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Chief, Cardiothoracic Surgery

July 23, 2009

David H. Wilderman
Acting Executive Director
Pennsylvania Health Care Cost Containment Council
225 Market Street
Suite 400
Harrisburg, PA 17101

Dear Sir,

I wish to address comments regarding the recent reporting of PHC4. These comments will be directed in two parts: Part one – Regarding my individual cases. Part two- regarding institutional cases.

The first thing I would like to address is the rating that was given to me for Valve and CABG/Valve surgery. I do not dispute the reporting of PHC4, but I do question the model under which the determined mortalities are made.

For valve only surgery, there were 3 mortalities. By Society of Thoracic Surgeons Database Risk Assessment Calculator, the pre-operative mortalities for the three cases were as follows:

Aortic Valve Replacement	Pre-op Mortality: 17.9%
Redo Sternotomy, Mitral Valve Repair	Pre-op Mortality: 21.6%
Mitral Valve Replacement, Tricuspid Valve repair	Pre-op Mortality: 18.5%

The first patient developed Heparin Induced Thrombocytopenia (HIT) with thrombosis which carries a mortality from that disease process of approximately 30%. This is not a problem that could have been predicted pre-operatively. The second patient was post-operative day number 50 when he died. Well beyond the 30 day mortality. If he had had better insurance, he would have been transferred to an LTAC and would not be on the mortality statistics. He died of his chronic pulmonary condition when he refused to be re-intubated to save his life. The third patient died as a result of injury from the pulmonary artery catheter placement and removal, which was not related to the surgery or the surgical team.

The average mortality of all of these cases was 19.3%. Taking this into account, the remaining average mortality of the remaining 30 cases would have to be 1.47%. This is an unrealistic number in modern valve surgery. The mortality risk for a 75 year old male undergoing aortic valve replacement or mitral valve replacement, without any other medical problems other than aortic or mitral valve stenosis (no hypertension, diabetes, lung disease, renal dysfunction, coronary artery disease, etc.) is 2.2% and 3.6% respectively. For a woman the numbers are even higher, 2.6% for aortic and 3.9% for mitral. This clearly indicates that the risk for these patients is being underestimated and therefore the expected mortalities will also be under estimated.

For the total valve category (Valve only plus Valve/CABG), there were 7 mortalities listed. Three of which were discussed above. The STS Risk Assessment Calculations for the other four are as follows:

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Mitral Valve Replacement, CABG
Mitral Valve Replacement, Tricuspid Valve Repair, CABG
Aortic Valve Replacement, CABG, Closure of ASD
Aortic Valve Replacement, CABG,
Replacement of Ascending Aorta

Pre-op Mortality: 19.2%
Pre-op Mortality: 21.6%+
Pre-op Mortality: 25.6%+
Pre-op Mortality: 11.8%+

(Please note that the plus sign is placed after those mortalities that are higher, but because of the limitations of the Risk Calculator, we are unable to include a double valve, ASD or ascending aortic replacement. Calculations were made based on Valve/CABG only.)

The first patient developed massive hemoptosis on the day he was scheduled to be transferred to a rehab center secondary to a bronchial AVM. He recovered from the bleed but developed pneumonia and the family withdrew all support and removed him from the ventilator. He died on post-operative day number 54. The second patient developed renal failure and required dialysis to stay alive but the family refused and made her comfort care. The third patient developed HIT with thrombosis and died on post-operative day number 56. The last patient had an ascending aortic replacement in addition to a Valve/CABG which is far more complicated than a Valve/CABG procedure.

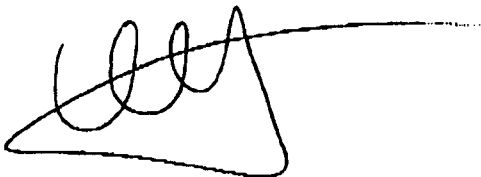
The average mortality of all 7 of the above cases is 19.4%. Taking this into account, the remaining average mortality of the remaining 53 cases would have to be 1.84%. If patients whose family members refused lifesaving medical treatment, patients who were still at the institution after 30 days, patients who died of HIT not surgical issues, and patients who had operations that were not just Valve/CABG procedures were excluded, the reported number would be much better than expected.

Both my individual and the institution reporting based on the STS Database have been AS EXPECTED for MORTALITY for all aspects of cardiac surgery (CABG only, Valve only, Valve with CABG) from the start of the recording period in 2006 through and including the present.

With regard to the institutional numbers, the Valve and Valve with CABG have been explained above since I was the only surgeon performing those procedures at this institution. The CABG only numbers include a number of cases that were very high risk and presented for exclusion. Since no cases were excluded from the PHC4 data, we feel it is important that readers be aware that these high risk cases were included in our data. The institutional CABG only data also includes four other surgeons who are no longer at this institution and were transient help during periods of my absence. Measures are being put in place to secure more permanent assistance at the institution to have a more stable presence. We expect that there will be a significant change with the more permanent presence.

I want to thank you for the opportunity to make comments with regard to the PHC4 reporting.

Sincerely yours,

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

Daniel S. Woolley, MD, FACS
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St. Joseph Medical Center, Reading, PA