## The Proposed Closing of Rancho Los Amigos National Rehabilitation Center Endangers the Health of Disabled Medi-Cal Patients Who Reside in Los Angeles County

Statement Elements

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#### INTRODUCTION

I am Professor of Health Services and Director of the Health Reform Program at the Boston University School of Public Health, where I have taught since 1983. I have been retained by the Western Law Center for Disability Rights to offer my opinion concerning certain effects of closing Rancho Los Amigos Hospital.

For the reasons set forth in this report, it is my opinion that:

- Closing Rancho Los Amigos Hospital will harm many of Rancho's Medi-Cal inpatients and outpatients because they will not be able to obtain adequate substitute inpatient and outpatient care at surviving hospitals or other settings.
- Los Angeles County has not succeeded in accurately estimating the savings it would accrue by closing Rancho Los Amigos Hospital.
- Any dollar savings that might seem to be won by closing Rancho will tend, in practice, to be offset by higher costs of care to Medi-Cal and to the remaining County health care system—if needed alternative care is provided to Rancho's displaced patients. If needed alternative care is not provided, the apparent savings will be won at the cost of undermining patients' health.

These opinions rest in part on some 30 years of professional work on hospital closings, relocations, mergers, and other reconfigurations in 51 U.S. cities and several states.<sup>1</sup>

I have followed some 1,200 urban acute general hospitals and other special hospitals from 1936 to 1997, and am currently updating this study through early-2003. This work has been supported from time to time by the Office of the Secretary of the U.S. Department of Health and Human Services, the U.S. Health Care Financing Administration, and the Robert Wood Johnson Foundation.

I have twice testified before committees of the U.S. House of Representatives on urban hospital closings nationally, and have occasionally investigated or testified on individual hospital closings, relocations, and other reconfigurations in Cincinnati, Detroit, Manchester (New Hampshire), Philadelphia, Washington, D.C., in other cities, and in the three southern New England states generally.

These are some of the main findings from my 51-city study concerning causes or predictors of hospital closings:

- hospitals located in African-American communities are substantially more likely to close, decade after decade, even after controlling for other predictors of closing;
- hospitals that close are actually more efficient (less costly) even after adjusting for case mix/severity of illness, than are surviving hospitals—this is not a case of survival of the fittest; and
- larger hospitals and teaching hospitals are more likely to survive than are smaller and less specialized non-teaching hospitals.

Other findings from this 51-city study concern the effects of hospital closings generally. The observed pattern of closings of acute general and other special hospitals in the 51 cities appears to be associated with reductions in access to care, increases in cost of care, and some improvements in technical quality of care. This is because smaller, more accessible, and less costly hospitals are more likely to close, while larger, less accessible, and more costly teaching hospitals are likelier to remain open.

Most Americans believe that a functioning free market is almost always the best method of making important economic decisions. I strongly lean in that direction. Unfortunately, for a host of reasons, we do not seem to enjoy the benefits of a free market system in urban hospital care—a system that would weed out the inefficient and less needed hospitals.

Rather, it appears that a considerable number of needed and relatively low-cost hospitals are forced to close. The overall configuration of hospital care has apparently been changed in some ways that are markedly undesirable—less accessible and more costly. Entire districts of large cities are without hospitals today. The northern half of St. Louis, extensive parts of Philadelphia, and the eastern half of Washington, D.C., for example, are entirely lacking in hospitals or almost entirely lacking. The harm is not restricted to inpatient care. Hospital closings disrupt patterns of ambulatory care as well. Physicians in private practice, for example, who admitted to a hospital that is now closed may choose to retire or to relocate their practices, depriving a district of both its hospitals and its doctors.

One other finding from the 51-city study that is salient here is that it is relatively easy to close a hospital and to dismantle its system of care. But after the harm associated with the closing is perceived, and it is decided to re-open the hospital, it usually proves very difficult to restore and recreate the services that were lost. One of the reasons is physical: a physical plant that was grandparented before it was closed must be brought into full compliance with building codes and life-safety codes before it can be re-opened. Another reason is human: teams of clinicians who were dispersed can be reassembled only with great difficulty. And the difficulty tends to increase with the underlying

complexity of the system of care. Both problems tend to make re-openings prohibitively costly.

In addition to this long-term study of hospital closings, I have done a fair amount of work on hospital survival generally <sup>2</sup> and also on long-term care services for elderly and other disabled citizens. <sup>3</sup>

The opinions expressed in this report rest in part on my work on hospital survival and on long-term care services for elderly and other disabled citizens.

The opinions expressed in this report also rest in part on my review of the great bulk of the items included in the Beilenson Administrative Record on Rancho Los Amigos.

I teach public health students about health administration, finance, and planning, and medical students about the realities of health care finance and delivery.

I serve as a trustee of Waltham Hospital, a community hospital in Waltham, Massachusetts, as a member of the Visiting Committee of Franciscan Children's Hospital and Rehabilitation Center in Boston, Massachusetts, and as a member of the Massachusetts Attorney-General's Advisory Group on Health Care Reform.

I formerly served on the long-range planning committee of the Joslin Diabetes Clinic in Boston; as a vice-president of the Health Planning Council of Greater Boston, the former regional health systems agency; as a member of the Massachusetts Secretary of Health and Human Services' Health Finance Working Group; and as the chair of the Health Equity and Public Hospitals Caucus, American Public Health Association.

My undergraduate degree in economics is from Brandeis University. My doctorate in city and regional planning (specializing in health care) is from MIT. An accurate copy of my curriculum vitae is attached.

## I. WILL MEDI-CAL AND "MEDI-CAL PENDING" PATIENTS BE ABLE TO OBTAIN ALTERNATIVE CARE IF RANCHO CLOSES?

## A. This Is a Matter of Degree

This question should be framed as one of proportions and probabilities. That is, if Rancho Los Amigos National Rehabilitation Center (hereafter "Rancho) were to close, what share of Rancho's Medi-Cal patients will be able to obtain alternative care elsewhere? To what extent will surviving caregivers be available, able, and willing to serve Medi-Cal patients? And if Medi-Cal patients obtain alternative care, to what extent will it be approximately equal in competence, appropriateness, and overall quality to that formerly provided at Rancho? For convenience, I will sometimes refer to Rancho's patients as "rehabilitation" patients to distinguish them from patients who do not have chronic health problems or disabilities that today require Rancho's services.

#### 1. A moving target

Today, some hospitals may accept certain numbers of Medi-Cal rehabilitation patients. Some take only or mainly those Medi-Cal patients who face medical emergencies and who enter through the ER. Other hospitals may also take non-emergency patients admitted by physicians with privileges at a given hospital.

While it is not easy to extrapolate with certainty from current to future behavior, one assessment is likely. Relatively few non-profit or for-profit hospitals that take some Medi-Cal rehabilitation patients today are likely to be able and willing to take appreciable numbers of additional Medi-Cal rehabilitation patients in the wake of Rancho's closing. This is partly because the average Rancho patient exhibits a high level of clinical need and partly because Medi-Cal pays most hospitals substantially lower rates per patient-day than it pays Rancho.

## 2. Overall assessment: How many Medi-Cal patients would surviving hospitals really be able and willing to accept?

According to Maureen Dyer Stevens, President and CEO of the California Rehabilitation Association, which represents 22 facilities in southern California alone, the Association's members are "unable to absorb the majority of patients currently treated at Rancho." Further, the Association's "providers do not offer highly specialized services and treatment of ventilator dependent quadriplegics, pediatric, and severe brain injury cases offered by Rancho. . . . <sup>\*4</sup> Dyer goes on to describe three types of harm:

Existing rehabilitation hospitals and rehabilitation units in Southern California do not have in-depth expertise or specialized services for ventilator dependent quadriplegics, (175 inpatients), pediatric (60 inpatients), and severe brain injury (85 inpatient) cases which currently [are] treated by Rancho Los Amigos National Rehabilitation Center.

Because of limited specialized rehabilitation services available in Los Angeles County for these populations after the closure of Rancho, as many as 1,400 rehabilitation inpatients

will likely be without needed rehabilitation services, creating bottlenecks in the healthcare system, trauma room and acute care hospitals at a much higher cost to the County of Los Angeles.

The high volume of specialized care provided to pediatric, adult inpatients and outpatients at Rancho led to the development of expert treatment teams able to achieve excellent outcomes with medically complex patients.

#### Dr. Ed Newton, Interim Chair of the Emergency Department at LAC + USC, asserts that:

If Rancho Los Amigos Rehabilitation Center closes it would be a disaster. Patients admitted through trauma often need long-term rehabilitation. We need Rancho as an outlet to transfer uninsured patients to. I know of no other facility that will take uninsured patients requiring rehabilitation care. Patients requiring that care need long-term specialized rehabilitation care. We have neither the bed space nor the medical expertise and technology to provide that care. If Rancho closes, we will have to keep those patients in our acute care hospital. For example, we now provide initial medical care for patients with spinal cord injuries and transfer those patients to Rancho for extended hospitalization. Without Rancho Los Amigos, that patient would have to remain in our hospital, taking up a much-needed bed.<sup>5</sup>

Dr. Brian D. Johnston, Chair of the Department of Emergency Medicine at White Memorial Hospital, asserts that closing Rancho would grievously harm both Medi-Cal and uninsured patients:

The Rancho Los Amigos patients are among the most complicated and difficult patients to treat in Los Angeles County. . . .

To take these patients out of the Rancho environment and drop them elsewhere is simply outrageous. The current County system cannot absorb them, especially not after the October 2002 drastic ambulatory care reductions and the proposed further bed reductions at LAC-USC....

The private sector simply dies not have the capacity to absorb these patients either, especially those who lack Medi-Cal, Medicare or other insurance coverage to pay for the high level of care hat they need. Even those Rancho patients with Medi-Cal would have a very difficult time finding another facility willing to treat them. The Medi-Cal reimbursements levels do not approach the cost of providing services, and those impose a liability on providers who meet the needs of this population. Further, while most hospitals are compliant with the Americans with Disabilities accessibility requirements, not every private hospital has the rehabilitation facilities and services that these patients need.

Further, it would be extremely difficult for any provider to step in and determine the appropriate medical treatment for a former Rancho patient. These patients' Rancho Los Amigos doctors know them and are familiar with their needs. Another provider would need to know their antibiotics, any previous infection history, which specific organisms they carry, and their previous level of function. Some of these patients' charts weigh 15 to 20 pounds. If another provider did not have immediate access to the medical chart, treatment would become more difficult and impose needless risk on patients and practitioners. Rancho patients will thus be deprived of medically appropriate care, and be at greater risk of illness and possibly death should the County close Rancho. <sup>6</sup>

This problem is exacerbated, to an unknown but probably considerable degree, by the nature of the medical problems facing many of Rancho's patients. If Rancho is closed, to the extent that its patients' problems are chronic, not acute, Rancho's former patients would be likely to fall to the bottom of the waiting list at County DHS hospitals' increasingly crowded emergency rooms. That is because patients facing life-threatening emergencies understandably take priority in those ERs.

## B. Are Substitute Services Available at Other Caregivers?

#### 1. What is the likely need for care at alternative settings?

What share of Rancho's patients will need special care elsewhere—and special help in organizing that care? Alternatively, what share can be expected to work out alternative arrangements simply by using the telephone directory to call doctors, hospitals, therapists, and other clinicians that accept Medi-Cal and work out reasonable substitutes if Rancho were to close?

One way of getting at this matter is to consider the patients currently served at Rancho. Rancho serves both rehabilitation and acute patients. Dr. Garthwaite asserts that 40 percent of Rancho's inpatient days are for rehabilitation, implying that the rest are for more or less routine care of a nature that can be provided at many or most hospitals.<sup>7</sup>

But this does not seem to be the case. Rather, from my review of the declarations in the Beilenson Administrative Record on Rancho, I conclude that the patients who Dr. Garthwaite considers "acute" are patients with complex and long-term health care needs who are getting help with one acute aspect of their chronic care. Providing acute care services like surgery to patients who have many long-term health care problems can not be expected to be the same as providing seemingly similar acute care services like surgery to patients who are essentially stable, who are in good overall health, and who enjoy good overall functional ability.

#### As Forer and Duvall write:

Most of Rancho's acute inpatients have a disability or chronic illness. Inpatient acute services may include wound care, tendon transplants, baclofen pump implants, reconstructive surgery for burns and decubitis ulcers, gerontology, renal and hepatic disorders, neurogenic bowel or bladder, or uncontrolled spasticity associated with disabilities or chronic illnesses. <sup>8</sup>

Dr. Garthwaite's comment tends toward minimizing the need for Rancho's special services by 60 percent of Rancho's patients on a given day. Given the declarations assembled in the Beilenson Administrative Record, it would appear incautious at best to accept Dr. Garthwaite's comment as accurate without careful examination of the patients who are receiving services at Rancho that are categorized by Dr. Garthwaite as "acute."

Both the Blue Consulting Report performed for DHS<sup>9</sup> and the Gill/Balsano report prepared for the California Community Foundation<sup>10</sup> focus on the availability of substitute rehabilitation beds. Blue Consulting stated that the supply of licensed

rehabilitation beds in the county is adequate, but noted high occupancy rates. Blue Consulting noted, however, that substitute hospitals would not be able to provide "the same amount and type of high level service that rehabilitation patients currently receive at RLANRC due to budget constraints and the reported shortage of nurses and therapists."<sup>11</sup> Gill Balsano found a shortage of at least 150-200 rehabilitation beds in Los Angeles County without factoring in a possible closing of Rancho.<sup>12</sup>

It is suggested here that the availability of substitute special acute care inpatient services for Rancho patients is also a very serious matter, one that has apparently received little attention to-date. The state of California should therefore carefully assess the availability of services for Rancho's acute—non-rehabilitation Medi-Cal patients.

#### a. Inpatient care

Rancho Los Amigos is projected to provide 72,647 patient-days of care in the 04-05 fiscal year, for an average daily census of 199.0 patients. Assuming 207 beds set up and staffed, that translates into an average annual occupancy rate of 96.2 percent.<sup>13</sup>

Of these some 33,858 patient-days were expected to be for Medi-Cal patients, or 46.6 percent of the total.

## b. Outpatient visits

Of the 58,848 visits projected at Rancho for fiscal year 04-05, some 30,021 visits (51.0 percent) are expected to be by Medi-Cal patients.<sup>14</sup>

8,941 unduplicated outpatients in fiscal year 2001-2002

61% of visits were Medi-Cal—5,000 patients to move to new medical home for OP services

What is the physical capacity of rehabilitation providers in Los Angeles County to meet this need for outpatient care?

This is a very important matter, as the importance of hospitals as providers of outpatient services is fairly well-documented.

The work of Bindman, Keane, and Lurie assessed the effects of the closing of Shasta General Hospital through a case comparison. Bindman and colleagues succeeded in following patients of Shasta General, a county hospital. In the year after the closing, they found a doubling in the share of patients lacking a regular provider, a rise of more than one-half in the share reporting a denial of care, a drop in perceived health, and a rise in pain. Patients of a surviving county hospital experienced no deterioration.<sup>15</sup>

How important are urban hospitals as providers of ambulatory care? Hospitals' provision of ambulatory services varies by city and by neighborhood. Several forces seem to affect hospitals' importance. Hospital-based physicians have become increasingly important in lower-income areas.<sup>16</sup> German and Shapiro found that Baltimore elders often depended heavily on hospital provision of ambulatory care.<sup>17</sup>

Nationally, in 1996, African-American citizens depended twice as heavily on hospitals to organize and deliver ambulatory care (32 percent of their ambulatory care visits were in hospital ERs or OPDs) as did white citizens (15 percent).<sup>18</sup> As noted earlier, hospitals in African-American neighborhoods have been substantially likelier to close, as have smaller hospitals (which tend to devote greater shares of their resources to ambulatory care). Even when all patients are insured and when overall primary care physician supply is adequate, as in Canada, residents of neighborhoods with higher ER use suffered lower incomes and were more likely to be minority citizens.<sup>19</sup> Taken together, these findings suggest that the pattern of hospital closings subjects African-American citizens to disproportionate risk of disruption of ambulatory care services.

Given the evidence that patients in lower-income neighborhoods and African-Americans depend heavily on hospitals to provide outpatient care, it is reasonable to expect that Medi-Cal patients also depend heavily on hospitals to provide outpatient care. This is certainly true of a substantial number of Rancho's patients each year.

Outpatient care for Rancho's patients should be hospital-based in order to draw on the expertise that they require. By voting with their feet and by other means, Rancho's Medi-Cal outpatients have signaled their conclusion that Rancho's services have constituted the most effective and efficient means of meeting their critical clinical needs.

For example, Rancho discharged 127 inpatients with spinal cord injuries at the cervical level. Many will require ventilator support. Unfortunately, very few of the surviving hospitals provide either inpatient or outpatient services for ventilator-dependent patients. A substantial share of Rancho's spinal cord-injured patients are children or young adults, who are likely to need and benefit from decades of care. Most other hospitals tend to orient their services toward older adults.

#### 2. Current rehabilitation bed capacity

Some 1,053 rehabilitation beds are estimated to be needed in Los Angeles County.<sup>20</sup>

According to data compiled by Forer and Duvall, 34 licensed acute inpatient rehabilitation providers in Los Angeles are licensed for 946 beds. These providers currently staff some 734 of those beds.

These 734 beds constitute only 69.9 percent of needed beds.

If, as estimated, Rancho operates 100 beds that should be categorized as rehabilitation beds, the closing of Rancho would result in only 634 staffed rehabilitation beds in Los Angeles County, or only 60.2 percent of needed beds.

It is possible to speculate that the rehabilitation bed deficit will actually worsen further in the unlikely but certainly possible event that the HealthSouth system melts down in the wake of the unfolding financial scandal afflicting that company.<sup>21</sup> What, for example, would become of HealthSouth's partnership with UCLA for a 56-bed rehabilitation facility that folds in UCLA's prior 11 beds? Further, the rehabilitation care system may already

be characterized by a measure of instability. For example, San Gabriel Valley Medical Center closed all of its rehabilitation beds in 2002.

Today, fully 95.5 percent of empty rehabilitation beds are in private hospitals.<sup>22</sup>

These beds are apparently empty not because of lack of need but rather because of some combination of lack of money to pay for care and lack of staff to provide care.

#### 3. Current non-rehabilitation bed capacity

Little is known regarding the bed capacity of surviving hospitals to admit and care for non-rehabilitation patients displaced by Rancho's closing. As these patients seem to account for about 1,673 (56.7 percent) of Rancho's discharges in fiscal year 2001/2002,<sup>23</sup> considerable resources must be made available to serve them. For the reasons discussed earlier, in Section I.B.1, these patients' acute care needs are extremely complex and are very often intimately tied to their rehabilitation needs.

Arranging alternative care for the Medi-Cal patients in this group will be a challenging job. Unlike rehabilitation beds, acute care beds for these patients should not be in short overall supply. Rather, the clinical capacity and competence to address the acute care needs of Rancho's displaced Medi-Cal patients is the limiting factor.

## 4. What is the availability of Rancho's clinicians to relocate to other caregivers to provide substitute services?

How much of the aggravated rehabilitation bed deficit associated with Rancho's closing might be offset by attracting clinicians displaced by Rancho's closing to surviving hospitals?

Some might suggest that availability of care at other hospitals would be enhanced if Rancho's skilled physicians, nurses, therapists, and other clinicians were willing to relocate to those other hospitals. But at least four problems might militate against such relocation.

First, some of Rancho's skilled clinicians may not be willing to continue to work in rehabilitation under circumstances that make it impossible for them to provide the type and quality of care that their patients need. Some might retire. Others might go into administration or into other careers.

Second, some of Rancho's skilled clinicians may not be willing to relocate to a new hospital if that new hospital requires them to start at bottom of seniority ladder, and work Saturday nights again.

Third, it appears that the effectiveness of Rancho's care rests in part on the whole being greater than the sum of the parts. Therefore, even if Rancho's clinicians were able and willing to work elsewhere, the process of dismantling and dividing up Rancho's services and its caregivers is likely to reduce these clinicians' effective caregiving capacity.

Fourth, even if skilled Rancho clinicians relocate within the County system, in part to take advantage of the 25-year retirement package, they can't be expected to relocate as workers in intact rehabilitation programs, leaving them effectively unavailable to displaced Rancho patients.

Further, even if the clinicians were to relocate, there is little reason for confidence, as discussed later, that the hospitals or other caregiving organizations that hired displaced clinicians would be oriented toward serving the Medi-Cal inpatients and outpatients whose care was disrupted by Rancho's closing.

## C. Would Potential Substitute Caregivers Be Willing to Serve Medi-Cal Patients?

## 1. General observations

Fully 53 percent of Rancho's inpatient rehabilitation patients in fiscal year 2001/2002 (678 of 1,280) were covered by the Medi-Cal program.<sup>24</sup>

<u>I see no reason to disagree with Forer's and Duvall's assertion that 300-500 of these patients "may not be able to secure comparable alternative services from other rehab providers" each year.<sup>25</sup></u>

My own assessment is that the share of displaced Medi-Cal rehabilitation patients who may not be able to secure comparable alternative services annually will be toward the high end of Forer's and Duvall's projection. This is owing to a combination of lack of available beds, lack of available clinicians, lack of adequate financing, and lack of adequate care of comparable coordination, continuity, experience, and overall clinical effectiveness.

These caregiving and financing problems may well be worsened by patients' own disorientation and disruption of often long-standing relations with clinicians and institutions in the wake of a closing of Rancho.

Some hospitals may be willing to serve Rancho's displaced Medi-Cal patients but simply lack the beds to do so. Some County DHS hospitals, for example, might be willing but are already entirely saturated—in their emergency rooms, in their inpatient beds, and in their outpatient clinics.

Some private hospitals have some empty rehabilitation beds, but these hospitals would typically be paid by Medi-Cal at rates that fall well below the cost of effective and efficient care of Rancho's patients.

Rancho is expensive, but its high costs are clearly attributable in large part to its complex case mix. It serves patients who need a great deal of complex and multifaceted care that can be difficult to coordinate at any one time, and to ensure continuity of service over time.

Potential substitute caregivers' willingness to serve Rancho's Medi-Cal patients will be influenced in part by the costs of these patients, in part by Medi-Cal's payment rates, and in part by other factors—such as their own clinical capacities.

Today, all rehabilitation patients in Los Angeles County have made the best arrangements for their care that they, their families, and their caregivers have been able to arrange. It can therefore be expected that any change will result in a degradation in levels of service. If that change is accompanied by a substantial diminution in the revenue available to pay for rehabilitation and for associated acute and outpatient care, then patients can not be expected to receive adequate and appropriate care.

Because the Medi-Cal revenue available to other hospitals to serve Medi-Cal patients will clearly be substantially less than is available today at Rancho, the adequacy of care for displaced Rancho patients can be expected to drop markedly, other things equal.

The Blue Consulting report prepared for County DHS raised grave reasons for worry in this regard. It noted that substitute private hospitals might serve only some of the displaced Rancho patients—particularly those of lower acuity. "County facilities would likely need to absorb the remainder of these patients." <sup>26</sup>

But how many of Rancho's Medi-Cal patients would have to be absorbed by County DHS facilities? At what cost? With what quality of care? With how long a waiting time in the ER and in obtaining an inpatient bed in a County system that is apparently saturated already? With what consequences for quality of care?

The state and the County have not answered these questions. They should answer these questions before proceeding with Rancho's closing.

One example: the Blue Consulting report notes that "No private facility has been identified to take adult or pediatric respiratory-dependent quadriplegic patients, regardless of payer type. It is not clear where this population will go." <sup>27</sup> Over 127 patients, receiving 6,000 patient-days of care, are involved annually. When these patients surface at County DHS facilities, it will be extremely difficult to absorb them. And if they are served, care will be cut to less gravely-ill patients.

This is one reason why it seems inappropriate for County DHS to list the closing of Rancho under the heading of "System Reforms." <sup>28</sup>

#### 2. Costs of serving Rancho's patients

Dr. Garthwaite prefaced his earlier-cited assertion that only 40 percent of Rancho's patient-days were for rehabilitation by saying that Rancho's cost per inpatient day is around \$1,400. "According to consultants, costs exceeding \$800 make it very difficult for a hospital to remain viable." <sup>29</sup>

Dr. Garthwaite's statement is surprising in light of the assertion by Forer and Duvall that "based on our experience in California, many rehab providers have costs/day between \$900 and \$1,250/day."<sup>30</sup>

Further, using data reported by hospitals themselves, I have calculated that all California community hospitals (including nursing home units) showed an average cost per patient day of \$1,592.93 in hospital fiscal year 2001.<sup>31</sup> (Please refer to the following exhibit.)

Costs have risen substantially since then, as we are now in hospital fiscal year 2003 for almost all hospitals.

## Exhibit

### California hospital costs, total, 2001 Hospital Statistics

Total expenses	\$39,559,376,603	
Gross inpatient charges		\$75,039,514,757
Gross outpatient charges		\$29,444,438,788
inpatient charges % of total		71.8%
inpatient expenses,		
estimated at 71.8% of total	\$28,411,218,409	
patient-days	17,835,799	
IP expenses/patient-day	\$1,592.93	

Using data from hospitals' Medicare Cost Reports (HCFA/CMS-2552), I have estimated the average inpatient cost per patient-day at five U.S. rehabilitation facilities.<sup>32</sup> While there is considerable variation, even among well-regarded institutions, it seems clear that rehabilitation can be costly—substantially more costly than Dr. Garthwaite appeared willing to acknowledge.

## Exhibit

## Cost per Patient-Day at Five Well-regarded Rehabilitation Facilities

<u>Facility</u>	Cost/patient-day	<u>Year</u>	<u>Reputational</u> score (USN&WR)
The Institute for Rehabilitation and	\$1,681	2000	41.0
Research, Houston			
Rehabilitation Institute of Chicago	\$1,779	1999	68.6
Casa Colina	\$1,088	2000	
National Rehabilitation Hospital, Washington	1,265	2001	10.9
Shepard Center, Atlanta	1,912	2001	4.7
Rancho Los Amigos			12.7

#### 3. Rancho serves very sick people

As the data in the following exhibit show, Rancho serves patients who are in very considerable clinical need.

Rancho's case mix index is 1.79, compared with 1.29 for the average of 42 members of the California Rehabilitation Association and 1.09 for all of the 806 hospitals participating in the Uniform Data System for Medical Rehabilitation.

Similarly, at the time they are admitted, Rancho's patients have much lower ability to perform basic self-care, as indicated by their much lower-than-average FIM (Functional Independence Measure) scores.

A much greater share of Rancho's patients have qualifying co-morbidities.

In keeping with the greater level of disability and the great co-morbidity level of its patients, Rancho's length-of-inpatient stay is much longer.

At the same time, Rancho discharges four-fifths of its patients to the community, about equal to the national average (though slightly below the California average).

Only two other facilities in Los Angeles County serve ventilator-dependent quadriplegics—Northridge and Casa Colina. The two have a total of 8 beds.

If Rancho's care to Medi-Cal patients is dispersed to other hospitals in Los Angeles County, the cost of providing comparable services to treat these Medi-Cal patients can be expected to be greater than it is today. That is because Rancho has been able to achieve economies of scale through higher volume and greater expertise. It serves its seriously disabled patients more effectively and efficiently.

## Exhibit

Statistic	Rancho Los	CRA	UDSMR
	Amigos	California	Nation
Number of inpatient rehab. facilities		42	806
Total Annual Rehab Admits/Institution	1,166	336	553
Medicare share of admissions	15.0%	61.8%	70.9%
Case Mix Index (all payers)	1.790	1.2945	1.094
Percent with Qualifying Comorbidities	48.5%	28.4%	19.6%
Average Length of Stay	28.38	15.97	15.35
Percent with Stroke	26.6%	32.1%	18.2%
Percent with Brain Injury	15.9%	10.3%	5.2%
Percent with Spinal Cord Injury	16.7%	8.7%	5.0%
Percent Ventilator Dependent	11.7%	2%	1.5%
Percent with Neurological Conditions	15.6%	6.9%	4.1%
Percent with Lower Extremity Fractures	1%	8.6%	9.8%
Percent with Joint Replacements	2%	13.4%	23.4%
Percent with Other Orthopedic	0%	2.6%	4.7%
Admission FIM Score	48.5	63.9	70.2
Percent of Community Discharges	80%	86%	79%

#### Rancho Los Amigos National Rehabilitation Center: Comparative Statistics <sup>33</sup>

As noted in the preceding exhibit, Rancho has averaged 1,166 patient admissions annually, far more than either the California or national averages per hospital.

Rancho's case mix-adjusted cost per patient seems to be relatively low in relation to the disability levels of its patients at time of admission, and to the outcomes of its care. This is partly because Rancho appears to be relatively efficient.

This is in line with the overwhelming bulk of the literature on the association between volume and cost. Flood found that care in low-volume hospitals was associated with an extra 4,000,000 days of hospital care in one year nationally.<sup>34</sup> Finkler estimated that consolidating cardiac surgery among several Los Angeles hospitals would save 32.9 percent of total cost annually. This reflected the offsetting cost associated with greater travel time to one consolidated surgical program.<sup>35</sup> And Mahrer reported a substantial saving even in semi-variable and variable costs of cardiac catheterization when a regional facility was built to serve eight Kaiser Foundation hospitals in the Los Angeles area.<sup>36</sup>

And Rancho's case mix-adjusted cost per patient, in relation to the outcomes of its care, appears to be relatively low in part because its clinical performance appears to be relatively high. This assertion is in line with the overwhelming bulk of the literature on the association between volume and quality and outcomes, as discussed later.

#### 4. Revenue associated with serving Medi-Cal patients

#### a. Medi-Cal payments

Medi-Cal payment rates to different hospitals are central to assessing surviving hospitals' willingness to accept Rancho's Medi-Cal patients.

First, few rehabilitation hospitals are oriented to serving a large share of Medi-Cal patients. Rancho is remarkable in this. One reason is that, because Rancho's patients tend to be younger, relatively few have been disabled long enough (29 months) to qualify for Medicare. As noted in the previous exhibit, only 15 percent of Rancho's inpatient admissions are covered by Medicare, compared with an average of 62 percent at the 42 California Rehabilitation Association members, and with 71 percent nationally.

Other Los Angeles facilities are not accustomed to serving large numbers of Medi-Cal patients for various reasons. Depending on the facility, these reasons may include the following:

- Some number of these hospitals' physicians are not willing to accept any or many Medi-Cal patients at current Medi-Cal payment rates for physicians' services.
- Medi-Cal payments to these hospitals are not adequate to cover the costs of caring for the more disabled Medi-Cal patients.
- These hospitals lack the financial resources to subsidize substantial possible losses associated with serving greater numbers of more-disabled Medi-Cal patients.
- Over time, through higher Medi-Cal payment rates, and through serving substantial numbers of patients with rare disabilities, Rancho has accumulated superior clinical expertise in its many programs, so Medi-Cal patients prefer to seek care at Rancho.

As a result of these and other factors, fewer than one-third of the rehabilitation facilities in Los Angeles County facilities that were surveyed by the Western Center for Disability Rights accepted Medi-cal without limitation. (Please refer to the following exhibit.) Of these nine facilities, four are primarily geriatric facilities.

A large number of facilities in Los Angeles County substantially restrain service to Medi-Cal patients currently. This level of restraint poses a large barrier to the delivery of substitute services to the Medi-Cal patients who would be displaced by the closing of Rancho.

The exhibit on the following two pages summarizes the results of a survey of the 30 hospitals with inpatient rehabilitation beds that were listed in the Blue Report.<sup>37</sup>

#### Exhibit

#### Medi-Cal Acceptance by 30 Rehabilitation Facilities in Los Angeles County, March 2003

a. Accept Medi-Cal in significant numbers or do not otherwise limit (9)

Brotman Medical Center	25 beds, no outpatient
Casa Colina Childrens Hospital of Los Angeles	33 beds plus outpatient 30 beds
Henry Mayo	17 beds plus outpatient
Northridge Hospital Medical Center (20%)	18 beds plus outpatient
Pacific Alliance Medical Center (30%)	23 beds plus outpatient (mostly geriatrics)
Presbyterian Intercommunity Hospital (5-10%)	15 beds plus outpatient (majority geriatrics)
Providence St Joseph Medical Center	20 beds plus outpatient, primarily geriatrics
Garfield Medical Center	28 beds (mostly geriatric)
b. Less than 2% Medi-Cal (3)	
Encino-Tarzana Regional Medical Center	24 beds plus outpatient
Glendale Adventist Medical Center (less than 1%)	28 beds plus outpatient
Good Samaritan Hospital	23 beds plus outpatient

#### c. "Very low" or "low" percentage (7)

St Mary Medical Center	46 beds
Queen of Angels/Hollywood Medical Center	28 beds plus outpatient
Huntington Memorial Hospital ("very few")	24 beds plus outpatient
Long Beach Memorial Hospital	40 beds plus outpatient
Methodist Hospital of Southern California ("very few, rarely accept")	20 beds plus outpatient
Alhambra Hospital	17 beds
Providence Holy Cross Medical Center ("only a few, less than 5%")	13 beds, no outpatient

#### d. No Medi-Cal only - only patients with Medi-Cal AND Medicare) (3)

Citrus Valley Medical Center	12 rehab beds, no outpatient
Valley Presbyterian Medical Center	17 beds plus outpatient
Glendale Memorial Hospital	14 beds plus outpatient (older geriatrics, age 85+)

#### e. No Medi-Cal at all (4)

Lancaster Community Hospita	
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Lakewood Regional Medical Center

UCLA Medical Center

Centinela Hospital Medical Center

10 beds, no outpatient

13 beds plus outpatient

11 beds

26 rehab beds plus outpatient

Note: four facilities refused to respond

Facilities that do not accept Medi-Cal patients today or that inhibit the number of Medi-Cal patients they serve can not be expected to change their behavior unless they are paid more, other things equal. In many instances, Medi-Cal might have to make higher payments to the physicians in private practice who do or would admit and care for Medi-Cal patients at these hospitals, before they agreed to serve Medi-Cal patients or to serve more Medi-Cal patients.

Medi-Cal rates of payments for inpatient care are set partly through competitive bidding and partly through negotiation. Rates are not widely or publicly known. A given hospital will typically have a rate for ICU care, pediatric care, and medical-surgical care. The medical-surgical rate also covers rehabilitation services. These are said to be the estimated Medi-Cal rates at various hospitals in California:<sup>38</sup>

Rancho Los Amigos	\$1,600
Santa Clara Medical Center	\$1,253
Riverside County	\$1,300
Average, private hospitals in Los Angeles County	\$ 750

A Medi-Cal patient who is displaced by the closing of Rancho and actually obtains care at a private hospital in Los Angeles County will be paid for at a much lower Medi-Cal rate. Total revenue available to finance care for severely ill patients will be sliced substantially.

It is my understanding that Rancho's total payment per all-inclusive patient-day—from Medi-Cal and from the special state payments under SB 855, SB1255, and SB1732 combined—can currently be estimated to be on the order of \$2,600. That estimate is apparently derived roughly in this way:

Medi-Cal payment	\$1,416
SB855, 1255, 1732 payment	\$1,184
Total payment	\$2,600

(The difference between the \$1,600 and the \$1,416 figures for Medi-Cal payment per patient-day may be explained in part by reference to different fiscal years, and in part by the possibility that the \$1,600 figure is estimated.)

If this total payment of \$2,600 per patient-day exceeds the actual cost of serving an average Medi-Cal inpatient at Rancho, then that surplus can be considered to be a cross-subsidy to help underwrite care for low-income uninsured inpatients.

Outpatient visits to Rancho by Medi-Cal patients are now reimbursed at Rancho's cost, under the current Medi-Cal waiver. This makes Rancho clearly the preferred provide of outpatient care for disabled Medi-Cal patients in Los Angeles County. Closing Rancho would clearly deprive its Medi-Cal patients of this financing.

This means that if another hospital sought to serve either inpatients or outpatients displaced by Rancho's closing, those other hospitals would suffer substantial financial pain: That other hospital would be paid an inpatient rate on the order of \$750 and it would not be reimbursed anything close to the actual cost of outpatient care.

## *b.* If Rancho closes, how much revenue that now finances care of Medi-Cal patients could be lost?

Another meaning is that closing Rancho is likely to render a very substantial share of today's Medi-Cal dollars unavailable to serve Medi-Cal patients in the future. How much money is involved? In fiscal year 2001/2002, some 678 rehabilitation patients were admitted to Rancho. At Rancho's overall average length-of-stay of 28.4 days, Medi-Cal patients received some 19,250 patient-days of care.<sup>39</sup>

#### Exhibit

#### Costs, Revenues by payer, inpatient + outpatient, FY 1999/2000

	Total costs	Medi-Cal <u>Revenue</u>	SB 855, <u>1255, 1732</u>	Medicare	Other	Total Operating <u>Subsidy</u>
Inpatient	\$123,880,824	\$37,693,262	\$44,863,806	\$5,505,888	\$3,064,987	\$32,752,880
Outpatient	\$27,097,187	\$3,394,778		\$1,290,734	\$1,327,913	\$21,083,765
Total	\$150,978,011	\$41,088,040	\$44,863,806	\$6,796,622	\$4,392,900	\$53,836,645
% of inpatient revenue	100.0%	30.4%	36.2%	4.4%	2.5%	26.4%
% of outpatient revenue	100.0%	12.5%	0.0%	4.8%	4.9%	77.8%

Source: Rancho Los Amigos National Rehabilitation Center, Medical Services Summary: Summary of Costs and Revenues, FY 1999 / 2000 Actual.

Projected patient-c	lays and outpatie	nt visits by paye	e <b>r, FY 04-05</b> Medi-Cal		Insurance, other	
	Total	Medi-Cal	pending	Medicare	self-pay	CIP
Patient-days	72,647	33,858	5,006	7,954	3,956	21,873
Outpatient visits	58,848	30,021		8,597	2,896	17,334
% of inpatient days	100.0%	46.6%	6.9%	10.9%	5.4%	30.1%
% of outpatient visits	100.0%	51.0%	0.0%	14.6%	4.9%	29.5%

Source: Rancho Los Amigos National Rehabilitation Center, FY 04/05 Projection Patient Days by Payor (Base Model)

As shown in the preceding exhibit, Medi-Cal provided 30.4 percent of Rancho's inpatient revenue in fiscal year 1999/2000.

#### c. Special state payments

Some health care dollars (SB 855, SB1255, and SB1732) come from the state to Los Angeles County and function somewhat like a block grant. That is, they can be divided up among different County-owned DHS hospitals and are not lost when one County DHS hospital closes. Instead, they shift to another hospital.

These funds are of vital importance. As shown in the preceding exhibit, they provided 36.2 percent of Rancho's inpatient revenue in fiscal year 1999/2000.

#### 5. Overall financial condition of alternative caregivers

Alternative hospitals' willingness to accept inpatient and outpatient Medi-Cal patients who are displaced by Rancho's closing will be modulated by the overall financial condition of these alternative hospitals.

Sadly, there appears to be a substantial mis-match between the financial capacity of accredited rehabilitation facilities in Los Angeles County and the capacity of those that are not accredited.

Consider this: Apart from Rancho, seven of the nine inpatient rehabilitation caregivers in Los Angeles County that are accredited by the Commission on the Accreditation of Rehabilitation Facilities (CARF) have Medi-Cal contracts. These seven hospitals have 178 staffed beds. These seven hospitals had a relatively low total financial margin in fiscal year 2001 of 1.47 percent.<sup>40</sup> By contrast, the 24 remaining inpatient rehabilitation caregivers (22 not CARF-accredited but holding Medi-Cal contracts and two CARF-accredited but without Medi-Cal contracts) had a relatively high total financial margin of 3.10 percent—more than twice as great. These relationships are summarized in the following exhibit.

Similarly, the seven accredited hospitals with Medi-Cal contracts had less in the way of financial reserves relative to the overall size of the hospital. Their total financial equity at the end of fiscal year 2001 equaled only 54.5 percent of total revenue. At the remaining 24 hospitals, equity was 78.1 percent of revenue.

By both measures, total margin and equity as a share of total revenue, the accredited hospitals with Medi-Cal contracts were in markedly inferior financial circumstances. Therefore, these hospitals' capacity to shoulder the financial burden associated with serving greater numbers of severely disabled Medi-Cal inpatients and outpatients must be considered markedly inferior to that of the other hospitals.

#### Exhibit

#### Comparing the Financial Capacity of Accredited Inpatient Rehabilitation Hospitals with Medi-Cal Contracts with the Capacity of Other Rehabilitation Hospitals in Los Angeles County, Fiscal Year 2001

<u>Hospitals</u>	<u>Total Margin</u>	<u>Equity as % of</u> <u>Total Revenue</u>	CARF with Medi-Cal/ as % of Other Hospitals
CARF-accredited, with Medi-Cal contracts	1.47%	3.10%	47.4%
Other rehabilitation hospitals	54.50%	78.10%	69.8%

#### 6. Declared willingness

Currently, Rancho is apparently the only rehabilitation hospital in Los Angeles County of 33 on which data were available that is willing to accept Medi-Cal Pending patients.<sup>41</sup>

Some 26 of the 33 do have Medi-Cal contracts. Of these 26, only eight (including Rancho) are CARF-accredited.<sup>42</sup>

Even more disturbing, the seven accredited programs (excluding Rancho) have only 178 staffed rehabilitation beds. They clearly do not have the capacity to accept 100 or so displaced Rancho rehabilitation patients on an average day.

Other hospitals may say that they are willing to accept Medi-Cal patients but their financial ability and their actual willingness to do so may be undermined by a combination of their lower payments and their clinical unpreparedness. Simply, a great number of hospitals do not now have the programs or the clinical expertise to handle the most severely ill or injured of Rancho's patients, those who are ventilator-dependent, spinal cord-injured, and others.

In my experience, alternative hospitals are usually more willing to promise to serve patients displaced by a hospital closing than they prove to be in practice. What is surprising in the case of Rancho is that the public record reveals no substantial declared ability and willingness to serve Medi-Cal patients displaced by Rancho's closing.

This absence is a product of three things: the low Medi-Cal rates paid to most private hospitals in Los Angeles County combined with the absence of available County DHS beds; the high cost of caring for Rancho's patients; and the very considerable clinical needs of Rancho's patients.

### 7. Potential for creaming

If other hospitals in Los Angeles County actually prove able and willing to serve any of the Medi-Cal patients displaced by Rancho's closing, those patients are likely to be the less severely ill patients. These are the patients on whom other hospitals will lose the least money—and also the patients who are likelier to fall within their clinical capacity to deliver relatively adequate care.

This practice is called "creaming." It is not illegal or even immoral. It is one of the ways that many hospitals—particularly those suffering financial distress—sometimes act.

## 8. Will the alternative caregivers serve Medi-Cal and Medi-Cal pending patients? In what numbers?

According to Dr. Daniels Higgins, Director of Emergency Medical Services at St. Francis Medical Center, the "busiest private trauma center in Los Angeles County":

Rancho is the only facility I know of that will readily accept "Medi-Cal pending" and uninsured patients with rehabilitation needs. A typical rehabilitation candidate will have a gunshot wound to the spine, resulting in some form of paralysis. After providing acute treatment for the first week, we currently transfer such patients to Rancho. If the County shuts down Rancho, these patients will not have a place to go for rehabilitation. Private facilities will not accept "Medi-Cal pending" or uninsured rehab patients because it is not financial [sic] feasible to do so. St. Francis and many other hospitals have no capacity nor expertise to effectively treat rehab patients.<sup>43</sup>

Writing on the need for a 750-bed replacement facility for LAC-USC, Mark Finucane criticized those who claimed that a smaller facility could be sufficient if some care is contracted out to private hospitals: "Large scale contracting with the private sector requires both sufficient interest among providers and a viable funding stream. Funding is not present and interest is limited." <sup>44</sup>

Finucane's assessment applies equally to the prospect of securing care for Rancho's Medi-Cal and Medi-Cal pending patients at private hospitals in Los Angeles County.

#### 9. Deficits of substitute inpatient and outpatient care for Medi-Cal patients

In light of the evidence and analysis presented above, it appears that surviving caregivers will not be available, able, or willing to provide sufficient services Medi-Cal patients to substitute for those taken away by a closing of Rancho. The supporting evidence mainly concerns inpatient care.

But substitute outpatient care for Medi-Cal patients is likely to be as inadequate as—or even less adequate than—substitute inpatient care. There are three principal reasons.

First, outpatient Medi-Cal payment rates appear to be lower, relative to cost of care, than are inpatient Medi-Cal payment rates.<sup>45</sup> It has been observed earlier that a) Medi-Cal inpatient payments to substitute hospitals appear to be substantially below payments to Rancho, b) other hospitals today see relatively small shares (compared with Rancho) of

Medi-Cal inpatients patients, and c) other hospitals are therefore likely to try to cream less needful and less-costly-to-serve Medi-Cal patients. These forces are likelier to operate even more powerfully on the outpatient side—in light of the apparently lower outpatient rates relative to cost.

Second, outpatient care usually tends to draw on the same clinicians, the same experience, and the same medical record as does inpatient care. Therefore, without an adequate base of inpatient services and long-term knowledge of each patient's needs, it can be difficult to quickly understand or satisfactorily coordinate effective outpatient care.

Third, because outpatient care is inherently more episodic and therefore prone to fragmentation, mal-coordination, and discontinuity of care, the value of an underlying base of medical record and long-term clinician-relationship is probably even more important on the outpatient side than on the inpatient side.

## D. Would Willing Substitute Caregivers Provide Care to Medi-Cal Patients That Is as Competent as Rancho's?

According to Forer and Duvall:

RLANRC [Rancho] is a nationally recognized leader in rehabilitation for spinal cord injury, brain injury, post-polio, muscular dystrophy, and pediatric rehabilitation programs. Rancho is one of 16 model systems nationwide for spinal cord injury and brain injury, funded by NIDRR. Rancho is accredited by the Commission of Accreditation of Rehabilitation Facilities (CARF) for Medical Rehabilitation, Comprehensive Integrated Inpatient Rehabilitation – Hospital, Brain Injury Comprehensive Integrated Inpatient Rehabilitation Programs, Spinal Cord Injury System of Care, and Pediatric Rehabilitation Programs. Of the 34 rehab providers in LAC [Los Angeles County], only 10 are CARF Accredited: 10 Medical Rehab Programs, 10 Comprehensive Integrated Inpatient Rehab Program, 3 Brain Injury Programs, 2 Spinal Cord Injury System of Care, and only 1 Pediatric Rehab programs.

There is an apparent lack of expertise in ventilator dependent quads, severe brain injury, and pediatric rehabilitation programs and services in LAC.

Acute care services provided at RLANRC may include special orthopedic procedures, dialysis, tendon transplants, baclofen pump implants, wound care, constructive surgery for burn victims, neurogenic bowel/bladder, respiratory complications, and infections related to disability and chronic diseases.

#### 1. Competence of alternative caregivers

Rancho has been designated the Regional Spinal Cord Injury System for Southern California, one of sixteen model systems nationally.<sup>46</sup>

Specifically regarding the needs of Rancho's patients, the competence of Rancho's specialized and experienced individual caregivers, and the high degree of coordination of Rancho's systems of care, how good are the individual services now provided

elsewhere? How well-coordinated are they? How do they compare with those now given at Rancho?

Overall, were Rancho to close, would non-Medi-Cal patients enjoy substantially superior access to appropriate services than would Medi-Cal patients? I believe that they would. As noted above, surviving facilities lack the physical capacity—the beds—the serve displaced patients. They are unlikely to be willing to accept substantial numbers of Medi-Cal patients displaced by the closing of Rancho, owing to a combination of high cost and low revenue associated with those patients. And, as now discussed below, they lack the systems of care required to treat the displaced Medi-Cal patients.

## a. Expertise

Rancho serves large numbers of patients with various complex problems. It has built up decades of expertise in quickly and competently diagnosing and treating a wide range of problems. It will be hard for Individual physicians, hospital clinics, or inpatient services that see only a few such patients yearly to acquire this level of expertise. At best, this is likely to take a considerable amount of time.

Rancho's acute medical-surgical care is heavily oriented to the acute care problems of the seriously disabled patients it serves. These include wound care, special orthopedic procedures, implantation of electrical stimulants, and the like. Rancho does not typically function as a traditional medical-surgical hospital in this regard. Complex care that is oriented toward preserving or restoring functioning over many years is different from an episode-oriented acute care approach.

Rancho is certified or accredited in five ways. It is accredited by the Commission on the Accreditation of Rehabilitation Facilities (CARF) as a Medical Rehabilitation Provider (MRP). It is also accredited as a Comprehensive Integrated Inpatient Rehabilitation Provider (CIIRP), and as a Spinal Cord System of Care (SCSC), and as a Brain Injury Program (BIP).

Of the remaining 32 acute inpatient rehabilitation providers in Los Angeles County, only

- nine are CARF-accredited (only seven with Medi-Cal contracts—with 178 staffed beds and far fewer empty beds),
- nine are accredited as CIIRPs, (only seven with Medi-Cal contracts—again with 178 staffed beds and far fewer empty beds),
- one is accredited as a SCSC (with 24 staffed beds and far fewer empty beds), and
- two are accredited as BIPs (with 56 staffed beds and far fewer empty beds).

Los Angeles County faces a shortage of certified rehabilitation programs with Medi-Cal contracts. Under these circumstances, expert substitute care for Medi-Cal patients displaced by Rancho's closing will be extremely difficult to find.

#### b. Coordination of different types of care at one time

This integration of acute and rehabilitative services for disabled Americans makes for better outcomes at lower costs. Disrupting this integrated pattern of care will be harmful and expensive to Rancho's Medi-Cal patients.

Additionally, Rancho coordinates outpatient care across multiple clinics. A patient who needs care for a spinal cord injury, for example, might need skin care and also help with bladder problems. These difficulties can be addressed during one trip to Rancho.

Many managed care organizations talk of coordinating or managing needed health services in order to cut cost and improve clinical outcomes. It appears that Rancho has evolved over the years to do this. Dismantling Rancho's system of care will harm Rancho's patients.

#### c. Continuity of care over time

Rancho's patients tend to experience complex patterns of disability and illness. Caregivers who follow these patients over time have a much better sense of what works and what does not for each individual patient. Disrupting the continuity of patient care can be expected to degrade the outcome of care.

Hospitals are not interchangeable pieces on a game board. Each has a unique and ecological relationship with its patients, its physicians and other workers, and its location.

This is likely to hold with special power in Rancho's case. At Rancho, patients and clinicians often get to know one another over years, even decades. Under these circumstances, a trusting relationship may be more likely to develop, and such a relationship can be expected to enhance a patient's compliance with a clinician's instructions and advice.

Disrupting patterns of care by closing a hospital can undermines this health care ecology. It usually takes substantial time and effort for patients to re-weave their patterns of care. When a hospital closes, we have evidence that a very substantial share of its inpatients ceases to seek substitute care. Shepard found that 30 percent of the inpatients displaced by a hospital closing do not re-appear at surviving institutions nearby, at least not for some time.<sup>47</sup>

Rancho constitutes the most severe challenge in this regard. Many of Rancho's patients are extraordinarily disabled, with complex medical, rehabilitative, pharmacological, and other needs. It will therefore require more time and effort to reweave their patterns of care. This is partly because their disabilities leave them relatively dependent on others, partly because their illnesses are often relatively complex, and partly because many patients had enjoyed long and trusting relations with their Rancho clinicians.

#### d. Division will cause deterioration

Other hospitals in Los Angeles County lack the capacity to provide these services currently. It would cost them money and time to build that capacity. By diffusing the capacity across many smaller programs, the opportunities to win financial economies of scale and the greater quality that comes from higher volume, practice, and expertise will both inevitably be lost.

Care for Medi-Cal patients would deteriorate in the wake of Rancho's closing because the smaller surviving programs would probably not be able to afford keeping available the wide array of specialized expertise long provided at Rancho's larger facility.

Indeed, closing Rancho will cause substantial clinical harm even if other hospitals are available, able, and willing to try to provide substitute care. Dispersing Rancho's services flies in the face of overwhelming evidence that concentrating specialized health care in fewer and larger hospitals wins better outcomes and lower cost.

Over the past 25 years, an impressive volume of health care research has provided clear evidence, in field after field of medicine, that experience counts—that higher volume, other things equal, means better outcomes and lower costs. This is shown in the fields of heart surgery,<sup>48</sup> percutaneous cardiac interventions,<sup>49</sup> heart attack,<sup>50</sup> cardiac catheterization,<sup>51</sup> surgery for cancer,<sup>52</sup> heart transplantation,<sup>53</sup> hip fracture,<sup>54</sup> surgery in general,<sup>55</sup> and trauma care.<sup>56</sup>

There is every reason to believe that this medical principle holds strongly for the both the rehabilitation services and the specialized medical and surgical services provided at Rancho. The evidence on this point, offered by both patients <sup>57</sup> and clinical experts <sup>58</sup> during the Beilenson hearing, is broad and deep and unambiguous. Further, according to Stevens, "The high volume of specialized care provided to pediatric, adult inpatients and outpatients at Rancho led to the development of expert treatment teams able to achieve excellent outcomes with medically complex patients."<sup>59</sup>

Dismantling the special services and expertise accumulated at Rancho will harm Medi-Cal patients disproportionately because they depend disproportionately on Rancho. Rancho exists in large part to address the special needs of the patients with long-term disabilities whose reduced earning power qualifies them for Medi-Cal disproportionately.

## 2. Arranging alternatives

Alternative caregivers are not available, able, and willing to serve many or most of Rancho's Medi-Cal patients. Even if appropriate alternative inpatient and outpatient services were available to Rancho's Medi-Cal inpatients and outpatients elsewhere in Los Angeles County—and even if alternative inpatient and outpatient caregivers are able and willing to serve Rancho patients—it would be important to connect Rancho's patients with those alternatives caregivers.

Connecting patients with caregivers can be expected to be a difficult job. That is because Rancho's patients tend to have complex problems, and this complexity means that they will require a case manager to assist them until they and their medical record are durably linked with a new medical home. They often require services from several

different specialized caregivers. And these services are substantially improved when new caregivers understand all that has been done earlier in the course of the patient's acute and rehabilitative care.

For these reasons, it is disappointing that the County is apparently doing very little to plan for each Rancho patient's safe landing at an alternative caregiver in the event of Rancho's closing. If this pattern persists, it will result in sub-optimal care for a substantial share of patients, and could seriously harm unknown but potentially large number of patients.

Some states, such as Massachusetts, require that if a nursing home proposes to close, suitably planned arrangements must be made to relocate residents. Long-stay nursing home residents often depend on the security and consistency of their circumstances— especially at a time when their own physical and cognitive abilities to protect themselves are waning.

As necessary as suitable planning is for relocation of nursing home residents, it is at least as necessary for the Medi-Cal inpatients and outpatients who have come to depend on Rancho's services. There are two reasons.

First, many of Rancho's services are not found elsewhere in Los Angeles County. When found elsewhere, they are often not of the same technical quality or expertise of Rancho's current array of care.

Second, when individual services are of high quality, they are often not woven together as they are at Rancho. This makes it vital to plan well in advance to identify appropriate discrete substitute services and to weave them together in service packages that are appropriate to each of Rancho's patients. Rancho's patients' needs are often extraordinarily complex. Unlike nursing home patients' services, Rancho's patients' services seldom can be met in one place. Arranging substitute care is not as easy as making a single phone call to identify an appropriate level of nursing home care in a convenient location.

If the County is indeed not setting aside money to finance the preparation of individualized and comprehensive discharge plans for each Rancho patient—inpatient and outpatient—it is behaving irresponsibly.

Why might the County fail to do this? Perhaps because it knows that services to replace those now provided at Rancho are simply not available elsewhere—or are not in adequate supply. Perhaps because it knows that other caregivers will not be willing to serve Rancho patients at the substantially lower Medi-Cal rates at which they are paid. Perhaps because it does not want these two things to become publicly known, as that knowledge would undermine its plan to close Rancho. Perhaps the County's DHS staff simply does not have the time to plan for Rancho's patients because it is already stretched precariously by the demands of budget-cutting, care-cutting, and employee cascading, and attempts at system reform.

The County's apparent failure to take responsibility for Rancho's patients contrasts with Thomas L. Garthwaite's description of County DHS's commitments to improving care. According to Garthwaite:

DHS is also committed to a revised system that is both more efficient and yields better health return for every dollar invested. A redesigned DHS system can produce a better health care delivery system with services of better quality, access to routine services through extended hours, urgent care clinics and phone consultation, and prudent use of specialty, inpatient and emergency services.<sup>60</sup>

But if a solution is to work, it should address the problem and its causes. Is the financial crisis in County DHS caused by an inefficient system or by inadequate revenue? Or, what share of the problem is caused by each?

It seems clear that County DHS has to promise system reform as a condition of receiving continued federal help. The federal government may believe or seem to believe that its short-term financial aid to Los Angeles County is all that is needed—that if the County DHS only operates more efficiently, financing from existing sources will be adequate. Viewed in this way, the federal government uses its short-term aid to lever County DHS to become more efficient. If the federal government did not do this, it would have to address the reality that County DHS simply needs more and more tax money, year after year, from some level of government, in order to sustain health care in Los Angeles County. And no level of government is willing to acknowledge this publicly.

Certainly, there are various types of inefficiencies and waste in any health system, public or private. But County DHS's problems will not be solved through system reform and greater efficiency. That is because the main cause of its financial problems is that Los Angeles County does not have enough money to provide adequate-quality health care in adequate volumes to the residents of the county who need and seek it.

In this sense, it appears that Rancho's closing is both a way for the County to save some money in the short run, and also a way to demonstrate to Washington that County DHS is indeed undertaking system reforms. Both County DHS and Washington probably realize that the substance of what they call reform is diminished capacity to care for Medi-Cal and uninsured patients—both at Rancho and at LAC+USC. But both must, apparently, pretend that system reform will make it possible to provide more and better care with less money.

When Dr. Garthwaite served as Under Secretary for Health in the Department of Veterans Affairs in 2000, he said to the Paralyzed Veterans of America that "'We can't stop by saying [VA facilities are] good or even great. We have to ask, How can we make them even better.' "<sup>61</sup>

Given the harm associated with closing Rancho, Dr. Garthwaite's view of VA facilities seems to be exactly the right one to apply to Rancho.

When a local government wishes to close a public hospital, it can be expected to promise that alternative services will be available and that access to care will not be harmed. In Washington, D.C., a considerable amount of incomplete or inaccurate information was put before the public by a local government anxious to close D.C. General Hospital.<sup>62</sup> The substitute services arranged under contract have proven to be extremely unreliable and of low quality. The emergency room that was to be left open at the former D.C. General will now be downgraded to an urgent care center.<sup>63</sup> The

JCAHO has just issued a preliminary denial of accreditation to the main substitute hospital.<sup>64</sup>

According to the December 2002 – January 2003 poll of "nearly" 200 resident physicians by the Joint Council of Interns and Residents, 90 percent "of residents surveyed indicated that their patients could not receive the type of rehabilitation services provided by the Rancho Los Amigos National Rehabilitation Center at other public or private facilities in the County." <sup>65</sup> The relevant questions concerned the availability of the kinds of services provided by Rancho at the resident's own hospital, and the ability of patients from the resident's own hospital to find services nearby that were comparable to Rancho's.

# *II. ARE THE COUNTY'S ESTIMATES OF ITS SAVINGS FROM CLOSING RANCHO ACCURATE?*

## A. What Are the County's Estimated Costs of Care at Rancho?

Estimates of the saving to be won for the County by closing Rancho begin with the current County subsidy. This was \$53.8 million in fiscal year 1999-2000.<sup>66</sup>

The Gill Balsano report estimated the County subsidy at about \$70 million, apparently for fiscal year 2002-03.<sup>67</sup>

County DHS now estimates that the County would save \$58.6 million in fiscal year 2003-04 if Rancho were to close by 15 June 2003.<sup>68</sup> This apparently reflects planned payment of some \$14.7 million to pay for care for uninsured low-income patients at other facilities.<sup>69</sup> Along these lines, Blue Consulting estimates a saving to the County of \$64.9 million, in fiscal year 2004-05, along with a sustained County contribution of \$14.7 million for indigent care.

## B. What Are the County's Estimated Savings from Closing Rancho?

Blue Consulting summarizes ten scenarios for Rancho along with the County's estimates of the savings associated with each. Five of the scenarios call for closing Rancho completely and the other five call for Rancho to become an independent medical authority.<sup>70</sup>

Baseline total County costs are assumed to be those associated with Rancho remaining open, and these are projected at \$79.6 million for fiscal year 2004-05.

Projected savings to the County range from

- \$64.9 million (if Rancho closes and the County's future obligation is limited to the planned \$14.7 million for care of uninsured low-income people) to
- \$21.7 million if Rancho remains open and becomes an independent medical authority, while the County's cost of financing care of uninsured low-income people rises to \$37 million.

## C. Are the County's Estimates Accurate?

#### 1. Problems identified by Blue Consulting

Blue Consulting has raised a number of questions about the assumptions that the County made while estimating the savings from closing Rancho. Two of the ways in which Blue Consulting faulted the County's estimates are:

• "Some patients previously considered to be the responsibility of the County were simply not going to be served at RLANRC."

 "Services and payment sources could be 're-mixed.' Some scenarios 're-mixed services and payers from low margin to high margin without any articulated clinical or marketing impact assessments."<sup>71</sup>

[Unfortunately, I am unable now to review the Blue Consulting report's assessment of the County's scenarios in depth because this assessment is unreadable because it is printed in mirror image in my copy of the Beilenson Administrative Record's version of Appendix I-A, Beilenson Administrative Record, Vol. V, E-23, pp. 592 ff.]

#### 2. Other problems

The County's estimates of its savings seem to rest on the difference between the County's share of the cost of continued operation of Rancho minus the costs of purchasing substitute services for uninsured low-income patients from private hospitals.

These estimates do not appear to include the continued net cost of serving Medi-Cal inpatients and outpatients who are forced to relocate from Rancho to other County DHS beds, emergency rooms, and outpatient clinics. The net cost is the difference between actual cost of care and Medi-Cal payments.

A subtle but powerful problem is that the average cost of caring for patients in the County DHS system is ineluctably rising as the number of patients served is shrinking. That is because, as beds are cut, the patients who are hospitalized as inpatients are, on average, the sickest of the sick, the most urgent of the emergent. This, after all, is the purpose of good medical triage.

Owing to this distillation-like process, the average cost of Medi-Cal patients displaced from Rancho will rise, but the Medi-Cal payment per patient-day may well not rise as quickly. If this happens, the cost *per patient* to the County of serving displaced Rancho patients in County DHS hospitals will rise substantially.

Further, if Medi-Cal patients displaced by Rancho fail to obtain substitute outpatient care that is as clinically appropriate and effective as that provided by Rancho, patients who had been stabilized and rehabilitated by Rancho, and who had been served principally as outpatients, can be expected to de-stabilize and become more disabled. That will engender a higher volume of need for inpatient care than prevails today. And it can be expected that a high share of this additional volume will flow to surviving County DHS hospitals.

These patients can be expected to experience longer inpatient hospitalizations at surviving County DHS hospitals than they would have experienced at Rancho because the surviving hospitals will, in all likelihood, lack the skill, experience, coordination, and continuity of care to treat these patients as efficiently and effective as did Rancho. And if County DHS appreciates the need to re-create Rancho's services at one of the surviving hospitals, it will have to confront the persisting shortages of beds, skilled staff, and money that plague those County DHS facilities.

Rancho inpatients would cost at least as much to serve at County DHS hospitals as they now cost at Rancho, were they to receive substitute care at other County DHS hospitals.

That is because other County DHS hospitals lack the training or experience to efficiently manage the complicated and often esoteric problems faced by Rancho's patients.

Beck and Scroggins note that for patients with spinal cord injury, for example, rehospitalization rates range from 19 percent to 57 percent. When providers of long-term care are more competent, rehospitalization rates can be expected to be lower.<sup>72</sup> In a French multi-center study, Klotz and colleagues found a much higher rate of rehospitalizations—74 percent—with an average of three additional hospital admissions per patient rehospitalized. Complications causing these additional hospitalizations included urinary and bowel problems, pressure sores, difficulty breathing, pain, and leg fractures.<sup>73</sup>

High rehospitalization rates and high complication rates testify to the substantial savings in annual cost of care per patient to be won through expert rehabilitation services. These rates also point to the high risk that Rancho's patients will cost substantially more to serve, each year, were Rancho to close.

Many patients who are today served at Rancho's outpatient clinics will be forced to seek care at already-crowded emergency rooms,<sup>74</sup> increasing cost of their own care and delaying care for other needy patients. Displaced Rancho patients could further clog intake to County DHS hospitals.

The could also clog discharge from County DHS hospitals, as County DHS hospitals alone are believed to need access to 90 or more rehabilitation beds for their own discharges.<sup>75</sup> If these beds are not available, either patients back up in County DHS hospitals, which already suffer unacceptably high occupancy rates,<sup>76</sup> or they are discharged to nursing homes and other sites of care that are not staffed or paid at levels adequate to provide safe or clinically appropriate care. And that can be expected to result in further increases in demands for admission to County DHS hospitals.

It appears, then, that the County's projected savings are predicated on the denial of needed care, not on efficiencies—not on clinical efficiencies, not on financial efficiencies, and not on health system efficiencies.

At the same time, the combination of a) *reduced volumes of care* and b) *lower Medi-Cal payment rates* at those hospitals that do serve some of Rancho's Medi-Cal patients mean a marked reduction in total Medi-Cal payments flowing to all caregivers in Los Angeles County as a whole. The reduction in dollars to pay for care means reduced employment for therapists, nurses, physicians, aides, and other caregivers. They have less money to pay rent, by groceries, fix their cars, and the like. The resulting total loss of income typically equals 2.08 times the actual reduction in Medi-Cal payments.<sup>77</sup>

It is noteworthy that County DHS plans to close Rancho to cut its own budget deficit. This means that County DHS is acting in a way that has the effect of disrupting care for all of Rancho's patients in order to save its own money. The County's subsidy to Rancho equaled a little over one-third of the hospital's total cost in fiscal year 1999-2000. This means that the County is leveraging disruption of clinical services whose value is almost triple its own subsidy cost in order to cut that subsidy. Indeed, if the County's net real saving from closing Rancho—after shouldering the real cost of substitute care to displaced uninsured low-income patients and to Medi-Cal patients—is only one-half of its total current subsidy, then the County will be disrupting care worth roughly five or six times its dollar saving.

Similarly, if Medi-Cal patients fail to receive effective rehabilitation services—because of Rancho's closing and because of the lack, adequacy, or skills of alternative providers—they are much less likely to be able to work and pay taxes that accrue to Los Angeles County.

ER and ICU delays and gridlock throughout Los Angeles County can be expected to grow if Rancho were to close. Rancho's patients often require substantial amounts of care to prevent or minimize acute destabilization of their underlying illnesses. With the loss of Rancho, its clinical expertise, its commitment to combining inpatient and outpatient care, and its orientation to prevention and to heightened functioning, many patients will suffer otherwise preventable deterioration, disability, pain, and even death.

Finally, the costs associated with closing Rancho should be assessed in light of capacity reductions elsewhere within the County DHS system. The proposed reduction of LAC+USC's beds to 600 will increase the stress on a County DHS acute care system that is already bursting at the seams.

The proposal for limiting the new LAC+USC to 600 beds rested on a combination of substantial contracting of acute care beds from private hospitals and on expansion of outpatient capacity.<sup>78</sup>

Persisting in those acute bed cuts—when one of County DHS's own foundations for those cuts has been removed—demonstrates an unwillingness to face reality and a reckless disregard of the health and safety of the County's residents.

Closing Rancho in the absence of alternative hospitals that are available, able, and willing to receive Rancho's patients constitutes an equally reckless disregard of the medical needs of Rancho's patients.

County DHS's cuts in three areas at the same time—closing Rancho, cutting outpatient capacity, and cutting inpatient beds—can be expected to gravely diminish County DHS's capacity to serve all of its patients. At the same time, growing over-crowding at County DHS hospitals will spill over to harm care at private hospitals.

Together, these events will push health care in Los Angeles County closer to medical meltdown.

#### Notes

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of Racial Change," Health Law Project Library Bulletin, Vol. 5, No. 6 (June 1980), pp. 169-181.

<sup>2</sup> "Threats to Urban Public Hospitals and How to Respond to Them," D.C. General Hospital Medical Staff, Doctors Day Address, Washington, D.C., 30 March 2001; Alan Sager, "The Opiate of the Managers," *Society*, Vol. 23, No. 5 (July - August 1986), pp. 65-71; reprinted in Carolyn L. Wiener and Anselm L. Straus, eds., *Where Medicine Fails*, 5<sup>th</sup> ed., New Brunswick, N.J.: Transaction Publishers, 1997.

<sup>3</sup> Alan Sager, "Evaluating the Home Care Service Needs of the Elderly," *Home Health Care Services Quarterly*, Vol. 3, No. 2 (Fall 1982), pp. 87-91; *Planning Home Care with the Elderly*, Cambridge: Ballinger, 1983; Alan Sager, "A Proposal for Promoting More Adequate Long-term Care for the Elderly," *The Gerontologist*, Vol. 23, No. 1 (February 1983), pp. 13-17; Alan Sager, "Improving the Provision of Long-Term Care," *Aging*, Nos. 324-326 (March-April 1982), pp. 16-27.

<sup>4</sup> Maureen Dyer Stevens, letter to Los Angeles County Supervisors, 8 November 2002, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-1, C. Letters to Board of Supervisors, #18, 28 January 2003.

<sup>5</sup> "Declaration of Dr. Ed Newton," Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-2, LAC/USC Hospital, A. Provider Declarations, #7, 28 January 2003.

<sup>6</sup> Declaration of Dr. Brian D. Johnston, Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-2, LAC/USC Hospital, A. Provider Declarations, #10, 28 January 2003.

<sup>7</sup> DHS Planning Advisory Group meeting, Meeting Summary of 24 January 2003 meeting.

<sup>8</sup> Stephen Forer and Steve Duvall, "Potential Impact of the Closure of Rancho Los Amigos National Rehabilitation Hospital on Access to Needed Rehabilitation Services in the Los Angeles Area," 1 April 2003, p. 3.

<sup>9</sup> Blue Consulting, *Rancho Los Amigos National Rehabilitation Center Fiscal and Operations Analysis,* Final Report, n.d., included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-23, 28 January 2003, pp. 565ff.

<sup>10</sup> Gill Balsano Consulting, *Rancho Los Amigos National Rehabilitation Hospital Market and Operational Analysis: Evaluation of Alternative Government Options,* 17 January 2003, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-26, 28 January 2003, pp. 714 ff.

<sup>11</sup> Blue Consulting, *Rancho Los Amigos National Rehabilitation Center Fiscal and Operations Analysis,* Final Report, n.d., p. 16, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-23, 28 January 2003, pp. 565ff.

<sup>12</sup> Gill Balsano Consulting, *Rancho Los Amigos National Rehabilitation Hospital Market and Operational Analysis: Evaluation of Alternative Government Options,* 17 January

2003, p. 11, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-26, 28 January 2003, pp. 714 ff.

<sup>13</sup> "Rancho Los Amigos National Rehabilitation Center, FY 04/05 Projection Patient Days by Payor (Base Model)," n.d.

<sup>14</sup> "Rancho Los Amigos National Rehabilitation Center, FY 04/05 Projection Outpatient Visits by Payor (Base Model)," n.d.

<sup>15</sup> Andrew Bindman, Dennis Keane, and Nicole Lurie, "A Public Hospital Closes: Impact on Patients' Access to Care and Health Status," *Journal of the American Medical Association,* Vol. 264, No. 22 (12 December 1990), pp. 2899-2904.

<sup>16</sup> David A. Kindig, Hormoz Movassaghi, Nancy Cross Dunham, Daniel I. Zwick, and Charles M. Taylor, "Trends in Physician Availability in 10 Urban Areas from 1963 to 1980," *Inquiry,* Vol. 24 (Summer 1987), pp. 136-146.

<sup>17</sup> Pearl S. German and Sam Shapiro, "Hospitals as Source of Ambulatory Care for Elderly Urban Populations," Baltimore: Health Services Research and Development Center, The Johns Hopkins Medical Institutions, 14 November 1978.

<sup>18</sup> Calculated from David A. Woodwell, "National Ambulatory Medical Care Survey: 1996 Summary," Advance Data from Vital and Health Statistics of the Centers for Disease Control and Prevention/National Center for Health Statistics, Number 295, December 17, 1997, Table 2; Linda F. McCaig and Barbara J. Stussman, "National Hospital Ambulatory Medical Care Survey: 1996, Emergency Department Summary," Advance Data from Vital and Health Statistics of the Centers for Disease Control and Prevention/National Center for Health Statistics, Number 293, December 17, 1997, Table 1; and Linda F. McCaig, "National Hospital Ambulatory Care Survey: 1996 Outpatient Department Summary," Advance Data from Vital and Health Statistics of the Centers for Disease Control and Prevention/National Center for Health Statistics, Number 294, December 17, 1997, Table 1.

<sup>19</sup> Cameron Mustard, Anita L. Kozyrskyj, Morris L. Barer, and Sam Sheps, "Emergency Department Use as a Component of Total Ambulatory Care: A Population Perspective," *Canadian Medical Association Journal,* Vol. 158, No. 1 (13 January 1998), pp. 49-55.

<sup>20</sup> Gill Balsano Consulting, Rancho Los Amigos National Rehabilitation Hospital Market and Operational Analysis: Evaluation of Alternative Government Options, 17 January 2003, p. 11, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-26, 28 January 2003, pp. 714 ff.

<sup>21</sup> See, for example, Evan Perez, Deborah Solomon, and Carrick Mollenkamp,
"HealthSouth Fires Scrushy, Terminates Auditor Service: Finance Executive Admits
Falsifying Results in Third Guilty Plea in Rapid Investigation," *Wall Street Journal Online*,
1 April 2003.

<sup>22</sup> OSHPD 2000 data on private sector hospitals, cited in From Appendix C of Los Angeles County Department of Health Services, Scenario III report, pp. 61-62.

<sup>23</sup> Stephen Forer and Steve Duvall, "Potential Impact of the Closure of Rancho Los Amigos National Rehabilitation Hospital on Access to Needed Rehabilitation Services in the Los Angeles Area," 1 April 2003, p. 4.

<sup>24</sup> Stephen Forer and Steve Duvall, "Potential Impact of the Closure of Rancho Los Amigos National Rehabilitation Hospital on Access to Needed Rehabilitation Services in the Los Angeles Area," 1 April 2003, p. 4.

<sup>25</sup> Stephen Forer and Steve Duvall, "Potential Impact of the Closure of Rancho Los Amigos National Rehabilitation Hospital on Access to Needed Rehabilitation Services in the Los Angeles Area," 1 April 2003, p. 4.

<sup>26</sup> Blue Consulting, *Rancho Los Amigos National Rehabilitation Center Fiscal and Operations Analysis,* Final Report, n.d., p. 17, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-23, 28 January 2003, pp. 565ff.

<sup>27</sup> Blue Consulting, *Rancho Los Amigos National Rehabilitation Center Fiscal and Operations Analysis,* Final Report, n.d., p. 17, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-23, 28 January 2003, pp. 565ff.

<sup>28</sup> What would George Orwell say? See Thomas L. Garthwaite, Memorandum to Supervisors on DHS, 1 April 2003, Attachment III for use of this phrase.

<sup>29</sup> DHS Planning Advisory Group meeting, Meeting Summary of 24 January 2003 meeting.

<sup>30</sup> Stephen Forer and Steve Duvall, "Potential Impact of the Closure of Rancho Los Amigos National Rehabilitation Hospital on Access to Needed Rehabilitation Services in the Los Angeles Area," 1 April 2003, p. 3.

<sup>31</sup> Author's calculations from American Hospital Association, Hospital Statistics, Chicago: The Association, 2002, table 6 (California).

<sup>32</sup> "Medicare Cost Report Provider Expense Comparison," various years. Total inpatient expenses, the numerators, were calculated in light of inpatient share of revenue.

<sup>33</sup> Stephen Forer and Steve Duvall, "Potential Impact of the Closure of Rancho Los Amigos National Rehabilitation Hospital on Access to Needed Rehabilitation Services in the Los Angeles Area," 1 April 2003, p. 6, citing data from Rancho Los Amigos National Rehabilitation Center, Neuro Rehabilitation Council, Program Performance Evaluation Report, 1 January 2001 through 31 December 2001; Rancho Los Amigos National Rehabilitation Hospital, Market and Operational Analysis, Report submitted to The California Community Foundation, January 17, 2003; California Rehabilitation Association and the Western Alliance for Rehabilitation: Special supplemental inpatient rehabilitation survey on IRF-PPS, 10/31/02. CRA 980 9<sup>th</sup> Street, Ste 420, Sacramento, CA 95814-2724; and Uniform Data System for Medical Rehabilitation, Custom Report for California Rehabilitation Association, State vs. Nation, Discharges 1/1 – 6/30/02, prepared 10/30/02.UDSMR, 270 Northpointe Parkway, Ste 300, Amherst, NY 14228-1897. <sup>34</sup> Ann Barry Flood, *The Impact of Hospital Characteristics on Surgical Outcomes and Lengths of Stay,* NTIS PB81-233165.

<sup>35</sup> Steven A. Finkler, "Cost-effectiveness of Regionalization: The Health Surgery Example, *Inquiry*, Vol. 16 (Fall 1979), pp. 264-270.

<sup>36</sup> Peter Mahrer, "Regionalizing Cardiac Catheterization: Why It Works," *Hospitals,* 20 July 1986.

<sup>37</sup> Survey of 30 Rehabilitation Facilities in Los Angeles County, Conducted by the Western Law Center for Disability Rights, March 2003.

<sup>38</sup> Stephen Forer and Steve Duvall, personal communication.

<sup>39</sup> Stephen Forer and Steve Duvall, "Potential Impact of the Closure of Rancho Los Amigos National Rehabilitation Hospital on Access to Needed Rehabilitation Services in the Los Angeles Area," 1 April 2003, pp. 4 and 6.

<sup>40</sup> Total margin is defined as [(total revenues minus total expenses)/total revenues]. Source of the data is the California Office of Statewide Health Planning and Development (OSHPD).

<sup>41</sup> Stephen Forer and Steve Duvall, "Consolidated List of Acute Inpatient Rehab Providers," 1 April 2003.

<sup>42</sup> Stephen Forer and Steve Duvall, "Consolidated List of Acute Inpatient Rehab Providers," 1 April 2003.

<sup>43</sup> Declaration of Dr. Daniel Higgins, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-5, Other Declarations, #o 18, 28 January 2003.

<sup>44</sup> Mark Finucane, Director, Los Angeles County Department of Health Services, "Los Angeles County+USC Medical Center Replacement Project, Position Paper, Executive Summary, p. 2, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. III, Exhibit C-1, #j , 28 January 2003, p 261.

<sup>45</sup> According to Steven Duvall, "Typically Medi-Cal reimbursement for OP is far worse than for IP," Personal communication, 2 April 2003. I am not personally familiar with any departure from this general pattern in any state's Medicaid program.

<sup>46</sup> Spinal Cord Injury Information Network, <u>www.spinalcord.uab.edu</u>, accessed 2 April 2003.

<sup>47</sup> Donald S. Shepard, "Estimating the Effect of Hospital Closure on Areawide Inpatient Hospital Costs: A Preliminary Model and Application," *Health Services Research*, Vol. 18, No. 4 (Winter 1983), pp. 513-549.

<sup>48</sup> Steven A. Finkler, "Cost-effectiveness of Regionalization: The Health Surgery Example, *Inquiry*, Vol. 16 (Fall 1979), pp. 264-270; Jonathan A. Showstack, Kenneth E.

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<sup>49</sup> Paul D. McGrath, David E. Wennberg, John D. Dickens, Jr., and others, "Relation between Operator and Hospital Volume and Outcomes Following Percutaneous Coronary Interventions in the Era of the Coronary Stent," *Journal of the American Medical Association,* Vol. 284, No. 24 (27 December 2000), pp. 3139-3144.

<sup>50</sup> Judith S. Hochman, Lynn A. Sleeper, Harvey D. White, and others, "One-year Survival Following Early Revascularization for Cardiogenic Shock, *Journal of the American Medical Association,* Vol. 285, No. 2 (10 January 2001), pp. 190-192; David R. Thiemann, Josef Coresh, William J. Oetgen, and Neil R. Powe, "The Association between Hospital Volume and Survival after Acute Myocardial Infarction in Elderly Patients, "*New England Journal of Medicine,* Vol. 340, No. 21 (27 May 1999), pp. 1640-1648.

<sup>51</sup> Peter Mahrer, "Regionalizing Cardiac Catheterization: Why It Works," *Hospitals*, 20 July 1986.

<sup>52</sup> Deborah Schrag, Laura D. Cramer, Peter B. Bach, and others, "Influence of Hospital Procedure Volume of Outcomes Following Surgery for Colon Cancer," *Journal of the American Medical Association,* Vol. 284, No. 23 (20 December 2000), pp. 3028-3035; Colin B. Begg, Laura D. Cramer, William J. Hoskins, and Murray F. Brennan, "Impact of Hospital Volume on Operative Mortality for Major Cancer Surgery," *Journal of the American Medical Association,* Vol. 280, No. 20 (25 November 1998), pp. 1747-1751.

<sup>53</sup> Jeffrey D. Hosenpud, Timothy J. Breen, Erick B. Edwards, and others, "The Effect of Transplant Center Volume on Cardiac Transplant Outcome," *Journal of the American Medical Association*, Vol. 271, No. 23 (15 June 1994), pp. 1884-1889.

<sup>54</sup> Robert G. Hughes, Deborah W. Garnick, Harold S. Luft, and others, "Hospital Volume and Patient Outcomes: The Case of Hip Fracture Patients," *Medical Care,* Vol. 26, No. 11 (November 1988), pp. 1057-1067.

<sup>55</sup> Harold S. Luft, John P. Bunker, and Alain C. Enthoven, "Should Operations Be Regionalized? The Empirical Relation between Surgical Volume and Mortality," *Journal of the American Medical Association,* Vol. 301, No. 25 (20 December 1979), pp. 1364-1369; "Patient Outcomes Linked to Hospital Case Load," *NCHSR Research Activities,* No. 62 (April 1984), p. 1; see also Ann Barry Flood, *The Impact of Hospital Characteristics on Surgical Outcomes and Lengths of Stay,* NTIS PB81-233165.

<sup>56</sup> Avery B. Nathens, Gregory J. Jurkovich, Ronald V. Maier, and others, "Relationship between Trauma Center Volume and Outcomes," *Journal of the American Medical Association,* Vol. 285, No. 9 (7 March 2001), p. 1164-1171; Avery B. Nathens, Gregory J. Jurkovich, Peter Cummings, and others, "The Effect of Organized Systems of Trauma Care on Motor Vehicle Crash Mortality," *Journal of the American Medical Association,* Vol. 283, No. 15 (19 April 2000), pp. 1990-1994; Richard J. Mullins, Judith Veum-Stone, Mark Helfand, and others, "Outcome of Hospitalized Injured Patients after Institution of a Trauma System in an Urban Area," *Journal of the American Medical Association,* Vol. 271, No. 24 (22/29 June 1994), pp. 1919-1924.

<sup>57</sup> Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-1, A. Patient Declarations #1 through #8, 28 January 2003.

<sup>58</sup> Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-1, B. Provider Declarations #1 through #11, 28 January 2003.

<sup>59</sup> Maureen Dyer Stevens, letter to Los Angeles County Supervisors, 8 November 2002, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-1, C. Letters to Board of Supervisors, #18, 28 January 2003.

<sup>60</sup> Thomas L. Garthwaite, Memorandum to Los Angeles County supervisors on Health Department Budget Committee of the Whole Meeting – June 26, 2002, p. 1, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-5, pp. 405ff., 28 January 2003.

<sup>61</sup> Thomas Garthwaite, cited in Cliff Crase, "A Changing of the Guard," Paralyzed Veterans of America 54<sup>th</sup> Convention, August 2000, *Paraplegia News*, October 2000, <u>www.sportsnspokes.com/PN/articles/00\_10/ChangingOfTheGuard.htm</u>, accessed 3 April 2003.

<sup>62</sup> Alan Sager, *Saving D.C. General Hospital: Why and How?* Boston: Health Reform Program, Boston University School of Public Health, 5 October 2000.

<sup>63</sup> Avram Goldstein, "Hospitals, City Agree on Future of D.C. General," *Washington Post,* 4 March 2003.

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<sup>65</sup> Joint Council of Interns and Residents, *Breaking the System: The Human Cost of Hospital Clinic Closures in Los Angeles County,* January 2003, Declaration of Dr. Daniel Higgins, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. III, Exhibit C-3, #aa, 28 January 2003, pp. 1435ff.

<sup>66</sup> Rancho Los Amigos National Rehabilitation Center, Medical Services Summary: Summary of Costs and Revenues, FY 1999 / 2000 Actual.

<sup>67</sup> Gill Balsano Consulting, *Rancho Los Amigos National Rehabilitation Hospital Market and Operational Analysis: Evaluation of Alternative Government Options,* 17 January 2003, p. 1, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-26, 28 January 2003, pp. 714 ff.

<sup>68</sup> Thomas L. Garthwaite, Memorandum to Board of Supervisors, 1 April 2003, Attachment III.

<sup>69</sup> Gill Balsano Consulting, *Rancho Los Amigos National Rehabilitation Hospital Market and Operational Analysis: Evaluation of Alternative Government Options*, 17 January 2003, p. 1, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-26, 28 January 2003, pp. 714 ff.

<sup>70</sup> Blue Consulting, *Rancho Los Amigos National Rehabilitation Center Fiscal and Operations Analysis,* Final Report, n.d., pp. 9-10, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-23, 28 January 2003, pp. 565ff.

<sup>71</sup> Blue Consulting, *Rancho Los Amigos National Rehabilitation Center Fiscal and Operations Analysis,* Final Report, n.d., pp. 7-8, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. V, Exhibit E-23, 28 January 2003, pp. 565ff.

<sup>72</sup> L.A. Beck and L.M. Scroggins, "Optimizing Health of Individuals with Tertraplegia," *Spinal Cord Injury Nursing,* Vol 18, No. 4 (Winter 2001), pp. 181-196.

<sup>73</sup> R. Klotz, P.A. Joseph, J.F. Ravaud, and others, "The Tetrafigap Survey on the Longterm Outcomes of Tetraplegic Spinal Cord Injured Persons: Part III, Medical Complications and Associated Factors," *Spinal Cord,* Vol. 40, No. 8 (September 2002), pp. 457-467.

<sup>74</sup> See, for example, Declaration of Dr. Daniel Higgins, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-5, Other Declarations, # o, 28 January 2003.

<sup>75</sup> Gill Balsano, *Rancho Los Amigos National Rehabilitation Hospital, Market and Operational Analysis: Evaluation of Alternative Governance Options,* Presented to the California Community Foundation, 6 January 2003, p. 30.

<sup>76</sup> See, for example, "Declaration of Scott Selco, M.D., included in Beilenson Administrative Record on Rancho Los Amigos, Vol. I, Exhibit A-2, LAC/USC Hospital, A. Provider Declarations, #1, 28 January 2003.

<sup>77</sup> Bureau of Economic Affairs, U.S. Department of Commerce, *Regional Multipliers: A User Handbook for the Regional Input – Output Modeling System (RIMS II)*, Washington: U.S. Government Printing Office, May 1986.

<sup>78</sup> Martin Finucane, Memorandum to Los Angeles County Supervisors on LAC+USC Medical Center Project, 3 December 1997, Declaration of Dr. Daniel Higgins, included in Beilenson Administrative Record on Rancho Los Amigos, Vol. III, Exhibit C-1, # o 18, 28 January 2003.