

The Perfect Storm: Past, Present, and Future
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For the past seven years surveys have been sent to the Chairs of the SAAC/AAPD departments regarding issues relating to faculty and finances to determine the status of the department with respect to workforce and financial stability. (1,2,3,4) These surveys were submitted by email in August of each year, and resubmitted to non-responders every two weeks for the next 16 weeks. In the fall at the SAAC/AAPD Annual Meeting, the preliminary results are presented although the final survey results are not complete until January. The following will describes the final results from the 2005-06 academic year (survey submitted in August 2006) and also the preliminary results of the 2006-07 academic year (survey submitted in August 2007).

The 2006 Survey Results: The final response rate of last year's survey was 61%. The average department had 50 faculty, 14 residents per class, while 65% of the departments had 9 interns and 96% of the departments had an average of 28 CRNAs. These departments provided clinical service for an average of 37 ORs, 7 offsites, and assigned an average of the following number of faculty to each of the specific clinical sites (OB 1.4, ICU 1.4, Acute Pain Service 1.0, Pain Clinic 2.3, Preop Clinic 1.0). Therefore the total of anesthetizing locations was 44 with another 7.1 faculty assigned to the above anesthesia services (51.1 total sites covered). There is an average of 2.5 open positions in 71% of the departments, (approximately a 5% shortage, down from 9.7% in the year 2000). Seventy percent of the departments had an average of 4.3 open CRNA positions, which is approximately 10.8%. Departments received an average of \$5,455,000 of institutional support (\$120,200/faculty). When the dollars used to support CRNA salaries was removed this was reduced to \$104,000/faculty. This is a 9.5% increase over the previous year. Departments billed an average of 12,193 units/faculty/year and collected \$31.30/unit while charging an average of \$85.50/unit. With this support overall departments had a positive margin of \$619,000/year (or \$11,000/FTE) although there was a wide range with 68% of departments had a positive margin of \$29,400/FTE, while 23% had a negative margin of \$39,900/FTE. Departments' averaged \$402,000 in clinical revenue per FTE, \$35,500 in research revenue per faculty FTE, and \$120,200 in support per FTE. This brought a total of \$27,600,000 in revenue or approximately \$550,000/FTE. Given the average expense budget per faculty at the current activity level, the average department would require \$44.00/unit in revenue, although it is receiving \$31.00; consequently requiring institutional support of approximately \$13.00/unit of service.

From a Department Chairs and a Hospital Directors perspective this support may be caused by several issues: poor payer mix and revenue per unit of service, or by poor utilization of faculty due to poor utilization of anesthetizing locations, and finally, it may be due to additional support required for academic productivity. To try to determine which of these factors was most responsible for the requirement of institutional support, the following correlations were made.

Dollars of faculty support were plotted versus dollars per unit collected and found to be highly significant (p value < 0.001). At the same time when dollars of support per faculty were plotted versus research dollars per faculty, the correlation was not significant (p value 0.5). When dollars of support per faculty versus units per site, the correlations was again not statistically

significant; although when research dollars per faculty were plotted versus faculty numbers per clinical site, there was again a statistical significant correlation. These findings imply that the primary reason for support is due to poor collect rate per unit (poor payer mix) and not faculty academic time or poor utilization of anesthetizing locations. Most interestingly and somewhat assuring is that the more faculty the department has per clinical sites that need to be covered the more productive faculty are with respect to generating external research funding.

Preliminary Result from 2007 Survey: The preliminary results of this year’s survey (45% response rate to date) demonstrate that 82% of departments have an average of 3.8 open faculty positions (6.1%, slightly more than last year) and that 76% of departments have 4.3 open CRNA positions (about the same as last year). The overall average is in the black by approximately \$376,000 or \$8,000/faculty while receiving even more support than the previous year (\$132,177/FTE or \$120,582 after CRNA support dollars are removed). Departments are charging an average of \$88.87/unit and receiving \$32.20/unit. The number of units is approximately the same as previous years (12,232/FTE). These are only preliminary result. We require approximately 25 more responding departments to achieve last year’s response rate.

Subspecialty Compensation: Sixty-four percent of departments do not provide additional compensation for subspecialty trained faculty. For the 36% who do pay, the mean and median of those amounts are presented in the table below.

	Mean	Median	Minimum	Maximum
Sub_Specialty_Cardiac	\$11,333	\$7,500	\$0	\$50,000
Sub_Specialty_ICU	\$7,921	\$5,000	\$0	\$35,000
Sub_Specialty_Peds	\$14,605	\$10,000	\$0	\$50,000
Sub_Specialty_Pain	\$9,079	\$5,000	\$0	\$50,000
Sub_Specialty_OB	\$3,026	\$0	\$0	\$20,000
Sub_Specialty_Neuro	\$3,472	\$0	\$0	\$20,000
Sub_Specialty_Other	\$5,139	\$0	\$0	\$60,000

In conclusion, the survey reveals there is a continuing need for institutional support to maintain financial viability of academic training programs. This support is required due to poor reimbursement for anesthesia work (poor payer mix). There is also a continuing shortage of anesthesia faculty.

References:

1. A Demographic, Service, and Financial Survey of Anesthesia Training Programs in the United States. *Anesth Analg* 2003; 96:1432-46.
2. Faculty and Finances of United States Anesthesiology Training Programs: 2002-2003. *Anesth Analg* 2004; 99:1185-92.
3. Trends in Financial Status of United States Anesthesiology Training Programs: 2000 to 2004. *Anesth Analg* 2006; 102:517-23.
4. Five-Year Follow-Up on the Work Force and Finances of United States Anesthesiology Training Programs: 2000 to 2005. *Anesth Analg* 2007; 104:863-68.