1,652	75.4%
O'CONNOR HOSPITAL			NA			NA
SANTA CLARA VALLEY	12	1,444	33.0%	40	8,573	58.7%
Total	20	2,149	29.4%	53	10,225	52.9%
Excluding SJMC	12	2,149	49.1%	46	10,225	60.9%

HOSPITAL NAME	Burn Care Avail	Burn Care PD Adult	Burn Occ	Other Intensive Care Avail	Other Intensive Care PD Adult	Other ICU Occ
SAN JOSE MEDICAL CENTER			NA			NA
REGIONAL MEDICAL CENTER			NA			NA
O'CONNOR HOSPITAL			NA			NA
SANTA CLARA VALLEY	8	2,377	81.4%	30	8,681	79.3%
Total	8	2,377	81.4%	30	8,681	79.3%
Excluding SJMC	8	2,377	81.4%	30	8,681	79.3%

				Pediatric	Pediatric	
	Medical/Surgical Me	dical/Surgical		Acute	Acute PD	
HOSPITAL NAME	Acute Avail Ac	ute PD Adult	M/S Occ	Avail	Ped	Ped Occ
SAN JOSE MEDICAL CENTER	157	17,246	30.1%	29	1,637	15.5%
REGIONAL MEDICAL CENTER	91	15,211	45.8%	22	2,254	28.1%
O'CONNOR HOSPITAL	180	31,116	47.4%	24	1,202	13.7%
SANTA CLARA VALLEY	189	44,961	65.2%	33	5,770	47.9%
Total	617	108,534	48.2%	108	10,863	27.6%
Excluding SJMC	460	108,534	64.6%	79	10,863	37.7%

	Psychiatric Acute - Adult	Psychiatric Acute - Adult	(		Obstetrics Acute PD	
HOSPITAL NAME	Avail	PD Adult	Psych Occ	Avail	Adult	OB Occ
SAN JOSE MEDICAL CENTER			NA			NA
REGIONAL MEDICAL CENTER			NA	20	7,899	108.2%
O'CONNOR HOSPITAL	22	2,805	34.9%	34	7,475	60.2%
SANTA CLARA VALLEY	50	17,992	98.6%	52	13,101	69.0%
Total	72	20,797	79.1%	106	28,475	73.6%
Excluding SJMC	72	20,797	79.1%	106	28,475	73.6%

				Other	Other	
	Physical	Physical		Acute	Acute	
	Rehabilitation	Rehabilitation		Care	Care PD	Other
HOSPITAL NAME	Care Avail	Care PD Adult	Rehab Occ	Avail	Adult	Acute Occ
SAN JOSE MEDICAL CENTER	30	3,711	33.9%	26	7,571	<mark>79.8%</mark>
REGIONAL MEDICAL CENTER			NA	37	12,694	<mark>94.0%</mark>
O'CONNOR HOSPITAL			NA			NA
SANTA CLARA VALLEY	60	10,501	47.9%			NA
Total	90	14,212	43.3%	63	20,265	<mark>88.1%</mark>
Excluding SJMC	60	14,212	64.9%	37	20,265	150.1%

HOSPITAL NAME	Total Licensed	Total Avail	Total Staffed	Total PD Adult	Total PD Ped
SAN JOSE MEDICAL CENTER	328	328	117	40,473	2,342
REGIONAL MEDICAL CENTER	204	188	188	39,741	3,906
O'CONNOR HOSPITAL	358	306	225	52,812	1,202
SANTA CLARA VALLEY	574	506	506	105,294	15,787
Total	1,464	1,328	1,036	238,320	23,237
Excluding SJMC	1,136	1,000	919	238,320	23,237

HOSPITAL NAME	Total Disch	GAC Avail Beds	GAC PD	ADC	Avail Occ	ADC @ 80% Occ	Excess Beds
SAN JOSE MEDICAL CENTER	7,250	) 274	35,105	96.2	35.1%	219.2	123
REGIONAL MEDICAL CENTER	10,346	<b>5</b> 188	43,094	118.1	62.8%	150.4	32
O'CONNOR HOSPITAL	12,626	<b>5</b> 260	44,177	121.0	46.6%	208.0	87
SANTA CLARA VALLEY	20,967	456	93,402	255.9	56.1%	364.8	109
Total	51,189	) 1,178	215,778	591.2	50.2%	942.4	351
Excluding SJMC	51,189	904	215,778	591.2	65.4%	723.2	132

	HOSPITAL NAME	Average Length of Stay		ance From MC Miles
SAN JOSE ME	EDICAL CENTER		4.8	
REGIONAL MI	EDICAL CENTER		4.2	2.5
O'CONNOR H	OSPITAL		3.5	5.7
SANTA CLAR	A VALLEY		4.5	4.9
Total			4.2	
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Source: Office of Statewide Health Planning and Development, Annual Hospital Financial Disclosure Reports, fiscal periods ending between June 30, 2002 and June 29, 2003; and Mapquest.com.

# TABLE B4ANNUAL UTILIZATION AND LICENSED CAPACITYSAN JOSE MEDICAL CENTER AND COMPETING HOSPITALS2002

		MED_SURG_BED_		
HOSPITAL NAME	TRAUMA_CTR	LIC	MED_SURG_CENS_DAY	MED_SURG_OCC
SANTA CLARA VALLEY	Level I	262	66,593	69.6%
SAN JOSE MEDICAL CENTER	Level II	183	24,817	37.2%
OCONNOR HOSPITAL		214	30,057	38.5%
REGIONAL MEDICAL CENTER		144	36,206	68.9%
TOTAL		803	157,673	53.8%
EXCLUDING SJMC		620	157,673	69.7%

HOSPITAL NAME	PERINATL_BED _LIC	PERINATL_CENS_ DAY	PERINATL_OCC	PED_BED_LIC	PED_CENS_DAY	PED_OCC
SANTA CLARA VALLEY	52	16,162	85.2%	40	5,576	38.2%
SAN JOSE MEDICAL CENTER	28	-	0.0%	29	1,637	15.5%
OCONNOR HOSPITAL	39	7,737	54.4%	27	878	8.9%
REGIONAL MEDICAL CENTER	20	7,170	98.2%	22	2,007	25.0%
TOTAL	139	31,069	61.2%	118	10,098	23.4%
EXCLUDING SJMC	111	31,069	76.7%	89	10,098	31.1%
HOSPITAL NAME	ICU_BED_LIC	ICU_CENS_DAY	ICU_OCC	CCU_BED_LIC	CCU_CENS_DAY	CCU_0CC
SANTA CLARA VALLEY	44	6,975	43.4%	8	2,396	82.1%
SAN JOSE MEDICAL CENTER	15	4,940	90.2%	10	-	0.0%
OCONNOR HOSPITAL	16	4,116	70.5%	8	-	0.0%
REGIONAL MEDICAL CENTER	8	88	3.0%	4	-	0.0%
TOTAL	83	16,119	53.2%	30	2,396	21.9%
EXCLUDING SJMC	68	16,119	64.9%	20	2,396	32.8%
HOSPITAL NAME	BURN_BED_LIC	BURN_CENS_DAY	BURN_OCC	NICU_BED_LIC	NICU_CENS_DAY	NICU_OCC
SANTA CLARA VALLEY	8	2,417	82.8%	40	7,981	54.7%
SAN JOSE MEDICAL CENTER	-	-	NA	7	-	0.0%
OCONNOR HOSPITAL	-		NA	10	1,685	46.2%
REGIONAL MEDICAL CENTER	-	-	NA	6	1,001	45.7%
TOTAL	8	2,417	82.8%	63	10,667	46.4%
EXCLUDING SJMC	8	2,417	82.8%	56	10,667	52.2%

HOSPITAL NAME	REHAB_BED_LIC	REHAB_CENS_DAY	REHAB_OCC	GAC_BED_LIC	GAC_DIS	GAC_CENS_DAY	
SANTA CLARA VALLEY	70	12,355	48.4%	524	20,256	120,455	
SAN JOSE MEDICAL CENTER OCONNOR HOSPITAL REGIONAL MEDICAL CENTER	30 - -	3,711 - -	33.9% NA NA	302 314 204	6,625 11,404 14,905	35,105 44,473 46,472	
TOTAL	100	16,066	44.0%	1,344	53,190	246,505	
EXCLUDING SJMC	70	16,066	62.9%	1,042	53,190	246,505	
HOSPITAL NAME	GAC_LOS	GAC_OCC	PSY_BED_LIC	PSY_DIS	PSY_CENS_DAY	PSY_LOS	PSY_OCC
SANTA CLARA VALLEY	5.95	63.0%	50	1,436	17,638	12.28	96.6%
SAN JOSE MEDICAL CENTER	5.30	31.8%	0	-	-	NA	NA
OCONNOR HOSPITAL	3.90	38.8%	22	219	2,979	13.60	37.1%
REGIONAL MEDICAL CENTER	3.12	62.4%	0	-	-	NA	NA
TOTAL	4.63	50.2%	72	1,655	20,617	12.46	78.5%
EXCLUDING SJMC	4.63	64.8%	72	1,655	20,617	12.46	78.5%
HOSPITAL NAME SANTA CLARA VALLEY	SN_BED_LIC	SN_DIS	SN_CENS_DAY	SN_LOS NA	SN_OCC NA		
SAN JOSE MEDICAL CENTER	26	625	7,710	12.34	81.2%		
OCONNOR HOSPITAL REGIONAL MEDICAL CENTER	24	595	6,950 -	11.68 NA	79.3% NA		
TOTAL	50	1,220	14,660	12.02	80.3%		
EXCLUDING SJMC	24	1,220	14,660	12.02	167.4%		

HOSPITAL NAME	HOSP_BED_LIC_ TOTL	HOSP_DIS_TOTL	HOSP_CENS_DAY_TOTL	HOSP_LOS	HOSP_OCC
SANTA CLARA VALLEY	574	21,692	138,093	6.37	65.9%
SAN JOSE MEDICAL CENTER	328	7,250	42,815	5.91	35.8%
OCONNOR HOSPITAL	360	12,218	54,402	4.45	41.4%
REGIONAL MEDICAL CENTER	204	14,905	46,472	3.12	62.4%
TOTAL	1,466	56,065	281,782	5.03	52.7%
EXCLUDING SJMC	1,138	56,065	281,782	5.03	67.8%

HOSPITAL NAME	EMS_NONURGENT_ VIS	EMS_URGENT VIS	EMS_MODER_VIS	EMS_SEVERE_VIS	EMS_CRITICAL VIS	EMS_VIS_TOTL	EMS_ADM_VIS
SANTA CLARA VALLEY	12	6,631	26,498	15,637	5,141	53,919	9,086
SAN JOSE MEDICAL CENTER	3,794	12,688	4,461	3,401	4,949	29,293	4,435
OCONNOR HOSPITAL	2,942	11,783	8,380	2,508	584	26,197	4,804
REGIONAL MEDICAL CENTER	420	11,880	5,792	3,905	2,569	24,566	-
TOTAL	7,168	42,982	45,131	25,451	13,243	133,975	18,325
EXCLUDING SJMC	7,168	42,982	45,131	25,451	13,243	133,975	18,325

HOSPITAL NAME	EMS_STATIONS EN	MS_VIS/STA E	EMS-ADM/VIS	SURG_IP	SURG_OP	TOT_CV_SURG
SANTA CLARA VALLEY	32	1,685	16.9%	4,509	4,081	72
SAN JOSE MEDICAL CENTER	19	1,542	15.1%	1,906	3,631	56
OCONNOR HOSPITAL	11	2,382	18.3%	3,032	3,911	629
REGIONAL MEDICAL CENTER	23	1,068	0.0%	2,934	6,554	-
TOTAL	85	1,576	13.7%	12,381	18,177	757
EXCLUDING SJMC	66	2,030	13.7%	12,381 Jandar Vaar 2002	18,177	757

Source: Office of Statewide Health Planning and Development, Annual Hospital Utilization Report, Calendar-Year 2002.

#### TABLE B5 UTILIZATION AND CAPACITY SAN JOSE MEDICAL CENTER AND REGIONAL MEDICAL CENTER OF SAN JOSE YTD SEPTEMBER 2004\*

SERVICE	SJMC	RMCSJ	COMBINED	Dec Changes(3)	REGIONAL NET TOTAL @ 12/04 2007 /	Additions	2007 REGIONAL TOTAL	SYSTEM NET CHANGE	2007 Occupancy @ 2004 PD
M/S LICENSED BEDS	183	144	327	2	146	20	166	(161)	0 20011 0
M/S PATIENT DAYS	18,920	22,616	41,536					( - )	
M/S OCCUPANCY	38%	57%	46%						91.4%
PERINATAL LICENSED BEDS (1)	28	20	48		20	32	52	4	
PERINATAL PATIENT DAYS	-	5,202	5,202						
PERINATAL OCCUPANCY	0%	95%	40%						36.5%
PEDIATRICS LICENSED BEDS	29	22	51	(14)	8	8	16	(35)	
PEDIATRICS PATIENT DAYS	1,024	1,566	2,590						
PEDIATRICS OCCUPANCY	13%	26%	19%						59.1%
ICU/CCU LICENSED BEDS	25	12	37	12	24	12	36	(1)	
ICU/CCU PATIENT DAYS	4,782	2,924	7,706						
ICU/CCU OCCUPANCY	70%	89%	76%						78.2%
NICU_LICENSED BEDS (1)	7	6	13		6	4	10	(3)	
NICU PATIENT DAYS	-	1,427	1,427						
NICU OCCUPANCY	0%	87%	40%						52.1%
REHAB LICENSED BEDS	30	-	30		-	-	-	(30)	
REHAB PATIENT DAYS	2,498	-	2,498						
REHAB OCCUPANCY	30%	NA	30%						
GAC LICENSED BEDS SUBTOTL	302	204	506	-	204	76	280	(226)	
GAC PATIENT DAYS	27,224	33,735	60,959						
GAC OCCUPANCY	33%	60%	44%						79.5%
SN LICENSED BEDS	26	-	26		-	-	-	(26)	
SN PATIENT DAYS	5,468	-	5,468						
SN OCCUPANCY	77%	NA	77%						

SERVICE	SJMC	RMCSJ	COMBINED	Dec Changes(3)	REGIONAL NET TOTAL @ 12/04	2007 Additions	2007 REGIONAL TOTAL	2007 SYSTEM NET Occupancy CHANGE @ 2004 PD
EMS VISITS	23,301	32,095	55,396					
EMS STATIONS (4)	19	24	43	9	3	3 14	47	4
EMS VISITS PER STATION	1,635	1,783	1,718					1,571.5
SURGERIES INPATIENT	1,239	1,490	2,729					
SURGERIES OUTPATIENT	2,590	3,542	6,132					
CARDIAC CATH ROOMS (2)	1	1	2				2	-
CARDIOVASCULAR SURGERIES	42		42					

\* In calculating occupancy rates and EMS visits per station, patient days and EMS visits are annualized based on nine-months data.

(1) - SJMC's OB program closed in fiscal year 2000.

(2) - RMCSJ temporarily closed its cath lab in 4th quarter 2003. It is scheduled to reopen in November 2004.

(3) -These changes have been approved by state licensing authorities and are going to be completed prior to SJMC's closure.

(4) – The 33 stations as of December 2004 includes 4 observation/holding beds. Source: Hospital records.