

## **The UCSF and Stanford Health Services:**

**The Proposed Merger Should Make the Partners Fiscally Stronger, Although the Extent of Financial Benefits Is Potentially Overstated**



September 1997  
97122

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# CALIFORNIA STATE AUDITOR

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September 3, 1997

97122

The Governor of California  
President pro Tempore of the Senate  
Speaker of the Assembly  
State Capitol  
Sacramento, California 95814

Dear Governor and Legislative Leaders:

As requested by the Joint Legislative Audit Committee, the Bureau of State Audits presents its audit report concerning the financing and structuring of the proposed merger between the University of California Medical Center at San Francisco and Stanford Health Services.

This report concludes that the merger should make the partners fiscally stronger, although the extent of financial benefits is potentially overstated. Specifically, we believe the benefits over the first four years of the merger will approximate \$120 million rather than amounts of approximately \$230 million, \$130 million, and \$150 million as reported in prior studies. However, aggressive management of cost-cutting efforts will be critical for the merger's success.

Respectfully submitted,

KURT R. SJOBERG  
State Auditor

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# Summary

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## Audit Highlights . . .

*Our review of the proposed merger between the UCSF and Stanford medical centers found:*

- The fiscal viability of neither entity is immediately threatened, but in order to survive in the long-run, they need to enhance their value;*
  - The two medical centers are about financially equal in the merger;*
  - Although Stanford will contribute more equity, UCSF will contribute a greater amount of liquid assets in relation to its long-term debt; and*
  - While the merger should result in reduced costs and some additional revenues, the financial benefits have been potentially overstated.*
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## Results in Brief

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The University of California, San Francisco (UCSF) and Stanford University (Stanford) are proposing to merge their medical centers and form a new nonprofit public-benefit corporation, the UCSF-Stanford Health Care (USHC). Although both medical centers are presently sound financially, they are both concerned that changes in the Bay Area health services marketplace will prevent them from supporting their respective medical education programs at current levels while also reserving resources needed to support ongoing program requirements and initiatives at the medical centers such as repair and replacement of buildings and equipment.

In fiscal year 1995-96, the UCSF and Stanford medical schools received support from their medical programs of \$22.7 million and \$21.2 million, respectively, from medical center earnings. In addition to these payments, the UCSF and Stanford medical schools received \$6.2 million and \$8.2 million, respectively, from an assessed tax on the revenues of the faculty practice programs.

In response to marketplace changes, the proposed merger is intended to enable the two universities to maintain financial support for their academic missions, including recruitment and retention of the best faculty, students and residents. The intent is also to sustain an adequate patient base and to significantly improve graduate education, continuing medical education, and public education. Lastly, the universities anticipate that the proposed merger will create opportunities that will “ensure vibrant clinical research and winning collaborations among scientists, and between universities and the private sector, especially the pharmaceutical industries.”

The proposed consolidation agreement provides UCSF and Stanford specific protections. For example, while UCSF and Stanford will transfer equipment and personal property to USHC at no cost, each entity will retain title to its buildings and land that will be leased to USHC. Also, either UCSF or Stanford can initiate dissolution proceedings if USHC does not meet the objectives of the merger.

Our financial analysis of the proposed merger is based on information currently available. However, significant provisions of the consolidation agreement, such as the specific assets to be transferred to USHC and the formulas to distribute earnings to the medical schools, are still being negotiated. We reviewed the changes occurring in the Bay Area health services marketplace to determine whether a merger was a reasonable response to those changes. Also, we performed a variety of analyses on the financial health and results of operations of the two medical centers to determine the extent to which they were equal partners. In addition, we evaluated the analyses performed in previous studies commissioned by UCSF and Stanford to determine if they correctly stated the financial benefits of the merger.

We do not believe that the fiscal viability of either medical center is immediately threatened. However, in order to survive in the long run, the two medical centers need to enhance the perceived value of their services through ongoing, aggressive cost reductions, improved consistency of results from medical treatment, and improved ability to document the quality of their medical care regardless of whether or not they merge.

While the merger should result in reduced costs and some additional revenues, the extent of the financial benefits of the merger have been potentially overstated. For example, UCSF and Stanford's latest estimate of the four-year net financial benefits derived from the merger as shown in the Third-Party Review of \$152 million is potentially overstated by nearly \$32 million.

Specifically, we found:

***Survey of Health Care Marketplace:***

- The proposed merger is an understandable response to the changing health care services market. Managed care in the Bay Area has dramatically changed the economic structure of health care through price declines and hospital-usage reductions in order to contain costs. As health maintenance organizations (HMOs) and physicians have increasingly consolidated to gain bargaining power, hospitals have sought to merge and affiliate with one another to gain leverage with these large HMOs and physician groups.
- Teaching hospitals such as UCSF and Stanford face particular challenges because they are traditionally the highest-cost, highest-price type of hospitals, and they have relied on hospital and clinical income to subsidize teaching and research. Hospital mergers are often an integral part of

strategies to raise revenues and reduce costs. Some studies have found evidence that mergers result in lower cost per admission and operating efficiency; others found that mergers do not result in lower patient care costs or administrative costs.

### ***Results of Historical Financial and Operational Analysis:***

- The two medical centers are approximately financially equal in the merger. For comparability purposes, our analyses include an adjustment to audited financial statement data because Stanford's accounting policies are different from UCSF's. The adjustment was to allow for comparisons under similar accounting policies. Stanford's contribution to the \$869 million equity (assets less liabilities) of the combined entity will be \$483 million (56 percent) and UCSF's contribution will be \$386 million (44 percent). While Stanford will be contributing more in liquid assets, UCSF will be contributing a greater amount of liquid assets (cash, stocks, and bonds) in relation to its long-term debt.
- For the five-year period between 1992 and 1996, we found that UCSF's net income (income after expenses from all activities), when adjusted for nonrecurring revenues and expenses and the distribution of earnings to the medical school, totaled \$251 million while Stanford's totaled \$215 million. Similarly, UCSF's income from hospital operations over the five-year period was \$186 million while Stanford's was \$150 million.
- Based on an analysis of data between 1991 and 1996, we found that each merger partner brings certain operating strengths to the merger based on such operating characteristics as number of inpatient days, occupancy rates on available beds, revenue per inpatient day and other measures of operating performance. However, UCSF's lower operating expenses per patient day could make it relatively stronger than Stanford as the health care services market becomes increasingly sensitive to hospital costs.

### ***Analysis of Financial Benefits From the Merger:***

- Proposed revenue increases, even at 50 percent of the business analysis estimates currently being used by UCSF and Stanford, are too optimistic based on the declining



demand for hospital services and continued pressure from payors for price reductions.

- We estimated that the net benefit from the additional number of specialty care cases is likely to equal \$28 million over the first four years of joint operation rather than \$84 million presented by the Third-Party Review which results in a difference of \$56 million.
- For most large operating expense reductions it proposed, the USHC appears to have a fairly clear and executable plan to achieve the cost savings identified in the business analysis for the merger. We analyzed the potential financial benefits of the merger assuming that various percentages of the projected new revenues and cost savings were achieved. In addition, we reduced the merger costs related to pension and severance payments by \$25 million, because pension costs are lower than originally estimated and severance costs are now unlikely to occur. If USHC does not succeed in increasing its number of complex patient cases above pre-merger levels, it would have to achieve 84.2 percent of its projected cost reductions for the merger to be at a break-even proposition after a four-year period.
- The estimated increased income from the merger is likely to help ensure the present level of funding being transferred from the medical centers to the medical schools will continue in the future. Also, it may allow for increased funding that could be transferred to the medical schools if the merger is very successful. Further, the estimated increased income is likely to allow for funding of short-term (within three to five years) capital needs. However, the income is unlikely to reach the 5 percent of estimated net revenue that is recommended to meet long-term capital requirements.

### ***Agency Comments***

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Generally, the University of California and Stanford University agreed with our conclusions.

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# *Introduction*

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## *Background*

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Over the last several years, the University of California Regents received numerous presentations pointing toward increased economic competition and reductions in support for the University of California (UC) medical education programs. Because of this, the University of California, San Francisco (UCSF) pursued a series of clinical strategies to improve its competitiveness. However, despite UCSF's reported success of many of these strategic initiatives, the chancellor, the dean of the school of medicine, and the medical center director have concluded that the UCSF clinical enterprise must partner with others to assure its continuing competitiveness and to sustain excellence in its academic medical programs.<sup>1</sup> Therefore, during the spring of 1996, members of the committee on health services from the UC discussed their expectations to propose, for the UC Regents' approval, a merger between the medical centers of UCSF and Stanford.

## *UCSF's Role in the Proposed Merger*

It is UCSF's belief that this merger would enhance its academic mission, strengthen its regional referral role, and create a more cost-effective teaching hospital. UCSF therefore believes that this proposed merger would enable it and Stanford to maintain the financial support for their academic mission, while also reserving resources needed for ongoing program requirements and initiatives of the medical center, such as repair and replacement of buildings and equipment.

In January 1995, the consulting firm KPMG Peat Marwick, LLP, made a presentation to the UC Regents that stated that if the current downward trends in the economic health care market continued, UCSF would not be able to meet its capital (buildings and equipment) and operating needs. In addition, UCSF believes the merger would sustain an adequate patient base for education, significantly improve graduate education and continuing medical education, and create opportunities for clinical research and collaborations between the universities

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<sup>1</sup> A clinical enterprise is the integration of those activities related to the delivery of health care services within the setting of a teaching hospital.

and their scientists. The rationale for the merger proposed to the members of the committee on health services is in Appendix A.

UCSF is one of five teaching hospitals within the UC system. These five are in Davis, Irvine, Los Angeles, San Diego, and San Francisco. They compose one of the nation's largest health science and medical training programs. UCSF alone trains approximately 650 medical students and nearly 1,200 medical residents annually.

As a teaching hospital, UCSF's responsibilities are both similar to and different from those of community hospitals. As is the case with community hospitals, UCSF also has a responsibility to provide patients with competitively priced care. However, UCSF's stated mission differs from community hospitals in that UCSF will, according to the mission statement, "educate and train the next generation of health care professionals, to invest in and conduct research for the advancement of science and medical technology, and to translate these advancements in research and science into new and improved systems of patient care."

To accomplish this mission, the UCSF School of Medicine uses the UCSF Medical Center's hospitals and clinics as the primary research, teaching, and learning vehicle for its students, faculty, and staff. The UCSF Medical Center is composed of three hospitals, UCSF/Mount Zion Hospital, Moffitt-Long Hospital, and Langley Porter Psychiatric Hospital and Clinic. Together, these hospitals are staffed by approximately 950 physicians and provide more than 960 licensed beds with approximately 160,000 days of hospital care annually. However, one of these three hospitals, Langley Porter, is not included in the proposed merger.

### ***Stanford's Role in the Proposed Merger***

In comparison, Stanford consists of the School of Medicine and Stanford Health Services. Stanford Health Services is a university-owned, nonprofit corporation that includes the Stanford University Hospital, Stanford University Clinics and the Lucile Salter Packard Children's Hospital. This combined nonprofit corporation has a medical staff of approximately 1,800 physicians and provides 814 licensed beds with approximately 164,000 days of hospital care annually.

Stanford, also a teaching hospital, has a mission similar to UCSF's. Its stated mission is to "deliver patient-centered, scientifically advanced care, as the primary teaching and

research hospital and clinic for Stanford University School of Medicine.” Stanford’s care ranges from general care through highly specialized care for local, national, and international patients. In addition, Stanford has more than 100 outpatient clinics, where members of the medical school faculty focus on treating patients and training doctors.

### ***UCSF-Stanford Health Care***

In order to unite Stanford Health Services with the UCSF Medical Center, the UC Board of Regents voted on November 15, 1996, to create UCSF-Stanford Health Care (USHC), a nonprofit, public-benefit corporation. Prior to this decision, a series of reports was produced exploring the feasibility of the merger and analyzing the business environment and health care market. The first report from the consulting firm of Lewin/VHI, was created through a series of meetings between the senior management of UCSF and Stanford exploring the feasibility of the merger. Subsequent to the feasibility study, Ernst & Young, LLP, another consulting firm, prepared a business analysis of the merger. Ernst & Young, LLP, assessed the long- and short-term benefits and examined potential risks involved for both UCSF and Stanford. Lastly, Warren Hellman (of Hellman and Friedman, an investment firm) chaired an independent Third-Party Review team whose members included John McArthur (Dean of the Harvard University Graduate School of Business Administration from 1980 to 1995) and Dr. Samuel Thier (Chief Executive Officer of Partners Healthcare System, Inc., President of the Massachusetts General Hospital and professor of medicine at Harvard Medical School). Also, Warren Hellman chose Bain & Company to provide analytic support to this process. This team’s study, referred to throughout the report as the Third-Party Review, focused on whether the merger was a sound business decision for UCSF and if the analysis to date was sufficient. Although the three reports were performed by different parties, their conclusions are similar in that each report suggests UCSF and Stanford should proceed with the merger proposal. A listing of chronological events and reports prepared regarding the merger is in Appendix B.

The primary purpose of this new entity, USHC, is to support, benefit, and further the charitable, scientific, and educational purposes of the UCSF and Stanford schools of medicine. USHC’s support for the two schools of medicine is carried out by providing financial support in exchange for the faculty’s clinical activities; by maintaining educational venues for physician training and by reinvesting earnings from USHC’s clinical activities, both professional and institutional, in UCSF and Stanford academic activities, including education,

research, and discovery. Although as part of this proposed agreement UCSF and Stanford agreed to transfer equipment, personal property, and other assets to USHC at no cost, both entities separately retain title to all land, buildings, and improvements in their respective medical centers. In addition, both UCSF and Stanford are proposing to have the right to share their respective transferred assets as is reasonably necessary for research and teaching.

USHC will be staffed by nonacademic employees of the UCSF and Stanford clinical enterprises and be subject to the employment, pay and benefits USHC establishes. On the other hand, the faculty, clinical residents and staff of the UCSF and Stanford medical schools will remain employees of their respective schools. Hence, the schools and USHC will negotiate terms of faculty and student participation in the USHC clinical enterprise. However, significant provisions of the consolidation agreement, such as the specific assets to be transferred to USHC and the formulas to distribute earnings to the medical schools, are still being negotiated.

In order to provide financial support to the two medical schools USHC proposes to distribute to the medical schools an annual unrestricted, academic grant or dean's tax expendable at the discretion of the deans from the UCSF and Stanford schools of medicine. In addition to the academic grant, USHC plans on making an annual academic contribution to the two schools. This contribution is to be funded in two parts; one as a portion of the USHC's operating expenses and the other as an amount based on USHC's achievement of overall financial goals. During the first year of operations, USHC intends to pay an initial \$1.25 million each to the UCSF and Stanford schools of medicine. In addition, a second payment of up to \$1.25 million to each school is to be funded by a 50 percent share of USHC's first \$5 million in adjusted operating income, if available.

The UCSF and Stanford clinical enterprises have historically provided financial support to their respective schools of medicine. Payment for the activities of the schools of medicine has taken many forms, but has included recurring payments for medical direction, which includes unit leadership; administrative support for department chairs; utilization review and quality assurance activities; and clinical oversight in various services. In addition to the academic grant and an annual academic contribution, USHC proposes to pay for the above activities traditionally supported by the clinical enterprises.

In the event of UC's and Stanford's final approval of the merger, control of the assets and operations of the UCSF Medical Center

and Stanford Health Services is to transfer to USHC's 17-member governing board of directors. The USHC board consists of six people from UCSF, including two regents; the UC president; the UCSF chancellor; the dean of the UCSF School of Medicine; and a faculty member from the UCSF School of Medicine. In addition, six members are from Stanford, including two trustees; the Stanford president, the dean from the Stanford School of Medicine; a faculty member from the Stanford School of Medicine; and one person elected by Stanford. The remaining five members, including the president of the corporation and chief medical officer, are selected jointly by UCSF and Stanford. However, even after the merger has been approved, should either UCSF or Stanford determine that USHC is failing to carry out the purposes for which it was organized, either UCSF or Stanford may petition for an involuntary dissolution of USHC.

One of USHC's proposed strategies is to improve its share in the specialty-care market. USHC proposes that its reduced-cost position would allow for lower prices for specialty care and would therefore make USHC more attractive than alternative referral centers. Although the separate universities currently have a market leadership position in six specialties each, the Third-Party Review projects that USHC will become the market leader in 20 of 26 specialties.

According to the UC's deputy general counsel, the Regents of the UC have been advised by their general counsel that they have the legal authority to transfer assets to USHC based upon the authority granted by Article IX, Section 9(f) of the Constitution of the State of California; however, critics argue that the proposed merger violates the Regents' trustee duties and is a violation of the public trust. Article IX, Section 9(f) of the California Constitution, states that the Regents of the UC are vested with the legal title and the management and disposition of property of the university and of property held for its benefit. In addition, critics argue that certain meetings of the Regents were held in closed session, and because the Regents refuse to allow public access to the minutes of these meetings, it is impossible for the public to determine if due diligence was exercised. As of August 20, 1997, the question pertaining to the legality of the merger based on the positions characterized here remains unresolved. This issue may be decided by cases currently in the California court system.

## ***Scope and Methodology***

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The Joint Legislative Audit Committee requested the Bureau of State Audits to perform an audit of the proposed merger between the UCSF Medical Center and Stanford Health Services. The purpose of our audit was to provide independently developed and verified information about this proposal.

We reviewed the relevant rules and regulations and assessed studies of the merger proposal, including the Lewin/VHI feasibility analysis; the Ernst & Young business analysis; the Third-Party Review; and similar documents prepared by UCSF, Stanford, their consultants and legal advisers, and other outside parties.

In order to assist us in evaluating the proposed merger and its impact, we hired a health care economics and strategy consulting firm, Analysis Group Economics. These health care experts reviewed changes in the current and expected health care environment in the Bay Area to determine whether a merger is a reasonable response to the changes. Further, they calculated trends from financial and operational data submitted by UCSF and Stanford to the Office of Statewide Health Planning and Development and compared the resulting trends from UCSF and Stanford with the trends of other acute-care and teaching hospitals in California, noting the similarities and differences.

Using audited financial statements, we performed several analyses on the financial health and results of hospital operations for both UCSF and Stanford for the period 1992 through 1996. Also, to further evaluate the merger, we reviewed the audited financial statements to calculate the proposed contributions each entity will bring to the merger and evaluate whether the entities are equal partners. In addition, we evaluated the impact of contingent liabilities (potential claims whose outcome cannot be determined at this time) on the financial health of these entities. For example, we evaluated the impact of a pending federal audit of UCSF's and Stanford's Medicare billings and the possible fines or repayments.

We also used our health care experts to assess the anticipated revenues and cost savings to be generated by the proposed merger. Specifically, the experts determined if these revenues and savings are reasonable and based on appropriate assumptions, and whether the merger plan specifies operational and organizational changes in sufficient detail to ensure that these changes actually can and will take place.

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# *Chapter 1*

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## ***Health Care Market Changes Support the Strategy for Merger; However, Financial Benefits of Other Hospital Mergers Have Been Inconsistent***

### ***Chapter Summary***

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The proposed merger between Stanford Health Services (Stanford) and the University of California, San Francisco (UCSF) Medical Center is in response to the Bay Area's changing health care services market.<sup>2</sup> Managed care plans, particularly health maintenance organizations (HMOs), have penetrated the health care services market in the Bay Area during the 1990s and caused structure changes in the health care delivery system. HMOs, competing with one another for a larger share of the market, have kept medical insurance premiums low by more closely managing the use of physician and hospital services, lowering payments to health care providers, and consolidating with one another to cut costs. Physicians, facing lower payments from HMOs, often affiliate with large physician groups to gain bargaining power and access to information systems and utilization-management techniques. As a result of both HMO and physician group consolidation, the number of hospital admissions declined, adding pressure to the Bay Area hospitals that have had an existing over supply of hospital beds. In response to the increasing bargaining power from these consolidated HMOs and large physician groups, most Bay Area hospitals have merged and affiliated with one another to gain bargaining leverage. While a few independent hospitals remain, they are in the process of evaluating merger partners.

Teaching hospitals such as UCSF and Stanford face unique competitive challenges because they traditionally have higher medical costs than other hospitals because of their mission to train medical and graduate students. These medical schools

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<sup>2</sup>As used throughout the report, the Bay Area consists of the following ten counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma (per the Office of Statewide Health Planning and Development).



and teaching hospitals, threatened by the decline in hospital utilization, have embraced a variety of survival strategies to increase revenues and reduce costs. These strategies include:

- Selling their hospitals to for-profit hospital systems;
- Acquiring, or affiliating with, physician groups and community hospitals to build a network of primary care facilities sufficient to provide adequate patient activities for teaching hospitals;
- Reducing costs by streamlining the process or procedures used for patient care or treatment; and
- Merging with other medical schools or teaching hospitals.

Merging with other teaching hospitals is often an integral part of the various strategies used by medical schools and teaching hospitals to increase revenues and reduce costs. Mergers provide opportunities to increase revenues and reduce costs by closing facilities, consolidating administrative functions, achieving economies of scale, improving bargaining power, increasing reputation, and eliminating competition with a main rival. Economy of scale is a reduction in unit cost resulting from an increase in volume. Studies of the proposed merger between UCSF and Stanford suggest that opportunities such as achieving operating economies of scale, increasing patient volume, and eliminating competition between the merger partners support the incentive to merge.

Although studies have examined the characteristics of merging hospitals and their post-merger performance, the findings have been inconsistent. Some studies found that mergers result in lower cost per admission and operating efficiency. Other studies found that mergers do not result in lower patient care costs or lower administrative costs.

### ***Overview of Market Structure and Implications for Merger Strategy***


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*Managed care has dramatically changed the economics of health care services in the Bay Area.*


Managed care has dramatically changed the economics of health care services in the Bay Area. The Bay Area has some of the highest HMO penetration rates in the nation, serving over 50 percent of the people living in Oakland, San Francisco, Vallejo, and other cities. Individuals that are not members of a managed care plan, either an HMO, a preferred provider organization, or a point of service plan, are on Medi-Cal,

Medicare, or are uninsured.<sup>3</sup> Trends indicate that Medi-Cal and Medicare enrollees who are not already members of a managed care plan are likely to become so in the near future. In essence, traditional indemnity insurance that reimburses the patient a fixed percentage for each type of medical service consumed plays a very minor role in California's health care delivery, and providers must gain access to managed care contracts to survive.

Hospitals that provide the most indigent care in the Bay Area are Santa Clara Valley Medical Center, Highland General Hospital, and San Francisco General Hospital. UCSF and Stanford, therefore, are not the largest indigent care providers in the Bay Area. However, UCSF's medical center is among the Bay Area's top ten indigent care providers. In addition, Stanford and the Lucile Salter Packard Children's Hospital (LSPCH) also provide health care services to the indigent at no cost. Furthermore, LSPCH is one of the largest providers of Medi-Cal in the Bay Area. Therefore, it will be important that UCSF and Stanford continue to serve the indigent and Medi-Cal patients after the merger, depending upon the financial stability and locations of alternative facilities.



*Economic power in the health care industry is now largely with health plans, HMOs in particular, and physician groups.*



Economic power in the health care industry is now largely with health plans (HMOs in particular) and physician groups. Physicians and, to an even greater degree, HMOs, have consolidated and gained control over large numbers of managed care enrollees. HMOs, in an effort to gain a larger share of the market, have been competing aggressively on price. Employer-purchasing groups have been particularly successful in extracting price concessions from HMOs. In order to offer these low prices, HMOs have pressured health care providers to lower their cost of care, either through closer management of specialist and hospital use or reduction of payments to providers.

Physicians have reacted to HMO cost pressures by joining or affiliating with large physician groups. As a member of a physician group, a doctor becomes part of a larger bargaining unit that has uniform techniques to manage the use of costly specialists and hospital services and sophisticated computer systems to track patients and document the quality of their care.

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<sup>3</sup> A health maintenance organization, or HMO, is a managed care plan that offers a comprehensive set of health services. The enrollee bears very low co-payments when obtaining medical care from network providers but has almost no coverage for any services from providers outside the HMO network. A preferred provider organization, or PPO, is a health care benefit arrangement that offers financial incentives, such as low out-of-pocket prices, to enrollees who obtain medical care from a preset list of physicians and hospitals. A PPO still covers services obtained from out-of-network providers. A point of service plan, or POS, is a product offered by managed care organizations or indemnity insurers that combines HMO features and out-of-network coverage with economic incentives for using network providers.

For these reasons, management operating managed care plans prefer to contract with large physician groups rather than individual physician or small practices. It is typical for HMOs to contract with physician groups on a capitated basis. Under a capitated basis, physician groups agree to provide physician services for a defined set of members for an annual fixed fee. In other cases, physician groups are compensated under a global capitation arrangement. In exchange for a fixed fee, these groups are financially responsible for all covered health care, including hospitalization.

The closer management of hospital use that has been implemented at both the health plan level and the physician group level has resulted in fewer hospital stays. These reductions in hospital use compound the existing oversupply of hospital beds in the Bay Area. This oversupply is unlikely to lessen in the future without large numbers of hospital closures. Further, hospital-utilization management is likely to have a greater impact on hospitalization rates in the future as more Medi-Cal and Medicare enrollees move into managed care systems and as physician groups play a more significant role in hospital-utilization management.

—◆—  
*Reduced Medicare  
spending in the new  
federal budget will affect  
teaching hospitals.*  
—◆—

Upon completion of medical school, physicians continue their medical education by completing at least three years of residency training. Medicare has historically helped finance the cost of this graduate medical education through payments to teaching hospitals. Direct graduate medical education payments compensate hospitals for a portion of the direct cost of graduate medical education, including residents' salary and benefits. Indirect medical education payments compensate hospitals for the indirect cost of training residents and for the higher cost of more severely ill patients typically treated at teaching hospitals.<sup>4</sup>

The federal Balanced Budget Act (Act) of 1997 affects hospitals in general, and teaching hospitals in particular, in several important ways. Overall, the legislation is expected to reduce Medicare spending by \$116.4 billion and Medicaid spending by a net \$8.4 billion over five years. The American Hospital Association estimates \$44 billion of the Medicare savings represent reductions in direct fee-for-service payments for inpatient and outpatient hospital services.<sup>5</sup> Much of this savings results from a one-year freeze on Medicare payment rates to

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<sup>4</sup> House Ways and Means Committee Report, Number 98-25, March 4, 1983, and Senate Finance Committee Report, Number 98-22, March 11, 1983.

<sup>5</sup> "Highlights of Medicare and Medicaid Provision in Balanced Budget Act," American Hospital Association, July 31, 1997.

hospitals, with payment rates through the year 2001 growing more slowly than hospital cost inflation. Among the specific provisions of the Act affecting UCSF and Stanford are the following:

- The indirect medical education payments to teaching hospitals will be reduced as the indirect medical education “adjustment factor” is lowered from the current 7.7 percent to 5.5 percent in fiscal year 2001;
- Starting in fiscal year 1997-98, the number of full-time equivalent residents in training will be capped at 1996 levels; however, hospitals will be eligible to participate in incentive payment plans for reducing the number of residents;
- Graduate medical education payments for Medicare managed care enrollees will be “carved-out” of payments to health plans and instead will be made directly to teaching hospitals;
- Medicare disproportionate-share adjustments will be reduced by 1 percent in 1998, with reductions increasing to 5 percent by 2002; and
- An additional \$24 billion in block grants will be provided to states over the next five years to expand health insurance coverage for children while Medicaid disproportionate-share payments will be reduced by \$10 billion.

We did not review a detailed statement of direct graduate medical education, indirect medical education, or Medicare disproportionate-share receipts for UCSF or Stanford. Nor did we review any analyses of the impact of the Act on hospital receipts. However, we noted that UCSF reported that “over \$55.8 million is received annually for Medicare graduate medical education and disproportionate-share payments.”<sup>6</sup> Also, in conversations with UCSF executives, they stated that the legislation would reduce graduate medical education-related compensation between \$10 million and \$15 million combined for UCSF and Stanford in fiscal year 1997-98.<sup>7</sup>



  
*Most Bay Area hospitals have chosen to affiliate with or have been acquired by multihospital systems.*

Despite the above circumstances and changes in the marketplace, few acute-care hospitals in the Bay Area have closed in recent years. Instead, most hospitals in the Bay Area have chosen to affiliate with or have been acquired by

<sup>6</sup> UCSF Medical Center 1995-96 Annual Report, vol. 1, pp. 157-158.

<sup>7</sup> Based upon a memorandum from Larry Smith, CFO of UCSF.

multihospital systems; even the few remaining independent hospitals are in the process of considering partners to affiliate with. A multihospital system is an organization of hospitals managed by a single corporation. Becoming part of a multihospital system offers a number of advantages to a hospital in an overcrowded market. One advantage is that as part of a larger bargaining unit, a hospital can become part of a network of health care providers that an HMO cannot avoid contracting with if it wishes to offer a full range of services to its members within a convenient distance. In addition, it can offer a managed care plan the convenience of a single point of contact for a large number of hospitals and the promise of uniform practices managing the use of hospital services among those hospitals. Some multihospital systems have further strengthened their bargaining position by becoming integrated delivery systems, owning or affiliating with other health care organizations such as physician groups, home health care services, and outpatient centers.

  
*UCSF and SHS offer tertiary and quaternary care, which is highly complex medical treatment like kidney and liver transplants.*  



As a result, it has become difficult for a hospital to thrive in the Bay Area as an independent entity. The question for most hospitals has become how and with which entity to affiliate, rather than whether to affiliate. Unless an independent hospital has unique services that health plans need for their members or is especially cost effective, HMOs have no reason to forego the convenience of a multihospital system to contract with a single hospital. The tertiary and quaternary services (highly complex medical care that involves more sophisticated medical treatments than primary or secondary medical care), such as highly complex kidney and liver transplants provided by UCSF and SHS medical centers, may offer just such an opportunity.

### ***Stanford and UCSF Compete for Patients***


As teaching hospitals, Stanford and UCSF offer a broad range of health care services. These include basic primary and secondary care such as childbirth through sophisticated tertiary and quaternary services such as liver transplants. Among Stanford's clinical specialties are organ transplants, cancer diagnosis and treatment, cardiovascular medicine and surgery, and neurosciences and high-risk maternal care. Further, Stanford is home to LSPCH, that offers a variety of programs for children, including cardiology and heart transplants services, hematology/oncology/bone marrow transplants, liver and kidney transplants, and neonatology. Similarly, UCSF's specialties also include children's services such as pediatric cardiology and cardiac surgery. Further, several programs at UCSF have been designated as "centers-of-excellence," including the cardiopulmonary transplantation program, liver

transplantation program, and Parkinson's disease programs. The soon-to-be completed cancer research building on the UCSF/Mount Zion location will house programs that will facilitate research and strengthen the already strong base of cancer services offered at UCSF.

Although patients typically travel only a short distance for primary and secondary care, they will travel longer distances for tertiary and quaternary services because fewer hospitals offer these highly complex services. Consequently, Stanford and UCSF each compete with other hospitals locally for primary and secondary care and compete with each other within a broader and overlapping geographic market for highly complex tertiary and quaternary services.



*Patients travel short distances for primary and secondary care and longer distances for tertiary and quaternary services.*



Stanford's and UCSF's bargaining power with health plans and physician groups is therefore likely to be increased as a combined entity only if they are able to take advantage of their greater market share in tertiary and quaternary services. Lower combined costs will also enhance their ability to attract tertiary and quaternary patients. However, leverage in tertiary and quaternary care alone is unlikely to significantly improve a merged entity's access to primary and secondary managed care patients. Unless UCSF and Stanford can offer cost-effective primary and secondary care, managed care patients will continue to be steered to other less expensive local hospitals for these services.


Among the various changes discussed earlier, no single change in the Bay Area health care market would necessarily cause UCSF to merge with Stanford. However, when one considers all the changes in total, the proposed merger is an understandable response to the changing Bay Area market. For more detail on managed care presence in the Bay Area; the role of physicians, medical groups, and hospitals in the Bay Area managed care market; and the historic and forecast demand of hospital services, refer to Appendix C.

***Survival Strategies for Teaching Hospitals:  
Increasing Revenues and Cutting Costs***


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The Bay Area's demand for hospital services has fallen substantially during the 1990s. This decline stems from a combination of pressure from health care service payors, such as HMOs, to decrease costs by reducing the number of admissions to hospitals, limiting reimbursements, switching to outpatient surgery, and using technical advances such as substituting drug therapy for surgery and hospitalization. The decline in demand has reduced hospital occupancy rates and

led to an excess of hospital beds in most areas. In response, many hospitals have closed portions of their hospitals, closed their hospitals entirely, been acquired by other hospitals, merged with rival hospitals, or were aggressive in their search for additional revenues.



*Teaching hospitals face unique competitive challenges because they traditionally are the highest-cost, highest-price hospitals.*



Teaching hospitals face unique competitive challenges because they traditionally are the highest-cost, highest-price hospitals and have relied on hospital and clinical income to subsidize teaching and research. As hospital revenues fall, teaching and research are threatened by the loss of funds. The economic solution to these reduced funds involves some combination of increasing revenues and reducing costs. A variety of strategies to accomplish this have been embraced by teaching hospitals. These strategies include selling hospitals to for-profit hospital firms, integrating vertically by acquiring firms at different levels of the delivery channel such as physician groups to provide primary care services, reducing costs through improving the process and procedures for patient care and treatment, and merging with other hospitals.

Instead of merging with other hospitals, some teaching hospitals have sold a majority interest in their hospital to for-profit hospital firms. For example, Creighton University Medical School in Omaha, Nebraska, sold its hospital in 1984 to American Medical International, now controlled by Tenet, and later bought back a 26 percent interest in the hospital. Tenet also owns the University of Southern California's medical hospital. In another instance, Columbia/HCA Healthcare Corporation purchased 80 percent of the Tulane University Medical Center in New Orleans in 1995 and is negotiating with the universities of Oklahoma and South Carolina to purchase their hospitals. In addition, Universal Health Services recently announced a plan to acquire George Washington University Hospital in Washington, D.C.<sup>8</sup> A reported 16 state university hospitals have announced or completed sales or mergers of their teaching hospitals.<sup>9</sup> Selling teaching hospitals follows in the tradition of universities having private firms run their food services and book stores.


Both Columbia/HCA Healthcare and Tenet Healthcare, the two largest national for-profit hospital chains and possibly the most likely potential acquirers, own hospitals in the Bay Area. While neither firm is a dominant player in the region, a strong local market presence may not be necessary to achieve the

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<sup>8</sup> "Can For-Profit Chains Save Troubled Academic Hospitals?" *Medicine & Health*, April 4, 1997.

<sup>9</sup> Milt Freudenheim, "Teaching Hospitals Under the Knife, Long-Term Missions Pressed by HMO's," *New York Times*, May 20, 1997, p. 1.

anticipated benefits of this strategy. The mounting legal problems Columbia faces may effectively eliminate it as a potential acquirer, at least for the foreseeable future. An often-cited disadvantage of full or partial sale of a teaching hospital to a for-profit firm is that the profit motive is inconsistent with the long-term support of the teaching and research missions of the medical school and its faculty. While most sales agreements have attempted to address this concern by any number of methods, it is not yet clear how effective these arrangements will be in practice over the long run.



*Other teaching hospitals have built a network of primary care hospitals to assure an adequate number of teaching cases.*



Other teaching hospitals have concentrated on building revenues by “networking”: acquiring physician practices and community hospitals and affiliating with physician groups, managed care plans, and community hospitals. This strategy is to build a network of primary care facilities sufficient to provide adequate medical cases to teaching hospitals. For example, the University of California, Los Angeles (UCLA) purchased Santa Monica Hospital, a lower-cost primary and secondary care facility. In addition, it pursued primary care volume by building its own group of physicians, affiliating with group practices, and operating primary clinics staffed by affiliates or UCLA physicians.<sup>10</sup> UCLA’s plan was to have eight community-based satellites by the end of 1996 and ten satellites by the end of 1997, with each staffed by two to five primary care physicians and one or two residents.<sup>11</sup> UCLA believes its reputation has strong appeal, particularly for seniors 65 and over, helping it to attract patients from competitors. In another instance, the University of Pennsylvania purchased physician practices and formed affiliations with community hospitals. It reportedly acquired 200 practices for over \$100 million since 1994, with a goal of acquiring 400 practices in total to support its hospital services.<sup>12</sup>

Some teaching hospitals have rejected the idea of building a delivery network because of the high cost of such a strategy and because it may limit patient referrals from competing networks.<sup>13</sup> Further, in Northern California, there are a limited number of independent physicians who have not already joined medical groups. These medical groups, many of which are

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<sup>10</sup> Richard Sinaiko, “Academic Medical Clinics and Managed Care: Adapting to a Changing Health Care Market Place,” *Managed Care Week*, September 30, 1996.

<sup>11</sup> Alan M. Fogelman, et al., “Preserving Medical Schools’ Academic Mission in a Competitive Marketplace,” *Academic Medicine*, November 1996, pp. 1168-1182; and Fogelman, et al., Appendix, Nine Case Studies: Summaries of Comments Presented to the AAMC’s Working Group,” *Academic Medicine*, November 1996, pp. 1183-1199.


<sup>12</sup> Neil Chesnow, “How Fast Can Things Change? Just Look at Philadelphia,” *Medical Economics*, January 27, 1997.

<sup>13</sup> See “Hospitals That Gobbled Up Physician Practices Feel Ill,” *The Wall Street Journal*, June 17, 1997, p. B4.




capitated, may have little incentive to merge with asset-intensive, under-occupied hospitals. A variant of the network strategy is to merge with an existing integrated delivery system. In Northern California possible merger candidates might include Kaiser, Sutter, and Catholic Healthcare West. Again, some teaching hospitals have been reluctant to pursue such a strategy because a merger with one existing system might limit patient referrals from other systems in the region.

Many teaching hospitals have implemented programs to reduce costs through improving efficiency and refining the process of providing patient treatment. These programs, known by such names as “total quality management,” “reengineering,” and “critical pathways,” are intended to improve overall management, clinical care and procedures, and establish common practices for patient treatment. For example, UCSF is known for having reengineered processes of care for quaternary product lines in liver and kidney transplants and thus lowering prices for these procedures.<sup>14</sup> Similarly, Massachusetts General Hospital, now merged with Brigham and Women’s Hospital to form Partners Healthcare System, is known for establishing best practices in coronary artery bypass surgery.<sup>15</sup> Also, an orthopedic surgeon who practiced at the hospital developed a care path for total-knee replacement surgery that reportedly reduced costs and lengths of stay by 30 percent with no reduction in the quality of outcome. This encouraged other orthopedic surgeons to adopt the care path.



*In some cases, entire medical schools—hospital, teaching, and research—merged.*



In some cases, entire medical schools—hospital, teaching, and research—merged. For instance, two medical schools in Philadelphia, Hahnemann University and the Medical College of Pennsylvania (owned by the Allegheny Health, Education, and Research Foundation), merged in 1993.<sup>16</sup> In another instance, the medical school of New York University Medical Center planned to merge with the medical school of Mount Sinai Medical Center (also in New York), but the plan fell apart at the last minute when Mount Sinai objected to moving its medical education to the New York University campus.<sup>17</sup>

Full mergers of medical schools are rare, but clearly they are being contemplated. As in the case of UCSF and Stanford, an

<sup>14</sup> David Blumenthal and Gregg S. Meyer, “Academic Health Centers in a Changing Environment,” *Health Affairs*, (2) (1996), pp. 200-215.

<sup>15</sup> Harvard Business School, “Massachusetts General Hospital: CABG Surgery,” case study, December 20, 1996.

<sup>16</sup> Karen Pallarito, “Allegheny Adds to Philadelphia Ranks,” *Modern Healthcare*, August 12, 1996.

<sup>17</sup> Merger of New York Medical Schools Unravels,” *American Medical News*, March 10, 1997, p. 3.

  
*No single strategy dominates teaching hospitals' response to changing market conditions.*



alternative is to limit the merger to the medical centers of the medical schools, with each school maintaining its separate teaching and research programs. Some observers consider this strategy an intermediate step in a process that will ultimately lead to the full merger of the associated medical schools. A recent example of this type of consolidation is Columbia University's Presbyterian Medical Center's announcement of its plan to merge with Cornell University's New York Hospital in mid-1996. In markets such as the Bay Area where there are only two competing teaching hospitals, this strategy may be motivated by the desire to position the consolidated enterprise as the sole firm at the top of the hospital industry triangle. This positioning, it is argued, may allow the entity to capture the full marketing benefits of being a top-tier hospital without the need to compete directly with other similarly positioned teaching hospitals.

No single strategy dominates although most teaching hospitals have major cost-cutting programs. However, teaching hospitals in large metropolitan areas face different market conditions and opportunities from those in smaller university towns, which lead to different approaches to solving fiscal problems. An alternative to the strategies outlined above would be for UCSF and SHS to remain independent entities and continue to manage their operations as usual.


### ***Motives for Mergers***

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As previously discussed, mergers are often an integral part of strategies to raise revenues and reduce costs. Typically, the four goals of hospital mergers are to reduce costs by closing facilities; reduce costs by consolidating functions and achieving economies of scale; increase revenues by improving bargaining power, marketing services, and increasing reputation; and increase revenues by eliminating competition with a main rival. A merger may aim to achieve all these goals, but frequently a merger attempts to fulfill a few primary goals.

Closing a facility has often proved difficult, particularly for community hospitals with long-term community support and involvement. Neighborhood hospitals are seen as a vital resource. For some, a way to bring about change is by a merger that consolidates clinics and services at one hospital. The closed facility may be converted into a different treatment facility, such as a primary care outpatient clinic, a long-term nursing care operation, or a rehabilitation hospital.

Economies of scale (reductions in unit cost with greater volume) can be achieved in various ways. One way is to spread fixed



*Through a merger, administrative functions, as well as clinical services, can be consolidated in some cases.*



costs over a larger volume. This can be applied to administrative costs, such as billing, accounting, marketing, and information systems, and use of capital equipment, including diagnostic imaging and various laboratory testing. Through a merger, administrative functions and clinical services can be consolidated in some cases. Mergers also yield greater purchasing power and quantity discounts, although similar savings can be achieved by joining a purchasing cooperative. On a broader scale, if the minimum efficient scale of a hospital is, for example, 300 to 400 beds, then two hospitals forced to downsize to 200 beds each can merge to achieve minimum efficient scale and minimum operating costs. Minimum efficient scale is the minimum number of beds required to arrive at the lowest operating costs.

Mergers or acquisitions are common in networking strategies as a way to build greater patient activities. Combined, two hospitals may be able to compete more effectively for patients beyond their immediate area by affiliating with physician groups and community hospitals or by acquiring physician groups and hospitals. Mergers are also used as leverage when bargaining with managed care firms. As HMOs have increasingly consolidated into a few firms dominating an area, such as in the Bay Area, hospital mergers are viewed by the merging partners as a way to strengthen their bargaining leverage with HMOs and physician groups. Although an HMO or a physician group may be able to play one hospital against another by threatening to bypass the hospitals, it may be unable to bypass the merged entity.


Another motive for mergers is to reduce competition, a practice that may be headed for antitrust litigation. However, out of the literally hundreds of hospital mergers in the country since the 1970s reviewed by the government, only a handful have been challenged on antitrust grounds. And of those challenges, the government's success rate is mixed, with some courts ruling in favor of the merging hospitals. However, hospital mergers do raise anti-competition issues, particularly in areas served by only two or three acute-care hospitals. In large metropolitan areas, reduced competition has not been an issue because there is typically an abundance of competing hospitals. However, there are exceptions. The United States Department of Justice recently challenged the merger of North Shore Health Systems and Long Island Jewish Medical Center, two hospitals within two miles of each other. The hospitals' merger plan indicated that the merger would "free both hospitals from the stress of competition."<sup>18</sup> For the Department of Justice and the courts,

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<sup>18</sup> John R. Wilde and Lucette Lagnado, "Merger of Two Hospitals in New York is Challenged by the Justice Department," *Wall Street Journal*, June 12, 1997, p. B12.

the issue is whether the merger's gains in efficiency outweigh the threat of a monopoly. The closer the hospitals are to one another, the greater the possibilities for consolidation and efficiency gains, but also the greater the potential for anti-competitive pricing in the absence of good alternative hospitals. In any event, gaining market power and relief from competition to the detriment of such health care service payors as HMOs likely influences at least some hospital mergers.

The four motives discussed in the previous paragraphs do not cover all the possible benefits from a merger, but they are the prominent ones for most hospital mergers. Examples of additional gains for the hospitals include the adoption of the merging parties' best procedures with the lowest cost and best outcomes, and the sharing of intellectual property and reputation or goodwill.



*Studies of UCSF/Stanford suggest the incentives to merge are based on economies of scale, increasing case volume, and eliminating competition.*



Studies of the UCSF and Stanford merger suggest that capturing economies of scale, increasing case volume through greater geographic coverage, and eliminating competition between the merger partners underlie the incentive to merge. Administrative costs are projected to be reduced the most through consolidating departments and spreading fixed cost over a greater volume. Networking will boost revenues the most by focusing on increased tertiary and quaternary patients.

Further, existing studies of the merger are candid about the potential to reduce competition between the merging partners, particularly in the area of tertiary and quaternary care. As the Third-Party Review team states: "There are also competitive risks to consider; specifically, the risks associated with competing head-on in clinical medicine, education, and research with the only other major academic medical center in the Bay Area."<sup>19</sup> An academic study of this merger case, not commissioned by Stanford or UCSF in planning for the merger, is even more explicit about the anticipated drop in competition. According to the authors, both UCSF and Stanford were "aware that HMOs and other purchasers of services were squeezing UCSF Medical Center and Stanford on price in part by having the two institutions compete with each other in the provision of tertiary and quaternary services . . . UCSF and Stanford share about 11 percent of the tertiary and quaternary care market and it made sense to consider joining forces in order . . . to stop competing with each other for market share."<sup>20</sup>

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<sup>19</sup> UCSF Medical Center/Stanford Health Services Proposed Merger of Clinical Enterprises, Third Party Review, November 8, 1996, Regents Report, p. 22.

<sup>20</sup> Arnold Naimark and Morley M. Singer, *Health Care Reform, Academic Medicine*, Part 3: Academic Health Sciences Centers, Case Study, University of California, San Francisco Medical Center and Stanford Health Services, March 3, 1997, p. 11.

Whether the facilities have market power in these specialized areas is unclear. However, to the extent that payors have few substitutes for some high-end tertiary and quaternary care (such as organ transplants), some health care service payors like HMOs, may have greater difficulty negotiating price discounts with the merged entity.

### ***Post-Merger Effects Are Uncertain***

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*There are not sufficient studies to establish a consensus on the impact of mergers on hospital performance.*  
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A small group of cross-section studies examining a representative sample of numerous mergers has examined the characteristics of merging hospitals and their post-merger performance. But there are not sufficient studies to establish a consensus on the impact of mergers on hospital performance. Moreover, most of the studies look at data primarily from the 1980s and not the hospital-merger wave of the 1990s. Nevertheless, it is useful to review some of the findings. Few published studies have reported on the performance of an individual merger. Reviewers in one recent study of hospital mergers in Massachusetts, however, reported on the relative success of two small mergers, one in 1985 and one in 1991. Specifically, the reviewers found evidence that the mergers resulted in lower cost per admission than the remaining hospitals in Massachusetts.<sup>21</sup>

Another study examined a sample of 92 mergers between 1980 and 1990 to test how mergers affected hospitals' size of operation, operating efficiency, and staffing practices.<sup>22</sup> The authors of the study compared performance for the three years before the merger with the three years after. The reviewers found mergers to improve operating efficiency relative to a sample of nonmerging hospitals by slowing the rate of occupancy decline. However, there was no evidence of relative reductions in staffing and overall size.

Another cross-section study tested for characteristics of merging hospitals between 1983 and 1992 in the region surrounding the Bay Area, including the metropolitan areas of San Francisco, San Jose, Oakland, and Sacramento.<sup>23</sup> The reviewers identified 17 mergers out of 76 possible partners. In addition, they found a strong relationship between the likelihood of merger and the

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<sup>21</sup> Jason R. Barro and David M. Cutler, "Consolidation in the Medical Care Marketplace: A Case Study from Massachusetts," *National Bureau of Economic Research*, working paper, March 1997.

<sup>22</sup> Jeffrey A. Alexander, Michael T. Halpern and Shouou-Yih D. Lee, "The Short-Term Effect of Merger on Hospital Operations," *Health Services Research*, February 1, 1997.


<sup>23</sup> Geoffrey R. Brocks and V. Grace Jones, "Hospital Mergers and Market Overlap," *Health Services Research*, February 1, 1997.

overlap of the respective hospitals' market area. Specifically, mergers were more likely between close rivals. In addition, the more similar the hospitals' operating performance, the greater the likelihood of merger.

Two papers reported on cross-section studies of local multihospital systems in California in the late 1980s and early 1990s.<sup>24</sup> Multihospital systems are typically the product of both acquisitions and mergers, but they should feature the same economic phenomenon promised by merger, including cost reductions and revenue gains. In these studies, the reviewers found no consistent evidence of cost savings from consolidating high-tech services, although it occurs in some cases. Similarly, they found patient care costs to be no lower in general in multihospital systems, and the ratio of administrative to total costs was found to be higher in multihospital systems than in independent hospitals. Again, there were exceptions. The authors conclude that the benefits of multihospital systems came from gaining a reputation for providing a uniform standard of care in each hospital in the system.



*Merger partners typically have high expectations and optimistically forecast great improvements based on the merger.*



While they are helpful for comparison purposes, these large cross-section studies cannot predict with accuracy the results of any given merger. Merger partners typically have high expectations and optimistically forecast great improvements based on the merger. Some mergers succeed, although often not to the extent originally envisioned, and some fail. Whether the proposed UCSF and Stanford merger can meet its expectations of aggressive cost reductions and revenue increases, as predicted by the consulting firm Ernst & Young, LLP, and by the Third-Party Review, is addressed in Chapter 3.

### ***Conclusion***

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The proposed merger between UCSF and Stanford is an understandable strategic response to the dramatic structure changes occurring in the health care services market, where health plans and physician groups are consolidating with one another to cut costs and increase bargaining power. Merging with other teaching hospitals provides opportunities to increase revenues and reduce costs by increasing reputation, eliminating competition with a main rival, consolidating administrative functions, and achieving economies of scale. However, existing studies of other hospital mergers show that the financial benefits are not guaranteed. While some studies show that the

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<sup>24</sup> David Dranove, Amy Durkac, and Mark Shanley, "Are Multi-hospital Systems More Efficient?" *Health Affairs*, (1996), pp. 100-103; and David Dranove and Mark Shanley, "Cost Reductions or Reputation Enhancement as Motives for Mergers: The Logic of Multi-hospital Systems," *Strategic Management Journal*, (1995), pp. 55-74.

mergers result in lower costs per admission and operating efficiency, others show that mergers do not result in lower patient care costs or administrative costs. Nonetheless, as time is of the essence in this rapidly changing market, UCSF and Stanford need to act to improve their competitive position. In order to maintain and expand its patient base, it needs to employ some combination of market initiatives and strategies to ensure its ability to fulfill its research, teaching, and clinical missions.

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# Chapter 2

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## *The Financial and Operational Strengths of the Merger Partners Are Approximately Equal*

### *Chapter Summary*

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The medical centers of the University of California, San Francisco (UCSF) and Stanford (referred to in this chapter as Stanford Health Services or SHS) are approximately equal partners in the planned merger. Based on the analyses we performed on each organization's financial position as of March 31, 1997, and results of financial operations for the years from 1992 to 1996, we determined that each organization contributes more to the merger in some respects than the other, depending on the way the contribution is measured.

For example, SHS's contribution to the \$869 million equity (assets less liabilities) of the combined entity will be \$483 million (56 percent) and UCSF's contribution will be \$386 million (44 percent). SHS will be contributing more equity, while UCSF will be contributing a greater amount of liquid assets (cash, stocks, and bonds) in relation to its long-term debt. Specifically, SHS will be contributing a larger amount of liquid assets than UCSF, while UCSF will be contributing liquid assets of approximately three times the amount of its debt. SHS will be contributing liquid assets of approximately two times the amount of its debt. However, the parties to the merger are currently negotiating which assets will be transferred to the merged entity.

When analyzing the results of financial operations between 1992 and 1996, we found that UCSF's net income (income after expenses from all activities), when adjusted for nonrecurring revenues and expenses, post-retirement health care expenses, and the distribution of earnings to the medical school, totaled \$251 million while SHS's totaled \$215 million. In addition, UCSF's income from hospital operations, which excludes nonoperating activities such as investment income, interest expense, and an appropriation from the State of California for clinical teaching support, and includes an adjustment for post-retirement health care expenses, was greater than SHS's. Specifically, UCSF had cumulative earnings from hospital operations over these five years of \$186 million versus \$150 million for SHS. Our analyses include an adjustment to




audited financial statement data because SHS's accounting policies are different from UCSF's. This adjustment allows for comparisons under similar accounting bases.

Our review and analysis of the data reported to the Office of Statewide Health Planning and Development (OSHPD) noted similar findings. Specifically, each merger partner brings certain operating strengths to the merger. Our analysis included such operating characteristics as number of inpatient days, occupancy rates on available beds, revenue per inpatient day, and other measures of operating performance. However, UCSF's lower operating expenses per patient day could make it relatively stronger as the health care services market becomes increasingly sensitive to hospital costs.


### ***Background***

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SHS and UCSF prepare their financial statements using different accounting policies that are allowed under accounting rules. Specifically, SHS prepares its financial statements under the standard rules of accounting applicable to private nonprofit hospitals established by the Financial Accounting Standards Board (FASB) while UCSF prepares its financial statements according to the rules applicable to government hospitals established by the Governmental Accounting Standards Board (GASB). As a result, SHS's and UCSF's financial statements contain different accounting treatments of similar activities affecting their comparability.



*SHS's and UCSF's financial statements contain different accounting treatments of similar activities that affect their comparability.*



For example, SHS's financial statements reflect an increase in the reported value of its stocks and bonds portfolio to reflect the fair market value (the cash value of the securities if they had been sold on August 31, 1996), while UCSF's do not. This resulted in an \$11 million increase in equity for SHS. When we applied this accounting treatment to UCSF's financial statements, we determined that it did not have a significant effect on its financial statements; therefore, we made no adjustment.


Another difference between UCSF's policies and SHS's policies is the treatment of post-retirement health care benefit expenses (cost of providing health insurance and other benefits to retired employees of the hospital). Although SHS's financial statements include these expenses, under GASB standards UCSF's do not. To provide comparability between the two organizations, we adjusted UCSF's income to reflect the estimated post-retirement health care expense. Using data provided by UCSF's chief financial officer, we calculated

UCSF's post-retirement health care benefits between 1992 and 1996 and determined that it would increase UCSF's expenses by approximately \$19 million.

Finally, because UCSF's pension plan assets exceed estimated future pension payments, under GASB standards, UCSF does not record its current pension costs. However, under FASB standards, SHS records an expense based upon the specifics of its circumstances. UCSF employees, as well as most other UC employees, are members of the University of California Retirement System (UCRS). To determine if UCSF would have had to record a pension expense if it had followed FASB standards, we discussed with UCSF and its actuary the extent to which earnings on retirement plan assets exceed future pension payments. We were informed about the extent to which prior contributions by UC, including UCSF, have resulted in UCRS assets and earnings on these assets exceeding the UCRS obligation for pension benefits. Even though UCSF employees were earning pension benefits during fiscal years 1991-92 through 1995-96, we concluded that UCSF pension expense would not be required to be reported under FASB standards.


### ***SHS Will Invest More Than UCSF in USHC***

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*Of the combined \$869 million equity of the two medical centers, SHS will contribute \$483 million (56 percent), and UCSF will contribute \$386 million (44 percent).*

A measure of the level of investment by each party to a merger is the amount of equity (assets less liabilities) that each contributes. In this merger, SHS will be investing more resources than UCSF. As shown in Table 1, of the combined \$869 million equity of the two medical centers, SHS will contribute \$483 million (56 percent), and UCSF will contribute \$386 million (44 percent).



In Table 1, a portion of the amount of assets (specifically the property, plant, and equipment) is valued at its original cost. Both SHS's and UCSF's hospital management believe that the current value of these assets is higher than their original cost. However, the assets' current market value is unknown at this time. Furthermore, the parties to the merger are currently negotiating which assets will be transferred to the merged entity. Accordingly, the following amounts are subject to change by the actual date of the merger.

**Table 1**

**Summary of Contributed Assets, Liabilities,  
and Equity as a Percentage of Combined Total  
March 31, 1997  
(in thousands)**

	SHS*	SHS as a Percent of Combined Total	UCSF	<sup>a</sup> UCSF as a Percent of Combined Total	Combined Total
Assets	\$885,565	62%	\$547,336	38%	\$1,432,901
Liabilities	402,973	71	161,241	29	564,214
<b>Equity</b>	<b>\$482,592</b>	<b>56%</b>	<b>\$386,095</b>	<b>44%</b>	<b>\$ 868,687</b>

Source: Audited financial statements as of March 31, 1997.


\*SHS's numbers include the assets, liabilities, and equity of the Lucile Salter Packard Children's Hospital at Stanford which merged into SHS on January 17, 1997. Also, according to Stanford, it is their intent to transfer its Boswell Building and the pediatric faculty practice program to USHC during the merger. This transfer is valued at approximately \$8 million.

<sup>a</sup>The above published data for UCSF includes its investment in the Langley Porter Psychiatric Institute in the amount of \$10.5 million which is not expected to be included in the merger. In addition, the UCSF data excludes the assets, liabilities, and equity of the faculty practice program (FPP) of the UCSF School of Medicine. The assets and liabilities of the FPP, and its equity totaling approximately \$13.2 million (unaudited) are expected to be transferred to USHC. If the UCSF financial data were adjusted to reflect these items, its assets and equity would increase by a net amount of approximately \$2.7 million.


For detail of the assets, liabilities, and equity summarized above, refer to Appendix D.

Our review of the documentation provided by the two hospitals disclosed certain contingencies whose outcomes have not been determined. For example, based on an independent study prepared by an engineering firm, UCSF and SHS may be required to undergo a seismic retrofit of some of their buildings by the year 2008. Specifically, buildings posing a significant risk of collapse and a danger to the public must be brought up to code by January 1, 2008, while buildings that do not significantly jeopardize life, but may not be reparable or functional following strong motion must be brought into compliance with the structural provisions and regulations of the Alquist Hospital Facilities Seismic Safety Act by January 1, 2030. UCSF and SHS each have buildings that will require seismic retrofitting. However, according to UCSF and SHS, an engineering firm preliminarily estimated that while several buildings on each campus must be remodeled to comply with the mandated requirements of Senate Bill 1953 by the year 2008, the cost of UCSF's seismic retrofit will be between \$48 million and \$76 million and the cost of SHS's retrofit will be less than \$10 million. Further, these estimates assume the

continued use of the facilities for their current purpose. However, to reduce costs associated with the retrofit, management may elect to change the nature of services provided by a specific facility. For example, UCSF/Mount Zion is an acute care facility which requires the highest level of seismic support. However, UCSF management estimates that, if Mount Zion was converted to a less than acute level of care such as a skilled nursing facility, the cost of the seismic retrofit would be lower and would not need to be completed by 2008. Furthermore, the parties to the merger and their associated academic institutions are currently negotiating the nature of their responsibilities for the seismic retrofitting of their facilities as a condition of the merger. Accordingly, the extent of the seismic repairs, the costs, and the allocation of costs to the parties of the merger are subject to change by the actual date of the merger.



*The federal government has increased its investigations of possible Medicare violations by health care providers, including SHS and UCSF.*



In addition, similar to other industries, the health care industry is subject to numerous laws and regulations of federal, state and local governments. Compliance with these laws and regulations can be subject to government review. For example, the federal government recently increased its investigations of possible Medicare violations by health care providers, including SHS and UCSF. Specifically, the Physicians at Teaching Hospitals (PATH) Initiative has been undertaken as a result of audit and investigative work performed by the federal Department of Health and Human Services, Office of Inspector General (OIG). The initial audit work suggested that some physicians practicing at teaching hospitals were not complying with Medicare reimbursement requirements. As such, the objectives of the OIG review are to determine if physicians are in compliance with the rules governing payment of physician services in teaching settings and to ensure the claims submitted by these teaching physicians accurately reflect the level of service provided to the patient. As of August 11, 1997, the OIG is in the process of including SHS and UCSF in a PATH review. The review could result in fines and penalties as well as repayment of previously billed and collected revenues for patient services. According to a letter from the OIG, these reviews are presently in the preliminary stages with an anticipated completion date in mid-1998. SHS and UCSF have informed us that their management believes such repayments or civil remedies would not have a material effect on their respective financial positions.

***UCSF Will Contribute More Liquid Assets in Relation to Long-Term Debt Than SHS***

When measuring each organization's contribution, we considered the ratio of liquid assets (cash, stocks, and bonds) in relation to the hospitals' long-term debt. This ratio is a measure of the hospitals' ability to meet principal and interest payments. Although SHS will be contributing a greater amount of equity, it will also be contributing a greater amount of debt. Specifically, SHS has \$167 million in long-term debt while UCSF has \$44 million. This is an important consideration because greater levels of outstanding debt require the hospitals to divert a greater portion of operating income to meet principal and interest payments on long-term debt. As shown in Table 2, we considered the hospitals' ability to pay principal and interest. Although SHS will be contributing more liquid assets, UCSF will contribute liquid assets of approximately three times the amount of its long-term debt while SHS will only contribute liquid assets of two times the amount of its debt.

***Table 2***

***Ratio of Cash and Marketable Securities to Long-Term Debt As of March 31, 1997 (in thousands)***

	SHS*	UCSF
Cash and marketable securities	\$291,988	\$135,742
Long-term debt	166,824 <sup>a</sup>	43,748 <sup>a</sup>
<b>Ratio of Cash and Marketable Securities to Long-Term Debt</b>	1.8 <sup>b</sup>	3.1 <sup>c</sup>

Source: Audited financial statements as of March 31, 1997.

\*SHS's numbers include the assets, liabilities, and equity of the Lucile Salter Packard Children's Hospital at Stanford which merged into SHS on January 17, 1997. Also, see Table 1, Note \*.

<sup>a</sup>The \$166,824 and \$43,748 for SHS and UCSF, respectively, are comprised of the long-term debt shown on the audited financial statements and the current portion of long-term debt included in current liabilities amounting to \$50,319 and \$21,009 for SHS and UCSF, respectively.


<sup>b</sup>Cash and Marketable securities/long-term debt = \$291,988/\$166,824 = 1.8.

<sup>c</sup>Cash and Marketable securities/long-term debt = \$135,742/\$43,748 = 3.1.

***UCSF's Income After Expenses  
From All Activities Exceeds That  
of SHS From 1992 to 1996***

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We analyzed the net income (income after expenses of all activities) from 1992 to 1996. This analysis is important because it includes all revenues earned by each entity. For example, it includes interest income earned from investments that each hospital is contributing to the merger as well as income earned from hospital operations. We prepared our analysis on three levels. First, we determined that net income reported in the audited financial statements from 1992 to 1996 totaled \$143 million for UCSF and \$73 million for SHS. However, we believe that this is an incomplete analysis because it does not reflect the effect of UCSF not reporting post-retirement health care expenses for its employees in the same manner as SHS and the distribution of earnings to SHS's and UCSF's medical schools. In addition, the UCSF amounts include its investment in the Langley Porter Psychiatric Institute, which is not proposed to be included in the merger. When these adjustments are reflected, the results change significantly: UCSF's net income is increased to \$251 million while SHS's increased to \$204 million.

  
*After adjustments, UCSF's net income is increased to \$251 million while SHS's increased to \$204 million.*

In order to determine the net income from recurring activities, which would more likely occur after the merger, we reduced the net income for nonrecurring activities such as a one-time gain on the sale of a pediatric unit. Based on this analysis, SHS had a net income from recurring operations of \$215 million and UCSF remained at \$251 million. Our analysis is displayed in Table 3 and supporting data, by year, is displayed in Appendices E and F.

**Table 3**

**Comparison of Cumulative Five-Year  
Total Recurring Net Income  
(in thousands)**

	SHS*	UCSF
Net income per audited financial statements	\$ 72,749	\$143,249
Distribution of earnings to medical school Langley Porter Psychiatric Institute <sup>a</sup>	131,500 <sup>b</sup> -	127,400 <sup>b</sup> (1,253)
<b>Total Income</b>	<b>204,249</b>	<b>269,396</b>
Adjustments to reflect private nonprofit accounting principles	-	(18,837)
Adjusted income before nonrecurring accounting activities	204,249	250,559
Adjustments to reflect nonrecurring accounting activities	10,435	-
<b>Recurring Net Income</b>	<b>\$214,684</b>	<b>\$250,559</b>

Source: Selected data from Appendices E and F.

\*SHS's numbers include the assets, liabilities, and equity of the Lucile Salter Packard Children's Hospital at Stanford which merged into SHS on January 17, 1997.

<sup>a</sup>The Langley Porter Psychiatric Institute (LPPI) is not proposed to be included in the merger. Therefore, the LPPI net income has been removed.

<sup>b</sup>Amounts provided by SHS and UCSF.

**UCSF's Income After Expenses From  
Hospital Activities Also Exceeds That of  
SHS's From 1992 to 1996**

While it is important to analyze the total net income from recurring operations, it is also important to analyze the net income generated by the hospital operations of SHS and UCSF. As shown in the previous table, net income from recurring operations totaled \$215 million for SHS and \$251 million for UCSF. To determine net income from hospital operations, we reduced the net recurring income by investment earnings for each hospital and by a clinical teaching support appropriation from the State of California to UCSF that does not represent payments for medical services provided by UCSF. In addition, we increased the recurring net income for the interest expense for debt service that is a cost unrelated to operating each hospital. Based on our calculation, we found that over the five years, SHS earned \$150 million from hospital operations and UCSF earned \$186 million. Table 4 displays our adjustments to the net income from recurring operations that result in the net income from hospital operations.

**Table 4**

***Comparison of Cumulative Five-Year  
Net Income Adjusted for Nonoperating  
Revenues and Expenses  
(in thousands)***

	<b>SHS*</b>	<b>UCSF</b>
Recurring net income (from Table 3)	\$ 214,684	\$250,559
Adjustments for nonoperating revenues and expenses	(65,059)	(64,497)
<b>Net Operating Income</b>	<b>\$149,625</b>	<b>\$186,062</b>

Source: Audited financial statements for the five-year period between 1992 and 1996.

\*SHS's numbers include the assets, liabilities, and equity of the Lucile Salter Packard Children's Hospital at Stanford which merged into SHS on January 17, 1997.

This analysis demonstrates that approximately 30 percent of SHS's recurring net income and 26 percent of UCSF's recurring net income is not derived from its hospital operations, but from other activities. Specifically, SHS's reported income results from investment earnings and UCSF's results from investment earnings and an appropriation for clinical teaching support from the State of California. Appendices E and F provide more detail of the operating income summarized above.

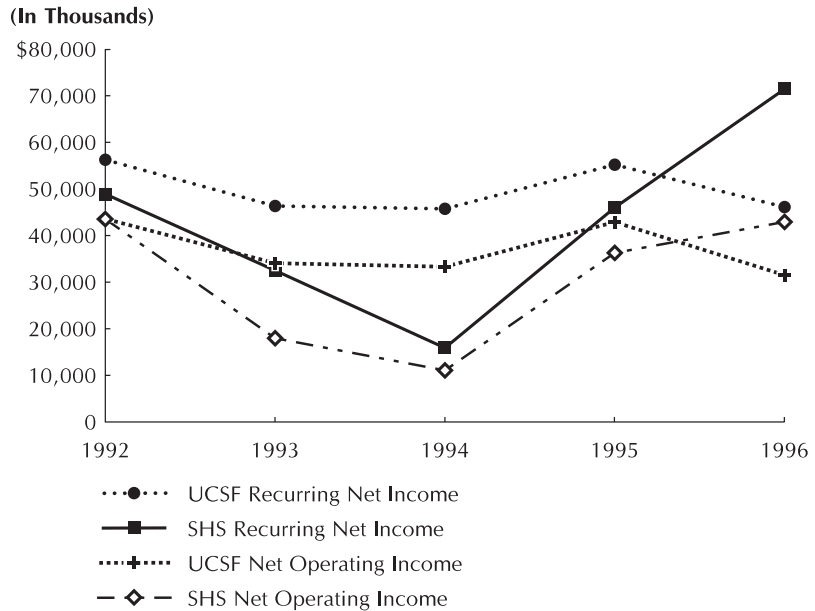
***UCSF and SHS Were Profitable  
Over Each of the Past Five Years***

Over the past five years, both SHS and UCSF were profitable annually as measured by both net income and operating income prior to their distribution of earnings to the medical schools. As shown in Figure 1, UCSF's income has been relatively stable and SHS's has been more volatile. However, SHS's reduction in profit in 1994 was due to losses related to its patient billing system that is more fully discussed in Appendix F.



**Figure 1**

***UCSF/SHS Comparison of Net Income  
and Net Operating Income Over a Five-Year Period***




***Each Merger Partner Brings Certain  
Operating Strengths to the Merger***

Based on an analysis of the OSHPD data between 1991 and 1996, we found that each merger partner brings certain operating strengths to the merger based on operating characteristics such as number of inpatient days, occupancy rates on available beds, revenue per inpatient days, and other measures of operating performance. However, UCSF's lower operating expenses per patient day could make it relatively stronger than SHS as the health care services market becomes increasingly sensitive to hospital costs.


Since 1993, SHS has succeeded at increasing hospital admissions while UCSF has seen admissions decline. In 1997, admissions at SHS are forecast to total approximately 30,000 compared to approximately 25,000 at UCSF. In addition, between 1993 and 1996, the average length of stay declined more rapidly at UCSF than at SHS. These two trends resulted in a 30 percent decline in inpatient days at UCSF between 1992 and 1996. In comparison, inpatient days declined by only 7 percent at SHS over the same period. These trends in inpatient days are reflected in occupancy rates for the two entities. While both hospitals enjoyed occupancy rates near 75 percent in 1991, by 1996 UCSF's occupancy rate had

declined to 61 percent compared to 71 percent for SHS. Preliminary estimates based on partial-year data indicate a departure from this trend for UCSF in 1997. As a result of an increase in the average length of stay at UCSF, both total inpatient days and occupancy rates are forecast to increase at UCSF in 1997. In contrast to declining demand for inpatient services, the volume of outpatient services has been growing at both institutions, albeit at a somewhat slower rate at UCSF than at SHS. SHS's faster growth in outpatient visits is at least partly attributable to the acquisition of outpatient medical clinics.

SHS realizes approximately 20 percent greater revenue per patient day (\$2,795) than does UCSF (\$2,324). This difference can be attributed to two factors. First, SHS has a more favorable payor mix than UCSF, drawing a greater proportion of its patients from the third-party and other payor categories, which tend to compensate at higher rates, and a smaller proportion of patients from Medi-Cal. Second, within the important category of third-party payors,<sup>25</sup> SHS's revenue per day (\$3,448) significantly exceeds that of UCSF (\$2,788). Outpatient revenue per visit is comparable between the two entities.



*While SHS enjoys greater revenue per inpatient day than UCSF, this advantage is more than offset by higher operating costs.*



While SHS enjoys greater revenue per inpatient day than UCSF, this advantage is more than offset by higher operating costs. Since 1991, operating expense per inpatient day has been between \$650 (25 percent) and \$820 (39 percent) higher at SHS than at UCSF. While SHS's level of operating expenses is higher than at UCSF, the growth in expenses per day between 1991 and 1994 (the last year for which these expenses are comparable between the two hospitals) has been greater at UCSF (47 percent) than at SHS (32 percent). Operating expense per discharge is also greater at SHS than at UCSF, though by a smaller margin than expense per patient day. This is the case in spite of shorter lengths of stay at SHS.

UCSF's lower operating expenses per patient day could make it relatively stronger than SHS as the health care services market becomes increasingly sensitive to hospital costs. Consistently over time, total operating expense per patient day has been significantly higher for SHS than for UCSF or for any of the comparable groups of hospitals we analyzed. Further, the case-severity analysis and the case-mix index reported by the university hospital consortium provide no evidence that these higher costs are associated with more severely ill patients or more complex cases. In Appendix G, the operating performance of UCSF and SHS is further analyzed and is

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<sup>25</sup> Third-party payors include health maintenance organizations (HMOs), preferred provider organizations, commercial insurance, workers' compensation, Short-Doyle and managed care contracts funded by Medicare or Medi-Cal.

compared with six other university teaching hospitals in California, 25 other large nonuniversity hospitals in the Bay Area, and approximately 100 other acute-care hospitals in the Bay Area.

### ***Conclusion***

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The UCSF Medical Center and SHS are approximately equal partners in the planned merger. Based on the analyses we performed on each organization's March 31, 1997, financial health and results of operations, we determined that each organization contributes more financially in some ways to the merger than the other based on how the contribution is measured. In addition, both UCSF and SHS bring certain operating strengths to the merger based on such operating characteristics as number of inpatient days, occupancy rates on available beds, revenue per inpatient day, and other measures of operating performance.

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# Chapter 3

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## *Estimated Financial Benefits From the Merger Are Potentially Overstated*

### *Chapter Summary*

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In May 1996, Ernst & Young, LLP, (E&Y) identified that the merged entity could achieve net financial benefits amounting to approximately \$236 million over the four-year period from 1997 to 2000. In October 1996, the estimates were modified when the Third-Party Review concluded that E&Y's anticipated cost savings were adequately supported and reasonable, but that 50 percent of E&Y's anticipated increased revenues was a more realistic estimate. The Third-Party Review projected the increase in net financial benefits from the merger over the four years to be approximately \$152 million.

Based on its budget projections for fiscal year 1997-98, the University of California, San Francisco-Stanford Health Care (USHC), further modified the estimates when it anticipated not reaching the same level of cost savings estimated by E&Y and the Third-Party Review and adopted the more conservative revenue increase anticipated by the Third-Party Review.


Even at 50 percent of E&Y's estimate of increased revenues, we believe the Third-Party Review's estimate of increased patient revenue is too optimistic given the declining demand for hospital services and continued pressure from payors for price reduction. Further, the projected revenue increases do not consider that some patient volume increase can be achieved if the two entities remain separate but adopt the same strategies that will be used by the merged entity to increase patient volume. In addition, estimates that small price reductions will result in large patient volume increases are likely too high. Whether increases in USHC's market share relative to competitors and enhanced prestige for particular specialties will result in significant patient volume is difficult to predict. Stanford and the University of California, San Francisco (UCSF) Medical Center already enjoy enormous prestige in Northern California.

If the merged entity succeeds in expanding its tertiary and quaternary patient base as projected, the net benefits have been overstated by E&Y, as the incremental costs associated with the projected revenue enhancement were inadvertently understated

by \$31 million. Alternatively, the Third-Party Review maintains that revenue enhancements can occur without lowering prices in addition to those price reductions already included in the stand-alone plans. However, we believe that additional price reductions will be necessary to compete. Hence, we estimate that the net benefit from the increased specialty-care case volume is likely to equal \$28 million over the first four years of joint operation rather than \$84 million estimated by the Third-Party Review, which is a difference of \$56 million.

Our review relied on discussions with Stanford, UCSF, and USHC staff and on summary schedules supplied by E&Y. In addition, we were provided with a detailed schedule of cost-reduction opportunities for USHC in the first year only. Therefore, we focused our investigation on current USHC cost-reduction projections. For the areas of cost savings we reviewed, USHC appears to have a fairly clear and executable implementation plan to achieve the cost savings identified by E&Y, except in three cost categories. Specifically, we found that USHC did not have a detailed implementation plan regarding the savings from clinical programs and academic-support reductions, one-time-only cost reductions in materials management, and capital reductions for nonclinical programs.


We analyzed the potential financial benefits of the merger assuming that various percentages of the projected new revenues and cost savings were achieved. In addition, we reduced the estimated merger costs related to pension and severance payments by \$25 million, because pension costs are lower than originally estimated and severance costs are now unlikely to occur. This analysis reveals that if USHC does not succeed in increasing its tertiary and quaternary care patient volume above current levels, it would have to achieve 84.2 percent of its projected cost reductions for the merger to reach a break-even point after a four-year period. It therefore may be important to include more aggressive cost-cutting initiatives in USHC's plans to make the merger less risky.




*The estimated increased income from the merger is likely to help ensure the present level of funding will continue to be transferred from the medical centers to the medical schools.*

The estimated increased income from the merger is likely to help ensure that the present level of funding will continue to be transferred from the medical centers to the medical schools. Also, the merger may allow for increased funding if it is very successful. However, the estimated increased income will not fully fund the reserves needed for long-term medical center capital expenditures. In fiscal year 1995-96, the UCSF and Stanford medical schools received \$22.7 and \$21.2 million, respectively, as distributions of medical center earnings that are intended to continue in the future. In addition to these payments, UCSF and Stanford medical schools received

\$6.2 and \$8.2 million, respectively, from an assessed tax on the revenues of the faculty practice programs. In addition, if the merger is very successful, the USHC Board of Directors may determine supplemental amounts to transfer. Although not required in subsequent years, in the first year these supplemental transfers are estimated to be \$2.5 million to each medical school. Based on the results of our review, the likelihood is remote that the merger will create sufficient income to fund long-term capital requirements estimated at 5 percent of net revenues. However, the estimated net financial benefit from the merger of \$120 million may be available to fund the merged entity's capital needs and these incremental resources may not be available without the merger.

  
*We do not believe that the continued existence of either UCSF or Stanford medical centers is immediately threatened if this merger is not completed.*

Based upon our review, we do not believe that the continued existence of either UCSF or Stanford is immediately threatened if this merger is not completed. However, in order to survive in the long-run, the two medical centers need to enhance the perceived value of the services they provide through ongoing, aggressive cost reductions, improving the consistency of results of medical treatment, and improving their ability to document the quality of their medical care regardless of whether or not they merge.

  
While the merger should result in reduced costs and some additional revenues, the extent of the financial benefits of the merger have been potentially overstated in prior studies. Specifically, assuming USHC succeeds in attaining its revenue enhancement goals and after the adjustments discussed above are made, the net financial benefit associated with the proposed merger is approximately \$120 million over four years. Alternatively, if USHC fails to increase patient revenue above nonmerger levels, it would have to achieve a minimum of 84.2 percent of its projected cost reductions to gain a positive financial benefit from the merger. This suggests that aggressive management of the cost-cutting effort will be critical for the merger's success.

### ***Overview of USHC Projections, Supporting Studies, and Documentation***

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USHC recently updated its budget projections for fiscal year 1997-98.<sup>26</sup> However, we have focused on the somewhat greater detail provided in the E&Y study and additional supporting documents to evaluate the reasonableness of USHC's estimated benefits from the merger. The Third-Party

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<sup>26</sup> UCSF Stanford Health Care Fiscal Year 1997-98 Budget Summary as of July 9, 1997, provided by Jim Sulat, CFO of SHS.

Review projected the amount of net financial benefits from the UCSF and Stanford merger at approximately \$152 million over the initial four-year period, with an estimated \$69 million annual benefit thereafter.<sup>27</sup> These projections are based on the E&Y study with one significant modification suggested in the Third-Party Review: that revenue enhancements are projected at just 50 percent of levels reported in the E&Y study. The E&Y study identifies two major advantages flowing from the proposed merger which E&Y asserts could not be obtained if the hospitals continue to operate on a stand-alone basis. These benefits are: (1) reductions in operating expenses and avoided capital expenditures and (2) increased operating income associated with projected volume enhancements made possible by price reductions and enhanced outcomes expected to result from combined operations. While the Third-Party Review considered the magnitude of the E&Y increase in specialty-care referrals to be too aggressive given the implied growth rate and given the expected growth rate of the market overall, it did not provide analysis documenting why specifically 50 percent of the E&Y revenue estimate was achievable. The estimated benefits from reductions in operating costs are approximately \$152 million over the initial four years (1997 to 2000 in the E&Y study) and an estimated \$84 million from projected volume enhancements.<sup>28</sup>



*Revenue is expected to be increased by attracting additional tertiary and quaternary care patients.*



Revenue is expected to be increased by attracting additional tertiary and quaternary care patients, such as those who require highly complex kidney and liver transplants, to USHC from the Bay Area and outlying areas. This strategy includes an expanded marketing effort to build on existing relationships with medical groups and regional health plans and working with local and distant community hospitals to refer tertiary and quaternary patients directly to USHC. The strategy additionally includes efforts to promote USHC as the premier provider of high quality tertiary and quaternary care in the Bay Area. Given current patient migration patterns and UCSF's and Stanford's combined market strength in certain specialty areas, the expected revenue enhancement may be possible. We are concerned, however, that in the highly competitive health care environment, combined with the oversupply of hospital beds, the expected patient volume increases may not materialize in the short-term and, even in the long-term, may not reach the


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<sup>27</sup> Expense reductions are expected to provide a \$44 million annual enhanced profit and additional patient volume is expected to produce a \$25 million annual benefit. An estimate of the continued pension costs after the year 2000 was not included in E&Y's business analysis. Therefore, the \$69 million figure likely overstates the ongoing net benefit of these initiatives. Pension costs in the year 2000 are estimated at \$21.9 million.


<sup>28</sup> From a two-page supporting document from E&Y's study.

forecast levels. In addition, it is unclear how much of any gain can be attributed to the merger, since a stand-alone entity may be able to achieve a portion of these gains.

According to E&Y, the health care industry is seeing a gradual reduction in the number of entities providing tertiary and quaternary services given the minimal volumes that they have been attracting. Providers and payors recognize that quality and cost efficiency are more common among entities that have increased volumes of those particular services on an annual basis. The constantly changing expertise required to provide these tertiary and quaternary services will become more of a limiting factor in the future.



*One-time merger costs of \$9 million have been reduced to \$5 million as a result of lower severance costs.*



The merger's expected cost encompasses a one-time \$9 million charge incurred in the merger's initial year. This \$9 million includes \$4 million of expenses for severance costs.<sup>29</sup> We understand that the current estimate of one-time costs has been reduced to \$5 million as a result of severance costs that are unlikely to occur.<sup>30</sup> The primary cost of the merger is an additional pension expense. Specifically, the merger costs include amounts that USHC will need to fund for pension benefits of transferring UCSF employees that UCSF was not required to fund. Because UCSF employees are members of the University of California Retirement System (UCRS), which has assets and earnings far exceeding its pension obligations, UCSF has not had to make payments to UCRS in any of the past five years. However, USHC will need to make payments to its pension plan since its pension assets will not exceed its pension obligation. Initially, this annual cost was estimated at approximately \$20 million, but UCSF recently informed us that the estimate has been reduced to approximately \$15 million annually because only 75 percent of the employees are now expected to transfer.

Table 5 shows the variance between USHC's current budget and the E&Y study. Our comparison highlights differences between E&Y's projection of USHC's initial year of operation and USHC's own projections of its 1998 budget. The middle column of Table 5 presents a 50 percent reduction to E&Y's original patient volume-enhancement estimates, thus resulting in lower net patient revenue levels. These reductions also translate to lower operating expenses as a result of lower

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<sup>29</sup> It is our understanding that most of the full-time employees eligible for severance have departed and have not been replaced. Consequently, \$4 million in severance expense included in the \$9 million, may not be incurred.

<sup>30</sup> According to the interim medical center director of UCSF, this \$5 million has been recently reduced to \$2.9 million. The difference of \$2.1 million netted against the \$1.7 million recent budget change discussed in footnote 21 is a net of \$400,000. Because it does not have a material effect, we did not adjust the amounts in our sensitivity analysis in Table 8.



expected patient volumes. The far-right column presents the variances between the adjusted E&Y projections and USHC's projected 1998 budget. The reasons for these variances are unclear; as a result, we cannot comment on their accuracy. Instead, we will focus solely on the analysis underlying the E&Y study and additional information provided verbally by USHC executives.

**Table 5**  
**Comparison of Projected Initial Year (1998)**  
**USHC Financial Results Using Various Studies**  
**(in millions)**

	E&Y Study (Base Case) <sup>a</sup>	E&Y Study (50 percent of Revenue Enhancement) <sup>b</sup>	USHC Fiscal Year 1997-98 Budget Summary	Variance
Net patient revenue	\$1,262.5	\$1,238.9	\$1,220.7	\$(18.2)
Other operating revenue	32.6	32.6	38.5	5.9
Total operating revenue	1,295.1	1,271.5	1,259.2	(12.3)
Operating expenses	1,262.1	1,250.3	1,239.0	(11.3)
<b>Excess of Revenue Over Expenses From Operations Before Gifts and Investment Income</b>	<b>\$ 33.0</b>	<b>\$ 21.2</b>	<b>\$ 20.2</b>	<b>\$ 1.0</b>

<sup>a</sup>The 1997 merger-related revenues and expenses are combined with 1998 nonmerger related revenues and expenses as shown in the base case of the E&Y business analysis.

<sup>b</sup>Assumes only 50 percent of revenue enhancement will be achieved. Hence, only \$23.5 million of the projected \$47.1 million merger-related revenue enhancements is included and \$11.8 million of the projected \$23.6 million revenue enhancement-related expenses are included.

The sources of information used for this assessment of potential operating cost reductions and increased operating income from enhanced volume include the E&Y study, the Third-Party Review, USHC, Stanford, and UCSF, as well as certain data sources independently obtained, analyzed, and presented above. We had little information on the details of the cost-savings projections other than a few examples discussed in the E&Y and Third-Party Review. We were, however, provided with a detailed schedule of first-year cost-reduction opportunities for USHC.<sup>31</sup>

<sup>31</sup> August 20, 1997 memorandum from Larry Smith, CFO of UCSF medical center, regarding update on cost savings.

According to E&Y, all projected cost reduction opportunities were prepared in accordance with those deemed as “merger-related only” as defined by the most recent guidelines developed by the Federal Trade Commission for the review of potential hospital mergers. If the cost savings were achievable without a merger, it was specifically stated as such in the narrative text of all documents.<sup>32</sup>

While the Third-Party Review agreed that merger-specific benefits and moderate price reductions would result in substantial increases in highly specialized cases, they concluded that the merger could obtain only half of the net revenue originally estimated by E&Y. Nevertheless, the Third-Party Review reaches the same basic conclusion that the financial benefits from substantial operating cost savings of \$152 million over four years and increased revenue from enhanced case volume of approximately \$50 million annually after two years of joint operation (reflecting a reduction of 50 percent off the E&Y study) are sufficient to justify combining UCSF and Stanford.

### ***Projected Revenue Increases Are Too Optimistic***

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*Even reducing E&Y’s estimates by 50 percent is overly optimistic in view of the stagnant or declining market for hospital services.*  
—◆—

As a combined entity, USHC expects to increase its tertiary and quaternary patient volume significantly.<sup>33</sup> Current estimates forecast an increase of 12.8 percent over the four-year period, from 16,669 patients to 18,152 patients.<sup>34</sup> Projected net income increases range from \$11.8 million in 1997 to \$25 million in 2000, where E&Y has estimated net income to be 50 percent of the additional revenues obtained from the enhanced case volume. These current revenue estimates are consistent with the Third-Party Review. However, we found even reducing E&Y’s estimates by 50 percent is overly optimistic in view of the stagnant or declining market for hospital services. A patient volume increase of this magnitude would require shifts in patient-referral patterns to compensate for future declines in the overall market and to make net increases in patient volume relative to current patient loads.<sup>35</sup>


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<sup>32</sup> We did not receive E&Y’s documentation supporting its analysis of merger cost-savings until August 27, 1997. Thus, we did not analyze their documentation in the scope of our review.

<sup>33</sup> No increase is forecast for primary and secondary patients.

<sup>34</sup> Current growth expectations are 50 percent of those predicted in the E&Y study.

<sup>35</sup> However, the merged entity is compared to a stand-alone operation, assumed to enjoy fairly steady patient volume. If in reality patient volume would otherwise decline, constant USHC patient volume could be viewed as a success.

  
*Detailed marketing plans have not yet been created to avoid sharing sensitive competitive information between UCSF and Stanford until after the merger.*

Detailed marketing plans have not yet been created to avoid sharing sensitive competitive information between UCSF and Stanford until after the merger. As a result, the following discussion on USHC's proposed marketing strategies presents broad strategies that were initially determined to be potentially feasible at the time when UCSF and Stanford analyzed the viability of a merger. The strategy by which an increase in tertiary and quaternary care patients is expected to be achieved is multifaceted. First, an expanded marketing effort is planned. USHC plans to build volume in its primary service area counties—San Francisco, San Mateo, and Santa Clara—and the eight surrounding counties (which in total can be considered the greater Bay Area) with a renewed marketing plan that will “build on existing relationships with capitated medical groups and regional health plans and [will] create new relationships.”<sup>36</sup> The marketing plan will also target the rest of Northern California and more distant markets.

Although it is not clear what form its marketing strategy will take, it is likely that USHC will take advantage of cost reductions to offer more competitive pricing to medical groups and health plans. Second, as a part of this marketing effort, USHC hopes to work with local and distant community hospitals to refer tertiary and quaternary patients directly to USHC. Finally, USHC expects to position itself as the best provider of high-quality tertiary and quaternary care in the Bay Area. Because employers and therefore health plans are becoming more concerned with the quality and cost of medical care, USHC may be able to attract additional patients if it can document its cost-effective provision of high-quality tertiary and quaternary care. Payors will be provided information that is expected to reveal better outcomes and associated benefits of reduced risk at USHC and will likely direct patient flow from community hospitals to USHC for highly specialized cases. In addition, USHC expects to improve its already high quality of care through joint development of standard treatment practices that will result in increased patient volumes. It is unknown at this time which, if any, of these strategies USHC will eventually adopt.

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<sup>36</sup> August 13, 1997 memo from Patricia Perry, Vice President, Strategic Development, at USHC.

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*Although strategies may be more effective when implemented by the merged entity, each strategy can be implemented regardless of whether a merger takes place.*  
—◆—

Although these strategies may be more effective when implemented by the merged entity, each strategy can be implemented regardless of whether a merger takes place. Consequently, only a portion of the patient volume expected to result from these strategies should be attributed to the merger itself. For instance, UCSF on its own could document and market its high-quality care and could also approach community hospitals about redirecting their patients needing highly specialized care. It would not, however, be able to represent itself as the only Bay Area high-quality tertiary and quaternary care provider, could not consolidate and act on information shared across the facilities, and might not be able to offer prices as low as the merged entity. As a result, its solo efforts would likely be less effective.



Inherent in E&Y's initial analysis are estimates of price elasticities, or the extent to which the patient volume is likely to change in reaction to changes in price.<sup>37</sup> Specifically, price elasticity is the ratio of percentage change in volume to the percentage change in price. Hence, a price elasticity of 2 implies that a 10 percent price decline will result in a 20 percent increase in volume. Under the E&Y forecasts, demand is highly elastic, with a price elasticity ranging up to 4.8.<sup>38</sup> In other words, with highly elastic demand, small price declines lead to more than proportional increases in volume and thus incremental gains in revenues. With USHC's assumption that only 50 percent of this volume increase will be achieved (as considered in one of the E&Y sensitivity scenarios and in the Third-Party Review), the elasticity is reduced, but is still high at 2.4.<sup>39</sup>

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<sup>37</sup> The E&Y report provides a sensitivity analysis of revenue increases for the year 2000. Scenario 1 assumes that this anticipated price decrease increases volume by only half the amount originally estimated, or about 1,500 highly specialized cases per year. Scenario 2 assumes that USHC doubles the assumed price decreases, from an average of 3.7 to 7.4 percent. The last scenario assumes no changes in prices and no increase in volume from the base, stand-alone case. These scenarios identify percentage price and quantity changes, which allow the calculation of how sensitive volume changes are to price changes.

<sup>38</sup> This is not strictly true in the sense that the volume increase may be associated with other nonprice factors causing the demand for highly specialized services to increase at any given price.

<sup>39</sup> See Paul J. Feldstein, *Health Care Economics*, 1993, pp. 92-93. Feldstein writes "generally, hospital and physician services are price inelastic. The price elasticity for patient days varies from 0.2 to 0.7; for admissions the variation in price elasticity is from 0.03 to 0.5." It is important to note that these elasticities are for overall market demand rather than for individual providers. Since there are better substitutes for individual providers (e.g. the provider in the next town) than for hospital care overall, the elasticities for individual providers will tend to be higher than those shown above. We are unaware of any published studies that estimate elasticities for individual hospitals.

  
*The fact that hospitals in general have not been able to increase revenues substantially and profitably through small price reductions indicates that these assumptions on elasticity are likely too high.*  


As E&Y asserts, volume enhancement is likely to be driven by other factors in addition to moderate price reductions; however, this issue raises an important question as to whether the limited consolidation of these facilities is sufficient to generate such large volume increases from these price declines. For example, suppose rival hospitals also reduce prices on highly specialized care, negating the price advantages to USHC. The fact that hospitals in general have not been able to increase revenues substantially and profitably through small price reductions indicates that these assumptions on elasticity are likely too high.<sup>40</sup>

That leaves nonprice enhancements as the key to increased case volume. But because this is largely an untested area, it is difficult to predict whether increases in USHC's level of prestige for particular specialties and increased marketing in outlying areas will result in a greater and more distant reach for patients. Indeed, Stanford and UCSF already enjoy enormous prestige in Northern California. See Appendix H for more discussion on whether combining UCSF and Stanford could significantly improve prestige and referrals and whether the incremental volumes acquired from other geographical areas are reasonable.

Consequently, our concurrence with the revenue-enhancement possibilities is limited. Specifically, we found that historically the volume of tertiary and quaternary patient flow into Bay Area hospitals is greater for specialties in which Stanford and UCSF had a high relative market share. However, this increase in patient volume is likely to require the physical combination of facilities that is not contemplated here. Furthermore, past success in attracting business for specialties captured by medical diagnostic categories in which the individual medical centers had high relative market share may be due to specialized services or price structures not applicable to other medical diagnostic categories.


### ***Additional Income Resulting From the Merger Is Potentially Overstated***

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In addition to overly optimistic assumptions about the additional revenue resulting from enhanced volumes as discussed above, we believe the amount of income (revenue less expense) related to increased volume as stated in both the E&Y report and Third-Party Review report are potentially

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<sup>40</sup> From a social policy standpoint, if such matching price reductions result from USHC's price leadership, these social benefits may not have been obtained in the absence of the merger. On the other hand, if rivals would likely decrease costs and prices in any event, the merged operation may enhance USHC's ability to retain patients.



*We differ from E&Y income projection because it made overly optimistic new case estimates and erred in computing related costs.*



overstated. Our estimate of the potential income possible from enhanced volume differs from E&Y's because we believe E&Y was too optimistic when estimating the number of new cases (2,966) in its base case scenario and because it erred in computing variable costs related to new cases (1,483) in scenario 1. In addition, our estimate of the potential income possible from enhanced volumes differs from the Third-Party Review report because we do not believe it is realistic that USHC can achieve 1,162 new cases by maintaining its anticipated nonmerger prices on existing contracts and only reducing prices on new contracts.

### ***Assumptions in BSA Estimate***

We adopted the assumptions used by E&Y in scenario 1 of its sensitivity analysis that project there will be 1,483 new cases. Corroborating this assumption, the Third-Party Review concluded that approximately 1,500 new cases was more realistic than the approximately 3,000 new cases in E&Y's base case scenario. Although we believe 1,483 cases is optimistic because it reflects a price elasticity of 2.4, it is more realistic than 2,966 cases that reflects a price elasticity of 4.8. Also, we adopted both E&Y's and the Third-Party Review's stated method of computing variable costs as 50 percent of additional revenue from new cases. Published studies indicate that variable costs at hospitals range from 40 to 60 percent of revenue. Thus, selecting 50 percent was considered reasonable. While we may be optimistic assuming 1,483 new cases, we may be conservative computing variable costs at 50 percent of additional revenue from new cases. Stanford and UCSF recently informed us that their variable costs are 43 and 42 percent, respectively, of net additional revenue.

In addition, we adopted E&Y's premise that the ratio of net revenue related to outpatient and inpatient cases will remain at 70/30. Maintaining this 70/30 mix on total revenues requires that outpatient revenues increase at a rate of 43 percent of net additional inpatient revenue. According to the UCSF's chief financial officer, an increase in inpatient specialty cases will generate substantial outpatient revenue that will be comparable to the historic inpatient/outpatient relationship existing at each organization. This is because tertiary and quaternary admissions usually require pre-admission outpatient physician evaluations as well as diagnostic testing. After discharge, follow-up outpatient physician visits and diagnostic testing are also required. Neither hospital has a substantial primary care program that would generate high volumes of outpatient revenue unrelated to inpatient stays. Therefore, in the absence of alternative independent data to the contrary, our analysis includes this assumption.

### ***Differences Between BSA and E&Y***

The additional operating expenses related to the increased number of cases has been miscalculated by E&Y in its supporting documentation for scenario 1. In its business analysis, E&Y states that, "Variable costs incurred with additional volume are estimated to be 50 percent of net revenue." In addition, the detailed supporting schedules provided to us for the sensitivity analysis show that variable costs are computed by taking 50 percent of net additional revenue.

The error arose when E&Y calculated additional operating expenses at 50 percent of **net** additional revenue. Net additional revenue equals the additional revenues from new cases less the lost revenue on existing cases from reducing price. Instead, additional operating expenses should be calculated as 50 percent of **gross** additional revenue (total additional revenue from new cases). On existing cases, operating expenses will be the same, and the revenue related to these cases will be reduced due to the lower price per case. Appendix I contains a complete analysis of this condition, including the effect of outpatient revenue that was not included here.

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*According to E & Y, the error did not arise for the reason we stated. Regardless of cause, the effect is a \$31 million overstatement of revenue.*  
—◆—

According to E&Y, the error did not arise when they used 50 percent of net revenue as we state. Rather, it arose when they used 32 percent of gross revenue rather than 42 percent of gross revenue as they intended. Regardless of the cause of the error, the effect of the miscalculation was an overstatement of approximately \$31 million between their stated method and corrected method as shown in Table 6. Of the \$31 million, \$16 million relates to using 32 percent rather than the 42 percent they intended and \$15 million is the difference between the 42 percent they intended and the 50 percent they stated in their report.

E&Y further clarified that their experience is that variable costs range from 40 to 60 percent for new volume. Also, they believe that the approximation of 42 percent used in the business analysis was a reasonable assumption because it falls within the range of their experience and because management indicated that the lower end of the range would be reasonable. In addition, they were not asked to audit or certify this assumption.

**Table 6**

***Differences in Additional Income  
Between BSA and as Reported in  
Merger Planning Documents  
(Year 2000)***

	E&Y			Third-Party Review
	BSA	Base Case <sup>a</sup>	Scenario 1 <sup>b</sup>	
Gross additional revenue	\$55.5	\$119.3	\$55.5	\$50.0
Net additional revenue	36.1	100.0	36.1	50.0
Additional expense	27.8	50.0	18.0	25.0
Annual new income	8.3	50.0	18.1	25.0
Four-year income projection <sup>c</sup>	28.3	169.2	59.1 <sup>d</sup>	84.6
<b>Difference From BSA</b>		<b>\$140.9</b>	<b>\$30.8</b>	<b>\$56.3</b>

<sup>a</sup> Base case, 2966 new cases with a variable cost of 50 percent of net new revenue.

<sup>b</sup> 1,483 new cases with a variable cost of 50 percent of net new revenue.

<sup>c</sup> E&Y estimated that new revenues will double between years one and two and rise by 3 percent in years three and four.

<sup>d</sup> This amount excludes the effect of the difference in assumed average price reduction discussed in Appendix I, Table I-1.

***Differences Between BSA and  
the Third Party Review***


Our estimate of additional income from enhanced volume is also significantly less than the Third-Party Review. Specifically, as shown in Table 6, we found that the Third-Party Review estimates fiscal benefits from enhanced volume to be \$56 million greater over the four years than we believe is reasonable. The difference in estimates occurs because of alternative marketing and pricing assumptions used by the BSA and the Third-Party Review. The Third-Party Review report states that they agreed with the underlying rationale used by E&Y to estimate the benefit from expected revenue enhancements.

However, a Bain & Company representative for the Third-Party Review informs us that unlike E&Y, they did not perform an analysis based on estimating increased case volume. Rather, the Third-Party Review team concluded that approximately \$50 million in new revenue could be achieved through the benefits of the proposed merger. This estimate was based on the professional judgment of the distinguished members of the




review team after interviewing management regarding their intended marketing strategies (e.g., joint marketing efforts, expanded referral development, targeted Northern California physician groups/hospitals) and reviewing the supporting data (e.g., the increased relative market share for the major medical diagnostic categories and the implied revenue growth rate). In addition, the \$50 million represents the additional net revenue (both inpatient and outpatient) from increased specialty cases only and assumes an average price decrease of 3.7 percent on this new revenue, consistent with the E&Y report.

Further the representative noted that the E&Y report also assumed an average 3.7 percent price decrease on the existing specialty care revenues (i.e., the base specialty care business of each stand-alone medical center). According to the representative, the Third-Party Review team did not believe this additional price decrease above and beyond the price decrease already assumed in the stand-alone business plans was necessary or appropriate. The pricing on the existing specialty care business was assumed to be consistent with each entity's previous stand-alone forecast.



*The Third-Party Review report appears to have overstated the number of new specialty care cases that would be required to achieve the \$50 million of new revenue presented in their analysis.*



The Third-Party Review report appears to have overstated the number of new specialty care cases that would be required to achieve the \$50 million of new revenue assumed in their analysis. Although not a calculation performed by the Third-Party Review, 70 percent of the \$50 million, or \$35 million of the new revenue, would require only 1,162 new cases at the average inpatient case revenue of \$30,126 versus the 1,500 new cases referenced in their report. The \$50 million happens to equal 50 percent of E&Y's base case incremental revenue estimate (that includes the effect of lost revenues associated with the price decrease on existing business) which may inadvertently lead to some confusion as to the method employed by the Third-Party Review. Specifically, since their method of determining additional revenues was not explicitly stated in their report, a reader could mistakenly believe that they adopted the assumptions that E&Y used in their sensitivity analysis for 1,483 new cases.

According to the representative, while this inconsistent case volume was referenced in the report, the Third-Party Review's financial analysis was based on the more conservative \$50 million of new revenue discussed above, and therefore does not change the conclusions of their report.

However, we do not accept the premise that USHC can achieve 1,162 new cases by maintaining nonmerger prices on existing contracts and only offering lower prices on new contracts for a number of reasons. First, based on discussions with USHC and

our review of the E&Y report, which was based on close interaction with UCSF and Stanford management, it appears that price reductions were an important part of the strategy that USHC was considering. As stated earlier, USHC does not yet have a specific strategy and cannot develop its strategy until after the merger is completed. The dynamics of the market, however, are such that price reductions are important to remaining competitive. Our survey of health care market participants also indicated that they expected future price reductions from USHC. Moreover, the following quote from the July 14, 1997 edition of the *The Sacramento Bee* is representative of the comments we received during our survey. "I'm expecting those savings will be passed on," said Henry Loubet, chief executive officer of United HealthCare of California. "Not just to health plans, but to the consumer and to the purchaser and the employer."

### ***Most Proposed Cost Reductions Appear Reasonable***

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*The \$152 million in cost reductions are driven by administrative savings due to the elimination of duplicative resources, adoption of best practices, and consolidated volume.*  
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The E&Y study projects operating expense savings of \$152 million over the initial four years of combined operations, with approximately \$44 million in annual cost reductions achieved by the year 2000. The \$152 million in estimated operating cost reductions are driven by administrative savings due to the elimination of duplicative resources, adoption of best practices, and consolidated volume. The Third-Party Review points out that the \$44 million in expense savings represent only 3.5 percent of the combined operating expense of the facilities in 1996, suggesting that such a reduction is reasonable given the scope of the combination.<sup>41</sup> Furthermore, the Third-Party Review concluded that E&Y cost reduction assumptions were reasonable after consideration of "the specific cost-reduction opportunities identified and the level of specificity associated with these assumptions."<sup>42</sup> In addition, the E&Y study projects capital-expenditure avoidance of approximately \$8 million over the initial four years, with over \$6 million to be saved in the year 2000. These savings are in addition to the substantial savings separately anticipated for the stand-alone medical centers, and come after several years of cost reduction efforts at UCSF and Stanford.<sup>43</sup>

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<sup>41</sup> Third-Party Review, page 14, see also page 65.

<sup>42</sup> Third-Party Review, page 14.

<sup>43</sup> According to the Third-Party Review (pages 77-78), from 1993 to 1996 UCSF removed \$53 million in costs while Stanford removed \$74 million. Over the 1997 to 2000 time period, forecast cost reductions totaled \$40 million at UCSF and \$48 million at Stanford.



*USHC's cost reduction strategy is based on a set of initiatives that primarily target the nonclinical areas of the facilities.*



Although we were not supplied with complete documentation of USHC's projected results, the analyses we were able to prepare show some indication as to how realistic the USHC projections are. USHC's cost reduction strategy is based on a set of initiatives that primarily target the nonclinical areas of the facilities. The cost savings forecast by USHC do not include savings from the integration of clinical activities. Instead, efforts focus on elimination and avoidance of duplicative resources, adoption of best practices, and consolidation of purchasing volume resulting in improved vendor prices.

To date, the only supporting information provided to us is a two-page listing of dollar value "cost reduction opportunities" by department and year over a four-year period and the first-year cost reduction opportunities by expense category at USHC for year one. Through a number of discussions with Stanford and UCSF executives, we gained a better understanding of the sources of many of the larger cost-reduction opportunities. We were given several examples of specific cost savings and asked to accept that cumulative four-year operating cost savings and capital avoidance of approximately \$160 million is possible, but only under merged operations.<sup>44</sup> As previously stated in a footnote, we did not include E&Y's documentation supporting its analysis of merger related cost savings in the scope of our review because we did not receive it in time to be included in our analysis.

### ***USHC Is Unlikely to Achieve All of Its Estimated Cost Reductions***

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Table 7 summarizes USHC's estimated cost-reduction categories as identified in the two-page E&Y document previously mentioned. We reviewed the estimates of the larger cost-reduction categories and interviewed various USHC executives to evaluate the likelihood of USHC's success in achieving the estimated savings.<sup>45</sup> In most of the categories where USHC is expected to achieve significant reductions in cost, we found that there is a fairly clear and executable plan in

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<sup>44</sup> The examples provided in the E&Y study are consolidating data centers (saving a cumulative \$8.2 million in currently duplicative resources), expanding "best-practices" of equipment maintenance self-service, saving \$9.6 million by more fully utilizing existing resources (apparently one facility does provide self-service and has extra capacity), and consolidation of supply volume across all facilities creating the opportunity to save a cumulative \$27.4 million.

<sup>45</sup> The major cost reduction categories include: materials management, information systems, equipment maintenance/clinical engineering, patient financial services, laboratory, blood bank, senior management organizational structure, clinical programs and academic support, and nonclinical programs. The executives interviewed include Jim Sulat, Chief Financial Officer of SHS; Patricia Perry, Vice President of Strategic Development of USHC; Bruce Schroffel, interim medical center director of UCSF; and Malinda Mitchell, CEO of SHS.

place to achieve goals. However, we also found that, for three of the cost categories, USHC is unlikely to achieve all of its estimated cost reductions. However, according to the interim medical center director for UCSF, staff at USHC identified a number of other areas to target for cost reductions that previously were not on the reduction list.

**Table 7**


***USHC Expected Cost Reductions by Category  
Fiscal Years 1997 to 2000  
(in thousands)***

	<b>Four-Year Total</b>	<b>Specificity of Plan</b>	<b>Likelihood of Success</b>
Annual cost-reduction opportunities			
Corporate structure			
Materials management	\$ 27,369	Clear	Good
Information systems	14,121	Clear	Good
Patient financial services	7,241	Detailed	Good
Laboratory	9,622	Clear	Good
Blood bank	7,727	Clear	--
Other	42,618	--	--
Senior management organization structure	12,551	Detailed	Good
Clinical programs and academic support			
New program development services, academic support, and clinical services	25,101	Vague	Unknown
<b>Total</b>	<b>146,350</b>		
One-time only cost reductions	5,611	Clear	Fair/Poor
<b>Total expense savings</b>	<b>151,961</b>		
Capital expenditure requirements/avoidance			
Information system requirements/avoidance	(11,593)		
New clinical programs—inpatient and outpatient	3,500		
Nonclinical programs	16,000	Indefinite	Good
<b>Total</b>	<b>7,907</b>		
<b>Decreased expenses from merger and capital avoidance</b>	<b>\$159,868</b>		


In the first category, USHC estimated cost reductions in its clinical programs and academic-support expenditures of \$25 million. We found that the rationale and assumptions behind the \$25 million in cost savings do not have a particularly firm basis. Savings here are expected to arise from avoiding duplicative new programs, recruiting fewer physicians,

and lower costs of recruiting specialized physicians and staff. In the process of recruiting new faculty and staff, UCSF and Stanford often bid up the compensation of each other's specialized hires. Specifically, USHC expects to avoid spending about \$6 million annually using these three strategies. This figure was arrived at by reviewing recruiting expenditures for the past three years and projecting hiring and new programs three years into the future.

Currently, UCSF and Stanford are already gaining experience in this area by jointly recruiting pediatric physician candidates. According to the interim medical center director, the intent of USHC is to recruit fewer physicians. At the present time, the two organizations often are required to recruit additional staff due to call and coverage issues, not due to patient demand. By maximizing resources, USHC will no longer have to recruit these additional staff. For example, a UCSF pediatric urologist that recently left will not be replaced since coverage and patient needs can be handled by combining the efforts of the two sites. According to the interim director, this is also true in pediatric surgery, surgery, and endocrinology, as well as other areas that are being reviewed.



*It is unlikely that USHC will avoid significant recruiting costs simply by eliminating competition between the two institutions for new recruits.*



While avoiding the establishment of duplicative new programs and reducing current levels of full-time employee equivalents appears to be a plausible source of cost reduction, it is unlikely that USHC will avoid significant recruiting costs simply by eliminating competition between the two institutions for new recruits. Because the market for specialists recruited by these institutions is national in scope, if UCSF's competing bidder is not Stanford, then some other hospital in California or even in another state will be the competing bidder. The identity of the primary competing bidder may change, but not the magnitude of the compensation paid to win the new hire. The savings in this category are therefore very difficult to forecast.

In the second cost category in which USHC may not achieve its estimated savings, it appears that one-time-only cost reductions of \$5.6 million have been overestimated. Specifically, in the area of materials management, it was originally projected that there would be \$3.8 million in one-time-only cost reductions from reducing total inventory at USHC. It was found, however, that only \$980,000 in savings could occur. The difference of \$2.9 million comes from the decision not to outsource inventory management to a private company and a smaller opportunity to reduce the inventories of the operating rooms


and printed forms from the three consolidating entities.<sup>46</sup> However, it was not stated why these opportunities are no longer feasible.

In the third cost category, USHC estimated cost reductions of \$16 million in its capital expenditures for nonclinical programs. Because USHC found that it was not possible to identify specific projects that would be foregone in the future, we found that USHC did not have a definite plan to achieve the \$16 million in savings. However, a review of capital projects over the previous three years revealed \$12 million that would not have been required. In view of this and an estimated capital budget in the range of \$70 million to \$85 million annually, an annual savings of \$4 million is a reasonable capital-reduction figure. Apparently, the \$4 million reduction will simply be required by management, so its implementation appears assured, at least initially.


### ***USHC Is More Likely To Achieve Cost Savings in Other Areas***

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Other areas of large projected cost savings appear reasonable given the limited information we have regarding their implementation plans. In addition to avoiding new expenditures, these plans rely heavily on three key strategies. First, USHC expects to reduce expenses by consolidating purchases using fewer vendors in order to achieve greater quantity discounts. For example, in materials management, USHC expects to save \$4.3 million in its first year of implementation with this strategy.<sup>47</sup> Through negotiations already conducted, USHC has already trimmed \$2.8 million from this budget after renegotiating with only one-third of its vendors. It is not clear whether this strategy will succeed in garnering all of the savings projected, since we do not know the existing levels of expenditures or the extent to which UCSF and Stanford have already extracted discounts from their vendors



*USHC has already trimmed \$2.8 million from this budget after renegotiating with only one-third of its vendors.*



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<sup>46</sup> Attachment to August 20, 1997 memorandum from Larry Smith, CFO of the UCSF medical center, "USHC Cost Reduction Opportunities (First Year)."

<sup>47</sup> The \$4.3 million is down from the \$6 million forecast in the E&Y supporting documents. According to Malinda Mitchell, CEO of SHS, this lower forecast is a result of the decision not to outsource some purchasing activities.


Equipment maintenance is also expected to miss its E&Y target, due to a reclassification of these numbers in the E&Y study. Rather than the \$2.3 million projected by E&Y, USHC expects a \$550,000 savings in this category. According to USHC executives, this shortfall is offset by increased or accelerated savings in other areas. Specifically, USHC expects to save an additional \$200,000 in telecommunications, \$300,000 in patient transportation, \$700,000 in pharmacy in the first year, \$550,000 in bio-engineering, and increased savings in other areas.

through group-purchasing organizations or by standardizing their products so that they purchase materials from a select few vendors.

The second strategy is to unify the management of multiple facilities. For instance, management of the laboratory area will be unified under one administrator and one medical director. This strategy can be effective, assuming the cooperation of the parties involved. Given the 40-mile distance between facilities, this type of change will likely require the additional expense of “assistant managers” to oversee the daily operations at each location. In addition, offsetting transportation and courier costs may be incurred to enhance communication between facilities managed centrally. Such managers are also likely to lose substantial time traveling between facilities.



*The merged entity may unify the operations of its laboratories by centralizing services or using a central-core location.*



According to the interim medical center director of UCSF, the merged entity may unify the operations of its laboratories. This will be achieved through either centralizing specific services at one site or by using a central-core location for all nonemergency services. In addition, there will continue to be site managers, but there will only be one senior administrator and medical director. While there may be offsetting transportation and courier costs, the interim director believes this is a relatively minor cost when compared to the significant savings that will occur as a result of the consolidation of laboratory services.

To a limited extent, USHC is also relying on the integration of multiple facilities serving the same function to achieve savings. In areas such as laundry and linen, this would seem to be a relatively simple endeavor. But in more complex areas, such as laboratory services, this process may take longer for positive results. Again, with no understanding of existing expenditures in these areas, it is difficult to judge how aggressive these cost-reduction projections are.

Lastly, USHC also expects to benefit from a sharing of best methods at each facility to both facilities. Clearly, without the benefit of the merger, such detailed sharing of information would be highly unlikely. It is unclear how or whether these savings are reflected in the E&Y documents.

Because we had insufficient documentation to effectively assess the likely success of particular USHC cost-reduction initiatives, we attempted to assess the reasonableness of the projections by comparing USHC’s overall projected performance with UCSF’s

and Stanford's previous performance.<sup>48</sup> Presumably, if these stand-alone efforts have not yet taken place, some of the anticipated savings could be achieved without a merger. For example, as shown on page 78 of the Third-Party Review, the reviewers forecast nonmerger cost reductions of approximately \$10 million annually over the four-year period for each entity. This analysis, contained in Appendix H, concludes that these future cost savings may not be unreasonable goals given the past cost-reduction performance at UCSF and the cost-reduction opportunities at Stanford.

### ***Sensitivity Analysis***

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*Anticipated merger cost, cost-savings, and revenue enhancements have differing probabilities of being realized.*  
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As discussed above, the anticipated merger cost, the cost savings, and revenue enhancements anticipated in the E&Y study have differing probabilities of being realized. For instance, the previously discussed additional pension expense is fairly likely to occur if the merger is completed. At the other extreme, the increased income from incremental volume of tertiary and quaternary services is considered highly uncertain.

We performed a sensitivity analysis (that analyzes the resulting financial benefits from the merger assuming various percentages of the projected new revenues and cost savings are achieved) to assess the impact on the potential net benefits of the merger of failing to achieve all of the anticipated cost savings or revenue enhancements. Table 8 estimates the present value of the net benefit of the merger assuming 100 percent of the anticipated cost reductions and 100 percent of the anticipated revenue enhancements, as previously discussed, are realized.

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<sup>48</sup> A key analysis that should be performed, in addition to the comparison with historic results, is a comparison of the USHC projections with those of comparable teaching hospitals. This analysis would shed some additional light on whether the projected results are feasible in a teaching hospital setting. For example, if a hospital had been pursuing a cost-cutting strategy more aggressive than that anticipated in the USHC merger, but had not attained USHC's anticipated results, then the expected cost reductions may be overly optimistic. On the other hand, if there is some precedent for these results, we could have greater confidence in their achievability.

However, without detailed supporting documents from the E&Y study and, more importantly, without detailed supporting documents on the revised fiscal year 1997-98 USHC budget, this analysis is not feasible. We need to understand how specific types of projected expenses and revenues are assigned to the general categories listed in the currently available documents to reliably compare these expected results with those found for other hospitals' historic performance. According to the interim medical center director at UCSF, these analyses already exist. Further, both Stanford and UCSF have and will continue to utilize the University Hospital Consortium and Mecon data bases. However, because Stanford and UCSF did not provide us with these analyses, we did not consider the analyses in conducting our audit.



**Table 8**

**Net Benefit After Cost of Merger  
Assuming 100 Percent Cost Reduction  
and 100 Percent Revenue Enhancement\*  
(in thousands)**

	1997	1998	1999	2000	Total
<b>Net Incremental Revenue Opportunities</b>					
Inpatient	\$11,913	\$23,826	\$24,541	\$25,278	\$ 85,558
Outpatient	5,106	10,212	10,518	10,833	36,669
Net incremental revenue	17,019	34,038	35,059	36,111	122,227
Variable operating expenses <sup>a</sup>	(13,081)	(26,162)	(26,947)	(27,755)	(93,945)
Net incremental income	3,938	7,876	8,112	8,356	28,282
<b>Cost Reductions</b>					
Annual cost savings	26,650	35,126	40,455	44,119	146,350
One-time cost savings	5,361	250	--	--	5,611
Capital expenditure requirements/ avoidance	2,773	(2,398)	1,352	6,180	7,907
Total cost reductions	34,784	32,978	41,807	50,299	159,868
<b>Total Revenue Opportunities, Net of Cost Reductions</b>	38,722	40,854	49,919	58,655	188,150
<b>Merger Costs<sup>b</sup></b>	(20,000)	(15,450)	(15,914)	(16,391)	(67,755)
<b>Net Increased Income from Merger</b>	18,722	25,404	34,005	42,264	120,395
Discount rate	--	10%	10%	10%	--
<b>Present Value of Income</b>	\$ 18,722	\$23,095	\$28,104	\$31,753	\$101,674

\*This sensitivity analysis is not adjusted for the \$400,000 as discussed in footnote 30 on page 39.

<sup>a</sup> Operating expenses defined as 50 percent of gross incremental revenue.

<sup>b</sup> According to USHC, the costs from the overfunded pension are 75 percent of the original estimates.

The variable operating expenses associated with the enhanced revenue have been properly estimated as 50 percent of gross incremental revenue. In addition, current anticipated volume enhancement in the base case equals 50 percent of that anticipated in the E&Y study. Table 9 shows the present value of the net benefit (cost) resulting from achieving different percentages of the cost savings and revenue enhancement currently anticipated. The table assumes that costs related to merging vary from projections by approximately \$25 million. Part of this variance is due to severance pay of \$4 million that is unlikely to happen. In addition, pension costs has been reduced by \$21 million. As discussed previously, only

75 percent of UCSF's employees will transfer to USHC. (The various percentages of cost savings achievement are shown along the vertical axis from 100 percent at the top to zero percent at the bottom. Similarly, various percentages of revenue-enhancement achievement are shown along the horizontal axis from 100 percent on the left to zero percent on the right.) If 100 percent of both the revenue enhancement and cost savings currently anticipated are achieved, the present value of the net benefit over four years is expected to exceed \$101 million [upper left-hand corner]. At the other extreme, if none of the cost savings and none of the revenue enhancements are achieved, the present value of the net cost increases over four years is expected to exceed \$115 million [lower right-hand corner].<sup>49</sup>

**Table 9**

***Total Present Value of Net Benefit (Cost)  
of Merger (Over First Four Years)  
Based on Various Cost-Reduction  
and Revenue-Enhancement Assumptions  
(in thousands)***

Cost Savings Achieved	Revenue Achieved from Increased Volume				
	Base 100%	75%	50%	25%	0%
Base 100%	\$101,674	\$81,677	\$ 61,681	\$ 41,684	\$21,687
75%	67,398	47,401	27,404	7,407	(12,589)
50%	33,121	13,124	(6,872)	(26,869)	(46,866)
25%	(1,155)	(21,152)	(41,149)	(61,145)	(81,142)
0%	(35,432)	(55,428)	(75,425)	(95,422)	(115,419)

- Notes: 1. The present value of the four-year cash flows is calculated using a 10 percent discount rate.
2. According to USHC, the costs from the overfunded pension are 75 percent of the original estimates.

Of particular interest are those combinations of revenue enhancement and cost-savings achievement resulting in a zero, or break-even net benefit. If none of the revenue enhancement is achieved, 84.2 percent of the cost reductions must be

<sup>49</sup> Note that the expected net benefits accruing in the fifth or subsequent years are not reflected in the Table 9.


achieved in order to break even. On the other hand, if none of the cost savings are achieved, it will be necessary to exceed the revenue enhancement goal by 38.5 percent in order to break even.

### ***Projected Distribution of Merger-Related Supplemental Income to the Medical Schools and USHC***


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Although each medical center is presently in sound financial health, both are concerned that changes in the Bay Area health services marketplace will cause them to be unable to support their respective medical education programs at previous levels while also reserving resources needed to support such ongoing program requirements and initiatives at the medical centers as repair and replacement of buildings and equipment.

The estimated increased income from the merger is likely to help ensure the present level of funding being transferred from the medical centers to the medical schools. Currently, the two medical schools receive payments for medical direction, purchased services, program development, primary care, and resident support. In 1995-96, the UCSF and Stanford medical schools received \$22.7 million and \$21.2 million<sup>50</sup> as distributions of medical center earnings related to these programs. Section 3.4 of the USHC, UCSF, and Stanford Affiliation Agreements proposes that this payment arrangement continue into the future. In addition to these payments, the UCSF and Stanford medical schools received \$6.2 million and \$8.2 million from an assessed tax on the revenues of the faculty practice programs. This amount, referred to as the dean's tax, is proposed as part of the USHC distribution in Section 7.1 of the affiliation agreements and is also intended to continue into the future.



*Presently, the two medical schools receive payments for a variety of services which the proposed merger intends to continue.*



As it relates to the academic grant/dean's tax, the draft-affiliation plan related to Stanford states, "For the first year, this academic grant shall be equal to the amount of the grant to the general budget of the Stanford University School of Medicine negotiated by the Faculty Practice Program for the period September 1, 1996, through August 31, 1997, plus any increase or decrease in this calculated amount based on the change in the Consumer Price Index . . . . For the second and third years, USHC shall provide to the Stanford University School of Medicine an academic grant equal to the amount of

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<sup>50</sup> The amount referenced in Appendix F includes the dean's tax portion for SHS. For comparison purposes, we removed the dean's tax amount on this page (\$29.4 million - \$8.2 million = \$21.2 million).

the academic grant in the preceding year, plus any increase or decrease in this amount based on the change in the Consumer Price Index.” The draft-affiliation plan provided to us related to the UCSF academic grant was less complete and precise but is expected to be similar.


If the merger is very successful, the USHC Board of Directors may additionally determine supplemental amounts to transfer. Although not required in subsequent years, in the first year, these transfers are estimated to be \$2.5 million to each medical school. Specifically, the draft-affiliation agreement between USHC and Stanford states that “during its first year of operation, USHC will pay an academic contribution from its institutional revenue in two components as follows:

- An initial \$2.5 million payment divided equally between the Stanford University School of Medicine and the UCSF School of Medicine as a fixed guarantee; and
- A second payment of up to an additional \$2.5 million, divided equally between the Stanford University School of Medicine and the UCSF School of Medicine, funded by a 50 percent share of USHC’s first \$5 million of adjusted operating income, if available.”

In addition to these distributions, USHC proposes to fund a reserve for major capital expenditures needed in the future. However, unless the most optimistic revenue assumptions are used, it is unlikely that the merger will create sufficient income to fund short-term capital equipment and facility needs as well as establish a reserve for long-term major capital expenditures that will be needed in the future.



*It is unlikely that the merger will create sufficient income to fund both short-term and long-term capital equipment and facility needs.*



With respect to these academic contributions and capital expenditure requirements, the draft-affiliation agreement states the following: “The USHC Board of Directors shall determine the amount of USHC’s academic contribution, as well as the allocation of that contribution into fixed and variable components, in the context of its annual budget-setting process and overall financial plan. It is expected that USHC’s financial plan will establish a reserve fund to support ongoing program requirements and initiatives at USHC, which shall have an annual goal set at between 5 percent and 7 percent of USHC’s net revenue. The parties expressly agree that payment of the variable portion of USHC’s academic contribution may, in any year after the first fiscal year, be withheld to the extent that USHC was unable to satisfy its reserve fund goals for the year in question or to the extent that payment of the variable portion of



its academic contribution would impair USHC’s ability to satisfy debt covenants and other debt payment schedules as required to maintain overall financial viability and avoid default.”

Using the financial projections from E&Y and the Third-Party Review, as shown in Table 10, we projected the supplemental annual distribution to the medical schools using E&Y’s approach, Third-Party Review approach, BSA approach, and assuming that there is no merger.<sup>51</sup>

Table 10 does not include the academic grant/dean’s tax portion of the academic contribution. It is our understanding that this amount is funded through the faculty practice program—and is included in the USHC operating expenses. Based on our analysis, should USHC elect to maintain for each of the next four years its first-year \$5 million contribution to the medical schools it will not reach the income equal to 5 percent of the net revenue target. According to the UCSF director of finance, this target was recognized by the State as necessary for funding short and long-term capital needs. However, the estimated net increased income from the merger of \$120 million may be available to fund the merged entity’s long-term capital needs and these incremental resources would not be available without the merger.

### ***Survival Prospects Without Merger***

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*The proposed merger is not an 11<sup>th</sup>-hour attempt to save currently failing hospitals.*  


Based upon our review, we do not believe that the continued existence of either UCSF’s or Stanford’s medical center is immediately threatened if this merger is not completed. Given their operating performance and financial position, we would expect both organizations to survive in the short-run. The proposed merger is not an 11<sup>th</sup>-hour attempt to save currently failing hospitals. Rather, it represents a proactive, strategic initiative designed to address the significant longer-run threats facing UCSF and Stanford and to improve the chances that both entities remain viable and able to fulfill their research, teaching, and clinical missions.

Regardless of whether the hospitals merge with each other, merge with other health care players (such as hospitals or physician groups), or remain independent, they will need to enhance the perceived value of the services they provide relative to the services of other hospitals in the eyes of both

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<sup>51</sup>Due to the uncertainty associated with incremental operating income and its effect on USHC reserves, the BSA approach does not include an estimate of incremental investment income. E&Y included such an estimate while the Third-Party Review did not.

patients and payors. This will undoubtedly mean ongoing, aggressive cost-reduction efforts, not only in administrative, but in clinical areas as well. Failure to reduce costs significantly will adversely affect both institutions' chances for survival. In addition to reducing costs, survival will also require improving outcomes, as well as enhancing the ability to demonstrate these superior outcomes to purchasers of health care services.

**Table 10**

***Four-Year Projection of Supplemental Amounts Available for Distribution to Reserves and Medical Schools (in thousands)***

	<b>E&amp;Y (Scenario 1)</b>	<b>Third-Party Review</b>	<b>BSA</b>	<b>No Merger</b>
<b>Revenue opportunities</b>				
Merger related revenue opportunities <sup>a</sup>	\$118,150	\$169,160	\$ 122,227	-
Expenses related to new revenue (operating expenses)	(59,075)	(84,580)	(93,945)	-
Increased operating income from revenue opportunities (contribution margin)	59,075 <sup>b</sup>	84,580	28,282	-
<b>Cost reductions</b>				
Annual, one-time cost savings and capital expenditure requirements/avoidance	159,868 <sup>f</sup>	159,868	159,868	-
<b>Increased operating income from merger</b>	218,943 <sup>e</sup>	244,448	188,150	-
Merger costs	(92,673)	(92,673)	(67,755)	-
<b>Net increased financial benefit from merger</b>	126,270	151,775	120,395	
Nonmerger net income <sup>c</sup>	84,775	84,775	84,775	\$ 84,775
<b>Amount available for academic contribution (merger and nonmerger net income)</b>	211,045	236,550	205,170	84,775
Allocation of academic contribution:				
Academic contribution to medical schools <sup>d</sup>	(20,000)	(20,000)	(20,000)	(20,000)
Amount required for USHC reserves (5 percent of operating revenue, excluding other operating revenue)	(250,344)	(252,895)	(250,548)	(244,437)
<b>Excess (deficit) after distribution to reserves and medical schools</b>	<b>\$ (59,299)</b>	<b>\$ (36,345)</b>	<b>\$ (65,378)</b>	<b>\$ (179,662)</b>

<sup>a</sup>These merger-related revenue opportunities exclude the effects of interest earnings on additional revenues. For example, E&Y estimated these earnings to be \$5.3 million for scenario 1.

<sup>b</sup>This amount agrees with a schedule provided to us by E&Y on August 28, 1997. Also, it assumes variable costs as shown in their business analysis for scenario 1.

<sup>c</sup>Nonmerger net income represents E&Y's estimation of the combined net incomes if the two entities did not merge.

<sup>d</sup>Although not required, this analysis assumes the USHC Board of Directors will continue to provide \$2.5 million annually to each medical school in addition to the academic grant/dean's tax.

<sup>e</sup>In E&Y's base case, the increased operating income from merger is approximately \$329 million.

<sup>f</sup>The capital expenditure/avoidance is approximately \$8 million.

As demand for hospital services in the Bay Area continues to fall, unused space and services in the hospital industry can be expected to rise. With increased excess capacity will come continued pressure on prices. More hospitals in the region will likely close their facilities. Whether the medical centers at UCSF and Stanford survive will depend on whether the ratio of perceived benefits to costs can be improved relative to other hospitals in the region.

### ***Conclusion***

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Both the E&Y business analysis and the Third-Party Review potentially overstate the increased income related to increased cases resulting from the proposed UCSF and Stanford merger. The increased operating income from merging, projected in E&Y's business analysis related to 2,966 additional cases, is potentially overstated by \$141 million, the estimate related to 1,483 cases by \$31 million, and the Third-Party Review estimate by \$56 million. These overstatements are at least partially offset by current estimates that four-year merger costs may be \$25 million lower than originally expected. As a result, the net overstatement in these studies varies from \$116 million, \$6 million, and over \$31 million, respectively. Specifically, we found:

- Revenue enhancement projections, although possible, are overly optimistic, even at 50 percent of the levels first projected by E&Y. USHC's goal of 12.8 percent growth in tertiary and quaternary care patients is aggressive in view of the stagnant and declining market for hospital services and the short two to three year time frame in which the target is anticipated to be achieved. Moreover, it is uncertain if adding new inpatient specialty cases will result in an additional 43 percent in revenue from outpatient cases.
- If the merged entity succeeds in expanding its tertiary and quaternary patient base as projected, the strategy's net benefits have been overstated by E&Y, as the incremental costs associated with the projected revenue enhancement were inadvertently understated by \$31 million. Alternatively, the Third-Party Review maintains that revenue enhancements can occur without lowering price further on existing business above and beyond the price decreases already assumed in the

stand-alone business plan. Conversations with USHC management and senior executives in the health care industry, however, indicate the additional 3.7 percent price reduction will be necessary to compete. Hence, we estimate that the net benefit from increased specialty-care case volume is likely to equal \$28 million over the first four years of joint operation rather than \$84 million presented by the Third-Party Review.

- To the extent complete documentation was available, USHC seems to have feasible plans in place to implement its cost reduction projections at \$160 million over four years.
- Further, the costs specifically associated with the merger are likely to be lower than originally expected. With fewer employees being transferred from UCSF to the merged entity and fewer staff reductions required, both pension and severance costs are likely to be significantly lower. As a result, we project merger cost will be lower by \$25 million over four years, at just under \$68 million.

Assuming USHC succeeds in attaining its revenue enhancement goals and after the adjustments discussed above are made, the net financial benefit associated with the proposed merger is approximately \$120 million over four years. Alternatively, if USHC fails to increase patient revenue above nonmerger levels, it would have to achieve a minimum of 84.2 percent of its projected cost reductions to gain a positive financial benefit from the merger. This suggests that aggressive management of the cost-cutting effort will be critical for the merger's success.



We conducted this review under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to generally accepted governmental auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,

KURT R. SJOBERG  
State Auditor

Date: September 3, 1997

Staff: Philip Jelicich, CPA, Deputy State Auditor  
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# *Appendix A*

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## *Rationale Behind the Proposed Merger as Presented to the UC Regents Committee on Health Services May 15, 1996 Meeting<sup>52</sup>*

### *Rationale Behind the Proposed Merger Threats to the Teaching Hospital*

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Numerous presentations to the Regents over the last several years have demonstrated that teaching hospitals are imperiled by economic competition in their local markets and by significant reductions in support for medical education programs. In Northern California, purchasers of insurance such as the Pacific Business Group on Health and the California Public Employees' Retirement System (CalPERS) have decreased employer funding of health insurance premiums by almost 20 percent over the past three years. Health plans have passed the risk of lower premiums on to physician groups and hospitals through lowered capitation payments. State and federal budget plans include drastic reductions in Medicare and Medi-Cal funding, with disproportionate cuts in the special payments that teaching hospitals receive. Medi-Cal managed care will shrink the dollars available to providers by 20 percent from historical levels that barely cover variable costs. To cope with these economic trends and the need to operate more efficiently, Northern California hospitals and physicians are consolidating into systems to reduce administrative and practice costs, to assume greater risk for providing cost-effective care for enrolled populations, and to create access to capital to fund future information systems, facilities, and equipment needs.

Over the past several years, the University of California, San Francisco (UCSF) has independently pursued a series of clinical strategies to improve its competitiveness, including: (1) developing common and responsive decision-making for a clinical enterprise that encompasses the medical center, the medical group, and the school of medicine; (2) developing stronger referral relationships with regional health care systems, such as Sutter Health and Kaiser Permanente; (3) creating a

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<sup>52</sup> Source: "Items for Discussion" Document #404 prepared for the May 15, 1996, UC Regents Committee on Health Services meeting. This appendix is taken verbatim from the UC Regents Document and does not include any interpretation or conclusions by the Bureau of State Audits.

primary care network, including community physicians at UCSF/Mount Zion, to improve access to UCSF specialists and facilities under managed care; (4) developing internal delivery systems to manage capitated care more effectively; (5) revamping the provision of referral care to other capitated medical groups and systems to meet their changing needs; (6) increasing the value of UCSF's patient care services by improving service while reducing costs; and (7) seeking appropriate federal and state funding for the costs of medical education and indigent care.

Despite the success of many of UCSF's strategic initiatives, the chancellor, the dean of the school of medicine, and the medical center director have concluded that the UCSF clinical enterprise must partner with others to assure its continuing competitiveness and to sustain excellence in its academic programs. To meet UCSF's need for a connection to a strong local primary care network, the San Francisco campus has proposed in another item to join with California Pacific Medical Group to create a new managed care medical group dedicated to serving San Franciscans under risk-sharing contracts for primary and comprehensive care. To enhance its academic mission, to strengthen its regional referral role, and to create a more cost-effective academic medical center, the UCSF clinical enterprise is engaged in planning a merger with Stanford Health Services, which encompasses Stanford University Hospital, Lucile Salter Packard Children's Hospital at Stanford, and the clinical practices of the faculty of the Stanford Medical School.

### ***Academic Advantages of a UCSF/Stanford Merger of Clinical Services***

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The dean of the UCSF School of Medicine has written the following statement on the importance of the formation of the UCSF-Stanford Health Care (USHC) to the academic program:

The fundamental mission of a school of medicine is to educate students and postgraduates. This mission has been expanded to include basic and clinical research, as well as the delivery of the highest quality, most innovative patient care. The teaching hospitals provide the opportunity for medical schools to control the content and quality of the educational, scientific, and patient care environment, and has become the core resource which is critical to the success of the academic

mission. For this reason, truly outstanding medical schools cannot exist without comparably outstanding medical centers.

To realize their full potential, the teaching hospitals and the schools of medicine require the recruitment and retention of the highest quality faculty, students, and postgraduate physicians. In other words, the value of the teaching hospital is integrally tied to its human resources and its capacity to foster an intellectually vigorous atmosphere. This environment serves the educational purposes of the medical school, and the teaching hospitals add value to the community at large as a resource for subspecialty and high technology care and as a major component of the safety net for the health of the public.

The fundamental mission of medical schools and teaching hospitals is being threatened. Market forces, including managed care, severely restricted access to specialty services, escalating costs of medical technology and associated clinical programs, and physician maldistribution, attack the historic foundations for the success of teaching hospitals. At the same time, important sites for the educational mission, such as the Veterans Affairs medical centers, are being subjected to resource reductions and reorganization efforts that are outside of the control of their affiliated medical schools. State and federal support for indigent care is also waning, and, in turn, threatening county hospitals that provide educational and research opportunities for University of California students and residents.

The proposed merger of the clinical enterprises of UCSF and Stanford University offers the best hope to insure the future success of these two schools of medicine, and the preservation of their core functions of education, research, and clinical care. As the demographics of physician specialization change, forcing students and graduates into a narrow array of choices, this merger will stabilize training programs at both universities by maintaining the critical mass of students and faculty necessary for excellence. The merger will also offer a platform for innovation in future training.

As the health care marketplace becomes more demanding, resources that can be applied to innovation, a cardinal feature of the teaching hospitals, will be its pursuit of new knowledge and its translation to practical clinical uses. The opportunity for productive, innovative

interactions between the new clinical enterprise and the pharmaceutical and biotechnology industries is substantial, and the merger of two strong academic institutions will open doors for further collaborations in basic research between the two schools of medicine. The shared culture of the two institutions, which has traditionally reinvested substantial portions of clinically-derived revenues into the basic and clinical science departments, will insure continued academic pre-eminence of the two schools.

The proposed UCSF/Stanford clinical merger, therefore, will be important in preserving, enhancing, and advancing all components of the academic missions of the two institutions.

### ***Financial Support of the Academic Mission***

Both medical schools are dependent on financial support from their respective clinical enterprises. Funds generated from the clinical enterprise are used to provide faculty salary support and to underwrite several aspects of the academic mission. Funds generated from clinical practice support 50 percent of the salaries of the UCSF faculty. Clinical dollars are also used for the recruitment of new faculty; for office and laboratory renovations; as seed money for new educational or research programs; to provide bridge funding to faculty who sustain a hiatus of research funding between funding cycles; in support of students; and to bring renowned lecturers to campus, among others. The deans also use clinical dollars to support the basic science departments. For the first time, the two teaching hospitals are experiencing a decline in their bottom-line financial performance. Thus, their ability to support the academic mission of the medical schools is threatened.

### ***Faculty Recruitment and Retention***

Both UCSF and Stanford are fortunate to have outstanding teachers and clinicians in their clinical departments. Their ability to recruit and retain such faculty is critically dependent on the breadth and quality of clinical practice. Thus, the protection and expansion of quality clinical practice is a key strategy for both institutions, one that will enable them to maintain their positions as leading academic health centers [teaching

hospitals]. A compelling case has been made that in a stand-alone mode, neither institution will likely be able to sustain its present clinical activities into the future.

The quality of the faculty is not only important to the success of the clinical enterprise itself, but, consistently, students and residents make their choice on what medical school to attend or train at based on the fame and accomplishments of their prospective teachers.

### ***Undergraduate Medical Education***

An adequate patient base is a critical requirement for training medical students in the acquisition of clinical skills. With the public mandate to train more generalists [primary care physicians], and to produce physicians that are appropriate to the changing health care delivery, it has become important to expose students to patients early, from the first year of medical school, in order to provide them with longitudinal clinical experience. It is also increasingly necessary to move clinical teaching from the inpatient to the ambulatory care site. These requirements have increased the need for an expanded patient base for teaching. Both medical schools are confronting difficulty in providing adequate clinical rotations to third- and fourth-year students in several disciplines. To the extent that the merger will increase the patient population in the new hospital system, the clinical teaching of medical students will be made more robust.

The new merged clinical entity will have the capacity to be a strong partner to health maintenance organizations, such as Kaiser, and to integrated physician group practices in the community. The result will be an expanded opportunity to secure appropriate primary care teaching sites for students. This strategy will be important in exposing students to physician office practice, to community-based medicine, and to clinical practice in managed care. In the final analysis, the ability of the two universities to successfully compete for the best and brightest students depends, at least in part, on the quality of the clinical training. The creation of an economically strong merged enterprise is, therefore, an important strategy to sustain the academic excellence of both medical schools.

### ***Graduate Medical Education***

The merger sets the stage for the country's premier training programs that will produce the country's future leaders, as well as informed broadly-based providers of care. The combined effect on the California state mandate to reduce the training of specialists combined with market forces that have reduced the popularity of certain medical and surgical specialty careers, has had a severe impact on several residency programs. At each site, some residency programs, such as neurosurgery and dermatology, have contracted to critically small sizes. The merger creates the opportunity to combine such programs into outstanding residencies. The recent residency match results clearly demonstrate a national decline in the popularity of anesthesia, radiology, and ophthalmology as career choices. Several residency programs in these specialties either did not match at all, or failed to fill all their positions. As these national trends increase, the newly merged clinical enterprise will be in the best position to plan rationally and implement practically the necessary downsizing of specialty training programs.

Another opportunity the proposed merger creates is an expanded opportunity for house-staff rotations, even in the instances in which residency programs are not merged. In this way, the strengths of the programs at both sites will be exploited to maximal advantage.

Yet another advantage of the merger is the opportunity to create new training programs that were recognized as being highly desirable by each university, but were never started because the critical mass of faculty and other resources did not exist at the individual sites. An example of this is the pediatric pulmonary programs. Childhood respiratory diseases, including the recent alarming growth rate in the incidence of childhood asthma, create a strong need to develop a training program in this area. The merger will now allow for this to happen.

### ***Research***

The merger of these two outstanding academic medical centers and the integration of their faculty clinical practices creates an unprecedented opportunity for research, both clinical and basic science.

Three critical factors created by the merger will significantly advance clinical research beyond what could be achieved by each academic medical center on its own. These factors include an increased patient population base, a single information system, and integrated faculty clinical services. The possibility for creating a world-class center for clinical research exists. Systematized data acquisition will characterize the delivery of health care making continuous quality improvement and outcome studies possible. Translational research, bringing the advances of basic research to the bedside to deliver highly innovative therapies, will be a major goal of the merged clinical entity, and in this way, it will distinguish itself from community hospitals. The advances in human genetics, for example, are rapidly leading to the understanding of single- and multi-gene diseases and soon definitive therapies will be available.

Because the two medical schools and their basic science departments will not be merged, the impact of the clinical merger on basic science research will not be as direct. Nevertheless, the merger creates opportunities for the basic science departments to collaborate in the acquisition of expensive equipment and facilities they require for cutting-edge research. Examples include the very expensive pieces of equipment required in structural biology and the increasingly costly transgenic (organisms that contain genetic material that has been experimentally transferred into it from some other source) animal facilities. In both campuses, the need of investigators for transgenic animals has increased beyond what each campus can supply. The cost of transgenic animals is one of the largest items of many research budgets. Yet, transgenic technology is the scientific advance that is creating incredible opportunities for translational research.

The combined intellectual power and creativity of the two faculties creates unprecedented opportunities for productive and innovative interactions with the pharmaceutical and biotechnology industries. It is likely that this benefit will prove to be one of the most important and rewarding by-products of the merger.



### ***Public Service***

The merged clinical enterprise can add value to the service it renders to both the medical profession and the public at large. Both UCSF and Stanford have the responsibility to provide continuing medical education (CME) to all physicians in Northern California and beyond. Both universities provide extensive continuing medical education programs. The merger will create the unique opportunity to reassess the respective efforts of each institution, and to develop a combined approach that would result in enhanced and more targeted courses. The provision of CME will be an important marketing tool for the merged clinical entity. The potential exists to create the best CME program in the country. Both the quality and the “name brand” of these courses is likely to attract participants from all over the country.

Both universities have public education programs that extend from “brown bag” lectures on the campuses, to large public conferences, and to radio and television programs. What the clinical merger of the two institutions will allow is a new and creative approach to the provision of this important public service in a well-coordinated fashion, one that will significantly and measurably increase its impact on the public. Opportunity exists to link outreach clinical programs with public education. For example, various outreach and satellite clinical programs of the new cancer center could be made responsible for the education of patients and their families on these risk factors of smoking, alcohol, diet, exposure to ultraviolet light, and genetics in the causation of cancer, and on the need to take appropriate preventive and surveillance measures. Such opportunities are created by a new vision of a single National Cancer Institute-designated cancer center of the two universities.

### ***Conclusions***

The proposed merger will enable the two universities to: (1) maintain financial support for their academic mission, including recruitment and retention of the best faculty, students, and residents; (2) sustain an adequate patient base for education; (3) significantly improve graduate education, continuing medical education, and also public education; and (4) create opportunities that will ensure vibrant clinical research and winning

collaborations among basic scientists, and between universities and the private sector, especially the pharmaceutical industries.

### ***Operating Functions to Be Transferred to USHC***

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USHC would be responsible for the clinical services now provided by Stanford and UCSF through their hospitals, hospital-owned clinics, and other practices of the full-time faculty of the schools of medicine. At UCSF, USHC would be responsible for the clinical practices of the faculty at UCSF Medical Center, UCSF/Mount Zion, and other medical center or UCSF medical group sites, but it [USHC] would not include the school of medicine faculty practices at San Francisco General Hospital or the San Francisco Veterans Affairs Medical Center. USHC also would not include the separate practices of faculty in the UCSF Schools of Dentistry, Nursing, and Pharmacy.

USHC would be responsible for the programs, operations, and finances of its clinical services, including the support services necessary to operate them.

Because USHC must create its own personnel and compensation system, it would establish its own human resources and payroll administration functions. USHC is also expected to create its own in-house finance department, including accounting services that UCSF currently purchases from the campus and treasury services provided by the Treasurer's Office. USHC might purchase other support services, from security and building services to the public information service, from either or both universities if they deliver the most cost-effective services.

The overall impact of USHC on existing UCSF campus services cannot be determined fully until the new USHC management evaluates its support service needs. Currently, the UCSF Medical Center purchases \$22 million in services from the campus and \$700,000 (excluding insurance costs) from the Office of General Counsel and the Office of the President. Medical center payments for the subset of human resource, payroll, and accounting services now total \$2.3 million annually.

### ***Next Steps***

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UCSF and Stanford have each scheduled a series of conferences to present the proposed plan for USHC to various important constituencies. The UCSF Medical Center director and dean of the UCSF School of Medicine are taking the lead in briefing members of the State Department of Finance, Department of Health Services, key legislators, and their staff. The academic leaders and UCSF have scheduled a series of meetings with the clinical chairs, culminating in a June retreat. Both UCSF and Stanford have held town meetings to brief interested faculty and staff.

# Appendix B

## Chronological Timeline of Events Related to the Merger Between UCSF and SHS

### UCSF

Date	Event <sup>a</sup>	Description
January 18, 1995	Regents meeting	KPMG Peat Marwick, LLP, presented its assessment of the University of California medical centers' capital programs and operating needs. This report projected a decrease in revenue for all UC medical centers and a continued decline in systemwide (consolidated) net income from \$120 million in 1993 to \$20 million by the end of the decade.
May 1995	UCSF and Stanford preliminary discussions	The UCSF chancellor and Stanford's president conducted preliminary discussions regarding possible collaboration between the universities.
Spring 1995	Newsbreak	Topics included "What UCSF Must Do To Survive and Thrive" and "UCSF and the Strain of Change."
June 1995	Lewin VHI Consulting Firm retained for feasibility study	UCSF hired consultants to assist in feasibility planning regarding a collaboration between Stanford and UCSF. Stanford and UCSF campus and medical center leadership formed steering committee to evaluate a merger of their clinical enterprises.
November 17, 1995	Regents meeting	The UCSF chancellor stated that UCSF initiated preliminary discussions with Stanford six months earlier regarding the feasibility of collaboration in patient care.
November 17, 1995	Campuswide e-mail message from UCSF chancellor	UCSF and Stanford conducted further discussions on the proposed collaboration.
December 14, 1995	Discussion Group meeting	A task force of clinical chairs and other faculty was appointed to examine the potential merger. <sup>b</sup>
January 1996	Lucile Salter Packard Children's Hospital's participation in negotiations	Representatives of Lucile Salter Packard Children's Hospital joined UCSF and Stanford discussions regarding the proposed collaboration.
January 27, 1996	Newsbreak	Chancellor's first public mention about the merger in his campus address.

## UCSF

Date	Event <sup>a</sup>	Description
March 14, 1996	Regents meeting	The UCSF chancellor updated UC Regents on the proposed collaboration. Regents support continued with negotiations.
May 3, 1996	Town hall meeting	The UCSF held a town hall meeting with the UCSF chancellor, the dean of the UCSF School of Medicine, and the UCSF medical director.
May 7, 1996	UCSF, State Legislature meeting	UC representatives met with members of the State Legislature, Department of Finance, Department of Health Services, and Office of Statewide Health Planning and Development.
May 15, 1996	Regents meeting	UCSF first proposed the creation of the UCSF and SHS merger initially termed "NEWCO."
June 13, 1996	UCSF, State Legislature meeting	UC director of State Governmental Relations and the UC president met with the Senate President pro Tempore.
June 20, 1996	Regents meeting	UCSF presented an oral and written discussion in response to concerns and questions raised by the public and the Regents regarding the proposed merger.
July 11, 1996	UCSF, State Legislature meeting	UC director of State Governmental Relations, director of UCSF Medical Center, dean UCSF School of Medicine, and UCSF chancellor met with members of the State Legislature.
July 18, 1996	Regents meeting	Regents approved the USHC governance structures and board composition.
July 1996	Warren Hellman and Bain & Company retained for a Third-Party Review	Following the July Regents meeting, Warren Hellman is asked to chair a third-party review of the proposed merger. Warren Hellman and the consulting firm of Bain & Company, hired by Warren Hellman, are to report to the Regents on their findings.
August 9, 1996	Meeting with the Department of Finance	UC director of State Governmental Relations, vice president-UC Clinical Services, and the vice president-UC Health Affairs met with the Department of Finance.
August 20, 1996	UCSF and State Legislature meeting	UC director of State Governmental Relations and the UC president met with the Senate President pro Tempore.
August 21, 1996	UCSF and State Legislature meeting	UC director of State Governmental Relations and the director of UCSF Medical Center met with the chair of the Assembly Budget Committee.

## UCSF

Date	Event <sup>a</sup>	Description
November 8, 1996	Special Regents meeting	Warren Hellman and representatives from the consulting firm of Bain & Company provided their report and presented their findings to the Regents.
November 15, 1996	Regents meeting	Regents authorized the formation of USHC, including the transferring of money to USHC and selection of representatives for the USHC board. Regents also authorized the UC president to take all action required on behalf of the Regents in connection with the merger.
November 15, 1996	Press release	<p>Press release contained a discussion of the following:</p> <ul style="list-style-type: none"> <li>• Regents approve formation of UCSF/Stanford Health Care (known as USHC)</li> <li>• Merger steps and timeline</li> <li>• Merger unites four hospitals</li> <li>• Answers to frequently asked questions and the merger</li> <li>• What supporters say about the merger</li> <li>• How the merger will affect UCSF employees</li> </ul>
January 13, 1997	UCSF and State Legislature meeting	UC director of State Governmental Relations met with Speaker of the Assembly.
January 15, 1997	Regents meeting	Regents were provided with an update of the merger and a listing of the newly appointed members of the USHC Board of Directors.
January 17, 1997	Lucile Salter Packard Children's Hospital and Stanford University Hospital combination	On August 30, 1996, Stanford University Hospital and Lucile Salter Packard Children's Hospital at Stanford agreed to be combined into Stanford Health Services. The combination is effective January 17, 1997.
February 1997	Board of Directors meeting	The USHC Board of Directors held its first meeting.
March 10, 1997	UCSF and State Legislature meeting	UC director of State Governmental Relations met with a Democratic representative from 8 <sup>th</sup> District.
March 14, 1997	Senate Judiciary Committee hearing	UC consultant presented an independent analysis of the financial health of the UCSF Medical Center to California Senate Judiciary Committee.
March 20, 1997	Regents meeting	Regents were provided with an update on the USHC Board of Directors' activities and copies of the Articles of Incorporation and Bylaws.

## UCSF

Date	Event <sup>a</sup>	Description
April 3, 1997	UCSF and State Legislature meeting	UC director of State Governmental Relations met with the Chair of the Senate Budget and Fiscal Review Committee.
April 15, 1997	UCSF and State Legislature meeting	UC director of State Governmental Relations and the UC president met with Senate President Pro Tempore and members of the Governor's Office.
May 16, 1997	Newsbreak	One topic included "Draft UCSF/Stanford Merger Documents Available."
May 29, 1997	UCSF and State Legislature meeting	UC director of State Governmental Relations and the UC deputy general counsel met with members of the State Legislature and their staff.
June 5, 1997	Newsbreak	One topic included "Some Benefits Questions and Answers for Employees Affected by Merger."
June 12, 1997	Town hall meeting	The UCSF held a town hall meeting with the executive vice dean of the UCSF School of Medicine.
June 19, 1997	Regents meeting	Regents were provided with an update on the status of the merger. Also, the Regents and the public were given a written statement regarding the merger.
July 10, 1997	Senate Select Committee on Higher Education hearing	Concerns regarding UCSF and Stanford medical centers merger were addressed.
July 16, 1997	Joint Legislative Audit Committee hearing	Concerns regarding UCSF and Stanford medical centers merger were addressed. BSA audit of the merger was approved.
July 29, 1997	Town hall meeting	The UCSF held a town hall meeting with the UCSF academic senate.

Source: University of California

<sup>a</sup>In addition to the events listed in the table above, the following events occurred:

- The UCSF chancellor sent six additional campuswide e-mail messages concerning the merger.
- Seven other written communications were distributed to the campus community, academic senate, faculty and campus colleagues.
- An additional 49 newsbreaks and press releases were published.
- An additional 11 town hall, academic senate clinical chair, and faculty address meetings were held. These do not include the meetings at the departmental level.

<sup>b</sup>In addition to its December 1995 meeting, the discussion group held six subsequent meetings between December 16, 1995 and November 22, 1996.

## Stanford

Date	Event	Description
August 8, 1995 through March 21, 1996	Board meetings	Stanford University Board of Directors held seven board meetings at which the merger was discussed.
April 8, 1996	Committee meeting	Audit Committee (AC) of the Stanford University Board of Trustees (Trustees) held a meeting at which the merger was discussed.
April 8, 1996	Committee meeting	Committee on the Medical Center (CMC) of the Trustees held a meeting at which the merger was discussed.
April 9, 1996	Members meeting	Members of Stanford University Corporation (Members) held a meeting at which the merger was discussed.
April 9, 1996	Trustees meeting	Trustees held a meeting at which the merger was discussed.
April 16, 1996	Committee meeting	Finance Committee (FC) of Stanford University Board held a committee meeting at which the merger was discussed.
May 7, 1996	Board meeting	Stanford University Board held a meeting at which the merger was discussed.
June 12, 1996	Board meeting	Stanford University Board held a meeting, established an ad hoc committee, appointed members, charged the committee, and delegated power to act on behalf of the Board.
June 13, 1996	Joint committee meeting	FC of Stanford University Board and CMC of Trustees held a meeting at which the merger was discussed.
June 14, 1996	Trustees meeting	Trustees established an ad hoc committee, appointed members to the committee, charged the delegate power to act on behalf of the Board, and delegated power to president of the university and dean of the school of medicine to authorize in writing the entity, the affiliation, and the right to use the Stanford name.
June 14, 1996	Members meeting	Members established an ad hoc committee, appointed committee members, charged the committee, and delegated power to act on behalf of the members.
August 23, 1996 and September 19, 1996	Board meetings	Board held two meetings where the status of the merger was discussed.
October 7, 1996	Committee meeting	CMC of Trustees held a meeting at which the status of the merger was discussed.



## Stanford

Date	Event	Description
October 8, 1996	Members meeting	Members held a meeting at which the status of the merger was discussed.
October 8, 1996	Trustees meeting	Trustees held a meeting at which the status of the merger was discussed.
October 15, 1996	Board meeting	Stanford University Board and Hospital Board held a meeting at which the status of the merger was discussed.
October 31, 1996	Committee meeting	FC of Stanford University Board held a meeting at which the status of the merger was discussed.
November 15, 1996	Committee meeting	Board approved start-up funding transfer to USHC, authorized certain officers to execute and deliver documents, extended existence of ad hoc committee, and reaffirmed June 12, 1996, resolution.
November 15, 1996	Committee meeting	Ad hoc committee of the Trustees authorized president of university to select two trustees—one additional person and one faculty member—to serve as initial directors of USHC, recommended the execution of Articles of Incorporation of certain designees to act as the representative of Stanford.
December 9, 1996	Committee meeting	CMC of Trustees held a meeting at which the status of the merger was discussed.
December 10, 1996	Trustees meeting	Trustees held a meeting at which the status of the merger was discussed.
January 6, 1997 and February 7, 1997	Board meetings	SHS Board held two meetings at which the status of the merger was discussed.
February 10, 1997	Committee meeting	CMC of Trustees held a meeting at which the status of the merger was discussed.
February 11, 1997	Members meeting	Members held a meeting at which the status of the merger was discussed.
February 11, 1997	Trustees meeting	Trustees held a meeting at which the status of the merger was discussed.

## Stanford

Date	Event	Description
March 17, 1997	Board meeting	SHS Board held a meeting at which the status of the merger was discussed.
April 14, 1997	Committee meeting	CMC of Trustees held a meeting at which the status of the merger was discussed.
April 15, 1997	Trustees meeting	Trustees reconstituted membership of the ad hoc committee.
May 9, 1997	Reconstitution of members of the ad hoc committee	Chair of SHS Board reconstituted membership of the ad hoc committee.
May 9, 1997	Board meeting	SHS Board ratified actions to reconstitute ad hoc committee, authorized the ad hoc committee to consider and act upon the affiliation on behalf of SHS in its role as the sole member of Lucile Salter Packard Children's Hospital, extended existence of ad hoc committee, and reaffirmed June 12, 1996, resolution.
May 9, 1997	Board meeting	The Lucile Salter Packard Children's Hospital at Stanford, established ad hoc committee, appointed members, charged the committee, and delegated power to act on behalf of the board.
June 13, 1997	Committee meeting	CMC of Trustees held a meeting at which the status of the merger was discussed.
June 13, 1997	Members meeting	Members held a meeting at which the status of the merger was discussed.
June 13, 1997	Trustees meeting	Trustees authorized certain individuals to vote on behalf of the Members of UCSF Stanford Health Care.
July 14, 1997	Board meeting	SHS Board held a meeting at which the status of the merger was discussed.

Source: Stanford University

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# Appendix C

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## *Results of Health Care Market Survey*

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### *Insurers and Health Maintenance Organizations:*

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#### *Managed Care Presence in the Bay Area*

Health plans and especially health maintenance organizations (HMOs) have been catalysts in changing the way health care is delivered. California and the Bay Area, in particular, have high levels of HMO enrollment relative to the rest of the nation. Among employees of large companies, the contrast is startling.<sup>53</sup> Indemnity insurance that reimburses the patient a fixed percentage for each type of medical services consumed virtually no longer exists in California, though it still maintains a 22 percent share nationally. And, unlike traditional indemnity plans, the 2 percent of the California population that remains with indemnity insurance is also subject to hospital-utilization management. The remaining 98 percent of California's large company employees are covered by some more restrictive type of managed care product, either HMO, preferred provider organization (PPO), or point of service (POS).<sup>54</sup> In HMOs, the most restrictive type of managed care plans, California's membership is far ahead of the rest of the nation at 70 percent, rather than just 26 percent found nationally.

In most Bay Area metropolitan areas such as Oakland and Santa Rosa, HMOs serve over 50 percent of the total population, compared with just 21 percent nationally.<sup>55</sup> Although 50 percent may not seem high, it is important to realize that this represents HMOs' share of the population as a whole. The rest of the population is served by Medicare, Medi-Cal, and other forms of managed care plans, while approximately 16 percent of the Bay Area's nonelderly population is uninsured.<sup>56</sup> Consequently, with the exception of

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<sup>53</sup> Large companies are defined here as companies of more than 500 employees.

<sup>54</sup> Foster Higgins, 1997.

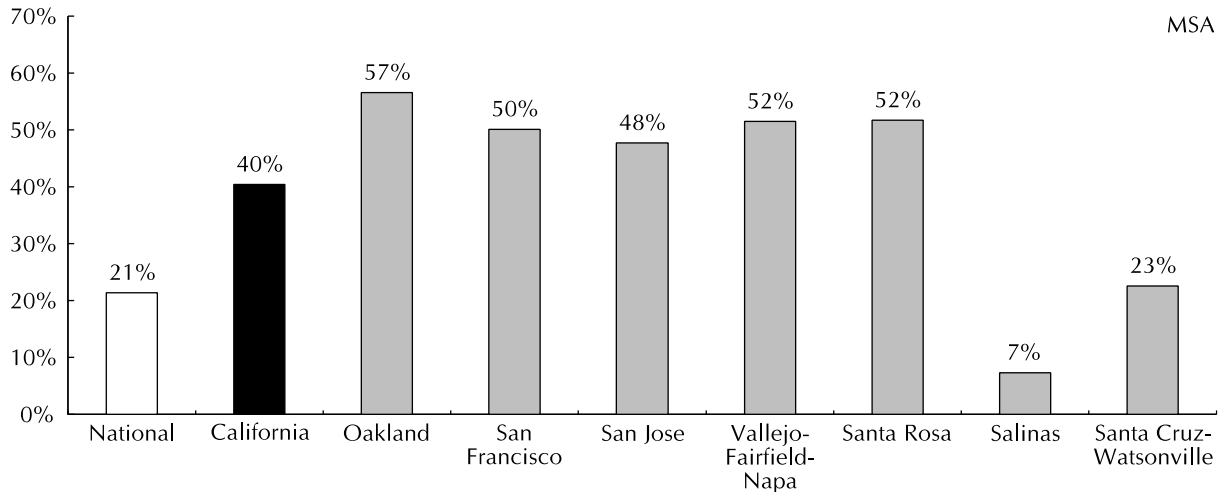
<sup>55</sup> Exceptions are the Salinas (7 percent) and the Santa Cruz-Watsonville (23 percent) metropolitan areas, which are relatively more rural areas.

<sup>56</sup> Helen Halpin Schauffler, E. Richard Brown and Thomas Rice, *The State of Health Insurance in California, 1996*, University of California at Berkeley School of Public Health and University of California at Los Angeles Center for Health Policy Research, January 1997, p. 8.

those who are covered under Medicare or Medi-Cal programs, insured residents are almost all in some type of managed care plans, whether it be an HMO, PPO, or POS plan. Refer to Figure 1.1 for a comparison of HMOs' share of populations in the nation, State, and greater Bay Area.

**Figure 1.1**

**HMO Share of Population – July 1, 1996**



Source: InterStudy, June 1997

Among all types of enrollees in the Bay Area (commercial, Medicare, and Medi-Cal), HMO penetration is particularly high among commercial enrollees. For example, over 80 percent of commercial enrollees are covered by HMOs in all but two Bay Area metropolitan areas.<sup>57</sup> HMOs are also making inroads among Medi-Cal and Medicare enrollees. Their share of Medicare enrollees is slightly over a third in all of the Bay Area metropolitan areas except Salinas and Santa Cruz-Watsonville. California is also the leader in Medicare HMO enrollment. For example, in 1995, over 33 percent of California's Medicare enrollees were in a Medicare HMO plan, compared with 12.5 percent in Florida, the state with the next-highest share.<sup>58</sup> Because Bay Area fixed Medicare payments to HMOs are relatively high, HMOs are aggressively pursuing Medicare enrollees in the Bay Area.<sup>59</sup> As a result, the Bay Area's share of Medicare enrollees in HMOs is likely to rise.

<sup>57</sup> Exceptions are the Salinas (12 percent) and the Santa Cruz-Watsonville (41 percent) metropolitan areas.

<sup>58</sup> *Physician Payment Review Commission 1996 Annual Report to Congress.*

<sup>59</sup> Medicare pays HMOs a capitated fee per member. This fee equals 95 percent of the average annual per capita cost (AAPC) for each member. The AAPC varies by county, age and sex.

In contrast, although metropolitan areas like Oakland, San Francisco, and San Jose have large numbers of Medi-Cal enrollees, few of them are members of HMOs. In the Oakland area, only 8 percent of Medi-Cal enrollees are served by HMOs while other Bay Area metropolitan areas have fewer than 2 percent of Medi-Cal beneficiaries enrolled in HMOs. This situation is also likely to change in the future as one of the primary Medi-Cal cost-containment efforts currently under way is to shift a larger portion of those eligible for Medi-Cal to managed care.

Considering the Bay Area's already high overall level of managed care penetration, large share increases are unlikely in the future. However, incremental growth should continue as Medicare and Medi-Cal enrollees are added to HMOs' rolls.

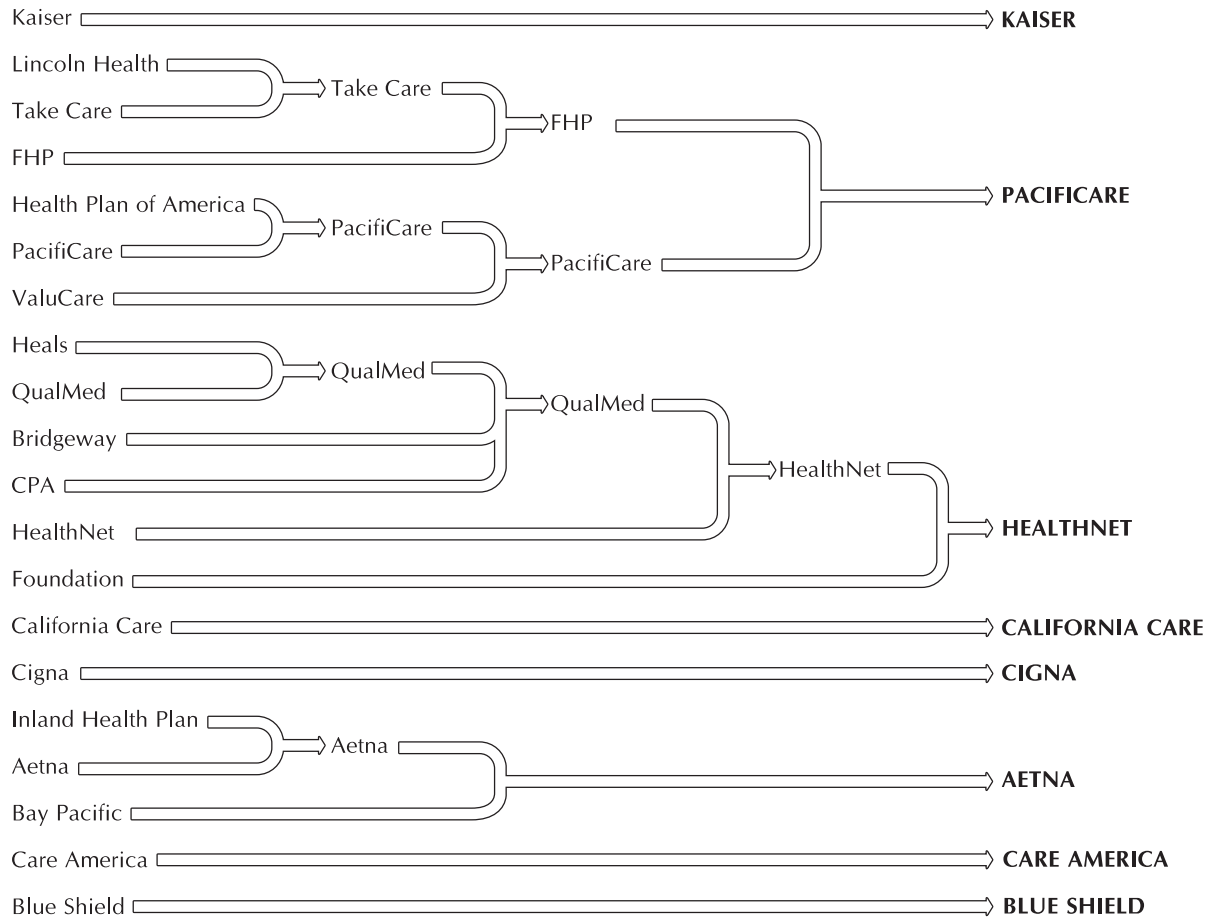
### ***HMO Consolidation***

Kaiser Foundation Health Plans, Inc. clearly dominates HMO coverage in the Bay Area. As of July 1996, Kaiser served almost half of HMO enrollees in San Francisco and well over 50 percent of HMO enrollees in the Oakland and San Jose metropolitan areas. A few other plans play major roles in these areas. HealthNet/Foundation has just over a 10 percent share in the Oakland and San Francisco areas and Lifeguard has a 13.5 percent share in the San Jose area. The State as a whole is less dominated by Kaiser, which has its origins in the Bay Area. Statewide, three HMOs, Kaiser, PacifiCare/FHP, and Foundation/HealthNet, cover 70 percent of HMO enrollees, with Kaiser accounting for less than 40 percent of enrollees and HealthNet/Foundation and PacifiCare/FHP roughly splitting the remaining 33 percent. Lifeguard is not a strong competitor statewide because it is a Bay Area regional HMO.

As the first HMO in California, Kaiser has historically held a strong position in California and especially in the Bay Area. As shown in Figure 1.2, other HMOs have typically grown through mergers and acquisitions. In California's two most recent mega-mergers, PacifiCare acquired Foundation Health Plan and Foundation Health Systems, Inc. merged with Health Systems, Inc. (HealthNet). Experts expect that Lifeguard is a likely takeover candidate along with another local HMO, Health Plan of the Redwoods.

**Figure 1.2**

**Significant Consolidation Among California HMOs Since 1990**



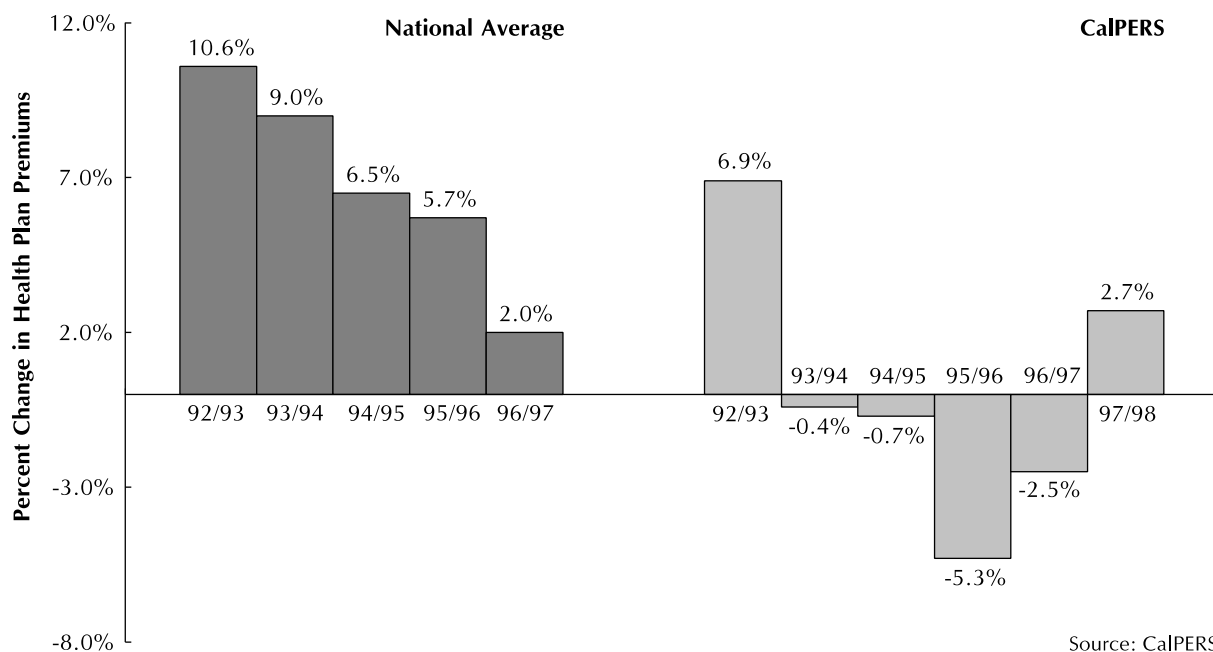
**HMO Pricing and Employer Purchasing Groups**

Although HMO coverage tends to be dominated by just a few health plans, these companies engage in fierce price competition to win managed care contracts. Low HMO premiums are made possible by effective hospital-utilization management and price concessions on the part of health care providers. Consequently, to compete with rival companies, HMOs contract selectively with the physicians and hospitals that are best able to offer cost-effective health care. Those selected providers are constantly pressured to minimize their costs while maintaining quality of care. Providers who fall behind risk losing their managed care contracts to other providers.

Employer purchasing groups successfully place additional pressure on HMO pricing to obtain the lowest health premiums for their members. Purchasing groups such as the California Public Employees Retirement System (CalPERS) and Pacific Business Group on Health (PBGH) that represent millions of employees have been quite successful. Figure 1.3 shows the change in health plan premiums that CalPERS has successfully negotiated. These employer purchasing groups have also focused HMOs on measuring and improving the quality of health care provided. These initiatives will require not only quality health care from providers, but also the ability to document the quality of their care with sophisticated information systems.

**Figure 1.3**

***CalPERS Has Successfully Limited Premium Increases – 1992/93 - 1997/98***



Health plan financial incentives are beginning to be tied to quality performance. For example, in April 1997, PacifiCare announced a three-year contract with CalPERS. In exchange for a 2.5 percent rate increase in 1998 and increases tied to the Consumer Price Index in 1999 and 2000, PacifiCare agreed to invest a percentage of the premium in enhancing member satisfaction and in facilitating the successful completion of quality-improvement programs that will focus on access to specialists and ease of referrals. In addition, to assist in



monitoring the health of CalPERS members, PacifiCare will seek to increase the collection of patient data from physician groups.<sup>60</sup>

### ***Physicians and Medical Groups:***

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#### ***The Role of Physician Groups in Bay Area Managed Care***

Medical groups dominate the provision of physician services to managed care patients in the Bay Area. Physicians outside of a large physician group typically find it more difficult to gain access to managed care patients.

Health plans negotiate with these physician groups for them to provide physician services to a defined population of members under a fixed (or capitated) payment arrangement. Sometimes, a “global capitation arrangement” is made, where the physician group extends its responsibility beyond just physician services to take financial responsibility for all covered health care services, including hospital and ancillary services. According to John H. Austin, M.D., head of UniHealth’s professional services division, “In the state of California, the transformation to at-risk payment is almost complete. Most physician groups now receive more than 75 percent of their payment through at-risk arrangements.”<sup>61</sup> Under at-risk arrangements, physicians take the financial risk of managed care by assuming responsibility for all health care services based on a fixed payment. As shown in Figure 1.4, Bay Area physician groups are paid primarily by capitated payments. In the Oakland, San Francisco, and San Jose areas over 70 percent of total HMO physician reimbursement is capitated rather than traditional fee-for-service payments.

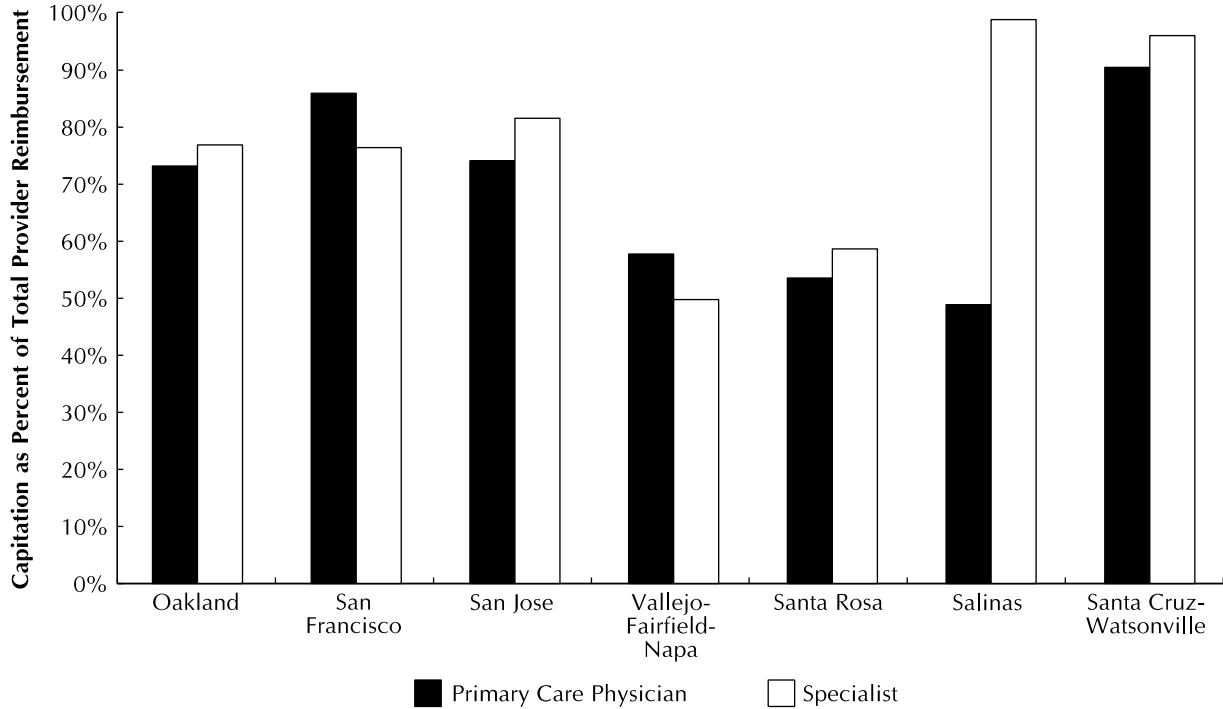
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<sup>60</sup> “CalPERS Holds the Line on Health Care Rates for Fifth Straight Year; Adds Quality & Stability,” CalPERS press release dated April 15, 1997.

<sup>61</sup> John C. Cochrane, “Future of Provider-Sponsored HMOs,” *Integrated Healthcare Report*, August 1996, p. 6.

**Figure 1.4**

**HMOs Typically Pay Bay Area Physicians  
With Capitated Payments – July 1, 1996**



Note: Figures exclude sole practitioners

Source: InterStudy, June 1997

Despite their dominance of managed care patients, physician groups in the Bay Area do not appear to be thriving financially. Further, according to Steve McDermont, CEO of Hill Physicians, “Half the medical groups and IPAs in Northern California are bankrupt and the other half are staying afloat with subsidies from hospitals.”<sup>62</sup> IPAs are independent-provider associations where independent and small physician groups band together and contract with HMOs on an unified basis. Medical groups face three challenges to their financial well-being. First, they face pressure from HMOs for further cost reductions. Second, they must invest in sophisticated information and quality measurement systems to remain competitive. And, finally, many Bay Area physician groups have too many specialists.

According to our health care expert, in a capitated payment setting, specialists are no longer revenue generators, but costly resources. Typically, medical groups prefer a one-to-one ratio

<sup>62</sup> John C. Cochran, “California Journal,” *Integrated Healthcare Report*, April 1997, p. 5.

of primary care physicians and specialists, rather than the one-third primary care/two-thirds specialty care ratio found on the typical hospital staff.<sup>63</sup> Under these assumptions, the Bay Area has a significant oversupply of specialists. Further, many of these speciality physicians can have difficulty being accepted by a medical group and gaining access to managed care patients.<sup>64</sup> In fact, physician groups, such as Hill Physicians Medical Group, have been known to trim specialists from their rosters to enhance their financial viability.

### ***Consolidation Among Physician Groups***

Smaller Bay Area physician groups are continuing to merge with one another or are joining existing large medical groups to improve their ability to obtain managed care contracts. Physician groups from outside the area such as AHI Healthcare Systems, Inc., the Mullikin IPA, and UniHealth are key players in the Bay Area, although they have been less successful in organizing Bay Area physicians compared with their experience in Southern California. These and a number of locally based groups have been the driving forces in consolidating physician practices. Major medical group players participating in the Bay Area include Hill Physicians Medical Group, BayCare Medical Group, Brown & Towland Medical Group, Palo Alto Medical Foundation, Santa Clara County Practice Association, FPA/AHI Healthcare Systems, and Mullikin/MedPartners.<sup>65</sup>

As shown in Table C-1, large physician groups have proved to be quite skilled at lowering member hospitalization rates. These hospitalization rates are significantly below those generally found even among HMO enrollees. Consequently, as Bay Area physician groups continue to consolidate to become part of large physician groups and seek globally capitated contracts, hospitalization rates of Bay Area HMO members are likely to decline further.

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<sup>63</sup> John C. Cochrane, "Specialist Survival Strategies," *Integrated Healthcare Report*, November 1996, p. 2.

<sup>64</sup> At 156 specialists per 100,000 population, the Bay Area has the highest level of specialists in California. The Center for the Health Professions at UCSF estimates that there is a 50 to 85 percent oversupply of specialists in the Bay Area. (John M. Coffman, John Q. Young, Karen Vranzian, Noelle Blick, and Kevin Grumbach, *California Needs Better Medicine: Physician Supply and Medical Education in California*, the California Primary Care Consortium and the Center for the Health Professions, UCSF, p. 14.)

<sup>65</sup> In addition, Kaiser's member physicians are preparing to create a physician practice management company named PermCorp to provide services for the 12 independent Permanente Medical Groups. This company could provide management for non-Kaiser medical groups, challenging other local physician practice management companies. ("Kaiser Physicians Organize National Federation," *Integrated Healthcare Report*, September 1996, p. 13.)

**Table C-1**

**Large Physician Group (UMGA)\*  
Hospitalization Rates<sup>a</sup>**

	Commercial HMO Members		
	HMO Industry Average	UMGA Average	Percent Below HMO Industry Average
Hospital days per 1,000 members	258	146	43%
Average length of stay (days)	3.9	3.3	15%

\* UMGA: Unified Medical Group Association

<sup>a</sup>Medical Group Digest 1996, Hoechst Marion Roussel Managed Care Digest Series.

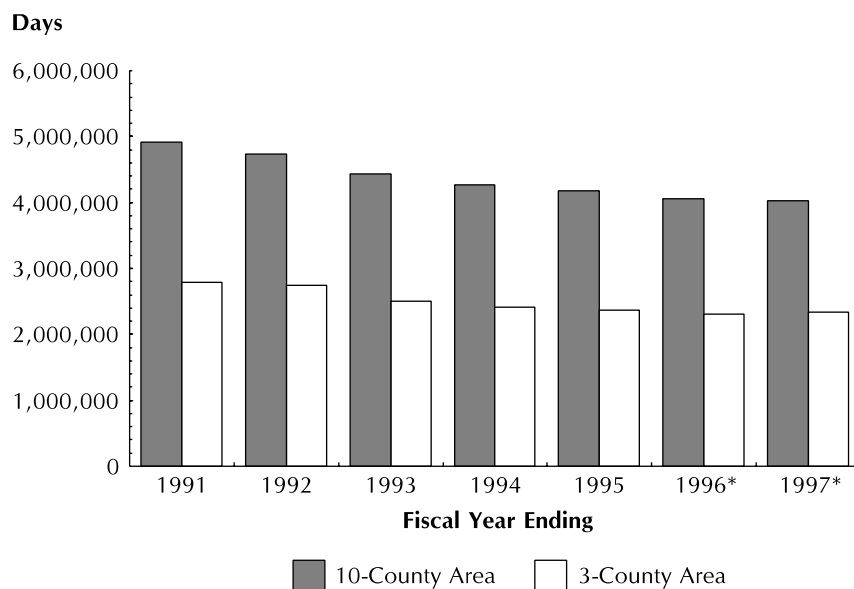
***Historic Demand for Hospital Services:***

***The Impact of Managed Care***

The impact of increased managed care penetration and changing modes of treatment is apparent in the Bay Area hospital-utilization statistics. Inpatient days (the product of the number of admissions and the average length of stay) at Bay Area hospitals have declined steadily. Over the seven years ending June 1997, total inpatient days have declined from 4.9 million days to just over 4 million days per year, or 18 percent, in the ten-county area. As shown in Figure 1.5, in the three-county area (San Francisco, Santa Clara, and San Mateo), inpatient days dropped by 16 percent in this time. The decline in inpatient days is even more dramatic when changes in population are taken into account by examining inpatient days on a per capita basis. Inpatient days per 1,000 population have declined steadily during this period, dropping almost 25 percent in the ten-county area and 22 percent in the three-county area.

**Figure 1.5**

**Total Inpatient Days - 1991 - 1997**



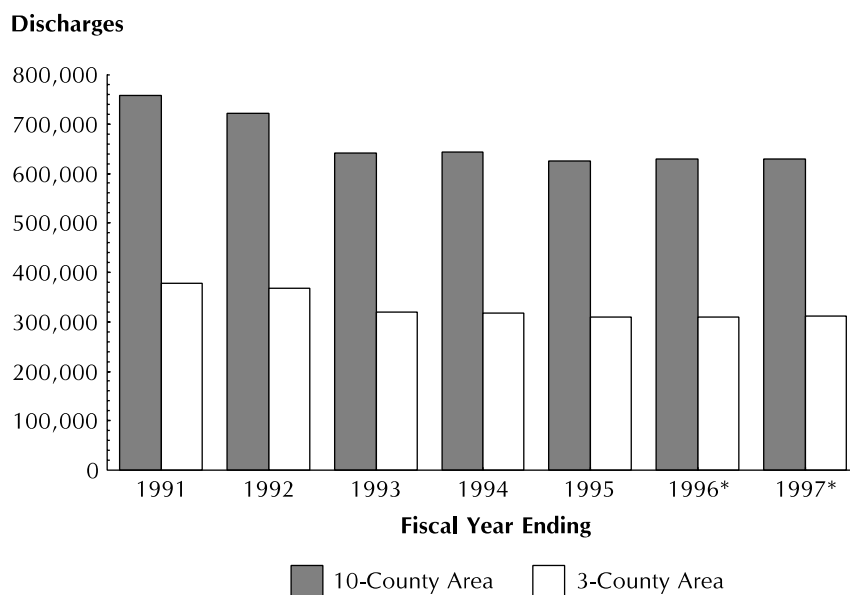
\*1996 and 1997 based on quarterly data  
April 1997 through June 1997 data estimated

Source: OSHPD

It appears that inpatient days have declined more as a result of a decline in hospital admissions than recent reductions in the average length of stay. Average length of stay has stagnated at about 7.5 days in the three-county area and 6.4 days in the ten-county area. Hospital discharges, on the other hand, have declined with changes in technology and closer hospital-utilization management. From 1991 to 1997, discharges in the three- and ten-county areas have both declined between 17 and 18 percent. Refer to Figure 1.6 for a graphic on the number of discharges between 1991 and 1997.

**Figure 1.6**

**Total Number of Discharges – 1991 - 1997**



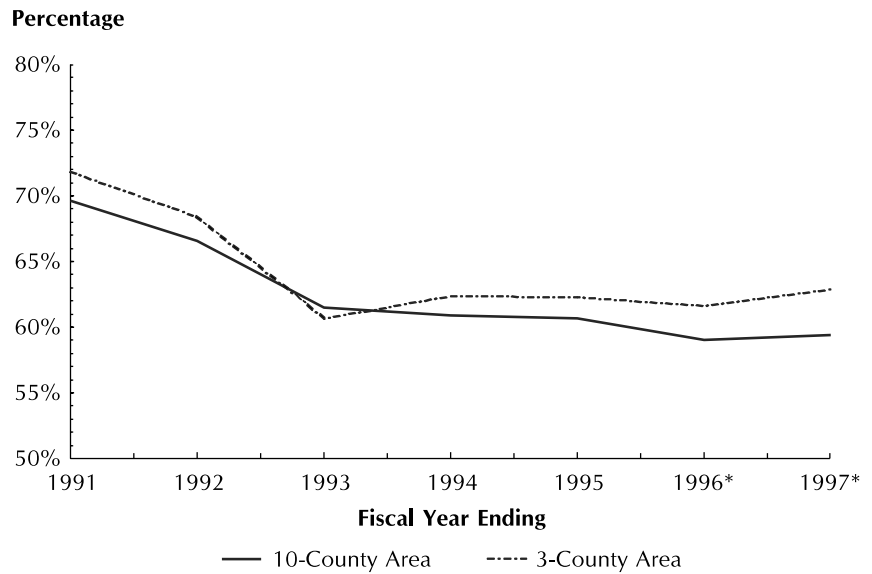
\*1996 and 1997 based on quarterly data  
April 1997 through June 1997 data estimated

Source: OSHPD

Although a few hospitals have exited the market, occupancy rates continue to decline in the Bay Area. In the three-county area, occupancy rates have declined from 72 percent in 1991 to just under 63 percent in 1997. Hospitals in the ten-county area have a higher average occupancy rate, but have experienced a similar slide in occupancy rates from almost 70 percent to 59 percent. A few hospitals are able to maintain healthy occupancy levels, but they are the exceptions. Only the top 25 percent of hospitals were able to maintain occupancy rates above 56 percent. Refer to Figure 1.7 for a trend line of occupancy rates in the Bay Area between 1991 and 1997.

**Figure 1.7**

**Occupancy Rate on Available Beds – 1991-1997**



\*1996 and 1997 based on quarterly data  
April 1997 through June 1997 data estimated

Source: OSHPD

**Forecast Demand for  
Hospital Services:**

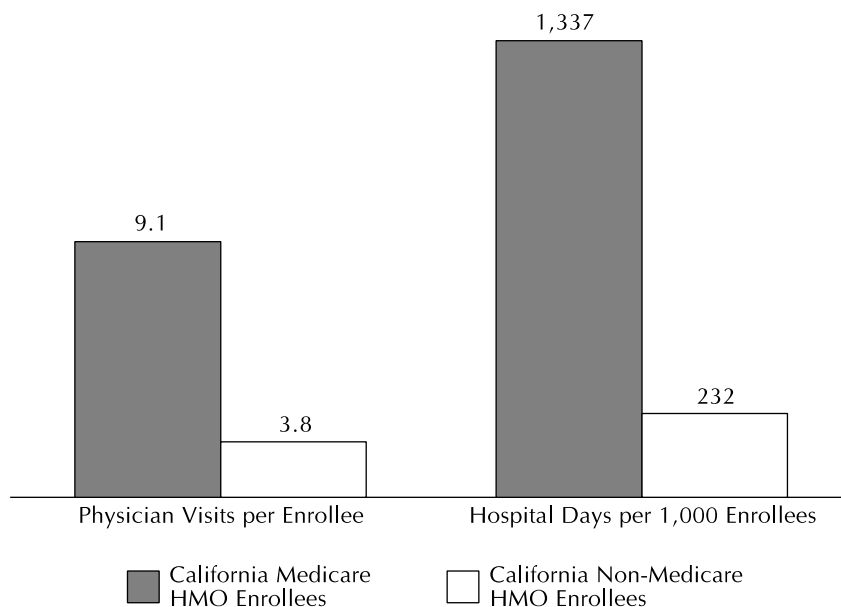
**Demographic Forecasts**

Demand for health care is driven in part by population trends. The Bay Area is expected to grow, but that growth is distributed unevenly. As has historically been the pattern, population growth is expected to continue to shift outward from the Bay Area's urban centers. Hospitals left behind by these population movements will be under greater pressure to maintain their patient referral cases.

Expected increases in the elderly population in particular, indicate likely increases in demand for hospital services. The elderly tend to require more hospitalization than younger populations. A simple comparison of Medicare (generally for patients over age 64) and non-Medicare hospital days demonstrates this point. Among HMO patients in California covered by Medicare, hospital days per 1,000 enrollees were 1,337 compared with just 232 for non-Medicare enrollees, as shown in Figure 1.8.

**Figure 1.8**

***The Elderly Have Higher Provider Utilization Rates***



Source: The New England Journal of Medicine, December 12, 1995

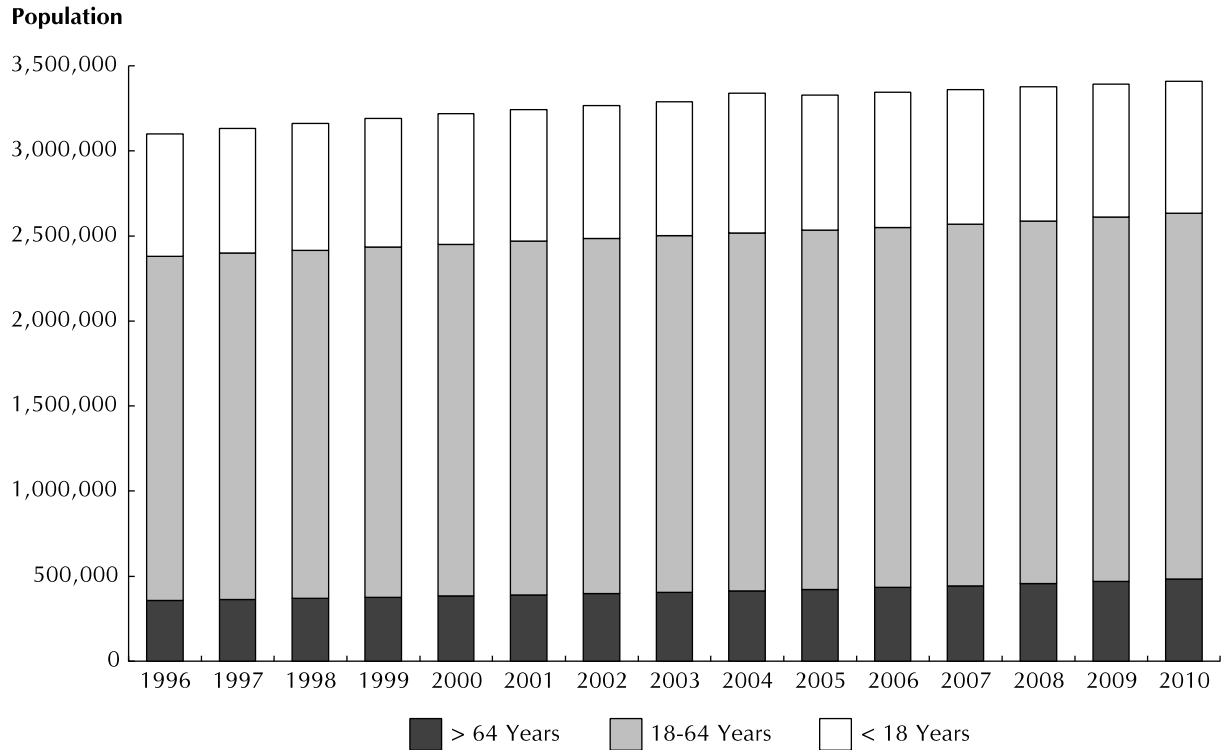
Expected growth rates vary significantly in the Bay Area. Experts expect the population to increase by just 2.4 percent in San Francisco County from 1997 to 2010, while in Santa Clara and San Mateo counties, they expect the population to grow by around 10 percent over the same period. Although San Francisco's expected median age of 45.9 years in 2010 is high, its expected growth among the elderly is just 14.3 percent, relative to 28.8 percent in San Mateo County and 48.1 percent in Santa Clara County.<sup>66</sup> On average, the population in the three-county Bay Area is expected to grow by just under 9 percent, while its elderly population will grow by about a third. Refer to Figure 1.9 for the projected population growth by age for the three counties listed above. Experts expect that the ten-county Bay Area will have similar growth levels, with overall expected population growth of 12.5 percent by 2010.

<sup>66</sup> San Mateo County's expected median age is 41.5 years and Santa Clara County's is projected to be 39.7 by 2010.



**Figure 1.9**

**Projected Population Growth by Age**  
*San Francisco, Santa Clara and San Mateo Counties*



Source: California Department of Finance, Demographic Research Unit

**Forecast of Managed Care Penetration**  
**Effect on Demand for Hospital Services**

As can be seen by the low occupancy rates in most Bay Area hospitals, the region is already experiencing a hospital bed surplus. Trends toward fewer hospital days are likely to continue as HMOs gain a larger share of the insured population and as medical groups consolidate and pursue more global capitation contracts. Consequently, the surplus is likely to persist until a large number of hospitals exit the market.

The current surplus of hospital beds in the ten-county Bay Area is approximately 2,400 beds, or about 11 average-size hospitals.<sup>67</sup> Underlying these figures is the assumption that hospitals will have an average 70 percent occupancy rate when

<sup>67</sup>The average size hospital in the ten-county Bay Area has 215 beds.

no oversupply exists. This is an occupancy rate at which most hospitals can be financially stable and have excess capacity to handle upsurges in patient loads.

The expected size of the oversupply in the future depends largely on the likely HMO share of the population. As HMOs gain incremental share, particularly among Medicare and Medi-Cal enrollees, the required number of beds is likely to decline further. For example, one could expect hospital days per 1,000 population to drop from the current 409 days for Medi-Cal enrollees to 258 days under the average HMO.

The HMOs' share of the population could quite easily increase from the current 49.2 percent level to 55 percent. Even if HMOs gain no incremental share among commercial enrollees, the HMOs' share of the population would increase to 55 percent, if 40 percent (up from 33 percent) of Medicare enrollees and one-third (up from 3 percent) of Medi-Cal enrollees are members of HMOs. At 55 percent HMO share, the expected surplus of hospital beds is about 3,000 beds, or the equivalent of 14 average-size hospitals.

The size of this expected oversupply could be substantially larger if hospital-utilization rates drop below average HMO levels to those achieved by large physician groups. Among the elderly, large physician groups have achieved hospital days per 1,000 of 891, compared with the HMOs' average of 1,578. Among the nonelderly, large physician groups typically maintain hospital day levels at 146 per 1,000, compared with 258 at average HMOs.<sup>68</sup>

Bay Area hospitals are therefore likely to face a period of considerable adjustment in which capacity must either be retired or reassigned to other uses. Merging into multihospital systems will not resolve the oversupply issue, although multihospital systems may be more willing to cut capacity than individual hospitals. During this period of oversupply, hospitals will continue to face considerable price pressure as payors and physician groups play hospitals off against one another when negotiating reimbursement rates.

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<sup>68</sup> *Medical Group Practice Digest 1996*, Hoechst Marion Roussel.

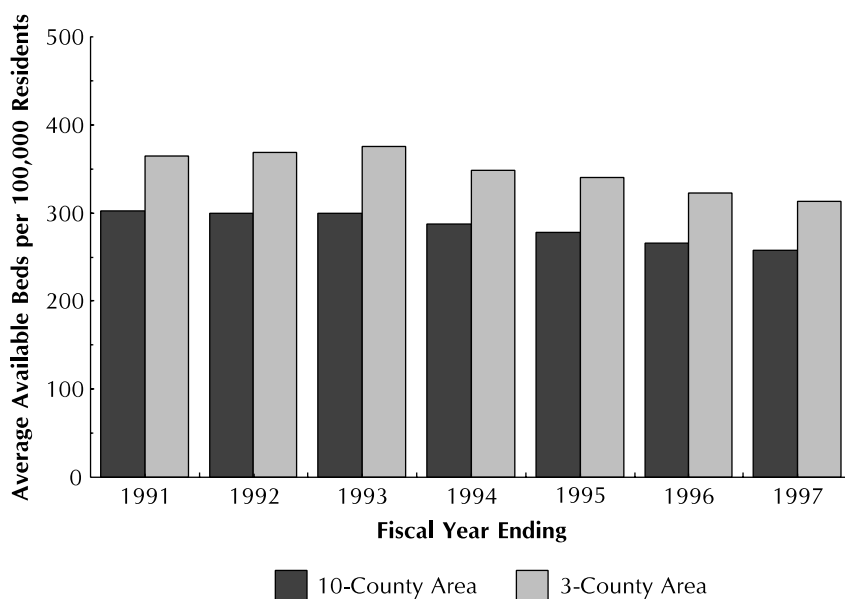
## Hospitals:

### Number and Size of Bay Area Hospitals

The number of acute-care hospitals in the Bay Area has declined, but not dramatically. From 1991 to 1997, only a net six hospitals shut down or converted to other uses, removing 1,386 beds from the market, or about 7 percent of available beds in 1991. As a result, average available beds per 100,000 residents have remained above the 250-bed level in the ten-county area, dropping less than 50 beds per 100,000 residents in seven years. As shown in Figure 1.10, in the three-county area, beds per 100,000 residents are higher at 313 but have also dropped by barely 50 over the seven-year period. Most hospitals in the Bay Area have fewer than 200 beds. Both UCSF's and Stanford's main facilities are among the largest facilities in the Bay Area, with just 460 available beds each.

**Figure 1.10**

**Average Available Beds per 100,000 Residents - 1991-1997**  
*10-County Bay Area Region vs. 3-County Region*



Source: OSHPD

## ***The Role of Hospital Systems***

To gain leverage with the large HMOs and physician groups, hospitals have sought to merge and affiliate with one another. Among Bay Area hospitals, few independent hospitals remain, and even these appear to be in the process of evaluating potential partners. As a result, multihospital systems are playing a larger role in the Bay Area. Multihospital systems often have an advantage in negotiating with health plans, because they can offer wide geographic coverage and often have lower costs and sophisticated information systems. Hospitals that fail to join a strong multihospital system may find it increasingly difficult to gain access to managed care patients unless they are able to offer unique and cost-effective services that are difficult to obtain from multihospital systems.

Recently, hospital systems have continued to acquire or lease a number of independent hospitals. For instance, Columbia/HCA entered the market with its purchase of Good Samaritan in San Jose. Voters approved Eden Medical Center's proposed affiliation with Sutter Health in April 1997.<sup>69</sup> Sequoia Hospital in Redwood City is now affiliated with Catholic Healthcare West.<sup>70</sup> Further, Tenet agreed to lease and manage San Pablo's Brookside Hospital, a district hospital, in January of 1997.<sup>71</sup>

Relationships have also been developing among multihospital systems. Sacramento-based Sutter Health merged with San Francisco's California Healthcare System hospital network in January of 1996. Kaiser has begun cooperating with other area multihospital systems. Last year, Kaiser started sending patients to Summit Medical Center in Oakland and Alta Bates Medical Center in Berkeley.<sup>72</sup> More involved alliances among multihospital systems, similar to those seen in Southern California, are also likely in the near future. In Los Angeles, Kaiser entered an agreement with Catholic Healthcare West (CHW) whereby Kaiser enrollees may be treated at CHW's St. Vincent Medical Center by Kaiser physicians and CHW may run Kaiser's inpatient operations at Kaiser's Baldwin Park Medical Center.<sup>73</sup>

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<sup>69</sup> John C. Cochrane, "California Journal," *Integrated Healthcare Report*, April 1997, p. 7.

<sup>70</sup> Sutter-CHS Working on Central Valley," *Integrated Healthcare Report*, July 1997, p. 14.

<sup>71</sup> "Tenet to Lease Brookside Hospital," *Integrated Healthcare Report*, January 1997, p. 22.

<sup>72</sup> Kaiser Slashes Budget & Staff," *Integrated Healthcare Report*, April 1997, p. 15.

<sup>73</sup> San Francisco Consolidation Moves to Next Level," *Integrated Healthcare Report*, January 1997, p. 28.

As this consolidation trend continues, just a few major systems could ultimately represent almost all Bay Area hospitals in negotiations with health plans and physician groups. This consolidation will allow hospitals to negotiate more effectively, but hospitals outside of these systems may find it quite difficult to obtain managed care contracts unless they offer unique and necessary services.

**Table C-2**

***Hospitals Owned by Systems in  
Ten-County Bay Area<sup>c</sup>***

	Number of Hospitals	
	1991-92	1995-96
Kaiser Foundation Hospitals	14	14
Catholic Healthcare West <sup>a</sup>	1	8
Sutter/CHS <sup>b</sup>	2	7
Tenet Healthcare <sup>c</sup>	0	5
Good Samaritan	0	3
Alameda County	1	2
City and County of San Francisco	2	2
Columbia/HCA	0	2
Eden Hospital	2	2
Mills-Peninsula Health System	2	NA <sup>d</sup>
Northbay	2	2
Stanford Health Services	1	2
Summit Medical Center	0	2
UCSF Hospitals	2	2

Note: Psychiatric hospitals are excluded from this list.

<sup>a</sup> As part of its June 1997 annual report, Catholic Healthcare West reports ownership of St. Francis Hospital, St. Louise Hospital, and Sequoia Hospital, in addition to the five hospitals listed in OSHPD's 1995-96 data set.

<sup>b</sup> Sutter merged with California Health Systems in 1996, thereby acquiring Alta Bates Medical Center, California Pacific Medical Center, Marin General Hospital, and Mills Peninsula Health System.

<sup>c</sup> In addition to those reported by OSHPD, Tenet also reports Brookside Hospital in San Pablo as one of its hospitals.

<sup>d</sup> Sutter merged with California Health Services in 1996, thereby acquiring Alta Bates Medical Center, Marin General Hospital, and Mills Peninsula Health System.

<sup>e</sup> Systems are the hospital systems owning two or more acute care hospitals per OSHPD 1995-96 data set.

Only 22 percent of hospitals in the Bay Area are investor-owned. The vast majority of hospitals are either government-controlled (16 percent) or private, nonprofit entities (62 percent). For example, the three major hospital systems in the Bay Area, Sutter/CHS, Catholic Healthcare West, and

Kaiser, are all nonprofit entities. Other significant hospital systems include UCSF, Stanford, UniHealth, and, recently, Columbia/HCA.

### ***Vertically Integrated Delivery Systems:***

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#### ***Large Integrated Delivery Systems***

A number of Bay Area multihospital systems have further strengthened their position by affiliating or merging with other types of health care providers and facilities such as medical groups, outpatient care centers, home-health networks, and long-term care facilities. These fully integrated delivery systems are capable of providing services across the continuum of care from preventive and primary care through post-acute and long-term care. The three largest multihospital systems in the Bay Area are all employing this strategy to some extent.

#### ***Kaiser Foundation***

Kaiser, the largest HMO in California, started as a staff model HMO, where the HMO directly employs physicians on a salary basis and owns its facilities. As such, Kaiser owns most of the hospitals where its members receive care. Fourteen of these hospitals are in the ten-county Bay Area.<sup>74</sup> Kaiser is exploring the idea of divesting its hospital assets and buying hospital services from other providers. In addition, Kaiser's member physicians are part of the region's Permanente Medical Group.

#### ***Catholic Healthcare West***

CHW, which is based in San Francisco, owns eight hospitals in the ten-county Bay Area, in addition to a long-term care facility.<sup>75</sup> CHW has also affiliated with Hill Physicians Medical Group, MedPartners, San Francisco Medical Group, and Western Medical Associates.

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<sup>74</sup> Kaiser's Bay Area hospitals are located in Hayward, Martinez, Oakland, Redwood City, Richmond, San Francisco, San Rafael, Santa Clara, Santa Rosa, Santa Teresa, South San Francisco, Vallejo, Walnut Creek, and one other in the region (per data from the *Office of Statewide Health Planning and Development*).

<sup>75</sup> CHW's hospitals include Dominican Santa Cruz, O'Connor Hospital, Seton Medical Center, St. Mary's Medical Center, St. Francis Hospital, St. Louise Hospital, and Sequoia Hospital (per CHW 1997 annual report).

### ***Sutter/CHS***

Sacramento-based Sutter has contracts with physician groups, outpatient clinics and home health networks. Sutter has seven hospitals in the ten-county Bay Area.<sup>76</sup> In addition to physician groups under its own name, Sutter is affiliated with Palo Alto Medical Foundation, Camino Medical Group, Bay Physicians, California Pacific Medical Group, Marin IPA, and Mills-Peninsula Medical Group.

### ***Long-Term Contracting***

Vertical integration between health plans and providers through common ownership is on the decline in California. Staff model HMOs such as Kaiser and Foundation have been spinning off their hospitals and medical groups in an effort to compete better with network and IPA HMOs that can purchase hospital services cheaply on the "spot market." Sutter/CHS has the only provider-owned HMO in Northern California.

Instead, some HMOs are turning to long-term contracts with providers. For example, FPA Medical Management, Inc., agreed to enter into ten-year fixed-payment agreements with PacifiCare for all its similar health care services. FPA also signed a letter of intent with Foundation Health Systems, Inc., in April 1997 to enter into long-term global capitation agreements with FHS health plans nationwide.<sup>77</sup> PacifiCare also signed its first ten-year contract with a hospital in Long Beach this year. PacifiCare's contracts with hospitals are typically only from one to two years.<sup>78</sup>

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<sup>76</sup> Sutter's Bay Area hospitals include Alta Bates Medical Center, California Pacific Medical Center, Sutter Delta Medical Center, Sutter Solano Medical Center, Marin General Hospital, Novato Community Hospital, Mills-Peninsula Health Services, and Camino Healthcare (per Sutter/CHS web site).

<sup>77</sup> John C. Cochrane, "California Journal," *Integrated Healthcare Report*, April 1997, p. 7.

<sup>78</sup> Memorial Health Services is the Long Beach-based hospital. "Memorial Health Services and PacifiCare Sign 10-Year Agreement," *Integrated Healthcare Report*, February 1997, p. 17.

# Appendix D

## *Planned Contributions of Assets, Liabilities, and Equity as a Percentage of SHS/UCSF Combined as of March 31, 1997 (in thousands)*

	SHS*	Percent of Combined Total	UCSF <sup>a</sup>	Percent of Combined Total	SHS/UCSF Combined
<b>Assets</b>					
Current assets and investments	\$504,471	66%	\$259,503	34%	\$ 763,974
Other assets	27,981	68	12,976	32	40,957
Property, plant and equipment	353,113	56	274,857	44	627,970
<b>Total Assets</b>	<b>\$885,565</b>	<b>62%</b>	<b>\$547,336</b>	<b>38%</b>	<b>\$1,432,901</b>
<b>Liabilities and Equity</b>					
Current liabilities	\$200,348	59%	\$138,502	41%	\$ 338,850
Other accrued liabilities	86,120	100	--	--	86,120
Long-term debt	116,505	84	22,739	16	139,244
Total liabilities	402,973	71	161,241	29	564,214
Equity	482,592	56	386,095	44	868,687
<b>Total Liabilities and Equity</b>	<b>\$885,565</b>	<b>62%</b>	<b>\$547,336</b>	<b>38%</b>	<b>\$1,432,901</b>

Source: Audited financial statements as of March 31, 1997.

\*Stanford Health Services' (SHS) numbers include the assets, liabilities, and equity of the Lucile Salter Packard Children's Hospital at Stanford which merged into SHS on January 17, 1997.

<sup>a</sup>The above published data for UCSF includes its investment in the Langley Porter Psychiatric Institute in the amount of \$10.5 million which is not proposed to be included in the merger. In addition, UCSF informed us that its data excludes the assets, liabilities, and equity of the faculty practice program (FPP) of the UCSF School of Medicine. The assets and liabilities of the FPP, and its equity totaling approximately \$13.2 million (unaudited) is proposed to be included in the merged company. If the UCSF financial data were adjusted to reflect these items, its assets and equity would increase by a net amount of approximately \$2.7 million.



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# Appendix E

## Net Operating Income of the University of California, San Francisco Medical Center Between 1992 and 1996 (in thousands)

	1992	1993	1994	1995	1996 <sup>a</sup>	Total
Net income	\$34,584	\$24,908	\$22,282	\$33,424	\$28,051	\$143,249
Distribution of earnings to medical school <sup>b</sup>	25,200	25,500	28,300	25,700	22,700	127,400
Langley Porter Psychiatric Institute <sup>c</sup>	-	297	(269)	(242)	(1,039)	(1,253)
Recurring net income before adjustments to reflect private nonprofit accounting principles	59,784	50,705	50,313	58,882	49,712	269,396
Adjustments to reflect private nonprofit accounting principles						
Post-retirement health care benefits <sup>d</sup>	(3,628)	(3,879)	(3,849)	(3,799)	(3,682)	(18,837)
Total adjustments	(3,628)	(3,879)	(3,849)	(3,799)	(3,682)	(18,837)
Recurring net income	56,156	46,826	46,464	55,083	46,030	250,559
Nonoperating revenues and expenses						
Investment earnings	299	(383)	(1,457)	(4,961)	(7,317)	(13,819)
Interest expenses	960	1,531	1,709	2,839	3,137	10,176
Clinical teaching support	(13,904)	(13,655)	(12,765)	(10,015)	(10,515)	(60,854)
Net nonoperating revenues	(12,645)	(12,507)	(12,513)	(12,137)	(14,695)	(64,497)
<b>Net Operating Income</b>	<b>\$43,511</b>	<b>\$34,319</b>	<b>\$33,951</b>	<b>\$42,946</b>	<b>\$31,335</b>	<b>\$186,062</b>

Source: Audited financial statements for the fiscal years ended June 30, 1992 through June 30, 1996.

<sup>a</sup>The most recent audited financial data available for the University of California, San Francisco (UCSF) is as of March 31, 1997. For the nine months ended March 31, 1997, net income totaled \$20,640.

<sup>b</sup>These distributions are based on information provided by UCSF. The amounts for 1992 through 1996 represent UCSF's estimate of expenses in the UCSF financial statements that represent earnings distributed to the medical schools.

<sup>c</sup>The Langley Porter Psychiatric Institute (LPPI) is not proposed to be included in the merger. Therefore, the LPPI net income has been removed.

<sup>d</sup>Represents 1.57 percent of salaries and benefits, as estimated by the University of California.

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# Appendix F

## Net Operating Income of Stanford Health Services<sup>a</sup> Between 1992 and 1996 (in thousands)

	1992	1993	1994 <sup>b</sup>	1995	1996 <sup>c</sup>	Total
Net income	\$27,051	\$18,983	\$(12,073)	\$ 4,576	\$34,212	\$ 72,749
Distribution of earnings to medical schools <sup>d</sup>	22,500	23,100	23,800	32,700	29,400	131,500
Net income before adjustments to reflect private nonprofit accounting principles	49,551	42,083	11,727	37,276	63,612	204,249
Adjustments to reflect private nonprofit accounting principles <sup>e</sup>	--	--	--	--	--	--
Net income before nonrecurring transactions	49,551	42,083	11,727	37,276	63,612	204,249
Nonrecurring transactions						
Gain on sale of pediatric unit	--	(19,700)	--	--	--	(19,700)
Loss on defeasance of debt <sup>f</sup>	--	10,345	--	--	--	10,345
Cost of merging affiliates	--	--	3,999	--	7,585	11,584
Loss on investment in medical affiliate	--	--	--	1,701	--	1,701
Loss on guarantee of debt <sup>g</sup>	--	--	--	6,505	--	6,505
Nonrecurring Transactions	--	(9,355)	3,999	8,206	7,585	10,435
Recurring net income	49,551	32,728	15,726	45,482	71,197	214,684
Nonoperating revenues and expenses						
Investment earnings	(15,169)	(22,652)	(12,907)	(20,484)	(39,071)	(110,283)
Interest expense	9,115	7,795	7,314	10,622	10,378	45,224
Net nonoperating revenues	(6,054)	(14,857)	(5,593)	(9,862)	(28,693)	(65,059)
<b>Net Operating Income</b>	<b>\$43,497</b>	<b>\$17,871</b>	<b>\$10,133</b>	<b>\$35,620</b>	<b>\$42,504</b>	<b>\$149,625</b>

Source: Audited financial statements for the fiscal years ended August 31, 1992 through August 31, 1996.

<sup>a</sup>Stanford Health Services' (SHS) numbers include the assets, liabilities, and equity of the Lucile Salter Packard Children's Hospital (LSPCH) at Stanford which merged into SHS on January 17, 1997.

<sup>b</sup>During the fiscal year ended August 31, 1994, the expense for uncollectible accounts increased to \$27.6 million, as compared to \$14.3 million for 1993. SHS management attributes a portion of this increase to its conversion to a new patient billing and registration system that occurred one month prior to the beginning of fiscal year 1993-94.

<sup>c</sup>The most recent financial data available for SHS is as of March 31, 1997, which includes the operations for the LSPCH for the period subsequent to January 31, 1997. For the seven months ended March 31, 1997, net income for SHS totaled \$20,774. Pro-forma operating results assuming that the LSPCH had merged September 1, 1996 (the beginning of the fiscal year) show net income of \$31,345 for the seven months ended March 31, 1997.

<sup>d</sup>These distributions are based on information provided by SHS as its estimate of expenses in the SHS financial statements that represent earnings distributed to the medical school. SHS informs us that the amount increases between 1994 and 1995 because faculty practice program transfers to the medical school were not included in the SHS financial statements until 1995.

<sup>e</sup>SHS uses generally accepted accounting principles applicable to private nonprofit hospitals; therefore, no adjustments are necessary.

<sup>f</sup>A defeasance of debt is the early payoff of long-term debt by placing sufficient funds into an escrow account to service the bond principal and interest.

<sup>g</sup>SHS determined that its advances to a medical group were uncollectible and that SHS would be required to repay certain amounts borrowed by the medical group under a line-of-credit guaranteed by SHS.

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# Appendix G

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## *Operating and Financial Performance of UCSF and SHS*

In this appendix, we compare the operating and financial performance of the University of California, San Francisco (UCSF) and the Stanford Health Services (SHS) with three benchmarks using data reported to the Office of Statewide Health Planning and Development (OSHPD).<sup>79</sup> One benchmark, “university hospitals,” includes six university teaching hospitals in California other than UCSF and SHS.<sup>80</sup> Another benchmark, “large facilities,” includes 25 (24 after 1991) large nonuniversity teaching hospitals that provide complex services and children’s specialty care in the ten-county Bay Area. The final benchmark, the “ten-county area,” includes the 106 (declining to 97 in 1995) acute-care hospitals in the ten-county Bay Area as reported data to OSHPD.<sup>81</sup>

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<sup>79</sup> We reconciled OSHPD financial statements with audited financial statements of UCSF, Stanford, and the Lucile Salter Packard Children’s Hospital at Stanford (LSPCH) for fiscal years 1994 and 1995. Adjustments to OSHPD reported statements consisted of the elimination of intercompany accounts receivable and payable between the UCSF Medical Center and UCSF/Mount Zion, and the inclusion of restricted fund balances as assets of Stanford and LSPCH. While some classification differences exist between OSHPD reported income statements and audited income statements, net income did not differ materially from these two sources for any facility for any year. Common revenue and expense categories may make OSHPD income statements more comparable across entities than audited statements. SHS includes Stanford University Hospital and LSPCH. UCSF includes the UCSF Medical Center and UCSF/Mount Zion. Since 1993, the net income (loss) of Langley Porter Psychiatric Institute is reported as nonoperating income (loss) on the income statement of the UCSF Medical Center. Because this amount was immaterial with regard to presentation in graphs and charts, no adjustment was made to the OSHPD financial statements of UCSF to eliminate Langley Porter Psychiatric Institute. For details of the impact of Langley Porter Psychiatric Institute on the operations of UCSF, see Appendix E.

<sup>80</sup> University hospitals include University of California, Davis (UCD) Medical Center, University of California, Los Angeles (UCLA) Medical Center, Los Angeles County/University of Southern California (USC) Medical Center, University of California, Irvine (UCI) Medical Center, Loma Linda University Medical Center, and University of California, San Diego (UCSD) University Hospital.

<sup>81</sup> All acute care hospitals report operating statistics to OSHPD. Total facilities in the ten-county area, excluding state hospitals, declined from 106 in 1991 to 97 in 1995. “Comparable” facilities also report financial data to OSHPD, while certain “non-comparable” hospitals, primarily Kaiser facilities, do not report financial results. The total number of comparable facilities in the ten-county area declined from 93 in 1991 to 84 in 1995. Data for 1991 through 1995 in the accompanying graphs are from annual reports for OSHPD reporting years 1991/1992 through 1995/1996. Data for 1996 are from quarterly reports for the period July 1995 through June 1996. Data for 1997 are annualized estimates based on the three quarter period July 1996 through March 1997. According to OSHPD, quarterly data may be subject to revision in the annual reports. Therefore, data shown for 1996 and 1997 should be considered preliminary.

## ***Operating Performance:***

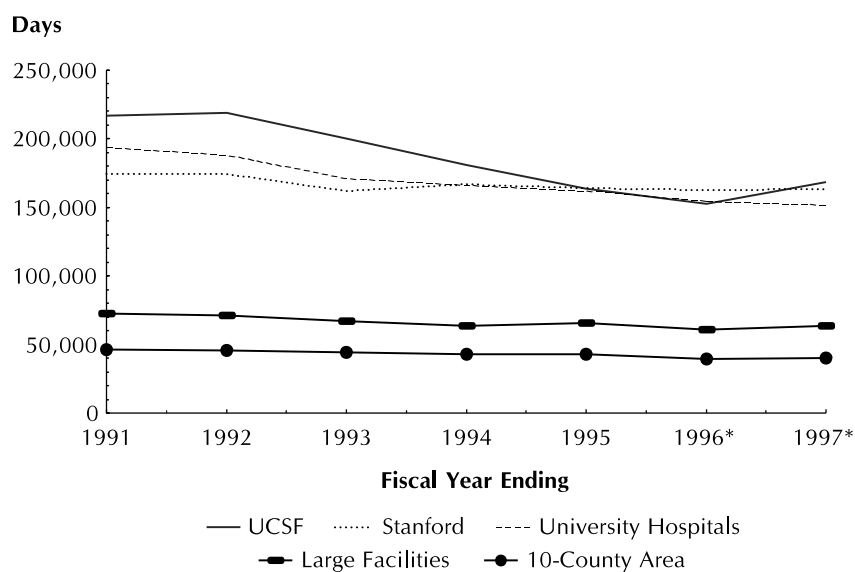
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### ***Inpatient Days***

Throughout the 1990s, we see that falling demand for inpatient hospital services is reflected in the downward trend in the total number of inpatient days as shown in Figure 2.1. Between 1991 and 1996, Stanford was more successful than UCSF in maintaining daily census. Specifically, total inpatient days at UCSF fell from 217,000 in 1991 to 152,000 in 1996, a decline of 30 percent. In comparison, over the same period, inpatient days at SHS declined from 174,000 to 163,000, a decline of just 7 percent. Further, since 1993, inpatient days at Stanford have been essentially unchanged. Data for the first three quarters of fiscal 1997, on which the 1997 forecast is based, indicate that UCSF will show an increase in patient days in fiscal 1997. We forecast a similar increase of 2 percent to 4 percent for both the large-facility and ten-county area benchmarks.

***Figure 2.1***  
***Average Annual Inpatient Days – 1991 - 1997***

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\*1996 and 1997 based on quarterly data  
1997 estimated based on three quarters of actual results

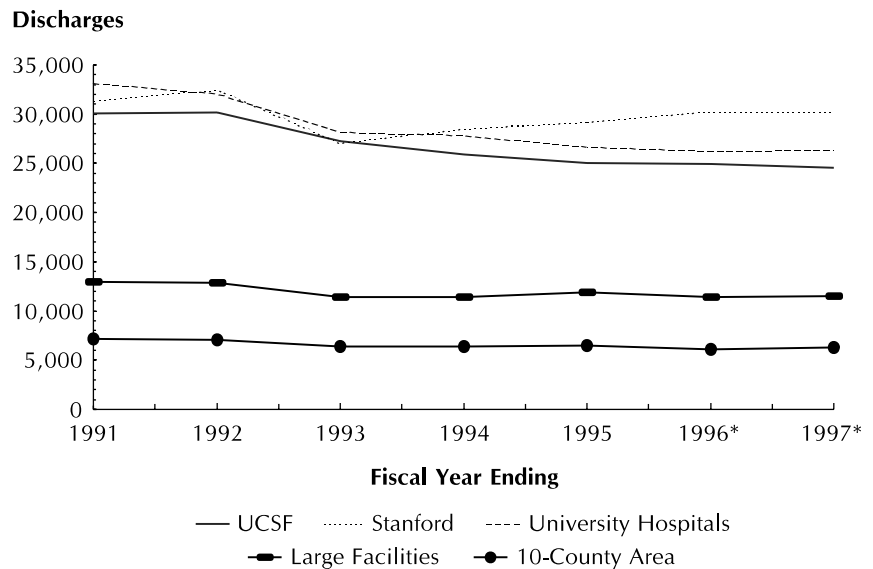
Source: OSHPD

### ***Hospital Discharges***

Total inpatient days reported above are the product of the number of discharges (or admissions) and the average length of stay. When hospitals are compensated on a fixed fee per case,

as under Medicare's Diagnostic-Related Groups (DRG) system, the number of discharges and average length of stay are better indicators of performance than the number of inpatient days. Our consultants found that total discharges at Stanford are expected to exceed total discharges at UCSF by approximately 5,000, or 23 percent, in 1997. The total number of discharges at UCSF has declined 19 percent since 1992, though the rate of decline has slowed since 1994. In contrast to both UCSF and other university hospitals, total discharges at Stanford have increased 12 percent, since 1993. As shown in Figure 2.2, after declining in 1992 and 1993, total discharges at all Bay Area hospitals have been relatively flat.

**Figure 2.2**  
**Average Annual Discharges – 1991 - 1997**



\*1996 and 1997 based on quarterly data  
1997 estimated based on three quarters of actual results

Source: OSHPD

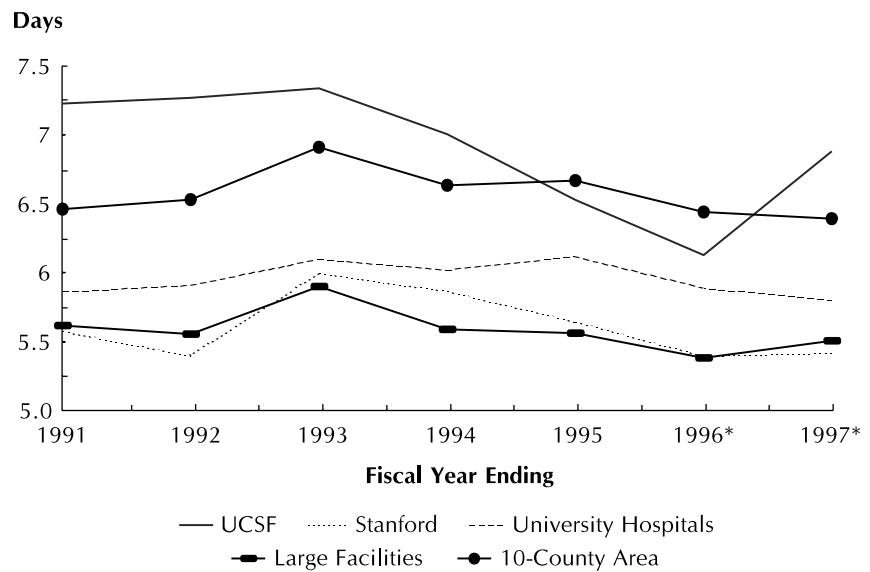
**Average Lengths of Stay**

After increasing from 1991 through 1993, average lengths of stay have generally been declining at Bay Area hospitals. UCSF showed a significant reduction between 1993 and 1996, though the most recent data suggest that the length of stay will increase



at UCSF in 1997.<sup>82</sup> As shown in Figure 2.3, Stanford has also shown significant, though less dramatic, reductions in the average length of stay since 1993. However, average lengths of stay may not be directly comparable across different facilities because of differences in patient mix and the types of procedures performed at different hospitals. Even for a single institution, changes in the average length of stay may be the result of changes in patient mix over time, rather than changes in the efficiency of hospital operations.

**Figure 2.3**  
**Average Length of Stays – 1991 - 1997**



\*1996 and 1997 based on quarterly data

1997 estimated based on three quarters of actual results

Source: OSHPD

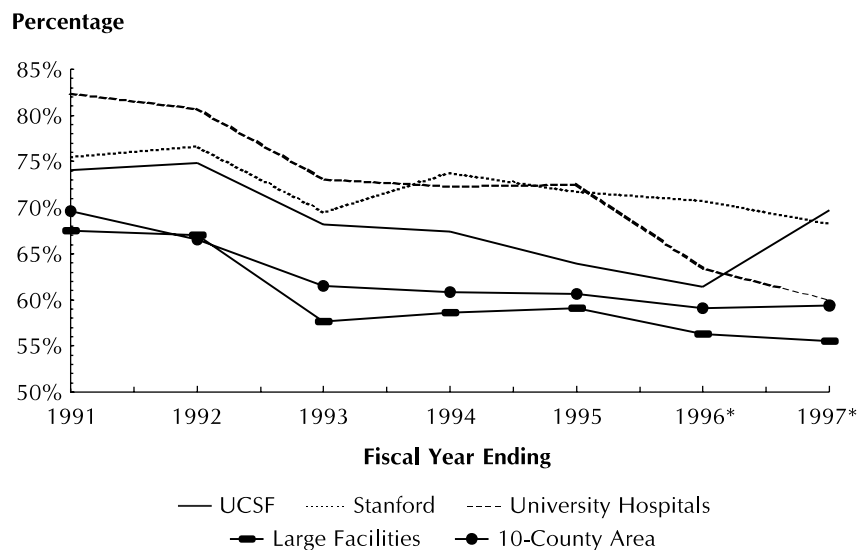
### **Occupancy Rates (on Available Beds)**

While the number of hospitals and available hospital beds in the Bay Area has declined significantly since 1991, the demand for inpatient services has fallen even faster. As a result, occupancy rates at Bay Area hospitals have dropped over the period from nearly 70 percent in 1991 to 59 percent in 1997. While both Stanford and UCSF have experienced higher

<sup>82</sup> UCSF internal reports indicate a somewhat smaller increase in average length of stay from 6.0 days in 1996 to 6.3 days in 1997. As shown in Figure 2.3, our forecast increase for 1997, based upon three quarters of OSHPD data, is somewhat higher. Interviews with UCSF personnel suggest that changes in length of stay resulted from (1) increased pediatric tertiary/quaternary referrals from managed care contracts and from the closure of a large pediatric physician group, (2) introduction of relatively long stay stroke and vascular surgery programs, and (3) partial retirement of a faculty physician that generated a particularly large volume of short stay admissions.

occupancy rates than the average for other facilities in the region, they too have suffered declines. Figure 2.4 shows that between 1991 and 1996 UCSF's occupancy rate declined 13 percent (from 74 percent to 61 percent), while Stanford's occupancy rate declined just 4 percent (from 75 percent to 71 percent). Partial-year data for 1997 indicate that growth in inpatient days at UCSF resulting from longer average lengths of stay may close the gap in occupancy rates between the two hospitals.

**Figure 2.4**  
**Average Occupancy Rates on Available Beds – 1991 - 1997**



\*1996 and 1997 based on quarterly data  
1997 estimated based on three quarters of actual results

Source: OSHPD

### Outpatient Visits

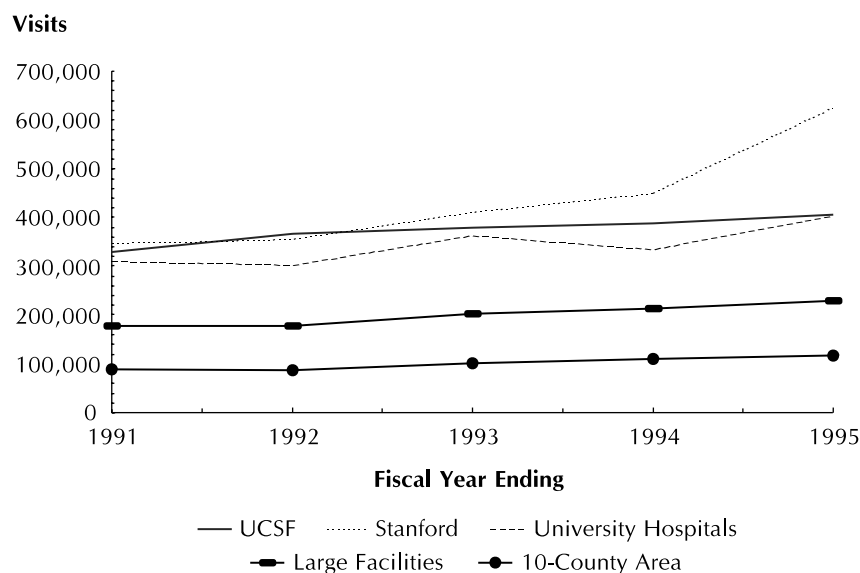
In contrast to falling demand for inpatient services, demand for outpatient services is growing. Between 1991 and 1995 outpatient visits at Stanford facilities increased 80 percent from 347,000 to 625,000.<sup>83</sup> Much of this growth can be attributed to the acquisition of Menlo Health Alliance, an outpatient medical clinic, by SHS in 1995. By comparison, outpatient visits at UCSF have increased 24 percent over the period from 329,000 in 1991 to 407,000 in 1995.<sup>84</sup> As shown

<sup>83</sup> Outpatient visits as reported by OSHPD in quarterly reports can vary materially from the values reported in the more accurate annual reports. For this reason, we have not used quarterly data to estimate 1996 or 1997 results involving outpatient visits.

<sup>84</sup> UCSF did not report its outpatient visits to OSHPD in a manner consistent with other facilities. The number of outpatient visits reported here was supplied by UCSF and excludes homecare visits which were not available for years prior to 1995.

in Figure 2.5, a similar upward trend is apparent in outpatient visits at other hospitals in the region and other university hospitals.

**Figure 2.5**  
**Average Outpatient Visits – 1991 - 1995**



Source: OSHPD and UCSF

### **Sources of Hospital Revenue:**

#### **Revenue per Unit of Service**

SHS earned greater net inpatient revenue per inpatient day (\$2,795) than either UCSF (\$2,324) or the average of other university hospitals (\$2,480) in 1995. As expected, nonuniversity hospitals in the Bay Area realize significantly lower revenue per inpatient day than university teaching hospitals. Differences in revenue (and cost) per unit across different types of institutions reflect, in part, differences in the complexity and severity of cases. University hospitals typically handle more complex cases of greater severity and therefore incur higher costs and earn greater revenue per day or per case.<sup>85</sup> Other factors affecting revenue per day include the mix

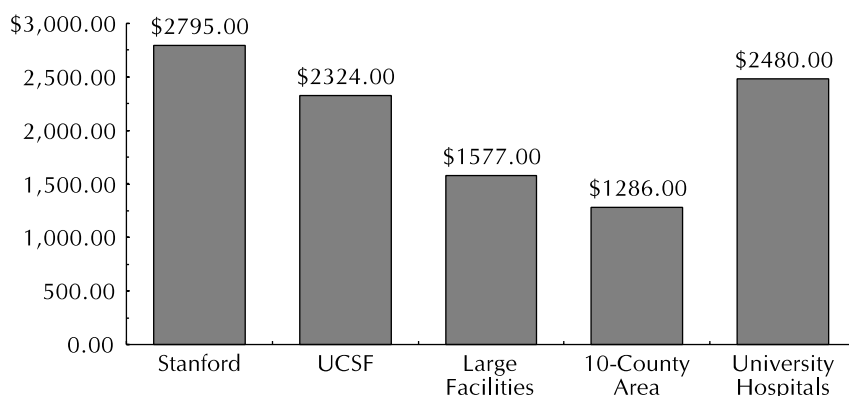
<sup>85</sup> Case mix indices have been developed which attempt to measure differences in the case complexity of different hospitals—higher index values indicating greater average complexity. For example, the case mix index published by the University Hospital Consortium reports case mix indices of 1.3600 for SHS, 1.6508 for UCSF, and 1.2 for the median California hospital in 1995. While these case mix indices contain some information, it is doubtful that they fully capture differences in average case complexity and severity. Further, they do not purport to measure differences in quality of care, outcomes, or other factors affecting both revenue and costs. They are properly considered as only rough indicators of one determinant of revenue and costs.

of payors (Medicare, Medi-Cal, health maintenance organizations, etc.), level of charity care, quality of care, level of patient service, and competitive conditions within the hospital's immediate market area.

Stanford included its faculty practice program in its financial statements beginning in 1995, while the faculty practice at UCSF was not included in UCSF's financial statements for any year. To ensure that the analysis above is not skewed by this difference, we calculated net inpatient revenue per inpatient day for 1993 and 1994.<sup>86</sup> Although our calculations confirm that Stanford realized greater net inpatient revenue per inpatient day than UCSF prior to 1995, it did not realize consistently higher revenue per day than other university hospitals in the State.

**Figure 2.6**

**Net Inpatient Revenue Per Inpatient Day - 1995**



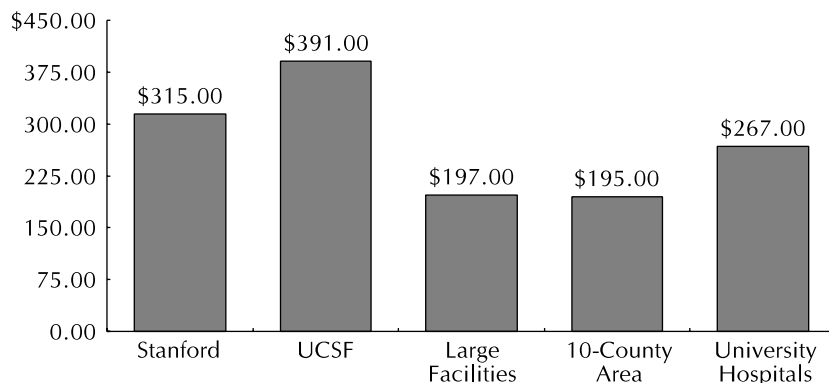
Source: OSHPD

For outpatient services, UCSF realizes greater outpatient revenue per patient visit (\$391) than Stanford (\$315). However, as shown in Figure 2.7, both entities are well above the average for other facilities in the Bay Area and other university hospitals in California.

<sup>86</sup> The basis on which OSHPD estimated net inpatient revenue was different in 1993 and subsequent years than in years prior to 1993. Comparisons of net inpatient revenue per day were thus limited to the period 1993 to 1995.

**Figure 2.7**

**Net Outpatient Revenue Per Visit – 1995**



Source: OSHPD and UCSF

**Patient Volume and Revenue  
by Type of Payor**

Figure 2.8 shows the percent of patient days by type of payor.<sup>87</sup> Compared with UCSF, Stanford has a larger proportion of patients from third-party and other payor categories. Although UCSF has a larger proportion of Medi-Cal patients, both institutions have similar proportions of Medicare patients.

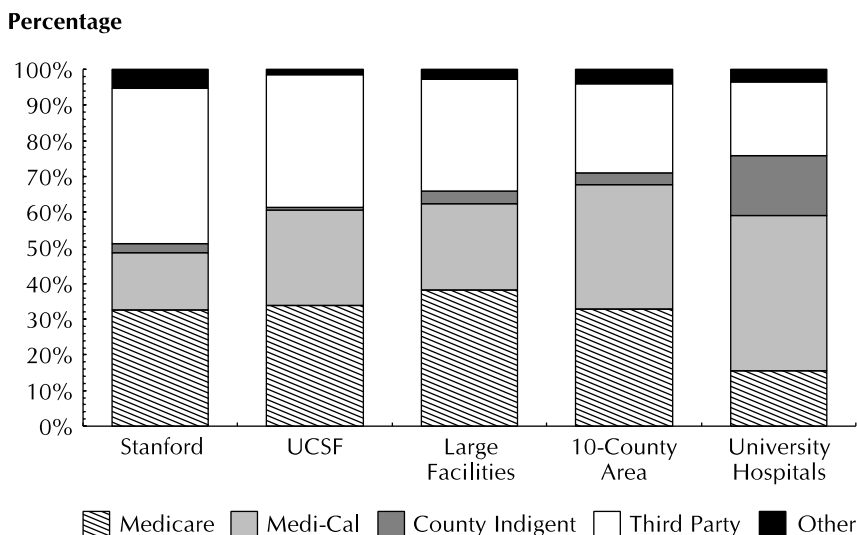
Both Stanford and UCSF may be at risk of losing Medi-Cal patients as beneficiaries are converted to managed care plans in the coming months. Because of their relative proportions of Medi-Cal patients, UCSF's exposure to this risk may be

<sup>87</sup> OSHPD reports data for the following payor categories:

- Medicare: The third-party reimbursement program administered by the Social Security Administration that underwrites the medical costs of persons 65 and over. Medicare patients enrolled in managed care programs funded by Medicare are included in the third-party payor category.
- Medi-Cal: The federally-aided, State operated Medicaid program which provides medical benefits to low-income persons. Medi-Cal patients enrolled in managed care programs funded by Medi-Cal are included in the third party payor category.
- County Indigent: Indigent patients covered under the California Welfare and Institutions Code Section 17000, or all indigent patients for which a county is responsible.
- Third-party: Patients covered by a variety of third-party contractual purchasers including HMO and preferred provider organization (PPO) contracts, commercial insurance, workers' compensation, Short-Doyle, and any managed care contracts funded by Medicare or Medi-Cal.
- Other: All patients not sponsored by any form of third-party health care coverage including self-pay patients, indigent patients who are not the responsibility of a county and, at UC hospitals, patients whose care is paid for by clinical teaching support (an appropriation from the State of California to UCSF).

considered greater than Stanford's compared with other hospitals in the Bay Area. However, neither entity relies upon Medi-Cal for a particularly large share of its patients. Compared with the average for other university hospitals, both Stanford and UCSF show lower proportions of Medi-Cal and county indigent patients. This is largely the result of exceptionally high levels of Medi-Cal and indigent care at Los Angeles County/University of Southern California Medical Center and University of California, Irvine Medical Center reflecting these hospitals' roles as the major providers of care for the underinsured in their communities.

**Figure 2.8**  
**Percent of Total Inpatient Days by Type of Payor - 1995**



Source: OSHPD

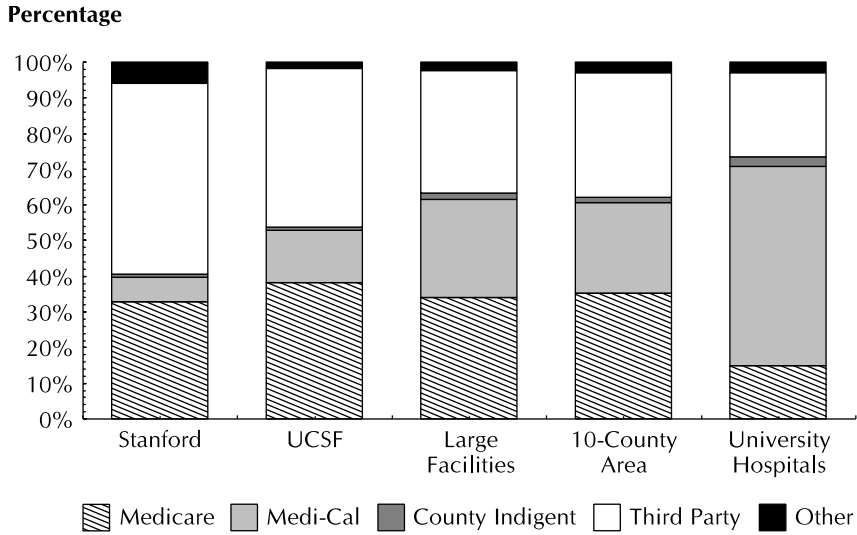
In contrast to Figure 2.8, which shows inpatient volume by type of payor, Figure 2.9 shows inpatient revenue by type of payor. In general, Figure 2.9 highlights the importance of Medicare and third-party payors as sources of revenue to both entities. Medicare represents approximately 38 percent of UCSF's inpatient revenue compared to 33 percent of Stanford's. The recently signed federal balanced-budget package will reduce Medicare reimbursements to both entities. Specifically, management's preliminary estimates indicate that they expect combined UCSF/Stanford revenue to decline by between \$10 million and \$15 million in fiscal year 1997-98 as a result of this legislation.<sup>88</sup>

<sup>88</sup> Based upon a memorandum from Larry Smith, Chief Financial Officer of UCSF.

In contrast, Medi-Cal, while representing a significant volume of patients, provides a much smaller proportion of total revenue. This reflects both lower payment levels for comparable services under Medi-Cal and differences in case mix across these payor categories.

**Figure 2.9**

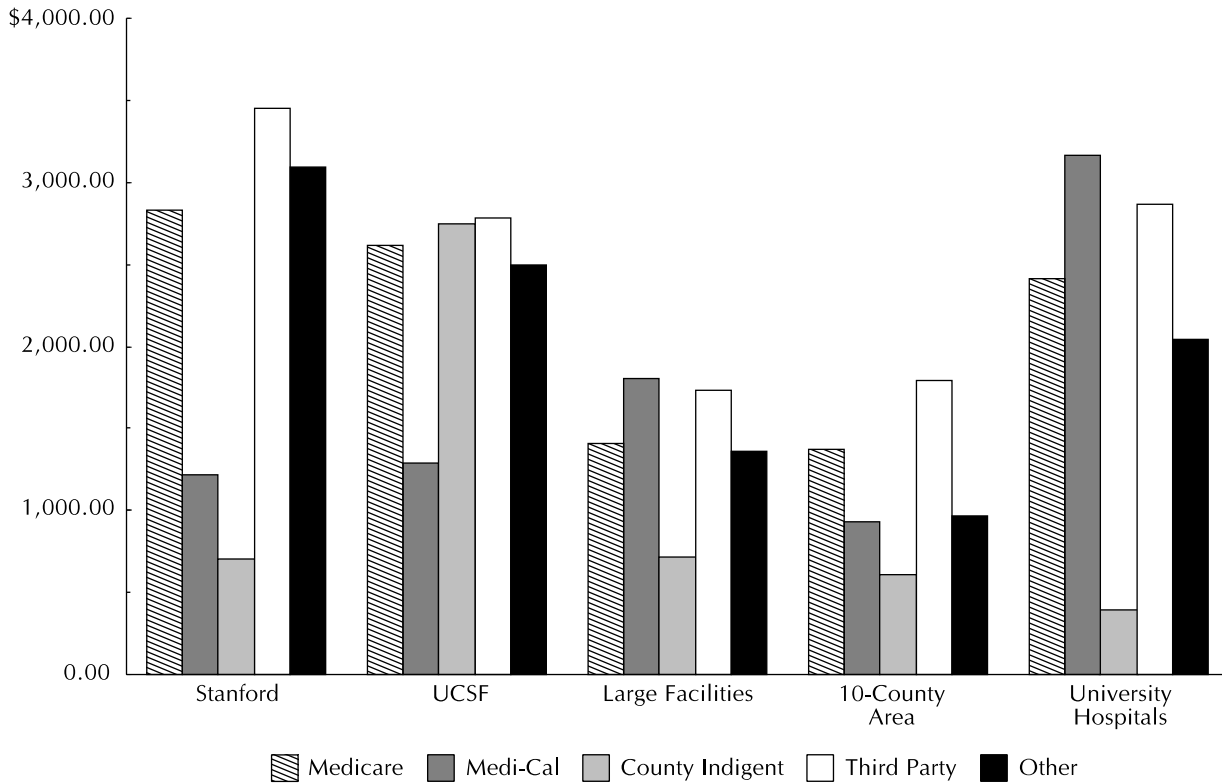
**Net Inpatient Revenue By Payor Type - 1995**



Source: OSHPD

Figure 2.10 summarizes the data on patient volume and revenue by presenting net patient revenue per day by type of payor. Stanford realizes significantly greater revenue per day from third-party payors (\$3,448) than does UCSF (\$2,788). Medicare revenue per day is also somewhat higher at Stanford (\$2,826) than at UCSF (\$2,614). Medi-Cal revenue per day is comparable at Stanford (\$1,217) and UCSF (\$1,285) and is significantly below the other two major sources of revenue.

**Figure 2.10**  
**Net Inpatient Revenue Per Day by Payor Type - 1995**



Source: OSHPD

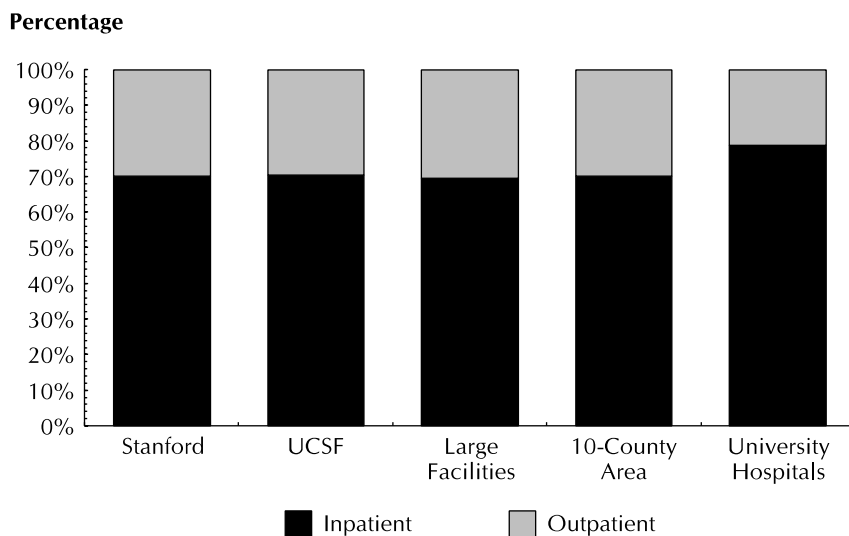
**Revenue by Type of Service**

As demand for inpatient services has declined, the proportion of hospital revenue contributed by outpatient services has grown. As of fiscal 1995, 30 percent of Stanford's revenue was from outpatient services compared to 29 percent for UCSF. As shown in Figure 2.11, these proportions are consistent with those of other hospitals in the Bay Area, but somewhat greater than other university hospitals.



**Figure 2.11**

**Net Inpatient Revenue vs. Net Outpatient Revenue – 1995**



Source: OSHPD

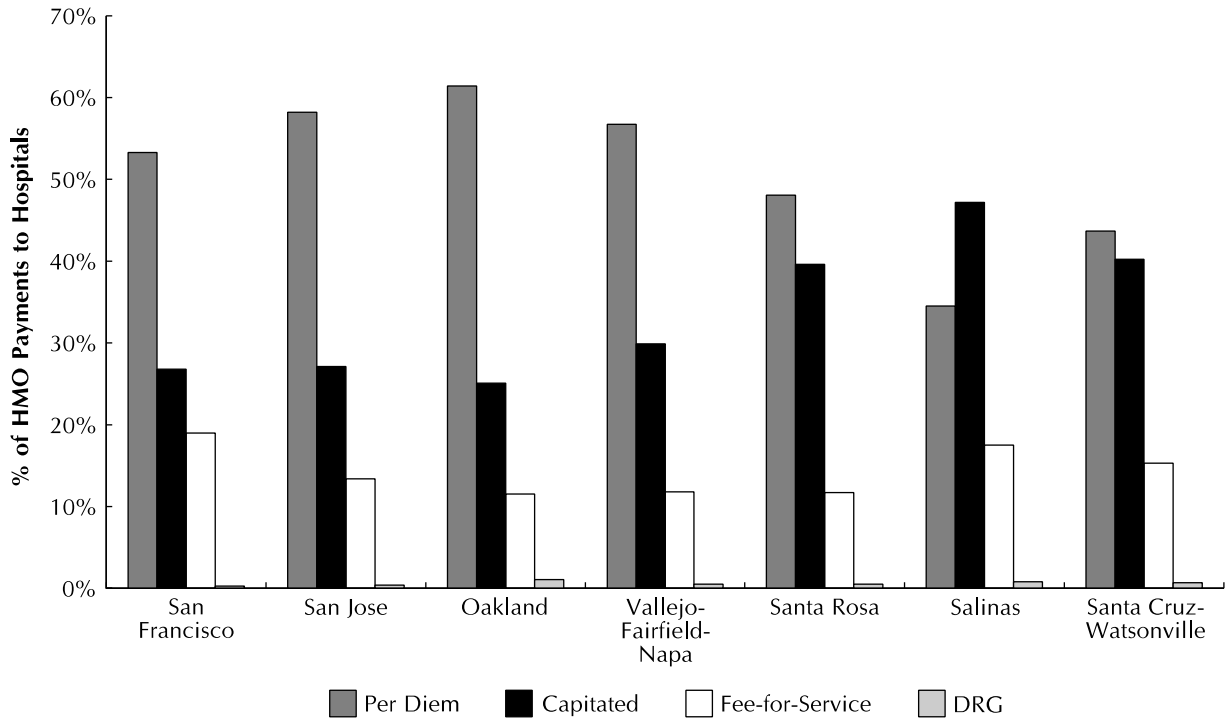
**HMO Payment Methods**

The method by which a hospital is compensated will affect its incentives in selecting patient treatment methods and controlling hospital costs. If, for example, a hospital is capitated (the hospital receives a fixed fee for all medical services provided), there may be a financial incentive to substitute outpatient for inpatient treatment (thereby lowering total admissions), to shorten the length of stay in the event of admission, or to generally reduce hospitalization costs where possible. Figure 2.12 summarizes how hospitals in the Bay Area are currently compensated under contracts with HMOs. Per diem rates are still the most common method of compensation, followed by capitation and fee for service arrangements. Across all payor types, approximately 10 percent of Stanford’s cases and 5 percent of UCSF’s cases are compensated under capitation arrangements.<sup>89</sup> For these cases, the hospitals can generally benefit directly from reducing patient admissions, lengths of stay, or hospitalization costs. Per diem and per case rates are also common methods of compensation for both organizations.

<sup>89</sup> Based on interviews with Managed Care Contracting Officers at SHS and UCSF.

**Figure 2.12**

**HMO Payment Methods to Hospitals – July 1, 1996**



Source: InterStudy, June 1997

**Operating Expenses**

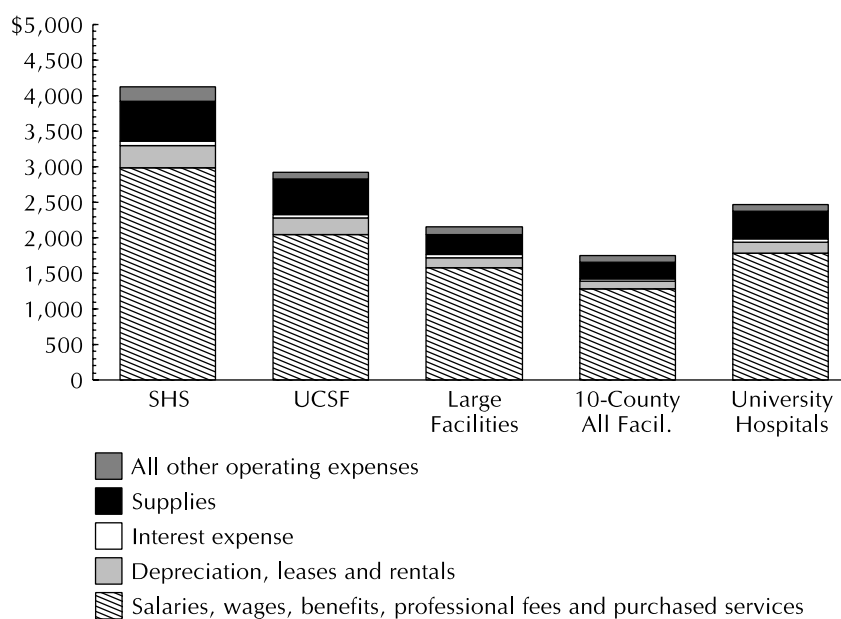
Comparing operating cost across hospitals is a difficult task because of the unique characteristics of individual hospitals and the markets in which they operate. Differences in patient populations, case mix and case severity, mix of inpatient and outpatient services, intensity of care, quality of patient services and amenities, and level teaching can all cause costs to vary. Further, a complete evaluation of the cost of care should consider differences in outcomes achieved across hospitals.

We have not attempted to adjust for differences in these variables across hospitals. Rather, Figure 2.13A presents a simple comparison of average operating cost per patient for fiscal 1995. As expected, university teaching hospitals report higher operating costs per patient day than nonuniversity hospitals, reflecting, in part, the greater case complexity and intensity of care provided at these hospitals and the additional cost associated with physician training. Across university hospitals, the costs differences are significant. The average

operating expenses per patient day at both Stanford (\$4,129) and UCSF (\$2,925) are significantly higher than the average for all university hospitals in California (\$2,476).

**Figure 2.13A**

**Operating Expense per Patient Day – 1995**

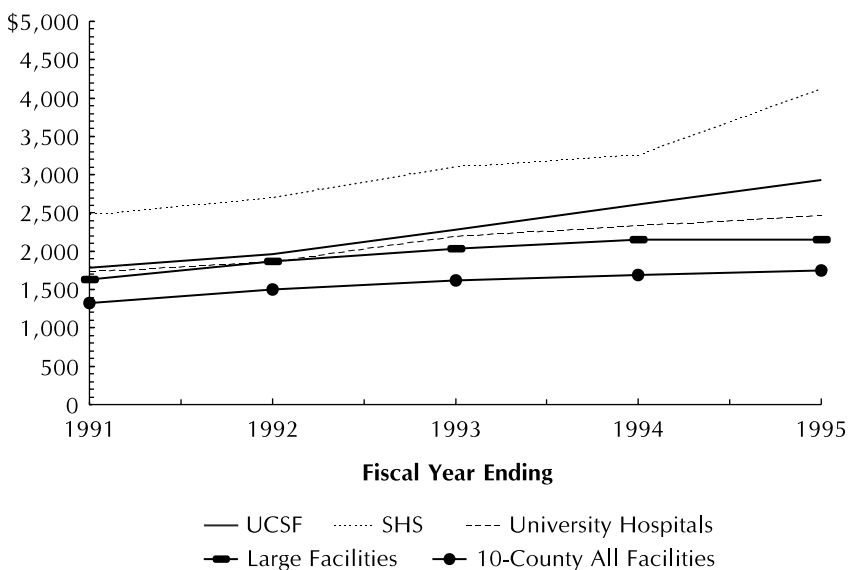


Source: OSHPD

Because data for 1995 may not be comparable for Stanford because of the inclusion of the faculty practice program in its operating results in that year, we examined the trend in operating cost per patient day from 1991 through 1995.<sup>90</sup> The results are shown in Figure 2.13B. Consistently over time, total operating expense per patient day has been significantly higher for Stanford than for UCSF or for any of the benchmarks considered. Further, the university hospital consortium’s case-severity analysis and case-mix index provide no evidence that these higher costs are associated with more severely ill patients or more complex cases.

<sup>90</sup> According to note 12 in the August 1994 Audited Financial Statements for Stanford University Hospital, “. . . effective September 1, 1994, Stanford University transferred the operations of the faculty practice program (FPP) of the School of Medicine into Stanford for no consideration. This transaction will be accounted for as a pooling-of-interest in the fiscal year 1995 financial statements.” The FPP at UCSF was not included in the financial statements of UCSF Medical Center over the period 1991 through 1995. Consequently, differences in the treatment of FPP between hospitals may affect the comparability of financial statements in 1995. Sufficient detail was not available in the financial statements we reviewed to estimate the magnitude of this possible source of noncomparability in fiscal year 1994-95.

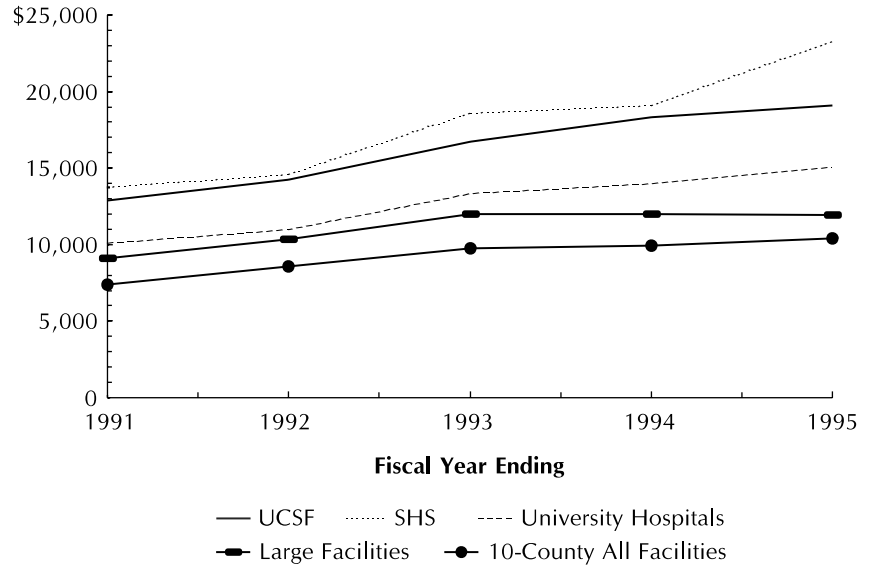
**Figure 2.13B**  
**Total Operating Expense per Patient Day – 1991 - 1995**



Source: OSHPD

Because the average length of stay is longer at UCSF and at Stanford compared to other hospitals in California (see Figure 2.3), we also calculated operating expenses per discharge. For most admissions, patient incur much of the cost of treatment during the first few days that the patient is in the hospital. If patients are routinely discharged earlier at Stanford than at UCSF, then these higher-cost initial days may represent a higher proportion of total patient days at Stanford than at UCSF. Figure 2.13C lends some support to this line of reasoning. While Stanford's operating expenses per discharge are still greater than UCSF's in all years, the gap between the two hospitals narrows significantly over that shown in Figure 2.13B. In 1994, for example, Stanford's operating expense of \$19,100 per discharge was just 4.4 percent above UCSF's expense of \$18,300 per discharge. Still, the analysis suggests that in spite of shorter lengths of stay, total cost per discharge at Stanford is greater than at UCSF.

**Figure 2.13C**  
**Total Operating Expense per Discharge – 1991 - 1995**



Source: OSHPD

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# *Appendix H*

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## *Comparison of Specific Expense Reductions With Previous Performance and Assessment of Revenue Enhancements*

Studies conducted by Ernst & Young, LLP (E&Y) and the Third-Party Review team did not systematically compare the cost-reduction performances of the Stanford facilities of Stanford Health Services (referred to in this appendix as Stanford) and the University of California, San Francisco (UCSF) Medical Center facilities over the last several years to two facilities if operated independently (or jointly) over the next few years. However, they anticipated future cost-reductions under the merger would have a significantly larger impact on reducing operating expenses as a percent of net patient revenues than either UCSF or Stanford has been able to maintain from 1991 to 1996.

We compared previous trends in operating expense as a percent of net patient revenue at the UCSF and Stanford facilities to that suggested by the E&Y Study predictions. Achieving these future cost savings may appear to be a somewhat optimistic but not unreasonable goal, given the short-run reductions in operating cost relative to net patient revenue these facilities were able to accomplish (but not maintain), and given the relatively high operating costs of the Stanford facilities compared to UCSF.

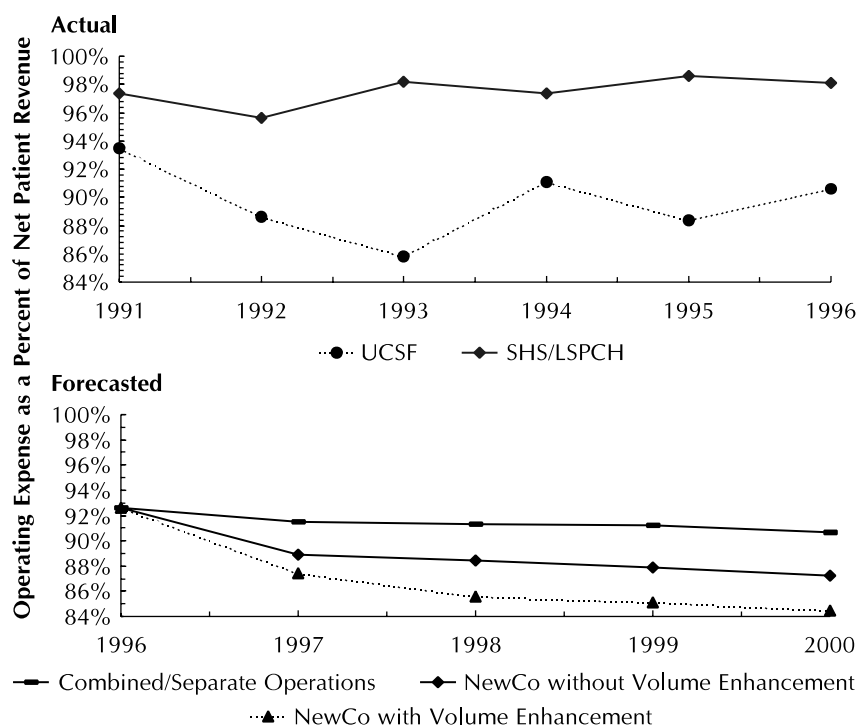
The E&Y report has projected financial statements for the Stanford and UCSF facilities operated both on a stand-alone and merged basis for each year from 1996 to 2000.<sup>91</sup> This provides a comparison of the overall impact of expected cost-reduction efforts between stand-alone and merged operations of the UCSF and Stanford facilities. The E&Y report also shows income statements for the Stanford and UCSF facilities for 1991 to 1996. This provides a comparison between the hospitals' actual overall cost-reduction performance with the above expected reduction efforts. For each year, operating expense (not including depreciation, interest expense, and bad debt expense) has been calculated as a percent of net patient revenue. These comparisons are illustrated in Figure 3.1. Consistent cost-reduction over time would be reflected in declines in these percentages, assuming reimbursement rates

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<sup>91</sup> Refer to the "Consolidated Pro Forma, Base Case" and "Consolidated Pro Forma, NewCo" in the E&Y business analysis.

have not declined by a greater amount.<sup>92</sup> Comparison of the ratios thus provides limited insight as to whether cost-reductions or cost controls successfully improved operating results or counterbalanced revenue reduction trends.

**Figure 3.1**  
**Overall Performance Relating to Operating Cost Reductions**



From 1991 to 1996, our analysis of the ratios for the UCSF and Stanford facilities suggest the offsetting impacts of hospital cost-reduction efforts and payor cost-containment efforts. Over the six-year period, UCSF and Stanford were not able to significantly decrease operating expense as a percentage of net patient revenue. However, there appear to be “sub-periods” in which cost-reduction resulted in significant overall improvements. For example, UCSF was able to decrease operating expenses as a percent of net patient revenue from 93.5 percent in 1991 to 85.8 percent in 1993, although this was a period in which net patient revenues were increasing at a relatively high rate and thus may not have truly reflected expense-reduction success. The combined Stanford facilities

<sup>92</sup> Other changes would also impact the operating expense/net patient revenue ratio. For example, growth in incremental patient revenue at existing departments should correspond with declines in this ratio as marginal costs for the enhanced volume would be significantly below average costs. On the other hand, lost volume or reduced compensation for existing discharges would decrease net patient revenue and increase the ratios.

also had a moderately improved performance in 1992, but this is likely because of improvements at the Lucile Salter Packard Children's Hospital (LSPCH) at Stanford early in that facility's history. Again, the complete picture of the 1993 to 1996 time period is one of other factors more than offsetting cost-reduction efforts and causing operating expenses as a percent of net patient revenue to increase. This occurred in spite of cumulative cost-reductions from 1993 to 1996 of \$53 million for UCSF and \$74 million for Stanford.<sup>93</sup>

It is important to note that the smaller cost-reductions forecast for UCSF and Stanford operating on a stand-alone basis during 1997 to 2000 are anticipated by E&Y to correspond with a decrease in this operating-expense ratio.<sup>94</sup> Thus, unlike the immediately preceding actual history, the E&Y forecasts anticipate that volume reduction and price-reduction pressures will not overwhelm those decreased cost-reduction efforts.

A comparison of the actual and forecast results reveals that the projected improved operating expense performance with the merger is not out of the question given the 1991 to 1993 performance at UCSF, although neither institution shows a consistent downward trend in operating expenses. This comparison also reveals that cost-reductions at Stanford that would bring operating expense as a percent of net patient revenue in line with UCSF's create a significant opportunity for combined operation cost-reductions. However, this figure suggests that the E&Y base case ignores much of the ongoing competitive pressures that reduced revenues and caused increases in operating expense as a percent of net patient revenue in spite of substantial cost-reduction efforts in the previous four years. Note, however, that unless this significantly impacts the merged operation versus separate stand-alone operations, there is no reason to believe it would alter the relative financial evaluation of the merger.

One outstanding issue relates to how much of these gains will be possible from the continued consolidation of Stanford University Hospital (SUH) and LSPCH (cumulatively known as Stanford Health Services), a consolidation we understand has been somewhat delayed pending the outcome of the proposed UCSF and Stanford Health Services merger. We anticipate that continued administrative cost savings from the SUH and LSPCH

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<sup>93</sup> According to the Third-Party Review report, over the 1997 to 2000 period, UCSF is forecast to have \$40 million in cost reductions and SHS will have \$48 million.

<sup>94</sup> These smaller cumulative cost-reductions for 1997 to 2000 are \$88 million for all the facilities, over 30 percent less than what was achieved in the previous four-year period. See the Third-Party Review report, page 78.



consolidation into Stanford Health Services would permit the Stanford facilities to obtain relatively large cost savings from 1997 through 2000, but this does not appear to be reflected in the forecast cost-reductions for Stanford.<sup>95</sup>

### ***Assessment of Conclusions on Incremental Volume***

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University of California, San Francisco-Stanford Health Care (USHC) personnel have provided forecasts of incremental increases in patient volume by major diagnostic categories (MDCs) and geographic area. However, we noted that forecasts at this level of specificity are “only illustrative and useful for reasonableness testing.”<sup>96</sup> Nevertheless, given current patient migration patterns, referral patterns would have to change significantly to achieve these forecasts. Either physicians in the greater Bay Area and Northern California would have to refer patients out of their area on a much more frequent basis or the vast majority of any smaller number of additional referrals would have to accrue just to USHC.

Consider, for example, the current forecast for increased volume of patients migrating from portions of Northern California beyond the ten-county primary and secondary market (herein referred to as ten-county Bay Area). Table H-1 specifies such tertiary and quaternary patient migration trends in 1995 for groups of 25 MDCs. We organized the 25 MDCs into five groups representing the relative market strengths of the UCSF or Stanford operations pre-merger as well as the post-merger combined market position. According to the Third-Party Review team, market position is based on the relative market share (RMS) concept. The first group represents the four MDCs for which one of the facilities was particularly strong as measured by RMS, including three where UCSF’s share was significantly larger than the next highest facility.<sup>97</sup>

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<sup>95</sup> Recall note 93 that discusses Stanford’s forecasting only somewhat higher cost-reductions than UCSF’s on a stand-alone basis from 1997-2000.

<sup>96</sup> August 13, 1997 memo from Patricia Perry, Vice President, Strategic Development, USHC.

<sup>97</sup> The fourth is MDC 17, where Stanford and UCSF have a very large share relative to others, but similar size, which caused the relative market share pre-merger to be unordinary, and the post-merger RMS to be the highest of all MDC categories. Thus, compared to all other facilities, both Stanford and UCSF would individually have a large RMS and this MDC is included in the first group.

**Table H-1**

**1995 UCSF/Stanford Merger  
Tertiary and Quaternary Discharges by Groups of MDCs  
Northern California Patients (Excluding Primary and Secondary Area)**

MDC Group	Total Patients	Non-Migrating Patients	Percent of Migrating Patients Share of Total	1995 Migrating Patients				1995 Patients Migrating to Hospitals in Primary Area					
				Total	To Hospitals Outside of Bay Area	To Hospitals Inside of Bay Area	Percent of Bay Area Hospitals' Share of Migrating Patients	Total	Other	UCSF	Stanford	Combined (USHC)	Percent of Combined USHC's Share of Patients Migrating to Bay Area
Group 1	12,720	10,011	21.3%	2,709	1,868	841	31.0%	841	345	309	187	496	59.0%
Group 2	25,170	20,459	18.7	4,711	3,675	1,036	22.0	1,036	599	205	232	437	42.2
Group 3	37,417	30,829	17.6	6,588	5,301	1,287	19.5	1,287	832	234	221	455	35.4
Group 4	29,558	22,773	23.0	6,785	5,126	1,659	24.5	1,659	1,105	284	270	554	33.4
Group 5	12,500	10,142	18.9	2,358	1,794	564	23.9	564	456	51	57	108	19.1
<b>Total</b>	<b>117,365</b>	<b>94,214</b>	<b>19.7%</b>	<b>23,151</b>	<b>17,764</b>	<b>5,387</b>	<b>23.3%</b>	<b>5,387</b>	<b>3,337</b>	<b>1,083</b>	<b>967</b>	<b>2,050</b>	<b>38.1%</b>

Sources: 1995 OSHPD Discharge Data for severity codes 3 and 4.  
Relative market shares per Third-Party Review team findings for 1994 discharge data.  
Pre-merger figures represent the largest of the two facilities.

- Notes:
1. Patients are considered to have migrated if patient county differs from hospital county.
  2. The Bay Area refers to both the primary and secondary areas.
  3. The MDC groups are comprised of the following:
    - Group 1: Eye, Hepatobiliary, Kidney, and Myeloproliferative
    - Group 2: Nervous, Digestive, and Endocrine
    - Group 3: Ear, Nose, Mouth and Throat, Respiratory, Musculoskeletal, Female Reproductive, Newborns, Infectious and Parasitic
    - Group 4: Circulatory, Skin and Breast, Male Reproductive, Blood, and Poison
    - Group 5: Pregnancy, Mental, Alcohol/Drug Use, Burns, Factors, Trauma, and HIV

Many observations flow from this comparison. First, for MDC group 1, on average, a greater percentage of patients were drawn into the Bay Area than for all the other groups of MDCs. Bay Area hospitals accounted for 31 percent of all migrating patients for the first group of MDCs and no greater than 25 percent for the other four groups of MDCs. Not coincidentally, USHC would have a very large share of these patients migrating to the Bay Area. As reflected in the last column of Table H-1, USHC accounted for nearly 60 percent of all patients migrating to Bay Area hospitals for tertiary and quaternary care in the first group of MDCs. USHC's average share for the other groups range from 19.1 percent to 42.2 percent, increasing in step with increasing pre-merger RMS. This suggests that USHC's enhanced strength and market position in a variety of additional MDC specialties may attract greater numbers of patients from outside the Bay Area into the Bay Area, and in particular, to the premier facility in the Bay Area. This would bode well for USHC's expected performance in certain MDC groups. However, it is unclear whether increased dominance with respect to the top MDCs in Table H-1 could be expected to generate even greater patient flow to the Bay Area and greater USHC share of highly specialized care for migrating Northern California patients.

Table H-2 summarizes the migration patterns from the previous table and adds information on the current USHC forecast for increased highly specialized cases by MDC groups from the outer reaches of Northern California. These targeted incremental patients are then compared to actual migration patterns for 1995 for check of the increase in migrating patients implied by the USHC targets. Overall, the increase in migrating patients is not unreasonably high under these targets. For example, total overall migration is implicitly targeted to increase 2.3 percent.<sup>98</sup> However, this increase is the highest for the currently strongest MDCs (the first group has an overall targeted increase of migration of nearly 5 percent). The implied targeted increase of patient flow to Bay Area hospitals averages 10 percent, but again this rate is substantially higher (15.9 percent) for those already strong MDCs. Thus, the targeted increase anticipates substantial improvement in those MDCs groups where UCSF has already enjoyed a strong position and has already been successful at pulling in patients from more distant portions of Northern California. While even greater relative size and enhanced outcomes may further increase migration in these MDC specialties, perhaps it is somewhat aggressive to target such growth. These changed migration patterns translate to an increase of highly specialized

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<sup>98</sup> This assumes USHC will be able to attract additional patients with no other increased migration.

patients from Northern California of just over 26 percent for the combined USHC. In a number of MDCs, this accounts for just over one-third of the overall targeted increase of cases from all geographic areas. However, this 26 percent increase is significant compared to the targeted increase of 9 percent for patients from the greater Bay Area.

**Table H-2**

***UCSF/Stanford Merger  
Tertiary and Quaternary Discharge  
Migration Trends by MDC  
Northern California Patients  
(Excluding Primary and Secondary Area)***

MDC Group	1995 Migrating Patterns			With USHC Targeted Increases			
	Total Migrating Patients	Total Migrating to Bay Area	Cases Combined USHC	Incremental Change in Patient Count	Percent of Targeted Increase at USHC	Percent of Implied Increase in Overall Migration	Percent of Implied Increase in Migration to Bay Area
Group 1	2,709	841	496	134	26.9%	4.9%	15.9%
Group 2	4,711	1,036	437	109	24.8	2.3	10.5
Group 3	6,588	1,287	455	143	31.8	2.2	11.2
Group 4	6,785	1,659	554	146	26.4	2.2	8.8
Group 5	2,358	564	108	8	6.9	0.3	1.3
Total	23,151	5,387	2,050	540	26.3%	2.3%	10.0%

Sources: 1995 OSHPD Discharge Data for severity codes 3 and 4.  
Relative Market Shares per Third-Party Review team findings for 1994 discharge data.  
Pre-merger figures represent the largest of the two facilities.

- Notes:
1. Patients are considered to have migrated if patient county differs from hospital county.
  2. The Bay Area refers to both the primary and secondary areas.
  3. The MDC groups are comprised of the following:
    - Group 1: Eye, Hepatobiliary, Kidney, and Myeloproliferative
    - Group 2: Nervous, Digestive, and Endocrine
    - Group 3: Ear, Nose, Mouth and Throat, Respiratory, Musculoskeletal, Female Reproductive, Newborns, Infectious and Parasitic
    - Group 4: Circulatory, Skin and Breast, Male Reproductive, Blood, and Poison
    - Group 5: Pregnancy, Mental, Alcohol/Drug Use, Burns, Factors, Trauma, and HIV

In Table H-3 we present related information comparing pre- and post-merger shares of highly specialized cases if these targets for additional patients are achieved. The top four MDC groups, which account for 99 percent of the targeted increase in patients flowing from Northern California, would each correspond with substantial USHC share gains of patients flowing from Northern California to Bay Area hospitals. For example, USHC's share of such patients would increase from

35.4 percent for MDC group 3 to 41.9 percent if the targeted increased volume is obtained. This resulting share of 41.9 percent would appear to be reasonable given the current shares of 59 percent for MDC group 1 and 42.2 percent for MDC group 2. However, USHC’s share of patients for MDC group 1 is targeted to increase from an already very healthy 59 percent to 64.7 percent. This MDC group accounts for nearly 25 percent of the increased volume targeted from Northern California and 19 percent of the entire targeted increase.

**Table H-3**

***UCSF/Stanford Merger  
Tertiary and Quaternary Discharge  
Share Patterns by MDC  
Northern California Patients  
(Excluding Primary and Secondary Area)***

MDC Group	1995 Share Patterns		1995 Migration Patterns With Targeted Increase			With USHC Targeted Increases	
	Percent of Bay Area Hospitals Share of Migrating Patients	Percent of Combined USHC's Share of Patients Migrating to Bay Area	Total Migrating Patients	Total Migrating to the Bay Area	Cases to Combined USHC	Percent of Bay Area Hospitals Share of Migrating Patients	Percent of Combined USHC's Share of Patients Migrating to Bay Area
Group 1	31.0%	59.0%	2,843	975	630	34.3%	64.7%
Group 2	22.0	42.2	4,820	1,145	546	23.8	47.7
Group 3	19.5	35.4	6,733	1,432	598	21.3	41.9
Group 4	24.5	33.4	6,931	1,805	700	26.0	38.8
Group 5	23.9	19.1	2,366	572	116	24.2	20.2
Total	23.3%	38.1%	23,691	5,927	2,592	25.0%	43.7%

Sources: 1995 OSHPD Discharge Data for severity codes 3 and 4.  
Relative market shares per Third-Party Review team findings for 1994 discharge data. Pre-merger figures represent the largest of the two separate facilities.

- Notes:
1. Patients are considered to have migrated if patient county differs from hospital county.
  2. The Bay Area refers to both the primary and secondary areas.
  3. The MDC groups are comprised of the following:
    - Group 1: Eye, Hepatobiliary, Kidney, and Myeloproliferative.
    - Group 2: Nervous, Digestive, and Endocrine
    - Group 3: Ear, Nose, Mouth and Throat, Respiratory, Musculoskeletal, Female Reproductive, Newborns, Infectious and Parasitic
    - Group 4: Circulatory, Skin and Breast, Male Reproductive, Blood, and Poison
    - Group 5: Pregnancy, Mental, Alcohol/Drug Use, Burns, Factors, Trauma, and HIV

Key questions arise as to how this increased volume can be accomplished if clinical facilities are not aggressively consolidated and what is an appropriate measure of gained volume in the absence of such consolidation. As suggested above, an additional question is where do these unexploited opportunities exist. At some point, volume-induced efficiencies and outcome improvements are largely exhausted. For certain specialties (such as those MDCs in group 1), perhaps Stanford and UCSF have already captured gains from volume effects. While analysis in the preceding tables may suggest currently unexploited gains could result in enhanced volume for other specialties in some geographic areas, this target appears aggressive given the short two-to-three-year time frame in which the target is anticipated to be achieved. However, this analysis is somewhat simplistic, possibly circular and cannot take into account a multitude of potential factors that may account for success in some diagnostic categories that could not be duplicated in other MDCs, even if the combined UCSF/Stanford facilities were able to take advantage of improved outcomes and marketing advantages resulting from the post-merger-enhanced RMS. Furthermore, with respect to the importance of clinical facility consolidation for highly specialized cases, most of the individuals interviewed who participate in this market indicated that such consolidation is necessary to generate increased volumes of referrals to USHC. See Table H-4 for survey responses regarding other concerns such as whether the merger will create market power or more bargaining power, whether the two entities are viable without the merger, whether the geographic distance is a barrier to integration, and whether they can integrate cultures.

### ***Relative Performance of USHC in Children's Services and All Other Services***

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The basic premise that an enhanced relative position of USHC can result in greater migration of patients to the Bay Area, and to USHC in particular, can also be assessed using data provided in the E&Y report for children's services when compared to all other highly specialized services. This comparison may provide further insight into whether USHC's ability to attract out-of-area cases should be expected to increase because of its improved relative market position. If true, these facilities should have had relatively strong attraction from outside the Bay Area for highly specialized cases in children's services where both UCSF and Stanford are currently viewed as market leaders in the Bay Area.

**Table H-4**

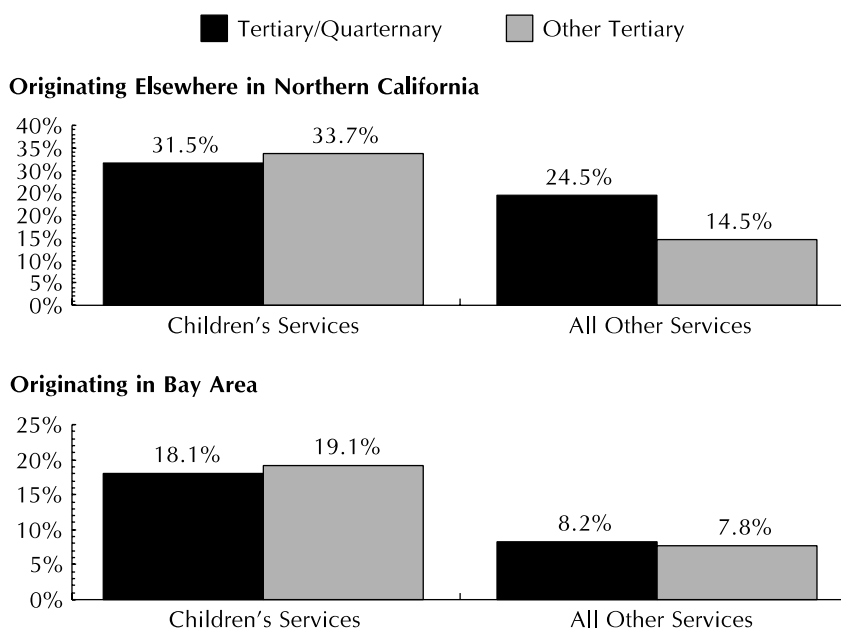
***UCSF/Stanford Merger Results of Survey of Health Care Market Participants Regarding the Proposed Merger of Clinical Enterprises Between UCSF Medical Center and Stanford Health Services***

Health Care Market Participant	Will the Merger Create Market Power?	Will the Merger Create More Bargaining Power?	Is There a Need to Consolidate High-End Services?	Are the Companies Viable Without the Merger?	Is Geographic Distance a Barrier to Integration?	Can They Integrate Cultures?
<b>HMOs</b>						
Pacificare	In specialized procedures but not overall	Yes	Yes	Yes: Short-term No: Long-term	No	In some ways
Blue Cross	Yes	Yes	--	Yes	No	Difficult
HealthNet	No	Yes	Yes	Not clear	--	No opinion
<b>Healthcare Service Purchasers</b>						
Pacific Business Group on Health	No	Yes	Yes	Yes: Short-term No: Long-term	No	Difficult
<b>Healthcare Systems</b>						
Sutter Health	No	Yes	Yes	Yes	No	--
Catholic Healthcare West	Not with hospital oversupply	Yes	--	--	not for some areas	--
<b>Physician Groups</b>						
Palo Alto Medical Foundation	No	Yes	Yes	Stanford: No UCSF: Do not know	No	No
Brown and Toland	No	No	Yes	Yes, but they must downsize	No	--
<b>Others</b>						
Institute for Health Policy Studies	No	Yes	Yes	Yes, but must cut costs	No	Yes, but will take work
Massachusetts General Hospital	Yes	Yes	Yes	Yes, but must cut costs	--	Difficult

Figure 3.2 summarizes 1994 performance of the combined UCSF/Stanford facilities for highly specialized cases for children's services and all services other than children's. Specifically, the lower panel of Figure 3.2 clearly shows the success these centers enjoy in children's services, with shares of highly specialized cases more than twice as high as their share of highly specialized cases for all other services. This means

USHC would have a relatively high RMS in children’s services, and not surprisingly, their share of cases generated in more distant parts of Northern California (outside the Bay Area) is also much higher for children’s services (see top panel of Figure 3.2). Their strong position in children’s services may increase the patient flow from more distant portions of Northern California to Bay Area hospitals, as reflected in the following figure. Bay Area hospitals have garnered a much higher share of these cases from other hospitals outside the Bay Area for children’s services. On its face, this supports the notion that greater pull is possible from outlying community hospitals when relative size and prestige of highly specialized care are enhanced. However, these penetration differences may be driven by particular aspects of children’s services that may not be applicable to other specialties.

**Figure 3.2**  
***NewCo Combined Share of all Bay Area Hospital Discharges Highly Specialized Cases***



Source: E & Y Study, pages 20-21, and Attachment II, pages 12-13; based on 1994 discharge data

This comparison suggests two implications about the forecast volume-enhancement estimates. First, the merged entity’s enhanced abilities have the potential to draw patients from community hospitals in certain specialty areas as a result of gaining a top reputation and increased scale in those specialty areas. This would appear to be, in part, because of a potential to draw greater numbers of cases into the Bay Area rather than



simply obtaining a greater percentage of a fixed flow. Second, it is questionable whether USHC would be able to significantly enhance its performance in children's services, where it already has a relatively large share and already pulls in a relatively large number of patients from outside the Bay Area. This is an important issue because highly specialized children's services cases account for a large share of USHC's total highly specialized cases.

This point is essentially identical to that made with respect to where the forecast performance in those MDCs that are already strong would appear to be hard to sustain given the existing excellent degree of patient migration.

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# *Appendix I*

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## *Calculation of Incremental Operating Expense Using E&Y's Approach Versus BSA's Approach*

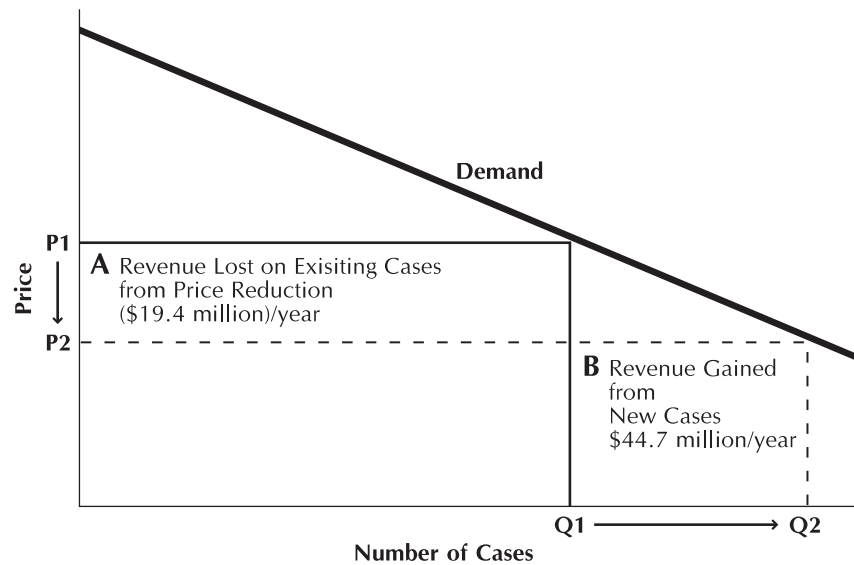
This appendix provides a detailed analysis of how incremental operating expenses are estimated by Ernst & Young, LLP (E&Y) and the Bureau of State Audits (BSA). In the workpapers supporting its business analysis, E&Y states that “variable costs incurred with additional volume are estimated to be 50 percent of net revenue.”<sup>99</sup> The E&Y report mistakenly applies the variable cost factor to the *net* incremental revenue (E&Y's approach), rather than to *gross* incremental revenue (BSA's approach). However, as discussed in Chapter 3, E&Y has informed us that the theory they used was not to calculate variable costs as 50 percent of net revenue (as stated in their report and (used in their calculations), but rather it was to use approximately 40 percent of gross additional revenue. To illustrate the difference, consider the demand curve in the following figure that shows the effect of a price reduction on the volume of cases and on total revenue. As price is reduced from  $P_1$  to  $P_2$ , the number of cases increases from  $Q_1$  to  $Q_2$ . These changes in price and quantity have two offsetting effects on total revenue. First, total revenue increases due to the additional cases. This gross incremental inpatient revenue equals the area in rectangle B. There is a second effect, however, that tends to reduce total revenue. Because the price reduction applies to existing cases as well as new cases, revenue decreases on existing cases by an amount represented by rectangle A. Net incremental inpatient revenue is the additional revenue from the new cases (rectangle B) minus the loss of revenue on previously existing cases resulting from the price reduction (rectangle A).

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<sup>99</sup> NewCo Business Analysis, May 3, 1996, p. 24.

The E&Y workpapers supporting its business analysis correctly calculates net incremental inpatient revenue as (rectangle B minus rectangle A).<sup>100</sup> However, the error arises when incremental operating expenses are calculated in E&Y workpapers as 50 percent of **net** incremental revenue. Rather, incremental expenses should be calculated as 50 percent of **gross** incremental revenue (rectangle B). This is the case because the incremental expense relates to the incremental volume of cases, and is wholly unrelated to the revenue foregone on existing cases (rectangle A).

**Figure 3.3**  
**Impact of Price Reduction on Incremental Revenue**



<sup>100</sup> The study states “The revenue model includes an additional 30 percent revenue reflecting outpatient services for each inpatient case” (p. 23). In fact, the calculations include an additional 43 percent revenue E&Y has indicated that they were attempting to produce a 70/30 mix of inpatient revenue to outpatient revenue. This mix corresponds to the average inpatient/outpatient revenue mix at UCSF and SHS. In making their calculations, however, they established the amount of outpatient revenue so that *net* incremental inpatient revenue equaled 70 percent and outpatient revenue equaled 30 percent. If they were attempting to duplicate the average mix at UCSF and SHS, they should have estimated outpatient revenue so that *gross* incremental inpatient revenue equaled 70 percent and outpatient revenue 30 percent. E&Y’s calculations imply an 80/20 mix on gross incremental revenue, not a 70/30 mix. More fundamentally, a basis supporting the premise that additional highly specialized inpatient cases will lead to additional outpatient revenue was not provided. The fact that these are highly specialized cases, expected to come in large part from outside the immediate Bay Area, suggest that the average 70/30 mix, or even an 80/20 mix, may not apply to these particular incremental cases.

To clearly see the error in calculating incremental expense as a percentage of net revenue, consider the case when the incremental revenue from new cases (rectangle B) is just offset by the revenue lost on existing cases (rectangle A). In this instance, net incremental revenue will be zero. Multiplying the cost factor of 50 percent by the net incremental revenue of zero will indicate zero incremental expense. But clearly, additional cases will result in some incremental expense. Unlike net incremental revenue, gross incremental revenue will always be greater than zero if there are incremental cases.<sup>101</sup>

As shown in Table I-1, the difference in incremental expenses and consequently in incremental operating income, calculated under the two different approaches is approximately \$9.7 million in the year 2000. This difference arises because total gross incremental revenue (\$55.5 million) exceeds total net incremental revenue (\$36.1 million) by \$19.4 million. Applying the 50 percent incremental expense factor yields a difference in incremental operating income of \$9.7 million.<sup>102</sup>

Using E&Y's approach as shown in its workpapers, incremental operating expenses are just 32.2 percent of incremental revenue. In our discussions with the University of California, San Francisco-Stanford Health Care (USHC) financial staff and E&Y, they asserted that a rule of thumb is that variable costs range between 40 percent and 60 percent of revenue in the hospital industry and that USHC variable costs are actually closer to 40 percent than to 60 percent. No documentation was supplied that would allow us to verify this assertion. However, 32.2 percent is significantly below even the lowest estimates of variable cost.

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<sup>101</sup> This assumes that incremental cases are not provided at zero price as in charity care.

<sup>102</sup> Because of uncertainty about the appropriate level of outpatient revenue which may result from incremental inpatient cases, we have also performed these calculations under the assumption that incremental revenue will result in a 70/30 inpatient to outpatient revenue mix rather than the 80/20 mix implicitly assumed in the E&Y calculations. When this change is made, incremental outpatient revenue in the table increases from \$10.8 million to \$19.1 million, and total incremental operating income (under the gross incremental revenue approach to expense estimation) increases from \$8.4 million to \$12.5 million.

**Table I-1**

**Incremental Operating Expense Estimation  
E&Y's Approach Versus BSA's Approach  
For Inpatient and Outpatient Cases  
(in thousands, except where noted)**

	Year 2000
Current cases (not in thousands)	\$ 116,669
Incremental cases (not in thousands)	1,483
<b>Total cases after price reduction</b>	<b>18,152</b>
Average inpatient revenue per case — Current (not in thousands)	\$ 31,290
Average inpatient revenue per case — after price reduction (not in thousands)	30,126
Total inpatient revenue — current	521,568
Gross incremental inpatient revenue (new cases) — A	44,677
Reduced inpatient revenue on current cases — B	(19,399)
<b>Total inpatient revenue—new</b>	<b>\$ 546,846</b>
Net incremental inpatient revenue (A minus B)	\$ 25,278
Incremental outpatient revenue	10,833
<b>Total net incremental revenue</b>	<b>\$ 36,111</b>
Gross incremental inpatient revenue	\$ 44,677
Incremental outpatient revenue	10,833
<b>Total gross incremental revenue</b>	<b>\$ 55,510</b>
E&Y's approach to expense estimation: <sup>a</sup>	
Total net incremental revenue	\$ 36,111
Incremental operating expense (50 percent of total <i>net</i> incremental revenue)	18,056
<b>Incremental operating income (net incremental revenue approach)</b>	<b>\$ 18,055</b>
Percent of incremental operating expense/total gross incremental revenue	32.5%
BSA's approach to expense estimation:	
Total net incremental revenue	\$ 36,111
Incremental operating expense (50 percent of total gross incremental revenue)	27,755
<b>Incremental operating income (gross incremental revenue approach)</b>	<b>\$ 8,356</b>
Percent of incremental operating income/total gross incremental revenue	50.0%
<b>Difference in incremental operating income</b>	<b>\$ 9,699</b>

<sup>a</sup>This case corresponds to scenario one presented in the E&Y Report (pp. 25-26). Under that scenario, E&Y shows incremental operating income of \$17 million compared to \$18 million shown here. The discrepancy results from differences in the assumed average price reduction. Under E&Y's approach, the average price reduction in scenario one is 3.857 percent. Because of the weighting scheme they employ, this average price reduction is different than the average price reduction used in their base case (3.719 percent). We have assumed a price reduction of 3.719 percent above to correspond with the E&Y base case assumption.

*Response to the report provided as text only*

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August 29, 1997

Mr. Kurt Sjoberg  
California State Auditor  
Bureau of State Audits  
660 J Street, Suite 300  
Sacramento, CA 95814

Re: September 1997 Report on the Proposed Transaction Between  
Stanford University and the University of California

Dear Mr. Sjoberg:

On behalf of the University of California, I want to thank you and your staff for their hard work and professional approach in concluding your report to the Joint Legislative Audit Committee. As you know, the creation of UCSF Stanford Health Care is an extremely complex undertaking. The amount of study and review this action has generated over the past two years is considerable.

With your work, the project has now been analyzed in depth by three separate review teams-- Ernst & Young, The Third Party Review team, and the Bureau of State Audits. Given the importance of this decision to the University of California, the UC San Francisco academic medical center, Stanford University, and, especially, the people of California, I am reassured that the findings remain the same. Although all three review teams took a slightly different approach, ranging from aggressive to conservative, the findings of all support the merger and the underlying premise that this is a merger of equals that will implement a proactive, strategic initiative designed to address the longer-run threats facing UCSF and Stanford.

Again, thank you for your hard work and careful analysis.

Sincerely,

Richard C. Atkinson  
President

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*Response to the report provided as text only*

STANFORD UNIVERSITY  
VICE PRESIDENT FOR BUSINESS AFFAIRS AND CHIEF FINANCIAL OFFICER

MARIANN BYERWALTER

August 29, 1997

Mr. Kurt R. Sjoberg  
California State Auditor  
Bureau of State Audits  
660 J Street, Suite 300  
Sacramento, CA 95814

Re: September 1997 Report on the Proposed Transaction Between Stanford University and the University of California

Dear Mr. Sjoberg:

On behalf of Stanford University, I would like to thank you for the opportunity to respond to the recent report prepared for the Joint Legislative Audit Committee. We appreciate the hard work and tremendous effort you and your staff undertook to complete this report within the allotted time, especially given the quantity and complexity of the documents that required review and analysis.

As you know, Stanford and the University of California have been discussing this proposed transaction since May 1995, and in that time we have shared many different perspectives on the merits of bringing our outstanding medical centers together. The Bureau of State Audits has taken another approach to reviewing this proposed transaction and, while Stanford University supports the ultimate conclusion, we must make one clarifying point. Previous financial analyses prepared by Ernst & Young, the Third Party Review Team, and Stanford have all attempted to compare UCSF and SHS operating performance over a five year period to determine if this is a merger of equals. Such a comparative analysis requires inclusion of all operating expenses associated with revenues generated within the period, without regard to private nonprofit accounting principles or governmental accounting principles.

We note that UCSF, due to the overfunded position of the University of California Retirement System, has not recorded pension costs in the five years ended 1996 as shown in the Bureau of State Audits report. We believe pension expense should be attributed to UCSF to properly compare operating performance to that of SHS. By incorporating this item, we believe the Bureau of State Audits report would further illustrate that these two institutions have roughly similar historical earnings.

As a final point, Stanford University wishes to acknowledge the leadership of this effort by your Deputy State Auditor, Philip Jelichich. He did an excellent job of helping to synthesize this complex proposed transaction into a meaningful report. We thank you again for this comprehensive and useful audit.

Sincerely yours,

Mariann Byerwalter



cc: Members of the Legislature  
Office of the Lieutenant Governor  
Attorney General  
State Controller  
Legislative Analyst  
Assembly Office of Research  
Senate Office of Research  
Assembly Majority/Minority Consultants  
Senate Majority/Minority Consultants  
Capitol Press Corps