

**CALIFORNIA CABG OUTCOMES REPORTING PROGRAM (CCORP)  
CLINICAL ADVISORY PANEL (CAP)**

Sutter Square Galleria  
2901 K Street, Room 200  
Sacramento, CA 95816

**April 25, 2006  
10:00 a.m. to 3:00 p.m.**

**MEETING MINUTES**

**In Attendance**

*Clinical Advisory Panel Members:*

Robert Brook, M.D., Sc.D.  
Andrew Bindman, M.D.  
Ralph Brindis, M.D., F.A.C.C.  
Cheryl Damberg, Ph.D.  
Timothy Denton, M.D., F.A.C.C.  
Coyness Ennix, Jr., M.D.  
Keith Flachsbart, M.D.  
Frederick Grover, M.D.  
James MacMillan, M.D.

*OSHPD:*

David Carlisle, M.D.  
Michael Rodrian  
Joseph Parker, Ph.D.  
Holly Hoegh, Ph.D.  
Hilva Chan  
Herbert Jew  
Denise King

*Other Attendees:*

Ezra Amsterdam, M.D., UC Davis  
Claude Brandeau, M.D., CA Society of Thoracic Surgeons  
Joe Carey, M.D., CA Society of Thoracic Surgeons  
Kofi Cash, M.S., Sutter Health  
Beate Danielsen, Ph.D., Health Information Solutions  
Nancy Gibbs, RN, John Muir Medical Center  
Forrest Junod, M.D., CA Society of Thoracic Surgeons  
Richard Kravitz, M.D., M.S.P.H., UC Davis  
Zhongmin Li, Ph.D., Health Services Researcher, UC Davis  
James Longoria, M.D., Sacramento Cardiovascular Surgeons  
Geeta Mahendra, Senior Analyst, UC Davis  
Eileen Pummer, RN, John Muir Medical Center  
Patrick Romano, M.D., UC Davis  
David Rocke, Ph.D., Professor, UC Davis  
Anthony Steimle, M.D., CCORP Consulting Cardiologist

**Introduction**

Dr. Robert Brook, Chairman, called the meeting to order at 10:11 a.m. After everyone introduced themselves Dr. Joseph Parker delivered the Program Director's Report.

## Program Director's Report

Dr. Parker began by introducing Dr. Holly Hoegh, the new Clinical Data Programs Manager. Dr. Brook requested a copy of Dr. Hoegh's Curriculum Vita be sent to all CAP members.

Data collection was the next topic. Dr. Parker explained 2005 data had been collected without any penalties and Data Quality Feedback Reports would be distributed in May 2006. New regulations, effective March 2006, now require hospitals collect data that include some of the complications, process measure and risk factors that the CAP members agreed to add to the data registry. Due to these changes in the regulations hospitals must send test files of their 2006 data prior to submitting the originals.

Next, Dr. Parker reviewed the 2004 data audit. A total of 40 hospitals were audited, twenty hospitals each in Northern and Southern California equaling one-third of all hospitals in the program. This includes seven of the 15 hospitals audited in 2003. Dr. Parker suggested a future discussion on whether repeat auditing of individual hospitals is necessary. 3,283 isolated CABGS were audited, a little less than 40% of all isolated CABG cases within selected hospitals with the average number of cases at 70. 17% of all 2004 isolated CABGs (approximately 19,000 patients) were audited. 53% of all surgeons had at least some of their cases audited, including potential outlier surgeons. The audit results and educational materials will be sent out to hospitals and members of the committee by June if available and will be discussed further at the next CAP meeting.

Dr. Parker highlighted data sets that are available for researchers to use which are 1997-1998, 1999 and 2000-2002 CCMRP data sets. There have been internal discussions favoring the release of CCORP hospital data however confidentiality is a continuing concern. Dr. Andrew Bindman noted that the process to acquire researcher data set from OSHPD is very lengthy and not transparent. Dr. Hoegh agreed to work on improving researcher access to the dataset.

As requested from a previous meeting Dr. Parker stated hospital charges have increased an average of 70% between 2000-2004. He went on to ask the committee to consider whether any of the additional elements adopted by the National Quality Forum (NQF) in November of 2005 should be collected for public reporting. The members agreed to discuss this issue at the next CAP meeting. Dr. Brook had several questions about data elements specific to valve repair cases, which if included might enable reporting of non-isolated CABG surgeries as well.

The floor was then open for remarks from the public concerning the 2003 CCORP Public Report that was released March 21<sup>st</sup> of this year. Dr. Joe Carey was pleased by the acceptance of the report but felt the effect of the report would take some time to sink in. There was agreement that more data in the area of PCI is needed. Dr. James MacMillan gave reasons for his hospital being rated worst than expected and suggested, among other things, that better preoperative assessments were needed. Mr. Kofi Cash had a question regarding whether the surgeon level report would denote if a surgeon joined the hospital halfway in the reporting year. Dr. Parker explained it would be administratively unfeasible to determine every surgeon's start date, however a minimum number of cases required for reporting will probably be used instead. He then gave a brief review of how to read the report. The topic turned to the need for better labeling of hospital performance. Dr. Keith Flachsbart found hospitals with no mortalities yet not labeled better than expected puzzling. He asked if there might be a way of highlighting hospitals with zero mortalities in the report who were not necessarily "better than expected". Dr. Parker suggested a follow up at a later meeting about possibly using five groups instead of the

current three for designating performance. After a lengthy discussion on how to reduce CABG mortality rates and the validity of the data in the report, the group took a break.

Once everyone returned Dr. Ralph Brindis motioned to approve the minutes from the last meeting and Dr. Cheryl Damberg seconded the motion. All were in favor.

### **CCORP Update & Discussion**

Dr. Parker gave a summary of the action items that needed approval and discussion which included: approval of the 2003-04 risk model; determining a minimum number of cases required for hospital and surgeon reporting of risk-adjusted results; deciding whether to combine all cases that a surgeon has performed across any hospital for a single score or breaking out performance by hospital as well; and providing feedback on the table format for reporting hospital and surgeon results.

After reviewing the timeline for the CCORP 2003-04 Hospital and Surgeon Public Report scheduled to be completed by December 2006, Dr. Parker requested the committee's approval of the 2003-04 Operative Mortality Risk Model for the report. It was noted that this year's model included the risk factor number of prior off-pump surgeries, whereas it had not been included in the prior CCORP report. After discussion, Dr. Brindis moved to approve the model and Dr. Bindman seconded the motion. All were in favor.

The 2003-04 Hospital and Surgeon Performance Summary was examined and a discussion ensued on determining a volume criteria given the falling rates of the procedure in California. Surgeon reporting criteria for New York, New Jersey and Pennsylvania were highlighted. Dr. Timothy Denton moved to require surgeon reports include two years of data, Dr. Damberg seconded. Dr. Flachsbart dissented the motion and commented the risk adjusted model was very valid for a large number of cases but tended to break down with smaller case loads. He would like five years of data used to produce more realistic performance reports. Dr. Brook agreed it was an important issue that should be reexamined when more data has been collected. All were in favor of the motion. A debate ensued on how to report surgeons with low volume caseloads. Dr. Parker explained that changing to a hierarchical model for 2003-04 data would cause a lengthy delay in the publication. Dr. Rocke argued that given the wide confidence intervals around the risk-adjusted mortality rates for low volume surgeons, there was no need to impose a low volume threshold for public reporting. After a lengthy discussion the committee agreed to a two-year report of risk adjusted data on all surgeons with a full explanation of the use a 0.05 p-value and a possible rating of worse-than or better-than-expected for surgeons even with low volume caseloads. Dr. Bindman moved the motion and Dr. Brindis seconded. All were in favor. The committee then recommended that surgeon results be listed by individual surgeon and then by the hospitals using the same layout as New York's report. Dr. Damberg moved the motion and Dr. Denton seconded. All were in favor. Dr. Parker clarified that the committee had also agreed to have hospital risk-adjusted mortality rates provided regardless of volume.

Dr. Parker detailed the physician appeal process. A preliminary report will be sent to each physician that includes an explanation on how to submit a response to the report within 30 days. The response will be reviewed administratively and give a decision that either the data was flawed and will be corrected, the model was flawed and will be changed or there was no flaw and reject the response. Physicians unsatisfied with the administrative decision will have their cases reviewed by the CAP to either uphold or change the final conclusion set forth by the law. The law states that for any surgeon statement found to reveal a flaw in their data, that has not been corrected by CCORP and materially diminishes the validity of the report, the data must be

corrected for the report or data for that surgeon must be excluded. Any surgeon statements found to reveal a flaw in the risk model will result in the report not being issued until the model is corrected. Any surgeon statements that do not reveal a flaw in the data or the model will not change the public report process. The CAP's decision is the final determination regarding the physician statement. The panel agreed to assign physician statements to teams of two CAP members, one of which is to be a surgeon and the other a non-surgeon. These randomly paired working subgroups would be randomly assigned cases and asked to review them thoroughly before presentation at the next CAP meeting.

Dr. Parker requested that the committee review the question of whether the next CCORP report should include only a combined 2003-2004 analysis of data for producing hospital quality ratings.. Analyses done by CCORP showed that the year to year correlation in hospital performance was fairly strong for hospitals with volume >100 and virtually nonexistent for hospitals with volume <100. This argued for using two years data to calculate hospital risk-adjusted mortality rates. Also, more outliers appeared when using two years of data, compared to one, because of the greater case volume. Dr. Brook cautioned that the correlation was very difficult to interpret, and might indicate that small hospitals are able to change their performance in a shorter time period. From a medical quality improvement position it is the hope that hospitals do change and that the model does predict performance well. The committee also would like analysis on the empirical question of whether one year or multiple rolling year data provide consumers with the best information in selecting a quality hospital. The members discussed both options and Dr. Denton motioned to report two years of data for surgeons and hospitals to report the most recent year data for hospitals. Dr. Brindis seconded the motion, Dr. Damberg and Dr. Bindman were against, all others were in favor. Dr. Bindman noted that it seemed odd to be basing some hospital results on one year's worth of data but only including a 2-year combined surgeon results. The committee also agreed to continue the current auditing process for 2005 data.

The CAP discussed having future meeting locations in locations other than Sacramento and the idea of rotating from northern and southern California brought up.

Dr. Anthony Steimle requested clarification from the committee regarding the definition of isolated CABG surgery for three case reviews. The first was the interpretation that a CABG would be considered isolated in the presence of a left ventricular assist device unless there is an operative note that states the operation was undertaken to implant the left ventricular assist device because of heart failure or to deal with bridging to a transplant. Dr. Denton moved to accept this interpretation and Dr. Brindis seconded; all were in favor. The second case regarded whether aortic endarterectomies for the purpose of implanting grafts would still be considered isolated CABGs. Dr. Denton motioned to accept the isolated interpretation and Dr. Damberg seconded. In relation to revising the definition of isolated CABG, the committee moved to have all Maze procedures to correct for arterial fibrillation classified as a isolated CABG. This is a change in current definition as full surgical Maze procedures are considered non-isolated and only modified or "mini" Maze procedures are considered isolated. Dr. Steimle motioned and Dr. Brindis seconded, all were in favor. Dr. Parker noted that the change in the definition of isolated CABG would not take place until new regulations are written.

The inclusion of Left Internal Mammary Artery (LIMA) use by Hospital and Surgeons in the public report was discussed. It was decided that these data would be reported for hospitals only. There was a discussion of bilateral use and it was decided that the report would include all IMA use. Dr. Zhongmin Li mentioned that Dr. Ezra Amsterdam had recommended setting the low

performance threshold cutoff at 80% for using IMA, rather than 75%, as one process measure of CABG surgery quality. Because the panel could not easily determine the correct cutoff and recognized that this would entail considerable effort, given the lack of a national standard, Dr. Brook recommended a statistical cutoff of 2 std. dev. below the mean. Format for the IMA use in the report was discussed.

### **Other Topics**

Next Dr. Denton presented on behalf of Dr. Richard Kravitz on appropriateness of CABG surgeries. Dr. Brook suggested a reliable transparent process of over-reading angiograms is needed in California and that a study was needed to distinguish between hospitals operating to increase survival vs. increase quality of life. Dr. Grover felt a review was needed on the appropriateness of interventional cardiology procedures.

Dr. Zhongmin Li presented on the impact of public reporting and surgeon volume outcomes. No risk-adjusted mortality and volume relationship for hospitals or surgeons was found, contrary to expectations. Dr. Brindis remarked that this was an important finding that needed to be shared with researchers. This analysis will be included in the 2003-04 public report, unless it delays the report's release and may be submitted to a peer review journal.

After public comments the meeting was adjourned at 3:00 pm.