In attendance at the meeting:

<table>
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<tr>
<th>Clinical Advisory Panel Members</th>
<th>OSHPD Staff/Consultants</th>
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<tbody>
<tr>
<td>Robert Brook, M.D., Sc.D.</td>
<td>Joseph Parker, Ph.D., HOC</td>
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<td>Andrew Bindman, M.D.</td>
<td>Holly Hoegh, Ph.D., HOC</td>
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<td>Ralph Brindis, M.D., F.A.C.C.</td>
<td>Robert Springborn, Ph.D., HOC</td>
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<td>Timothy Denton, M.D., F.A.C.C.</td>
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<td>Coyness Ennix, Jr., M.D.</td>
<td>Mary Moseley, HOC</td>
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<td>Keith D. Flachsbart, M.D.</td>
<td>Beth Wied, OSHPD Chief Legal Counsel</td>
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<td>Frederick L. Grover, M.D.</td>
<td>Zhongmin Li, Ph.D., HOC Consultant</td>
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<td>James MacMillan, M.D.</td>
<td>Richard White, M.D., HOC Consultant</td>
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<td>Anthony Steimle, M.D., HOC Consultant</td>
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Members of the Public/Presenters

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<th>Peter McNair, Harkness Fellow, UCSF</th>
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<td>Diana Lau, RN, MS, CNS</td>
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1. Call to Order and Introductions

Chairman Robert Brook, M.D., Sc.D., called the meeting to order at 9:00 a.m. All people attending the meeting introduced themselves.

2. Approval of Minutes of July 20, 2007 Meeting

Dr. Brook determined a quorum was present. He asked for comments or corrections to the minutes of the previous meeting. None were offered. Dr. Grover moved and Dr. Denton seconded the motion to approve the minutes. Minutes were approved by consensus.

3. Program Director’s Report – Joseph Parker, Ph.D.

2005 Hospital Report and Press Coverage

OSHPD released the hospital report on January 9 to good media response. The surgeon level report, released only six or seven months earlier, seemed to stimulate more media interest than might have been expected for the hospital-only report.
The media mostly took a community interest, identifying local hospital status and changes in these hospitals over time. Especially noteworthy was Lakewood Regional, which moved from “worse than expected” in the previous report to “better than expected” in this report, the first such dramatic turnaround since OSHPD reporting began. Other media messages included the usefulness of the information for consumers and stakeholders, PCI’s versus CABG procedures, and IMA usage as an indicator of surgical quality.

CCORP Surgeon’s Guide

Dr. Parker noted that “A Cardiac Surgeon’s Guide to CCORP”, an easy-to-understand reference guide, was included in the meeting packet. The panel had requested such a document at an earlier meeting. The panel had no additions to the guide and stated that it was clear and easy to read.

National Trends in Isolated CABG Volume

Since California has experienced a decline in CABG surgery volume, Dr. Parker investigated the decline in comparison to other states. No national database exists, so a comparison was made with other states known to collect and report clinical data regarding CABG surgeries. He presented a chart that demonstrated a decline in CABG surgeries in Massachusetts, New York, New Jersey, and, especially, in Pennsylvania.

Discussion: The group discussed possible reasons for the decline including shifts to other forms of heart surgery, the possibility that public reporting might cause surgeons to reduce their isolated CABG surgeries, and the potential that people who need the surgery might not have access, particularly the uninsured.

Comparison of Timelines for 2005 and 2006 CCORP Audits

Dr. Parker produced a table delineating a shorter timeline for the 2006 audit. Once the audit is completed, OSHPD must wait for the Death Statistical Master File from the California Department of Public Health (DPH) for the linkage necessary to create an the operative mortality measure.

4. Hospital and Surgeon Level Report for Data Years 2005-2006

Timeline for 2005-2006 Report

The report will hopefully be released by the end of 2008, about seven months earlier than the previous report, but this schedule depends on the timely availability of the death file.

Discussion: Several panel members discussed the need for a much faster timeline, since two-year-old data may be misleading and impede timely improvements. Delays receiving the Death Statistical Master File from the CDPH present a huge obstacle to earlier publication. Part of the delay results from problems with the CDPH electronic
data submission process. Another part occurs when CDPH sends death data to the federal government. At the federal level death files from other states are linked to capture all 30-day deaths from isolated CABG surgeries in California no matter what state they occur in. Further discussion included using in-hospital mortality as an alternative to 30 day post-operative mortality.

Members expressed a keen desire to resolve the reporting delay problem by using STS data, patient discharge data, or other means. The problem is complex and no clear course of action was determined.

Risk Model for 2006 Data

Action Item: The panel approved using the 2005 risk model for 2006 data, subject to possible minor revisions as a result of the 2006 audit analysis.

Proposed Report Contents

Dr. Parker asked for input regarding content for the 2005-2006 report including Risk-Adjusted Operative Mortality and Performance Ratings for Hospitals and Surgeons for 2005-2006 combined, Risk-Adjusted Operative Mortality and Performance Ratings for Hospitals for 2006; Internal Mammary Artery Usage by Hospitals; Volume-Outcome Analyses; and Trends for Hospital Risk-Adjusted Mortality Rates and Trends for IMA Usage Rates.

Dr. Parker particularly wanted directions for IMA usage rates.

Action Item: The panel approved one-year (2006) IMA reporting to maintain consistency with the last report.

Discussion: Members discussed the need for clear presentation of hospital trends over time for the reading public. Some tables and graphs could be confusing to the less sophisticated reader. For example, low volume hospitals produce a wider range of numbers over time. While the data may have little statistical significance, the resulting graphical display has a lot of “noise”, which could be misleading.

Recommendation: Panel recommended trends be included in an appendix or as a supplemental report separate from the public report. The panel also recommended inclusion of confidence intervals on Risk Adjusted Mortality Rates and IMA Usage values.

Surgeon Results and Statement Process

Dr. Parker stated new regulations are not in place for this year’s surgeon appeals process; however, following closely the process outlined in statute should alleviate some of the problems experienced last year – primarily identification of specific surgeons with their
cases under review. He referred to the “Process for Physician Review of Results and Submission of Statements” included in the meeting binder.

Discussion: The panel discussed logistics for the surgeon statement review process. Dr. Parker said a complete packet of surgeon review cases will be sent to all panel members for study. Everyone should review all cases; however, the panel may assign a lead reviewer to individual cases. Surgeon identification will be redacted from the materials sent.

At the next meeting, members will discuss and reach a final decision on all cases, then surgeons, or any other public member in attendance, may address the panel. In this manner, the panel agreed that the final decisions shall be made on the merits of the materials under review and avoid any potential influence on panel members by surgeons and colleagues whose cases are evaluated.

Recommendation: The panel also requested that the Director’s Report at the surgeon statement review meeting include a systematic review of the decisions that were made at the August 31, 2006 panel meeting.

5. Additions and Changes to CCORP Clinical Data Elements

Dr. Hoegh presented the list of data elements for review, approval, and discussion. She started with a brief review of the data elements approved at the July 20, 2007 meeting of the CAP.

Dr. White discussed the non-STS element of LAD bypassed, approved last July. The UCD team subsequently developed the following definition, “Indicate whether any part of the Left Anterior Descending artery (Proximal; Mid; Distal; Diagonal) was bypassed for this surgical intervention.”

Dr. White and the panel discussed and clarified other data elements prior to voting, especially problems identifying and coding chronic liver disease.

Action Items:

The panel approved all data element changes which result from STS version change to 2.61.

The panel also approved the addition by CCORP for (1) Hispanic or Latino Ethnicity, (2) Mean PA Pressure Done, and (3) Valve Procedure.

Finally, the panel made the following decisions (1) add Emergent Reason, (2) drop Hepatic Failure, (3) approve Left Anterior Descending (LAD) Bypassed definition, (4) add Postoperative Dialysis Requirement, and (5) add Postoperative Atrial Fibrillation.

Dr. White presented materials from the meeting binder which outlined stroke research and definitions.

Discussion: The panel, Dr. White, and OSHPD staff discussed the reliability of measuring Post-Operative Stroke outcomes -- permanent motor, cognitive, or speech deficits – within available, reportable time frames.

Action Item: The panel approved the new STS definition for Post-Operative Stroke but will wait for further evidence from CCORP on the validity and reliability of stroke coding before including Post-Operative Stroke in a public report.


Dr. Li presented his research from materials in the meeting binder. He reviewed the literature, methods of collecting data for On-Pump and Off-Pump CABG surgery, and improved outcomes for Off-Pump.

Discussion: The panel expressed interest in Dr. Li’s research. They noted that previous CABG reports encouraged and directly affected the increased use of the IMA in California heart surgery to improve CABG surgery outcomes. However, the consensus was to not recommend public reporting of Off-Pump surgery rates at this time, since selection of On-Pump or Off-Pump depends on patient health, surgeon experience, and available technology. The panel did not want to encourage a procedure which might jeopardize the patient or compromise the skill of the surgeon.

8. Conclusion

The meeting was adjourned by Dr. Brook, Chair, at 12:13 p.m. The next meeting is expected to be held in late summer for the surgeon review process.