

# Scenario III

Impact on Inpatient & Emergency  
Services in Los Angeles County



# **REPORT OF FINDINGS**

BY

**NATIONAL HEALTH FOUNDATION**

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**PREPARED FOR**

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## EXECUTIVE SUMMARY

The National Health Foundation's Model assesses the impact of implementing Scenario III of the 2002 Los Angeles County's Department of Health Services' Restructuring Recommendations. This Scenario includes closing hospital beds and reducing ambulatory care services. The Model focuses on the impact of the hospital-based changes and does not include any changes to ambulatory care.

A Technical Advisory Committee reviewed all Model development, including discussions about data (Office of State Health Planning & Development data supplemented by a hospital survey), Model assumptions and patient routing rules (details are provided in the Technical Report that accompanies this report). All Model outputs are annual averages and impacts are reported at the countywide and individual SPA levels.<sup>1</sup>

Overall the Model shows that implementing the hospital-based changes and closures delineated in Scenario III will result in:

- Little impact on hospitals throughout the County. However, the situation will worsen for DHS hospitals that, pre-Scenario III, are operating at maximum capacity virtually all the time.
- Patients waiting longer in Emergency Departments and more of them leaving without being treated.
- Physicians experiencing more difficulties finding hospital beds for the patients they want to admit immediately.
- Physicians experiencing more difficulties finding hospitals able to admit psychiatric patients and, consequently, more patients needing inpatient psychiatric services being sent to Emergency Departments in order to get the care they need.
- Patients needing rehabilitation services having more difficulty finding the beds they need; even those that find beds might not find equivalent treatment.
- Patients without health coverage bearing the brunt of the changes: Most of the patients sent to Emergency Departments because the psychiatric beds they need are unavailable will be uninsured; most of the patients unable to find the rehabilitation beds they need will be uninsured; and most of the patients whom physicians send to Emergency Departments because the inpatients beds they need are unavailable will be uninsured.

NHF developed the Model with funding from the Hospital Association of Southern California, the California HealthCare Foundation and The California Endowment and would like to thank the many knowledgeable people who generously helped with this project.

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<sup>1</sup> SPA stands for Service Planning Area, eight (8) of which comprise LA County. The LA County Board of Supervisors adopted these planning areas December 9, 1997.

## INTRODUCTION

Scenario III of the 2002 Los Angeles County's Department of Health Services' (LAC-DHS) Restructuring Recommendations<sup>2</sup> proposes the following service changes and closures:

- Closure of all inpatient beds at High Desert Hospital,
- Closure of all psychiatric beds in Department of Health Services' hospitals (Harbor/UCLA, LAC+USC, MLK/Drew, Olive View/UCLA),
- Reduction of 100 other inpatient beds at LAC+USC hospital,
- Alternate governance or closure of Rancho Los Amigos National Rehabilitation Center, and
- Closure of some health centers and reduction in ambulatory visits.

In mid 2002, the Hospital Association of Southern California (HASC) requested the National Health Foundation (NHF) to assess the impact of the Scenario III changes on the entire hospital system in Los Angeles County. Supported by HASC, the California HealthCare Foundation and The California Endowment, NHF has worked closely with LAC-DHS to develop a model through which to assess the impact of the hospital-based closures and changes delineated in Scenario III.<sup>3</sup>

The Impact Assessment Model simulates the use of inpatient and emergency services throughout LA County. Patients arrive at Emergency Departments requiring different levels of care (critical, urgent or non-urgent), whereas patients needing inpatient services may have scheduled admittance dates (elective inpatients), or may need to be admitted immediately (urgent inpatients).<sup>4</sup> All patients are routed through the entire system to different kinds of hospitals (e.g., Department of Health Services or private sector hospitals) according to historical patterns, their insurance status (commercial, Medicare, Medi-Cal and uninsured) and the type of bed they need.

A Technical Advisory Committee (TAC), which included representatives from public and private hospitals, community agencies, advocacy groups, public health and academia, reviewed all aspects of the Model development. This included discussions about data sources, Model assumptions and patient routing rules. Data came from different sources including Office of State Health Planning and Development (OSHPD) 2000 hospital discharge and utilization databases, which were supplemented and updated using NHF's 2002 Hospital and Emergency Department Survey distributed to all hospitals in LA

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<sup>2</sup> LAC-DHS Restructuring Recommendations delineate three distinct Scenarios. Scenario III proposes minimal changes and Scenario I proposes the most extreme changes. For details see LAC-DHS Redesign Plan, June 24, 2002.

<sup>3</sup> Scenario III's clinic closures and ambulatory visit reductions may increase the demand for emergency department care in the short-term; however, this increased demand is not factored into these results. The NHF Model originally included an Ambulatory Care component; because funding for it was not obtained, it has not yet been developed.

<sup>4</sup> Urgent status is approximated using the Office of State Health Planning and Development indicator "scheduled within 24 hours." Elective patients are taken to be those not scheduled within 24 hours.

County.<sup>5</sup> More detailed discussions about the data, assumptions and decision rules can be found the Technical Report that accompanies this report.

The Model simulates movement of patients through the current hospital system. Model outputs include the traditional measure of how busy hospitals are—occupancy rates—and three other more dynamic measures: 1) the times patients with different kinds of problems (those needing critical care, urgent care or non-urgent care) wait in Emergency Departments, 2) the numbers of patients who leave Emergency Departments without being seen because they get tired of waiting, and 3) the numbers of patients physicians send to Emergency Departments because they want them admitted immediately but no hospital beds are available.

In assessing the impact of Scenario III on the Model's 2002 baseline, four different outcomes are reported for seven groups of patients: 1) all patients seeking inpatient and emergency services, 2) patients needing critical emergency care, 3) patients needing urgent emergency care, 4) patients needing non-urgent emergency care, 5) patients needing psychiatric care, 6) patients needing rehabilitation care, and 7) patients whose physicians want them admitted immediately.

This document reports on the Model's results and consists of three sections: Introduction, Results and Conclusions. The Results section discusses Model outputs in five areas and the Conclusions section provides a review of the impact of Scenario III's hospital closures and changes on the entire hospital system.

## RESULTS

Each output area provides a brief introduction to the measure and findings at the overall County and individual SPA<sup>6</sup> levels (see Appendix A). Please note that while descriptive baseline data are presented, only statistically significant changes resulting from the implementation of Scenario III are reported. Figures of these findings are also presented<sup>7</sup> and data tables supporting the findings and the figures are provided in Appendix B.

### I. The Hospital Dilemma as Measured by Occupancy Rates

The Model includes data on nine different bed types, but for this report they are aggregated into five categories—Intensive Care beds, Medical/Surgical beds, Other Medical beds, Psychiatric beds and Rehabilitation beds (definitions are provided in each section). The Model's initial SPA level occupancy rates were perceived as being too low. Subsequent calculations using 2000 Office of State Health Planning and Development (OSHPD) data showed considerable variation in occupancy rates across different sectors of the overall

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<sup>5</sup> See the Technical Report that accompanies this report for a sample of this survey.

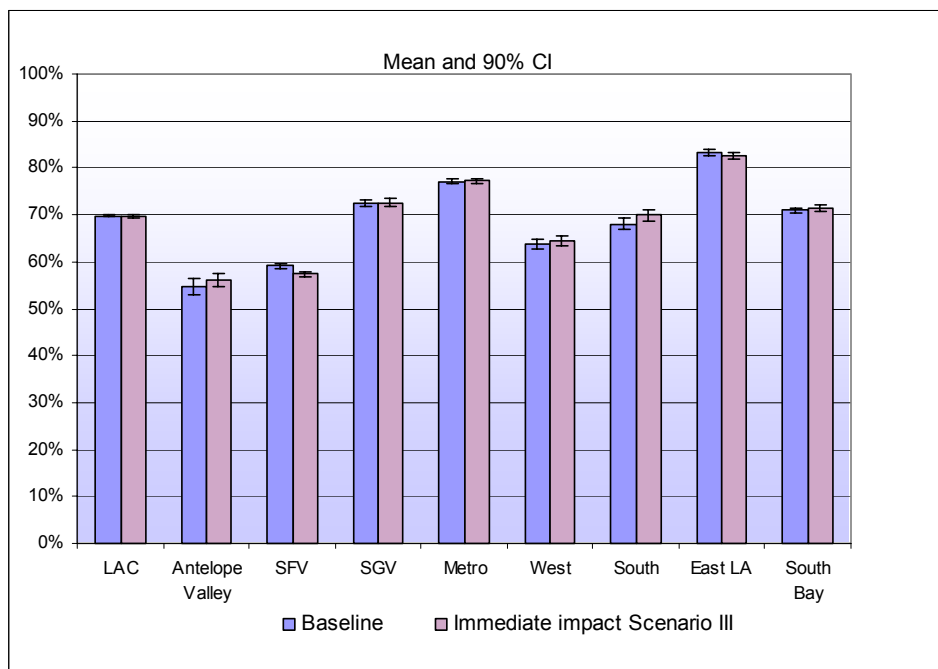
<sup>6</sup> SPA stands for Service Planning Areas, eight (8) of which comprise Los Angeles County. The LA County Board of Supervisors adopted these planning areas on December 9, 1997.

<sup>7</sup> The graphs include error bars representing 90% Confidence Intervals. Error bars showing smaller Confidence Internals indicate the increased precision of the projection.

hospital system. A detailed discussion is presented in Appendix C, but in summary, the highest occupancy rates are seen in Department of Health Services hospitals with trauma centers and the lowest in private sector hospitals without emergency departments. Occupancy rates for private sector hospitals with trauma centers and emergency departments fall between them. As a result of the wide variation, the occupancy rates generated by the Model are lower than those experienced by DHS and private sector hospitals with trauma centers but are consistent with the experience of the overall private sector hospitals which represent 96% of all hospitals within the system.

- a. **ICU occupancy rates.**<sup>8</sup> *Countywide*, Scenario III implementation will not affect the mean occupancy rate for Intensive Care beds in the entire hospital system. This will remain at 70%. As already discussed, occupancy rates among DHS hospitals are higher. As a result of Scenario III, the overall DHS hospital occupancy rate for ICU beds will increase 1%, from 86% to 87%.

**Figure 1: Hospital Inpatient Occupancy Rates by SPA, ICU Beds**



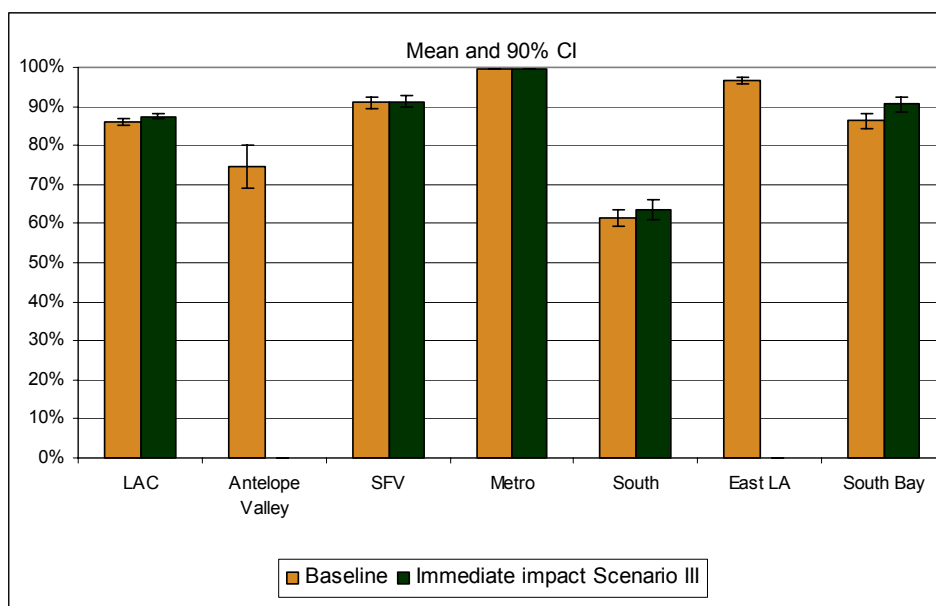
Source: NHF Impact Model Runs, Dec. 2002

*At the SPA level*, as a result of Scenario III, some SPAs will experience ICU occupancy rate changes of plus/minus one percent, but the range will remain very similar, from a low of 56% (Antelope Valley) to a high of 83% (East LA).

<sup>8</sup> This category includes Medical/Surgical Intensive, Coronary, Burn , Other Intensive, Pediatric Intensive and Neonatal Intensive Care.

Among DHS hospitals, ICU occupancy rates range from 61% (MLK/Drew, South) to 100% (LAC-USC, Metro). As a result of Scenario III, Harbor/UCLA (South Bay) will experience the largest increase, from 87% to 91%.<sup>9</sup>

Figure 2: DHS Hospital Inpatient Occupancy Rates by SPA, ICU Beds



Source: NHF Impact Model Runs, Dec. 2002

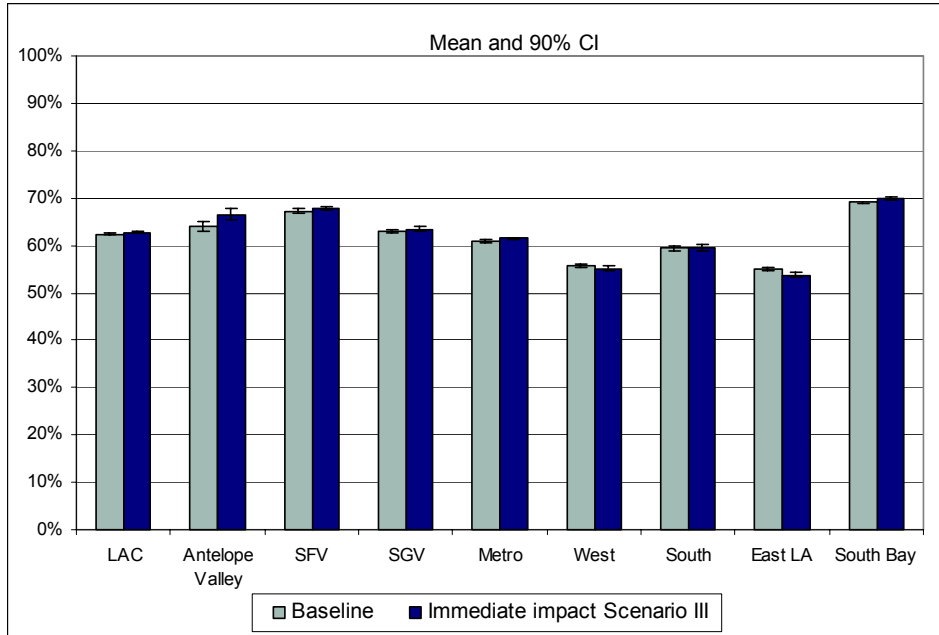
- b. Med/Surg occupancy rates.**<sup>10</sup> Countywide after Scenario III implementation the mean occupancy rate for all Med/Surg beds will increase slightly (1% increase to 63%). The Med/Surg beds' occupancy rate in DHS hospitals will increase from 94% to 98%.

*At the SPA level*, Med/Surg occupancy rates range from 55% (East LA) to 69% (South Bay). As a result of Scenario III, three SPAs will experience slight increases—Antelope Valley (from 64% to 67%), Metro (from 60% to 61%) and South Bay (from 69% to 70%).

<sup>9</sup> Note: There are no Immediate Impact Scenario III bars for Antelope Valley and East LA on the following DHS hospital graphs. This is because Scenario III includes removing this capacity from the system by closing High Desert Hospital's (Antelope Valley) inpatient beds and by alternate governance or closure of Rancho Los Amigos National Rehabilitation Center (East LA).

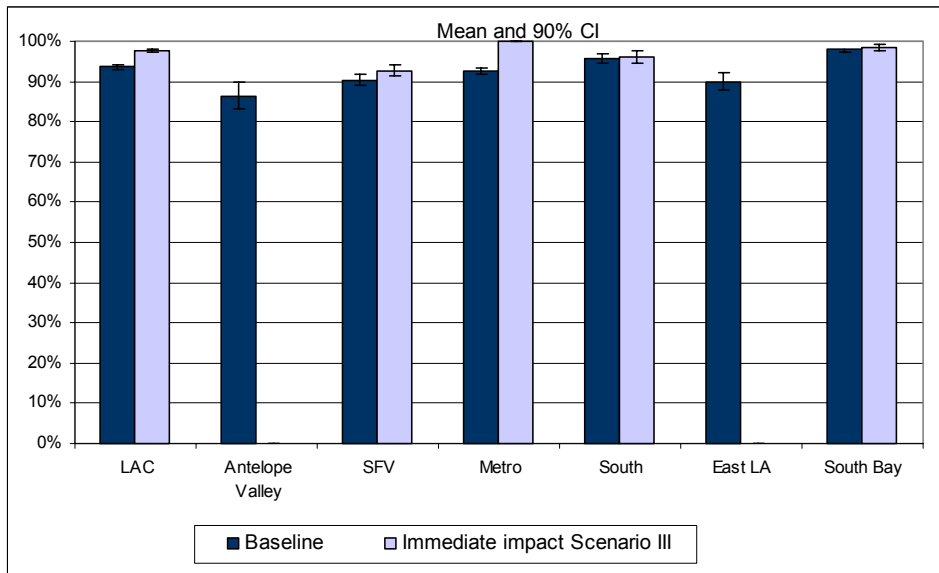
<sup>10</sup> This category includes Medical/Surgical Acute beds

Figure 3: Hospital Inpatient Occupancy Rates by SPA, Medical/Surgical Beds



Source: NHF Impact Model Runs, Dec. 2002

Figure 4: DHS Hospital Inpatient Occupancy Rates by SPA, Medical/Surgical Beds



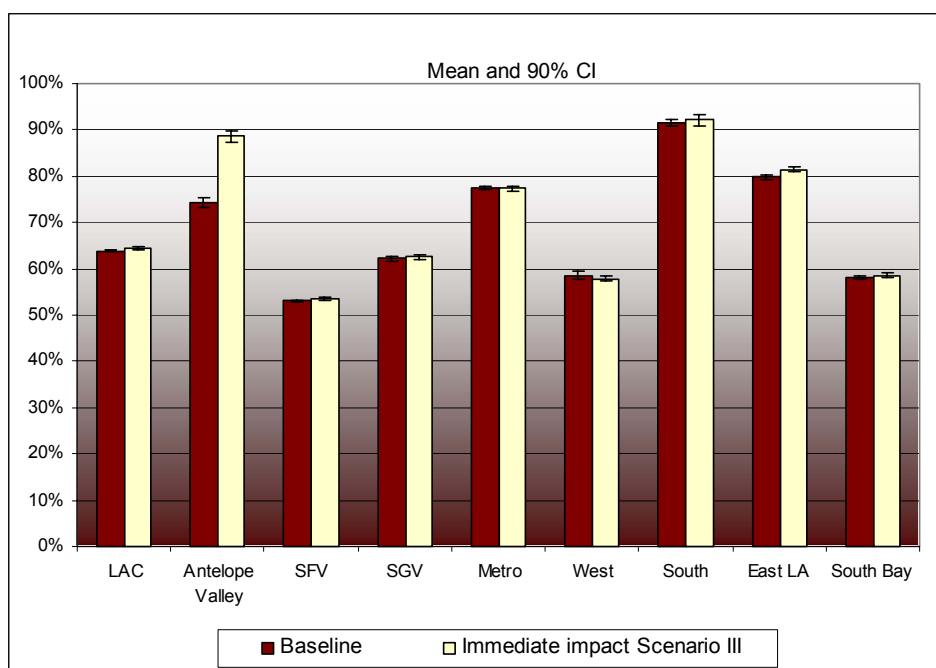
Source: NHF Impact Model Runs, Dec. 2002

Among DHS hospitals, Med/Surg occupancy rates range from 86% (High Desert Hospital, Antelope Valley) to 98% (Harbor/UCLA, South Bay). As a result of Scenario III, LAC-USC (Metro) will experience the largest increase, from 93% to 100%.

- c. **Other Medical beds occupancy rates.**<sup>11</sup> *Countywide*, after Scenario III implementation, the mean occupancy rate for Other Medical beds will show a slight increase from 63% to 64%. As with ICU and Med/Surg beds, DHS hospitals' Other Medical bed occupancy rate will show a larger increase--from 79% to 96%.

*At the SPA level*, before Scenario III, these occupancy rates range from 53% (San Fernando Valley) to 92% (South). After Scenario III, larger increases are seen in Other Medical bed occupancy rates than in ICU or Med/Surg beds. The largest increase will be seen in Antelope Valley (14% increase to 89%). Two other SPAs will also experience slight increases--East LA (2% increase to 81%), and San Fernando Valley (1% increase to 54%).

**Figure 5: Hospital Inpatient Occupancy Rates by SPA, Other Medical Beds**

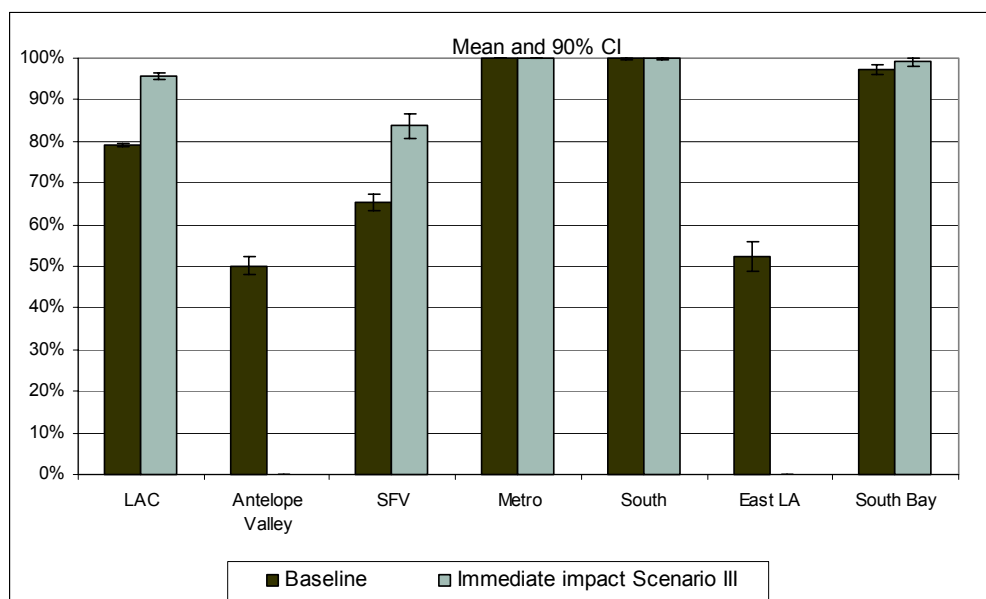


Source: NHF Impact Model Runs, Dec. 2002

Among DHS hospitals, the occupancy rates for Other Medical beds range from 50% (High Desert Hospital, Antelope Valley) to 100% (LAC+USC, Metro and MLK/Drew, South). As a result of Scenario III, the largest increase, from 66% to 84%, will be experienced in Olive View/UCLA (San Fernando Valley). Harbor/UCLA (South Bay) will also experience an increase from 97% to 99%.

<sup>11</sup> This category includes Pediatric Acute, Pediatric Subacute, Skilled Nursing, Definitive Observation, Chemical Dependency, Hospice, Other Acute, Other Subacute, Psychiatric Long-Term Care, Intermediate Care, Residential Care, Other Long-Term Care, Daily Hospital Services, Obstetrics, Alternative Birthing Care.

Figure 6: DHS Hospital Inpatient Occupancy Rates by SPA, Other Medical Beds



Source: NHF Impact Model Runs, Dec. 2002

## II. The Case Of Emergency Rooms—Increase in Wait Times and in the Numbers of Patients Who Leave Without Being Seen

The Model assessed the impact of Scenario III on the time different types of patients will wait for treatment in Emergency Departments. Three groups of patients—those requiring critical, urgent and non-urgent care—were assessed. Federal law requires that all patients entering emergency departments be assessed and stabilized regardless of ability to pay.<sup>12</sup> In the survey, wait times were defined as being from the time of arrival to the time of seeing a medical provider (not for triage but for care).

- a. **Critical patients.** These are patients presenting with acute injuries or illness that could result in permanent damage, injury, or death.

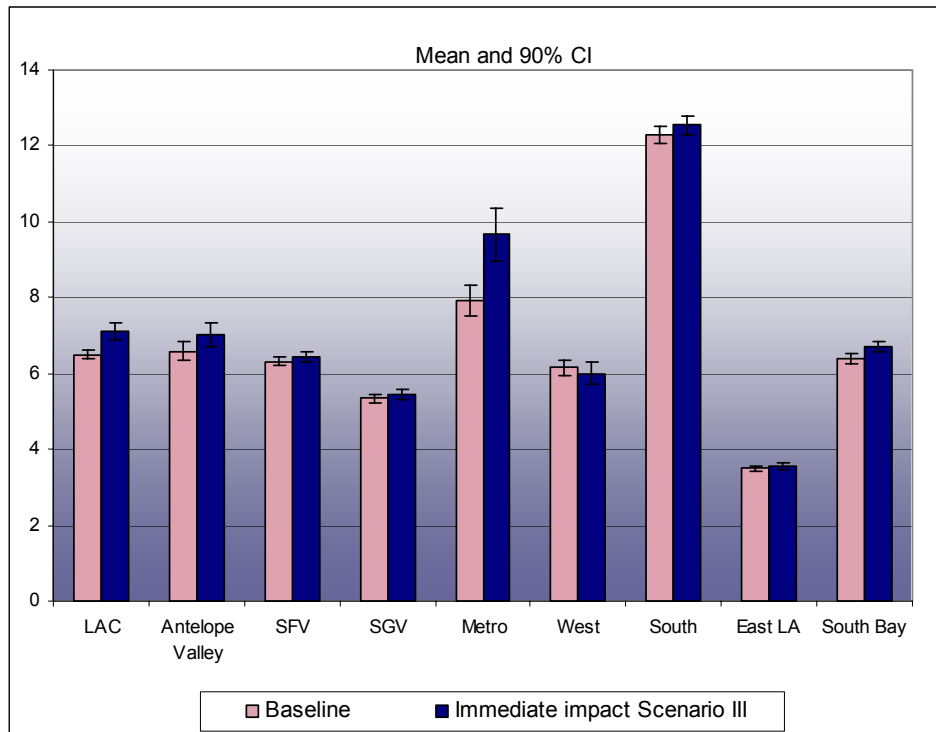
*Countywide*, as a result of implementing Scenario III, there will be less than a one-minute increase in the average wait times for critical patients. Average wait times will be between 6 and 7 minutes.

*At the SPA level*, before Scenario III, the wait times for critical patients range between 3 minutes (East LA) and 12 minutes (South). Critical patients in Metro and

<sup>12</sup> There is a paucity of information on patient wait times and there was considerable variation in wait times reported in the NHF survey. Again, the wait times in DHS hospitals with emergency rooms were different—longer—than those in private sector hospitals. For further discussion please refer to the Technical Report that accompanies this report.

South Bay will experience slight wait time increases after Scenario III implementation. In Metro this will be about two minutes (from 8 to 10) and in South Bay it will be less than one minute (from 6 to 7).

Figure 7: ED Waiting Times (in minutes) by SPA, Critical Patients



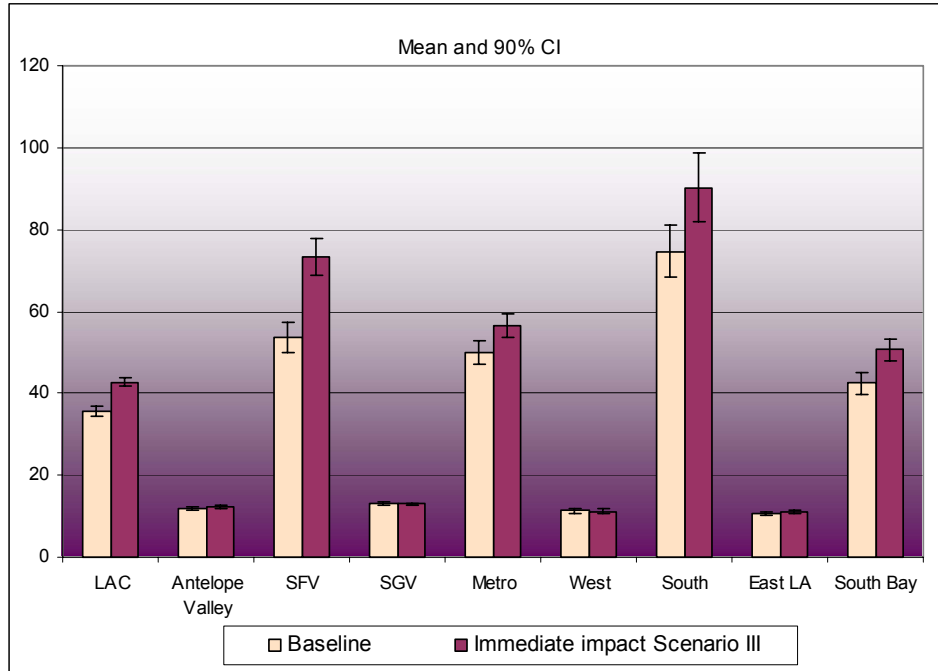
Source: NHF Impact Model Runs, Dec. 2002

- b. Urgent patients.** These are patients with acute injuries or illness where loss of life or limb is not an immediate threat to their well being, or patients who need timely evaluation (e.g., for fractures or lacerations).

*Countywide*, Scenario III will have an impact on wait times for urgent patients. An increase of 7 minutes will raise the average wait time from 36 minutes to 43 minutes.

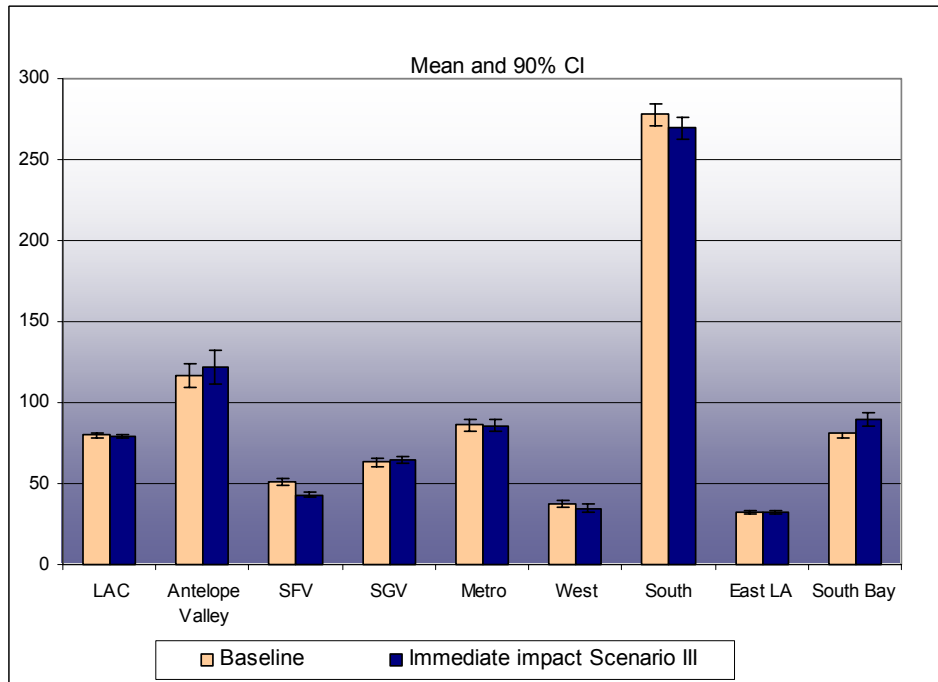
*At the SPA level*, before Scenario III, the range in wait times for urgent patients was from 11 minutes (East LA) to 75 minutes (South). After Scenario III, increases in wait times will be experienced in the four SPAs that have DHS hospitals with EDs (the longer wait times at these facilities bring up the average wait time). The SPAs experiencing increases are San Fernando Valley (20-minute increase to 73 minutes), South (16-minute increase to 90 minutes), South Bay (8-minute increase to 51 minutes) and Metro (6-minute increase to 56 minutes).

Figure 8: ED Waiting Times (in minutes) by SPA, Urgent Patients



Source: NHF Impact Model Runs, Dec. 2002

Figure 9: ED Waiting Times (in minutes) by SPA, Non-Urgent Patients



Source: NHF Impact Model Runs, Dec. 2002

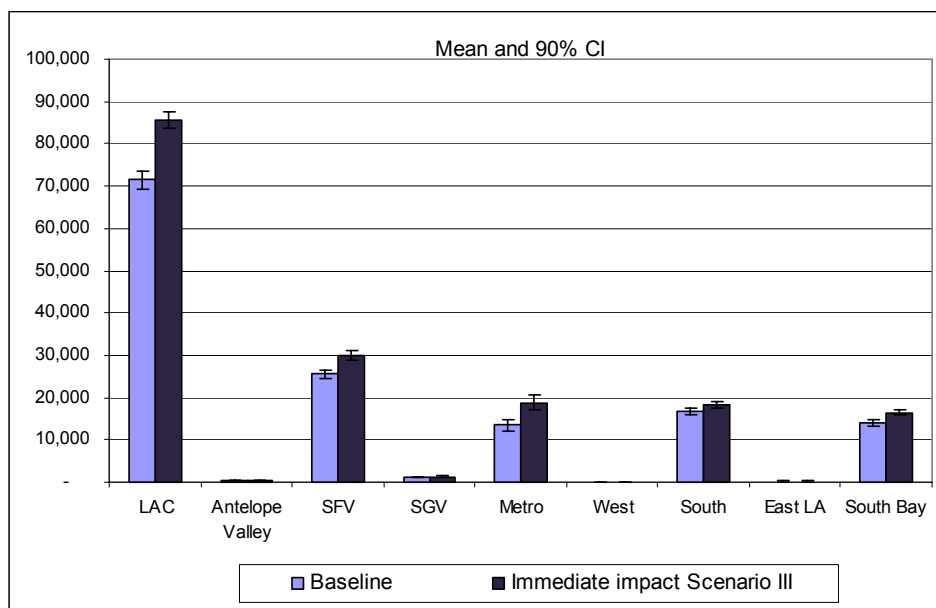
- c. **Non-Urgent patients.** These are patients with non-emergent injuries, illness or conditions. Sometimes they present with chronic conditions or illness that can be treated in a non-emergency setting and not necessarily on the same day they are seen in the emergency department.

*Countywide*, non-urgent patients already wait longer than critical or urgent patients—80 minutes on average. As a result of Scenario III, wait times for these patients will remain unchanged.

*Across the SPAs*, before Scenario III, wait times for non-urgent patients vary considerably, from 32 minutes (East LA) to 278 minutes (South). After Scenario III these are projected to increase in some SPAs and to decrease in others. South Bay will experience the largest increase of 9 minutes to a mean wait time of 90 minutes.

- d. **More patients will leave EDs without being seen.** Throughout the hospital system, patients requiring urgent and non-urgent care sometimes leave emergency departments without receiving the care they need. The numbers of these patients will increase as a result of Scenario III implementation.<sup>13</sup>

**Figure 10: Numbers of ED Patients Who Leave Without Being Seen by SPA, All Acutities**



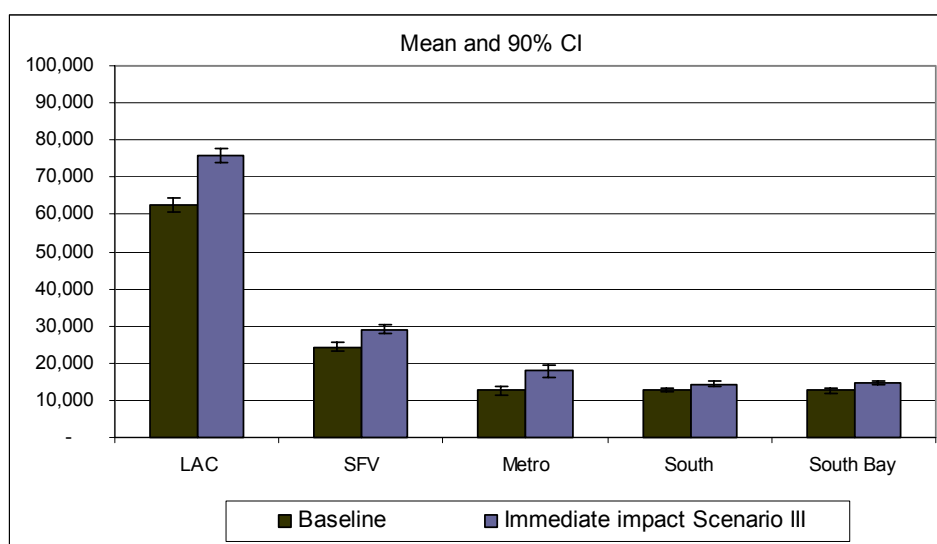
Source: NHF Impact Model Runs, Dec. 2002

<sup>13</sup> “Leaving Without Being Seen” (LBWS) behavior is one of the most uncertain parameters estimated in the model, and there is little published information about how long people will wait before leaving emergency departments without being seen. The Model’s wait time depends on the data reported in the NHF survey conducted for this study. If survey respondents underestimated ED wait times, then the Model will underestimate the incidence of patients leaving without being seen. See a more detailed discussion in the Technical Report that accompanies this Report.

*Countywide*, as a result of Scenario III, the numbers of patients leaving emergency departments without being seen will increase 20%, from 71,520 to 85,600. Most of these patients will leave DHS hospitals (62,556 at baseline to 75,962 after Scenario III implementation).

*At the SPA level*, increases in the numbers of patients leaving without being seen will be experienced in the four SPAs where there are DHS hospitals with emergency rooms—South (10%), San Fernando Valley and South Bay (each 18%), and Metro (40%).

**Figure 11: Numbers of DHS ED Patients Who Leave Without Being Seen by SPA, All Acuties**



Source: NHF Impact Model Runs, Dec. 2002

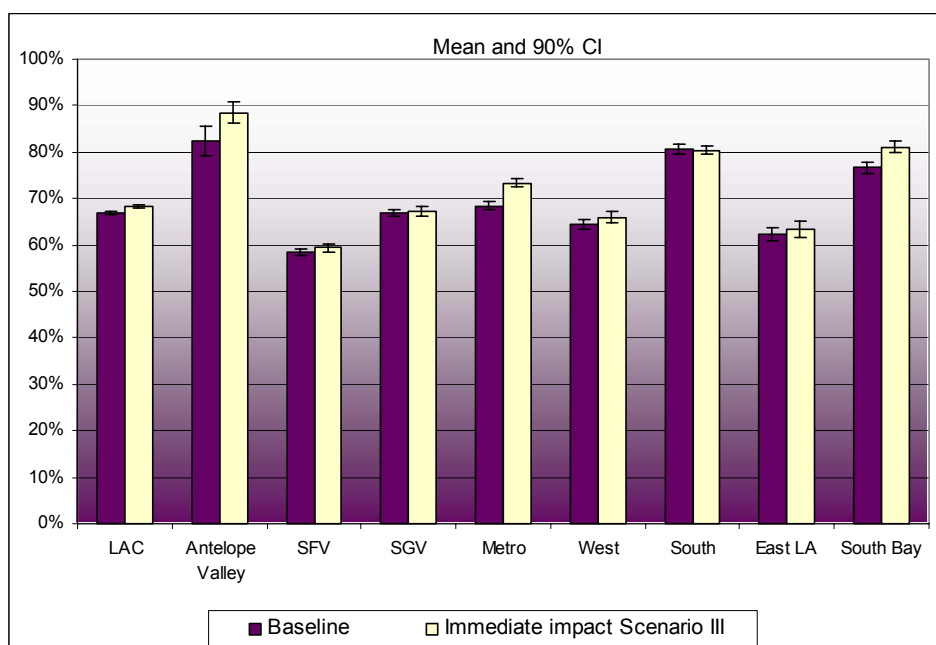
### III. Treating Psychiatric Patients will be Even More Difficult.

The Model focuses on psychiatric patients and psychiatric beds because, as part of Scenario III, DHS proposes closing all psychiatric beds in Harbor/UCLA, LAC+USC, MLK/Drew, and Olive View/UCLA hospitals. Before Scenario III implementation, 7% of all psychiatric patients requiring hospital admissions and 34% of the psychiatric patients admitted to DHS hospitals are uninsured. Model outputs include the impact of Scenario III on the psychiatric bed occupancy rates, and on the numbers and insurance status of patients sent to EDs because inpatient psychiatric beds are not available.

- a. **Psychiatric beds occupancy rates.** *Countywide*, the mean occupancy rates for psychiatric beds will show a slight increase—from 67% to 68%--as a result of Scenario III.

At the SPA level, before Scenario III, psychiatric bed occupancy rates range from 58% (San Fernando Valley) to 82% (Antelope Valley). As a result of Scenario III, three SPAs will experience increases: Antelope Valley (6% increase to 88%), Metro (5% increase to 73%), and South Bay (4% increase to 81%).

Figure 12: Hospital Inpatient Occupancy Rates by SPA, Psychiatric Beds



Source: NHF Impact Model Runs, Dec. 2002

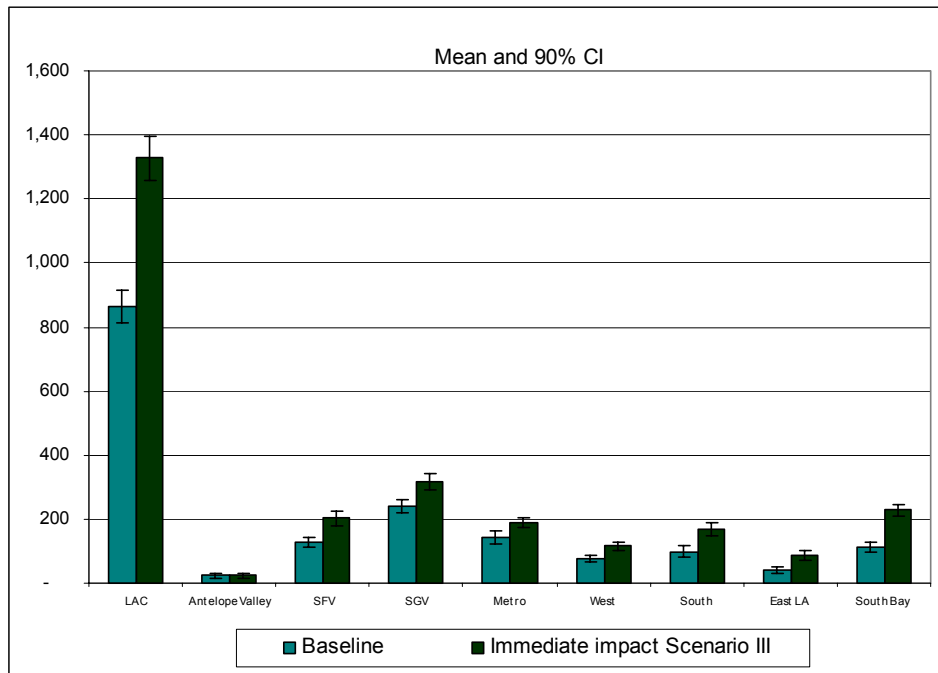
- b. Psychiatric patients sent to EDs because hospital beds are not available.** In the Model, patients 15 years old and older are sent to EDs if appropriate inpatient beds are unavailable. However, current data do not show what proportion of ED visits arise from these inpatients. Consequently, the Model only accurately predicts the additional numbers of patients sent to EDs as a result of Scenario III. That is, the baseline and Scenario III figures for this measure are underestimates but the difference is measured accurately.

*Countywide*, as a result of Scenario III, physicians will send an additional 463 psychiatric patients to EDs because psychiatric beds are not available. Of this increase, almost two-thirds (287, 62%) will be uninsured and almost half (225, 49%) will be children.<sup>14</sup>

*Every SPA except Antelope Valley* will experience this increase. The largest increase (116 patients) will be in South Bay, of them 90% (104 patients) will be uninsured.

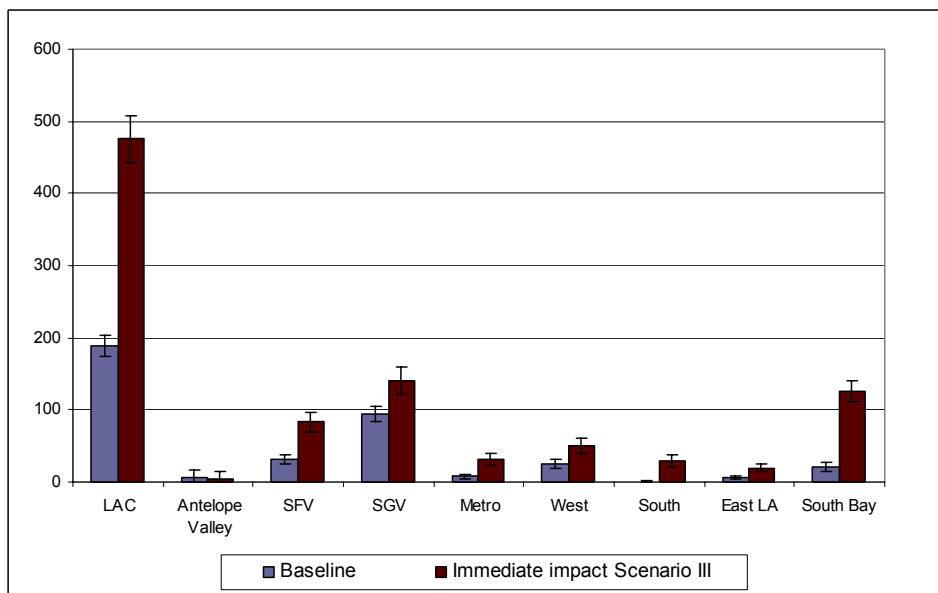
<sup>14</sup> Defined as 19 years old or under.

**Figure 13: Numbers of Psychiatric Patients Sent to EDs Because Hospital Beds Are Not Immediately Available by SPA**



Source: NHF Impact Model Runs, Dec. 2002

**Figure 14: Numbers of Psychiatric Patients sent to EDs Because Hospital Beds Are Not Immediately Available by SPA, Uninsured Patients**



Source: NHF Impact Model Runs, Dec. 2002

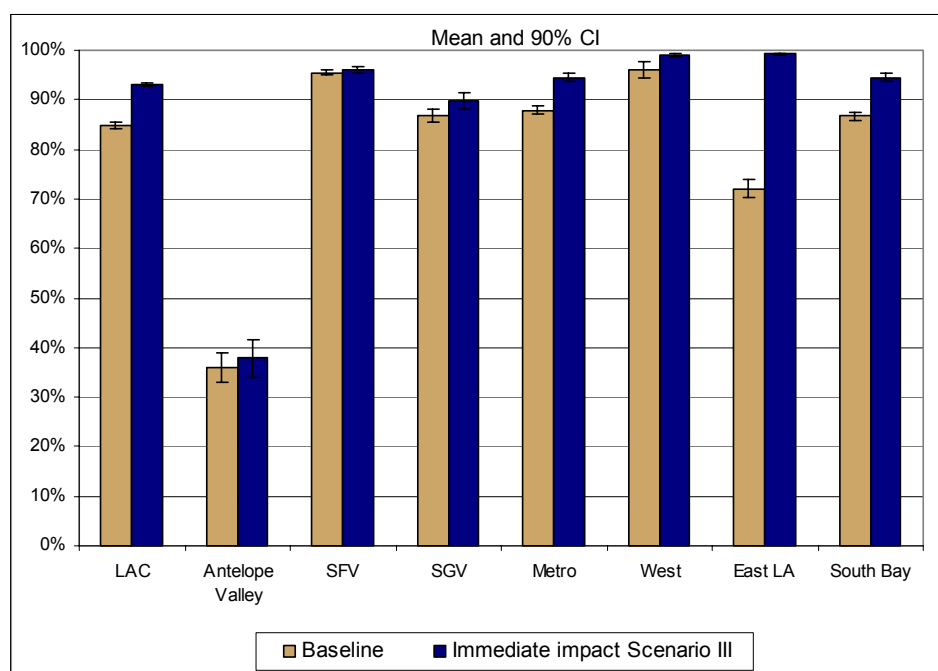
#### IV. Uninsured Patients Needing Rehabilitation Beds will be Hard to Place

Scenario III includes the closure of the Rancho Los Amigos National Rehabilitation Center. Thus the model also looks closely at the rehabilitation beds in the County and the patients who use them.<sup>15</sup>

- a. **Rehabilitation beds occupancy rates.** *Countywide*, as a result of Scenario III, rehabilitation bed occupancy rates will increase 8% from 85% to 93%.

*At the SPA level*, after Scenario III implementation, rehabilitation bed occupancy rates will range from 36% (Antelope Valley) to 96% (West and San Fernando Valley). Five SPAs will experience increases: San Gabriel Valley (3% increase to 90%), Metro (7% increase to 95%), West (3% increase to 99%), East LA (27% increase to 99%) and South Bay (8% increase to 94%).

**Figure 15: Hospital Inpatient Occupancy Rates by SPA, Ranch-equivalent Rehabilitation Beds**



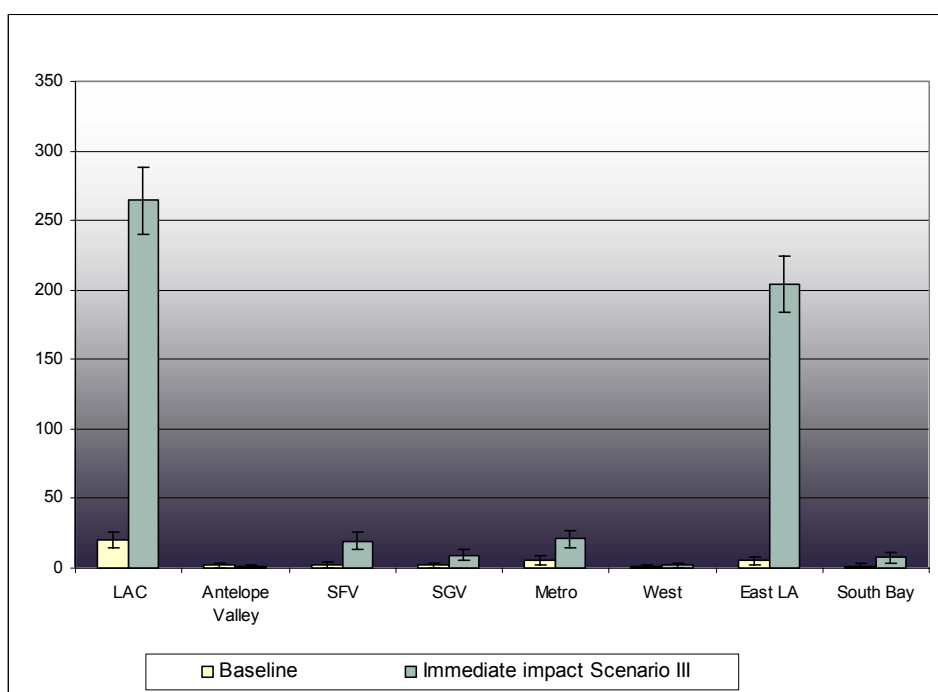
Source: NHF Impact Model Runs, Dec. 2002

<sup>15</sup> In gathering data for the Model, it became clear that LAC-DHS hospitals report no rehab beds to OSHPD. All beds used by LAC-DHS rehabilitation patients are reported as “Other Acute” beds. The Model’s physical rehabilitation bed category includes only beds at facilities that could accept Rancho patients based on their licensure status as acute rehab units and whether they use IRFPAI (Inpatient Rehab Facility Patient Assessment Instrument) for Medi-Cal reimbursement. The physical rehabilitation beds at hospitals without these designations (those that cannot accept Rancho patients) were reclassified as beds in the “Other” bed category.

**b. Rehabilitation patients unable to find beds.** *Countywide*, after Scenario III, an additional 294 rehabilitation patients will be unable to find rehabilitation beds. Of them 244 (83%) will be uninsured. As already discussed, the Model accurately predicts the additional numbers of patients sent to EDs as a result of Scenario III. That is, the baseline and Scenario III figures for this measure are underestimates, but the difference is measured accurately.

*Five SPAs* will experience increases in the numbers of uninsured rehabilitation patients unable to find beds. These increases will range from 6 additional patients in South Bay to 199 in East LA.

**Figure 16: Numbers of Patients Unable to Find Rancho-equivalent Rehabilitation Beds by SPA, Uninsured Patients**



Source: NHF Impact Model Runs, Dec. 2002

**V. More Physicians Will Have to “Work” the System to Get Beds for Patients Who Need Them Right Away.**

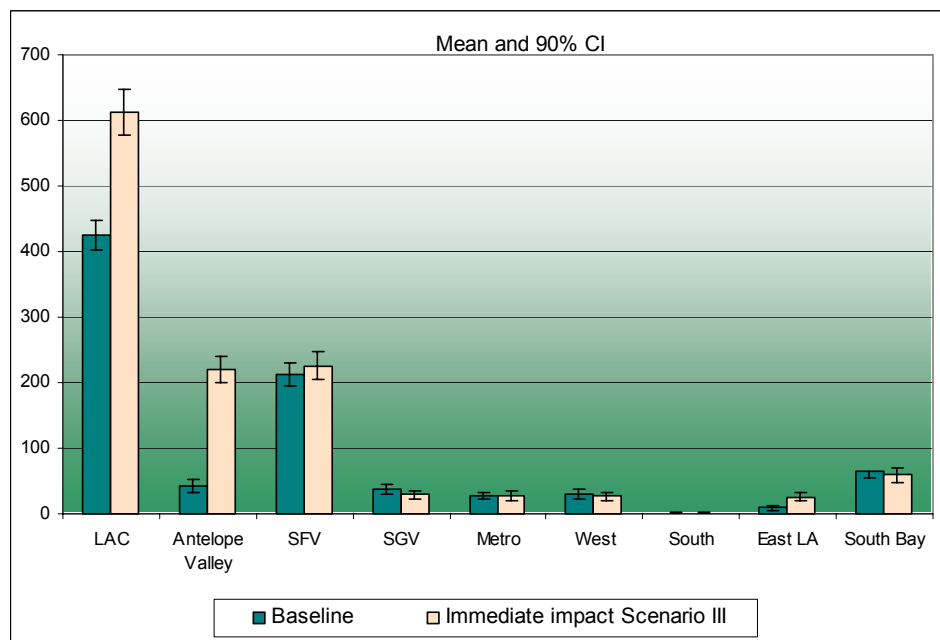
A Technical Advisory Committee consensus held that only about 40% of patients in hospitals enter through Emergency Departments; physicians directly admit the remaining 60%. Where appropriate, physicians schedule these admissions in advance but sometimes they need to admit their patients immediately (i.e., within 24 hours). Sometimes physicians want to immediately admit patients but cannot find available beds. To overcome this barrier, physicians may send their patients to EDs, that is, they “work” the system to get care for their patients. Many of these patients are uninsured.

- a. **Patients Sent to EDs by their Physicians because Med/Surg beds are not available.** In the Model, physicians wanting to immediately admit patients ages 15 and older send their patients to EDs if appropriate beds are unavailable. As with psychiatric patients sent to EDs and rehabilitation patients unable to find beds, current data do not show what proportion of ED visits arises from these inpatients. Consequently, the Model only accurately predicts the additional numbers of patients sent to EDs.<sup>16</sup>

*Countywide*, as a result of Scenario III, physicians will send an additional 188 patients to EDs because Med/Surg beds are not immediately available.

*Two SPA*, will experience increases in the numbers of patients physicians send to EDs because no Med/Surg beds are immediately available. These are Antelope Valley, which will see an increase of 177 patients, and East LA, which will see an increase of 17 patients.

**Figure 17: Numbers of Patients Sent to EDs Because Hospital Beds Are Not Immediately Available by SPA, Medical/Surgical Beds**



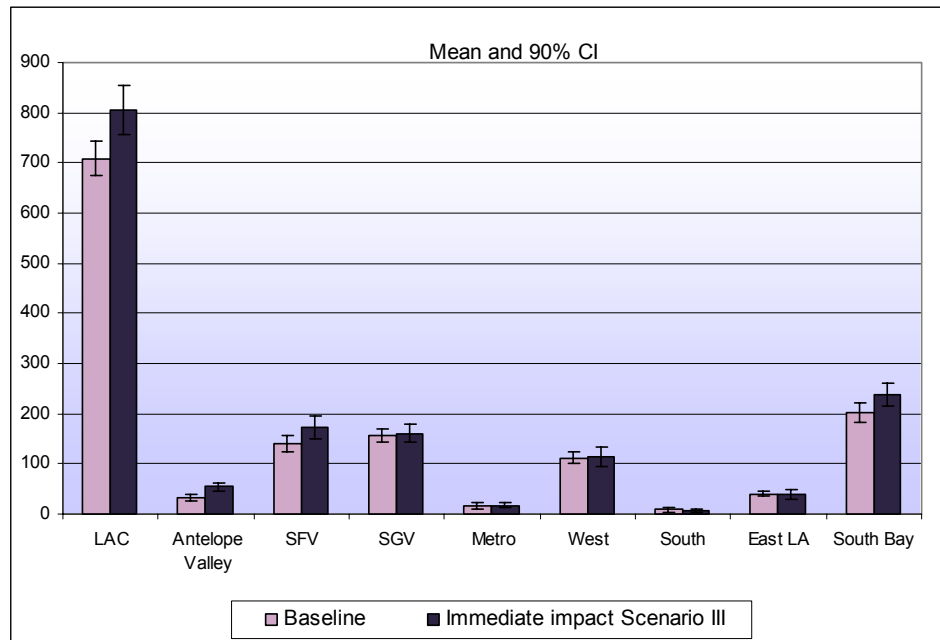
Source: NHF Impact Model Runs, Dec. 2002

- b. **Patients sent to EDs by their physicians because Other Medical beds are not immediately available.** *Countywide*, as a result of Scenario III, physicians will send 96 more of their patients to EDs because Other Medical beds are not immediately available.

<sup>16</sup> For a more detailed discussion see the Technical Report that accompanies this Report.

Three SPAs will experience increases in the numbers of patients sent to EDs for Other Medical beds. These are Antelope Valley (22 more patients), San Fernando Valley (32 more), and South Bay (37 more).

**Figure 18: Numbers of Patients Sent to EDs Because Hospital Beds Are Not Immediately Available by SPA, Other Medical Beds**

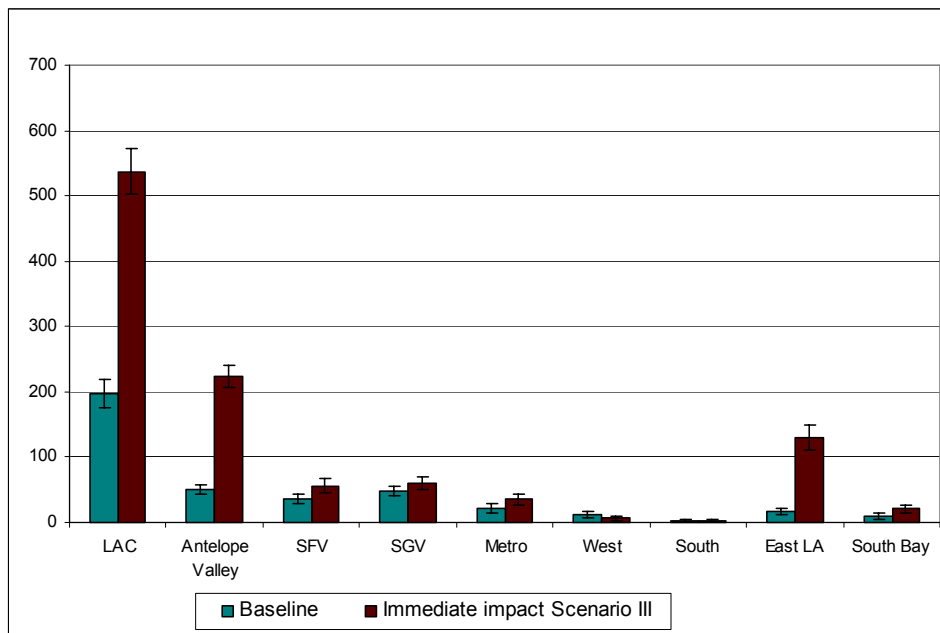


Source: NHF Impact Model Runs, Dec. 2002

- c. **Most of these patients will be uninsured.** *Countywide*, 73% of the additional patients sent by physicians to EDs because beds are not immediately available will be uninsured.

*At the SPA level*, the biggest increases in the numbers of uninsured patients being sent to EDs because no beds are available will be experienced in Antelope Valley (174 patients) and East LA (113 patients).

Figure 19: Numbers of Patients Sent to EDs Because Hospital Beds Are Not Immediately Available by SPA, Uninsured Patients



Source: NHF Impact Model Runs, Dec. 2002

## CONCLUSIONS

The impact on the hospital and emergency services system resulting from Scenario III of LAC-DHS’s Restructuring Recommendations appear to be slight as would be expected of the “least draconian” Scenario. Nevertheless, this minimal impact will ripple throughout the entire system and pose problems particularly in some areas.

Before Scenario III changes, LAC-DHS hospitals are already working at, or near, maximum capacity, virtually all the time. The Impact Model projects that after the implementation of the hospital-based changes (even without the ambulatory care changes), this condition will occur even more frequently, pushing the capacity of the system well beneath demand for some types of care. The Model also projects that the DHS hospitals’ inability to meet the demand will result in patients seeking services elsewhere, particularly from private sector hospitals with Emergency Departments in close proximity to DHS hospitals.

This additional demand on the entire hospital system will have some effect on all patients, a more pronounced effect on psychiatric and rehabilitation patients and will most negatively affect the uninsured. Patients using emergency departments throughout the county will wait longer for services and more of them will leave without being treated due to the lengthy wait.

With the reduction in psychiatric beds proposed in Scenario III, physicians will experience more difficulties finding hospitals able to admit psychiatric patients. Consequently, more patients needing inpatient psychiatric services will be sent to Emergency Departments in order to get the care they need. It seems obvious that this additional demand on the system could make it difficult for everyone, particularly law enforcement officers needing to place patients with “5150” holds,” to appropriately place these patients.

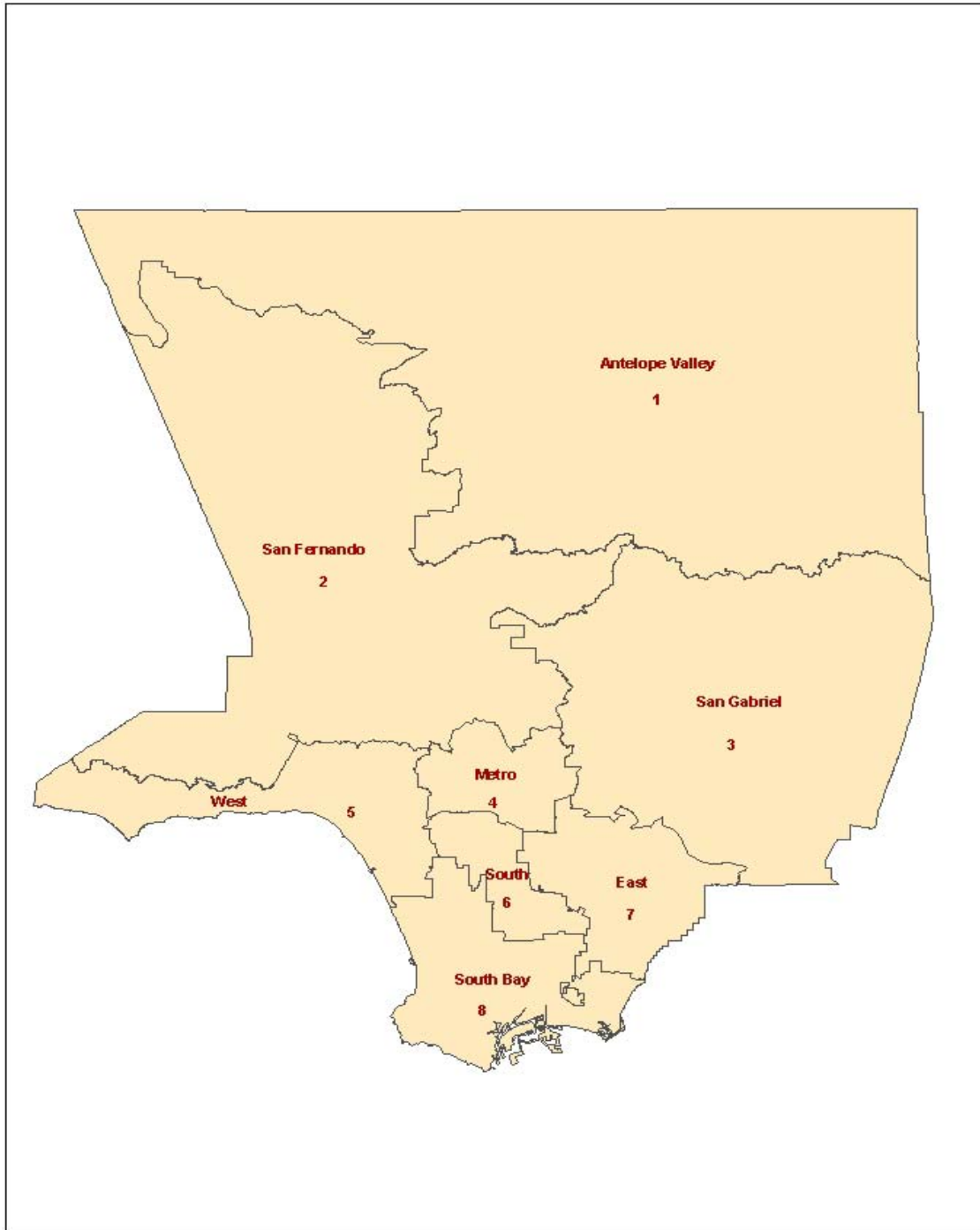
Similarly, closing Rancho Los Amigos National Rehabilitation Center (Rancho) will result in increased difficulty in obtaining beds for rehabilitation patients. The already high occupancy rate for these beds throughout the County will, after Scenario III implementation, become even higher. However, this increase encompasses two dilemmas. First, will there be sufficient capacity to provide treatment to all who need it and, second, will this treatment be equivalent to the treatment available through Rancho Los Amigos. Even though there may be capacity in the system to treat these patients, there is considerable concern that this treatment will not be in formally organized rehabilitation programs that measure up to the treatment currently available through Rancho.

As would be expected, patients without health insurance will fare most poorly from full implementation of Scenario III. Most of the psychiatric patients sent to Emergency Departments because the beds they need are not immediately available will be uninsured. Most of the rehabilitation patients who are unable to find the beds they need will be uninsured. Similarly, most of the patients whom physicians send to Emergency Departments because the inpatient beds they need are not immediately available will be uninsured. However, due to the interconnectivity of the hospital system, the Model projects that even insured patients will find less care available when they need it.

Thus, although the Impact Model shows relatively minor effects from Scenario III implementation, these predictions are conservative, resulting only from considering the hospital-related changes and closures. Had the Model included the reduction in ambulatory care also outlined in Scenario III, the impact on Emergency Departments would most probably have been greater. However, given the differential impact of even these minor changes on uninsured patients, the impact of increasing numbers of uninsured patients as job lay-offs and cut backs continue can only be imagined.

APPENDIX A

LOS ANGELES COUNTY SERVICE PLANNING AREAS



APPENDIX B

**Hospital Inpatient Occupancy Rates by SPA (Supporting Data for Figures 1, 3, 5, 12 & 15)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	bedtype	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	ICU	0.70	0.70	0.70	0.70	0.69	0.70	0.41	0.82	0.00
Antelope Valley	ICU	0.55	0.53	0.56	0.56	0.55	0.58	0.23	-1.21	0.02
SFV	ICU	0.59	0.59	0.59	0.57	0.57	0.58	0.00	5.01	-0.02
SGV	ICU	0.72	0.72	0.73	0.73	0.72	0.73	0.82	-0.23	0.00
Metro	ICU	0.77	0.77	0.78	0.77	0.77	0.78	0.90	-0.12	0.00
West	ICU	0.64	0.63	0.65	0.65	0.63	0.66	0.41	-0.83	0.01
South	ICU	0.68	0.67	0.69	0.70	0.69	0.71	0.10	-1.67	0.02
East LA	ICU	0.83	0.83	0.84	0.83	0.82	0.83	0.23	1.21	-0.01
South Bay	ICU	0.71	0.70	0.71	0.71	0.71	0.72	0.31	-1.02	0.01
LAC	Med/surg	0.62	0.62	0.63	0.63	0.63	0.63	0.03	-2.26	0.00
Antelope Valley	Med/surg	0.64	0.63	0.65	0.67	0.65	0.68	0.00	-2.98	0.03
SFV	Med/surg	0.67	0.67	0.68	0.68	0.67	0.68	0.23	-1.22	0.00
SGV	Med/surg	0.63	0.63	0.63	0.63	0.63	0.64	0.17	-1.38	0.00
Metro	Med/surg	0.61	0.61	0.61	0.61	0.61	0.62	0.01	-2.56	0.01
West	Med/surg	0.56	0.55	0.56	0.55	0.55	0.56	0.14	1.49	-0.01
South	Med/surg	0.59	0.59	0.60	0.60	0.59	0.60	0.74	-0.34	0.00
East LA	Med/surg	0.55	0.55	0.55	0.54	0.53	0.54	0.00	3.49	-0.01
South Bay	Med/surg	0.69	0.69	0.69	0.70	0.70	0.70	0.02	-2.44	0.01
LAC	Other medical	0.64	0.64	0.64	0.64	0.64	0.65	0.00	-3.10	0.01
Antelope Valley	Other medical	0.74	0.73	0.75	0.89	0.87	0.90	0.00	-15.63	0.14
SFV	Other medical	0.53	0.53	0.53	0.54	0.53	0.54	0.05	-2.01	0.01
SGV	Other medical	0.62	0.62	0.63	0.63	0.62	0.63	0.36	-0.92	0.00
Metro	Other medical	0.77	0.77	0.78	0.77	0.77	0.78	0.99	0.02	0.00
West	Other medical	0.59	0.58	0.59	0.58	0.57	0.58	0.24	1.19	-0.01
South	Other medical	0.92	0.91	0.92	0.92	0.91	0.93	0.52	-0.65	0.01

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Hospital Inpatient Occupancy Rates by SPA (Supporting Data for Figures 1, 3, 5, 12 & 15)**

SPA is the hospital's SPA

(mean and 90% confidence interval lower and upper bounds)

spa	bedtype	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
East LA	Other medical	0.80	0.79	0.80	0.81	0.81	0.82	0.00	-3.33	0.02
South Bay	Other medical	0.58	0.58	0.59	0.59	0.58	0.59	0.25	-1.15	0.00
LAC	Rehab	0.85	0.84	0.85	0.93	0.93	0.93	0.00	-20.82	0.08
Antelope Valley	Rehab	0.36	0.33	0.39	0.38	0.34	0.42	0.53	-0.63	0.02
SFV	Rehab	0.95	0.95	0.96	0.96	0.95	0.97	0.41	-0.83	0.00
SGV	Rehab	0.87	0.85	0.88	0.90	0.88	0.91	0.02	-2.37	0.03
Metro	Rehab	0.88	0.87	0.89	0.95	0.94	0.95	0.00	-10.04	0.07
West	Rehab	0.96	0.94	0.98	0.99	0.99	0.99	0.01	-2.96	0.03
East LA	Rehab	0.72	0.70	0.74	0.99	0.99	0.99	0.00	-24.80	0.27
South Bay	Rehab	0.87	0.86	0.88	0.94	0.94	0.95	0.00	-11.28	0.08
LAC	Psych	0.67	0.66	0.67	0.68	0.68	0.69	0.00	-5.14	0.02
Antelope Valley	Psych	0.82	0.79	0.86	0.88	0.86	0.91	0.01	-2.52	0.06
SFV	Psych	0.58	0.58	0.59	0.59	0.59	0.60	0.12	-1.57	0.01
SGV	Psych	0.67	0.66	0.68	0.67	0.66	0.68	0.64	-0.47	0.00
Metro	Psych	0.68	0.68	0.69	0.73	0.72	0.74	0.00	-7.06	0.05
West	Psych	0.64	0.63	0.66	0.66	0.65	0.67	0.12	-1.57	0.01
South	Psych	0.81	0.79	0.82	0.80	0.79	0.81	0.84	0.21	0.00
East LA	Psych	0.62	0.61	0.64	0.63	0.62	0.65	0.37	-0.91	0.01
South Bay	Psych	0.77	0.75	0.78	0.81	0.80	0.82	0.00	-4.57	0.04

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**DHS Hospital Inpatient Occupancy Rates by SPA (Supporting Data for Figures 2, 4 & 6)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	bedtype	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	ICU	0.86	0.85	0.87	0.87	0.87	0.88	0.02	-2.41	0.01
Antelope Valley	ICU	0.74	0.69	0.80						
SFV	ICU	0.91	0.90	0.93	0.91	0.90	0.93	0.87	-0.16	0.00
Metro	ICU	1.00	1.00	1.00	1.00	0.99	1.00	0.04	2.15	0.00
South	ICU	0.61	0.59	0.64	0.63	0.61	0.66	0.32	-1.00	0.02
East LA	ICU	0.97	0.96	0.98						
South Bay	ICU	0.86	0.84	0.88	0.91	0.89	0.92	0.01	-2.70	0.04
LAC	Med/surg	0.94	0.93	0.94	0.98	0.97	0.98	0.00	-11.61	0.04
Antelope Valley	Med/surg	0.86	0.83	0.90						
SFV	Med/surg	0.90	0.89	0.92	0.93	0.91	0.94	0.06	-1.91	0.02
Metro	Med/surg	0.93	0.92	0.93	1.00	1.00	1.00	0.00	-17.05	0.07
South	Med/surg	0.96	0.95	0.97	0.96	0.95	0.97	0.75	-0.32	0.00
East LA	Med/surg	0.90	0.88	0.92						
South Bay	Med/surg	0.98	0.97	0.99	0.98	0.98	0.99	0.53	-0.63	0.00
LAC	Other medical	0.79	0.79	0.80	0.96	0.95	0.97	0.00	-28.36	0.17
Antelope Valley	Other medical	0.50	0.48	0.52						
SFV	Other medical	0.65	0.63	0.67	0.84	0.81	0.87	0.00	-8.41	0.18
Metro	Other medical	1.00	1.00	1.00	1.00	1.00	1.00	0.81	0.24	0.00
South	Other medical	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.12	0.00
East LA	Other medical	0.52	0.49	0.56						
South Bay	Other medical	0.97	0.96	0.98	0.99	0.98	1.00	0.04	-2.08	0.02
LAC	Rehab	0.70	0.68	0.72						
East LA	Rehab	0.70	0.68	0.72						
LAC	Psych	0.78	0.76	0.79						
SFV	Psych	0.68	0.65	0.72						
Metro	Psych	0.66	0.64	0.68						
South	Psych	0.99	0.98	0.99						
South Bay	Psych	0.86	0.84	0.88						

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Emergency Department Waiting Times (In Minutes) by SPA (Supporting Data for Figures 7, 8 & 9)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

In Minutes\*

spa	acuity	mean <sup>†</sup>	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
			lb*	ub*	mean	lb	ub				
LAC	critical	6.50	6.38	6.62	7.12	6.90	7.34	0.00	-4.22	0.62	
Antelope Valley	critical	6.58	6.34	6.82	7.02	6.69	7.36	0.07	-1.82	0.44	
SFV	critical	6.32	6.22	6.43	6.43	6.30	6.55	0.28	-1.09	0.10	
SGV	critical	5.34	5.21	5.47	5.44	5.30	5.58	0.38	-0.88	0.10	
Metro	critical	7.91	7.52	8.31	9.66	8.97	10.34	0.00	-3.75	1.74	
West	critical	6.16	5.96	6.35	6.01	5.72	6.29	0.46	0.74	-0.15	
South	critical	12.28	12.07	12.49	12.54	12.30	12.79	0.17	-1.38	0.26	
East LA	critical	3.49	3.41	3.58	3.55	3.47	3.64	0.39	-0.86	0.06	
South Bay	critical	6.40	6.27	6.52	6.70	6.58	6.82	0.00	-2.93	0.31	
LAC	nonurgent	79.72	78.51	80.92	79.30	77.93	80.67	0.70	0.39	-0.42	
Antelope Valley	nonurgent	116.40	108.89	123.92	121.92	111.70	132.15	0.46	-0.74	5.52	
SFV	nonurgent	50.73	48.65	52.80	43.21	41.61	44.80	0.00	4.87	-7.52	
SGV	nonurgent	63.11	60.56	65.67	64.44	62.28	66.61	0.50	-0.67	1.33	
Metro	nonurgent	85.96	82.07	89.84	85.59	82.08	89.11	0.91	0.12	-0.37	
West	nonurgent	37.58	35.29	39.87	34.78	32.45	37.12	0.15	1.45	-2.80	
South	nonurgent	277.75	270.91	284.58	269.30	262.81	275.79	0.13	1.52	-8.44	
East LA	nonurgent	31.96	31.09	32.84	32.24	30.91	33.57	0.77	-0.30	0.28	
South Bay	nonurgent	81.03	78.12	83.94	89.73	85.70	93.75	0.00	-2.97	8.70	
LAC	urgent	35.64	34.43	36.85	42.77	41.83	43.72	0.00	-7.87	7.13	
Antelope Valley	urgent	12.07	11.65	12.48	12.24	11.77	12.71	0.65	-0.46	0.17	
SFV	urgent	53.60	49.97	57.23	73.24	68.78	77.71	0.00	-5.80	19.64	
SGV	urgent	13.08	12.64	13.53	12.93	12.60	13.26	0.64	0.47	-0.15	
Metro	urgent	50.12	47.29	52.94	56.46	53.65	59.26	0.01	-2.70	6.34	
West	urgent	11.32	10.83	11.81	11.17	10.64	11.70	0.72	0.35	-0.15	
South	urgent	74.63	68.34	80.91	90.27	81.84	98.70	0.01	-2.53	15.64	
East LA	urgent	10.76	10.44	11.08	11.08	10.66	11.49	0.32	-1.01	0.31	
South Bay	urgent	42.48	39.91	45.04	50.69	48.10	53.28	0.00	-3.83	8.21	

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Emergency Department Patients Who Leave Without Being Seen (LWBS) by SPA - All Acuties (Supporting Data for Figure 10)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	mean <sup>†</sup>	Baseline		Immediate impact Scenario III			p-value	t-statistic	Diff	% Increase
		lb*	ub*	mean	lb	ub				
LAC	71519.66	69428.12	73611.21	85600.05	83737.62	87462.49	0.00	-8.52	14080.39	
Antelope Valley	376.47	285.18	467.76	389.54	306.17	472.92	0.86	-0.18	13.07	
SFV	25591.19	24590.98	26591.41	30105.58	28968.66	31242.50	0.00	-5.06	4514.39	17.6%
SGV	1178.43	1035.77	1321.09	1231.56	1067.01	1396.11	0.68	-0.41	53.13	
Metro	13467.46	12218.63	14716.29	18845.33	17240.49	20450.17	0.00	-4.49	5377.87	39.9%
West	110.54	91.28	129.81	96.91	67.63	126.19	0.51	0.66	-13.63	
South	16656.51	15898.24	17414.79	18326.78	17499.34	19154.21	0.01	-2.52	1670.27	10.0%
East LA	188.24	153.41	223.06	188.16	148.58	227.75	1.00	0.00	-0.07	
South Bay	13950.82	13276.82	14624.83	16416.19	15774.88	17057.50	0.00	-4.49	2465.37	17.7%

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Emergency Department Patients Who Leave Without Being Seen (LWBS) by SPA - All Acutities  
(Supporting Data for Figure 10)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
	mean <sup>†</sup>	lb <sup>*</sup>	ub <sup>*</sup>	mean	lb	ub			
LAC	0.02	0.02	0.02	0.03	0.03	0.03	0.00	-8.66	0.00
Antelope Valley	0.00	0.00	0.00	0.00	0.00	0.00	0.88	-0.15	0.00
SFV	0.04	0.04	0.04	0.05	0.05	0.05	0.00	-5.13	0.01
SGV	0.00	0.00	0.00	0.00	0.00	0.00	0.66	-0.44	0.00
Metro	0.02	0.02	0.02	0.03	0.03	0.03	0.00	-4.55	0.01
West	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.67	0.00
South	0.12	0.11	0.12	0.13	0.12	0.13	0.01	-2.71	0.01
East LA	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.01	0.00
South Bay	0.03	0.02	0.03	0.03	0.03	0.03	0.00	-4.50	0.00

<sup>†</sup> Mean across multiple runs of the simulation model

<sup>\*</sup> Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of DHS Emergency Department Patients Who Leave Without Being Seen (LWBS) by SPA - All Acuties (Supporting Data for Figure 11)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	mean <sup>†</sup>	Baseline		Immediate impact Scenario III			p-value	t-statistic	Diff
		lb*	ub*	mean	lb	ub			
LAC	62556.31	60636.06	64476.55	75965.94	74144.43	77787.45	0.00	-8.59	13409.63
SFV	24403.38	23409.95	25396.81	28986.66	27855.53	30117.80	0.00	-5.17	4583.28
Metro	12681.14	11452.53	13909.75	17940.38	16341.80	19538.96	0.00	-4.43	5259.24
South	12766.66	12216.23	13317.08	14426.31	13726.39	15126.23	0.00	-3.16	1659.65
South Bay	12705.13	12078.78	13331.48	14612.59	14034.29	15190.88	0.00	-3.79	1907.46

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of DHS Emergency Department Patients Who Leave Without Being Seen (LWBS) by SPA - All Acuties (Supporting Data for Figure 11)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
	mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	0.16	0.16	0.17	0.20	0.19	0.20	0.00	-9.10	0.035
SFV	0.23	0.23	0.24	0.28	0.27	0.29	0.00	-5.41	0.043
Metro	0.08	0.08	0.09	0.12	0.11	0.13	0.00	-4.58	0.035
South	0.22	0.21	0.23	0.25	0.24	0.26	0.00	-3.34	0.027
South Bay	0.18	0.17	0.19	0.21	0.20	0.22	0.00	-4.18	0.028

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Total Number of Psychiatric Patients Requiring Inpatient Admission (Whether or Not Through the ED) by Patient's SPA**

*SPA is the patient's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	mean <sup>†</sup>	Baseline lb*	ub*		Medi-Cal	Medicare	Private	Uninsured	Total	%Uninsured
LAC	medi-cal	18854.34	18670.64	19038.03	LAC	18854.34	19812.20	17207.14	4410.24	60283.92	7%
Antelope Valley	medi-cal	530.29	499.49	561.10	Antelope Valley	530.29	408.28	671.08	87.60	1697.25	5%
SFV	medi-cal	3773.58	3703.19	3843.97	SFV	3773.58	4697.55	3916.97	780.06	13168.16	6%
SGV	medi-cal	2353.21	2306.85	2399.57	SGV	2353.21	2838.66	3144.21	955.26	9291.34	10%
Metro	medi-cal	3568.66	3494.37	3642.95	Metro	3568.66	3442.47	2279.69	611.11	9901.93	6%
West	medi-cal	774.84	737.48	812.21	West	774.84	2507.03	1537.17	532.38	5351.42	10%
South	medi-cal	3403.36	3338.08	3468.65	South	3403.36	1550.21	1320.78	408.80	6683.15	6%
East LA	medi-cal	1705.59	1652.42	1758.76	East LA	1705.59	1578.89	1694.12	428.09	5406.69	8%
South Bay	medi-cal	2744.80	2669.54	2820.06	South Bay	2744.80	2789.12	2643.12	606.94	8783.98	7%
LAC	medicare	19812.20	19646.84	19977.56							
Antelope Valley	medicare	408.28	383.74	432.81							
SFV	medicare	4697.55	4633.75	4761.35							
SGV	medicare	2838.66	2779.83	2897.49							
Metro	medicare	3442.47	3356.02	3528.93							
West	medicare	2507.03	2446.69	2567.37							
South	medicare	1550.21	1500.89	1599.53							
East LA	medicare	1578.89	1533.71	1624.07							
South Bay	medicare	2789.12	2732.68	2845.56							
LAC	private	17207.14	17038.43	17375.86							
Antelope Valley	private	671.08	640.87	701.29							
SFV	private	3916.97	3856.76	3977.18							
SGV	private	3144.21	3086.79	3201.64							
Metro	private	2279.69	2223.19	2336.18							
West	private	1537.17	1489.68	1584.66							
South	private	1320.78	1277.67	1363.89							

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Total Number of Psychiatric Patients Requiring Inpatient Admission (Whether or Not Through the ED) by Patient's SPA**

*SPA is the patient's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	mean <sup>†</sup>	Baseline		Medi-Cal	Medicare	Private	Uninsured	Total	%Uninsured
			lb*	ub*						
East LA	private	1694.12	1658.96	1729.28						
South Bay	private	2643.12	2580.96	2705.29						
LAC	uninsured	4410.24	4336.22	4484.27						
Antelope Valley	uninsured	87.60	77.57	97.63						
SFV	uninsured	780.06	743.32	816.80						
SGV	uninsured	955.26	917.16	993.36						
Metro	uninsured	611.11	584.00	638.23						
West	uninsured	532.38	501.04	563.71						
South	uninsured	408.80	385.50	432.10						
East LA	uninsured	428.09	400.77	455.41						
South Bay	uninsured	606.94	579.80	634.09						

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Total Number of Psychiatric Patients at DHS Hospitals Requiring Inpatient Admission (Whether or Not Through the ED) by Patient's SPA**

*SPA is the patient's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa		Baseline									
	payer	mean <sup>†</sup>	lb*	ub*		Medi-Cal	Medicare	Private	Uninsured	Total	%Uninsured
LAC	medi-cal	1645.63	1594.70	1696.56	LAC	1645.63	225.78	263.32	1092.91	3227.64	34%
Antelope Valley	medi-cal				Antelope Valley						
SFV	medi-cal	39.63	31.58	47.68	SFV	39.63	3.65	1.56	24.51	69.35	35%
SGV	medi-cal	384.81	360.47	409.16	SGV	384.81	31.29	43.80	200.75	660.65	30%
Metro	medi-cal	33.89	28.36	39.43	Metro	33.89	1.04	4.69	21.90	61.53	36%
West	medi-cal	450.51	422.92	478.11	West	450.51	38.59	99.07	317.03	905.20	35%
South	medi-cal	6.26	2.92	9.59	South	6.26	0.52	2.61	11.99	21.38	56%
East LA	medi-cal	380.12	354.21	406.03	East LA	380.12	70.91	51.62	229.43	732.09	31%
South Bay	medi-cal	47.97	39.86	56.08	South Bay	47.97	6.78	8.34	38.06	101.16	38%
LAC	medi-cal	302.43	279.65	325.21	LAC	302.43	73.00	51.62	249.24	676.29	37%
Antelope Valley	medicare	225.78	207.18	244.38	Antelope Valley						
SFV	medicare	3.65	1.18	6.12	SFV						
SGV	medicare	31.29	24.64	37.93	SGV						
Metro	medicare	1.04	0.00	2.27	Metro						
West	medicare	38.59	31.34	45.83	West						
South	medicare	0.52	0.00	1.40	South						
East LA	medicare	70.91	60.12	81.71	East LA						
South Bay	medicare	6.78	3.93	9.63	South Bay						
LAC	medicare	73.00	63.04	82.96	LAC						
Antelope Valley	private	263.32	235.08	291.56	Antelope Valley						
SFV	private	1.56	0.08	3.05	SFV						
SGV	private	43.80	35.29	52.31	SGV						
Metro	private	4.69	2.06	7.33	Metro						
West	private	99.07	84.41	113.73	West						

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Total Number of Psychiatric Patients at DHS Hospitals Requiring Inpatient Admission (Whether or Not Through the ED) by Patient's SPA**

*SPA is the patient's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa		Baseline			Medi-Cal	Medicare	Private	Uninsured	Total	%Uninsured
	payer	mean <sup>†</sup>	lb*	ub*						
LAC	private	2.61	0.36	4.85						
South	private	51.62	42.63	60.61						
East LA	private	8.34	4.48	12.21						
South Bay	private	51.62	41.62	61.62						
LAC	private	1092.91	1058.83	1127.00						
Antelope Valley	uninsured	24.51	18.72	30.30						
SFV	uninsured	200.75	181.69	219.81						
SGV	uninsured	21.90	15.86	27.94						
Metro	uninsured	317.03	294.50	339.56						
West	uninsured	11.99	8.21	15.78						
South	uninsured	229.43	210.31	248.54						
East LA	uninsured	38.06	30.98	45.15						
South Bay	uninsured	249.24	231.22	267.27						

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Psychiatric Patients Sent to ED Because Hospital Beds are Not Immediately Available By SPA and Payer Type (Supporting Data for Figure 14)**

SPA is the hospital's SPA

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	medi-cal	368.13	332.76	403.49	556.94	499.24	614.64	0.00	-4.74	188.81
Antelope Valley	medi-cal	4.69	2.06	7.33	8.18	5.26	11.10	0.14	-1.50	3.49
SFV	medi-cal	57.88	47.33	68.42	83.07	68.16	97.97	0.02	-2.34	25.19
SGV	medi-cal	82.39	68.28	96.49	117.68	99.28	136.08	0.01	-2.58	35.30
Metro	medi-cal	56.84	46.89	66.78	80.55	66.90	94.20	0.02	-2.38	23.72
West	medi-cal	15.12	11.02	19.22	32.09	23.16	41.03	0.01	-2.93	16.97
South	medi-cal	95.94	80.48	111.40	139.08	121.75	156.40	0.00	-3.15	43.13
East LA	medi-cal	21.90	15.73	28.07	52.23	40.23	64.24	0.00	-3.82	30.33
South Bay	medi-cal	33.37	26.27	40.47	44.05	34.37	53.74	0.14	-1.51	10.68
LAC	medicare	240.38	222.78	257.98	230.33	209.63	251.02	0.53	0.63	-10.05
Antelope Valley	medicare	8.34	4.08	12.60	6.92	3.69	10.16	0.65	0.45	-1.42
SFV	medicare	35.46	28.20	42.72	28.32	21.86	34.78	0.22	1.25	-7.14
SGV	medicare	62.57	52.43	72.71	56.01	45.23	66.79	0.45	0.75	-6.56
Metro	medicare	38.06	30.33	45.80	37.76	27.78	47.74	0.97	0.04	-0.31
West	medicare	33.89	26.61	41.18	32.09	24.92	39.26	0.77	0.30	-1.80
South	medicare	2.09	0.40	3.77	3.15	0.93	5.36	0.52	-0.65	1.06
East LA	medicare	7.82	4.41	11.24	10.07	5.06	15.08	0.53	-0.63	2.25
South Bay	medicare	52.14	44.03	60.26	56.01	46.03	65.99	0.61	-0.51	3.87
LAC	private	68.31	57.77	78.84	65.45	55.89	75.01	0.73	0.34	-2.86
Antelope Valley	private	9.91	6.25	13.56	8.81	4.56	13.06	0.74	0.33	-1.10
SFV	private	4.17	1.05	7.29	7.55	3.93	11.17	0.23	-1.20	3.38

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Psychiatric Patients Sent to ED Because Hospital Beds are Not Immediately Available By SPA and Payer Type (Supporting Data for Figure 14)**

SPA is the hospital's SPA

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
SGV	private	1.04	0.00	2.27	1.89	0.10	3.67	0.51	-0.66	0.85
Metro	private	40.15	30.96	49.34	39.65	31.63	47.66	0.94	0.07	-0.50
West	private	1.56	0.08	3.05	1.26	0.00	2.75	0.81	0.25	-0.31
South	private	0.00	0.00	0.00	0.00	0.00	0.00			0.00
East LA	private	5.74	2.97	8.50	3.78	1.40	6.15	0.37	0.91	-1.96
South Bay	private	5.74	2.97	8.50	2.52	0.49	4.54	0.12	1.59	-3.22
LAC	uninsured	188.76	174.12	203.40	475.76	442.90	508.62	0.00	-13.56	287.00
Antelope Valley	uninsured	1.04	0.00	2.27	0.63	0.00	1.70	0.67	0.43	-0.41
SFV	uninsured	31.81	25.57	38.05	83.07	69.76	96.38	0.00	-5.93	51.26
SGV	uninsured	94.38	83.31	105.44	140.34	121.40	159.28	0.00	-3.56	45.96
Metro	uninsured	7.82	4.65	10.99	32.09	23.85	40.34	0.00	-4.67	24.27
West	uninsured	26.07	19.84	32.31	50.34	40.52	60.17	0.00	-3.54	24.27
South	uninsured	0.52	0.00	1.40	24.54	16.80	32.29	0.00	-5.24	24.02
East LA	uninsured	6.26	3.17	9.34	19.51	13.97	25.05	0.00	-3.55	13.25
South Bay	uninsured	20.86	14.51	27.20	125.23	110.16	140.31	0.00	-10.85	104.38

**Baseline**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	368.13	240.38	68.31	188.76	865.57	22%
Antelope Valley	4.69	8.34	9.91	1.04	23.99	4%
SFV	57.88	35.46	4.17	31.81	129.31	25%
SGV	82.39	62.57	1.04	94.38	240.38	39%
Metro	56.84	38.06	40.15	7.82	142.87	5%

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

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West	15.12	33.89	1.56	26.07	76.65	34%
South	95.94	2.09	0.00	0.52	98.55	1%
East LA	21.90	7.82	5.74	6.26	41.71	15%
South Bay	33.37	52.14	5.74	20.86	112.11	19%

**Immediate Impact**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	556.94	230.33	65.45	475.76	1328.47	36%
Antelope Valley	8.18	6.92	8.81	0.63	24.54	3%
SFV	83.07	28.32	7.55	83.07	202.01	41%
SGV	117.68	56.01	1.89	140.34	315.91	44%
Metro	80.55	37.76	39.65	32.09	190.05	17%
West	32.09	32.09	1.26	50.34	115.79	43%
South	139.08	3.15	0.00	24.54	166.77	15%
East LA	52.23	10.07	3.78	19.51	85.59	23%
South Bay	44.05	56.01	2.52	125.23	227.81	55%

**Difference**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	188.81	-10.05	-2.86	287.00	462.90	62%

† Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Psychiatric Patients Sent to ED Because Hospital Beds are Not Immediately Available By SPA and Payer Type (Supporting Data for Figure 14)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	medi-cal	0.04	0.03	0.04	0.05	0.05	0.06	0.00	-4.72	0.02
Antelope Valley	medi-cal	0.09	0.03	0.15	0.18	0.11	0.26	0.11	-1.63	0.09
SFV	medi-cal	0.02	0.02	0.03	0.03	0.03	0.04	0.03	-2.19	0.01
SGV	medi-cal	0.03	0.03	0.04	0.05	0.04	0.05	0.01	-2.66	0.01
Metro	medi-cal	0.06	0.05	0.07	0.09	0.07	0.10	0.02	-2.49	0.03
West	medi-cal	0.05	0.04	0.06	0.11	0.08	0.14	0.00	-3.32	0.06
South	medi-cal	0.05	0.05	0.06	0.08	0.07	0.09	0.00	-3.35	0.03
East LA	medi-cal	0.02	0.01	0.02	0.04	0.03	0.05	0.00	-3.65	0.02
South Bay	medi-cal	0.03	0.03	0.04	0.04	0.03	0.05	0.20	-1.31	0.01
LAC	medicare	0.04	0.03	0.04	0.03	0.03	0.04	0.47	0.73	0.00
Antelope Valley	medicare	0.16	0.09	0.23	0.17	0.08	0.25	0.91	-0.12	0.01
SFV	medicare	0.02	0.02	0.02	0.02	0.01	0.02	0.21	1.26	0.00
SGV	medicare	0.05	0.04	0.05	0.04	0.03	0.05	0.30	1.04	-0.01
Metro	medicare	0.04	0.03	0.05	0.04	0.03	0.05	0.73	0.35	0.00
West	medicare	0.04	0.03	0.05	0.04	0.03	0.05	0.87	0.17	0.00
South	medicare	0.01	0.00	0.01	0.01	0.00	0.02	0.48	-0.71	0.00
East LA	medicare	0.01	0.01	0.02	0.02	0.01	0.03	0.46	-0.74	0.00
South Bay	medicare	0.07	0.06	0.08	0.07	0.06	0.08	0.82	-0.23	0.00
LAC	private	0.01	0.01	0.01	0.01	0.01	0.01	0.76	0.31	0.00
Antelope Valley	private	0.11	0.07	0.16	0.08	0.04	0.12	0.39	0.87	-0.03
SFV	private	0.00	0.00	0.01	0.01	0.00	0.01	0.30	-1.05	0.00
SGV	private	0.00	0.00	0.00	0.00	0.00	0.00	0.51	-0.67	0.00
Metro	private	0.02	0.02	0.03	0.02	0.02	0.03	0.84	0.20	0.00
West	private	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.30	0.00
South	private	0.00	0.00	0.00	0.00	0.00	0.00			0.00

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Psychiatric Patients Sent to ED Because Hospital Beds are Not Immediately Available By SPA and Payer Type (Supporting Data for Figure 14)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
East LA	private	0.00	0.00	0.01	0.00	0.00	0.00	0.32	1.00	0.00
South Bay	private	0.01	0.00	0.01	0.00	0.00	0.00	0.09	1.72	0.00
LAC	uninsured	0.12	0.11	0.13	0.30	0.28	0.32	0.00	-14.03	0.18
Antelope Valley	uninsured	0.06	0.00	0.13	0.04	0.00	0.10	0.66	0.44	-0.02
SFV	uninsured	0.16	0.13	0.20	0.46	0.40	0.52	0.00	-6.97	0.30
SGV	uninsured	0.16	0.14	0.17	0.24	0.21	0.27	0.00	-3.97	0.08
Metro	uninsured	0.06	0.04	0.09	0.32	0.24	0.39	0.00	-5.71	0.25
West	uninsured	0.10	0.07	0.13	0.18	0.14	0.21	0.00	-3.08	0.08
South	uninsured	0.01	0.00	0.02	0.55	0.42	0.68	0.00	-7.05	0.54
East LA	uninsured	0.04	0.02	0.06	0.10	0.07	0.12	0.00	-3.22	0.06
South Bay	uninsured	0.10	0.07	0.13	0.68	0.63	0.73	0.00	-17.33	0.58

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Pediatric Psychiatric Patients Sent to ED Because Hospital Beds are Not Available**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	Baseline			mean	Immediate impact Scenario III			p-value	t-statistic	Diff
	mean <sup>†</sup>	lb*	ub*		lb	ub				
LAC	457.81	417.32	498.31		682.80	619.83	745.78	0.00	-5.10	224.99
Antelope Valley	2.77	0.81	4.72		4.06	1.52	6.59	0.48	-0.71	1.29
SFV	76.13	63.57	88.68		109.50	90.69	128.31	0.02	-2.51	33.37
SGV	122.01	106.02	138.01		174.95	154.25	195.65	0.00	-3.43	52.93
Metro	60.49	50.79	70.18		85.59	71.80	99.38	0.01	-2.53	25.10
West	26.07	19.84	32.31		44.05	33.66	54.45	0.02	-2.52	17.98
South	95.94	80.07	111.81		138.45	121.46	155.43	0.00	-3.10	42.51
East LA	23.46	17.32	29.61		59.78	46.90	72.67	0.00	-4.32	36.32
South Bay	51.10	42.17	60.03		66.71	56.23	77.19	0.06	-1.92	15.61

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Pediatric Psychiatric Patients Sent to ED Because Hospital Beds are Not Available**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff	
	mean <sup>†</sup>	lb <sup>*</sup>	ub <sup>*</sup>	mean	lb	ub				
LAC	0.07	0.06	0.07		0.10	0.09	0.10	0.00	-5.14	0.03
Antelope Valley	0.05	0.01	0.09		0.11	0.03	0.19	0.24	-1.21	0.06
SFV	0.07	0.06	0.09		0.11	0.09	0.13	0.01	-2.65	0.04
SGV	0.05	0.05	0.06		0.08	0.07	0.08	0.00	-3.40	0.02
Metro	0.11	0.10	0.13		0.16	0.13	0.19	0.01	-2.56	0.05
West	0.05	0.04	0.07		0.09	0.07	0.11	0.02	-2.48	0.04
South	0.14	0.12	0.16		0.20	0.18	0.23	0.00	-3.10	0.06
East LA	0.02	0.01	0.03		0.05	0.04	0.06	0.00	-4.50	0.03
South Bay	0.07	0.06	0.09		0.10	0.08	0.11	0.06	-1.93	0.02

<sup>†</sup> Mean across multiple runs of the simulation model

<sup>\*</sup> Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Patients Sent to ED Because Hospital Beds are Not Immediately Available by SPA and by Bed Type  
(All Except Rehab)**

**Number of Rehab Patients Unable to Find Bed  
(Supporting Data for Figures 13, 16, 17 & 18)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	bedtype	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	ICU	846.80	807.70	885.90	855.23	820.07	890.39	0.79	-0.27	8.43
Antelope Valley	ICU	39.11	30.89	47.32	42.79	33.39	52.20	0.62	-0.50	3.69
SFV	ICU	161.64	146.40	176.88	172.43	156.16	188.71	0.42	-0.82	10.79
SGV	ICU	179.89	164.70	195.08	190.68	173.07	208.29	0.43	-0.79	10.79
Metro	ICU	222.13	200.27	243.99	205.16	190.40	219.91	0.28	1.09	-16.97
West	ICU	57.88	49.25	66.50	54.75	46.17	63.33	0.66	0.44	-3.13
South	ICU	1.04	0.00	2.27	2.52	0.49	4.54	0.30	-1.06	1.47
East LA	ICU	80.82	67.72	93.93	99.43	82.23	116.63	0.15	-1.46	18.61
South Bay	ICU	104.29	92.11	116.46	87.47	75.02	99.93	0.11	1.64	-16.81
LAC	Med/surg	424.96	402.14	447.79	612.95	577.49	648.40	0.00	-7.57	187.98
Antelope Valley	Med/surg	41.71	32.03	51.40	219.00	198.79	239.21	0.00	-13.44	177.29
SFV	Med/surg	212.74	196.11	229.38	225.29	204.10	246.49	0.43	-0.79	12.55
SGV	Med/surg	38.59	31.02	46.15	29.58	23.53	35.63	0.12	1.58	-9.01
Metro	Med/surg	27.11	21.55	32.68	27.06	19.42	34.71	0.99	0.01	-0.05
West	Med/surg	30.24	23.09	37.39	26.43	20.35	32.51	0.49	0.69	-3.81
South	Med/surg	0.52	0.00	1.40	0.63	0.00	1.70	0.90	-0.13	0.11
East LA	Med/surg	8.86	5.93	11.80	25.80	19.17	32.43	0.00	-3.97	16.94
South Bay	Med/surg	65.18	54.06	76.30	59.16	47.66	70.65	0.53	0.64	-6.02
LAC	Other medical	708.10	674.06	742.14	804.26	755.56	852.96	0.01	-2.75	96.16
Antelope Valley	Other medical	32.33	25.16	39.49	54.75	46.45	63.05	0.00	-3.47	22.42
SFV	Other medical	141.31	125.09	157.53	173.06	151.40	194.72	0.05	-1.99	31.75
SGV	Other medical	156.43	143.70	169.16	161.10	143.67	178.54	0.71	-0.37	4.67
Metro	Other medical	16.16	10.83	21.50	17.62	12.88	22.37	0.73	-0.35	1.46
West	Other medical	111.59	99.67	123.51	113.91	94.74	133.07	0.86	-0.17	2.32

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Patients Sent to ED Because Hospital Beds are Not Immediately Available by SPA and by Bed Type  
(All Except Rehab)**

**Number of Rehab Patients Unable to Find Bed  
(Supporting Data for Figures 13, 16, 17 & 18)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	bedtype	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
South	Other medical	8.34	4.27	12.41	7.55	3.93	11.17	0.81	0.25	-0.79
East LA	Other medical	40.15	34.38	45.92	37.76	28.02	47.49	0.72	0.36	-2.39
South Bay	Other medical	201.79	181.05	222.54	238.51	216.40	260.62	0.04	-2.05	36.72
LAC	Rehab	203.88	188.00	219.75	377.59	340.73	414.44	0.00	-7.36	173.71
Antelope Valley	Rehab	7.30	4.15	10.45	8.81	4.56	13.06	0.63	-0.48	1.51
SFV	Rehab	92.81	82.66	102.96	101.95	84.41	119.48	0.45	-0.77	9.13
SGV	Rehab	30.24	23.32	37.17	42.16	34.29	50.04	0.06	-1.93	11.92
Metro	Rehab	27.11	20.38	33.85	40.28	28.60	51.95	0.10	-1.66	13.16
West	Rehab	2.09	0.40	3.77	2.52	0.49	4.54	0.78	-0.28	0.43
East LA	Rehab	11.99	8.00	15.98	135.30	118.74	151.86	0.00	-12.31	123.31
South Bay	Rehab	32.33	25.74	38.91	46.57	35.08	58.06	0.07	-1.83	14.24
LAC	Psych	865.57	815.25	915.90	1328.47	1259.00	1397.95	0.00	-9.16	462.90
Antelope Valley	Psych	23.99	16.74	31.23	24.54	16.80	32.29	0.93	-0.09	0.56
SFV	Psych	129.31	114.22	144.41	202.01	178.70	225.32	0.00	-4.44	72.69
SGV	Psych	240.38	218.16	262.60	315.91	290.31	341.52	0.00	-3.78	75.54
Metro	Psych	142.87	124.69	161.05	190.05	173.35	206.75	0.00	-3.24	47.18
West	Psych	76.65	65.21	88.09	115.79	101.99	129.60	0.00	-3.70	39.14
South	Psych	98.55	82.00	115.10	166.77	146.28	187.25	0.00	-4.40	68.22
East LA	Psych	41.71	33.17	50.25	85.59	70.09	101.08	0.00	-4.21	43.87
South Bay	Psych	112.11	96.71	127.51	227.81	210.82	244.80	0.00	-8.56	115.70

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Patients Sent to ED Because Hospital Beds are Not Immediately Available by SPA and by Bed Type (All Except Rehab)**

**Percent of Rehab Patients Unable to Find Bed**

**(Supporting Data for Figures 13, 16, 17 & 18)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	bedtype	mean <sup>†</sup>	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
			lb*	ub*	mean	lb	ub				
LAC	ICU	0.03	0.03	0.03	0.03	0.03	0.03	0.61	-0.52	0.00	
Antelope Valley	ICU	0.12	0.09	0.14	0.13	0.10	0.16	0.66	-0.45	0.01	
SFV	ICU	0.03	0.02	0.03	0.03	0.03	0.03	0.28	-1.09	0.00	
SGV	ICU	0.04	0.04	0.05	0.05	0.04	0.05	0.48	-0.71	0.00	
Metro	ICU	0.03	0.02	0.03	0.02	0.02	0.03	0.45	0.76	0.00	
West	ICU	0.06	0.05	0.07	0.06	0.05	0.07	0.83	0.21	0.00	
South	ICU	0.00	0.00	0.00	0.00	0.00	0.00	0.38	-0.88	0.00	
East LA	ICU	0.03	0.03	0.04	0.04	0.03	0.05	0.16	-1.42	0.01	
South Bay	ICU	0.02	0.02	0.03	0.02	0.02	0.02	0.09	1.71	0.00	
LAC	Med/surg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-7.61	0.00	
Antelope Valley	Med/surg	0.02	0.01	0.02	0.09	0.09	0.10	0.00	-14.03	0.08	
SFV	Med/surg	0.01	0.01	0.01	0.01	0.01	0.01	0.38	-0.88	0.00	
SGV	Med/surg	0.00	0.00	0.00	0.00	0.00	0.00	0.11	1.64	0.00	
Metro	Med/surg	0.00	0.00	0.00	0.00	0.00	0.00	0.96	-0.05	0.00	
West	Med/surg	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.63	0.00	
South	Med/surg	0.00	0.00	0.00	0.00	0.00	0.00	0.87	-0.17	0.00	
East LA	Med/surg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-3.90	0.00	
South Bay	Med/surg	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.68	0.00	
LAC	Other medical	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-2.73	0.00	
Antelope Valley	Other medical	0.01	0.01	0.02	0.02	0.02	0.03	0.00	-3.61	0.01	
SFV	Other medical	0.01	0.01	0.01	0.01	0.01	0.01	0.05	-1.96	0.00	
SGV	Other medical	0.01	0.01	0.01	0.01	0.01	0.01	0.67	-0.43	0.00	
Metro	Other medical	0.00	0.00	0.00	0.00	0.00	0.00	0.74	-0.34	0.00	
West	Other medical	0.03	0.03	0.03	0.03	0.02	0.03	0.77	-0.30	0.00	
South	Other medical	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.17	0.00	

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Patients Sent to ED Because Hospital Beds are Not Immediately Available by SPA and by Bed Type (All Except Rehab)**

**Percent of Rehab Patients Unable to Find Bed**

(Supporting Data for Figures 13, 16, 17 & 18)

SPA is the hospital's SPA

(mean and 90% confidence interval lower and upper bounds)

spa	bedtype	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
East LA	Other medical	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.37	0.00
South Bay	Other medical	0.01	0.01	0.01	0.01	0.01	0.01	0.04	-2.11	0.00
LAC	Rehab	0.02	0.02	0.03	0.05	0.04	0.05	0.00	-7.74	0.02
Antelope Valley	Rehab	0.24	0.13	0.35	0.28	0.15	0.42	0.66	-0.45	0.04
SFV	Rehab	0.07	0.06	0.08	0.08	0.06	0.09	0.47	-0.74	0.01
SGV	Rehab	0.04	0.03	0.04	0.05	0.04	0.06	0.04	-2.11	0.01
Metro	Rehab	0.01	0.01	0.01	0.01	0.01	0.02	0.11	-1.64	0.00
West	Rehab	0.02	0.00	0.04	0.02	0.00	0.04	0.94	0.08	0.00
East LA	Rehab	0.01	0.01	0.02	0.13	0.12	0.15	0.00	-13.21	0.12
South Bay	Rehab	0.02	0.01	0.02	0.02	0.02	0.03	0.06	-1.94	0.01
LAC	Psych	0.03	0.03	0.03	0.05	0.05	0.05	0.00	-9.28	0.02
Antelope Valley	Psych	0.12	0.09	0.15	0.13	0.09	0.16	0.71	-0.37	0.01
SFV	Psych	0.02	0.02	0.02	0.03	0.03	0.04	0.00	-4.26	0.01
SGV	Psych	0.04	0.04	0.04	0.05	0.05	0.06	0.00	-3.82	0.01
Metro	Psych	0.04	0.03	0.04	0.05	0.05	0.05	0.00	-3.08	0.01
West	Psych	0.04	0.03	0.04	0.05	0.05	0.06	0.00	-3.57	0.02
South	Psych	0.04	0.03	0.04	0.07	0.06	0.07	0.00	-4.81	0.03
East LA	Psych	0.01	0.01	0.02	0.03	0.02	0.03	0.00	-4.15	0.01
South Bay	Psych	0.04	0.03	0.04	0.08	0.07	0.08	0.00	-8.55	0.04

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Rehab Patients Unable to Find Beds By SPA and Payer Type**

includes electives who find no receiving hospital  
and urgents who find no bed when needed (within 1/2 a day)  
*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	medi-cal	28.68	22.57	34.78	54.75	43.02	66.48	0.00	-3.35	26.07
Antelope Valley	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00			0.00
SFV	medi-cal	20.34	15.00	25.67	23.28	16.41	30.16	0.57	-0.58	2.95
SGV	medi-cal	6.26	3.17	9.34	8.18	4.54	11.82	0.50	-0.68	1.92
Metro	medi-cal	1.04	0.00	2.27	1.89	0.10	3.67	0.51	-0.66	0.85
West	medi-cal	0.52	0.00	1.40	0.00	0.00	0.00	0.32	1.00	-0.52
East LA	medi-cal	0.52	0.00	1.40	20.14	13.72	26.55	0.00	-5.15	19.62
South Bay	medi-cal	0.00	0.00	0.00	1.26	0.00	2.75	0.16	-1.44	1.26
LAC	medicare	137.14	124.46	149.81	154.18	136.44	171.92	0.19	-1.33	17.05
Antelope Valley	medicare	3.13	1.13	5.12	4.41	1.46	7.35	0.55	-0.61	1.28
SFV	medicare	72.48	64.94	80.01	78.66	64.62	92.71	0.51	-0.66	6.19
SGV	medicare	14.08	9.16	18.99	15.10	10.73	19.48	0.79	-0.26	1.02
Metro	medicare	15.12	9.98	20.26	9.44	4.19	14.69	0.19	1.31	-5.68
West	medicare	0.52	0.00	1.40	0.63	0.00	1.70	0.90	-0.13	0.11
East LA	medicare	3.65	1.53	5.77	10.70	5.47	15.93	0.04	-2.12	7.05
South Bay	medicare	28.16	21.42	34.89	35.24	26.40	44.08	0.28	-1.08	7.08
LAC	private	37.02	29.59	44.45	43.42	35.81	51.04	0.31	-1.02	6.40
Antelope Valley	private	2.09	0.00	4.19	3.15	0.93	5.36	0.56	-0.59	1.06
SFV	private	16.69	11.89	21.48	13.84	9.31	18.38	0.47	0.73	-2.84
SGV	private	7.82	3.97	11.68	9.44	6.13	12.75	0.59	-0.54	1.62
Metro	private	5.21	2.51	7.92	8.18	2.71	13.65	0.41	-0.83	2.97
West	private	0.00	0.00	0.00	0.00	0.00	0.00			0.00
East LA	private	2.61	0.76	4.46	6.29	3.50	9.08	0.07	-1.87	3.69
South Bay	private	2.61	0.76	4.46	2.52	0.00	5.06	0.96	0.05	-0.09
LAC	uninsured	20.34	14.43	26.24	264.31	240.06	288.56	0.00	-16.63	243.97
Antelope Valley	uninsured	2.09	0.40	3.77	1.26	0.00	2.75	0.53	0.62	-0.83
SFV	uninsured	2.61	0.36	4.85	19.51	13.55	25.46	0.00	-4.52	16.90
SGV	uninsured	2.09	0.40	3.77	9.44	5.48	13.40	0.01	-2.90	7.35
Metro	uninsured	5.74	2.70	8.77	20.77	14.28	27.25	0.00	-3.57	15.03

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Rehab Patients Unable to Find Beds By SPA and Payer Type**

includes electives who find no receiving hospital  
and urgents who find no bed when needed (within 1/2 a day)  
*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
West	uninsured	1.04	0.00	2.27	1.89	0.10	3.67	0.51	-0.66	0.85
East LA	uninsured	5.21	2.23	8.20	203.90	183.63	224.17	0.00	-16.49	198.68
South Bay	uninsured	1.56	0.08	3.05	7.55	3.62	11.49	0.02	-2.42	5.99

**Baseline**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	28.68	137.14	37.02	20.34	223.17	9%
Antelope Valley	0.00	3.13	2.09	2.09	7.30	29%
SFV	20.34	72.48	16.69	2.61	112.11	2%
SGV	6.26	14.08	7.82	2.09	30.24	7%
Metro	1.04	15.12	5.21	5.74	27.11	21%
West	0.52	0.52	0.00	1.04	2.09	50%
East LA	0.52	3.65	2.61	5.21	11.99	43%
South Bay	0.00	28.16	2.61	1.56	32.33	5%

**Immediate Impact**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	54.75	154.18	43.42	264.31	516.66	51%
Antelope Valley	0.00	4.41	3.15	1.26	8.81	14%
SFV	23.28	78.66	13.84	19.51	135.30	14%
SGV	8.18	15.10	9.44	9.44	42.16	22%

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Report of Findings — Scenario III Impact on Inpatient & Emergency Services in Los Angeles County**

Metro	1.89	9.44	8.18	20.77	40.28	52%
West	0.00	0.63	0.00	1.89	2.52	75%
East LA	20.14	10.70	6.29	203.90	241.03	85%
South Bay	1.26	35.24	2.52	7.55	46.57	16%

**Difference**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	26.07	17.05	6.40	243.97	293.49	83%

† Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Rehab Patients Unable to Find Beds By SPA and Payer Type**

includes electives who find no receiving hospital  
and urgents who find no bed when needed (within 1/2 a day)  
*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	medi-cal	0.01	0.00	0.01	0.01	0.01	0.01	0.00	-3.32	0.01
Antelope Valley	medi-cal	0.00			0.00					0.00
SFV	medi-cal	0.02	0.02	0.03	0.03	0.02	0.04	0.62	-0.50	0.00
SGV	medi-cal	0.02	0.01	0.03	0.03	0.02	0.04	0.24	-1.18	0.01
Metro	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.52	-0.65	0.00
West	medi-cal	0.02	0.00	0.05	0.00	0.00	0.00	0.24	1.18	0.02
East LA	medi-cal	0.00	0.00	0.00	0.02	0.01	0.02	0.00	-5.21	0.02
South Bay	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.16	-1.43	0.00
LAC	medicare	0.05	0.05	0.05	0.05	0.05	0.06	0.31	-1.02	0.00
Antelope Valley	medicare	0.08	0.03	0.13	0.15	0.04	0.25	0.28	-1.11	0.07
SFV	medicare	0.14	0.13	0.16	0.15	0.13	0.17	0.53	-0.63	0.01
SGV	medicare	0.05	0.03	0.07	0.05	0.04	0.06	0.97	0.03	0.00
Metro	medicare	0.02	0.01	0.02	0.01	0.00	0.01	0.10	1.67	0.01
West	medicare	0.00	0.00	0.01	0.01	0.00	0.02	0.59	-0.54	0.00
East LA	medicare	0.02	0.01	0.03	0.03	0.02	0.05	0.14	-1.50	0.02
South Bay	medicare	0.05	0.04	0.06	0.06	0.04	0.07	0.36	-0.93	0.01
LAC	private	0.01	0.01	0.01	0.01	0.01	0.01	0.24	-1.19	0.00
Antelope Valley	private	0.07	0.00	0.13	0.18	0.05	0.32	0.14	-1.52	0.12
SFV	private	0.03	0.02	0.03	0.02	0.01	0.03	0.39	0.86	0.01
SGV	private	0.01	0.01	0.02	0.01	0.01	0.02	0.54	-0.61	0.00
Metro	private	0.00	0.00	0.01	0.00	0.00	0.01	0.47	-0.73	0.00
West	private	0.00	0.00	0.00	0.00	0.00	0.00			0.00

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Rehab Patients Unable to Find Beds By SPA and Payer Type**

includes electives who find no receiving hospital  
and urgents who find no bed when needed (within 1/2 a day)  
*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
East LA	private	0.02	0.01	0.03	0.05	0.03	0.07	0.06	-1.95	0.03
South Bay	private	0.00	0.00	0.00	0.00	0.00	0.01	0.95	0.07	0.00
LAC	uninsured	0.05	0.04	0.06	0.62	0.59	0.66	0.00	-27.50	0.58
Antelope Valley	uninsured	0.50	0.13	0.87	0.67	0.00	1.64	0.23	-1.22	0.17
SFV	uninsured	0.05	0.01	0.10	0.60	0.47	0.73	0.00	-7.59	0.55
SGV	uninsured	0.06	0.01	0.12	0.30	0.17	0.42	0.00	-3.36	0.24
Metro	uninsured	0.06	0.03	0.09	0.27	0.20	0.34	0.00	-4.50	0.21
West	uninsured	0.17	0.00	0.37	0.23	0.00	0.48	0.51	-0.66	0.07
East LA	uninsured	0.03	0.01	0.04	0.99	0.98	1.00	0.00	-92.11	0.96
South Bay	uninsured	0.02	0.00	0.04	0.14	0.06	0.23	0.01	-2.77	0.13

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Patients Sent to ED Because Hospital Beds are Not Immediately Available By SPA and Payer Type  
(Supporting Data for Figure 19)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	mean <sup>†</sup>	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff	% Increase
			lb*	ub*	mean	lb	ub					
LAC	medi-cal	61.01	50.66	71.36	112.65	99.21	126.08	0.00	-5.17	51.64		
Antelope Valley	medi-cal	19.81	14.25	25.38	41.53	33.40	49.67	0.00	-3.74	21.72		
SFV	medi-cal	28.16	21.54	34.77	35.87	28.25	43.49	0.20	-1.30	7.71		
SGV	medi-cal	7.82	4.41	11.24	8.81	4.85	12.77	0.75	-0.32	0.99		
Metro	medi-cal	2.09	0.40	3.77	2.52	0.49	4.54	0.78	-0.28	0.43		
West	medi-cal	2.09	0.40	3.77	1.26	0.00	2.75	0.53	0.62	-0.83		
South	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00			0.00		
East LA	medi-cal	1.04	0.00	2.27	20.77	14.47	27.07	0.00	-5.23	19.72		
South Bay	medi-cal	0.00	0.00	0.00	1.89	0.10	3.67	0.08	-1.80	1.89		
LAC	medicare	1489.72	1445.14	1534.31	1524.82	1483.49	1566.15	0.33	-0.98	35.10		
Antelope Valley	medicare	32.33	24.83	39.82	33.98	26.32	41.64	0.79	-0.26	1.65		
SFV	medicare	439.56	417.49	461.64	460.03	427.73	492.32	0.38	-0.89	20.46		
SGV	medicare	207.53	190.04	225.02	199.49	181.01	217.98	0.59	0.54	-8.04		
Metro	medicare	150.17	137.39	162.95	138.45	121.32	155.57	0.36	0.93	-11.72		
West	medicare	181.46	165.46	197.46	182.50	159.86	205.14	0.95	-0.06	1.04		
South	medicare	7.30	4.15	10.45	7.55	4.66	10.44	0.92	-0.10	0.25		
East LA	medicare	96.46	85.69	107.24	118.94	105.90	131.98	0.03	-2.25	22.48		
South Bay	medicare	374.91	350.79	399.02	383.88	360.90	406.86	0.65	-0.46	8.97		
LAC	private	435.91	411.29	460.54	475.13	455.73	494.53	0.04	-2.12	39.22		
Antelope Valley	private	17.73	12.44	23.02	25.17	20.45	29.90	0.08	-1.78	7.44		

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Number of Patients Sent to ED Because Hospital Beds are Not Immediately Available By SPA and Payer Type  
(Supporting Data for Figure 19)**

SPA is the hospital's SPA

(mean and 90% confidence interval lower and upper bounds)

spa	payer	mean <sup>†</sup>	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff	% Increase
			lb*	ub*	mean	lb	ub					
SFV	private	105.33	92.05	118.60	120.83	110.44	131.21	0.12	-1.56	15.50		
SGV	private	141.31	125.54	157.08	154.81	138.10	171.52	0.32	-1.00	13.50		
Metro	private	118.89	105.59	132.18	113.91	102.51	125.30	0.63	0.48	-4.98		
West	private	6.78	3.93	9.63	6.92	3.02	10.82	0.96	-0.05	0.14		
South	private	0.00	0.00	0.00	0.00	0.00	0.00			0.00		
East LA	private	27.11	19.38	34.85	28.32	19.80	36.84	0.86	-0.18	1.20		
South Bay	private	18.77	12.91	24.64	25.17	18.56	31.78	0.22	-1.23	6.40		
LAC	uninsured	197.10	175.34	218.86	537.43	501.71	573.16	0.00	-13.82	340.33		
Antelope Valley	uninsured	50.58	42.87	58.28	224.66	207.64	241.69	0.00	-15.83	174.09	344%	
SFV	uninsured	35.46	28.31	42.61	56.01	44.80	67.22	0.01	-2.62	20.55	58%	
SGV	uninsured	48.49	40.60	56.39	60.41	50.07	70.76	0.13	-1.55	11.92		
Metro	uninsured	21.38	14.75	28.01	35.24	27.40	43.09	0.03	-2.29	13.86	65%	
West	uninsured	11.47	6.72	16.22	6.92	3.34	10.51	0.20	1.30	-4.55		
South	uninsured	2.61	0.76	4.46	3.15	0.45	5.85	0.78	-0.28	0.54		
East LA	uninsured	17.21	12.32	22.10	130.27	110.79	149.74	0.00	-9.58	113.06	657%	
South Bay	uninsured	9.91	4.95	14.86	20.77	15.27	26.26	0.02	-2.49	10.86	110%	

**Baseline**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	61.01	1489.72	435.91	197.10	2183.74	9%
Antelope Valley	19.81	32.33	17.73	50.58	120.45	42%

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Report of Findings — Scenario III Impact on Inpatient & Emergency Services in Los Angeles County**

SFV	28.16	439.56	105.33	35.46	608.51	6%
SGV	7.82	207.53	141.31	48.49	405.15	12%
Metro	2.09	150.17	118.89	21.38	292.52	7%
West	2.09	181.46	6.78	11.47	201.79	6%
South	0.00	7.30	0.00	2.61	9.91	26%
East LA	1.04	96.46	27.11	17.21	141.83	12%
South Bay	0.00	374.91	18.77	9.91	403.59	2%

**Immediate Impact**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	112.65	1524.82	475.13	537.43	2650.03	20%
Antelope Valley	41.53	33.98	25.17	224.66	325.35	69%
SFV	35.87	460.03	120.83	56.01	672.73	8%
SGV	8.81	199.49	154.81	60.41	423.53	14%
Metro	2.52	138.45	113.91	35.24	290.11	12%
West	1.26	182.50	6.92	6.92	197.60	4%
South	0.00	7.55	0.00	3.15	10.70	29%
East LA	20.77	118.94	28.32	130.27	298.29	44%
South Bay	1.89	383.88	25.17	20.77	431.71	5%

**Difference**

	Medi-Cal	Medicare	Private	Uninsured	Total	% Uninsured
LAC	51.639	35.098	39.215	340.331	466.28	73%
Antelope Valley	21.720	1.654	7.444	174.085	204.90	85%
SFV	7.714	20.462	15.499	20.551	64.23	32%
SGV	0.989	-8.037	13.503	11.921	18.38	65%
Metro	0.432	-11.723	-4.981	13.863	-2.41	-575%
West	-0.827	1.043	0.144	-4.549	-4.19	109%
South	0.000	0.252	0.000	0.539	0.79	68%
East LA	19.724	22.475	1.205	113.060	156.46	72%
South Bay	1.888	8.972	6.401	10.860	28.12	39%

† Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Patients Sent to ED Because Hospital Beds are Not Immediately Available By SPA and Payer Type (Supporting Data for Figure 19)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
LAC	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5.21	0.00
Antelope Valley	medi-cal	0.01	0.01	0.02	0.03	0.02	0.04	0.00	-3.71	0.02
SFV	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.21	-1.26	0.00
SGV	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.71	-0.37	0.00
Metro	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.76	-0.30	0.00
West	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.60	0.00
South	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00			0.00
East LA	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5.25	0.00
South Bay	medi-cal	0.00	0.00	0.00	0.00	0.00	0.00	0.08	-1.80	0.00
LAC	medicare	0.02	0.02	0.02	0.02	0.02	0.02	0.33	-0.98	0.00
Antelope Valley	medicare	0.02	0.02	0.03	0.02	0.02	0.03	0.80	-0.25	0.00
SFV	medicare	0.03	0.03	0.03	0.03	0.03	0.03	0.26	-1.15	0.00
SGV	medicare	0.02	0.02	0.02	0.02	0.01	0.02	0.57	0.57	0.00
Metro	medicare	0.01	0.01	0.01	0.01	0.01	0.01	0.30	1.05	0.00
West	medicare	0.04	0.03	0.04	0.04	0.03	0.04	0.93	-0.09	0.00
South	medicare	0.00	0.00	0.01	0.00	0.00	0.01	0.86	-0.18	0.00
East LA	medicare	0.01	0.01	0.01	0.02	0.01	0.02	0.02	-2.32	0.00
South Bay	medicare	0.03	0.02	0.03	0.03	0.02	0.03	0.72	-0.36	0.00
LAC	private	0.00	0.00	0.00	0.00	0.00	0.00	0.05	-2.01	0.00
Antelope Valley	private	0.01	0.01	0.01	0.01	0.01	0.02	0.05	-2.04	0.00
SFV	private	0.00	0.00	0.01	0.01	0.01	0.01	0.10	-1.67	0.00
SGV	private	0.01	0.01	0.01	0.01	0.01	0.01	0.43	-0.79	0.00
Metro	private	0.01	0.00	0.01	0.00	0.00	0.01	0.65	0.46	0.00
West	private	0.00	0.00	0.00	0.00	0.00	0.00	0.89	-0.14	0.00

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

**Percent of Patients Sent to ED Because Hospital Beds are Not Immediately Available By SPA and Payer Type (Supporting Data for Figure 19)**

*SPA is the hospital's SPA*

(mean and 90% confidence interval lower and upper bounds)

spa	payer	Baseline			Immediate impact Scenario III			p-value	t-statistic	Diff
		mean <sup>†</sup>	lb*	ub*	mean	lb	ub			
South	private	0.00	0.00	0.00	0.00	0.00	0.00			0.00
East LA	private	0.00	0.00	0.00	0.00	0.00	0.00	0.90	-0.12	0.00
South Bay	private	0.00	0.00	0.00	0.00	0.00	0.00	0.22	-1.23	0.00
LAC	uninsured	0.02	0.02	0.03	0.06	0.06	0.07	0.00	-14.70	0.04
Antelope Valley	uninsured	0.13	0.11	0.15	0.58	0.55	0.61	0.00	-21.00	0.45
SFV	uninsured	0.03	0.02	0.03	0.04	0.04	0.05	0.01	-2.53	0.01
SGV	uninsured	0.04	0.04	0.05	0.06	0.05	0.07	0.07	-1.88	0.01
Metro	uninsured	0.01	0.01	0.01	0.02	0.01	0.02	0.02	-2.43	0.01
West	uninsured	0.04	0.02	0.05	0.02	0.01	0.04	0.21	1.27	0.01
South	uninsured	0.00	0.00	0.01	0.01	0.00	0.01	0.69	-0.40	0.00
East LA	uninsured	0.02	0.02	0.03	0.17	0.15	0.20	0.00	-9.59	0.15
South Bay	uninsured	0.01	0.00	0.01	0.01	0.01	0.01	0.02	-2.34	0.01

<sup>†</sup> Mean across multiple runs of the simulation model

\* Lower bound, Upper bound of 90% CI

Source: NHF Impact Assessment Model Runs, December 2002

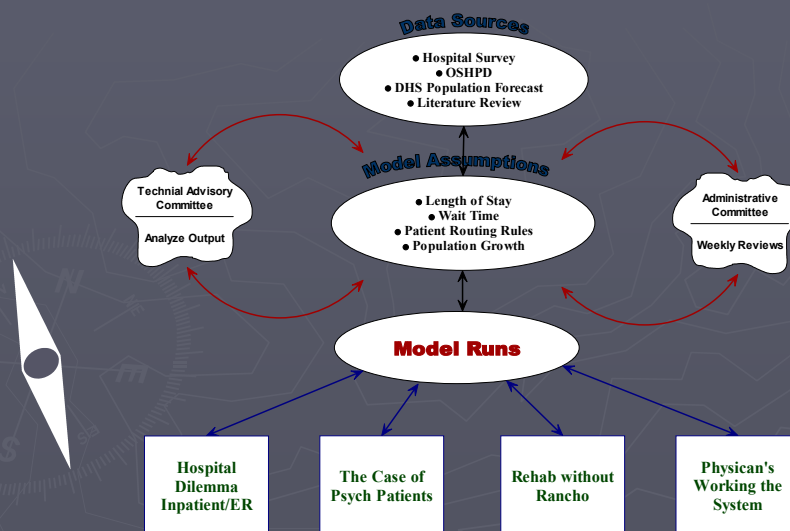
APPENDIX C

# NHF IMPACT STUDY

Discussion with HASC's Los Angeles Healthcare Committee  
December 11, 2002



## National Health Foundation Hospital Impact Inpatient Model



## Concerns that have been raised

- ▶ Occupancy Rates
- ▶ Emergency Department Wait Times
- ▶ Numbers Leaving Without Being Seen

## Hospital System Universe (N = 120)

DHS/Public Sector  
n = 6

Private Sector  
n = 114

Hospitals  
w/ Trauma  
Centers  
n = 3

Hospitals  
w/ Trauma  
Centers  
n = 10

Hospitals  
w/ EDs  
n = 1

Hospitals  
w/EDs  
n = 67

Inpatient  
only  
n = 2

Inpatient  
only  
n = 37

## DHS/Public Sector Hospitals (OSHPD 2000 Data – 6 Hospitals)

► System in distress:

- County as provider of last resort for indigent and Medi-Cal pending
- Numbers of uninsured increasing
- Most DHS hospitals have high occupancy rates. Median Occupancy Rates (# beds) Across All DHS Hospitals by bed type:



▪ Adult ICU	96%	(152)	Adult Acute	99%	(1032)
▪ Peds ICU	89%	(82)	Peds Acute	89%	(115)
▪ Physical Rehab	93%*	(197)	Psych ICU	Not reported	
▪ Psych Adult	101%	(137)	Psych Peds	102%	(10)
▪ Other	99%	(351)			

\* Calculated assuming rehab beds categorized as "other acute."

## Hospitals with Trauma Centers (OSHPD 2000 Data)

► DHS Hospitals (3)

- Median Occupancy Rates (# beds) by Bed Types:

► Adult ICU	99%	(124)
► Adult Acute	100%	(802)
► Peds ICU	89%	(68)
► Peds Acute	98%	(85)
► Physical Rehab	95%*	(69)
► Psych ICU	Not reported	
► Psych Adult	102%	(105)
► Psych Peds	102%	(10)
► Other	99%	(147)

\* Calculated assuming rehab beds categorized as "other acute."

► Private Sector Hospitals (10)

- Median Occupancy Rates (# beds) by Bed Types:

► Adult ICU	72%	(369)
► Adult Acute	70%	(1768)
► Peds ICU	77%	(364)
► Peds Acute	57%	(536)
► Physical Rehab	52%	(186)
► Psych ICU	88%	(61)
► Psych Adult	72%	(150)
► Psych Peds	Not reported	
► Other	66%	(1210)

## Private Sector Hospitals (OSHPD 2000 Data)

### ▶ With EDs (67)

- Median Occupancy Rates (# beds) by Bed Types:
  - ▶ Adult ICU 64% (1292)
  - ▶ Adult Acute 52% (6747)
  - ▶ Peds ICU 70% (596)
  - ▶ Peds Acute 47% (410)
  - ▶ Physical Rehab 58% (401)
  - ▶ Psych ICU 78% (41)
  - ▶ Psych Adult 67% (862)
  - ▶ Psych Peds 15%\*(6)
  - ▶ Other 70% (4443)

### ▶ Without EDs (37)

- Median Occupancy Rates (# beds) by Bed Types:
  - ▶ Adult ICU 53% (208)
  - ▶ Adult Acute 55% (1251)
  - ▶ Peds ICU Not Reported
  - ▶ Peds Acute 46% (106)
  - ▶ Physical Rehab 57% (85)
  - ▶ Psych ICU 99% (41)
  - ▶ Psych Adult 70% (879)
  - ▶ Psych Peds 67% (439)
  - ▶ Other 80% (2129)

\* Data from 1 hospital only

## Impact of Scenario III on Countywide Hospital System

### ▶ On psychiatric patients

- Closing DHS hospitals' psych beds will cause problems for private hospitals because they already have high psych bed occupancy rates.

### ▶ On rehab patients

- Among DHS hospitals, only MLK has additional capacity for rehab patients. The private sector has sufficient capacity to pick up Rancho's insured patients.