California Hospital Outcomes Project

Heart Attack Outcomes
1994 - 1996
Volume 4: Hospital Comment Letters

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Governor
State of California

Grantland Johnson
Secretary
California Health and Human Services Agency

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Director
Office of Statewide Health Planning and Development

2002

"Equitable Healthcare
Accessibility for California"

OSHPD
OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
Report on Heart Attack Outcomes in California, 1994-1996

Office of Statewide Health Planning and Development

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Acknowledgments

This report reflects the efforts of the contractors and staff in the Office of Statewide Health Planning and Development. Work was completed under contract 96-0171 with the University of California, Los Angeles.

Roxanne Andrews, Ph.D. and Mary MacDonald had overall responsibility for all aspects of the project, serving as liaisons between OSHPD, the research team, and the included hospitals. OSHPD staff conducted the death certificate linkage.

Gerald F. Kominski, Ph.D. and Rebecca Levan supervised the contract team at UCLA. Dr. Kominski had primary responsibility for revising the User's Guide and Technical Guide. Lisa Lara was responsible for most of the data processing and statistical analyses, with the assistance of Dr. Hongjian Yu and Dr. Kominski. Dr. Brian Mittman and Cori Reifman led the focus groups of administrators and physicians who provided useful feedback about the content and format of the project reports, and the development of one-page hospital summary reports. Dr. Gregg Fonarow, a cardiologist on the faculty of the UCLA Medical School, served as a clinical consultant to the project team.

The UCLA project team owes a substantial debt to Harold Luft, Ph.D., and Patrick Romano, M.D., M.P.H., who developed the original risk-adjustment models described in this report. We are also indebted to the programming staff at UC, San Francisco and UC, Davis who developed the original computer programs used in earlier AMI reports. Without the considerable prior effort of both project teams, our work would have been more difficult.

Suggested Citation

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Overview


The California Hospital Outcomes Project is an initiative mandated by the State of California, and conducted by the Office of Statewide Health Planning and Development (OSHPD), to develop public reports comparing hospital outcomes for selected conditions treated in hospitals throughout the state.

The Report on Heart Attack Outcomes is intended to encourage all California hospitals to improve their care and give credit to the hospitals that are the leaders. It can also help insurers, employers, and consumers to select hospitals based on quality of care.

The California Hospital Outcomes Project

Heart attack (acute myocardial infarction or AMI) was chosen as one of the first conditions to be reported upon by the California Hospital Outcomes Project because they are important, common, and deadly. Every year approximately 40,000 heart attack patients are admitted to 400 California hospitals. More than 5,000 of these persons die.

The mortality rates published in previous heart attack reports have been used in many ways. Hospitals have used their results to evaluate and improve their quality of care. Payers and providers have used the reports to contract with the best hospitals. Consumers have used the reports to make more informed decisions.

The results published in this report are useful because:

- **They have been risk-adjusted.** Patient age, sex, type of heart attack, and chronic diseases were used to adjust for differences in patient risk when calculating hospital mortality rates.

- **They have been validated.** A major validation study involving nearly 1,000 heart attacks at 30 hospitals showed that variations in how hospitals report their data to OSHPD do not significantly affect their risk-adjusted death rates. In general, low-mortality hospitals treat heart attacks more aggressively than high-mortality hospitals.

Content of the Report on Heart Attack Outcomes

This is the fourth report on heart attack outcomes. The first report was published in December 1993; the second in May 1996; and the third in December 1997. This report includes heart attack cases from 1994 through 1996. The current report includes improvements in the risk-adjustment methodology introduced in the previous report. These improvements include:
• linking with Vital Statistics records to identify deaths occurring outside the hospital;
• refining patient risk-factor definitions based on the findings of the validation study published in 1996; and
• using six months of pre-heart attack hospital records to more completely describe patient risk factors.

This report consists of four volumes:

The **User's Guide** (Volume 1) is intended for all those interested in hospital performance including hospital staff, employers, government agencies, health plans, and insurance companies. This volume provides a brief description of the study background and methods. It also contains two tables that display the results for individual hospitals based on heart attacks that occurred between 1994 and 1996.

The **Technical Guide** (Volume 2) is intended for health services researchers, health care providers, and others interested in the statistical methods used to calculate risk-adjusted death rates.

The **Detailed Statistical Results** (Volume 3) contains the numerical results for individual hospitals upon which the classifications in the **User's Guide** are based. In addition, there are tables that aggregate the results to the county level. It also contains a graphical representation of both individual hospital and county-wide results, which can be used to examine annual trends.

The **Hospital Comment Letters** (Volume 4) is intended to give readers of the **Report on Heart Attack** an appreciation of its strengths and weaknesses from the hospitals’ perspectives.

To obtain these volumes of the report contact:

Office of Statewide Health Planning and Development
Healthcare Information Resource Center
818 K Street, Room 500
Sacramento, CA 95814
(916) 326-3802

The report volumes are also available on the internet at
http:\ www.oshpd.state.ca.us

Hospitals were provided with a “Hospital Guide to Using the Report Data” several weeks before the **Report on Heart Attack Outcomes** was published. This document accompanied each hospital’s patient-specific data. Hospitals used this document to access and use their patient-specific data and to prepare their comment letters, provided in Volume 4. More importantly, hospitals and their physicians can use this information to target areas where heart attack care might be improved.
Section

1

Summary of Hospital Letters

The major issues raised by hospitals in these letters are summarized in this section, with the most frequently cited concerns listed first. In general, the concerns cited by hospitals in response to this report are the same concerns raised in response to the previous report published in 1997. Therefore, many responses remain unchanged since the last report. The responses from the Office of Statewide Health Planning and Development to the comment letters both acknowledge the limitations of the study and reiterate its strengths, where appropriate. They also report on progress that the Office of Statewide Health Planning and Development (OSHPD) has made in addressing several of these concerns.

This report is one of many steps in a long and important process. OSHPD looks forward to continue working closely with hospitals to improve the quality of the data and the scope of the medical conditions included in the studies.

Process-of-Care Data Should Be Used In Addition To Mortality Data

Hospital Comments: Many of the hospitals submitting letters in response to this report noted that they have initiated quality improvement (QI) efforts specifically focused on the care of AMI patients since publication of the 1996 report. These include the establishment of multidisciplinary QI teams and development of clinical protocols for chest pain and for AMI. A number of hospitals indicated that they participate in the Health Care Financing Administration's (HCFA's) Cooperative Cardiovascular Project or the National Registry of Myocardial Infarction (NRMI) (sponsored by Genentech), which provide data on process-of-care indicators that have been shown to improve outcomes. These include areas such as time for administration of thrombolytic drugs or angioplasty, and use of aspirin, beta-blockers and ACE inhibitors. These process data were widely felt to be important indicators of quality of care. Some hospitals urged OSHPD to link its risk-adjusted mortality data with process-of-care data.

Response: OSHPD is pleased that the publication of earlier versions of this report helped stimulate hospitals to focus on the quality of care provided to AMI patients in California. Many more hospitals reported participation in the National Registry of Myocardial Infarction or the Cooperative Cardiovascular Project since the previous report. Clinically based registry programs and other sources of comparative data are important tools for hospital quality improvement efforts. Neither risk-adjusted outcome studies nor process-of-care studies tell a complete story. Risk-adjusted outcome studies, such as the California Hospital Outcomes Project, help to identify health care providers with best practices as well as providers that deserve special attention. They provide a "bottom line" view of the effectiveness of health care, similar to the financial statement of a business or the transcript of a
college graduate. They can be difficult for hospitals and physicians to interpret, however, because they do not tell hospitals why their outcomes may be better or worse than expected. Therefore, hospitals should undertake process-of-care studies, alone or in collaboration with other institutions, to determine the reasons for better or worse outcomes. Nevertheless, process-of-care studies should not be used in isolation, because seemingly good processes do not always lead to good outcomes.

The AMI Validation Study found that low-mortality hospitals (identified in a previous edition of this report) started aspirin within 6 hours of presentation more often than intermediate and high-mortality hospitals (35 percent versus 25 percent and 26 percent, respectively). Low-mortality hospitals used heparin more often than other hospitals, among eligible patients (79 percent versus 60 percent and 70 percent, respectively). Finally, low-mortality hospitals performed or referred patients for early revascularization more often than other hospitals (9 percent versus 4 percent). Other studies have also confirmed the link between outcomes and processes of care for AMI patients. OSHPD strongly encourages hospitals to collect and disseminate process-of-care information, but its statutory mandate is to study risk-adjusted outcomes, which are easier for consumers, purchasers, and payers to understand.


**Hospital Comments:** A number of hospitals observed that significant advances in medical care have taken place since the 1994-1996 period, most notably in the development of new thrombolytic drugs. In addition, some hospitals described recent improvements in how they treat AMI patients.

**Response:** Recent data are clearly more useful than older data in comparing hospital outcomes. However, there are two limiting factors. First, it takes 12 to 18 months for hospitals to submit, and for OSHPD to edit and compile, patient discharge abstracts. Another year is needed to develop risk-adjustment models and calculate outcome rates, followed by six months to solicit comments from hospitals and to prepare, print, and disseminate the official report. Therefore, data after December 31, 1996 could not be used in this year's report. However, OSHPD has adopted procedures to accelerate the process, which should result in more timely publication of future reports. Second, most hospitals have too few cases in one year to provide meaningful results. When a hospital has very few cases in a given period, one has little confidence in its outcome statistics because chance variation is so important. By combining several years of data, hospital outcome statistics become more reliable and more useful.

Patients Who Requested “Do Not Resuscitate” Orders Should Not Be Included

**Hospital Comments:** Many of the hospital comment letters noted that patients with “Do Not Resuscitate” (DNR) orders are inherently at higher risk
of dying than other patients and therefore should not be included in the study. Patients with severe medical problems frequently ask their doctors not to resuscitate them if their heart or lungs stop working. This decision is recorded in the medical record as a "do not resuscitate" (DNR) order. Patients with DNR orders have a high risk of death, both because of their underlying medical problems and because they are not candidates for life-prolonging interventions. If a hospital has a disproportionate number of DNR patients, this would make their death rate appear artificially high.

Response: In response to hospitals’ comments on the prior versions of this report, OSHPD recognized the importance of being able to adjust for DNR status as well as other unmeasured risk factors. A change in California's Health and Safety Code in 1994 authorized OSHPD to collect DNR information on discharges occurring on or after January 1, 1999.

In the meantime, it is not appropriate for hospitals to recalculate their death rates after excluding DNR patients because: (1) DNR patients are not predestined to die, but simply choose not to receive certain therapies; and (2) DNR orders may be written or discontinued at any time, even after patients experience complications, so they may reflect previous errors in the process of care. The AMI Validation Study showed that only 40 percent of DNR orders among AMI patients were written on or before the date of admission. Among the patients whose DNR orders were written at least one day after admission, 11 percent received thrombolytics and 15 percent underwent either angioplasty or coronary bypass graft surgery during the AMI hospitalization.

Hospitals Should Not Be Charged With Deaths That Occur After Discharge

Hospital Comments: Some hospitals expressed concern that when a patient died after being transferred from one hospital to another, the case was counted only once and the death was attributed to the first hospital. This approach was considered unfair to hospitals that do not perform specialized procedures. Several hospitals were concerned that all deaths occurring within 30 days of admission were counted, regardless of the immediate cause or location. Some of these deaths may not have been related to the patients’ AMI, or to the quality of care during the AMI hospitalization. Extraneous factors, such as adherence to therapy and outpatient follow-up, may confound comparisons of total 30-day mortality.

Response: Rather than being a source of bias, the linkage of serial hospitalizations and the attribution of outcomes to primary facilities is a strength of this study. If this had not been done, the analysis would have been severely biased against hospitals that have open-heart surgery facilities. Referral centers would have shown high risk-adjusted mortality rates because all of their patient deaths would have been attributed to their facilities. Conversely, small hospitals would have shown very low risk-adjusted mortality rates because many of their patients who died would have died elsewhere. Linking serial hospitalizations created a "level playing field" so that small hospitals and referral centers could be directly compared. In
addition, the hospital that initially receives an AMI patient decides when, where, and how to transfer that patient. These community hospitals should share the responsibility for the ultimate outcomes of their patients.

Deaths among AMI patients for unrelated reasons cannot be excluded, for three reasons: (1) without detailed information about the date, severity, and treatment of each diagnosis, we cannot identify which diagnosis led to death; (2) the true cause of death can often be established only by autopsy, yet relatively few AMI fatalities are autopsied; and (3) the AMI is probably a contributing cause, even if it is not the underlying cause, of a substantial majority of these deaths. Previous studies have shown substantial error in the attribution of “cause of death” on death certificates, especially among patients with multiple contributing factors.

### Hospitals Without Catheterization Laboratories Are Unfairly Penalized For Admitting Only the Sickest Patients

**Hospital comments:** Some hospitals without catheterization laboratories argue that they refer all AMI patients who are candidates for urgent catheterization directly from their emergency rooms (without admitting them first). As a result, the AMI patients that remain tend to be too ill to transfer. This report is based entirely on inpatient data, and may therefore be biased.

**Response:** This concern is valid. Since OSHPD does not collect emergency room data, there is no evidence to support or refute this argument. Ideally, the risk-adjustment models used in this report would fully account for the clinical differences between patients who are stable for transfer and those who are not. OSHPD recognizes, however, that its current risk-adjustment models are unlikely to meet this standard. Hospitals will begin collecting emergency room data to report to the Office beginning January 1, 2002.

### Differences in Coding Practices May Affect the Validity of the Results

**Hospital Comments:** Several hospitals noted that coding practices are quite variable across hospitals. Part of this variation relates to differences in the availability of important information in the medical record. The *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM), was never intended to be used for comparing hospital outcomes, so coding guidelines are often vague and allow physicians considerable discretion in diagnosing complications. In the absence of standard definitions, different coders may interpret ICD-9-CM in different ways.

**Response:** These concerns are well founded. In some areas, coding guidelines are vague and therefore subject to interpretation. This problem was addressed by appointing a coding expert to each advisory panel and by carefully reviewing professional coding publications. In addition, OSHPD staff have worked very closely with hospitals, both directly and through the California Health Information Association, to improve the uniformity and validity of hospital discharge data. The AMI Validation Study showed that
variations in reporting risk factors explain, at most, one-quarter of the
difference in risk-adjusted death rates between high-mortality and low-
mortality hospitals.

Clinical Risk Factors (Comorbidities) Were Underreported

**Hospital Comments:** Several hospitals linked data from this project with
their own medical record systems, so that they could review individual
medical records. Some of these facilities acknowledged that they had failed
to code some clinical risk factors, because these diagnoses either did not affect reimbursement or seemed unimportant.

**Response:** Many hospitals have improved their coding practices since the
first report of the California Hospital Outcomes Project was published in
1993. By law, hospitals must report to OSHPD all diagnoses that "affect the
treatment received and/or the length of stay."\(^1\) Specifically, reportable
diagnoses include "conditions that affect patient care in terms of requiring:
clinical evaluation... therapeutic treatment... diagnostic procedures...
extended length of hospital stay... increased nursing care and/or monitoring."\(^2\)
According to these guidelines, conditions that require inpatient evaluation or
treatment (e.g., laboratory tests, medications) should always be reported.
Hypertension, shock, diabetes, and congestive heart failure are clear
examples of such conditions. Hospital coders should consult with their
medical staffs to confirm that the risk factors in these models indeed affect
the care of their patients.

The Results Are Uninformative or Unreliable for Low-Volume Hospitals

**Hospital Comments:** At least one hospital with relatively few cases
commented that the data have little value. A low-volume hospital is
extremely unlikely to be classified as "significantly better than expected," no
matter how outstanding its quality of care, because the role of chance is too
great.

**Response:** It is true that some low-volume hospitals may provide outstanding
care, but this hypothesis cannot be tested. No statistical method would
permit characterization of low-volume hospitals as "significantly better than
expected," unless an inordinately high risk of misclassifying larger hospitals is
accepted. Of course, low-volume hospitals are also unlikely to be classified
as "significantly worse than expected." This problem has nothing to do with
the validity of the study; it is inherent to statistical analysis.

In response to similar comments from hospitals in previous years, OSHPD
included a new symbol (лежит на бумаге) starting with the previous report to indicate those
hospitals that had no deaths, but treated too few heart attack cases to be
classified as significantly better than expected. Low volume hospitals were

Division 7, Chapter 10, §97212(e)(11)
not excluded from this report because Californians are interested in the outcomes of care at all hospitals in the state, not just high volume hospitals. Only by examining the performance of all hospitals against statewide norms can current problems and opportunities be understood.
Section 2

Hospital Letters

The law that created the California Hospital Outcomes project specified that hospitals and their medical staff be given 60 days to review a draft of this report, along with the patient data on which it is based. Hospitals and their chiefs of staff were encouraged, but not required, to submit written comments. These comments have been published as part of this report, so that readers can better appreciate this report’s strengths and limitations. Enclosed are all letters received in response to this report.
Date: July 13, 2000

To: David Werdegar, MD, MPH
Director
Office of Statewide Health Planning and Development
1600 9th Street, Room 433
Sacramento, Ca. 95814

From: Toni Brayer, MD
Chief of Staff
California Pacific Medical Center

William Armstrong, MD
Chief of Cardiology
California Pacific Medical Center
P.O. Box 7999
San Francisco, California 94120

Subject: OSHPD Report on Acute Myocardial Infarction

We, at California Pacific Medical Center, appreciate the opportunity to respond to OSHPD’s 1994-1996 outcome study (4th report) for the care of acute myocardial infarction (AMI) in California hospitals. The preliminary report rates California Pacific Medical Center – Pacific Campus significantly better than expected in both Model A and Model B. Our care of the acute myocardial infarction patients is based on best practice guidelines and aggressive management of AMI patients with reperfusion therapies.

The OSHPD data includes the California Pacific Medical Center – California Campus which has been closed to acute myocardial infarction patients since 1995. The California Campus at CPMC has had no eligible myocardial infarction patients since 1995. In addition, Davies Medical Center in San Francisco is now the California Pacific Medical Center – Davies Campus. Please note these changes in the final report.

Toni Brayer, MD
William Armstrong, MD
August 2, 2000

David Werdegar, MD, MPH,
Director
State of California – Health and Human Services Agency
Office of Statewide Health Planning and Development
1600 9th Street, Room 433
Sacramento, California 95814

Dear Dr. Werdegar:

This is in response to the OSHPD letter of May 23, 2000 on outcome studies for care of acute myocardial infarction (AMI) in California hospitals.

Chapman Medical Center in Orange, California is part of an integrated delivery system and transfers patients to other hospitals within the Tenet system when patient acuity and the level of care required are outside the scope of care provided at Chapman.

The OSHPD report includes a total of ten patients in 1995 and 1996 that expired with an AMI diagnosis. Two of these ten patients were transferred to another facility. Therefore, there were only 8 patients (4 in 1995 and 4 in 1996) that expired at Chapman with an AMI diagnosis.

Of the 4 that expired in 1995, patient #1 (age 83) was a DNR; patient #2 (age 66) had several high comorbidities; patient #3 (age 83) arrested at the field; and patient #4 (age 77), was treated with thrombolytics, stabilized and then possibly re-infarcted.

Of the 4 that expired in 1996, three patients (ages 63, 65, and 91) all had high comorbidities. Two of these three patients were DNR. Patient #4 (age 94) died within three hours of admission.

We appreciate this opportunity to respond to the California Hospital Outcomes Report.

Sincerely yours,

[Signature]

Maxine T. Cooper
Chief Executive Officer
June 23, 2000

Roxanne Andrews, Ph.D., Deputy Director, Health Policy and Planning
Office of Statewide Health Planning and Development
818 K. Street, Room 200
Sacramento, CA 95814

Dear Dr. Andrews:

This letter is written in response to the Report on Heart Attack Outcomes in California 1994-1996 study. A review of the data provided by an ad hoc committee composed of Emergency Room Physicians, Cardiologists, Performance Improvement, and Administration addressed the following issues related to the results which show our outcomes to be significantly worse than expected in both Model A and B.

1. **Risk Adjustment** – The results of the study show that our risk adjustment falls between 18% and 22% which is higher than the state mean of 12%. A review of the records by cardiologists show that the data reflects: 1) mortalities of patients greater than >75 years of age, 2) BP and heart rate not documented at presentation, 3) shock at presentation, 4) cardiac arrest within the previous 24 hours and 5) do not resuscitate orders on or the day of admission. Your 1996 AMI Validation Study reflects this missing coding could be responsible for up to a 10% difference between hospitals with significantly higher than expected mortalities.

2. **Corrected Expected Probability** – Stated in your guide it is impossible to correct values for patients who receive care in another hospital. This is a reflection of our role in the community. We are a base station receiving calls from a wide area but do not have a cardiac catheterization lab. A recent study of Acute MI’s in our Internal Medicine Department showed that 95% of those transferred to San Antonio or Pomona Valley survived. This resulted in a decreased denominator of those actually discharged from Chino Valley Medical Center with a diagnosis of AMI.

3. **Timeliness** – The difficulty with any study is reflecting current practices. The difference in Acute MI care between 1994 and the year 2000 is not indicative of the advances in therapy that Chino Valley Medical Center has undertaken in partnership with our cardiologists and medical staff members. Reports on the HCA CHOIS system reveal that we have a current facility risk adjusted mortality rate of 12.5% which is what your study shows to be the mean.

Thank you for this opportunity to include our reply in your final draft before publication.

Stephen Dixon
Chief Executive Officer
July 14, 2000

Roxanne Andrews, Ph.D., Deputy Director, Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento CA 95814

Dear Ms. Andrews,

Thank you for the opportunity to review and comment on the OSHPD data on heart attack outcomes.

This report indicates that our adjusted heart attack mortality rate was higher than expected. In reviewing a small number of the medical records, codes were present for patients as having congestive heart failure, hypertension, prior CABG, renal failure, shock, and diabetes mellitus. Many of these risk factors were not present in the OSHPD diskette data that was submitted to us. This adversely affects our risk adjusted mortality rate.

The Latino population for 1994 it was 13.2% and only for 0.7% in 1995 and 0.61% in 1996. An evaluation of the National Registry for Myocardial Infarction indicates a Latino population of 10.3% in 1997, 9.3% in 1998, and 12.9% in 1999. In looking at the Latino population percentage it does not appear to be accurate for the years 1995 and 1996.

There was no system to determine which patient was a DNR. In reviewing 21 medical records, it was discovered that 9 were DNRs. This data may alter the report's outcome for hospitals that treat a high percentage of DNR patients.

The assessment of quality of care can not be measured adequately by using coded data intended for billing purposes. The 30 day mortality rate is an important tool to guide our quality processes, but it does not reflect current treatment of myocardial infarction.

Dameron Hospital is participating in the National Registry for Myocardial Infarction funded by Genetech and the Cooperative Cardiovascular Project with California Medical Review, Inc. These studies have allowed us to use more current data to improve the quality of care for the myocardial infarction patient.

Our goal is to continue to deliver the highest standard of care possible. We thank you for the opportunity to review this data and utilize it to improve care.

Sincerely,

Christopher Arismendi, MD
Administrator

Page 14
August 10, 2000

Roxanne Andrews, Ph.D.
Deputy Director
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, California  95814

Re: California Hospital Outcomes Project - Acute Myocardial Infarction

Dear Dr. Andrews:

On behalf of Daniel Freeman Marina Hospital, I appreciate the opportunity to review the data from the California Hospital Outcomes Project on Acute Myocardial Infarction. Our organization is committed to cooperative and collaborative efforts in improving the quality of patient care.

We have noted the small sample size for our Marina facility which could limit the analysis of the data into significant information. We also recognize that the usefulness of any data is dependent upon the timeliness of data collection, evaluation, and reporting. While the variables studied are relevant, the findings are outdated. Practice patterns have changed since 1997, and, therefore, it is difficult to utilize this information in any comparative manner that is meaningful.

Thank you for the opportunity to comment on these findings. We look forward to any efforts that would be helpful in producing more timely reports.

Sincerely,

[Signature]

Joseph W. Dunn, Ph.D.
President and Chief Executive Officer

cc: Suzanne Cannata
August 10, 2000

Roxanne Andrews, Ph.D.
Deputy Director
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, California 95814

Re: California Hospital Outcomes Project - Acute Myocardial Infarction

Dear Dr. Andrews:

On behalf of Daniel Freeman Memorial Hospital, I appreciate the opportunity to review the data from the California Hospital Outcomes Project on Acute Myocardial Infarction. Our organization is committed to collaborative efforts in improving the quality of patient care.

The usefulness of any data is dependent upon the timeliness of data collection, evaluation, and reporting. While the variables studied are relevant, the findings are outdated. Practice patterns have changed since 1997. In addition, we have made significant changes in our cardiology physician leadership and look forward to continued improvements in cardiac patient outcomes.

Thank you for the opportunity to comment on these findings. We look forward to any efforts that would be helpful in producing more timely reports.

Sincerely,

[Signature]

Joseph W. Dunn, Ph.D.
President and Chief Executive Officer

cc: Suzanne Cannata
June 27, 2000

David Werdegar, MD, MPH
Director, Office of Statewide Health Planning and Development
1600 9th Street, Room 433
Sacramento, CA 95814

SUBJECT: CALIFORNIA HOSPITAL OUTCOMES REPORT

Dear Dr. Werdegar,

This is to advise you that due to the closure of Del Puerto Hospital on April 30, 1998 we will be unable to respond to the above referenced report.

If you have any questions, please contact me at (209) 892-8781.

Sincerely,

[Signature]

Dee Carr, Secretary
Del Puerto Health Care District

cc: Roxanne Andrews, Ph.D.
July 19, 2000

Roxanne Andrews, Ph.D.
Deputy Director
Office of Statewide Health Planning and Development
Health Policy and Planning Division
818 K. Street, Room 200
Sacramento, CA 95814

Dear Dr. Andrews:

Thank you for providing the opportunity to comment on the California Hospital Outcomes Project, Heart Attack Outcomes 1994-1996.

We acknowledge the Office's significant efforts in improving the presentation of the data, however, we are not confident that the risks associated with the principal diagnosis of AMI were captured accurately. We do not believe that the data is an accurate representation of outcomes relevant to our current protocols. Utilizing data that is 4-6 years old is not valid in predicting current outcomes. Many improvements in therapies, processes and protocols including the widespread use of thrombolytics have enhanced outcomes.

Thank you once again for the opportunity to preview the study results.

Sincerely,

Don H. Miller
Executive Vice President and Chief Officer of Operations
July 17, 2000

Roxanne Andrews, Ph.D.,
Deputy Director
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K. Street, Room 200
Sacramento, CA 95814

RE: ENCINO-TARZANA REGIONAL MEDICAL CENTER
DETAILED STATISTICAL RESULTS
FOR ACUTE MYOCARDIAL INFARCTION MORTALITY
1994-1996

Dear Ms. Andrews:

Thank you for the opportunity to allow us to review the Report on Health Attack Outcomes in California for the year 1994-1996. As you may know, Encino-Tarzana Regional Medical Center's data, when comparing observed to expected mortality, was given the designation of "not significantly different than expected" for both campuses.

TARZANA CAMPUS:

During the years 1994-1996 there was a total of 401 cases of Acute Myocardial Infarction with an observed death rate of 11.7 which is below the expected of 14.1 with a p-value 0.082. The observed death rate of 11.7 is also below the upper control limit of 13.5.

When looking at the individual years, it should be noted that the observed death rate has decreased significantly each year where in 1996 the observed death rate was 5.5 with the expected of 4.7.

ENCINO CAMPUS:

During the years 1994-1996 there was a total of 81 cases of Acute Myocardial Infarction with an observed death rate of 21.0 which is above the expected of 18.0 with a p-value 0.272. The reasoning for the high observed death rate is related to the low volume of cases.

We appreciate the opportunity to review this data prior to publication. If you have any questions, please do not hesitate to call us.

Sincerely,

Dale Swowitz
Chief Executive Officer
Fountain Valley Regional Hospital and Medical Center
Tenet Health System

17000 Bould St.
P.O. Box 8010
Fountain Valley, CA 92708
Tel: 714-496-7700

July 25, 2000

David Werdegar, MD, MPH
Office of the Director
Office of Statewide Health Planning and Development
1800 9th Street, Room 433
Sacramento, CA 95814

Dear Dr. Werdegar,

We appreciate the opportunity to respond to the "Report on Heart Attack Outcomes in California". Fountain Valley Regional Hospital and Medical Center's mission is to provide our community with superior care and services. We have a comprehensive Cardiology program that provides high quality care to our cardiac patients. Optimal patient care outcomes are assured through continual and concurrent monitoring.

As you are aware, there have been many advances in both invasive and non-invasive treatment modalities for Acute Myocardial Infarction (AMI) patients since the OSHPD data (1994 - 1996) presented in this report. Our facility strives to be on the cutting edge of this technology offering our patients the most current treatment options available. Due to these rapid advances, the period covered by this OSHPD report makes the data clinically irrelevant for our use in entering systems and processes within our program. We monitor our AMI patient outcomes through the National Registry of Myocardial Infarction (NRMI) on an ongoing basis. This data has demonstrated ongoing improvements in our AMI mortality rates with an overall rate of 8% observed mortality (4/1998 – 3/2000). This represents a significant improvement from the 14% observed mortality rate in the OSHPD report.

We do recognize the value of the OSHPD data as it provides us with beneficial comparative data. The task of risk-adjusting data in such large populations is not a task that individual organizations could undertake. The models used by OSHPD, however, appear not to take into consideration critical data elements that dramatically affect the risk for mortality. Additionally, the p-score values for Model B indicate a low level of significance. As is evident in the data presented, variations in the risk adjustment model create significant variations in the data outcomes and therefore make analysis challenging.

We welcome any questions from your office or the public related to our Cardiac Program or this report. An administrative representative can be reached at (714) 966-8011.

Sincerely,

Tim Smith
Chief Executive Officer

Suresh Mylavaram, MD
Medical Director Cardiology
July 14, 2000

Roxanne Andrews, Ph.D.,
Deputy Director, Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K. St., Room 200
Sacramento, CA 95814

SUBJECT: Report on Heart Attack Outcomes in California, 1994-96

Dear Dr. Andrews:

Thank you for the opportunity to review the draft of the Report on Heart Attack Outcomes in California, 1994-96 prior to release to the media and the general public. We would like to see the following comments published with this report.

One of the stated goals of the Outcomes Project is to provide the public with information that objectively compares hospitals according to the quality of their care. We are concerned that data used for this study, which will not be made public until late in 2000, encompasses hospital discharge data from 1994-96. This data is too old to reflect the current state of MI care in California hospitals. Although we appreciate the monumental challenges of completing such a comprehensive study using more current data, we feel it is imperative that this be clearly stated as a limitation of the study. Care of the patient with an acute myocardial infarction is continually improving as new medications and techniques are made available to preserve myocardium. Our facility and hospitals throughout the state and the nation are utilizing performance improvement techniques to improve all aspects of patient care on an on-going basis.

This study focuses on mortality as the primary indicator of quality outcomes, yet does not factor in the patient’s own health maintenance and willingness to comply with the treatment regime and make lifestyle modifications - these are key to long-term survival! Patients who are noncompliant with the recommended treatment plan post-discharge may experience a higher 30-day mortality rate.

It is stated in the study definition of outcome that serial hospitalizations are linked to define “an episode of care” and that outcomes (mortality) are attributed to the hospital that admitted the patient. We have concerns that the observed mortality rate for a hospital can be adversely affected by interventional procedures (such as angioplasty, stent placement, or coronary artery bypass grafting) which each carry their own set of risk associated with the invasive procedure itself! Fremont Medical Center in Yuba City must refer all patients requiring interventional therapy to Sacramento area hospitals. According to the design of this study, deaths occurring in those facilities as a complication of the interventional procedure adversely affect the mortality rate for Fremont Medical Center! We would like to see “like hospitals” compared as a subset of the entire population of hospitals included in the study. In this way, hospitals
without interventional cardiology could be compared to other facilities that lack interventional capability and those facilities performing angioplasty, bypass surgery and other invasive procedures could be compared to other facilities with the same capability. Also, it is not completely clear whether deaths due to unrelated causes, occurring within 30 days of an initial hospitalization for an acute MI, would factor into the overall mortality rate for AMI’s. Certainly, cases where death is attributed to a pre-existing condition, such as cancer or chronic obstructive pulmonary disease, should be excluded from this study.

Care of MI patients has been one of the many performance improvement initiatives in place at Fremont-Rideout Health Group. In 1993, our facilities joined the National Registry for Myocardial Infarction (NRMI). This allows us to compare hospital specific data re: care of MI patients, including mortality rates, to the cumulative database for both California and the Nation. A multi-disciplinary group, consisting of physicians, ER and ICU nursing staff, pharmacy and cardiology staff continue to meet on an on-going basis to implement strategies to further improve care to our MI patients. While the results for Fremont Medical Center and Rideout Memorial Hospital reflect outcomes that are “not significantly different than expected”, we are confident that our current mortality rate is at or below the statewide average. In fact this is validated by the most recent comparative data from NRMI 3 (March 2000), which shows that our mortality rate for acute MI patients is lower than that of “like hospitals” and the state and national observed mortality rates.

The data from the OSHPD California Outcomes Project is only one of many reports that we utilize to assist us in our performance improvement efforts. Despite the concerns listed above, we do take this data seriously and have shared the information with medical staff and nursing leadership, the physician who chairs the Acute MI performance improvement team and the appropriate medical staff departments for the purpose of continuing to improve outcomes for our patients.

Thank you again for the opportunity to review the draft of the 1994-96 Report on Heart Attack Outcomes in California and to respond with comments to be printed in the final published report.

Sincerely,

[Signature]

Thomas P. Hayes
Chief Executive Officer, Fremont-Rideout Health Group
Fremont Medical Center / Rideout Memorial Hospital
June 15, 2000

Roxanne Andrews, Ph.D.
Deputy Director
Health Policy and Planning Division
OSHPD
818 "K" Street, Room 200
Sacramento, California 95814

Re: California Hospital Outcomes Report

Dear Mr. Andrews:

This is in response to your letter dated May 23, 2000. We appreciate the opportunity to be able to respond to the data reflected for Glendale Memorial Hospital and Health Center.

We are pleased with our results and will utilize the detailed statistical results to further educate our physicians and hospital staff.

Finally, we will continue to support the efforts and objectives of the OSHPD outcomes initiative.

Sincerely,

Patrick A. Petre

PP/dc
August 9, 2000

Roxanne Andrews, Ph. D., Deputy Director,
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, CA 95814


Dear Dr. Andrews,

Hemet Valley Medical Center welcomes the opportunity to participate in this study. We believe that projects such as this contribute to improving the quality of care, and ultimately, the health status of our communities.

We are pleased to note that our risk-adjusted mortality rate is below the statewide rate and that we also scored significantly better than expected in both Models A and B. We contribute these positive outcomes to the clinical expertise of our physicians and other healthcare professionals, as well as, our comprehensive performance improvement program related to cardiovascular diseases, such as, acute myocardial infarction. Through multidisciplinary efforts we have significantly reduced our thrombolytic administration times, which has also contributed to improved outcomes. The prompt diagnosis and treatment of acute myocardial infarction remains a performance improvement priority at our facility due to our high volume of patients with this diagnosis.

We thank you for the opportunity to present our comments. We appreciate our community's support and always welcome comments and requests for further information.

Sincerely,

Jack A. Burrows
Administrator

cc: Chief Executive Officer
    Chief of Staff
August 1, 2000

Roxanne Andrews, PhD
Deputy Director, Health Policy and Planning Division
Office of Statewide Health Planning & Development
818 K Street, Room 200
Sacramento, CA 95814

Dear Dr. Andrews:

Enclosed are comments from Henry Mayo Newhall Memorial Hospital regarding the California Hospitals Outcomes Project.

Thank you for the opportunity to submit these comments.

Sincerely,

James T. Yoshioka
President/Chief Executive Officer

e:000724.8
Henry Mayo Newhall Memorial Hospital (HMNMH) is a 217-bed non-profit community hospital located in the Santa Clarita Valley. According to the information from the Office of Statewide Health Planning and Development (OSHPD), HMNMH’s observed mortality rate for acute myocardial infarctions for admissions between 1994 through 1996 was above our expected mortality rate for both models utilized. HMNMH’s observed mortality rate was 12.5% under Model A versus an expected rate of 10.8%, and the observed mortality rate was 12.7% under Model B versus an expected rate of 11.2%. However, under both models HMNMH scored in the category of “not significantly different than expected”, and HMNMH’s rate matched the statewide rate.

HMNMH remains committed to providing excellent care for this patient population, and in addition to review of the OSHPD data, which is several years old, participates in Genentech Inc.’s National Registry of Myocardial Infarction (NRMI) project in an effort to maintain a current review of outcomes for myocardial infarction patients at HMNMH.

HMNMH Medical Staff Committees are responsible for monitoring the care provided to patients, and the following ongoing review processes and care management protocols provide the Hospital and Medical Staff with feedback mechanisms to continually improve our care and services:

- The Critical Care Committee reviews NRMI data on a quarterly basis and does intensive reviews of individual charts that either fall below our expectations for treatment with thrombolytic therapy or demonstrate an excellent response that fully meets our expectations. NRMI data also allows us to measure our performance with that of like-hospitals that also participate in the program.
- The Critical Care Committee has previously reviewed the outcomes data provided by OSHPD and will continue to do so.
- HMNMH continues to utilize the APACHE III System, a comprehensive decision support computer system for use in the Intensive/Coronary Care Unit (ICCU) to access concurrent information about the quality of care provided to critical care patients, including patients with acute myocardial infarction. The system provides concurrent and daily information about the severity of illness of patients, and predicts responses to therapy in terms of standard outcome measures like mortality and length of stay, compares the actual performance of the ICCU to predicted performance, and monitors the resource consumption of ICCU patients.
- HMNMH currently utilizes an ICCU/DOU Admitting Orders for Chest Pain and MI form to expedite care for these patients and has developed a Clinical Path for Chest Pain.

Our goal as a community hospital is to continue to deliver the highest standard of care possible. We appreciate our community’s support and always welcome comments and requests for further information.
August 3, 2000

Roxanne Andrews, Ph.D.
Deputy Director
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, California 95814

Dear Dr. Andrews:

The Kaiser Permanente Medical Care Program would like to thank the Office of Statewide Health Planning and Development (OSHPD) for the opportunity to comment on the latest release of the Report on Heart Attack Outcomes in California, 1994-1996. The report allows us to evaluate our performance in relationship to other hospitals across the state.

Kaiser Foundation Hospitals across California continually strive to improve the quality of care for its patients. For example, Kaiser Foundation Hospitals invest in developing and implementing Clinical Practice Guidelines and Integrated Care Management for MI patients. The organization also maintains extensive quality improvement and peer review programs, as well as regional Cardiac Services Committees. Finally, monitoring tools such as the National Registry of Myocardial Infarction (NRMI) allows regular comparisons of process and outcomes measures for Kaiser Foundation Hospitals with "like hospitals" across the nation.

This commitment to quality is reflected in the results of the report. The results of Model A demonstrate that nine of the 26 Kaiser Foundation Hospitals in California experienced mortality rates that were significantly better than expected. Further, no hospital experienced mortality rates that were significantly worse than expected. Combining the mortality outcomes for all Kaiser Foundation Hospitals in California indicates that 30-day mortality rates for patients at Kaiser Foundation Hospitals are significantly better than expected from 1994 to 1996. Finally, we are especially pleased with the Kaiser Foundation Hospitals in San Diego, Walnut Creek, and San Francisco. The results for these hospitals were significantly better than expected in both the 1997 and 2000 versions of the Report on Heart Attack Outcomes in California.
The Kaiser Permanente Medical Care Program appreciates the opportunity to respond to the preliminary draft of the Report on Heart Attack Outcomes in California. The organization continues to make quality its first priority and looks forward to future reports.

Sincerely,

[Signature]

Philip Madvig, MD
Associate Executive Director for Quality
The Permanente Medical Group

[Signature]

Patricia Siegel
Senior Vice President, Quality, Member and Regulatory Services
California Division

[Signature]

Les Zendle, MD
Associate Medical Director, Clinical Services
Southern California Permanente Medical Group
July 13, 2000

Roxanne Andrews, Ph.D.
Deputy Director
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, CA 95814

Subject: California Hospital Outcomes Reports

Dear Dr. Andrews:

While we have no quarrel with the design, methodology, or accuracy of the data, I want to acknowledge our excellent outcomes in mortality for acute myocardial infarction. In Alameda county, Kaiser Oakland was one of two hospitals receiving two stars (the highest score), for far better than expected survival from myocardial infarction. We believe the data to be accurate and reflective of the unique way we provide care.

We attribute our success to the strong focus on quality by an integrated Kaiser Permanente Healthcare system. We have organized, integrated care of MI patients from the ED into the ICU. Beyond our ICU, this care is supported by superior cardiac and cardiac surgery services at Kaiser San Francisco, which also received two stars for MI survival.

Statewide over 400 hospitals were evaluated and compared. Only 14 hospitals received the highest score. Five of the 14 were Kaiser Permanente facilities (Oakland, San Francisco, Sacramento, San Diego, and San Rafael). This further supports the strength of the quality provided by our integrated health care system.

We will be expanding our cardiac services by bringing cardiac surgery services to the Oakland Community. We strongly believe that this will further enhance the quality of care provided here. As a result, we look forward to your evaluation in the future and anticipate the impact of cardiac surgery services on acute MI survival.

Sincerely,

Nance Beth Jones
Director of Hospital Operations

NB100
July 18, 2000

Roxanne Andrews, Ph.D., Deputy Director
Health Policy and Planning Division
818 K Street, Room 200
Sacramento, Ca. 95814

Dear Ms. Andrews,

KDDH has observed a decline in myocardial infarction mortality rate from 1994 through 1996. The absolute mortality rate has decreased from 16.7 to 14.5% in this time interval. There has also been a reduction in the difference of our observed vs. expected mortality rates. We believe this trend has continued. Our 1999 mortality rate, for myocardial infarction patients admitted via the KDDH emergency room, is approximately 12%.

However, the mortality rate at KDDH continues to exceed both the statewide averages for absolute and risk adjusted mortality rates. To address this opportunity for improvement, we have established procedures to provide primary angioplasty as an alternative to traditional thrombolytic therapy when possible. In addition, adherence to drug therapy guidelines and timeliness of therapy for myocardial infarction patients has always been monitored at our institution.

In spite of outstanding compliance with drug therapy guidelines for the use of aspirin, thrombolytic therapy, beta-blocker and ACE therapy, our observed myocardial infarction rates remain no better than average and higher than OSHPUD risk adjusted models would predict. We believe that there are problems with coding accuracy that can partially explain these differences. At our institution, 30% error rates in ICD-9 coding of infarct location have been noted.

We suspect that similar problems exist statewide and would expect this to have a measurable effect on accurate risk adjustment. Errors in failing to reliably identify myocardial infarction, especially in patients who subsequently die, may also be a statewide problem that is not accounted for in these measurements. While steps have been taken to correct this problem at KDDH, we suspect that many institutions have similar problems that may be affecting the reasonableness of risk adjustment as well as the comparison of individual institutions' mortality rates.

Sincerely,

Stephen Smith, MD
Chief of Staff
Kaweah Delta Health Care District

Thomas M. Johnson
Chief Executive Officer
Kaweah Delta Health Care District
July 17, 2000

Roxanne Andrews, Ph.D.
Deputy Director, Health Planning Division
Office of Statewide Health Planning and Development
818 "K" Street, Room 200
Sacramento, CA 95814

RE: AMI Outcome Studies

Dear Dr. Andrews:

We received and reviewed the draft report of Outcome Studies for Care of Acute Myocardial Infarction (AMI) in California Hospitals.

We believe the data is discriminatory to small rural hospitals since it does not include patients who were stabilized in our emergency department and then transferred to a tertiary care center for interventions (angioplasty, stent or coronary artery bypass surgery) that are not available at Lompoc Healthcare District (LHD). A significant number of patients arrive at LHD and are admitted under the Medicare required "observation" status. This patient population is also not included in your statistical analysis, thereby excluding 32% of our total AMI patients in 1994, 47% in 1995, and 50% in 1996.

The second concern we have is the inaccuracy with the risk adjusting. Our cardiologist, Barry Coughlin, M.D., F.A.C.C. reviewed every case in your study. His review identified that 3 of the 6 deaths in 1994 had "Do Not Resuscitate" (DNR) orders documented in the chart, 1 in 1995 with a DNR order, and 5 of the 6 deaths in 1996 with DNR orders. The DNR decisions were precipitated by co-morbid conditions. If these cases were excluded from our data the "Number of Observed Deaths" in 1994 and 1995 would equal the "Number of Expected Deaths" according to your statistical information. The 1996 data, interestingly enough, would show a significantly better than expected outcome at LHD since we would be expected to have 3.7 deaths but actual deaths, excluding the DNR cases, would be 1.

During our analysis we scrutinized the coding policies and procedures at LHD as a possible contributing factor for the outcome data. I am pleased to inform you the review confirmed our belief that our staff performs extremely well and accurately. In 1994 thru 1996 OSHPD did not have a field to code "DNR" and, therefore, the data was erroneously included due to the shortcomings of the OSHPD system.

We are requesting that this data not be published until the significant limitations in data collection are corrected. Publishing data with such significant limitations is irresponsible and will undermine the state mandate of reporting accurate patient outcomes.

Sincerely,

[Signatures]

Tim Raggio
Chief Executive Officer

Barry Coughlin, M.D., F.A.C.C.
Chief of Cardiology

Wallace Marsh, M.D.
Chief of Medical Staff

cc: Medicine Subcommittee
July 22, 2000

Roxanne Andrews, Ph.D.
Deputy Director, Health Planning Division
Office of Statewide Health Planning and Development
818 "K" Street, Room 200
Sacramento, CA  95814

RE:  AMI Outcome Studies

Dear Dr. Andrews:

Thank you for the draft report of the Outcome Studies for Care of Acute Myocardial Infarction (AMI) in California Hospitals for the time period of 1994-1996. This data is helpful for internal use and can be beneficial to an organization once it is analyzed. We believe the data as it is published, is misleading. It does not include patients who were stabilized in the emergency department and then transferred to a tertiary care center for interventional procedures or coronary bypass surgery during that time period. It also does not account for patients that arrived at Marian who were admitted under the Medicare required “observation” status.

An additional concern is the inaccuracy of the risk adjustments and internal coding. Patients with Do Not Resuscitate orders were not accurately accounted for in the data. If these cases were excluded from our data, the number of observed deaths in the draft report would be statistically different.

We believe the public value of this data is significantly limited due to the inclusion and exclusion of certain patient information. We appreciate the opportunity to respond to your report, but remain disappointed with the misleading statistical publication of the data.

If I can provide you with any further information, please contact me directly.

Sincerely,

[Signature]

Charles J. Cova,
Executive VP/COO
August 1, 2000

Roxanne Andrews, Ph.D., Deputy Director, Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, CA 95814

Dear Dr. Andrews:

NorthBay Healthcare Group Hospitals (NorthBay Medical Center and VacaValley Hospital) appreciate the opportunity to review and respond to the California Hospital Outcomes Project, "Report on Heart Attack Outcomes in California 1994-1998". Our organization is committed to continuous quality improvement and we consistently monitor internal and external data.

To assist in improving the care provided to acute myocardial infarction patients our organization participates in the National Registry of Myocardial Infarctions 3. We have participated in the Registry since 1990. The Registry provides quarterly hospital specific data that are process and outcome of care based. This clinical practice and outcomes data enable us to improve our processes, treatment protocols, and outcomes. Our mortality data have continued to improve due to clinical practice improvements such as increased utilization of ASA, Beta-Blockers, and Ace Inhibitors. Our organization is very proud of our "door to drug" time that is consistently better than the reported benchmark average.

We would find the Outcome Project to be more beneficial if the data and report were provided in a timelier manner. Data that are three plus years old have limited usefulness in guiding clinical quality improvement initiatives. We also continue to suggest exclusion of cases with a "Do Not Resuscitate" status.

Thank you for the opportunity to respond to the California Outcomes Project Report.

Sincerely,

Deborah Sugiyama, President
NorthBay Healthcare

Richard Bell, MD
Chief of Staff
NorthBay Healthcare, Hospital Division
June 20, 2000

Roxanne Andrews, PhD
Deputy Director
Health Policy & Planning Division
Office of Statewide Planning & Development
818 K Street, Room 200
Sacramento, CA 95814

Dear Ms. Andrews:

Parkview Community Hospital Medical Center has reviewed the OSHPD Acute Myocardial Infarction Mortality Report for the years 1994, 1995 and 1996. Parkview falls within the acceptable range compared to the statewide observed rate.

Parkview has a very aggressive performance improvement program. Parkview's Quality Council prioritized an Acute MI Team as a result of the previous published OSHPD Acute MI Mortality data analysis and the CMRI Acute MI quality improvement initiative regarding the use of ace inhibitors and betablockers.

Three processes were selected for improvement: patient assessment, clinical management protocol and patient/family education. The hypothesis for this initiative suggested that better performance of the quality indicators as established by nationally recognized guidelines is associated with lower mortality rates of Acute MI patients. As a result of the Team effort, an evidence-based clinical pathway and a thrombolytic protocol for the Emergency Department were initiated. A discharge order sheet pointing out the recommended medications upon discharge was also developed, along with a patient education protocol.

Parkview utilizes the HCIA national data base for reviewing the hospital's data compared to the national norm and local market. Parkview Community Hospital Medical Center is very proud of the results of their initiative. The HCIA data substantiates that Parkview's mortality rate is lower than the national norm and our local market for the year 1998.

Cont...
Our facility has learned that it is very important to continue reviewing the initiative to update the clinical guidelines and review the outcome data on an annual basis.

We appreciate the opportunity to comment. We recognize the importance of a comparative database. All healthcare organizations are challenged to continuously review their processes based on outcome data. The mission statement for our organization is carried out through this process: "to provide comprehensive, high-quality, cost-effective health care services which are responsive to the needs of the community".

Norm Martin, CEO

Dennis Hilliard, M.D., Chief of Staff
July 10, 2000

David Werdegar, MD, MPH
Director
Office of Statewide Health Planning and Development
1600 9th Street, Room 433
Sacramento, CA  95814

Dear Mr. Werdegar,

Subject: Presbyterian Intercommunity Hospital’s California Hospital Outcomes Report for Acute Myocardial Infarction (AMI).

Thank you for the opportunity to respond to the release of data on our hospital’s outcomes for Acute Myocardial Infarction. Presbyterian Intercommunity Hospital (PIH) is a 339-bed, not-for-profit regional hospital and health center that serves a wide community in Southeastern Los Angeles County and portions of the San Gabriel Valley and Orange County. We are a full-service medical center offering care in the specialty areas of cancer, cardiovascular care, complex spine and scoliosis treatment, maternal/child care, rehabilitation services, diabetes management, wound care, respiratory services, emergency and industrial medicine, behavioral health, as well as general medicine and surgery.

We at PIH are committed to analyzing our patterns and outcomes of care to provide the highest quality of care possible. One hundred percent of the unexpected death cases are screened by the Performance Improvement Department to ensure that they are not related to a quality of care issue. Cases with comorbidities, complications and other risk factors are also reviewed to ensure optimal medical management.

OSHPD’s AMI data for 1994-96 have been analyzed carefully by the hospital president, president of the medical staff, vice president of medical affairs, chief of the cardiology section, administrative director of cardiology, director quality management and director of medical records.
While PIH’s outcomes were not significantly worse than expected, beginning in 1996 the hospital began to participate in the NRMI (The National Registry of Myocardial Infarction) database to look for areas where improvements could be made. Our latest 12 months of data from April 1999 through March 2000 shows PIH’s AMI mortality rate to be 8.5% compared to 10.3% for 155 like hospitals across the nation.

On behalf of the medical staff, administration, and staff of Presbyterian Intercommunity Hospital, thank you again for the opportunity to present this response. As always, PIH remains dedicated to providing the utmost in quality patient care to the communities we serve.

Sincerely,

[Signature]

Daniel F. Adams
President and CEO
DATE: July 19, 2000

TO: Roxanne Andrews, Ph.D.
Deputy Director, Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, CA 95814

SUBJECT: Response to the California Hospital Outcomes Report

Thank you for the opportunity to review and respond to the Hospital Outcomes Report on Heart Attack Outcomes in California, 1994 - 1996. The report has been shared with key physicians and staff.

While this data shows that we are not significantly different than expected, it should be noted that our patient population has a high percentage of elderly that are high risk and approximately a third of our AMI patients are referrals from other healthcare facilities.

The 1996 data shows our mortality rate continues to decrease and is less than the state averages. As part of our ongoing quality management program we review all mortality cases and in addition Queen of the Valley Hospital has continued ongoing participation in the National Registry of Myocardial Infarction. This report provides trending information in the care and treatment of AMI patients that promotes quality improvement and survival. The calendar year 1999 data we received in the more recent March 2000 NRMI report, indicates our mortality rate for the Acute Myocardial Infarction patient has decreased and is better than the comparison hospital group.

The information in these reports reflects our continual improvement in caring for the patient experiencing an acute myocardial infarction. Our Medical Staff and Hospital Professionals are dedicated to ongoing efforts to provide optimal patient outcomes.

Sincerely,

Dennis Sisto
CEO, Queen of the Valley Hospital
August 9, 2000

TO: Roxanne Andrews, Ph.D.
    Deputy Director
    Health Policy and Planning Division
    Office of Statewide Health Planning and Development
    818 K Street, Room 200
    Sacramento, CA 95814

Subject: California Hospital Outcomes Reports
         Acute Myocardial Infarction Study

Dr. Andrews:

Thank you for the opportunity to review the records of patients admitted with diagnosis of acute myocardial infarction. A review of the six cases at Rancho was completed. Three patients can be included in the study. Three should be excluded because the diagnosis of myocardial infarction was ruled out during hospitalization.

Rancho's sample size (3) is so small that it is not statistically significant for analysis. Our facility is a tertiary referral center for rehabilitation and medical problems and has no emergency room. Therefore, the number of patients admitted with acute Myocardial Infarction will continue to be low.

Thank you for the opportunity to comment on this data.

Please contact Yaga Szlachcic, M.D., Chief of Cardiology, Department of Medicine (562-401-7611) or Maria Heckman, R.N., MHA (562-401-7900), Director Quality Resources if there are additional questions.

Thank you very much.

Sincerely,

Robert Waters, M.D., Chief Medical Officer

Consuelo Diaz, Chief Executive Officer

MH2:rew (9/2Andrews/8-9-00)
14 July 2000

Roxanne Andrews, Ph.D.
Deputy Director
Office of Statewide Health Planning and Development
Health Policy and Planning Division
818 K Street, Room 200
Sacramento, CA 95814

Dear Dr. Andrews:

We at Saddleback Memorial Medical Center would like to thank the Office of Statewide Health Planning and Development for giving us the opportunity to comment on the latest California Hospital Outcomes Project Report on Heart Attack Outcomes.

The data is valuable to us in that it provides external benchmarks on heart attack patients and risk stratification models for comparison. However, the age of the data is a major weakness. The data in this report reflects patient care rendered from 1994-1996. In the Report on Heart Attack Outcomes 1991-1993 (volume 4), OSHPD acknowledged this issue and stated that alternatives to accelerating the process of compiling and reporting the data were being examined. Once again, the data in the 2000 report is up to 6 years old. With rapidly changing technology and new pharmaceuticals for the care of heart attack patients, there is an inherent need for current data in order to evaluate the utility of these new treatment strategies and adjunct therapies.

Another weakness of the study is the lack of distinguishing those patients with DNR orders. Saddleback Memorial Medical Center is located across the street from Laguna Woods, the nation’s only city of adults over the age of 55, which boasts a population of 18,000 seniors and an average age of 77. The average age of heart attack patients at SMMC is 75 (NRMI 3, June 2000), which is significantly older than the state average of 67.7 years. We can hypothesize that because of our older population, our percentage of DNR patients would likely be higher than the state, and therefore, thirty day mortality would be higher. According to your previous report, a proposal to implement the collection of DNR information was made in December of 1997, with data collection to begin in 1999. We look forward to the inclusion of this important indicator in future reports.

Saddleback also feels that the reporting of thirty day mortality introduces many variables beyond the control of the hospital. Some out of hospital deaths may not relate to hospital quality of care but adherence to medical treatment and follow up post discharge.
Saddleback Memorial Medical Center is dedicated to providing patients with the best quality care. We continually review and compare our heart attack outcomes through process of care studies, such as The National Registry of Myocardial Infarction and the Cooperative Cardiovascular Project/CMRI. Despite SMMC's older and higher risk population, we have demonstrated a 23% reduction in risk adjusted mortality for heart attack patients during the study years 1994-1998 (using model A; model B demonstrates an 18% reduction). The state mortality decreased by only 4.6% during the same time period.

Our most recent National Registry of Myocardial Infarction Data showed that we deliver thrombolytic therapy to heart attack patients 27% faster than the state median time (NRMI 3, June 2000). And despite our high-risk population, we rank in the 97th percentile in the nation for treatment of eligible heart attack patients (NRMI 3, June 2000).

Saddleback recognizes the value of the California Hospital Outcomes Project's risk adjusted heart attack outcomes. However, we feel that efforts should be made in the future to link risk adjusted mortality outcome studies and process of care studies for a more complete and accurate assessment of quality patient care.

We look forward to future OSHPD reports and we appreciate the opportunity to respond.

Sincerely

Barry S. Arbuckle
Chief Executive Officer
July 14, 2000

Roxanne Andrews, Ph.D.
Deputy Director
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, California 95814

Dear Dr. Andrews:

On behalf of Saint Agnes Medical Center I would like to thank you for the opportunity to comment on the preliminary draft of the Report on Heart Attack Outcomes 1994-1996. We care for many patients who have suffered heart attacks, and we share your goal of improving the quality of hospital care for all California citizens.

We are certainly interested in doing all we can to examine our processes of care and determine those that result in the best outcomes. Since 1994, many improvement efforts have been undertaken at Saint Agnes Medical Center regarding cardiac care. We have revised the chest pain protocol in the Emergency Department and implemented the first Chest Pain Unit in the Central Valley to facilitate rapid MI rule out. We also have created a Cardiovascular Performance Improvement Committee and Action Team, which has worked diligently to improve our process of caring for heart attack patients. This Action Team has implemented several clinical pathway protocols for our cardiac patients. Faithful to its mission, Saint Agnes Medical Center is devoted to delivering compassionate care, high quality, exceptional service and organizational performance.

Since receiving the preliminary draft of your findings, we have replicated your model in an attempt to validate your findings. As a result of our analysis, we have substantial concerns regarding the accuracy of your report.

- A database for a study of this type should be created with that purpose in mind. Data collection must include variables not currently included in the State-mandated discharge record abstract, and medical record coding practices must be standardized across all hospitals in the State in order to create a database that has any potential to support a model for quality comparisons.

- The model does not include one of the largest single contributor to AMI death: “Do Not Resuscitate” orders and/or “Comfort Care Only” treatment modalities. These are life decisions that cannot be captured by an ICD 9 CM code number.

- The risk adjustment methodology is not sound and tested. As acknowledged by the State, the possibility exists that an adverse outcome was the result of a variable not currently in model A or B.
Three variables, one included in Model A and all three included in Model B, behave in an erratic manner. In the models, the above variables both reduce and increase the likelihood of death depending upon if a case presented with a prior admission. It is very abnormal that the same variable can reduce and increase the likelihood of death (variables Inferior Wall Infarction, Shock*Coma, and Uninsured).

Due to the above identified concerns with your study, please reconsider your plans to release this report to the public. Using coded data, which is intended for billing purposes, to assess quality of care is fraught with inaccuracies and problems. We recommend that future studies use data that are more appropriate for the evaluation of quality care.

Again, we applaud your efforts to improve the quality of care provided to the citizens of our great state. Even though we have concerns with the accuracy of your report, please be assured that we intend to continue to focus on the quality care our patients receive and to make improvements wherever possible.

Sincerely,

Sister Ruth Marie Nickerson, CSC
President & Chief Executive Officer
July 18, 2000

Roxanne Andrews, PhD, Deputy Director
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, Calif. 95814

Dear Dr. Andrews:

Thank you for providing the opportunity to comment on the California Hospital Outcomes Project, Heart Attack outcomes for 1994 – 1996.

Results of the OSHPD’s fourth report on Acute Myocardial Infarction Mortality covering patient admitted to St. John’s Regional Medical Center have been reviewed by the medical staff. Discussion with our Cardiologists has resulted in the following observations and comments.

1. Our published Observed Mortality rate for 1994-1996 is 15.6%, the Statewide death rate is 12.7. Model A severity adjustment actually adjusts our mortality rate upward. Model B places our Risk adjusted Death rate at 14.6 which is not statistically significant from the Statewide Death Rate. We do not feel that Model A adequately reflects the severity of our patients.

2. Neither Risk Adjustment Model takes into account the Resuscitation status of our patients. Extensive chart review of our AMI mortalities revealed that most of the deaths were expected and approximately 70% had patient/family requests for Do Not Resuscitate honored.

3. We have been monitoring our own AMI mortality rates for some years. According to APACHE III System data our Hospital mortality rates for AMI were as follows: 1997 (7.14%), 1998 (6.45%) and 1999 (8.67%). We believe this data to more accurately reflect the quality of care in our hospital. The mortality rates that are cited in your study include patients that expire outside of the hospital.

4. We feel that Mortality rates isolated do not adequately reflect the Hospitals Quality of Care. We have an aggressive Invasive Cardiology Team. The mortality rate for our patients requiring PTCA is <1%. We have been monitoring process measures for several years related to AMI. ASA usage within 24 hours of admission we are at 90%. Beta Blocker usage on discharge at 80%. All of these demonstrate superior performance at St John’s Regional Medical Center in the care of AMI patients.

Thank you for the opportunity to review the draft of the Outcomes Project and to respond with comments to be printed in the final published report.

Sincerely,

Eugene Fussell, MD
Regional Chief Medical Officer
July 24, 2000

Roxanne Andrews, Ph.D.
Deputy Director,
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K. Street, Room 200
Sacramento, CA 95814

Dear Ms. Andrews,

We are in receipt of your most recent outcome studies for the care of patients who suffered an acute myocardial infarction in California hospitals. Our continuous efforts have resulted in a slightly better than average rating in the recent past and will further show increased positive outcomes with our ongoing Performance Improvement Program.

St. Vincent Medical Center, in order to further improve the care we provide our patients, has formed a Multidisciplinary Care Management Team whose initiative is to focus on "state-of-the-art" treatment and care of patients admitted with an acute myocardial infarction.

One of the difficulties we have is that St. Vincent Medical Center does not have an Emergency Room. Most of our patients have either been seen in another facility’s E.R. or by private physician. This is often the cause for a delay in proper initial care of the infarcting patient.

You can be assured of our continuous efforts to implement the programs we have initiated in tracking accountability and documentation of identified problem areas. We feel confident we will improve our performance level for the benefit of our patient population.

Sincerely,

William D. Parente, President

/wp
August 8, 2000

Roxanne Andrews, Ph.D., Deputy Director  
Health Policy and Planning Division  
Office of Statewide Health Planning and Development  
818 K Street, Room 200  
Sacramento, CA 95814

Dear Dr. Andrews:

Please be advised that our official hospital name has been changed from  
Columbia San Clemente Hospital and Medical Center to San Clemente Hospital,  
Inc., and doing business as San Clemente Hospital & Medical Center as of June  
1, 1998.

We appreciate all the comparison data on heart attack outcomes. We are  
pleased to see that we are below the statewide average for overall risk adjusted  
mortality rates. The care of the acute MI patient continues to be a main focus  
with our process improvement teams.

We have no concerns with your data collection and thank you for the opportunity  
to participate in this study.

Sincerely,

Ronald McGee, MD  
Chief of Staff

Pat Wolfram  
Chief Executive Officer
August 7, 2000

Roxanne Andrews, Ph.D.
Deputy Director, Health Policy & Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, CA 95814

Dear Dr. Andrews:

We at San Leandro Hospital appreciate the opportunity to review the data provided by the OSHPD report and wish to respond. As the authors of the report have indicated, this outcomes data study is of limited value to the average consumer because their measured quality of medical care does not account for many of the factors which play a part in determining a patient's outcome. It does, however, provide an opportunity to compare past care with present care, which, as you know can change significantly in four or five years.

San Leandro Hospital is a small hospital (122 beds) that provides service to a largely aging community. We are now a part of the TRIAD company. As part of a national health care corporation, we participate in a variety of quality reviews, of which one is death from a heart attack (AMI mortality). We are compared to 1700 hospitals whose severity and risk factors are taken into account. We also perform extensive internal review of our patients with an AMI as well as report this information to the national hospital accrediting organization, JCAHO.

Our current performance Index for AMI mortality is .55 for the last twelve months, which is much lower than the .92 for the 1700 hospitals. Our AMI complication Index for the last twelve months is .66 compared to the average Index of .85, again showing much better than average results. We are anticipating continued improvement with the next OSHPD report.
Following the study that was reported in 1996, our Medical Staff directed a review of patients’ medical records spanning nine months to evaluate their respective course of treatment and outcome.

The results of this study included revision of our Myocardial Infarction Protocol (1996). Additionally, we entered into a joint study with CMRI, who as you know is a state medical review organization, regarding the management of patients with MI on discharge. This included monitoring for predefined Quality Indicators, i.e., choice of medications, management of heart failure, and reduction of risk factors. The results of the above studies were shared with our Medical Staff and over the next 6 months, changes in practice were evidenced through additional studies. We have established a team of cardiologists and Emergency Room physicians who regularly review our care of patients with an AMI to insure that we offer the most up to date care that can be provided in a facility e.g. San Leandro Hospital.

We now review the care of all patients who suffered a cardiac arrest to see if the event could have been prevented. We have established a new protocol for heart rhythm problems to improve earlier detection and notification before a major problem develops. A panel of physicians and nurses reviews all deaths from an AMI that occur in the Emergency Room. About 25% of these patients were found "down" for a long time before being brought to the Emergency Room. Another 25% had significant complicating problems. In spite of that, our current Index for MI mortality is down to 0.66 compared with 0.92 for the average Index in 1700 hospitals.

We utilize the HCIA algorithm that has been approved by Dr. Lisa Iazzoni of Harvard. The review and Root Cause Analysis of the indicator, Acute Myocardial Infarction Mortality, is included in our JCAHO Core Measures and ORYX, as well as part of the PRO Sixth Scope. The outcomes and analyses are taken not only to our Division and Corporate Board, but also reviewed quarterly in our Resource Management Reviews.

San Leandro Hospital does not perform cardiac surgery and transfers appropriate patients to the nearest hospital that provides this
specialty service. We have asked to be included in their reporting of subsequent mortalities of these transfers. This hopefully will help us ensure the best care before the transfer from our facility.

Continued review and fine-tuning of related protocols has resulted in improved mortality outcomes as compared to other Columbia, and now TRIAD, hospitals. We recognize reports such as the OSHPD as opportunities for improving practice and standards of care as indicated by the above activities. We look forward to the next report.

Sincerely yours,

[Signature]

Kelly Mather, President/CEO
July 15, 2000

Roxanne Andrews, Ph.D.
Deputy Director
Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K Street, Room 200
Sacramento, California 95814

Dear Dr. Andrews:

We have reviewed the California Hospital Outcomes Project document “Report on Heart Attack Outcomes in California 1994-1996.” We believe there are a number of serious problems with this study that limit its usefulness and make it potentially misleading to consumers who will eventually hear about this in their local newspapers and on television and radio media. Our main concerns are in the following areas:

1. Patients for this study were selected between January 1, 1994 and December 1, 1996. By the time these data are published, it will represent clinical care that is 4 to 6 years old. There have been major advances in the past 2 to 3 years that have revolutionized the treatment of acute myocardial infarction (widespread use of direct angioplasty, availability of coronary stents, better thrombolytic therapies and the introduction of GPIIb/IIIa platelet inhibitor therapy). This study does not represent contemporary management of acute myocardial infarction patients and it is inappropriate to characterize the current performance of hospitals based on these data. In fact, the State of California itself acknowledged the limitation of using old data to rate surgical programs and joined Pacific Business Group on Health to fund the California CABG Mortality Reporting Project (CCMRP) to address the concerns about using old data to rate hospital programs.

2. These data are based on hospital discharge abstracts which reflect coding which the Technical Guide distributed with this report acknowledges on page 21 that “…the guidelines that professional coders follow when they abstract medical records are sometimes ambiguous and subject to multiple interpretations.” The definitions used by coders do not follow the guidelines published by the American Heart Association and American College of Cardiology. Again, the State of California itself initiated the CCMRP project to collect primary clinical data on coronary artery bypass graft surgery to avoid the well-documented problems of using administrative data to judge the quality of clinical care.
3. In this time period, the ICD coding did not include the additional code to distinguish conditions that existed on admission from those that developed during the hospitalization. This makes it virtually impossible to use some of the data available on abstract forms to develop an accurate risk-adjustment model.

4. It is well documented that mortality from acute myocardial infarction is related to delay in seeking treatment. As we pointed out in the state report published in 1994, many of the hospitals in California that are located in geographic areas with high proportions of ethnically diverse populations have higher rates of mortality. It is very likely that this delay in seeking treatment elevates the mortality rate from acute myocardial infarction in those areas. This important factor makes it very difficult to compare programs, whether the data are risk-adjusted or not.

There are excellent clinically derived databases that reflect current practice, such as the National Registry for Myocardial Infarction (NRMI) sponsored by Genentech, which have set a standard for comparison that most hospitals have come to expect. Anything less than this kind of effort is nonproductive and unacceptable. We believe that the State of California owes it to its consumers to provide clinically relevant and current information so that consumers can make informed decisions about the quality of care delivered by hospitals in California.

We appreciate the opportunity to provide feedback and hope that our concerns can be addressed.

Sincerely,

Colman Ryan, M.D., F.A.C.C  
President, Medical Staff  
Seton Medical Center

Executive Director  
San Francisco Heart Institute

Bernadette M. Smith  
Chief Operating Officer  
Seton Medical Center
July 17, 2000

Roxanne Andrews, Ph.D.,
Deputy Director,
Health Policy and Planning Division,
Office of Statewide Health
Planning and Development,
818 K Street, Room 200
Sacramento, CA 95814

Dear Dr. Andrews,

Woodruff Community Hospital, a Tenet facility, was closed in November of 1997. As the closest Tenet facility, geographically speaking, Suburban Medical Center assumed responsibility for the facility's medical records.

Those records have been inventoried and stored with a local record management company. Unfortunately, the retrieval costs are prohibitive to any data access or analysis of the statistics reported for Woodruff Community Hospital.

In this regard, we are electing not to comment on the Acute Myocardial Infarction data for Woodruff Community Hospital as we lack the resources to verify the accuracy of the data. However, we do appreciate the opportunity afforded to us to do so.

Sincerely,

[Signature]
Sean Fowler,
Chief Operating Officer
July 21, 2000

Roxanne Andrews, PhD
Deputy Director, Health Policy and Planning Division
Office of Statewide Health Planning and Development
Room 200
818 K Street
Sacramento, CA 95814


Dear Dr. Andrews:

Thank you for the opportunity to provide comment on the recently-released results of the OSHPD acute myocardial infarction outcome studies.

Data for this facility was presented for 1994, 1995 and 1996. Sutter Medical Center of Santa Rosa would like to make the following comments:

1. The report indicates data for this entity was excluded for the entire year of 1995. The statistics appear to thus be computed with one-third of the data missing and then compared to the statewide rate, which was based on three full years of data. In addition, the patient numbers represented for the remaining two years are extremely low (25 in 1994 and 21 in 1996), which would negatively impact the statistical power of the confidence intervals.

2. Sutter Health was not the owner of this business entity in either the year 1994 or the year 1995. Sutter took over ownership and also operation of the hospital from the County of Sonoma in April of 1996. As such, Sutter Medical Center of Santa Rosa has only been in operation since April 1996.

In summary, we appreciate being given the opportunity to respond to this report and we appreciate the State of California's support of this ambitious outcome study. We are confident the results will show us all how cardiac patient care may be improved in the future.

Sincerely,

M. Jill Magri, RN, BSN, MBA
Chief Administrative Officer
July 20, 2000

Roxanne Andrews, Ph.D
Deputy Director, Health Policy and Planning Division
Office of Statewide Health Planning and Development
818 K. Street, Room 200
Sacramento, CA 95814

Dear Ms. Andrews:

Thank you for the opportunity to respond to OSHPD’s Annual Report of the California Hospital Outcomes Project. Based upon a review of the technical and informational data provided by OSHPD related to the Acute Myocardial Infarction (AMI) study, we believe you and any member of the public who requests a copy of the statistical information will be interested in this additional perspective.

The following areas have been identified as potential factors in the score of “significantly worse than expected” for both Model A and Model B studies:

1. As a rural facility, we see a high percentage of patients who have acute and chronic disease processes who seek little or no healthcare services. They are a high risk population when they enter the hospital and have multiple contributing comorbid conditions. These can include, but are not limited to, diabetes with complications, congestive heart failure, cerebrovascular accident, and pulmonary failure. These poorly treated disease processes, combined with the AMI, will obviously have an adverse affect on patient outcome. Interestingly, the study projected that our patient population was at lower risk than the state average (11.2% vs. 12.7% statewide). Consistently, studies conducted by UCSF, the California State Department of Health Services and other health care agencies identify our county population, and the entire Central Valley of California, to have the highest risk for heart disease, diabetes and respiratory disease in the California. We are concerned that the OSHPD interpretation of our data would indicate that the risk is lower in our district, when clearly this is not the case.

2. In reviewing our data, we identified that 75% of the deaths attributed to our hospital occurred in other healthcare facilities. We question the process of attributing all patient deaths to the source hospital, as this allows for misleading statistical results. Many community hospitals provide only medical cardiac care, and transfer their AMI patients to facilities offering surgical cardiac care. Surgical cardiac care is complex and high risk, with multiple opportunities for poor outcomes. While the argument can be made that the post-surgical outcome can be directly affected by the previous medical care, it can also be argued that even the best medical care can be rendered useless by factors created in the surgical process. To create a truly objective analysis of cardiac care, the study should evaluate facilities providing surgical care separately from those only providing medical care—using separate indicators to evaluate each level of care on its own merits.
3. Patients with “do not resuscitate” (DNR) orders were included in the sample as this is not reflected in coding data. Patients with DNR orders have a high risk of death, both because of their underlying medical problems that contribute to the patient/family’s decision for DNR, and because they are not candidates for life-prolonging interventions, such as mechanical ventilation. As a rural community hospital, our population of chronically ill patients and their families exercise their right to request DNR status, and medical treatment is modified to their requests. Life-saving measures are withheld per their request, which is a factor when reviewing incidences of mortality.

On an on-going basis, our Medical Staff Services Committees review every death in our facility to ensure that appropriate and quality medical care is being offered to each of our patients.

Thank you for the opportunity to review and respond to this report prior to its publication. We look forward to future involvement in improved statewide outcomes measurement projects.

Sincerely,

[Signature]

Robert M. Monton
Chief Executive Officer
Western Medical Center
Santa Ana
Tenet HealthSystem

1001 North Justus Avenue
Santa Ana, CA 92705
Tel 714.935.3555
http://www.thenethealth.com

July 5, 2000

Office of Statewide Health Planning and Development
Health Policy and Planning Division
1600 9th Street, Room 400
Sacramento CA 95814

Western Medical Center Santa Ana appreciates the opportunity to respond to the
Annual Report of the California Hospital Outcomes Project published by the Office of
Statewide Health Planning and Development (OSHPD). We support the State's effort to
better inform the public regarding the quality of health care being delivered in California
hospitals. Unfortunately, the usefulness of the 1994-1996 Acute Myocardial Infarction
Study is limited since the data reported primarily uses ICD-9-CM codes, a coding and
classification system which does not recognize the severity of the patients' illness, has
vague and consistently changing guidelines and is not uniformly reported by California
hospitals and health care facilities. The severity of illness indexing or risk adjusting
utilized in this study is dependent on coding of pre-admission diagnosis. Additionally,
the statistical data that has been published has a very low probability of being related to
the quality of care that a patient would receive at a given hospital.

Western Medical Center Santa Ana conducts extensive reviews of all mortalities and
complications as a significant part of our Continuous Quality Improvement Program.
The Medical Staff has taken opportunities to identify and improve patient outcomes. We
believe our review processes provide continuous feedback that allows us to meet and
exceed quality of care standards. Additionally, it should be mentioned that Western
Medical Center Santa Ana has a comprehensive Cardiovascular program in order to
better serve cardiac patients.

Thank you for the opportunity to respond to the California Hospital Outcomes Project
Report prior to publication. We are aware OSHPD continues in their effort to improve
the methodology of reporting.

If you have questions feel free to contact me at 714/953-3610.

Sincerely,

[Signature]
Daniel J. Brothman
Chief Executive Officer