

2006 State of the Flight Surgeon Final Report

Society of USAF Flight Surgeon

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Past-President

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2006 Annual State of the Flight Surgeon Report

Introduction: The Surgeon General of the Air Force, in May 2003, requested that the president of the Society of USAF Flight Surgeons (SOUSAFFS) provide an annual report capturing the “state of the flight surgeon”. This assessment, conducted outside commander channels, would provide an independent assessment of priority areas to guide senior leaders in continued improvements. This analysis of data constitutes the third “State of the Flight Surgeon” report, and it contains important corrections after statistical review since the raw data was first presented during the Annual Society Business Luncheon in Orlando in May 2006.

This year’s evaluation is intended to be a benchmark for future assessment of a number of fundamental changes within Air Force aerospace medicine, and to provide basic comparative data that reflects significant changes over the past half decade. The context of this evaluation is important and should not be lost in future comparative efforts. Over the previous five years the enlisted support traditionally associated with aerospace medicine has transitioned, and anecdotes of widespread issues with that transition have been common. Within the prior two years Air Staff made a concerted and public effort to re-invigorate the installation Chief of Aeromedical Services (SGP), defined the roles and responsibilities of that flight surgeon in recently released overarching guidance (AFPD 48-1 and AFI 48-101) and renewed inspection vigor. And finally, this survey encompasses over five years of continuous sustained combat operations overlaid on fifteen years of continuous worldwide deployment and peacekeeping and combat.

Flight Surgeon training evolved somewhat during the five years preceding this survey. The Aerospace Medicine Primary Course underwent re-structuring and a major course re-write with migration to a partially distance learning course is underway. The Residency in Aerospace Medicine added a Preventive Medicine emphasis area in 1999 and moved the occupational medicine training site from Kelly to Tinker AFB in 2002. Additionally, over the past two years Residents in Aerospace Medicine have been allowed to complete their training after a Master’s in Public Health and Aerospace Medicine year only. All residency programs and the AMP changed directorships at least once during the previous five-year period. And, at the time of this survey, preparations are underway to relocate parts of the school of aerospace medicine to Wright-Patterson AFB, OH.

This report, therefore, attempted to assess the success of training and education programs in preparing flight surgeons for their duties and on preparing chiefs of aerospace medicine for theirs. In 2004 the Society began a 3 year cycle of assessment in sequential years beginning with the membership, then MTF leadership, then Wing leadership and then repeating the assessment. This year there were start-up difficulties with fielding the Wing Leadership assessment, and Society leadership felt it likely that it would have to be pushed into the subsequent year. Moreover, the 2004 assessment of the membership was found to be difficult to objectively quantify and use for future comparison. Therefore, the society president opted to field an objective survey of the membership, based specifically

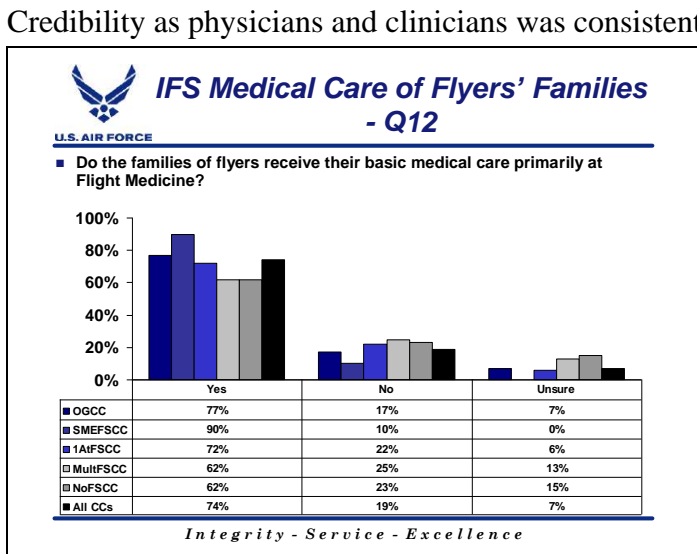
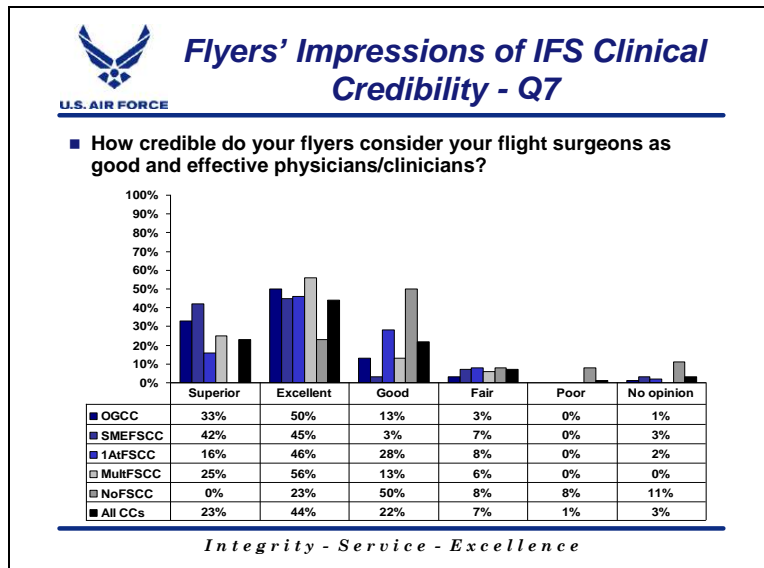
on reproducible elements of the 2002 membership survey, to create a robust baseline dataset that could be used for future comparisons. This dataset was specifically designed to be broad enough to assess success of training programs and to assess motivators for flight surgeon retention and growth. Each of these surveys resulted in large enough samples to provide good statistical power, and should be useful in future comparative surveys.

Methods: This evaluation of the “State of the Flight Surgeon” utilized two strategies to assess the success of the state of the flight surgeon. The first was an analysis of perceptions by line leadership of the flight surgeons assigned to or supporting their unit. A survey was designed that specifically questioned operations group commanders and squadron commanders separately regarding their perceptions of flight surgeon capability and support, and addressed the leadership role of the SGP in their operational capability. The survey was designed in such a manner that relational information by grouping and by major mission could be further explored. This survey was assembled and conducted by the Air Force Survey Agency and sponsored by the USAF School of Aerospace Medicine as a tool to further enhance current and future education and training emphasis areas. This survey, which forms much of the findings in this summary, was completed approximately 48 hours before the initial findings were briefed at the Society’s Annual Business Luncheon. Those initial findings prompted a complete review of the data and methodology used, to verify accuracy. In fact, a significant error in methodology (transposed answers) was discovered. Furthermore, the population of commanders who represented operational units with no flight surgeon attached or assigned was found to be a significant outlier, and their data confounded the initial data presented. This survey is published in its entirety in section 2, but excerpts will be presented in this summary.

The second survey technique was a survey of Air Force flight surgeons by the Society. A survey was assembled that built on a previous survey presented by Wg Cdr Victor Wallace that was conducted during late 2001 and published in *FlightLines* in 2002. This survey expanded upon the previous one to include objectively measurable assessments of training effectiveness and perceptions of stressors and family impact. The survey was constructed in such a manner that all information can be paired with a specific population of flight surgeons by mission, experience, training timeframe, and qualification. It included twenty-five questions of varying types including answers categorized as multiple choices, yes/no, and free-text. The survey was collected electronically on the Society website and responses were elicited by a single e-mail request from the president. The data collected from this survey is robust, and lends itself to considerable analysis. Some questions were amenable to comparative analysis with the 2002 survey, while other new questions were used to analyze relationships with other questions within the survey.

Observations and Discussion: Operational Commander view of the flight surgeon support to their organization was assessed using a survey conducted by the Air Force Survey Office. Of 58 Operations group commanders, 31 (58%) returned surveys and of 188 flying or missile operations squadron commanders 124 (66%) returned completed surveys.

The first emphasis area was the credibility and perceived competence of installation flight surgeons (IFS). Overall perceptions of competence by operations group and squadron commanders were high among all populations, although in all categories commanders of units without an attached or assigned flight surgeon rated flight surgeon credibility and competence significantly lower than commanders with attached or assigned flight surgeons. Therefore, in the revised analysis, the commanders of these units are reflected separately (NoFSCC).

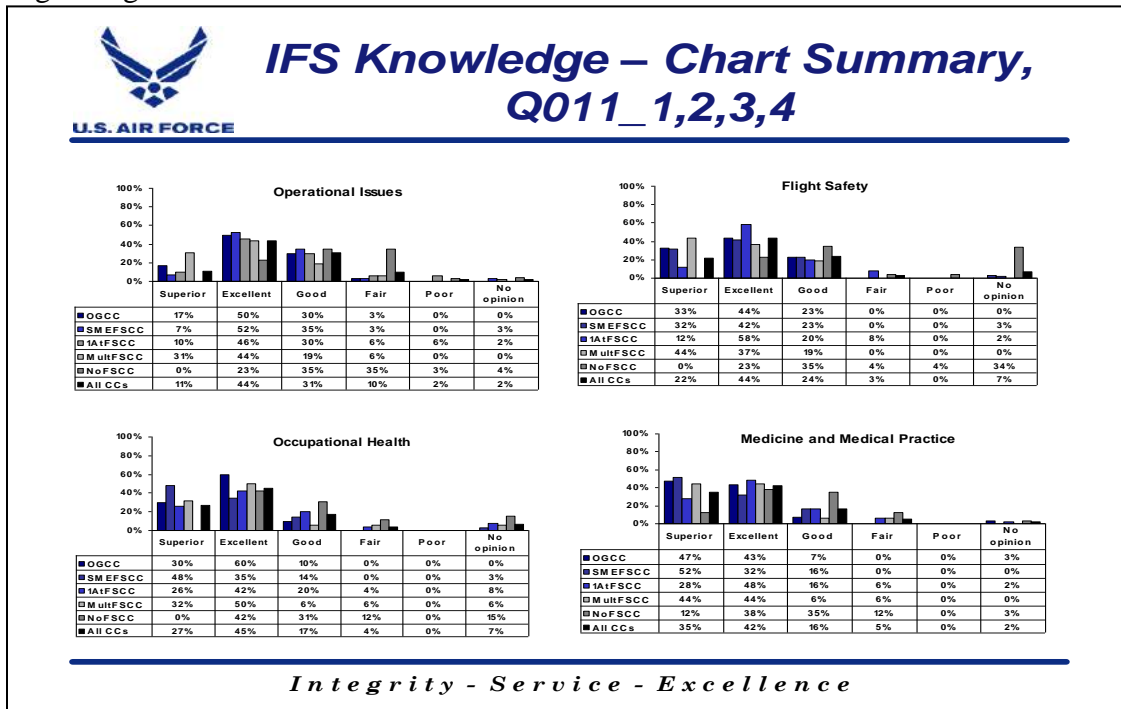


Credibility as physicians and clinicians was consistently rated highly, with 90% of respondents in all categories rating flight surgeons as good or better, and 23% rating physician effectiveness as superior. 91% felt that flight surgeon management of flying status determinations were appropriate (neither overly restrictive nor overly permissive). Only about 75% of respondents felt that the flight surgeon was the primary care-giver for families of aviators, though 90% of SME commanders responded in the affirmative to this question. Of

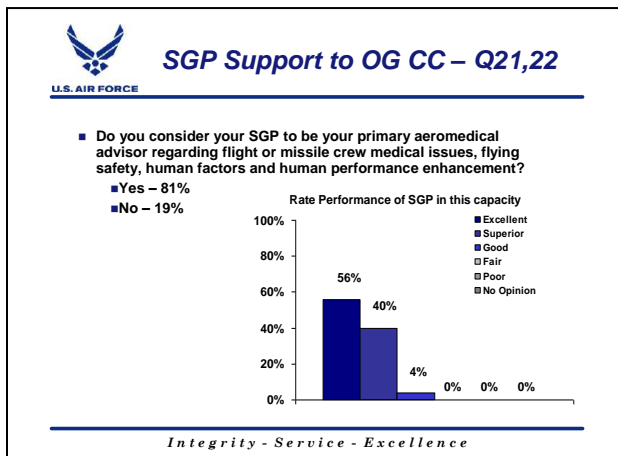
those over 90% were rated superior or excellent in the conduct of that care. Most of the units in which families did not receive care or within which the commander was unsure were those with no assigned or attached flight surgeon, or with multiple flight surgeons.

We evaluated training effectiveness in using several questions related to depth of knowledge and effectiveness of support. In most areas both operations group commanders and squadron commanders rated flight surgeons highly in both depth of knowledge and effectiveness. During the initial briefing of this material occupational health knowledge and knowledge of flight safety were found to potential problem areas. These were analyzed in depth and findings are somewhat different following the corrected statistical analysis.

In the area of Flight Safety knowledge, “no opinion” responses were erroneously originally included as “less than fair”. When parsed out, 90% of commanders found the flight surgeons knowledge in this area to be good or better, though about 20% still rated their flight surgeons knowledge as only “good”. A similar pattern was noted in the area of occupational health. When the data was re-analyzed we found that 90% of commanders rated knowledge good or better, and the majority of no-opinion or negative responses in all categories were attributable to commanders without attached or assigned flight surgeons.



The most troublesome area noted in the preliminary report was in Mishap and casualty response support. This was again related to the aggregation of “no-opinion” responses into the negative categories, though this category remains concerning. 71% of commanders rated mishap response and investigation satisfactory or greater. 6% were very dissatisfied, and of those all were attributable to operations group commanders and to commanders of units *with* attached flight surgeons. 87% of commanders did feel that flight surgeons contributed to their units overall safety. Further evaluation of these areas is warranted.



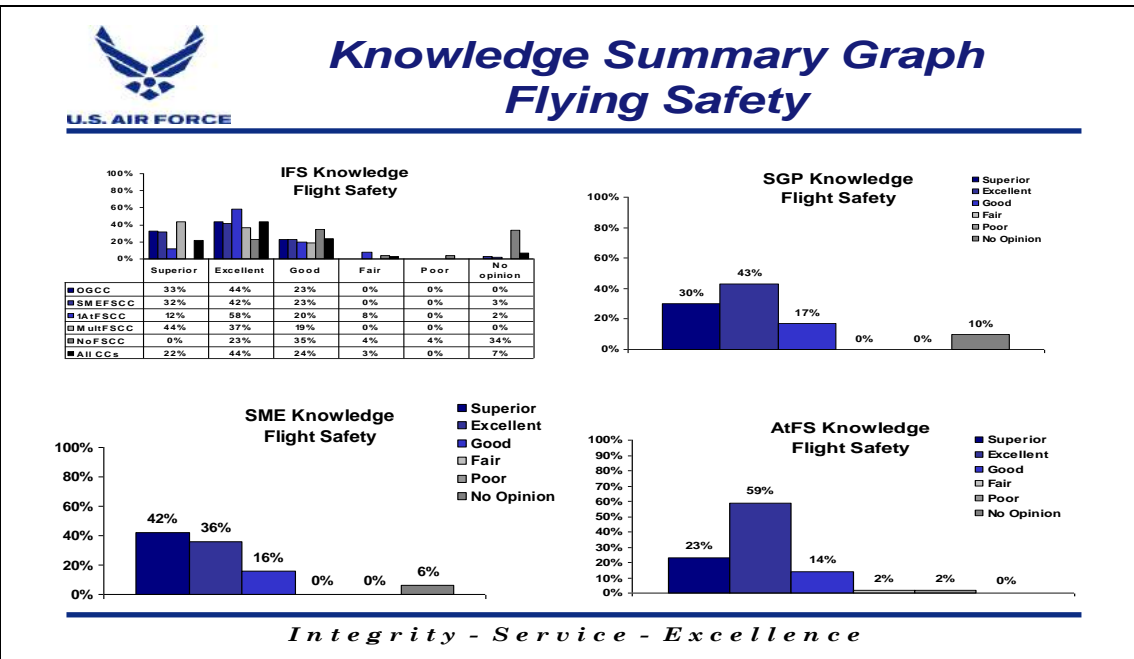
...ess of Chief of Aerospace Medicine as a
 ...commanders were favorable toward
 ...commanders identified the SGP as a
 ...96% rated the SGP as excellent or
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tended to rate the SGP very highly in their fund of knowledge in all areas including occupational health and flight safety.

Assigned squadron medical elements were rated by squadron commanders. As evaluated by the commander, SMEs were universally (97%) perceived as a personal medical advisor and 100% were rated as good or better in their performance in that capacity. Of note, though, 19% of commanders reported that their SME did not fly regularly and 10% did not participate in unit social events. 26% of commanders reported that their SME attended squadron safety briefings occasionally or never (6%).

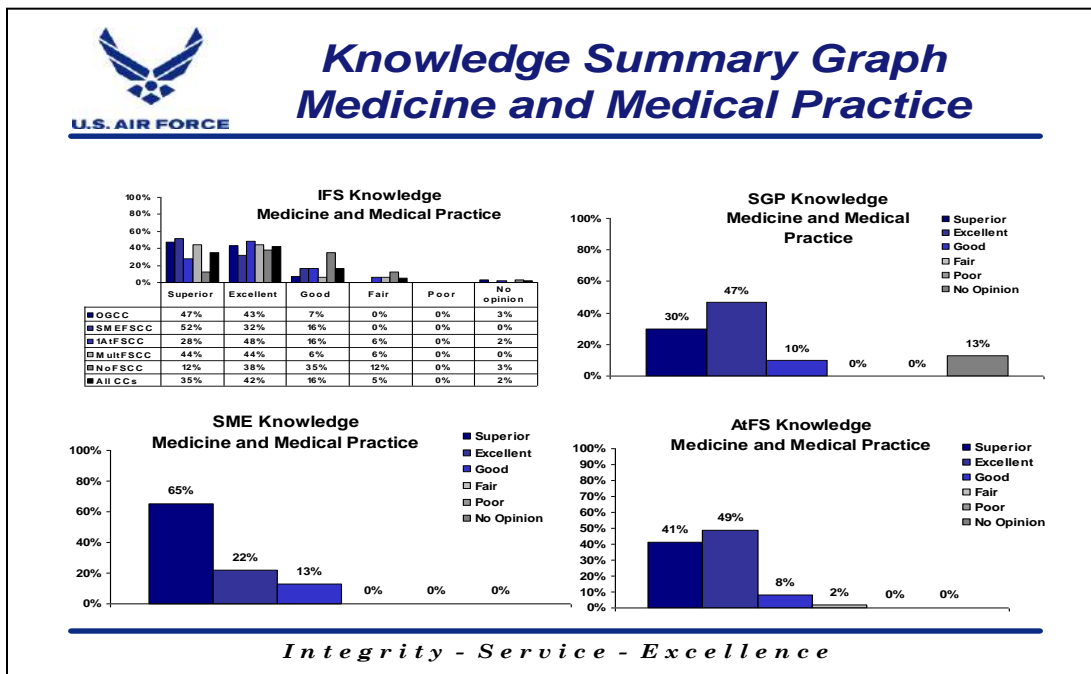
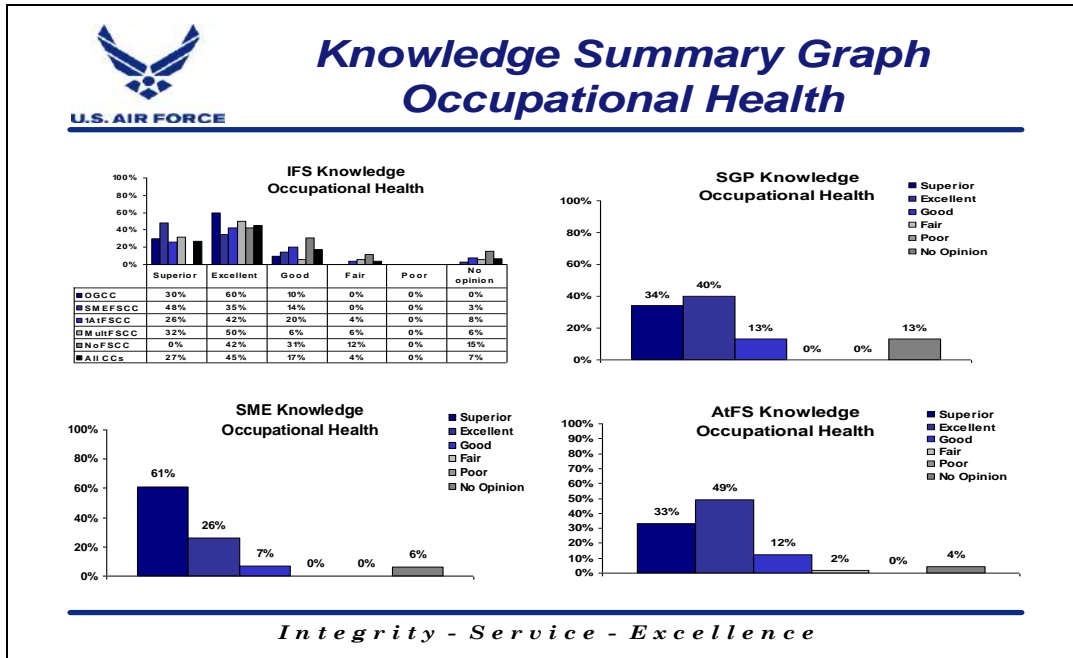
SME's fund of knowledge was generally rated highly and commanders of SME units were consistently more likely to rate their flight surgeon superior than were other commanders.

In squadrons with a single attached flight surgeon and with multiple attached flight surgeons commanders were generally very favorable in all areas. Of note, commanders of units with multiple attached flight surgeons were very favorable toward the flight



surgeon's impact on flight safety, with 44% describing them as superior.

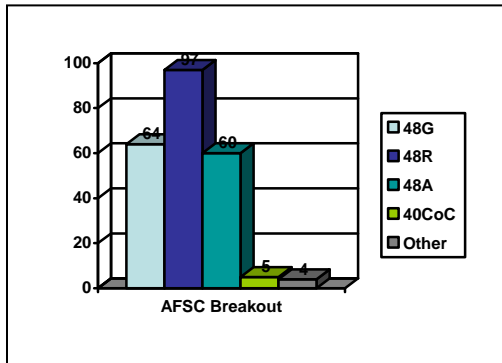
Thus, the survey of unit commanders seems to indicate a generally high level of satisfaction with flight surgeon support. Areas warranting continued vigilance include occupational health and mishap response, and flight surgeons must ensure they remain visible and participate fully in their flying unit activities. Specific comments are available with the complete report but exceed the scope of this summary.



The response to the Society survey of flight surgeons was excellent. 230 active flight surgeons responded to the electronic survey for a response rate of approximately nearly 50% of all active flight surgeons. The comparative survey of 2002 had only 60 respondents, so comparative data with that survey, due to its very low statistical significance may be considered somewhat suspect. However, the current survey should be considered to be highly representative of the active flight surgeon population. AFPC reported that at the time of this survey there were 93 RAM authorizations with 62 filled, 377 48R or G authorizations with 356 assigned, and 10 pilot/physician authorizations

with 6 filled for a total denominator of 424. Members of the ARC were not independently identified in this survey.

Among the current survey respondents were 60 RAMs, 5 Group Commanders and 161



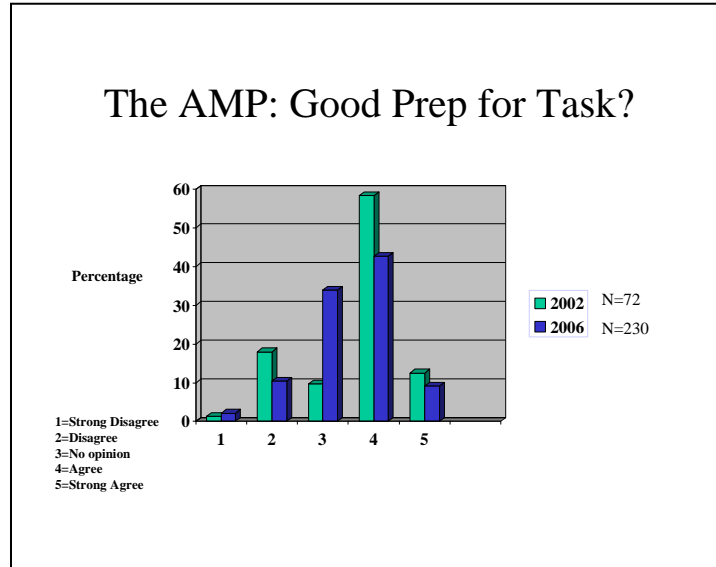
48G or 48R. 4 respondents were not categorized by AFSC, and some or all were felt to be pilot/physicians as we provided no AFSC identifier for this group. These categories were further identified by years of experience, specialty, and deployment experience. Survey respondents were not necessarily Society members, and there is not a method to identify which, if any, were.

The distribution of duties by years of experience since the AMP course predictably demonstrated the majority of young flight surgeons assigned in SME or MTF based duties. Of non-RAM flight surgeons less than 5 years from AMP training (n=88), 43% were performing SME duties. Additionally, 7% of this group was performing flight commander duties and 3.5% were squadron commanders. All flight and squadron commanders in the 0-5 year category had some prior residency training.

Of non-RAM flight surgeons 6-10 years from AMP course training (n=22), 13.6 % were performing headquarters staff duties, 4.5% were squadron commanders, 18% were flight commanders, and the rest were performing MTF, SME or “other” duties.

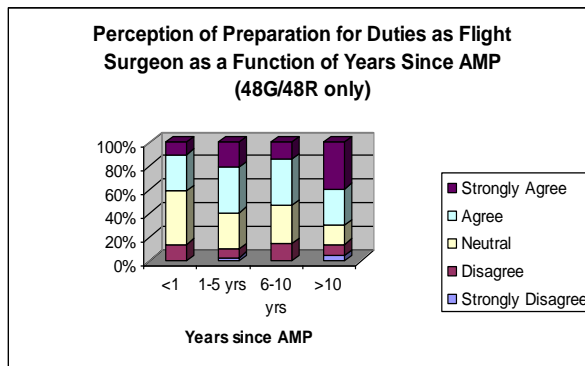
Among non-RAM flight surgeons who reported they were more than 10 years beyond AMP course training (n=42), 4% were performing headquarters staff duties, 7% were MTF commanders, 19% were squadron commanders, 12% were performing flight commander duties, 33% were performing MTF assigned flight surgeon duties, 16% were performing SME duties, and 24% categorized their jobs as “other”. All non-RAM flight surgeons beyond SME or MTF assigned duties reported as being residency trained. This finding is consistent with DoD policy that a physician must complete residency training after one General Medical Officer tour of duty.

Among RAMs less than 1 year post-training(n=10), 10% reported they were MTF flight surgeons, 30% were flight commanders, 10% were squadron commanders, 50% were categorized as other. This latter number may reflect the fact that the survey had no category specifically for MTF SGP. Of those 1-5 years post training (n=23), 4% reported they were SMEs, 22% were assigned to a MTF, 35% were flight commanders, and 26% were squadron commanders.



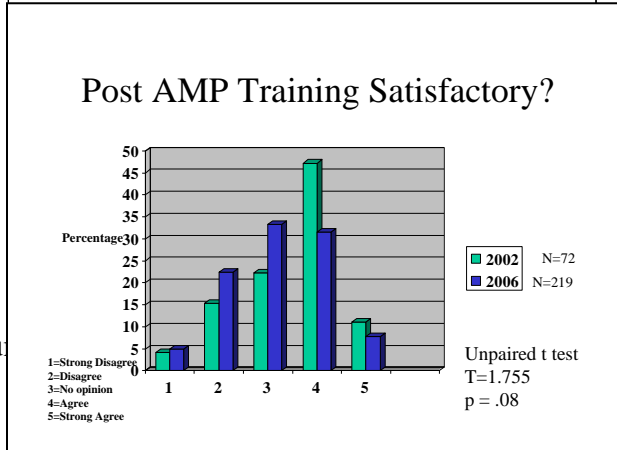
Of those 6-10 years beyond the RAM (n=13), 8% were MTF commanders, 38% were HQ staff, 23% were squadron commanders, and 31% were flight commanders. None were MTF or SME based flight surgeons. Finally, of RAMs more than 10 years after training 29% were HQ staff and 71% were squadron commanders.

We sought to evaluate the effectiveness of the AMP course through this survey and by comparing it to the former survey in 2002. Answers to the statement “the AMP course prepared me well for my duties as a flight surgeon” were graded on a five-point scale and correlated to answers given to the same statement in 2002. Although fewer respondents in the 2006 test responded as strongly agreeing, the difference was statistically insignificant (p=0.20) using an unpaired t-test. Comparing those who graduated the AMP before and those who graduate the AMP after the major overhaul of the course, similarly revealed no significant difference on unpaired t-test analysis of AMP graduates with less than 5 years experience (p=0.8).



In this survey, in response to the question “I am well prepared to do my job” and stratified by years since the AMP course, there seems to be a correlation with time since training and perception of adequacy of training. This could reflect experiential learning as well as that from primary training.

Expected Retention as a Function of Years Since AMP Completion



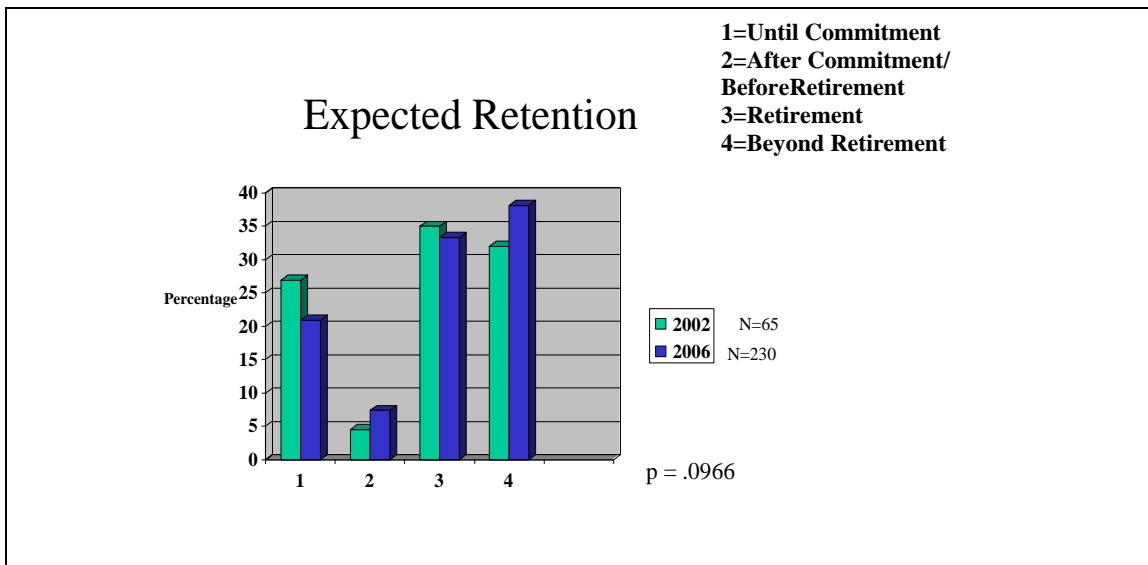
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When correlated to the 2001-2002 survey, proportionally fewer respondents agreed or strongly agreed in this survey. However, using an unpaired t-test the difference was found to be statistically insignificant ($p=.08$).

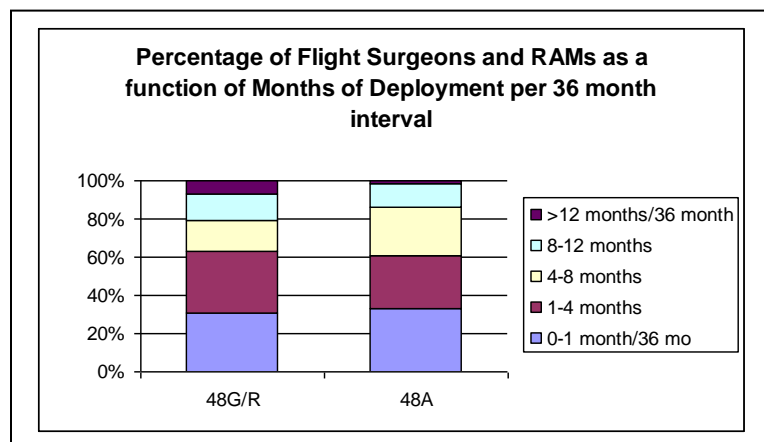
The period prior to this survey included major changes in post-AMP training – with the dissolution of the Operational Aeromedical Problems, creation of Team Aerospace Operational Solutions then skipping that, an aborted effort at active duty flight surgeon sustainment training, cancellation of the Aerospace Readiness and Management course altogether, and more. Thus, a correlation was attempted between the 2001-2 survey in flight surgeon sustainment training and the current survey. Again in the current survey over 20% fewer respondents rated post AMP sustainment training highly.

Retention and overall satisfaction of Flight Surgeons was addressed in several related questions. In this survey, 80% of recently graduated AMP students intend to remain on active duty for less than retirement, of which 40% expect to remain on active duty only until their commitment ends. However, among flight surgeons with 6-10 years since their AMP training, 80% intend to remain on active duty to retirement or beyond.

Additionally, we evaluated the difference in intended retention of the 2002 survey versus the 2006 survey. Again, we did not find statistical significance using an unpaired t-test ($p=.0966$) suggesting that the population of flight surgeons and RAMs and expected attrition is relatively stable and predictable.



We attempted to assess the impact of various factors on flight surgeon retention. One major goal for this study was to determine whether



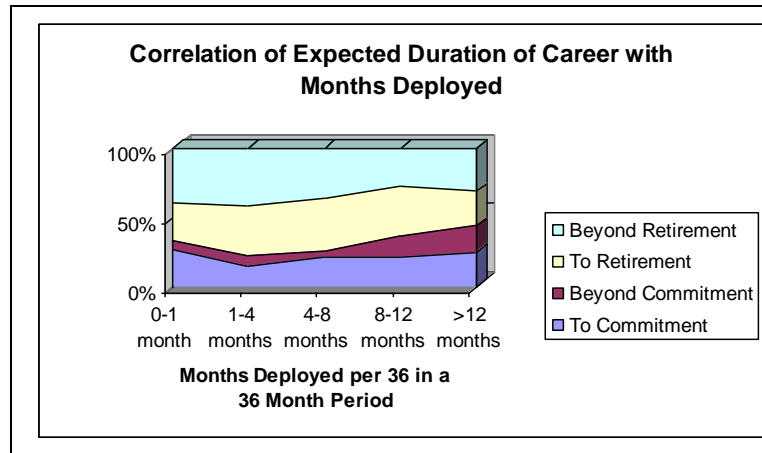
current high operations tempo could have a direct correlation to retention.

Deployment tempo was addressed in terms of months deployed per 36 month period. In this population, 75% of 48G/R flight surgeons had deployed greater than 4 months during the past 3 years, and 20% had deployed greater than 8 months (2 cycles) during that 3 year period. RAMs deployed at a similar rate, though slightly fewer (15%) deployed twice during the 36 month time period.

We correlated respondent’s expectations for career longevity with the number of months deployed with the hypothesis that there would be a correlation with greater months deployed and an expectation to leave the service sooner. In fact our data reflects no correlation to number of months deployed and expected duration of career service (p=0).

Simple Linear Regression - Ungrouped Data				
Parameter	Value	S.E.	T-STAT	Notes
Constant	2.896884			
Beta	0.006354	0.062990	0.100876	H0: beta = 0
Elasticity	0.005022	0.049779	-19.987918	H0: elast. = 1

We also assessed several other potential factors influencing individuals’ willingness or desire to remain in the Air Force. These factors included financial compensation, professional autonomy, confidence in leadership, input into the assignment process, time available to take leave, sense of duty, quality work



environment, family health benefits, lifestyle, frequency of PCS, frequency/length of deployments, unique challenges of aerospace medicine, and opportunity to fly. We used Wessa Free Statistics Software version 1.1.18 (www.wessa.net) in order to calculate a multiple linear regression formula. From this analysis, we found that the only statistically significant factors correlated to retention were a strongly positive (favorable to retention) correlation to a “sense of duty” (p=0), a positive correlation with the unique challenges of aerospace medicine (p=0.1) and a negative (tending toward separation) correlation with frequency of PCS (p=0.01).

Multiple Linear Regression - Ordinary Least Squares					
Variable	Parameter	S.E.	T-STAT H0: parameter = 0	2-tail p-value	1-tail p-value

Fincomp	0.034064	0.072803	0.467884	0.640508	0.320254
Autonomy	-0.01488	0.092185	-0.161414	0.871972	0.435986
Leadership	0.018649	0.088532	0.210644	0.833435	0.416717
Assignment	-0.093445	0.094123	-0.992796	0.322318	0.161159
Leave	0.096635	0.084276	1.146649	0.253249	0.126625
duty	0.552824	0.087333	6.330089	0	0
Environment	-0.053873	0.103657	-0.519727	0.603977	0.301988
Constant	0.711738	0.463506	1.535554	0.126635	0.063318

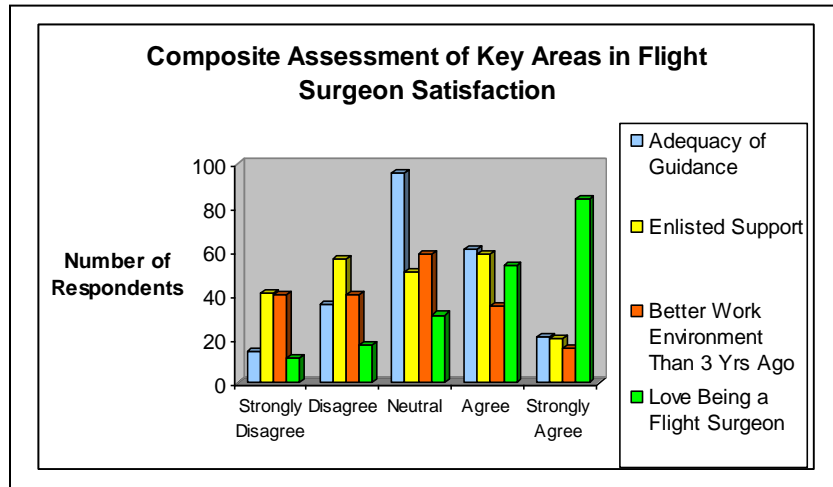
Multiple Linear Regression - Ordinary Least Squares					
Variable	Parameter	S.E.	T-STAT H0: parameter = 0	2-tail p-value	1-tail p-value
Healthbene	0.086697	0.098892	0.876689	0.382549	0.191274
Lifestyle	-0.062552	0.110881	-0.564137	0.573799	0.286899
Pcs	-0.187074	0.115633	-1.617821	0.108539	0.05427
Deployment	-0.048757	0.109063	-0.447049	0.655711	0.327856
Aeromed	0.349281	0.102537	3.406381	0.000918	0.000459
Flying	0.152261	0.09612	1.584062	0.116025	0.058012
Constant	1.76902	0.449117	3.938885	0.000143	7.2E-05

Multiple Linear Regression - Ordinary Least Squares					
Variable	Parameter	S.E.	T-STAT H0: parameter = 0	2-tail p-value	1-tail p-value
leave	0.080971	0.078384	1.033013	0.303109	0.151555
aeromed	0.142688	0.087261	1.635184	0.103917	0.051958
flying	0.047971	0.080386	0.596755	0.551489	0.275744
pcs	-0.161865	0.063556	-2.546813	0.011786	0.005893
duty	0.387301	0.096144	4.028336	8.6E-05	4.3E-05
assignments	-0.063086	0.076948	-0.81985	0.413484	0.206742
Constant	1.078358	0.473666	2.276619	0.024094	0.012047

However, of those participants planning to separate prior to retirement eligibility, personal and family reasons, dissatisfaction with work, and deployment operations tempo were the most common reasons for this choice. Further analysis is limited by participants choosing more than one reason to separate.

In assessing workplace satisfaction, we specifically inquired about a wide variety of factors essential for satisfaction in the workplace. The major barrier to fully successful practice was inadequate staffing in regards to training and sufficiency, followed by inadequate guidance and leadership support. The area of practice that respondents felt most difficult or uncomfortable to perform was administrative requirements. Opinions regarding guidance and enlisted staffing tended to be neutral to slightly negative. Among respondents with greater than one year since the AMP there was negative trend in overall

perception of workplace environment as compared to three years ago. However, the final aggregate question simply asked the respondents if they loved to be Air Force flight surgeons. An overwhelming majority of responses were strongly positive. We performed additional analyses using multiple linear regression modeling for these variables versus retention intent.



In the first model, we evaluated level self-confidence regarding training for patient care duties, operational support taskings, performance of command and leadership functions, and overall job performance. Additionally, we correlated plans to become a future medical leader in the Air Force as well as feelings towards having adequate tools and equipment to do the job. In this analysis, the only statistically significant correlation with planned retention was planning to become a medical leader in the Air Force.

Multiple Linear Regression - Ordinary Least Squares					
Variable	Parameter	S.E.	T-STAT H0: parameter = 0	2-tail p-value	1-tap-value
Patientduty[t]	-0.032894	0.087757	-0.374828	0.708184	0.354092
Operational[t]	0.131171	0.095528	1.373114	0.171247	0.085623
Commandleader[t]	0.084034	0.077734	1.081037	0.280976	0.140488
Afleader[t]	0.440426	0.056445	7.80268	0	0
Welltrained[t]	-0.082314	0.118106	-0.696952	0.486638	0.243319
Toolsequip[t]	-0.015724	0.07681	-0.204718	0.837999	0.419
Constant	1.069758	0.372737	2.87001	0.004544	0.002272

In the second, we evaluated job support versus planned retention. Factors included provision of adequate guidance, enlisted support, friendly working environment, and finally general job satisfaction. Of these variables, job satisfaction had the highest correlation to retention (p=0) with leadership support and encouragement positively correlated at a 94% confidence level. Finally, enlisted support was negatively correlated at a 92% confidence level.

Multiple Linear Regression - Ordinary Least Squares					
Variable	Parameter	S.E.	T-STAT H0: parameter = 0	2-tail p-value	1-tail p-value
Guidance[t]	0.062619	0.070454	0.888795	0.37522	0.18761
Enlistsupport[t]	-0.098454	0.056821	-1.732683	0.084749	0.042375
Leadersupport[t]	0.126516	0.067636	1.870545	0.062922	0.031461
Workplace3yrs[t]	0.040489	0.063975	0.632887	0.527556	0.263778
LoveFS[t]	0.432563	0.059832	7.229623	0	0
Constant	0.86932	0.26936	3.227358	0.001468	0.000734

Of the top three reasons compelling people to continue a career in aerospace medicine, flying and operational opportunities was the highest ranked at 30% of the total response. The next most popular reasons were deployment opportunities (15%) and future military opportunities (14%). The least ranked reason was that future civilian jobs are unattractive (2%).

The survey also included questions regarding flight surgeons' families in regards to their Air Force career. Participants rated being able to meet family healthcare, financial, legal needs at 4.2 out of 5, with 5 being "strongly agree." The average answer to a question asking about a spouse being able to maintain a satisfying career was 2.9 out of 5, with 3 being "neutral". Given this background, participants on average rated their family's support of their Air Force career as 3.8 with 4 being "agree".

Society specific questions included the relevance of AsMA to professional careers and the usefulness of various society products. 75% found AsMA to be beneficial and the most often used society products were the flight surgeon checklist, mishap guide and FlightLines.

Summary: This combination of surveys provides a valuable insight into the training, motivation, utilization and retention of flight surgeons. The perspective of the end-user of the flight surgeon's experience provides tremendous opportunity to tailor future training. This survey seems suggests that line leadership who have attached or assigned flight surgeons are, on the whole, quite satisfied with the performance of their flight surgeons. Commanders who do not have assigned or attached flight surgeons, as may be found in SpaceCom or similar operational units, were generally less positive toward installation flight surgeons. Across the board areas of concern remained occupational medicine, flight safety and mishap response as having somewhat less positive, and even a few negative, comments. These may be appropriate areas for school of aerospace medicine staff to research further using this data as a starting point. SMEs were generally very strongly valued as were the SGPs and all flight surgeons were felt to be knowledgeable in all key areas. Participation in unit safety activities, regular flying, and participation in squadron social events was generally good, but among some groups less frequent than expected.

These surveys tend to contradict a widely held notion that high operations tempo leads to poor retention. This survey finds that sense of duty was the top factor in retention, and

that ops tempo had no correlation to perceived career longevity. Also, from the flight surgeon's standpoint, AMP training seems to be as adequate now as it was in the past, though sustainment training seems less adequate.

From a career field management standpoint this survey is very useful in providing a clear reproducible model of expected attrition and utilization in terms of years after AMP and years after RAM. Further, this survey demonstrates statistically significant stability within aerospace medicine over a period of significant tumult, which should further assist in modeling future requirements for training and for establishing selection criteria based on anticipated demand.

Finally, this survey does indeed confirm that for the vast majority of respondents, the "love being a USAF Flight Surgeon".

The combined surveys of line leadership and of society membership provide a comprehensive and very powerful view into the success and potential areas for improvement in flight medicine training and lifestyle. As the member survey was accomplished one-year early in the three-year cycle previously established, this author suggests that these surveys be utilized to create an action list for aerospace medicine, and that the surveys be completed not more frequently than every 3 years. Future surveys should strive to use identical, if possible, questions and methodology to establish a long-term track record to monitor the impact of career field and training changes over time, and to assist in modeling the future of aerospace medicine.

I am grateful and humbled by the tremendous expertise, diligence and tenacity of Lt Col Brain Pinkston and Lt Col Dana Windhorst among several others who saw these two highly complex surveys through to completion and final product despite training requirements, SERE training, PCS and a myriad of distracters. They will be aerospace medicine leaders, and these surveys will be their first of many legacies.

These final reports are humbly submitted to the membership of this Society and to the Surgeon General of the Air Force for use in continuing to improve the lives and effectiveness of the USAF Flight Surgeon.

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President, Society of USAF Flight Surgeons
15 August 2006

2006 State of the Flight Surgeon Survey of Line Commanders

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Methods

This component of the SoUSAFFS “State of the Flight Surgeon” survey series utilized a number of resources to accomplish, then analyze, a survey of operational line leadership regarding its perceptions of the flight surgeons assigned to, or supporting, operational units. The purpose of the survey was to provide feedback to flight surgeons in the field regarding line perceptions of their performance, and to utilize it as a tool to further enhance current and future education and training emphasis areas. It was designed by a USAF physician resident in Aerospace Medicine, conducted online by the Air Force Survey Office, and sponsored by the USAF School of Aerospace Medicine. Analysis of the data was accomplished via a cooperative effort between the physician resident and the AF Survey Office.

The survey targeted commanders of operations groups and squadrons involved in active flying or missile/launch operations. Various reference materials, such as unit level Personnel Accounting System (PAS) files in conjunction with the Air Force Association Almanac, were used to construct a comprehensive list of Air Force units directly supporting major weapons systems. Once commanders were identified, individually addressed e-mails were sent via the Air Force e-mail exchange system. Each e-mail “invitation” contained a motivational message encouraging participation in the survey and a link to the web-based data collection system maintained by the Air Force Survey Office (AFMA/MAPP). Undelivered invitations were captured and corrected where possible.

Half way through the data collection period, as a measure intended to increase the survey response rate, an email was sent to the Chief of Aeromedical Services (SGP) at each base involved in the survey. Each email message sent to an SGP included a list of those commanders, at that particular SGP’s base, who had not yet responded to the survey. The message suggested, but did not require, the SGP to use his or her judgment in making tactful reminders to those commanders who had yet to respond. No tool was utilized to assess the effect, if any, of this intervention on the number of responses. The possibility that this intervention might in some way affect the quality of responses was considered. However, as the SGPs were not given advance notice that this survey was being fielded (and thus could not have prepped the respondents in any way), and as the email was sent with only a few days left in the data collection period, it was felt the likelihood of a significant qualitative effect on the responses was low. This was balanced against the potential positive effects of this intervention – that is, to maximize the survey response rate in order to increase statistical power in the face of relatively small numbers (for instance, there were only 58 identified operations group commanders on our mailing list).

These commanders were questioned regarding their perceptions of the abilities and capabilities of, and mission support by, their FSs. All items in the questionnaire are contained in Appendix A, numbered in sequence, q1 through q61. All commanders (CCs) were queried (Question Set 1 or QS1) regarding the performance of all their installation flight surgeons (IFS) as a group. The remainder of the questions concerned, for each respondent, a specific flight surgeon. The commanders were divided into five groups, each of which answered either one or two question sets as described. The five groups are defined:

1. OGCC

Operations group commanders. Each OGCC, in addition to answering QS1 (as did all commanders), answered QS2 regarding his/her installation SGP.

Squadron commanders (SqCC) made up the other four groups:

2. SMEFSCC

SqCCs with an assigned squadron medical element (SME). SMEFSCCs answered QS3 regarding the assigned flight surgeon (SMEFS).

3. 1AtFSCC

SqCCs with a solitary FS attached to the squadron. 1AtFSCCs answered QS4 regarding the attached flight surgeon (AtFS).

4. MultFSCC

SqCCs with more than one FS attached to the squadron. MultFSCCs were directed out of the survey following completion of QS1.

5. NoFSCC

SqCCs with no assigned or attached FSs. NoFSCCs were directed out of the survey following completion of QS1.

The descriptive statistics of how the commanders answered the questions, QS1-4, are shown graphically in Appendix B.

The last page of each question set contained a “Comments” text box encouraging “further comments, positive, negative or otherwise.” 75 of the 153 respondents made comments (Appendices C and D).

The administration period, or the data collection period, for the survey extended from 3 to 26 May 2006. Of the 246 commanders contacted by e-mail, 153 (63%) completed the survey. An additional 9 squadron commanders submitted partially completed surveys;

these were not included in the descriptive statistics or statistical analysis. Descriptive statistics to include frequencies and percentages were computed for each survey item.

Statistical analysis was performed (Appendix E). The null hypothesis was that the commander groups were not different from one another in terms of their responses to the questions. The qualitative responses to the questions were given numerical values with the most-favorable opinion on each question given a value of 1 and each less-favorable response given a whole number value sequentially greater than one. Therefore, in the statistical comparisons, the higher the mean score of a commander group on a given question the less favorable was that group's impression of the relevant performance of the flight surgeon(s). This is reflected in the group-mean distribution plots with the groups with the higher deflections having the least-favorable opinions.

Most of the qualitative questions had a "no opinion" response option; these responses were not given a qualitative value and therefore were not included in the statistical analysis, nor are they included in the group variance plots (line graphs included with the ANOVA analysis). However, these "no opinion" responses were included in the graphical representation of the descriptive statistics (Appendix B) for QS1, as the "no opinion" responses were, in some instances, worthy of comment or cause for concern.

One-way analysis of variance (ANOVA) was used to assess variance, on each question in QS1, among the five groups of commanders in their ratings of the IFSs as a group. The purpose of this analysis was to look for any differences among these groups of commanders in how they viewed their installation flight surgeons as a group in terms of knowledge, skills, delivery of aeromedical services, and support of the operational mission.

ANOVA was also used to compare the three commanders' groups that answered QS2, 3 and 4 (OGCCs, SMEFSCCs and 1AtFSCCs respectively), in their responses to a set of questions assessing the CCs' impressions of the fund of knowledge of the SGP, SME and solo AtFSs, respectively, in operational issues, flight safety, occupational health and medical knowledge/practice (Questions 29_1-4, 46_1-4 and 60_1-4, respectively). The purpose of this analysis was to assess for any differences in how these three commander groups view their "own" flight surgeon in these four specific knowledge areas.

Scheffe's test was used for individual pairwise analysis to determine significant differences between each pair combination of the five groups (for QS1) and of the three groups (for the "knowledge questions" in QS2, 3 and 4) on those questions where ANOVA showed group differences exceeding the 95% confidence level.

Two errors in the survey were corrected mid-stream. These corrections resulted in problems of their own. The survey was released at 1700 Central Time on 11 April. The corrections were made shortly after 0930 the next morning. It was hoped the number of respondents affected would be minimal. However, 43, or 28% of those who responded, logged on prior to the corrections being saved into the online survey.

The first was that the ratings scales of questions 14_1 and 14_2 (assessing the degree of preparedness for mishap response/investigation and for other casualty response) were reversed in comparison with the rest of the survey (poor ratings on the left, best on the right; the standard across the survey was the opposite). Concerned that this might result in some inadvertent unfavorable inputs, the decision was made to make a correction shortly after the problem was noted. However, the change was not accounted for when the results were tabulated, so those questions were tabulated as if the scale had been correct for the entire time. This resulted in a preliminary report that there was a surprisingly high number of line commanders dissatisfied with the preparedness of their IFSs to respond to mishaps and other casualties. This report was erroneous (see Results).

The other error corrected after on-line survey release was the inadvertent absence of “Tanker” and “Airborne Command and Control” as weapons platform options for the OGCCs (Q19). This was corrected at approximately 16 hours after the survey went live online. Aside from possibly increasing the number of OGCCs who answered “Other” as a weapons platform, it is hoped this had a negligible effect on the survey results. However, the descriptive statistics for this question, and the corresponding question for the SqCCs (Q33), are not available for this report. An error was discovered in the raw spreadsheet as this report was being finalized, so the Survey Office is again looking into verifying the collected data.

Results

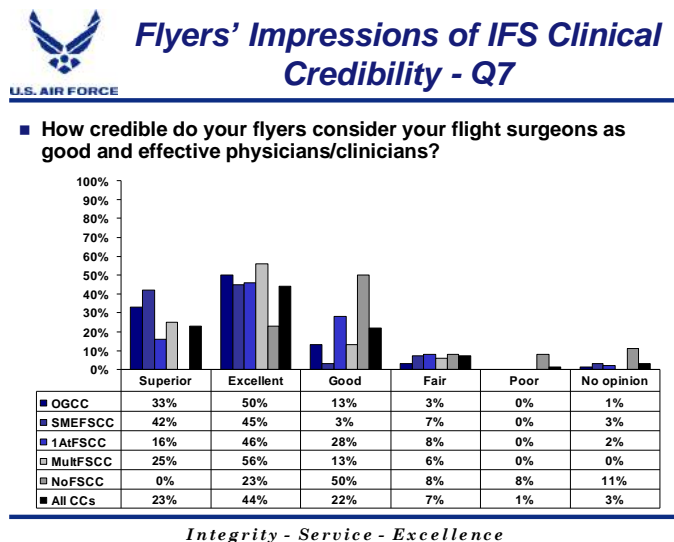
Of 58 OGCCs, 30 (53%) returned surveys, for a confidence interval (CI) of 90% (a 95% CI required one additional completed survey). Of 188 flying or missile operations SqCCs, 123 (65%) returned completed surveys, for a 95% CI. Of those, 31 (25% of those with completed responses) reported having an SMEFS assigned, 50 (41%) had one AtFS, 16 (13%) had multiple attached flight surgeons, and 26 (21%) had no SMEFS or AtFS.

1. Installation Flight Surgeons (IFS). Questions 3 – 15. (Appendix A).

All CCs evaluated, via QS1, performance of all flight surgeons, as a group, assigned to their installations.

IFS – Credibility:

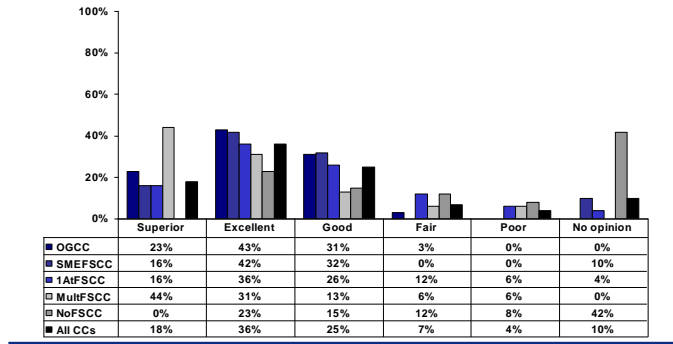
All CCs were queried regarding perceptions of credibility, as physicians and clinicians, of their



IFSs as a group (Q7). 67% rated them as excellent or better, and 23% rated them as a group of superior clinicians. 22% rated them as good, 7% as fair, and 1% as poor. 3% had no opinion.

 **IFS Credibility as Aircrew - Q8**
U.S. AIR FORCE

■ Please rate your flight surgeons in terms of level of respect accorded them as aircrew.



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poor. 11% (three respondents) had no opinion. This group of CCs was the only one to give any “poor” ratings on this question, and the only one to give no “superior” ratings.

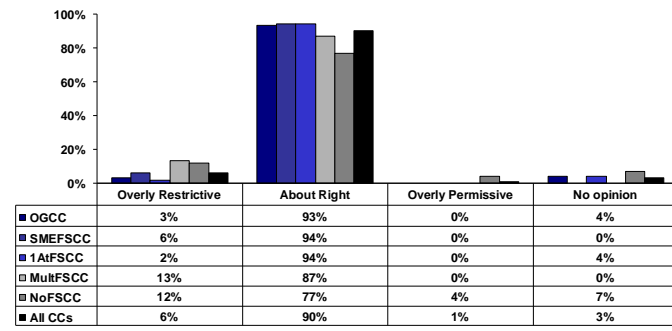
54% of responding CCs felt their rated personnel respected their IFSs as aircrew at a level of excellent or better, with 18% rating this as superior (Q8). 25% responded with a rating of good, 7% fair, and 4% poor. 10% had no opinion.

ANOVA for Q8 was marginally significant with $p < 0.05$ and a variance of 9%. No Scheffe’s test pairwise comparisons met 95% confidence level criteria. The bar graph and variance of means plot of this question, however, suggests the variance is probably partly due to a less-favorable view, overall, by the NoFSCC group. None of the commanders in the NoFSCC group rated their IFSs as superior on this question, in contrast to the other groups. 20% rated this respect-as-aircrew-by-aircrew as fair to poor and, remarkably, 42% had no opinion on the matter. Of interest, 44% of the MultFSCC group rated this respect for IFSs as superior, more than twice the average of the CCs as a group (only 16% of the SMEFSCCs and 16% of the 1AtCCs rated this respect for IFSs as superior). Also worth noting is that just one (3%) of OGCCs rated this aspect of respect for the IFSs as fair to poor, and none of the SMEFSCCs did.

ANOVA for Q7 showed a significant difference in responses to this question among CC groups ($p < 0.001$ with 21% variance), with a less-favorable view by the NoFSCC group accounting for the greatest portion of the variance. 23% of the NoFSCC group rated the IFSs as excellent, 50% as good, 8% as fair and 8%

 **IFS Determination of Flying Status - Q9**
U.S. AIR FORCE

■ How 'easy' or 'tough' are your flight surgeons when determining flying status, DNIF or RTFS, when you balance flying safety, the manpower needs of mission completion, and good medical care?

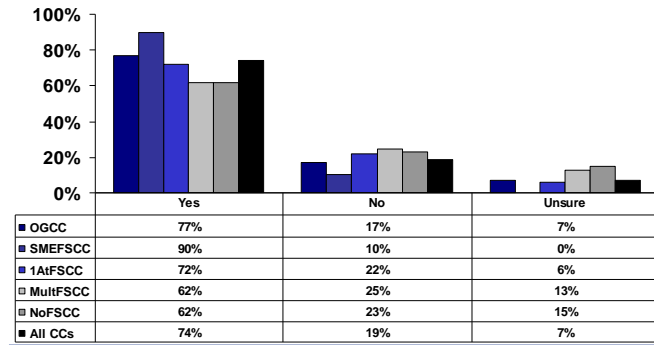


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IFSs were rated very highly in their management of flying status (Q9). 90% of all CCs felt IFS flying status determinations, including the ability of the FSs to balance concerns for flying safety, the manpower needs of mission completion, and good medical care in the process of making those determinations, were “about right” (neither overly restrictive nor overly permissive). Only one CC of 153 felt the IFSs were overly permissive. 6% of all CCs felt the flying status determinations were overly-restrictive, and 3% had no opinion. ANOVA of responses for Q9 showed no significant variance among the CC groups.

IFS Medical Care of Flyers' Families - Q12

Do the families of flyers receive their basic medical care primarily at Flight Medicine?



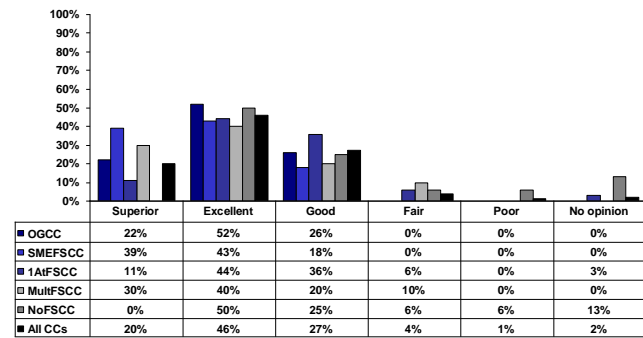
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Only 74% of all CC respondents felt the IFSs were the primary care-givers for families of their flyers (Q12). 19% felt the families did not receive their basic medical care primarily at Flight Medicine. 7% were unsure. ANOVA for Q12 showed no significant variance among the groups.

Only those CCs answering “yes” to Q12 were presented with the question of quality of care the flyers’ families receive from the IFSs (Q13). Those answering “no” and “unsure” were routed past Q13 to Q14 to isolate the quality of care ratings to the IFSs as opposed to other MTF providers.

IFS Medical Care of Flyers' Families - Q13

How well do your flight surgeons meet the families’ health care needs?



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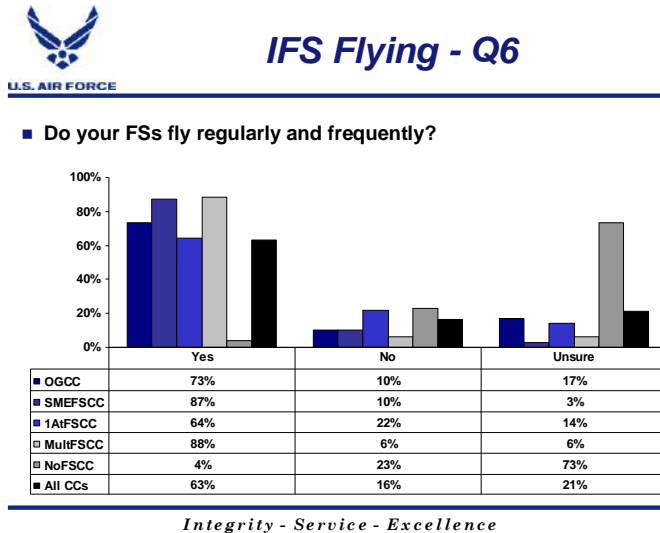
Only 66% felt the quality of care the IFSs provided to the flyers’ families was excellent or better (Q13), with 20% overall rating this as superior. 27% felt the effort was good, 5% fair to poor, and 2% had no opinion.

ANOVA for Q13 was significant at $p < 0.001$ with a variance of 17%. Pairwise comparisons with Scheffe’s test showed a slightly less favorable view by NoFSCCs (not one NoFSCC gave a

“superior” rating) when paired against OGCCs and SMEFSCCs. This likely accounts for the majority of the identifiable variance. The bar graph and group variance plot for this question reflect this difference.

IFS – Flying:

63% of all CCs reported that their IFSs were flying regularly and frequently (Q6); 16% felt they were not and 21% were unsure.



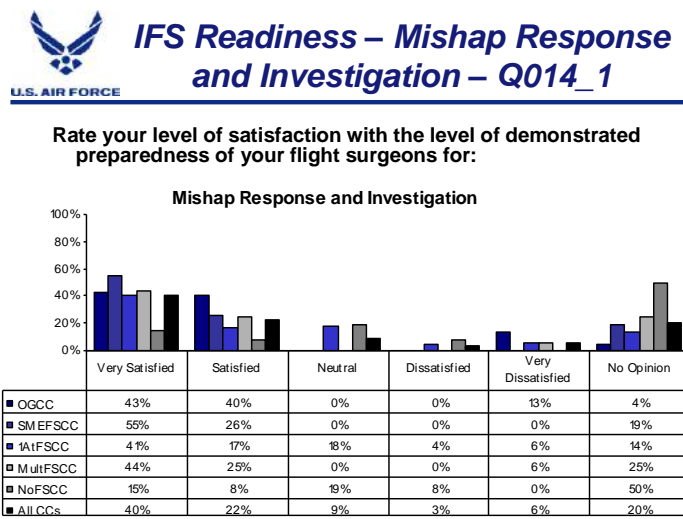
ANOVA for Q6 showed significant variance among the CC groups ($p < 0.0001$ with 20% variance). The largest part of the accountable variance was due to the NoFSCCs whose responses were markedly different from the other CC groups. Only 4% of the NoFSCCs reported their impressions that the installation flight surgeons, as a group, were flying regularly and frequently (with any flying unit). The estimates of IFS

flying frequency ranged from a low of 63% to a high of 88% among the other CC groups.

IFS – Readiness:

All CCs were asked to rate their level of satisfaction with level of demonstrated preparedness of their IFSs for mishap response and investigation (Q14_1), as well as for response to other types of casualties (Q14_2). As discussed in the “Methods” section, due to an edit to the online survey a few hours after its release, the initial data analysis for these two questions was inaccurate, suggesting substantial dissatisfaction among many of the CCs.

The data was re-analyzed. Each survey response had been tagged with a time stamp at the time the respondent logged onto the survey site. Manually

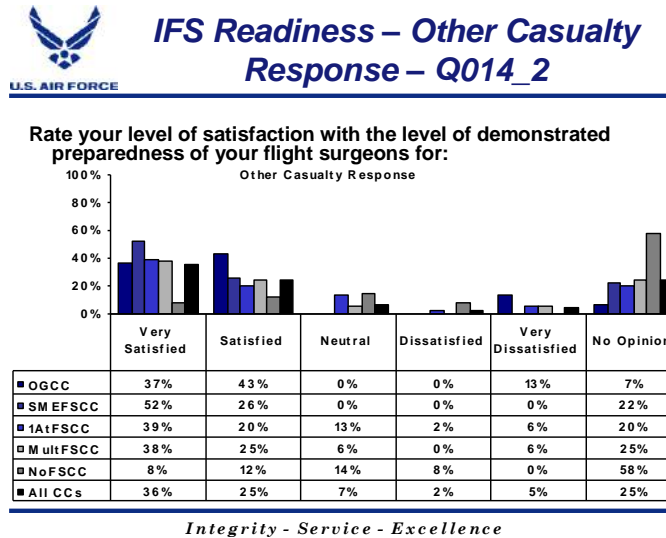


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examining the data and comparing the time stamps with the individual responses ensured that most of the data accurately reflects how the survey participants responded. This process showed that 100% of the “dissatisfied” and “very dissatisfied” ratings that were initially reported were from respondents who had logged on prior to the change. Those ratings actually represented “neutral” and “satisfied” ratings, respectively. The charts in Appendix B (and reproduced here) for these questions reflect only a partial correction of the data – these charts still have a few “dissatisfied” and “very dissatisfied” responses. The Survey Office is working to resolve this.

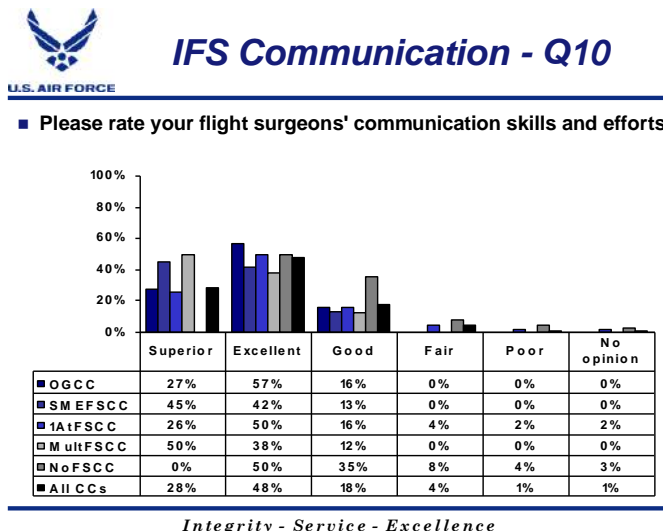
Due to the tabulation error, responses to questions 14_1 and 14_2 were not included in the statistical analysis.

However, as nearly all the tabulation error is accounted for, some conclusions can be drawn. First, the concern raised by the preliminary report, that there might be marked dissatisfaction regarding these readiness areas among a substantial number of line commanders, is unfounded. Most of the responses were “very satisfied,” “satisfied” or “no opinion.” The “no opinion” block was, as in many of the questions in this survey, dominated by the NoFSCCs.



IFS – Communication Skills and Efforts:

76% of responding CCs rated the communication skills and efforts of their IFSs as excellent or better (Q10). This broke down to: 28% superior, 48% excellent, 18% good, 4% fair, 1% poor; 1% had no opinion.



ANOVA for Q10 was significant, $p < 0.0001$ with 15% variance. As with Q6, the only notable paired comparisons were those involving the NoFSCCs. This group showed significant variance from each of the four other groups, with the NoFSCCs having a less-favorable opinion. None of the NoFSCCs rated the IFSs' communication skills as

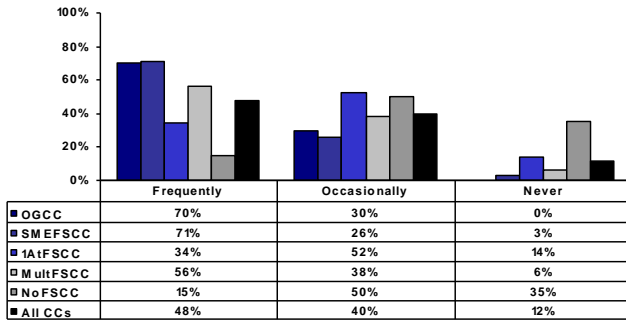
Superior, while 26 to 50% of the other four CC groups did.

IFS – Briefings:

Responding CCs were asked how often their IFSs speak to their personnel at safety briefings, Commanders Calls and other appropriate venues (Q3). 88% of all CCs

 **Line Support from Installation Flight Surgeons (IFS): Briefings - Q3**

■ Do your flight surgeons speak to your personnel at safety briefings, Commanders Calls and other appropriate venues?



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responded with “frequently” or “occasionally.” 100% of OGCCs and 97% of SMEFSCCs reported the same, with nearly ¾ reporting that the IFSs brief frequently. 40% overall said their IFSs brief only occasionally.

ANOVA for Q3 was significant at $p < 0.0001$ with 26% variance. Pairwise comparisons with Scheffe’s test showed the responses of 1AtFSCCs and NoFSCCs to be significantly different

from the others and not significantly different from each other. 50% of NoFSCCs and 52% of 1AtFSCCs felt the IFSs briefed only occasionally. 35% of NoFSCCs never see an IFS give a briefing

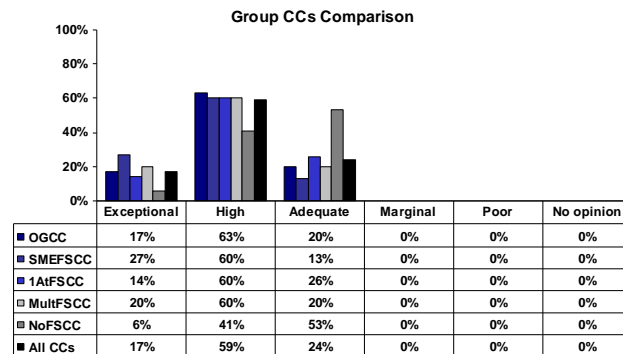
Those CCs who said their IFSs briefed at least occasionally (those who said “never” were routed to Q6), were asked their opinions of the quality of those briefings (Q5).

17% of OGCCs felt the quality of these briefings was exceptional, 59% rated the quality as high and 24% as adequate. No CCs rated the briefings as marginal, poor or expressed no opinion.



Quality of IFS Briefings - Q5

■ Please rate the overall quality of these briefings



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ANOVA was marginally significant at $p < 0.05$ with 8% variance. Scheffe’s test showed pairwise comparison differences only between NoFSCCs responses and those of SMEFSCCs. 80% of SMEFSCCs rated the quality of these briefings as “high” or “exceptional,” while only 47% of NoFSCCs did (the

remainder, 53%, responding with “adequate”).

93% of the CCs who said their IFSs briefed at least occasionally felt the briefings had a “positive” or “strongly positive” impact on their operational missions (Q4). Responses were fairly uniform across the CC groups. ANOVA was not significant to the 95% level for differences among the groups, although the variance of means plot suggests a slightly less-favorable view from the NoFSCCs (only 6% of this group rated the impact of these briefings as strongly positive).

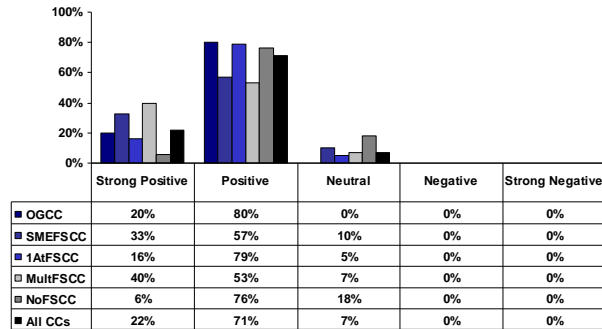
IFS – Other Impact on Mission:

All CCs rated overall impact of their IFSs on flying safety (Q15_1). The response was positive, with 67% rating this as excellent or better. 25% said the impact was “good,” 4% fair and 1% (a single response from a 1AtFSCC) poor. The OGCCs put in a strongly positive rating, 90% rating the overall impact of their IFSs on flying safety as excellent or superior.

ANOVA was significant at the $p < 0.0001$ level with 18% variance. Pairwise comparisons showed NoFSCCs with a less favorable opinion, differing from all groups except 1AtFSCCs. There were no “superior” ratings from the NoFSCC group on this question, and fully 42% expressed no opinion. Although the 1AtFSCC group did not differ from the other groups in the Scheffe’s pairwise comparison test, the variance of means plot shows a trend toward a slightly less favorable view. Only 10% felt the IFS impact on flying safety was superior, while 35%, 25% and 20% of the SMEFSCCs, OGCCs and MultFSCCs did, respectively.

U.S. AIR FORCE Impact of IFS Briefings on Mission - Q4

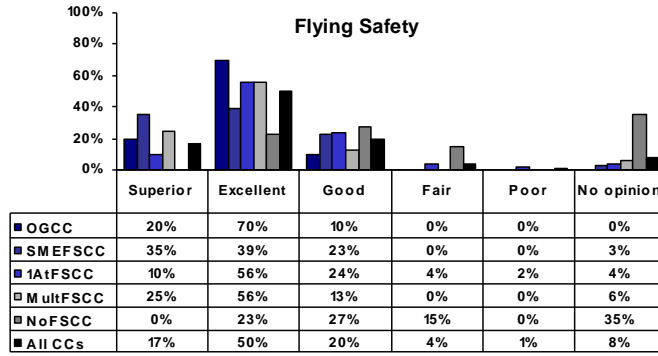
■ Please rate the impact of these briefings on your mission.



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U.S. AIR FORCE IFS Impact on Flying Safety - Q015_1

■ Provide your overall rating of your flight surgeons' impact on :

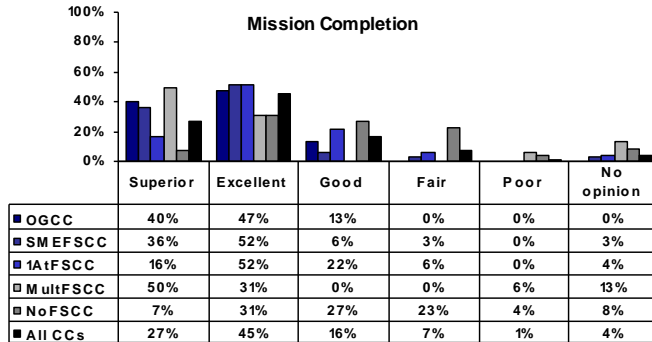


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IFS Impact on Mission Completion - Q015_2

U.S. AIR FORCE

■ Provide your overall rating of your flight surgeons' impact on :



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Ratings by all CCs of the overall impact of IFSs on mission completion (15_2) were strongly positive with 45% rating this as “excellent” and 27% as superior. However, 27% of the NoFSCCs felt this impact was “fair” to “poor.”

ANOVA was significant at $p < 0.0001$ with 19% variance. Pairwise comparisons and the variance of means plot were very similar to those of Q15_1, with the NoFSCC

group differing from all except the 1AtFSCCs. Again, these differences were most obvious in the “superior” category. MultFSCCs, OGCCs and SMEFSCCs rated the IFS impact on mission completion strongly in the “superior” range, in contrast to the NoFSCCs and 1AtCCs. Fully 23% of the NoFSCCs felt this contribution was only “fair.”

2. Chief of Aeromedical Services (SGP). Questions Q21 – 28, Q30 and 31 (Appendix A).

Ratings of the base-level SGPs were obtained from the responding OGCCs.

SGP – Advisory Support to the OGCC:

OGCCs were asked, “Do you consider your SGP to be your primary aeromedical advisor regarding flight or missile crew medical issues, flying safety, human factors and human performance enhancement?” 81% said they did; 19% indicated they did not. Of those who did (the others were routed past this item), 96% rated their SGP’s performance in this capacity as excellent to superior, with just 4% rating it as good.

SGP – Meeting Attendance:

Only 29% of OGCCs reported that their SGPs frequently attend “any” operations group meetings and 39% reported occasional SGP attendance. 58% reported frequent SGP attendance at Wing Standup and 29% reported occasional attendance. They indicated their impression that 13% of SGPs never attend Wing Standup and fully 32% never see the SGP at their OG meetings.

SGP – As Aeromedical Consultant and Advisor to Wing Leadership:

The OGCCs were asked to assess the services the SGP provides to the line as an advisor or consultant on aeromedical issues. They rated the SGP in three components of this role. The responses showed little variance across the items. The first of these represented a first, line-side look at how the SGPs are doing with gap analysis. The OGCCs' ratings are in percentages and are in this order: Superior, Excellent, Good, Fair, Poor and No Opinion

- A. Please rate the performance of your Chief of Aeromedical Services in identifying gaps in the capabilities of the human weapons system in your wing, and making recommendations, or implementing plans, to close those gaps.
23, 36, 19, 6, 0, 16
- B. Please rate the performance of your Chief of Aeromedical Services as a consultant to commanders and supervisors regarding aeromedical problems related to aircraft or life support equipment, mission plans, and human performance enhancement.
29, 42, 16, 0, 0, 13
- C. Please rate your Chief of Aeromedical Services' advice to you and your wing leadership regarding medical, environmental and operational factors that influence war fighter effectiveness and mission completion.
23, 39, 19, 6, 0, 13

SGP – As a Leader:

80% of responding OGCCs felt their SGPs were very well-prepared, at the excellent to superior level, to lead the other flight surgeons at their installations. 7% rated this at good to fair and 13% had no opinion.

3. Squadron Medical Element Flight Surgeon (SMEFS). Questions Q36 – 46, Q47-50 (Appendix A).

SME – Advisory Support to the SqCC and Squadron:

SMEFSCCs were asked, “Do you consider your SME flight surgeon to be your primary aeromedical advisor regarding flight crew medical issues, flying safety, human factors and human performance enhancement?” Fully 97% said they did; only 3% (one SMEFSCC) indicated they did not. Of those who did, 83% rated their SMEFSs' performance in this capacity as excellent to superior, with 17% rating it as good.

In addition, this question was asked, “Please rate your SME flight surgeon's advice to you and your squadron leadership regarding medical, environmental and operational factors that influence war fighter effectiveness and mission completion.” 71% rated this advice as excellent or superior, 16% good, 3% fair and 10% had no opinion.

65% frequently advise the squadron personnel at Commanders Calls and flight safety meetings with briefings on aeromedical, flight safety or general safety topics. 29% do so occasionally and only 6% have yet to do so.

SME – Meeting Attendance:

87% of SMEFSCCs reported that their SMEFSs attended their squadron Commander's Calls frequently, 10% occasionally and 3% never. 74% of SMEFSs attend squadron safety briefings frequently, 23% occasionally and 3% never.

SME – Leadership and Supervision

45% of SMEFSCCs rated as superior their SMEFSs' performance in providing and arranging medical training for the SME medical personnel; 29% rated this as excellent and 10% good. 16% had no opinion. 74% felt their SMEFSs' overall supervision of their SME personnel was excellent or better, with 45% rating this as superior. 16% felt it was good, 6% fair, and 4% had no opinion.

SME – Flying:

81% of SMEFSCCs reported their SME to be flying regularly and frequently with their squadrons, 19% indicating this was not the case. However, other response options that might have explained some of the 19% were not offered (i.e., flying N/A to this squadron, or SMEFS flying regularly but not with own squadron).

SME – Social Activity Involvement:

68% of SMEFSCCs reported their SMEFSs were frequently involved in squadron social activities, 22% indicated occasional involvement, and 10% (3 of the 31 reporting) said their SMEFS never attended such functions.

SME – Deployment Support:

87% of SMEFSCCs indicated their SMEFS had deployed with the squadron, while 10% reported the SMEFS had not. The question was noted as not applicable in 3% (this would be just one person in this sample size).

Performance in deployed locations was assessed by having the SMEFSCCs rate the performance of their SMEFSs in four areas. 100% of these ratings were good or better.

- A. Arranging and ensuring medical support for the squadron. 66% indicated superior performance, 30% excellent and 4% good.
- B. Utilizing medical intelligence resources to keep squadron aware of medical threats. 62% superior, 30% excellent and 8% good.
- C. Ensuring proper deployment sanitation, including billeting, food and water assessment. 67% superior, 26% excellent, 7 good.

- D. Readiness for mishaps and disasters. 59% superior, 30% excellent and 11% good.

The SMEFSCCs were asked how well-prepared the SMEFS were to lead the squadron medical element in-garrison versus in the deployed environment. There were no significant differences, with 90% rating that level of preparedness for both situations as excellent or superior, or not applicable. 52% rated the level of preparedness to lead in-garrison as superior, 32% excellent, 10% good, and not applicable in 6%. The corresponding ratings for preparedness to lead in the deployed location were 58%, 22%, 10% and 10%.

4. Attached Flight Surgeon (AtFS). Questions Q52 – 59, Q56 (Appendix A).

AtFS – Advisory Support to the SqCC and Squadron:

Nearly all, 96%, of the 1AtFSCCs consider their AtFS to be their personal aeromedical advisor (the same question that was put to the SMEFSCCs and the OGCCs). 4% did not. Of those who did, 87% rated their AtFSs' performance in this capacity as excellent to superior, with 13% rating it as good. These ratings were very similar to those of the SMEFSs.

Aeromedical advice to the squadron leadership (the same question as was asked the SMEFSCCs) was felt to be excellent or superior by 76%, good by 20%, fair by 2% and 2% had no opinion. Again, this was nearly the same as (just slightly higher than) the ratings of the advice given by the SMEFSs.

37% frequently advise the squadron personnel at Commanders Calls and flight safety meetings with briefings on aeromedical, flight safety or general safety topics. 51% do so occasionally and 12% have yet to do so.

AtFS – Meeting Attendance:

Only 37% of 1AtFSCCs reported that their AtFSs attended their squadron Commander's Calls frequently. 55% reported occasional attendance and 8% never see their AtFS at their Commanders Calls. 45% of AtFSs attend squadron safety briefings frequently, 45% occasionally and 10% never. Again, the AtFSs appear to be somewhat less involved with these functions than the assigned SMEFSs.

AtFS – Flying:

61% of 1AtFSCCs reported their AtFS to be flying regularly and frequently with their squadrons, and 29% said "no." However, this question was slightly different than the corresponding one for the SMEFSs and IFSSs, as other choices were given to account for those who do not fly regularly with the squadron to which they are attached. Still, an option for "flying regularly but not with this squadron" would have improved the design

of the question. 8% said “no, the FS is not on flying status,” and 2% felt the question was not applicable to the situation.

AtFS – Social Activity Involvement:

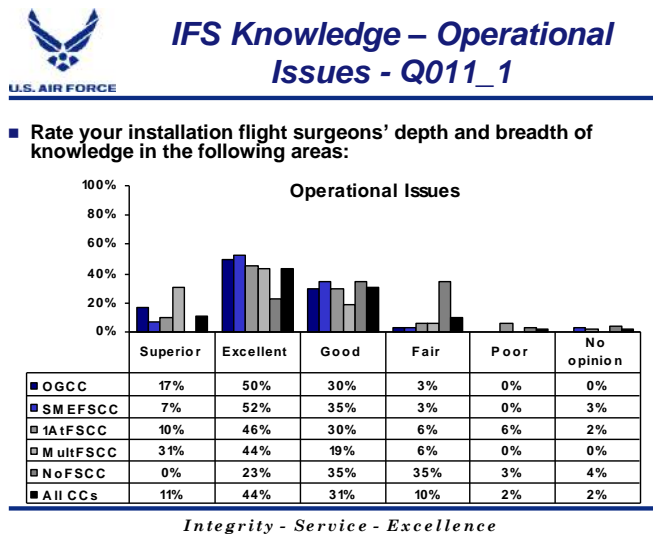
As expected, involvement of the AtFSs in squadron social activities was slightly less than for the SMEFSs. The percentage of 1AtFSCCs reporting that their AtFS never participates was 16% (8 of the 49 reporting), similar to the SMEFSs (10%). 39% reported frequent participation, 45% occasional.

5. Flight Surgeon Knowledge. Questions Q11 (IFS), Q29 (SGP), Q42 (SMEFS) and Q55 (AtFS) (Appendix A).

Respondents were asked their opinions of their flight surgeons’ mastery of four areas of depth and breadth of knowledge: operational issues, flight safety issues, occupational health, and medicine and medical practice. They rated their impressions on a scale of Superior, Excellent, Good, Fair, Poor or No Opinion. All CCs were presented in QS1 with these questions regarding their IFSs as a group. Identical questions regarding the SGP, SMEFS and AtFS were then asked of the OGCCs, SMEFSCCs and the 1AtFSCCs, respectively, in QS2, 3 and 4. Commanders’ ratings were uniformly favorable across all four knowledge areas, for all four groups of flight surgeons. The full data is in graphic and table form in Appendix B.

All CCs rated knowledge by the IFSs of the operational mission (Q11_1). 55% rated this as excellent or better, 35% good and 12% fair to poor, with 2% having no opinion. 31% of MultFSCCs rated the IFSs’ operational knowledge as superior; only 7% of the SMEFSCCs did.

ANOVA of Q11_1 was significant at $p < 0.0001$ with 15% variance. Pairwise comparisons showed the NoFSCCs rating the IFSs less favorably than each of the other CC groups, with no differences between the other groups. The variance of means plot suggested the MultFSCCs had the best overall opinion, followed by the OGCCs and SMEFSCCs (not statistically significant).

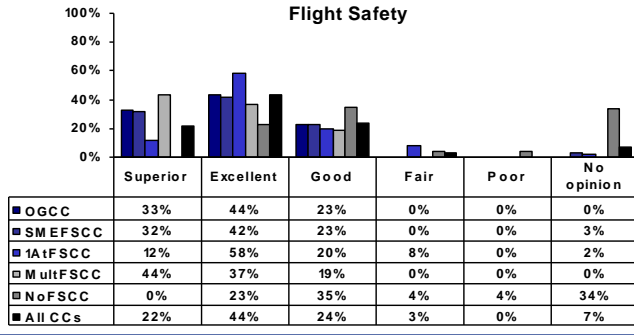


All CCs rated knowledge by the IFSs of flight safety (Q11_2). 66% rated this as



IFS Knowledge – Flight Safety - Q011_2

Rate your installation flight surgeons' depth and breadth of knowledge in the following areas:



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excellent or better, 24% good and 3% fair. As with IFS knowledge of the operational mission, the MultifSCCs gave them the highest rating of the CC groups in the area of flight safety – 100% rated them as good or better, with 37% excellent and 44% superior. Only 23% of the NoFSCCs rated the IFSs' knowledge of flight safety as excellent and none gave them a superior rating; 34% had no opinion.

ANOVA of Q11_2 was significant at $p < 0.0005$ with 15% variance. Scheffe's test showed a significantly less-favorable rating by the NoFSCCs when paired against all other CC groups except 1AtFSCCs.

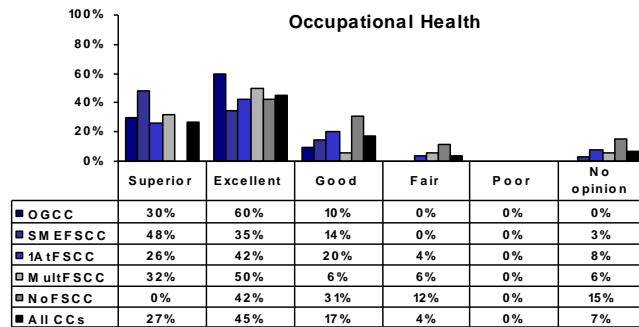
All CCs rated knowledge by the IFSs of occupational health (Q11_3). 72% rated IFS knowledge in this area as excellent or better. 48% of SMEFSCCs rated this as superior, while none of the NoFSCCs did.

ANOVA of Q11_3 was significant at $p < 0.0001$ with 16% variance, with the variance, as with the previous knowledge questions, accounted for primarily by the NoFSCCs which were different, on Scheffe's pairwise comparison, from all other groups except MultifSCCs (NoFSCCs ratings being less favorable).



IFS Knowledge – Occupational Health - Q011_3

Rate your installation flight surgeons' depth and breadth of knowledge in the following areas:



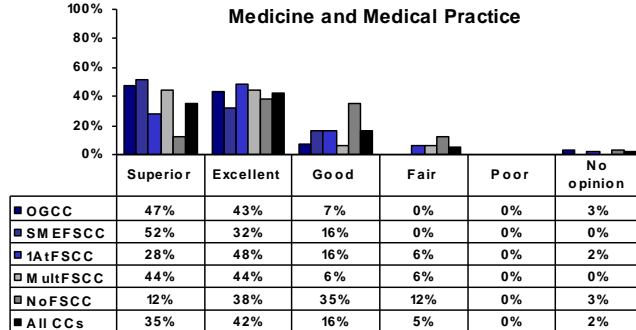
Integrity - Service - Excellence

All CCs rated the knowledge of IFSs in the area of medicine/medical practice (Q11_4). 77% rated IFS knowledge in this area as excellent or better. 44%, 47% and 52% of MultifSCCs, OGCCs and SMEFSCCs rated this as superior, respectively; only 12% of NoFSCCs did so.



IFS Knowledge - Medicine and Medical Practice - Q011_4

■ Rate your installation flight surgeons' depth and breadth of knowledge in the following areas:



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ANOVA for Q11_4 was significant at $p < 0.0005$ with 13% variance. Pairwise comparisons showed NoFSCCs rating the IFS knowledge of medicine/medical practice lower than OGCCs and SMEFSCCs.

Did the three groups of commanders with one flight surgeon (OGCC, SMEFSCC and 1AtFSCC) differ from one another in how they

assessed *their own* flight surgeon on the four “knowledge questions”? Asking these same questions in QS2, 3 and 4 allowed for this analysis. ANOVA showed no statistically significant differences in this comparison for the operations, flight safety and medicine/medical practice questions. ANOVA was significant for the occupational health question (Q29_3, 46_3 and 60_3). Pairwise comparisons with Scheffe’s test showed that the SMEFSCCs rated their SME FSs higher than the 1AtFSCCs rated their AtFSs in their knowledge of occupational health issues.

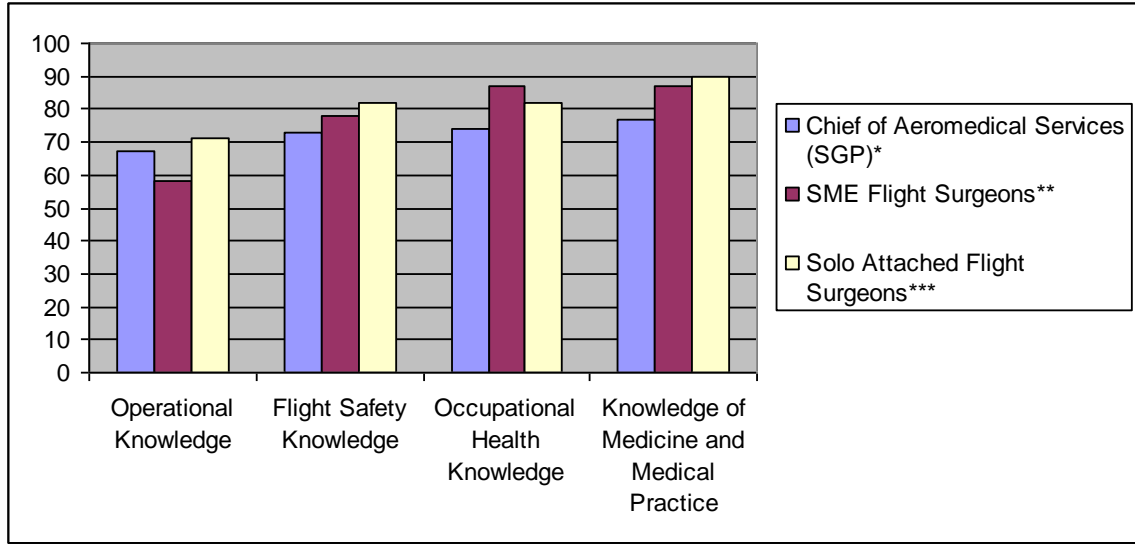
Although the other ANOVAs were not significant, useful information was obtained by breaking out the ratings levels. The percentage of CCs rating their “own” FSs’ knowledge in the four “knowledge areas” is compared in table and graphical form below. The ratings of excellent or better (adding the percentages for “excellent” and “superior”) ranged from a low of 58 (for SMEFSs’ operational knowledge, rated by SMEFSCCs) to a high of 90 (AtFSs’ medical knowledge, rated by 1AtFSCCs).

Excellent + Superior (%)	Chief of Aeromedical Services (SGP)*	SME Flight Surgeons**	Solo Attached Flight Surgeons***
Operational Knowledge	67	58	71
Flight Safety Knowledge	73	78	82
Occupational Health Knowledge	74	87	82
Knowledge of Medicine and Medical Practice	77	87	90

* Rated by operations group commanders

** Rated by squadron commanders with assigned squadron medical elements

*** Rated by squadron commanders with a single attached flight surgeon

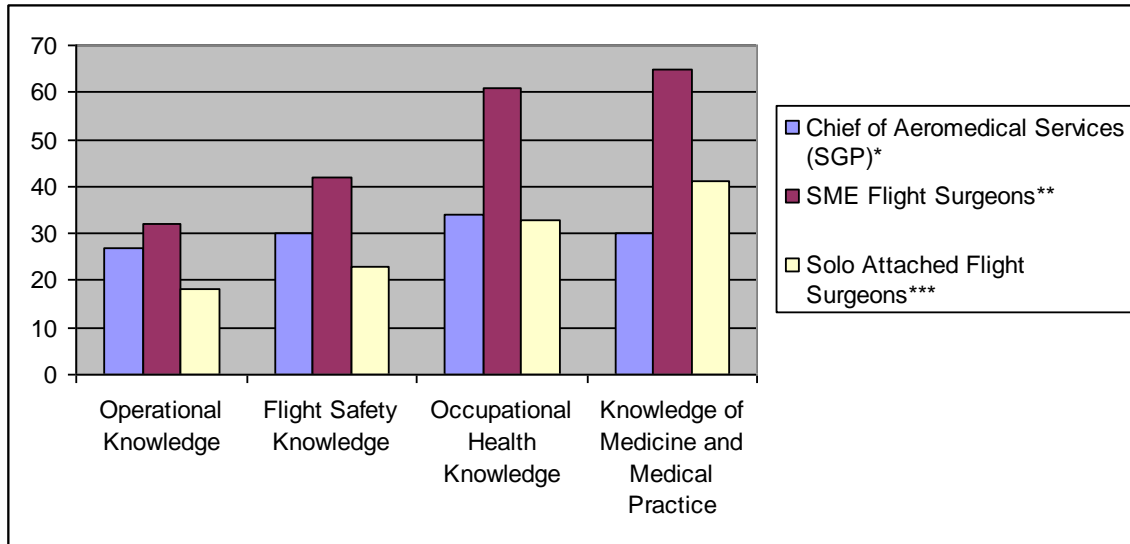


This method of looking at the data seems to correspond with the mostly non-significant ANOVAs in that the different CC groups rated their own flight surgeons fairly similarly. Their impression of their FSs’ medical knowledge was slightly better than of their knowledge of the operational mission.

However, when we broke the data down further, and looked at only “superior” ratings, some differences emerged.

Superior (%)	Chief of Aeromedical Services (SGP)**	SME Flight Surgeons***	Solo Attached Flight Surgeons****
Operational Knowledge	27	32	18
Flight Safety Knowledge	30	42	23
Occupational Health Knowledge	34	61	33
Knowledge of Medicine and Medical Practice	30	65	41

* Rated by operations group commanders
 ** Rated by squadron commanders with assigned squadron medical elements
 *** Rated by squadron commanders with a single attached flight surgeon



“Superior” ratings were more likely for the SME and SGP in operational and flight safety knowledge. The percentage of SMEFSCCs who felt their SME FSs had superior knowledge in the areas of occupational health and medicine/medical practice was substantially higher than the OGCCs and 1AtFSCCs.

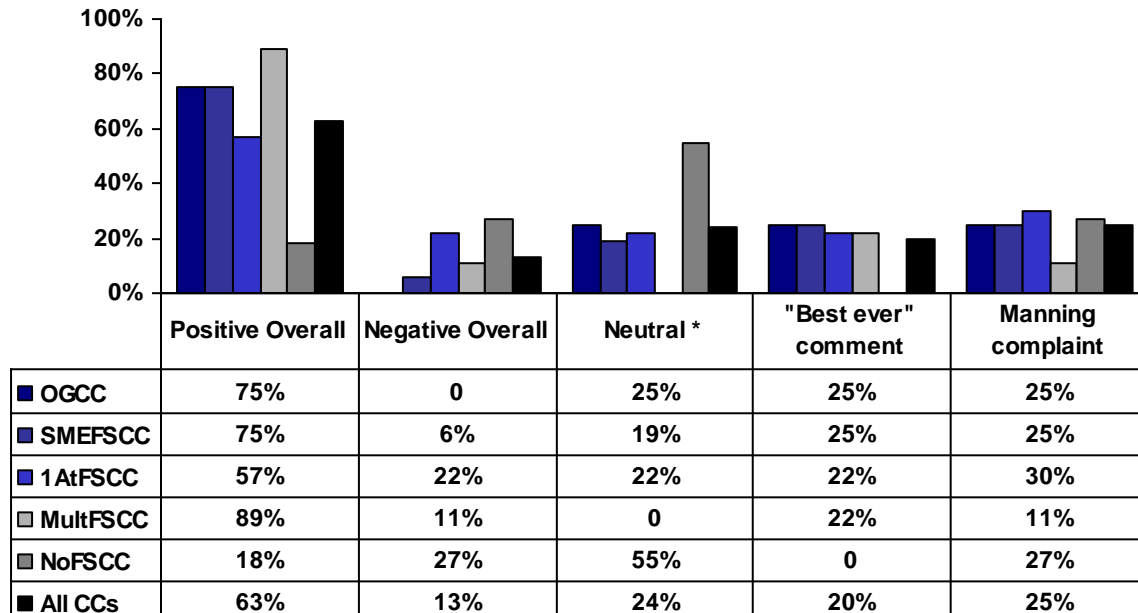
6. Commander Comments. (Appendices D and E)

Comments were solicited as described in “Methods.” 75, or nearly one-half of the participating commanders, left comments. The comments were rated by the authors, so there was some potential for bias in interpreting them. Most were positive, but there were a few negative comments. Those rated by the authors as “neutral” did not address FS quality or quantity issues. Major themes of the comments were: quality of FS skill, knowledge, effort and/or mission contribution, and concerns about levels of unit or installation FS manning (and how that affected the mission). 25% of those who left comments mentioned concerns that manning in garrison is inadequate and adversely affecting access to care and/or the ability of the over-tasked IFSs to accomplish their mission. Two questioned the appropriateness of an emphasis on full staffing of deployed medical facilities at the expense of adequate staffing in garrison. There were numerous comments praising a current FS, a group of FSs, and/or services provided by the Flight Medicine clinic, as the “best ever” experienced in the commenters’ Air Force careers.

The following table (raw numbers) and figure (percentages) summarizes the analysis of the comments made by OGCCs (Appendix D) and the SqCCs (Appendix E, arranged by SqCC group).

Comments from Survey Respondents: Categorization of Comments
(Total Survey Respondents – 153; Total Commenting – 75)

Comment Category	OGCC	SMEFSCC	1AtFSCC	MultFSCC	NoFSCC	Total # / % of Comments
Positive Comments	12	12	13	8	2	47 / 63%
Negative “	0	1	5	1	3	10 / 13%
Neutral “	4	3	5	0	6	18 / 24%
“Best Ever” “	4	4	5	2	0	15 / 20%
Manning Concerns	4	4	7	1	3	19 / 25%
Total # of Comments	16	16	23	9	11	
% of Commander Group Commenting	52	52	47	56	42	



Discussion

1. Installation Flight Surgeons (IFS).

A significant overall trend was observed in the descriptive analysis of QS1, which included Q3 through Q15. With this question set, we wanted to look at, and compare, how the four groups of commanders evaluated the installation flight surgeons (IFS) as a group. The null hypothesis was that each of the four groups would rate the IFSs the same on each question. We saw a pattern of responses to questions that, for all but three of the questions (Q4, 9 and 12 – quality of IFS briefings, flying status management and the question of whether families of flyers receive their medical care primarily at Flight

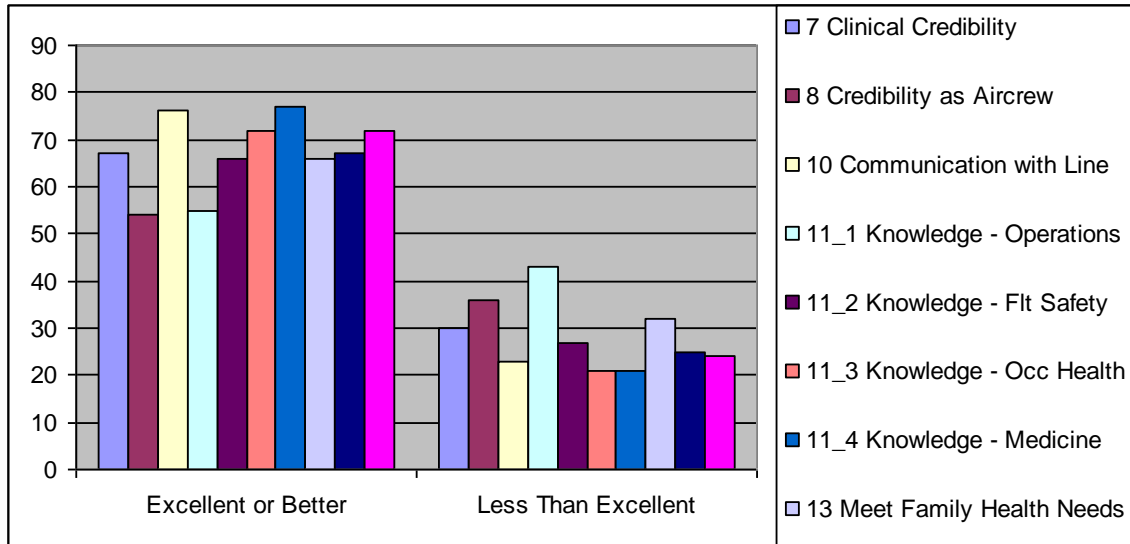
Medicine), rejected the null hypothesis. The four CC groups' responses to the rest of the QS1 questions were significantly different from one another as tested by ANOVA and associated Scheffe's pairwise testing. That is, while all CC groups viewed IFS performance indicators relatively favorably, the NoFSCC group, the squadron commanders with no assigned or attached flight surgeon, generally viewed the indicators less favorably than the other groups. The presence of flight surgeons associated with a squadron had a positive association with the SqCCs' impressions of all the IFSs.

Keep in mind that for QS1 (which included Q3 through Q15), which were answered by all participants, the results represent the impressions of each of these 5 CC groups of their installation flight surgeons as a whole, not of their "own" flight surgeons. The ratings of their "own" flight surgeons took place in QS2, 3 and 4.

While the overall view of IFS performance indicators were favorable, there was a significant portion of the CCs who rated the performance indicators as less than "excellent." There were 10 questions which used this qualitative rating scale for responses: Superior – Excellent – Good – Fair – Poor – No Opinion. Responses to those questions are grouped as "Excellent or better" or "Less than excellent" in the table and figure below:

Ratings of Installation Flight Surgeons by All Commanders

Question #	Excellent or Better	Less Than Excellent
7 Clinical Credibility	67	30
8 Credibility as Aircrew	54	36
10 Communication with Line	76	23
11_1 Knowledge - Operations	55	43
11_2 Knowledge - Flt Safety	66	27
11_3 Knowledge - Occ Health	72	21
11_4 Knowledge - Medicine	77	21
13 Meet Family Health Needs	66	32
15_1 Impact on Flying Safety	67	25
Impact on Mission		
15_2 Completion	72	24



These less-than-excellent ratings ranged, across those questions, from 21% to 43% of “all CCs.” Within CC groups, less-than-excellent ratings were most remarkable from the NoFSCC group – 66% for Q7 (the CCs’ estimate of their fliers’ opinions of IFS clinical credibility) and 73% for Q11_1 (ratings of IFS knowledge of mission operational issues). If those ratings reflected reality, they would not meet the minimum criteria of our Air Force core values – “excellence in all we do.” “Good” is not good enough. Does this reflect an insufficient dedication to the other Core Values – “integrity first” and “service before self”? Perhaps there is a component of that among a minority of USAF FSs, but the authors hope the explanation lies elsewhere. Maybe it reflects misunderstandings and misinterpretations, and a need to improve communication with the line, or to increase efforts to build relationships and trust. Perhaps it has, to some extent, to do with undermanned and overworked FS cadres just not having enough hours in a day to cover all the bases at the level of quality and quantity they strive for.

The good news is that this less-than-excellent rating ranged down to as low as 4% (SMEFS deployment support), 7% (OGCCs rating IFS knowledge of medicine and medical practice, and SMEFSCCs rating SMEFS knowledge of occupational health issues) and 10% (SMEFSCCs estimating their fliers’ opinions of IFS clinical credibility, SMEFS and AtFS knowledge of medicine and medical practice, and SMEFS training of their SME personnel).

For these questions, Q7, 8, 10, 11, 13 and 15, a general trend of NoFSCCs rating the IFSs lower than the other groups held up, with OGCCs, SMEFSCCs and MultFSCCs rating the IFSs fairly high and 1AtFSCCs ratings slightly lower, but well above the NoFSCCs.

The results of Q8, where the CCs gave their estimates of how well their flyers regarded the IFSs as aircrew, was interesting in that the MultFSCCs rated the IFSs the highest of the groups, especially in the “superior” range. Interestingly, the SMEFSCCs had one of the lowest “superior” totals. This might be due to the SMEFSCCs considering their own FSs as so superior to the other IFSs that they rated the IFSs, as a whole, without as much

enthusiasm. This is conjecture. 36% of all CCs rated this as less than excellent and 11% (17 of the 153) rated this as “fair” to “poor.” Only 5 of these were NoFSCCs, so this group did not explain the bulk of the less-than-good ratings.

So, 17 of 153 CCs felt their flyers regarded the IFSs only fair to poor as aircrew. Is this cause for concern? This number did not include the “no opinion” responses, so they are all ratings from CCs who felt their flyers did not respect their IFSs as aircrew. There is certainly room for improvement here. Is it surprising? In the authors’ opinions, not really. Our non-RAM FSs receive no formal flight training, only a single familiarization ride in a two-seat trainer. Including Medical Officer Flight Familiarization Training (MOFFT) for all FSs in the Aerospace Medicine Primary course would almost certainly make a favorable difference. To place this in perspective, the physiologists’ version of MOFFT (with an identical flying academics syllabus) is required for all Air Force – trained aerospace physiologists, but among FSs it is required only for RAMs.

Another trend was seeing the MultFSCCs rating the IFSs higher than the 1AtFSCCs did on multiple areas of assessment. Perhaps the MultFSCCs saw the IFSs in a more favorable light because they knew more of them personally by virtue of the multiple attachments. Again, this is conjecture, but it fits the multiple clues in this survey that increased personal familiarity of the CCs with FSs correlated with more favorable ratings.

One of the traditional bedrocks of flight medicine has been the care of the families of the flyers. We do this for various reasons, but it boils down to the flight medicine *raison d’être* – to care for the flyer. Providing excellent medical care for the families can help keep concern for their well-being out of the cockpit. It also, in a unique and personal way, fosters a trusting relationship with the flyers that enhances our ability to carry out our mission.

This survey reveals some cracks in the bedrock. Only 74% of the CCs felt the IFSs were the primary health care providers for their flyers’ families (Q12). This was fairly consistent across the CC groups – the null hypothesis held up here. That fully one quarter of our flyers’ families are not cared for by the IFSs can be partly explained by unaccompanied tours, but the overwhelming majority of flyers have their families with them in garrison. Some flight medicine shops have limited access by family members due to flight surgeon manning shortages, sending them to primary care and pediatrics either as policy or as a practical result of prioritized access in the setting of limited availability of provider template time. Care of the family by the flyer’s flight surgeon is, regrettably, no longer a given.

An alarming percentage of CCs reported their IFSs brief their flyers only occasionally, or not at all. Not surprisingly, the worst impressions came from the NoFSCCs (50% know of only occasional IFS briefings and 35% report “never”). It is of concern that 30% of OGCCs report only occasional IFS briefings (as they should ideally have a big picture view of IFS participation wing-wide) and only 56% of MultFSCCs reported frequent IFS briefings. The IFS ratings on this question from SMEFSCCs and 1AtFSCCs have less

meaning if the FS briefings they see are done by their SME and AtFSs. However, 29% of SMEFSs and 51% of 1AtFSs report their “own” FSs brief only occasionally.

One can speculate that where awareness of FS briefing is limited, it might be partially due to the increasing involvement of the HPTTs in briefing on subjects, and in venues, traditionally considered the province of the flight surgeon. Our aerospace physiologists play an important role in extending the reach of FSs to personnel in all AFSCs with essential safety and human factors information and educational material. However, it may be that our FSs are delegating this responsibility excessively in some cases. One author is anecdotally aware of an operational flying squadron with an SMEFS that recently went an entire year with all aircrew medical and physiology briefings conducted by the HPTT physiologist.

2. Chief of Aeromedical Services (SGP).

This is the first survey to evaluate the effectiveness of Chief of Aerospace Medicine as a specific leadership role. Ratings were done by the OGCCs. Overall responses were favorable toward their installations’ SGPs.

That most (81%) of responding OGCCs considered their SGPs to be their primary aeromedical advisors was impressive, given the lack of a formal or AFI-required relationship (see “Weaknesses for further discussion of this issue). That 96% of those rate the SGPs’ performance in this advisory role as superior or excellent is very positive.

However, when it came to rating the SGPs in terms of their performance in gap analysis and closure, and as specialist aeromedical consultants to other commanders and supervisors and to wing leadership in general (Q26, 27 & 28), the ratings, although still favorable, dropped somewhat with “excellent” or better ratings ranging from 59% to 71%.

87% and 68% of OGCCs see the SGP at Wing Standup and OG meetings either occasionally or regularly. These probably represent reasonable numbers, as rank and local policy considerations may keep these from ever approaching 100%.

Finally, it is gratifying that fully 80% of OGCCs felt their SGPs showed leadership qualities at an “excellent” or better level. Only 3% (one of 30) rated this as “fair,” and none responded with “poor.” Four of 30 OGCCs expressed no opinion on this question, likely reflecting the limited access to the OGCC that some SGPs presumably have.

3. Squadron Medical Element Flight Surgeon (SMEFS) and Solo Attached Flight Surgeon (1AtFS).

SMEFSs were rated by their squadron commanders on a range of topics relevant to the SME function. Having 1AtFSs rated by the squadron commanders of the units to which

they were attached was included as a FS group with some similarities to which to compare the performance of the SMEFSs, as well as to directly evaluate how involved 1AtFSs are in the squadrons to which they are attached. The question sets for these two groups were very similar except for the deployment and SME leadership questions asked of SMEFSCCs that were not relevant to the 1AtFSs.

SMEFSs were nearly universally perceived as the SqCCs' primary personal aeromedical advisors and the quality of this advice was rated very highly. It was somewhat surprising that the ratings on these two questions were nearly identical for the SMEFSs and 1AtFSs, as rated by their assigned and attached SqCCs, respectively.

Nearly all the SMEFSs attend their squadrons' commanders' calls. That a small number were reported to attend less than frequently (3 of 31 in this case) is expected, as a few of these relationships will be new due to commander and SMEFS turnover. Attendance at flight safety meetings (74% frequently), and presentations of briefings (65% frequently) at flight safety and other squadron meetings, was somewhat lower. This may be partly explained by SMEFS time commitments to the Flight Medicine clinic. However, as previously discussed, it might also be partly due to delegation of briefing responsibilities to the HPTTs.

Nearly 20% of SMEFSs are perceived as not flying regularly and frequently with their squadrons. This may be partly explained by operational flying units where there is no opportunity for the SMEFS to do so, such as A-10 and F-22 squadrons. Unfortunately, identifying this as a reason was not designed into the question – a flaw that should be corrected in the next Line Survey. Also of concern is that 32% of the SMEFSs were reported as participating in squadron social activities only occasionally or never. The need for better effort to get involved in these functions might be implied from this. Such activity is invaluable for gaining the confidence and trust of the squadron flyers and their families.

Participation by 1AtFSs was perceived to be substantially lower than by the SMEFSs, with only 39% frequently participating in squadron functions and only 37% briefing frequently on aeromedical and safety topics. The 1AtFSs also brief on aeromedical and safety topics less frequently than the SMEFSs.

Only 61% of 1AtFSs are reported to be flying “regularly and frequently” with their attached units. The question for the 1AtFSCCs was of a better design, allowing for “no, the FS is not on flying status, and “N/A,” which could be used if there are no flying opportunities to be had with the unit. However, only 10% of responses fell into these two categories, leaving 29% of 1AtFSs with presumed opportunities to fly with their attached units, yet not doing so regularly and frequently.

The advice given to the SqCCs and squadron leadership, regarding factors that influence flyer readiness and mission completion, was rated similarly, and fairly highly, by both SqCC groups. Approximately $\frac{3}{4}$ considered this excellent or better, with $\frac{1}{5}$ to $\frac{1}{6}$ rating it as just good. “Poor” ratings were insignificant.

The remainder of the questions for the SMEFSCCs regarded SME-specific issues. ¾ of SMEFSCCs reported excellent or better supervision, and training of the SME unit by the SMEFSs. 16% (five of 30) of SMEFSCCs had “no opinion” regarding how well their SMEFSs handle training for their other SME personnel. This does tend to occur out of sight of the line, but it should also be a reminder to SME flight surgeons to keep their commanders apprised of their SME activities. Leadership qualities of the SMEFSs were ranked highly, both in-garrison and while deployed. Most of the SMEs were deploying with their squadrons, and their support of their units while deployed, in the various areas covered by the questions, was overwhelmingly perceived to be excellent or better.

4. Flight Surgeon Knowledge.

SGPs, SMEFSs and 1AtFSs were rated well in the four funds of knowledge areas that received focus across all groups: line operations, flight safety, occupational health and medicine and medical practice. There were no significant overall differences among these FS groups on these “knowledge questions.”

Virtually none of the FSs within these three groups were rated as having only fair to poor knowledge in these areas (just one of 123 – an SMEFS – was rated as having “fair” knowledge of an area – operations).

When only “superior” responses to the knowledge questions were considered, the SMEFSs looked the “best” across all four knowledge areas, with the SGP having a slightly higher percentage of “superior” ratings than the 1AtFSs for knowledge of flying safety and operations, and the opposite for knowledge of medicine/medical practice.

In QS1, all CCs were asked to rate the IFSs on these same four knowledge areas. Overall, the ratings were similar to those given to SGPs, SMEFSs and 1AtFSs in QS2, 3 and 4. However, across the board, OGCCs, SMEFSCCs and 1AtFSCCs rated “their” FSs higher than they did the IFSs as a group.

Interestingly, MultFSCCs rated IFS knowledge of operational issues and flying safety higher than did the OGCCs, SMEFSCCs and 1AtFSCCs. Also, consistent with the rest of the survey, NoFSCCs rated the IFSs significantly lower on all four knowledge questions than did any other CC group, including a disturbing 35% “fair” rating of the IFSs for their knowledge of operational issues.

5. Commanders’ Comments

75 (49%) of the CCs left comments. These were mostly favorable, some very highly so – 20% of the comments included some kind of “best ever” wording – best Flight Medicine shop experienced in career, best group of FSs ever encountered, etc. There were a few less favorable comments, and a very few said there were FSs on their installations that their flyers avoided at all costs. There were many (25%) comments expressing serious

concern about FS manning at their installations, many ascribing the problem to deployment demands, and some suggesting the level of manning was so low at their installations that Flight Medicine services were rendered nearly dysfunctional.

6. Other Observations

One of the most striking findings from this survey was the correlation between SqCCs having assigned or attached flight surgeons and giving higher ratings of the performance of the IFSs. The correlation was roughly in this order, more favorable to less so: SMEFSCCs, MultFSCCs, 1AtFSCCs, NoFSCCs. The ratings of the first three groups were very favorable overall and fairly close to one another. The NoFSCCs’ ratings of the IFSs, however, were statistically significantly less favorable than the other groups on every IFS question except Q4, 9 and 12 (impact of IFS briefings on the mission, appropriateness of flying status determinations and whether flyers’ families receive their medical care primarily at Flight Medicine). In addition, the variance of means plot for Q4, as well as the graphic, suggests a less favorable view by the NoFSCCs.

The NoFSCCs perceived the IFSs as briefing less, flying less, having a less favorable impact on the mission, having less credibility as flight crew and as clinicians, communicating less, meeting family health needs less well, and having less mission-critical knowledge than did the other CC groups. Why?

Some of the differences were so striking that the possibility of misclassification was considered; that is, were some SqCCs with no operational mission mistakenly polled? This was discounted for two

reasons. First, a specific weapons platform was indicated for 18 of the 26 NoFSCCs, with the other eight answering with “other.”

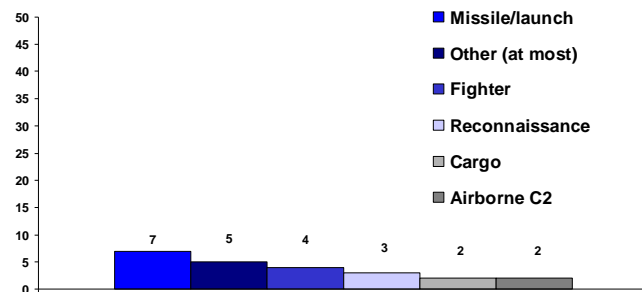
Further data analysis narrowed the “others” to a maximum of five and as few as zero (see the adjacent figure). So, at most, five of the 26 NoFSCCs were misclassified. Second, every respondent answered affirmatively to the statement,

“My Operations Group or Squadron operates flying or missile assets and receives Flight Medicine support from an on-installation medical treatment facility.” Those who answered “No” to this question were exited from the survey with no opportunity to participate. A significant number of misclassifications were felt to be very unlikely.



U.S. AIR FORCE

NoFSCC Weapons Platforms



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The high percentage of missile/launch operations could explain some of the variances, such as the relative lack of awareness of IFS flying participation (if the FSs are flying regularly in the supporting helicopter units, the ICBM SqCC might well be unaware). Aside from that, however, questions remain.

A cause may elude confirmation. Koch's postulates do not apply (we're not investigating a disease). The "but for" test is inadequate (but for the lack of "their own" FSs, would the NoFSCCs' ratings have been more favorable?). We must stick with opinions. So be it. In the authors' opinion, given the other indicators that associating flight surgeons with a squadron positively influences IFS ratings, it fits the logic test that what the NoFSCCs lack, in a relative sense, is a reliable connection to the installation's aeromedical services. One of the OGCCs commented, "Each squadron should have [a] single point [of] contact for flight medicine purposes." Those SqCCs with multiple attached FSs rated the IFSs quite well overall, so maybe more than one contact is advantageous. Or, perhaps, those MultFSCCs typically had one of the groups of attached FSs as a most-trusted consultant.

Regardless, most indicators from this survey suggest the 1AtFSCCs and MultFSCCs have a very positive appreciation of their attached flight surgeons. Many of the CCs' comments specifically mentioned the value of this relationship in terms of operational readiness and mission completion. This is a valuable, and possibly under-rated, flight surgeon/line relationship. This survey has provided statistically significant evidence that squadron commanders who have one or more associated flight surgeons, whether SME or attached, have more favorable opinions of most aeromedical services issues we asked about than do squadron commanders with no "unique" flight surgeon to consider "their" flight surgeon.

7. Weaknesses

Possible weaknesses of this survey included the strategy of contacting the SGPs in the middle of the data collection to suggest their encouragement of non-responding (at that point) commanders to participate. This might have introduced a bias among those who were contacted. Which direction that possible bias might have influenced ratings is open to speculation, depending on how tactfully any contact regarding this survey might have been made, or on the quality of the relationships involved.

Other possible weaknesses lie in the design of the study. A rating of all the installation flight surgeons by all the participating commanders was desired. In an effort to keep the design relatively simple, the commanders were asked to rate the IFSs as a group. This obviously would have presented a difficult situation to those commanders who had a mixed view of their group of IFSs. This was mentioned in the Comments section – how does one rate a group when some in the group are seen as outstanding and some on the other end of the quality scale? Yet, designing a questionnaire that allowed for consistent data collection from bases with different numbers of IFSs was a daunting consideration. Polling the CC groups regarding the IFSs as a group, while encouraging comments to allow expression of caveats and qualifications, was seen as the best compromise.

Another design characteristic that was less than ideal was the pairing of the OGCCs with the SGPs for purposes of ratings. Collection of ratings of FS job categories with unique line visibility and/or responsibility to the line was desired, and the SME FS and SGP topped the list. Having SMEFSCCs rate SMEFSs was uncontroversial. Solicitation of ratings of solo attached FSs by 1AtFSCCs was included to have a group, with some similarities, against which to compare the SME ratings. It also provided a means to directly assess the utility and possible benefits of the tradition of informal FS attachments to operational squadrons.

Expectations, and the reality, of the OGCC-SGP relationship are a bit cloudier. As the direct commander of the wing's operational mission, if the OGCC does not have a trusted aerospace medicine consultant at his or her ready call, our mission to support the flier is compromised. Who that consultant will be may vary depending upon the local circumstances. The SGP will not always be the OGCC's primary aerospace medicine consultant. Although not established AFMS dogma, when the SGP is the senior flight surgeon or aerospace medicine specialist on base or in the wing, this OGCC-SGP relationship passes the logic test and ought (in the authors' opinions) to be encouraged by the MDG CC or, as appropriate, the AMDS or MDOS squadron commander. This will markedly enhance the ability of the SGP to do a meaningful operational mission gap analysis and to see that the METALS obligations of Team Aerospace are met. However, when there is a better-qualified physician to directly interface with the OGCC at a given base or wing, the SGP might not be that primary consultant. There may also occasionally be less-than-comfortable rank differences that complicate such a direct relationship.

This lack of a standard relationship between OGCCs and SGPs might help explain the lower rate of participation of the contacted OGCCs in comparison to the SqCCs. It probably also helps explain the relatively low rate of reported SGP attendance at OG meetings (29% frequently, 39% occasionally).

In the first group of questions, regarding the IFSs, there might have been some transference with some of the SMEFSCCs responding based on how their SME FSs perform. The survey was designed to minimize this with this statement, which opened the online survey, "The first group of questions applies to all assigned flight surgeons, assessed as a group or average, at your installation."

Questions where ratings included "frequently" and "occasionally." These included Q3, 41 and 56 (frequency of FS briefings), Q6, 44 and 58 (regularity and frequency of FS flying) and Q23, 24, 39, 40, 54 and 55 (frequency of FS attendance at line meetings). These questions did not define "regular" or "frequent." These words meant whatever the respondents felt they meant. What is frequent to an over-tasked flight surgeon flying his minimums likely differs from a typical line definition. These questions did not take into account the unique challenges to flight surgeon participation in flying among those assigned to installations with no primary manned flying mission. Consideration might be given to re-working the form of these questions for the upcoming ANG/AFR Line

Survey, and the next active duty Line Survey. However, this would diminish the ability to compare whether these ratings change over time, at least for the first two editions. Questioning SqCCs about FSs flying with their squadrons had a very clear limitation – there was no way to account for squadrons with no in-unit flying opportunities (A-10 or F-22 units, for instance).

As noted previously, the questions regarding whether SMEFSs fly frequently with their assigned squadrons did not account for situations where there is no possibility of doing so.

As pointed out by one of the ICBM SqCCs in the Comments, this survey did not query the CC groups regarding the Personnel Reliability Program (PRP). This was considered and rejected as a survey question for two reasons. First, the numbers of bases with large PRP programs is limited, and the authors were trying to maximize numbers for reasons of statistical power. Second, it was thought that PRP might be seen more as a Flight Medicine administrative program, rather than a flight surgeon quality, performance of knowledge issue, and it was the latter that was the focus of this survey.

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Appendix A – Line Survey Questions

Appendix B – OGCC Comments from Line Survey

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Appendix F – Society Survey Questions

Appendix G – Specific Responses to Society Survey

APPENDIX A

Assessment of Flight Surgeon Support to the Line

Question Set 1 (QS1)

Q1 My Operations Group or Squadron operates flying or missile assets and receives Flight Medicine support from an on-installation medical treatment facility.

Q2 The first groups of questions apply to all assigned flight surgeons, assessed as a group or average, at your installation.

Q3 Do your flight surgeons speak to your personnel at safety briefings, Commanders Calls and other appropriate venues?

- Frequently
- Occasionally
- Never

Q4 Please rate the impact of these briefings on your mission.

- Strong Positive Impact
- Positive Impact
- Neutral
- Negative Impact
- Strong Negative Impact

Q5 Please rate the overall quality of these briefings.

- Exceptional Quality
- High Quality
- Adequate Quality
- Marginal Quality
- Poor Quality
- No Opinion

Q6 Do your flight surgeons fly regularly and frequently?

- Yes
- No
- Unsure

Q7 How credible do your flyers consider your flight surgeons as good and effective physicians/clinicians?

- Superior
- Excellent
- Good
- Fair
- Poor
- No Opinion

Q8 Please rate your flight surgeons in terms of level of respect accorded them as aircrew.

- Superior
- Excellent
- Good
- Fair
- Poor
- No Opinion

Q9 How 'easy' or 'tough' are your flight surgeons when determining flying status, DNIF or RTFS, when you balance flying safety, the manpower needs of mission completion, and good medical care.

- Overly Restrictive
- About right
- Overly Permissive
- No Opinion

- Q10 Please rate your flight surgeons' communication skills and efforts.
Superior
Excellent
Good
Fair
Poor
No Opinion
- Q11 Please rate your installation flight surgeons' depth and breadth of knowledge in the following areas.
Q011_1 Operational Issues
Q011_2 Flight Safety Issues
Q011_3 Occupational Health
Q011_4 Medicine and medical practice
- Q12 Do the families of your flyers obtain their basic medical care primarily at the Flight Medicine Clinic?
Yes
No
Unsure
- Q13 How well do your flight surgeons meet the families' health care needs?
Superior
Excellent
Good
Fair
Poor
No Opinion
- Q14 Please rate your level of satisfaction with level of demonstrated preparedness of your flight surgeons for:
Q014_1 Mishap response and investigation
Q014_2 Other casualty response
- Q15 Please provide your overall rating of your flight surgeons' impact on ...
Q015_1 Flying safety
Q015_2 Mission completion
- Q16 Are there any comments you wish to make about your flight surgeons, positive, negative or otherwise?

Routing Questions

- Q17 Are you ...
I am currently, or have been within the last 6 months, an Operations Group Commander
I am currently, or have been within the last 6 months, a Squadron Commander
I am neither
- Q18 How long have you been, or were you, an operations group commander?
Less than 6 months
6-12 Months
13-18 Months
19-24 Months
Greater than 24 Months
- Q19 For which weapon systems are your operations group responsible?
Airborne Command and Control
Attack/Fighter
Bomber
Cargo
High Performance Trainer
Heavy Trainer
Reconnaissance
Tanker
Helicopter

Missile and/or Launch Ops
UAV
Other

Question Set 2 (QS2)

Q20 This group of questions concerns specifically the flight surgeon who is the Chief of Aeromedical Services (SGP) at your installation. This is frequently a different individual than the Aeromedical Squadron Commander, particularly when the latter is not a flight surgeon.

Q21 Do you consider your Chief of Aeromedical Services to be your primary aeromedical advisor regarding flight or missile crew medical issues, flying safety, human factors and human performance enhancement?

Yes
No
Unsure

Q22 Please rate the performance of your Chief of Aeromedical Services in this capacity.

Superior
Excellent
Good
Fair
Poor
No Opinion

Q23 Does your Chief of Aeromedical Services attend any of your OG meetings?

Frequently
a. Occasionally
b. Never

Q24 Does your Chief of Aeromedical Services attend Wing Standup?

frequently
Occasionally
Never

Q25 Please rate your Chief of Aeromedical Services on how well he/she advises wing leadership regarding medical and operational factors that enhance war fighter effectiveness.

Superior
Excellent
Good
Fair
Poor
No Opinion

Q26 Please rate the performance of your Chief of Aeromedical Services in identifying gaps in the capabilities of the human weapons system in your wing, and making recommendations, or implementing plans, to close those gaps.

Superior
Excellent
Good
Fair
Poor
No Opinion

Q27 Please rate the performance of your Chief of Aeromedical Services as a consultant to commanders and supervisors regarding aeromedical problems related to aircraft or life support equipment, mission plans, and human performance enhancement.

Superior
Excellent
Good
Fair
Poor
No Opinion

Q28 Please rate your Chief of Aeromedical Services' advice to you and your wing leadership regarding medical, environmental and operational factors that influence war fighter effectiveness and mission completion.

- Superior
- Excellent
- Good
- Fair
- Poor
- No Opinion

Q29 Please rate your Chief of Aeromedical Services' depth and breadth of knowledge in the following areas:

- Q029_1 Operational Issues
- Q029_2 Flight Safety Issues
- Q029_3 Occupational Health
- Q029_4 Medicine and medical practice

Q30 How well prepared is your Chief of Aeromedical Services to lead the other flight surgeons at your installation?

- Superior
- Excellent
- Good
- Fair
- Poor
- No Opinion

Q31 Do you have any further comments, positive, negative or otherwise?

Routing Questions

Q32 How long have (had) you been a squadron commander?

- Less than 6 months
- 6-12 Months
- 13-18 Months
- 19-24 Months
- Greater than 24 Months

Q33 For which weapon system is (was) your squadron responsible?

- Airborne Command and Control
- Attack/Fighter
- Bomber
- Cargo
- High Performance Trainer
- Heavy Trainer
- Reconnaissance
- Tanker
- Helicopter
- Missile and/or Launch Ops
- UAV
- Other

Q34 My squadron has:

- A squadron medical element (SME)
- One (1) attached flight surgeon
- Multiple attached flight surgeons
- No SME or attached flight surgeon

Question Set 3 (QS3)

Q35 This group of questions concerns specifically your own SME flight surgeon.

Q36 Do you consider your SME flight surgeon to be your personal aeromedical advisor regarding flying safety, human factors and human performance enhancement?

Yes

No

- Q37 Please rate the performance of your SME flight surgeon in this capacity.
Superior
Excellent
Good
Fair
Poor
No Opinion
- Q38 Please rate the performance of your SME flight surgeon in providing and arranging medical training for the SME medical personnel.
Superior
Excellent
Good
Fair
Poor
No Opinion
- Q39 Does your SME flight surgeon attend your Commander's Calls?
Yes
No
Unsure
- Q40 Does your SME flight surgeon attend your Flight Safety meetings/briefings?
Yes
No
Unsure
- Q41 Does your SME flight surgeon present aeromedical, flight safety or general safety topics at Commander's Calls and/or Flight Safety meetings/briefings?
Yes
No
- Q42 Please rate your SME flight surgeon's advice to you and your squadron leadership regarding medical, environmental and operational factors that influence war fighter effectiveness and mission completion.
Superior
Excellent
Good
Fair
Poor
No Opinion
- Q43 Please rate the performance of your SME flight surgeon in supervising the other members of your SME.
Superior
Excellent
Good
Fair
Poor
No Opinion
- Q44 Does your SME flight surgeon fly regularly and frequently with your squadron?
Yes
No
- Q45 Is your SME flight surgeon involved in squadron social functions?
Frequently
Occasionally
Never

- Q46 Please rate your SME's flight surgeon's depth and breadth of knowledge in the following areas.
- Q046_1 Operational Issues
 - Q046_2 Flight Safety Issues
 - Q046_3 Occupational Health
 - Q046_4 Medicine and medical practice
- Q47 While you have been, or were, a squadron commander, did your SME flight surgeon deploy with your unit?
- Yes
 - No
 - N/A, my unit did not deploy
- Q48 Please rate your SME flight surgeon's performance during deployments in the following areas:
- Q048_1 Arranging and ensuring adequate medical support of the squadron
 - Q048_2 Utilizing medical intelligence resources to keep squadron personnel aware of medical threats
 - Q048_3 Ensuring proper deployment sanitation, including billeting, food and water assessment
 - Q048_4 Readiness for mishaps and disasters (response plans, checklists and equipment)
- Q49 How well prepared, overall, is your SME flight surgeon to lead your Squadron Medical Element?
- Q049_1 In garrison
 - Q049_2 In deployed location
- Q50 Do you have any further comments, positive, negative or otherwise?

Question Set 4 (QS4)

- Q51 This group of questions concerns specifically the flight surgeon attached to your squadron.
- Q52 Do you consider your attached flight surgeon to be your personal aeromedical advisor regarding flying safety, human factors and human performance enhancement?
- Yes
 - No
- Q53 Please rate the performance of your attached flight surgeon in this capacity.
- Superior
 - Excellent
 - Good
 - Fair
 - Poor
 - No Opinion
- Q54 Does your attached flight surgeon attend your Commander's Calls?
- Frequently
 - Occasionally
 - Never
- Q55 Does your attached flight surgeon attend your Flight Safety meetings/briefings?
- Frequently
 - Occasionally
 - Never
- Q56 Does your attached flight surgeon present aeromedical, flight safety or general safety topics at Commander's Calls and/or Flight Safety meetings/briefings?
- Frequently
 - Occasionally
 - Never

Q57 Please rate your attached flight surgeon advice to you and your squadron leadership regarding medical, environmental and operational factors that influence war fighter effectiveness and mission completion.

- Superior
- Excellent
- Good
- Fair
- Poor
- No Opinion

Q58 Does your attached flight surgeon fly regularly and frequently with your squadron?

- Yes
- No
- No, the attached flight surgeon is not on flying status, or is not qualified
- N/A

Q59 Is your attached flight surgeon involved in squadron social functions?

- Frequently
- Occasionally
- Never

Q60 Please rate your attached flight surgeon's depth and breadth of knowledge in the following areas.

- Q060_1 Operational Issues
- Q060_2 Flight Safety Issues
- Q060_3 Occupational Health
- Q060_4 Medicine and medical practice

Q61 Do you have any further comments, positive, negative or otherwise?

APPENDIX B

OPERATIONS GROUP COMMANDERS – COMMENTS

Comment 1

OPERATIONAL PLATFORM

High Performance Trainer / Heavy Trainer

Comments

Too few flight surgeons (AETC SUPT base). When I was overseas we had twice the number of flight docs with a much smaller mission. I fly up to 350 sorties per day with roughly 650 flyers and they support with only three flight docs. They are meeting themselves coming and going. I have seriously considered reducing our PFT output because we are running the flight surgeons ragged by the way, they never complain. Im blessed with the best flight medicine clinic Ive seen in 25 years in the AF.

Comment 2

OPERATIONAL PLATFORM

Helicopter / Missile and/or Launch Ops

Comments

The team here at ____ AFB and the ____ Space Wing are among the finest Flight Surgeons Ive been with during my 20 years in uniform...awesome team!

Comment 3

OPERATIONAL PLATFORM

Fighter/Attack

Comments

The current group of Flight Surgeons here at _____ are some of the best I've seen in the AF.

Comment 4

OPERATIONAL PLATFORM

Other

Comments

The Aerospace Medicine physicians and staff at _____ AFB are the best team I have seen in my AF career. Their can do attitude is noteworthy. Although not listed as a category of Ops Group Aircraft in your survey, the tankers are the backbone of the USAF and our flight surgeons do a superior job keeping us airborne. Chief of Aerospace Medicine is the best physician (knowledge and competency) I have been in contact with in my career.

Comment 5

OPERATIONAL PLATFORM

Cargo

Comments

I tempered my responses based on what I could reasonably expect the flight surgeon force to accomplish with the workload they have. My excellent ratings mean that our flight surgeons do excellent work with the tools/time at their disposal. They have such a heavy workload levied upon them that they cannot do all they or I want them to do. They do not have time to attend stand-ups, and I don't believe that is the right question to ask. The question should be, do they interact with Wg/Gp leadership. Stand-ups are not the right place for this interaction.

Comment 6**OPERATIONAL PLATFORM**

Attack/Fighter / Cargo / Helicopter / Other

Comments

As a single seat Group Commander with tenant units on base, I am unsure how often the flight surgeons fly with helicopters or heavies. I would like to see more flight surgeons assigned to squadrons. We have one young (excellent) flight surgeon assigned to one of our fighter squadrons, but the other two squadrons don't have someone they can turn to for continuity. This is especially difficult due to deployments and TDYs, which reduce flight surgeon manning to critical levels. Ideally, each squadron should have their single point contact for flight medicine purposes.

Comment 7**OPERATIONAL PLATFORM**

UAV / Other

Comments Have very little interaction with Medical Group Chief of Aeromedical Services. Flight Surgeons in my Wing are assigned to my OSS, and work directly for my OSS commander.

Comment 8**OPERATIONAL PLATFORM**

Tanker

Comments

All of my above answers are based on our current outstanding flight surgeons. Every single one of them will leave this summer. This is a very poor plan by someone in the personnel management of controlling the flight surgeon rotation at Fairchild. This is having a huge impact to our ability to conduct our mission and maintain our personnel readiness. I rate our current flight surgeons as outstanding. I rate the personnel management of our flight surgeons at AFPC as poor.

Comment 9**OPERATIONAL PLATFORM**

Attack/Fighter / Other

Comments

FW Flight Surgeons have the exact attitude, work ethic and personalities I need them to have. They are like sports team docs: they get the players on the field and keep them there. They are approachable by the patients and are willing to do whatever it takes to get them back in the cockpit when they are sick/hurt. They do a great job caring for the families too, even on the weekends or after-hours. I am very happy with their performance in the Operations Group. They enable the mission and we've never had a medical issue that we couldn't resolve. I appreciate their vigilant work.

Comment 10**OPERATIONAL PLATFORM**

Attack/Fighter / Other

Comments

Flight Surgeons at ____ are all pooled at the ___ ABW. The ___ flt docs assigned to the ___ FW are included in this pool. The involvement and interaction with the ___ FW and the pull of their duties in the flt med clinic with the rest of the base sometimes strains the relationship. The ___ MG flt doc oversees their activities but the flying sq CCs rate them. This arrangement is not ideal and is personality dependent. Don't have a solution but believe flt docs time needs to be spent more at the sq and less in the clinic to provide the flight safety we all expect.
Flight docs deploy with us and we deploy all the time - expectation is they come to us ready but they always seem to have to go to further training such as top knife. Suggest work the schedule so they don't have to go TDY once they arrive on station. The Chief [of Aeromedical Services] is a _____ flt doc and does not have the ___ patch. Therefore, is not directly the POC we go to so we designate one of the ___ flt docs as the lead flt doc to discuss with the leadership. This is difficult with deployments and young flt docs.

Comment 11**OPERATIONAL PLATFORM**

Helicopter / Missile and/or Launch Ops

Comments

I command an ICBM Operations Group that also operates a helicopter squadron. To my knowledge, the flight surgeons have not flown with us however, they may be flying regularly with the Bomb Wing.

Comment 12**OPERATIONAL PLATFORM**

Attack/Fighter

Comments

Doctor ____ has established a Medical Group that is the best seen to date. This translates to an Aeromedical environment which is professional, proactive, and responsive to the needs of the largest Ops Group in the Air Force. The AMDS/CC is considered to be a part of the Ops Group Command team. The lack of communication barriers allows for a free exchange of information which allows each commander to accurately assess the operational capability of his squadron.

Pls contact me direct if you require any further information. Col _____ OG/CC. xxx-xxxx

Comment 13**OPERATIONAL PLATFORM**

Attack/Fighter

Comments

Highly motivated and mission oriented. Deploy side by side with ops squadrons and enhance mission effectiveness. Training Squadron attached flight surgeons do an outstanding job taking care of students and their families.

Comment14

OPERATIONAL PLATFORM

Cargo / Other

Comments

The flight surgeons office at ____ AFB provides support to aviators on the ____ staff, ____ staff, and several of the 30 plus tenant units. Therefore the direct impact on the ____ OG and its mission is minimal. We are not their largest customer.

Bring back the SME and attach FS and med tech to every flying squadron if you desire a true positive working relationship between the FS and OPS.

Comment 15

OPERATIONAL PLATFORM

Attack/Fighter

Comments

The flight Doctors provide the pilots and their families great medical care! They take their job seriously and professionally. They deploy forward with the flying Squadrons and have done outstanding both at home and the deployed locations. In fact, one of them made a call to medevac a pilot out of Lithuania, saving the pilot from an operation (recommended by the Lithuanian doctor but was not required). Outstanding team! Great support.

Comment 16

OPERATIONAL PLATFORM

Attack/Fighter

Comments

I am very impressed with the professionalism and expertise of the flight surgeons assigned to the ____ MDG.

APPENDIX C**SQUADRON COMMANDERS – COMMENTS****NO SME OR ATTACHED FLIGHT SURGEON COMMENTS****Comment 1****My Squadron Has** No SME or attached flight surgeon**OPERATIONAL PLATFORM**

Cargo

Comments

A serious issue is the overall lack of flight surgeon manning--we are always undermanned at ____ AFB. Always 1/2 the flight surgeon staff it seems are deployed overseas at any given time, leaving the home station Ops/care needs less than adequately supported. We fight our war from home station in the MAF, so home station support is more important, in my opinion, than stuffing a flight doc at every place overseas. I have very few folks get sick in the system. Even worse when family mbrs cant get appointments or call backs, as they are lower priority. Our flight surgeons work very hard and try hard too. They just are overworked/under manned.

Also, I wish my flight surgeons would perhaps consult with the owing Sq/DO or Sq/CC before pursuing a course of treatment that DNIFs a Sq member for days if not weeks/months. We run on very tight margins and every body counts. It's almost as if the mission requirements rarely fit into the DNIF decisions. Id like to have a bigger say, given the opportunity.

Thank you.

Comment 2**My Squadron Has** No SME or attached flight surgeon**OPERATIONAL PLATFORM**

Other

Comments

My unit is a Special Ops Sq stationed at ____ AFB, __ and is separated from my Wing Hq at _____. The Flight Surgeons at ____ AFB have not regularly flown with my sqdn. Most of my flyers receive their routine care and PHAs from the ____ Flt Med Clinic, but interact more often (fly, brief, debrief, consult about med concerns) with the _____ assigned Flt Docs while deployed to the OIF/OEF combat environment.
 In these deployed circumstances I have a very favorable experience and impression of the Flt Docs.

Comment 3**My Squadron Has** No SME or attached flight surgeon**OPERATIONAL PLATFORM**

Reconnaissance

Comments

My impression is that the older flight surgeons perceive themselves more as part of the aviation crowd and enjoy being involved in Ops. Some of the younger crowd often come across as if it's an annoying additional duty and are therefore markedly less effective with far less rapport/impact.

NO SME OR ATTACHED FLIGHT SURGREON COMMENTS CON'T

Comment 4

My Squadron Has No SME or attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Maj _____ at ___ is an excellent primary care provider. As we are at an A-10 base, I can't fly the flight surgeons so I did not rate their flying credibility. As a group, I feel the flight surgeons are less credible with medical issues than other providers. This is probably due to their experience level.

Comment 5

My Squadron Has No SME or attached flight surgeon

OPERATIONAL PLATFORM

Other

Comments

I've interacted with only 2. One was highly qualified, capable and successful. The other seemed pretty clueless, possibly due to lack of experience. As a non-flyer in command of flyers I used to be seen by flight med, but have since been moved to the regular clinic, so I have little current info, and have had no complaints from my flyers.

Comment 6

My Squadron Has No SME or attached flight surgeon

OPERATIONAL PLATFORM

Missile and/or launch ops

Comments

Very happy with flight surgeon support! Critical for my ops...

NO SME OR ATTACHED FLIGHT SURGEON COMMENTS CON'T

Comment 7

My Squadron Has No SME or attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Luke AFB is not sufficiently manned with flight surgeons. I don't know if this is a problem across our AF.

Comment 8

My Squadron Has No SME or attached flight surgeon

OPERATIONAL PLATFORM

Missile and/or launch ops

Comments

Although there was a nod to the fact that our flight surgeons primarily support ICBM ops at the beginning of the survey, the rest of the survey seemed remarkably insensitive to the fact that I haven't a clue as to how well our flight surgeons support flying safety. Their impact on the Personnel Reliability Program is, on the other hand, of key importance to me, and it wasn't mentioned at all. One might draw the conclusion that the PRP isn't important to the flight surgeon community at large.

Comment 9

My Squadron Has No SME or attached flight surgeon

OPERATIONAL PLATFORM

Airborne Command/Control

Comments

Need more ACC Flight Surgeons assigned to _____ AFB. We are a tenant unit with AFMC and do not have enough Flight Surgeons. My SQ does not have a dedicated Flt Doc. I have 2 (outstanding!) medtechs (SSgt _____ and TSgt _____), but I really need a doc. I have 157 flyers assigned to my unit.

NO SME OR ATTACHED FLIGHT SURGEON COMMENTS CON'T

Comment 10

My Squadron Has No SME or attached flight surgeon

OPERATIONAL PLATFORM

Reconnaissance

Comments

The Flight Surgeons at _____ AFB have not made a huge effort to get out here to the flight line and fly with us in either the T-38 or U-2. Situation is improving as we have implemented a new orientation and ready to fly program for the flight surgeons. No actual flight surgeons are assigned to the _____, they are all assigned to the _____ here at _____ AFB, but the _____ is responsible for all initial training and will now ensure the flight surgeons receive all necessary training to commence flying.

Comment 11

My Squadron Has No SME or attached flight surgeon

OPERATIONAL PLATFORM

Missile and/or launch ops

Comments

I am not a flying squadron, and this questionnaire is geared towards such a unit. Nonetheless, I am satisfied with FSO support to my unit

Comment 1

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Cargo

Comments

We have a fantastic relationship with our flight surgeons

MULTIPLE ATTACHED FLIGHT SURGREON COMMENTS

Comment 2

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Cargo

Comments

Flight surgeon presented an outstanding briefing at last
OG/CC Call on alcohol abuse awareness.

Comment 3

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Cargo

Comments

Response to unique flight status issues (waivers, etc.) varies dramatically with the individual flight surgeon. They have done exceptionally well in returning some of my flyers to status, while on some seemingly simple issues have caused significant confusion (hearing/vision tests, etc.) and mission impact. The restrictive appointment process for physicals makes it overly difficult to get annual physicals scheduled, often forcing us to wait until the very last month or even day. Lost 1042s is also a huge issue, with the member having to handcarry a copy of the form to flight records to ensure it is captured. Deployment requirements also are stripping the flt surgeons down to almost dysfunctional levels in garrison.

Comment 4

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Attack/Fighter

Comments

The Flight Surgeon corps at ____AFB is superb. The current both within our flight surgeons office and in the Medical Group is outstanding. Overall this is the best group I have seen in 21 years of flying.

MULTIPLE ATTACHED FLIGHT SURGREON COMMENTS CON'T

Comment 5

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Lt Col _____ at _____ has assembled an outstanding team. My main Flight Surgeon, Doc _____ has been exceptional and I think she has been the best Flight Surgeon I have worked with in 20 years of aviation service. Keep up the great work at producing some fantastic personnel.

Comment 6

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Flight surgeons are personality dependent. We have 2 outstanding, 1 average, 1 one new flight doc. Lets just say that they each have their particular strengths and weaknesses--but as a whole do a great job.

Comment 7

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Missile and/or launch ops

Comments

_____ Flight Surgeons are great TEAM _____ contributors and support the Space Wings mission exceptionally well!

MULTIPLE ATTACHED FLIGHT SURGREON COMMENTS CON'T

Comment 8

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Cargo

Comments

Our flight surgeons are professional, and understand the peculiarities of our diverse mission here.

Comment 9

My Squadron Has Multiple attached flight surgeons

OPERATIONAL PLATFORM

Helicopter

Comments

Both of our flight surgeons are relatively new to our operations so they've only recently completed training. However, our flight docs are outstanding when it comes to supporting us operationally or medically. They have consistently bent to our schedules to provide requested care and advice.

SQUADRON MEDICAL ELEMENT (SME) COMMENTS**Comment 1****My Squadron Has** A squadron medical element (SME)**OPERATIONAL PLATFORM**

Bomber

Comments

Dr. _____ and his SME team are the best in the world today in the field of operational aerospace medicine, both in garrison and the deployed environment.

Comment 2**My Squadron Has** A squadron medical element (SME)**OPERATIONAL PLATFORM**

Reconnaissance

Comments

At my installation there are two flight surgeons who command the greatest respect from commanders and the flying community. Their standard of patient care and understanding of the primacy of the mission make them the go to flt docs. Dr _____ is a stand-out, awesome provider.

conversely, there are at least two flight docs who do not get, nor have they earned the respect of the members of the flying community. Their motivation/professionalism/competence has been questioned by leadership and flyers alike. Specific examples include a Dr leaving a heart attack patient on the table at a FOL (no other USAF medical presence) so the Doc could get lunch and another who walked out in the middle of an annual exam because he was stressed out and just couldn't take it any more.

Due to shortages in FS manning, families of our flyers have been forced out of the flt med clinic and pushed to increasingly crowded family practice and pediatrics clinics where wait times for appts can be weeks. Not nearly responsive enough for the families of those at the tip of the spear.

As a flying sq/cc I've experienced a period where I was between assigned docs and the health of my flyers (or at least the continuity of their care) suffered. The assignment of a sq flt doc is vital to helping get flyers back on status.

Specific example: one of my flyers was suffering from a couple of different illness and was being treated by several specialists off-base. When he reported to the FSO for follow-up care, he'd see a different doc every time...no continuity. When I was finally assigned a SQ flt doc (after a 6 month gap), My new doc immediately took a proactive stance, examined the various treatments the flyer was undergoing, found a case where one treatment was counteracting another, got all the docs on the same page and my flyer back on status in a few short weeks. Without his efforts, my flyer was headed for a MEB...now, he's a combat ready crew member.

The flight surgeon is an integral part of a flying squadrons operations...he can literally make or break the combat readiness of the unit. The continuity of care an assigned flt doc can provide is vital.

Dr _____ has been a Godsend...he rocks. The US Army's loss is the USAFs gain. As stated previously, he's provided a level of care to the members of my unit which has gotten them back on status and into the fight quickly and effectively. The 6 months the SQ was without a FS was tough and the medical readiness suffered for it. When we deployed, we took Docs from other squadrons who did not know our people...though the medical care was good, it is of tremendous value to have one of your own forward deployed with you. I'm looking forward to having my FLT DOC with me as we enter the AEF bucket this winter!

SQUADRON MEDICAL ELEMENT (SME) COMMENTS CON'T

Comment 3

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Our flight surgeon was previously an ER doc and it shows in his level of clinical expertise. I have experienced flight surgeons who come straight into that field and seem a bit lost when it comes to big picture medicine. Our flight surgeon is a more full up round as far as medical care is concerned, and that is good for all of us, families included. Our SME here in the _____ is by far the finest I have seen in 20 years of flying.

Comment 4

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Other

Comments

I am a commander of an Air Control Squadron, ground command and control. I have two IDMTs assigned to my unit who interface with the flight surgeons office.

Comment 5

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Overall the flight surgeons I have had under my command and interacted with over my career have been and are exceptional. The level of care to my flyers and their families is second to none. I have had the pleasure to deploy my squadron to a combat zone and my flight surgeons role keeping 24 pilots and 20 enlisted personnel healthy to accomplish the mission was outstanding. Not only did he take care of the squadron, but he also took care of the personnel assigned to the expeditionary wing. At home the flight surgeons work both at the clinic and the squadron and I would say the split is 70/30 due to the clinics requirements. The flight surgeon always finds time to see squadron personnel or family members. There is never a question if the squadron is deployed that the flight surgeon will be part of the package.

SQUADRON MEDICAL ELEMENT (SME) COMMENTS CON'T

Comment 6

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Tanker

Comments

My current flight surgeon is superior in every respect--officer, Airman, leader, and clinician.

Comment 7

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Cargo

Comments

The group of flight surgeons at _____ AFB are the best most professional group I have seen in my 17 year career. They are a credit to the flt surg career field.

Dr./Maj _____ is an absolute professional. He's the best flight surgeon I have seen in my career. He stands out in a group of outstanding flt docs at _____.

Comment 8

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Attack/Fighter

Comments

As an F-15C SQ/CC, my flight surgeon and med techs are an integral part of my squadron full time, their offices are just at the hospital. Together, they do an outstanding job making not just my pilots, but also my combat enlisted support, and all their families healthy and happy. I expect the, to deploy when we deploy and they do. PLEASE do not take them away from being assigned to any particular squadron! It takes time to build relationships and trust. It's about the people knowing their people.

SQUADRON MEDICAL ELEMENT (SME) COMMENTS CON'T

Comment 9

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Attack/Fighter

Comments

The only area where my FS lags behind the pilots is in overall officer skills. Many FS have difficulty writing effective reports, conducting professional briefs and knowing customs and courtesies.

Comment 10

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Attack/Fighter

Comments

It's tough to group all flt surgeons into one group. We have one flight surgeon that is outstanding - proper mix of mission accomplishment, professional doctor and caring. However, he is the exception currently. The grades on this survey are not fair to that individual, but as a group the grade drops.

I also have a pilot who is a flight surgeon that is assigned to my squadron. He is outstanding. Great doctor, excellent pilot and has proper mission focus. He is not assigned to the medical group so I did not include him this survey.

While on paper, my squadron is authorized techs as well as Doctors. Since I have been in command, we have not had any techs available due to manning issues. This is an ongoing issue for us, and the SGP is aggressively pursuing relief, but the bodies just aren't available.

Our flight surgeons do a fantastic job, and none of my pilots have any reservations with deploying with them. We are glad to have them! Flying opportunities for them are hard to come by due to their office responsibilities and high deployment rates. We are attempting to get all required training complete and get them in the air regularly.

SQUADRON MEDICAL ELEMENT (SME) COMMENTS CON'T

Comment 12

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Our flight surgeons at _____ are the consummate medical professionals. They provide prompt and outstanding service to both my pilots and the pilots families. That is their hallmark. My squadron assigned flight surgeon flies with us normally twice a week, and is totally incorporated into the squadron. Just reacting to your survey, I can see a week point of incorporating my flight medicine more into my safety program. I currently do not do that.

Comment 13

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Tanker

Comments

I am thoroughly impressed with the quality of flt surgeon I have had the honor to work with at _____. I am more concerned with the additional patients and workload they are asked to perform. The Medical Group continues to add additional patients and workload on these individuals giving them less and less time to dedicate to being flight surgeons and taking care of their primary duties.
 In addition, current HQ ___ policy of only allowing Ops Group assigned flight surgeon, and not MED Group assigned flight surgeons to fill SME deployments means the two Ops Group assigned flight surgeons are deployed 180+ days a year. It is only through the incredible dedication of the assigned flt Docs that the level of service has only seen cracks and not a total failure.

Capt _____ is an incredible Flt Doc. He had limited interaction with the squadron in garrison only because he was deployed for 180+ days in the past year. Additionally, when he is home he is continually tasked by the MEd Group with additional patients and responsibilities.

SQUADRON MEDICAL ELEMENT (SME) COMMENTS CON'T

Comment 14

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Having a flight surgeon in our squadron is a huge mission enhancer and combat family concern all the time. His visibility in the air, in the squadron and in the clinic make it much more comfortable to perform the mission and know that our families are being taken care of when we are deployed. End

My SME is deeply rooted in every aspect of my squadron's mission accomplishment. End

Comment 15

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Attack/Fighter

Comments

___ MDG is at emergency manning levels for Flight Surgeons - so I lose my assigned FS in 3 weeks with no back fill. So my answers in a month will all be unsat/doesn't meet my needs!

[My SME flight surgeon is a] superstar performer. Previous comments apply here as well.

Comment 16

My Squadron Has A squadron medical element (SME)

OPERATIONAL PLATFORM

Tanker

Comments

Having an assigned flight surgeon and IDMT in my flying squadron is invaluable. They contribute to health, welfare, and mission readiness. The effectiveness of my squadron would decline without my SME!!!

I think it is essential that the flight surgeon deploys with the squadron. As a tanker unit that frequently deploys we are tasked as enablers in the AEF system, which challenges getting the flt surgeon deployed at the same time. Still, with crews deployed year round, the FS couldn't cover every deployment. Overall, the flight surgeon is essential to mission readiness and a key part of a flying squadron's success!

ONE ATTACHED FLIGHT SURGEON

Comment 1

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Reconnaissance

Comments

As I'm merely one of 7 operational SQ/CCs in this Wing I cannot answer for my counterparts nor the OG/WG/CCs however, in discussing issues with my SQ/CC counterparts I'm well aware of the issues we have concerning our flight docs and the Med Gp here as a whole...A huge part of the issue here at Tinker is that our ACC Flight Docs answer to two masters...AFMC and ACC and that often causes great issues and hampers things such as local flight doc scheduling, flying waivers, etc...

Comment 2

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Flight Surgeons assigned to _____ are extremely overtasked for clinic duties and are not afforded the opportunity to fly frequently or spend time establishing relationships with my aircrew in the squadron. This impacts the credibility of flight surgeons.

Comment 3

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

_____ Flight Surgeon manning is abysmally low. This is unsat. We are the largest fighter Ops Group on the planet and yet we have horrible manning shortages of Flight Surgeons. Shame on the USAF for allowing this to happen!

ONE ATTACHED FLIGHT SURGEON CON'T

Comment 4

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Other

Comments

Lt Col _____ at _____ is one of the most impressive flight docs I have worked with. He is very attentive to unit needs and have even attended spouse functions to discuss health and well being issues.

Comment 5

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Cargo

Comments

It would be good if the flight surgeon could consult with Squadron Commanders before placing a member on DNIF-- particularly long term DNIF that could impact mission readiness.

Comment 6

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

High Performance Trainer

Comments

Wide variation in Flt surgeons on many issues - there are definitely some that the flyers try to get to see, and others they avoid at all costs. Their medical skills are well regarded in all cases. The more contact with the flying operation the better in all cases.

ONE ATTACHED FLIGHT SURGEON CON'T

Comment 7

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Heavy Trainer

Comments

Flight surgeons are awesome! Great people skills and technical knowledge. They are undermanned. How can they support 600+ students and 4 flying squadrons with their current manning?

Comment 8

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Our squadron FS is Lt Col _____. I am a Fighter Squadron commander, and have served over 19 years in ACC, AETC, and PACAF. Lt Col _____ is the finest flight surgeon I have ever worked with. His passion, commitment to the flyers and their families, and depth of knowledge as a physician is truly exceptional.

Comment 9

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Tanker

Comments

Capt _____ is dedicated, professional, personable, caring, responsive, knowledgeable and approachable! He initiated a program to spend up to a few half days in the Squadron, outside the clinic, to have ready access to our flyers! Brilliant!

ONE ATTACHED FLIGHT SURGEON CON'T

Comment 10

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Reconnaissance

Comments

Would like our families to be seen by the FS. I know that health care is a scarce commodity but would like to see that reinstated.

Comment 11

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

High Performance Trainer

Comments

I am a squadron commander in a SUPT wing and our flight surgeons are the best I've seen in 18 years of flying. However, they are overworked and undermanned. The norm at this base is for us to have 50-75 of our flight surgeon billets filled. And it is the rare exception when one of our flight surgeons is not deployed. That's the reason they don't regularly or consistently fly and only occasionally get over to the squadron to brief at IP meetings, they want to fly and visit the squadrons but cant because they are busy fulfilling MTF duties.
In fact, one of our flight surgeons was named AETCs flight surgeon of the year, and it was well deserved. However, due to what that flight surgeon has experienced here and his perspective on his future in the Air Force, he has come to the painful decision to separate. He loves being a flight surgeon and serving his country, but has come to the conclusion that it would be better to further develop his medical skills as a civilian. And the prospect of higher civilian pay was not a factor in his decision making. In my opinion that is a huge loss for the Air Force and major cause for concern when we cant retain such high quality people that want to serve their country.

Comment 12

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Airborne Command/Control

Comments

We are an ACC wing on an AFMC base. While the flight surgeons belong to me, they work almost exclusively for the AFMC hospital. In general, our assigned flight surgeons are of poor quality, both as practitioners of medicine and as officers. I receive much more support from my IMTs than I ever have from my flight docs.

ONE ATTACHED FLIGHT SURGEON CON'T

Comment 13

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

High Performance Trainer

Comments

The Flight Surgeons office is great. Everyone who works there is very receptive and helpful. The problem is getting an appointment for our dependants to see them. The central appointment system is terrible and needs to be fixed. It is incredibly frustrating to wait and wait for a human to answer. Someone needs to take an active role in solving this or it will just keep frustrating our incredible troops--both Ops Group and Med Group.

Comment 14

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Capt _____ is the best Flt Surgeon I've worked with in my entire career of 18 years. He has the perfect operational sight picture, balanced with in-depth understanding of the medical issues and strong risk management skills. His replacement, Maj _____, looks to be of equal caliber. I am extremely happy with the support I receive from my Flt Docs as a fighter squadron commander!

Comment 15

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

High Performance Trainer

Comments

We have the best flight surgeons I have ever worked with here at _____ AFB. The only issue is they are constantly undermanned or away on AEF deployments. This chronic low manning condition takes away from their ability to fly as much as I would like for them to.

ONE ATTACHED FLIGHT SURGEON CON'T

Comment 16

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

In general, the flight surgeons are satisfactory. The care received at the clinic is hit and miss. Some of the flight surgeons have a very positive reputation and some have the "I wouldn't send my worst enemy to" reputation. None of the flight surgeons actively fly with my squadron. More than ample opportunity exists to fly - they choose not to. The biggest detractor for the health care given is the family support. The automated appointment system is completely unsatisfactory, the referral system combined with TRICARE is, by most accounts, a train wreck. I do not have an alternative approach, however, the lack of understanding with family concerns bothers me. From the flight surgeons down to the airmen who answer the phones seem to be numb to the concerns and valid complaints from families.

Comment 17

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

My flight surgeon is outstanding. We take her contributions to our mission as so important that we built a flight line clinic in our squadron to reduce travel time for the fighter squadron and maintenance squadron. Although not a flight surgeon issue, I am concerned that I only have one medtec even though I am authorized two in my squadron. With a 43 person squadron, it hurts our OPSTEMPO. Additionally, there is always some conflict regarding ownership of flight doctors.

Recently the communication and relationships have been better than in the past. I am fully supportive of the mission flight surgeons and medtecs perform for the med group, however, it is imperative they be available for fighter squadron duties when necessary. I think sometimes, they are double tasked with duties in the med group as well as to their assigned fighter squadron.

Comment 18

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

High Performance Trainer

Comments

Maj _____ -- Awesome Doctor and Flt Surgeon. Cares about the pilots and their families.

ONE ATTACHED FLIGHT SURGEON CON'T

Comment 19

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Cargo

Comments

The biggest issue I have had is with the Air Force Fitness Program. Flt Surgeons seem to be overly cautious when granting exemptions for unit fitness programs. Folks having trouble passing the fitness test use the Flt Surgeon to avoid taking the test. I've had folks that were exempted from push-ups, crunches, and running, but not DNIF from loading and operating aircraft for world-wide missions. I've heard too many times from some members that if you make me test, Ill just get a not from the Doc, and then they get their note from the Doc. I need the Docs to make sure that they only give exemptions that are medically necessary and not generically broad just because that is what the members ask for.

Comment 20

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Other

Comments

Our flight surgeons are too withdrawn from the flight line. They are either too busy in primary care or they are TDY. Gone are the days when we could have a flight surgeon that could relate to the pilots on the line and loved to fly with them. It was nice for them to actually pick up a phone from one of the pilots and make a squadron call (house call). I understand the shortage, and the lack of time for the flight surgeons, but I don't have to like it.

Comment 21

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

Primary issue in the 1FW is limited Flt Surgeon manning. In my 2+ years as an Ops Officer/Commander we have never been fully manned to allow each sq to have a flight surgeon. Flight surgeons are stretched way to thin to make the real impact that they should have at the squadron level. Same w/ SMEs/Med Techs. The quality of the individuals has been good.

Lt Col _____
____FS/CC

ONE ATTACHED FLIGHT SURGEON CON'T

Comment 22

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

High Performance Trainer

Comments

Our flight doc is only attached to our squadron (is an ACC doc) but is absolutely outstanding and a huge asset to the overall success of our mission.

Comment 23

My Squadron Has One (1) attached flight surgeon

OPERATIONAL PLATFORM

Attack/Fighter

Comments

I've currently have the best Flt Surgeon on base and one of the best I've seen in 17 years. Keep sending more like her.

APPENDIX D

One-Way Analysis of Variance

Results

The ANOVA Procedure

Class Level Information						
Class	Levels	Values				
Group1	5	1AtFSCC	MultFSCC	NoFSCC	OGCC	SMEFSCC

Data for Analysis of n3	
Number of Observations Read	162
Number of Observations Used	153

Data for Analysis of n4 n5	
Number of Observations Read	162
Number of Observations Used	135

Data for Analysis of n6	
Number of Observations Read	162
Number of Observations Used	120

Data for Analysis of n7	
Number of Observations Read	162
Number of Observations Used	148

Data for Analysis of n8	
Number of Observations Read	162

Data for Analysis of n8	
Number of Observations Used	137

Data for Analysis of n9	
Number of Observations Read	162
Number of Observations Used	148

Data for Analysis of n10	
Number of Observations Read	162
Number of Observations Used	151

Data for Analysis of n011_1	
Number of Observations Read	162
Number of Observations Used	150

Data for Analysis of n011_2	
Number of Observations Read	162
Number of Observations Used	142

Data for Analysis of n011_3	
Number of Observations Read	162
Number of Observations Used	143

Data for Analysis of n011_4	
Number of Observations Read	162
Number of Observations Used	150

Data for Analysis of n12	
Number of Observations Read	162
Number of Observations Used	142

Data for Analysis of q13	
Number of Observations Read	162
Number of Observations Used	113

Data for Analysis of n015_1	
Number of Observations Read	162
Number of Observations Used	140

Data for Analysis of n015_2	
Number of Observations Read	162
Number of Observations Used	146

Note: Variables in each group are consistent with respect to the presence or absence of missing values.

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n3 (Significant)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	16.11610308	4.02902577	10.82	<.0001
Error	148	55.11265509	0.37238280		
Corrected Total	152	71.22875817			

R-Square	Coeff Var	Root MSE	n3 Mean
0.226258	37.19739	0.610232	1.640523

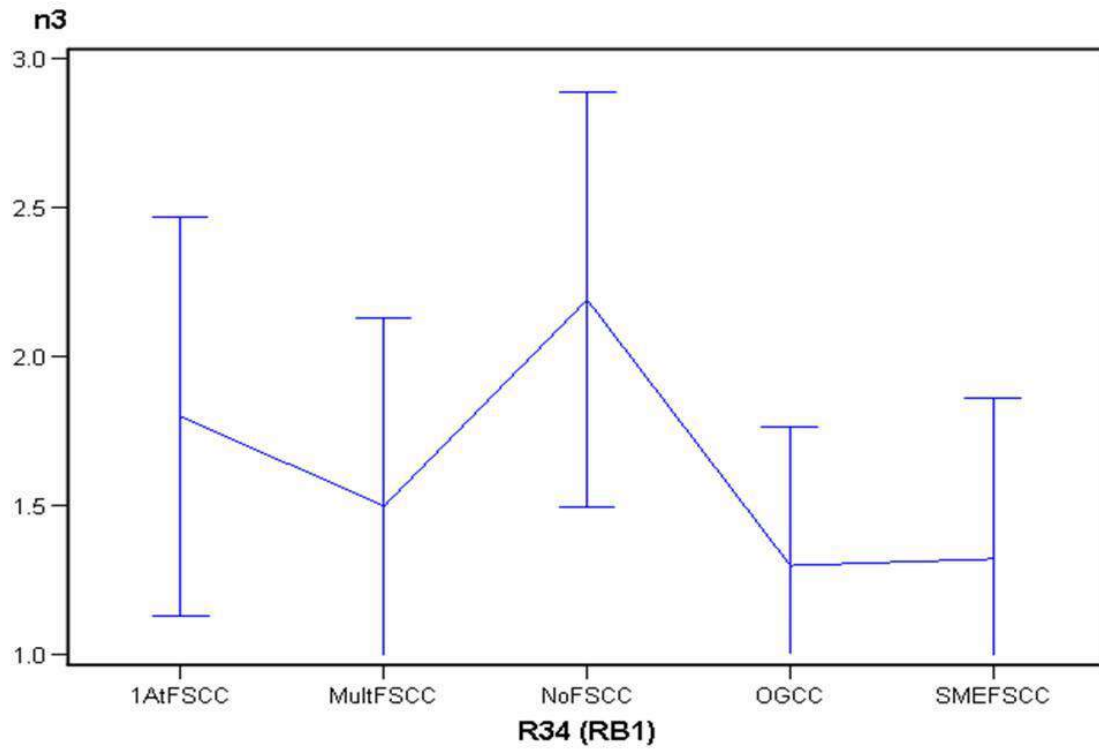
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	16.11610308	4.02902577	10.82	<.0001

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One-Way Analysis of Variance

Plots

Box Plot of n3 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n3

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	148
Error Mean Square	0.372383
Critical Value of F	2.43279

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.3923	-0.0680	0.8526	
NoFSCC - MultFSCC	0.6923	0.0874	1.2972	***
NoFSCC - SMEFSCC	0.8697	0.3635	1.3760	***
NoFSCC - OGCC	0.8923	0.3822	1.4024	***
1AtFSCC - NoFSCC	-0.3923	-0.8526	0.0680	
1AtFSCC - MultFSCC	0.3000	-0.2468	0.8468	
1AtFSCC - SMEFSCC	0.4774	0.0423	0.9126	***
1AtFSCC - OGCC	0.5000	0.0604	0.9396	***
MultFSCC - NoFSCC	-0.6923	-1.2972	-0.0874	***
MultFSCC - 1AtFSCC	-0.3000	-0.8468	0.2468	
MultFSCC - SMEFSCC	0.1774	-0.4086	0.7634	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
MultFSCC - OGCC	0.2000	-0.3893	0.7893	
SMEFSCC - NoFSCC	-0.8697	-1.3760	-0.3635	***
SMEFSCC - 1AtFSCC	-0.4774	-0.9126	-0.0423	***
SMEFSCC - MultFSCC	-0.1774	-0.7634	0.4086	
SMEFSCC - OGCC	0.0226	-0.4649	0.5101	
OGCC - NoFSCC	-0.8923	-1.4024	-0.3822	***
OGCC - 1AtFSCC	-0.5000	-0.9396	-0.0604	***
OGCC - MultFSCC	-0.2000	-0.7893	0.3893	
OGCC - SMEFSCC	-0.0226	-0.5101	0.4649	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n4 (Not Significant)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	2.05002280	0.51250570	1.98	0.1016
Error	130	33.68331053	0.25910239		
Corrected Total	134	35.73333333			

R-Square	Coeff Var	Root MSE	n4 Mean
0.057370	27.59752	0.509021	1.844444

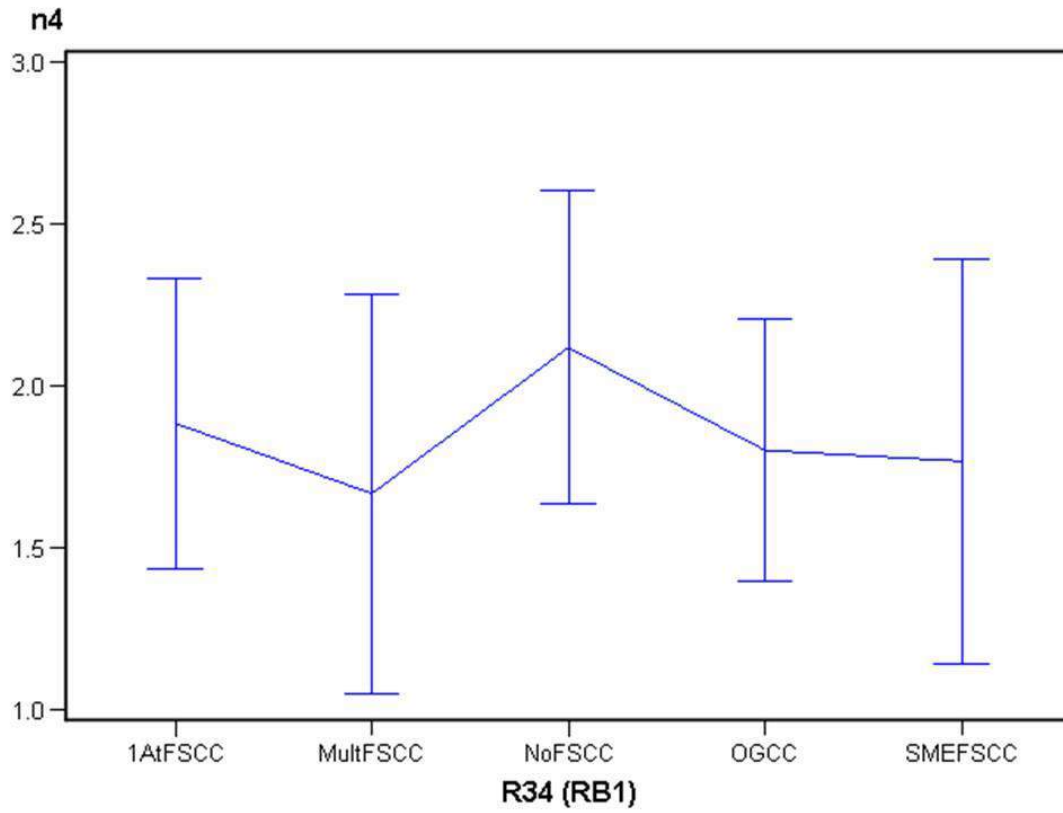
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	2.05002280	0.51250570	1.98	0.1016

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One-Way Analysis of Variance

Plots

Plot of n4 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n5 (Marginally Significant)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	4.17202716	1.04300679	2.65	0.0359
Error	130	51.08723210	0.39297871		
Corrected Total	134	55.25925926			

R-Square	Coeff Var	Root MSE	n5 Mean
0.075499	30.22458	0.626880	2.074074

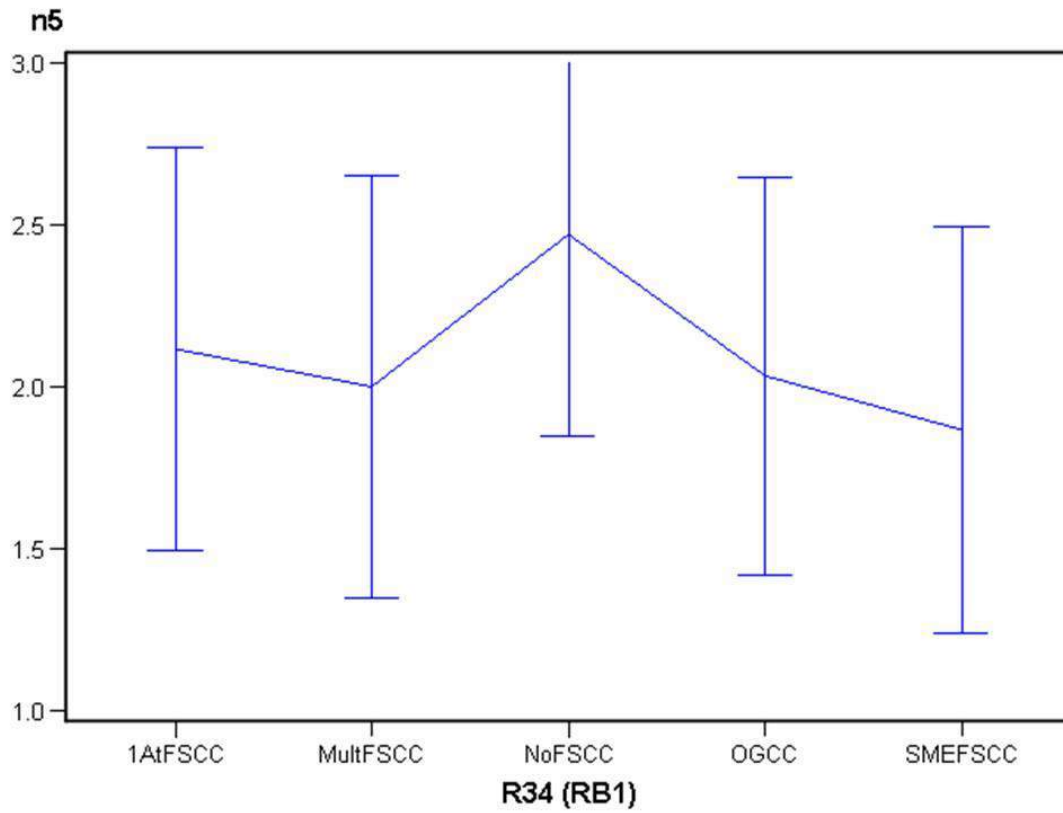
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	4.17202716	1.04300679	2.65	0.0359

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One-Way Analysis of Variance

Plots

Plot of n5 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n5

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	130
Error Mean Square	0.392979
Critical Value of F	2.44135

Comparisons significant at the 0.05 level are indicated by ***.				
Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.3543	-0.2069	0.9155	
NoFSCC - OGCC	0.4373	-0.1574	1.0319	
NoFSCC - MultFSCC	0.4706	-0.2234	1.1645	
NoFSCC - SMEFSCC	0.6039	0.0092	1.1986	***
1AtFSCC - NoFSCC	-0.3543	-0.9155	0.2069	
1AtFSCC - OGCC	0.0829	-0.3831	0.5490	
1AtFSCC - MultFSCC	0.1163	-0.4712	0.7037	
1AtFSCC - SMEFSCC	0.2496	-0.2164	0.7156	
OGCC - NoFSCC	-0.4373	-1.0319	0.1574	
OGCC - 1AtFSCC	-0.0829	-0.5490	0.3831	
OGCC - MultFSCC	0.0333	-0.5861	0.6528	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
OGCC - SMEFSCC	0.1667	-0.3391	0.6725	
MultFSCC - NoFSCC	-0.4706	-1.1645	0.2234	
MultFSCC - 1AtFSCC	-0.1163	-0.7037	0.4712	
MultFSCC - OGCC	-0.0333	-0.6528	0.5861	
MultFSCC - SMEFSCC	0.1333	-0.4861	0.7528	
SMEFSCC - NoFSCC	-0.6039	-1.1986	-0.0092	***
SMEFSCC - 1AtFSCC	-0.2496	-0.7156	0.2164	
SMEFSCC - OGCC	-0.1667	-0.6725	0.3391	
SMEFSCC - MultFSCC	-0.1333	-0.7528	0.4861	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n6 (Significant)

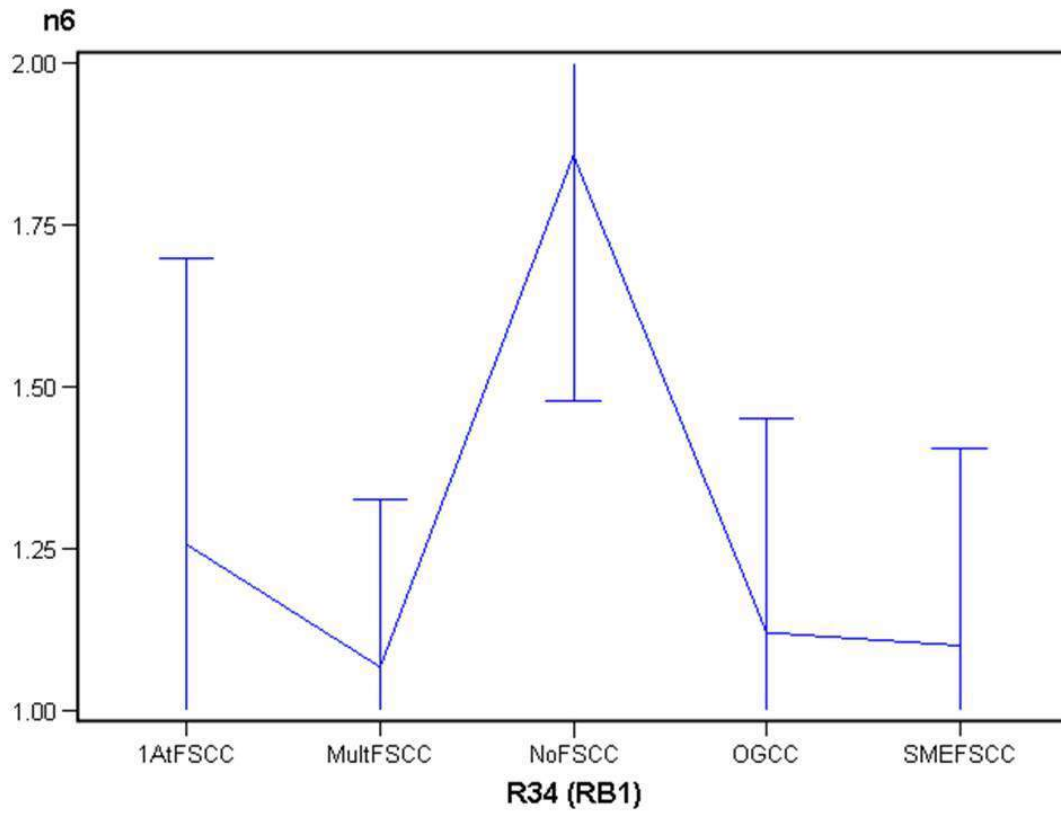
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	3.88347730	0.97086932	7.29	<.0001
Error	115	15.31652270	0.13318715		
Corrected Total	119	19.20000000			

R-Square	Coeff Var	Root MSE	n6 Mean
0.202264	30.41235	0.364948	1.200000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	3.88347730	0.97086932	7.29	<.0001

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One-Way Analysis of Variance
Plots
Plot of n6 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n6

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	115
Error Mean Square	0.133187
Critical Value of F	2.45057

Comparisons significant at the 0.05 level are indicated by ***.				
Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.60133	0.13564	1.06702	***
NoFSCC - OGCC	0.73714	0.24855	1.22574	***
NoFSCC - SMEFSCC	0.75714	0.27754	1.23675	***
NoFSCC - MultFSCC	0.79048	0.26746	1.31349	***
1AtFSCC - NoFSCC	-0.60133	-1.06702	-0.13564	***
1AtFSCC - OGCC	0.13581	-0.15156	0.42319	
1AtFSCC - SMEFSCC	0.15581	-0.11599	0.42762	
1AtFSCC - MultFSCC	0.18915	-0.15349	0.53178	
OGCC - NoFSCC	-0.73714	-1.22574	-0.24855	***
OGCC - 1AtFSCC	-0.13581	-0.42319	0.15156	
OGCC - SMEFSCC	0.02000	-0.28942	0.32942	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
OGCC - MultFSCC	0.05333	-0.31984	0.42651	
SMEFSCC - NoFSCC	-0.75714	-1.23675	-0.27754	***
SMEFSCC - 1AtFSCC	-0.15581	-0.42762	0.11599	
SMEFSCC - OGCC	-0.02000	-0.32942	0.28942	
SMEFSCC - MultFSCC	0.03333	-0.32799	0.39466	
MultFSCC - NoFSCC	-0.79048	-1.31349	-0.26746	***
MultFSCC - 1AtFSCC	-0.18915	-0.53178	0.15349	
MultFSCC - OGCC	-0.05333	-0.42651	0.31984	
MultFSCC - SMEFSCC	-0.03333	-0.39466	0.32799	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n7 (Significant)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	25.4436937	6.3609234	9.35	<.0001
Error	143	97.3333333	0.6806527		
Corrected Total	147	122.7770270			

R-Square	Coeff Var	Root MSE	n7 Mean
0.207235	38.03816	0.825017	2.168919

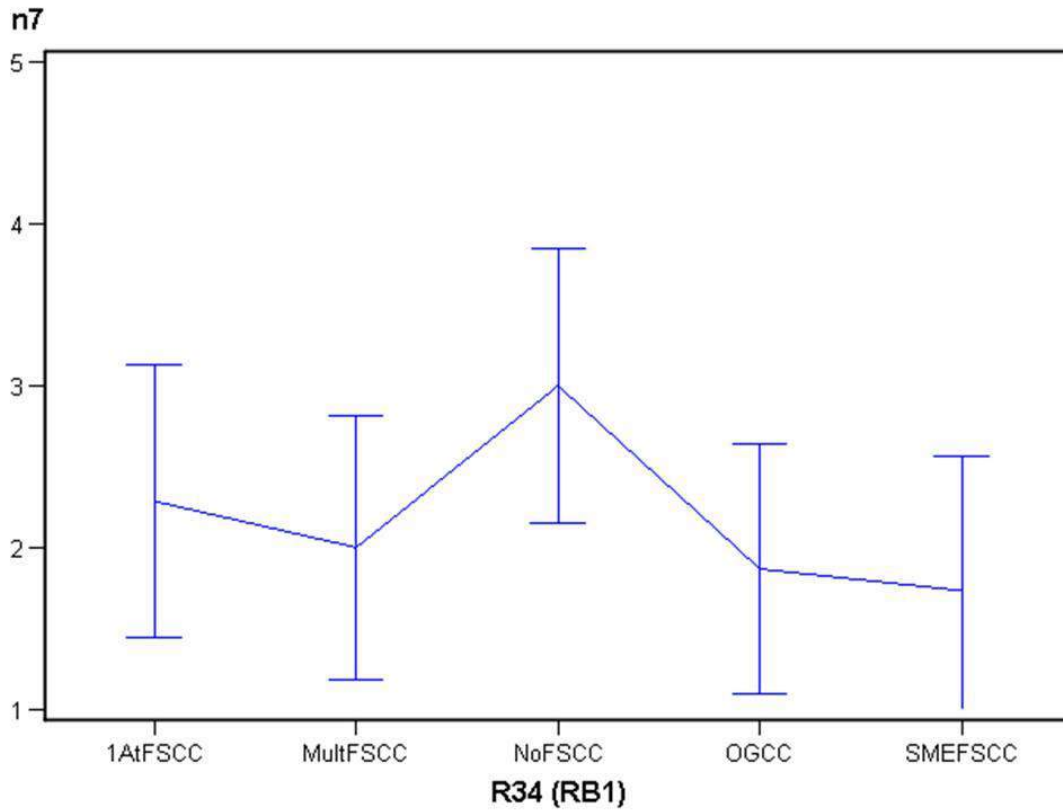
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	25.44369369	6.36092342	9.35	<.0001

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One-Way Analysis of Variance

Plots

Plot of n7 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n7

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	143
Error Mean Square	0.680653
Critical Value of F	2.43495

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.7143	0.0635	1.3651	***
NoFSCC - MultFSCC	1.0000	0.1618	1.8382	***
NoFSCC - OGCC	1.1333	0.4197	1.8469	***
NoFSCC - SMEFSCC	1.2667	0.5531	1.9803	***
1AtFSCC - NoFSCC	-0.7143	-1.3651	-0.0635	***
1AtFSCC - MultFSCC	0.2857	-0.4557	1.0271	
1AtFSCC - OGCC	0.4190	-0.1778	1.0159	
1AtFSCC - SMEFSCC	0.5524	-0.0445	1.1493	
MultFSCC - NoFSCC	-1.0000	-1.8382	-0.1618	***
MultFSCC - 1AtFSCC	-0.2857	-1.0271	0.4557	
MultFSCC - OGCC	0.1333	-0.6637	0.9304	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
MultFSCC - SMEFSCC	0.2667	-0.5304	1.0637	
OGCC - NoFSCC	-1.1333	-1.8469	-0.4197	***
OGCC - 1AtFSCC	-0.4190	-1.0159	0.1778	
OGCC - MultFSCC	-0.1333	-0.9304	0.6637	
OGCC - SMEFSCC	0.1333	-0.5315	0.7981	
SMEFSCC - NoFSCC	-1.2667	-1.9803	-0.5531	***
SMEFSCC - 1AtFSCC	-0.5524	-1.1493	0.0445	
SMEFSCC - MultFSCC	-0.2667	-1.0637	0.5304	
SMEFSCC - OGCC	-0.1333	-0.7981	0.5315	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n8 (Marginally Significant)

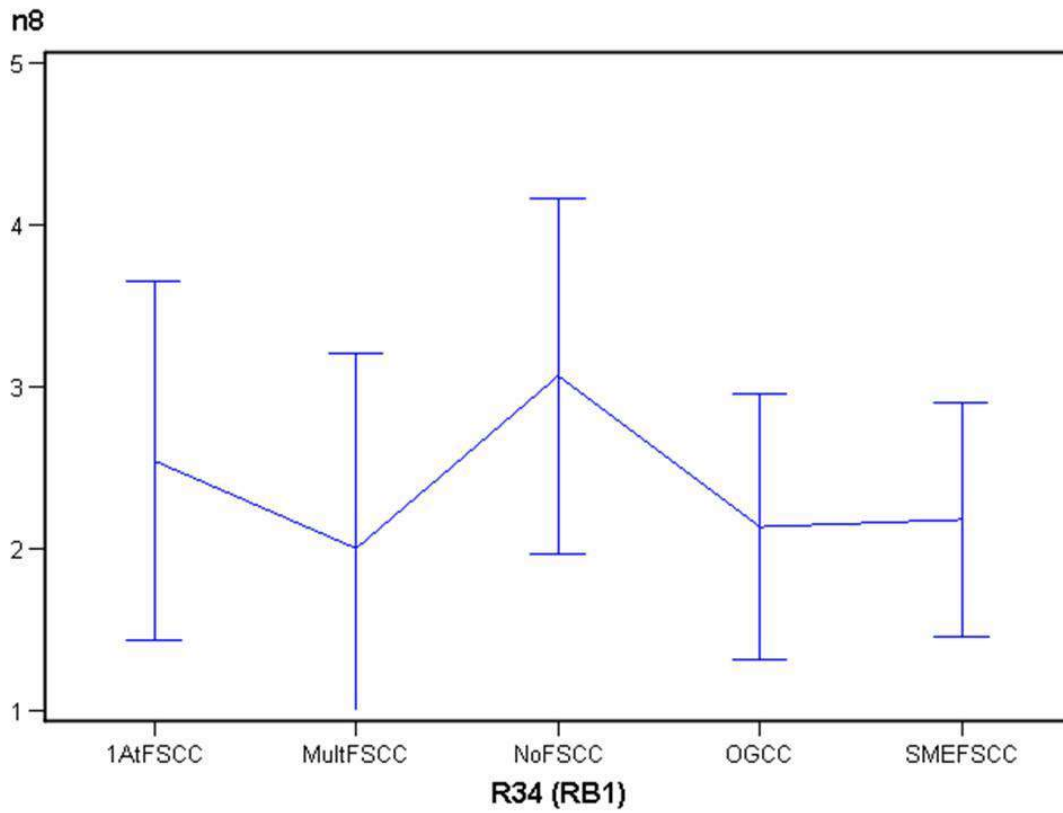
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	13.5907890	3.3976973	3.44	0.0104
Error	132	130.4238095	0.9880592		
Corrected Total	136	144.0145985			

R-Square	Coeff Var	Root MSE	n8 Mean
0.094371	41.90141	0.994012	2.372263

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	13.59078902	3.39769725	3.44	0.0104

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One-Way Analysis of Variance
Plots
Plot of n8 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n8

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	132
Error Mean Square	0.988059
Critical Value of F	2.44028

Comparisons significant at the 0.05 level are indicated by ***.				
Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.5250	-0.3936	1.4436	
NoFSCC - SMEFSCC	0.8881	-0.1056	1.8818	
NoFSCC - OGCC	0.9333	-0.0487	1.9154	
NoFSCC - MultFSCC	1.0667	-0.0495	2.1828	
1AtFSCC - NoFSCC	-0.5250	-1.4436	0.3936	
1AtFSCC - SMEFSCC	0.3631	-0.3754	1.1016	
1AtFSCC - OGCC	0.4083	-0.3144	1.1311	
1AtFSCC - MultFSCC	0.5417	-0.3548	1.4382	
SMEFSCC - NoFSCC	-0.8881	-1.8818	0.1056	
SMEFSCC - 1AtFSCC	-0.3631	-1.1016	0.3754	
SMEFSCC - OGCC	0.0452	-0.7708	0.8613	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
SMEFSCC - MultFSCC	0.1786	-0.7947	1.1518
OGCC - NoFSCC	-0.9333	-1.9154	0.0487
OGCC - 1AtFSCC	-0.4083	-1.1311	0.3144
OGCC - SMEFSCC	-0.0452	-0.8613	0.7708
OGCC - MultFSCC	0.1333	-0.8281	1.0947
MultFSCC - NoFSCC	-1.0667	-2.1828	0.0495
MultFSCC - 1AtFSCC	-0.5417	-1.4382	0.3548
MultFSCC - SMEFSCC	-0.1786	-1.1518	0.7947
MultFSCC - OGCC	-0.1333	-1.0947	0.8281

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n9 (Not Significant)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	0.16858258	0.04214565	0.64	0.6340
Error	143	9.39898498	0.06572717		
Corrected Total	147	9.56756757			

R-Square	Coeff Var	Root MSE	n9 Mean
0.017620	13.17473	0.256373	1.945946

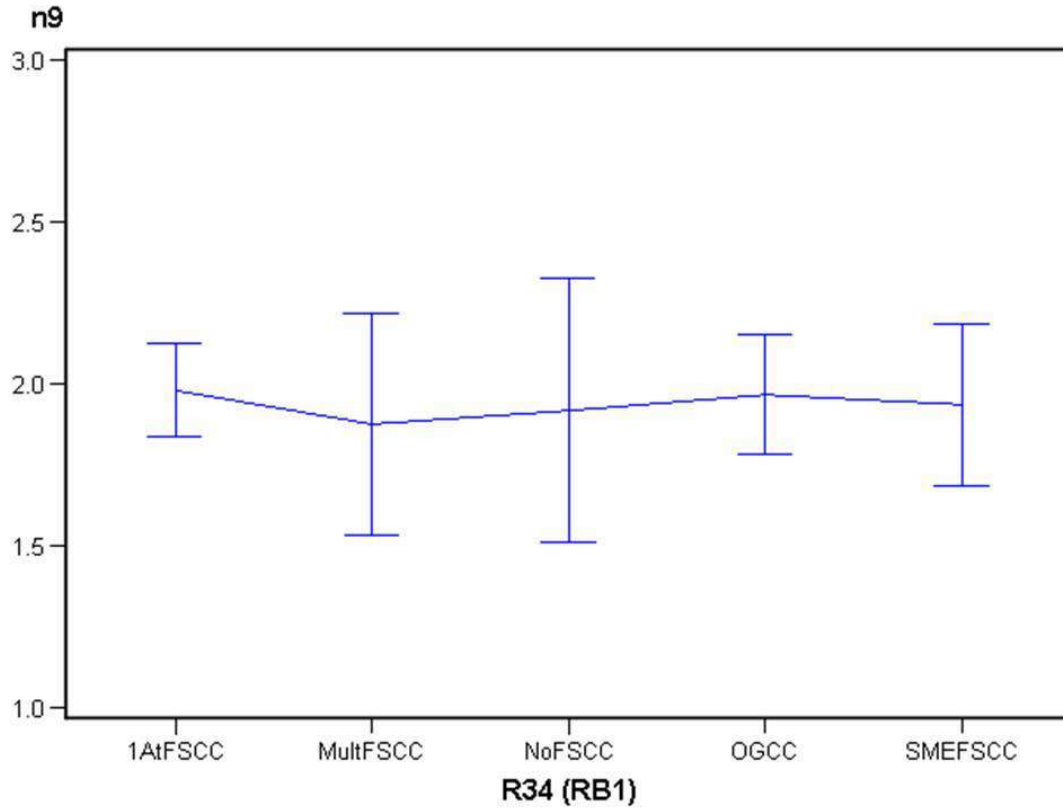
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	0.16858258	0.04214565	0.64	0.6340

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One-Way Analysis of Variance

Plots

Plot of n9 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n10 (Significant)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	16.0908166	4.0227041	6.61	<.0001
Error	146	88.9025609	0.6089216		
Corrected Total	150	104.9933775			

R-Square	Coeff Var	Root MSE	n10 Mean
0.153256	39.14634	0.780334	1.993377

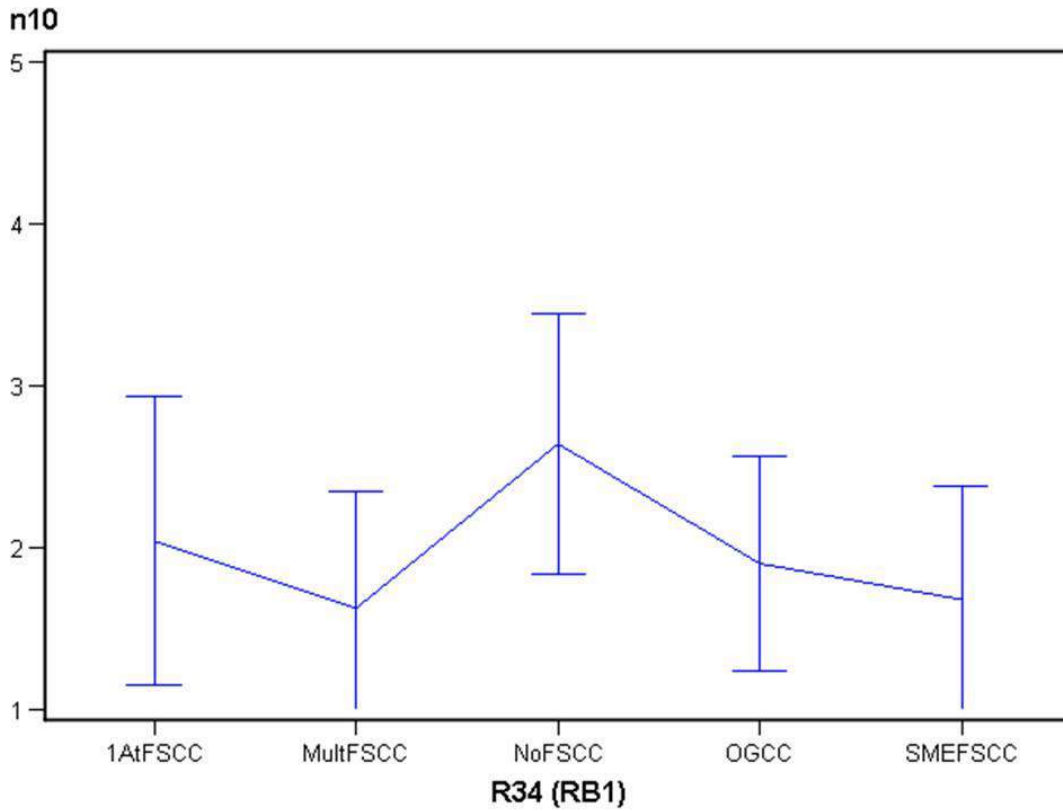
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	16.09081659	4.02270415	6.61	<.0001

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One-Way Analysis of Variance

Plots

Plot of n10 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n10

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	146
Error Mean Square	0.608922
Critical Value of F	2.43363

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.5992	0.0008	1.1976	***
NoFSCC - OGCC	0.7400	0.0807	1.3993	***
NoFSCC - SMEFSCC	0.9626	0.3081	1.6170	***
NoFSCC - MultFSCC	1.0150	0.2355	1.7945	***
1AtFSCC - NoFSCC	-0.5992	-1.1976	-0.0008	***
1AtFSCC - OGCC	0.1408	-0.4236	0.7052	
1AtFSCC - SMEFSCC	0.3634	-0.1953	0.9221	
1AtFSCC - MultFSCC	0.4158	-0.2852	1.1168	
OGCC - NoFSCC	-0.7400	-1.3993	-0.0807	***
OGCC - 1AtFSCC	-0.1408	-0.7052	0.4236	
OGCC - SMEFSCC	0.2226	-0.4010	0.8461	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
OGCC - MultFSCC	0.2750	-0.4787	1.0287	
SMEFSCC - NoFSCC	-0.9626	-1.6170	-0.3081	***
SMEFSCC - 1AtFSCC	-0.3634	-0.9221	0.1953	
SMEFSCC - OGCC	-0.2226	-0.8461	0.4010	
SMEFSCC - MultFSCC	0.0524	-0.6970	0.8019	
MultFSCC - NoFSCC	-1.0150	-1.7945	-0.2355	***
MultFSCC - 1AtFSCC	-0.4158	-1.1168	0.2852	
MultFSCC - OGCC	-0.2750	-1.0287	0.4787	
MultFSCC - SMEFSCC	-0.0524	-0.8019	0.6970	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n011_1 (Significant)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	19.4284354	4.8571088	6.64	<.0001
Error	145	106.0115646	0.7311142		
Corrected Total	149	125.4400000			

R-Square	Coeff Var	Root MSE	n011_1 Mean
0.154882	34.47791	0.855052	2.480000

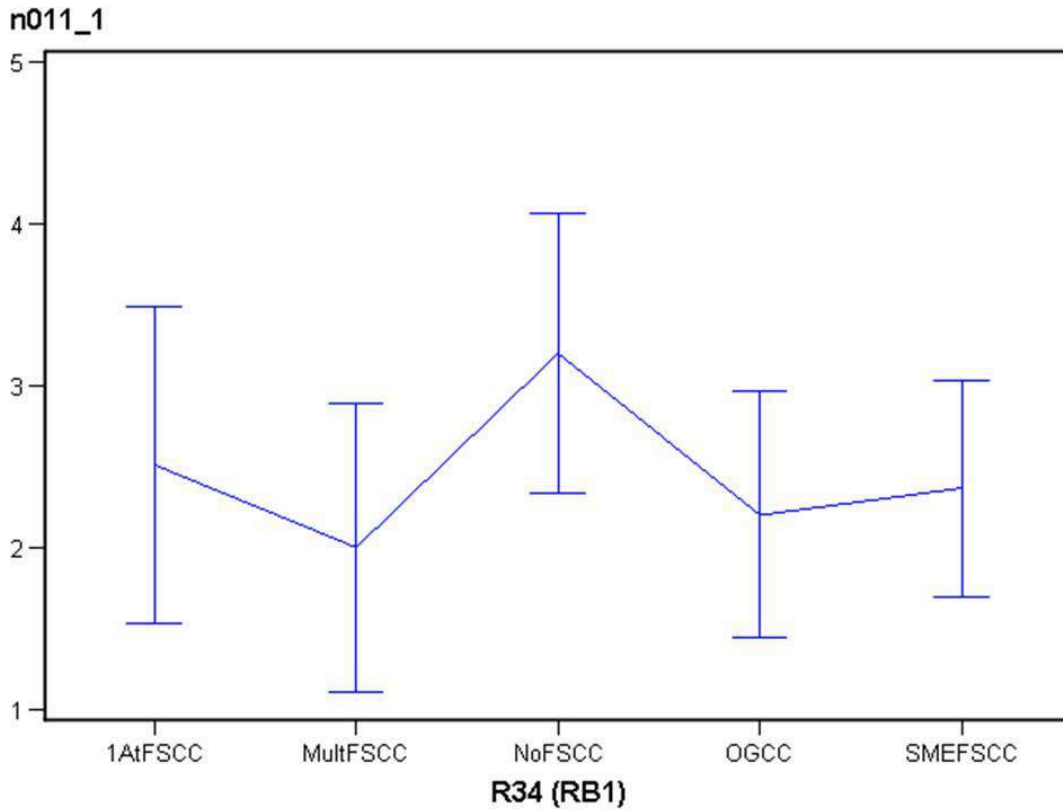
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	19.42843537	4.85710884	6.64	<.0001

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One-Way Analysis of Variance

Plots

Plot of n011_1 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n011_1

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	145
Error Mean Square	0.731114
Critical Value of F	2.43407

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.6898	0.0340	1.3455	***
NoFSCC - SMEFSCC	0.8333	0.1108	1.5558	***
NoFSCC - OGCC	1.0000	0.2775	1.7225	***
NoFSCC - MultFSCC	1.2000	0.3458	2.0542	***
1AtFSCC - NoFSCC	-0.6898	-1.3455	-0.0340	***
1AtFSCC - SMEFSCC	0.1435	-0.4750	0.7620	
1AtFSCC - OGCC	0.3102	-0.3083	0.9287	
1AtFSCC - MultFSCC	0.5102	-0.2580	1.2784	
SMEFSCC - NoFSCC	-0.8333	-1.5558	-0.1108	***
SMEFSCC - 1AtFSCC	-0.1435	-0.7620	0.4750	
SMEFSCC - OGCC	0.1667	-0.5222	0.8555	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
SMEFSCC - MultFSCC	0.3667	-0.4593	1.1926	
OGCC - NoFSCC	-1.0000	-1.7225	-0.2775	***
OGCC - 1AtFSCC	-0.3102	-0.9287	0.3083	
OGCC - SMEFSCC	-0.1667	-0.8555	0.5222	
OGCC - MultFSCC	0.2000	-0.6259	1.0259	
MultFSCC - NoFSCC	-1.2000	-2.0542	-0.3458	***
MultFSCC - 1AtFSCC	-0.5102	-1.2784	0.2580	
MultFSCC - SMEFSCC	-0.3667	-1.1926	0.4593	
MultFSCC - OGCC	-0.2000	-1.0259	0.6259	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n011_2 (Significant)

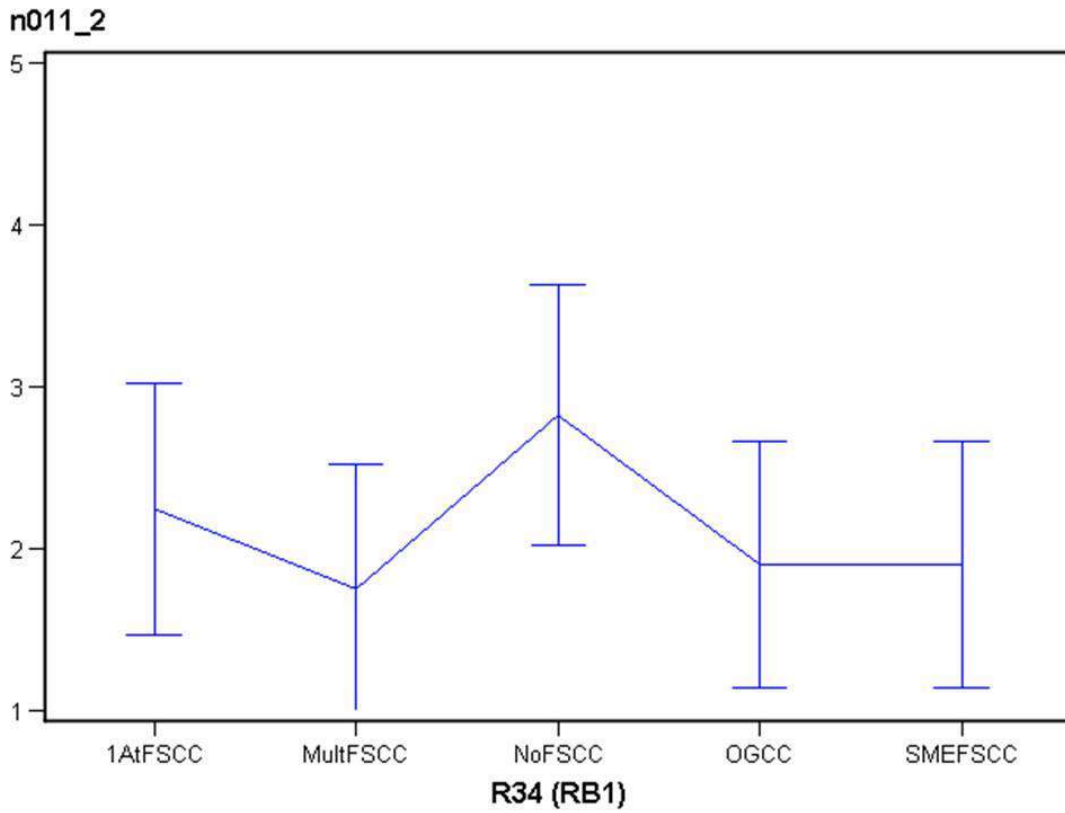
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	14.26537037	3.56634259	5.96	0.0002
Error	137	81.93181273	0.59804243		
Corrected Total	141	96.19718310			

R-Square	Coeff Var	Root MSE	n011_2 Mean
0.148293	36.60438	0.773332	2.112676

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	14.26537037	3.56634259	5.96	0.0002

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One-Way Analysis of Variance
Plots
Plot of n011_2 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure
Scheffe's Test for n011_2

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	137
Error Mean Square	0.598042
Critical Value of F	2.43775

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.5786	-0.1011	1.2584	
NoFSCC - OGCC	0.9235	0.1904	1.6566	***
NoFSCC - SMEFSCC	0.9235	0.1904	1.6566	***
NoFSCC - MultFSCC	1.0735	0.2324	1.9147	***
1AtFSCC - NoFSCC	-0.5786	-1.2584	0.1011	
1AtFSCC - OGCC	0.3449	-0.2149	0.9047	
1AtFSCC - SMEFSCC	0.3449	-0.2149	0.9047	
1AtFSCC - MultFSCC	0.4949	-0.2004	1.1902	
OGCC - NoFSCC	-0.9235	-1.6566	-0.1904	***
OGCC - 1AtFSCC	-0.3449	-0.9047	0.2149	
OGCC - SMEFSCC	0.0000	-0.6235	0.6235	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
OGCC - MultFSCC	0.1500	-0.5976	0.8976	
SMEFSCC - NoFSCC	-0.9235	-1.6566	-0.1904	***
SMEFSCC - 1AtFSCC	-0.3449	-0.9047	0.2149	
SMEFSCC - OGCC	0.0000	-0.6235	0.6235	
SMEFSCC - MultFSCC	0.1500	-0.5976	0.8976	
MultFSCC - NoFSCC	-1.0735	-1.9147	-0.2324	***
MultFSCC - 1AtFSCC	-0.4949	-1.1902	0.2004	
MultFSCC - OGCC	-0.1500	-0.8976	0.5976	
MultFSCC - SMEFSCC	-0.1500	-0.8976	0.5976	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n011_3 (Significant)

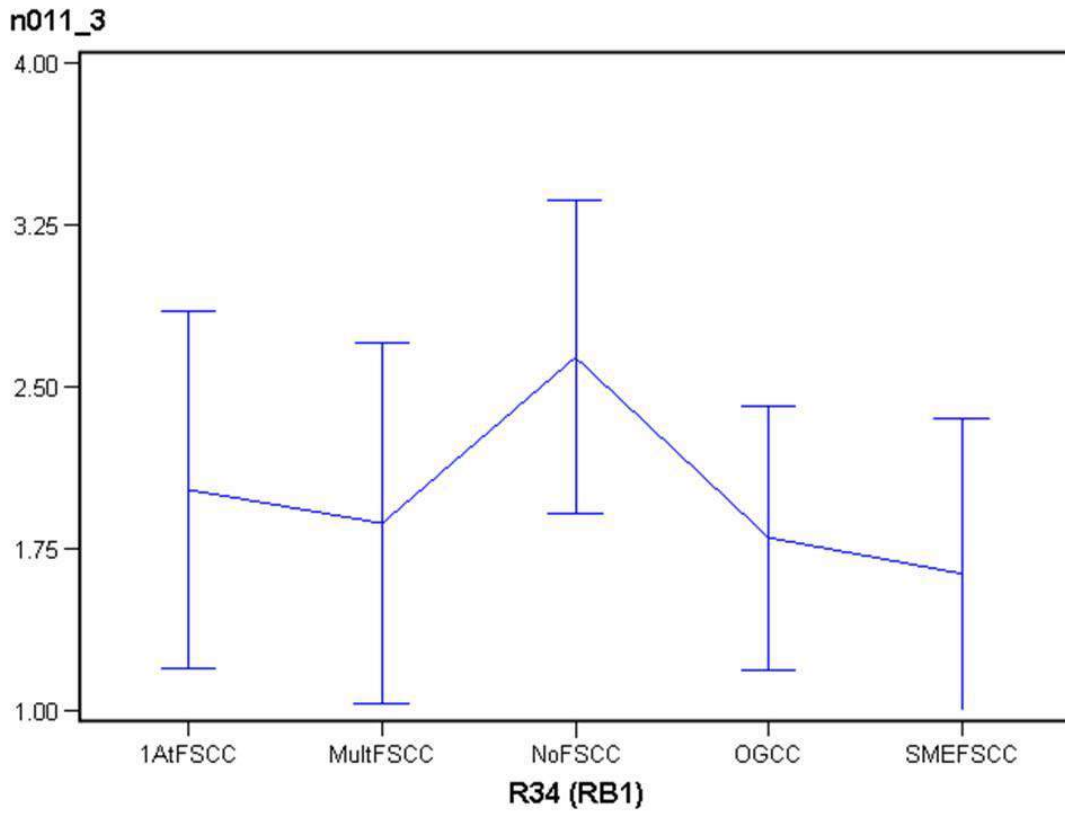
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	14.31894193	3.57973548	6.37	<.0001
Error	138	77.56916996	0.56209543		
Corrected Total	142	91.88811189			

R-Square	Coeff Var	Root MSE	n011_3 Mean
0.155830	38.01824	0.749730	1.972028

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	14.31894193	3.57973548	6.37	<.0001

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One-Way Analysis of Variance
Plots
Plot of n011_3 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n011_3

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	138
Error Mean Square	0.562095
Critical Value of F	2.43726

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.6146	0.0078	1.2214	***
NoFSCC - MultFSCC	0.7697	-0.0141	1.5535	
NoFSCC - OGCC	0.8364	0.1793	1.4934	***
NoFSCC - SMEFSCC	1.0030	0.3460	1.6601	***
1AtFSCC - NoFSCC	-0.6146	-1.2214	-0.0078	***
1AtFSCC - MultFSCC	0.1551	-0.5410	0.8511	
1AtFSCC - OGCC	0.2217	-0.3276	0.7711	
1AtFSCC - SMEFSCC	0.3884	-0.1609	0.9378	
MultFSCC - NoFSCC	-0.7697	-1.5535	0.0141	
MultFSCC - 1AtFSCC	-0.1551	-0.8511	0.5410	
MultFSCC - OGCC	0.0667	-0.6736	0.8069	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
MultFSCC - SMEFSCC	0.2333	-0.5069	0.9736	
OGCC - NoFSCC	-0.8364	-1.4934	-0.1793	***
OGCC - 1AtFSCC	-0.2217	-0.7711	0.3276	
OGCC - MultFSCC	-0.0667	-0.8069	0.6736	
OGCC - SMEFSCC	0.1667	-0.4378	0.7711	
SMEFSCC - NoFSCC	-1.0030	-1.6601	-0.3460	***
SMEFSCC - 1AtFSCC	-0.3884	-0.9378	0.1609	
SMEFSCC - MultFSCC	-0.2333	-0.9736	0.5069	
SMEFSCC - OGCC	-0.1667	-0.7711	0.4378	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n011_4 (Significant)

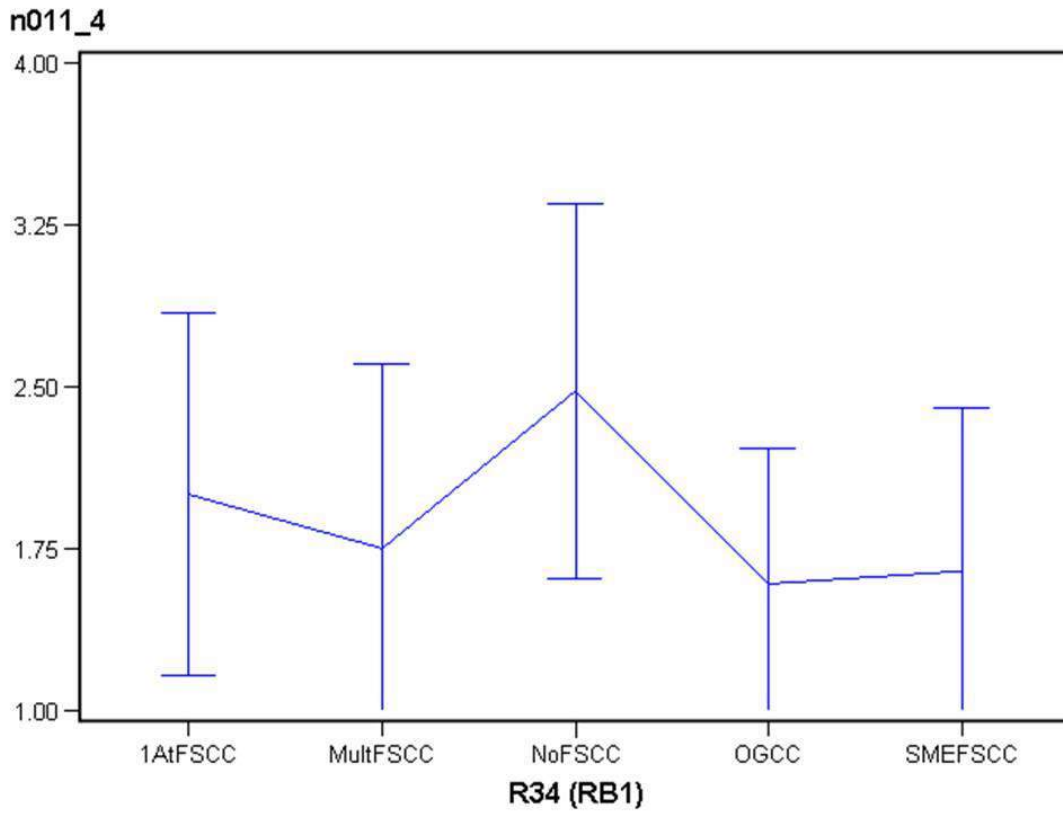
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	14.1287430	3.5321858	5.61	0.0003
Error	145	91.3712570	0.6301466		
Corrected Total	149	105.5000000			

R-Square	Coeff Var	Root MSE	n011_4 Mean
0.133922	41.77988	0.793818	1.900000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	14.12874305	3.53218576	5.61	0.0003

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One-Way Analysis of Variance
Plots
Plot of n011_4 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n011_4

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	145
Error Mean Square	0.630147
Critical Value of F	2.43407

Comparisons significant at the 0.05 level are indicated by ***.				
Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.4800	-0.1288	1.0888	
NoFSCC - MultFSCC	0.7300	-0.0630	1.5230	
NoFSCC - SMEFSCC	0.8348	0.1690	1.5007	***
NoFSCC - OGCC	0.8938	0.2178	1.5698	***
1AtFSCC - NoFSCC	-0.4800	-1.0888	0.1288	
1AtFSCC - MultFSCC	0.2500	-0.4632	0.9632	
1AtFSCC - SMEFSCC	0.3548	-0.2136	0.9233	
1AtFSCC - OGCC	0.4138	-0.1665	0.9941	
MultFSCC - NoFSCC	-0.7300	-1.5230	0.0630	
MultFSCC - 1AtFSCC	-0.2500	-0.9632	0.4632	
MultFSCC - SMEFSCC	0.1048	-0.6576	0.8673	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
MultFSCC - OGCC	0.1638	-0.6076	0.9352	
SMEFSCC - NoFSCC	-0.8348	-1.5007	-0.1690	***
SMEFSCC - 1AtFSCC	-0.3548	-0.9233	0.2136	
SMEFSCC - MultFSCC	-0.1048	-0.8673	0.6576	
SMEFSCC - OGCC	0.0590	-0.5809	0.6989	
OGCC - NoFSCC	-0.8938	-1.5698	-0.2178	***
OGCC - 1AtFSCC	-0.4138	-0.9941	0.1665	
OGCC - MultFSCC	-0.1638	-0.9352	0.6076	
OGCC - SMEFSCC	-0.0590	-0.6989	0.5809	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n12 (Not Significant)

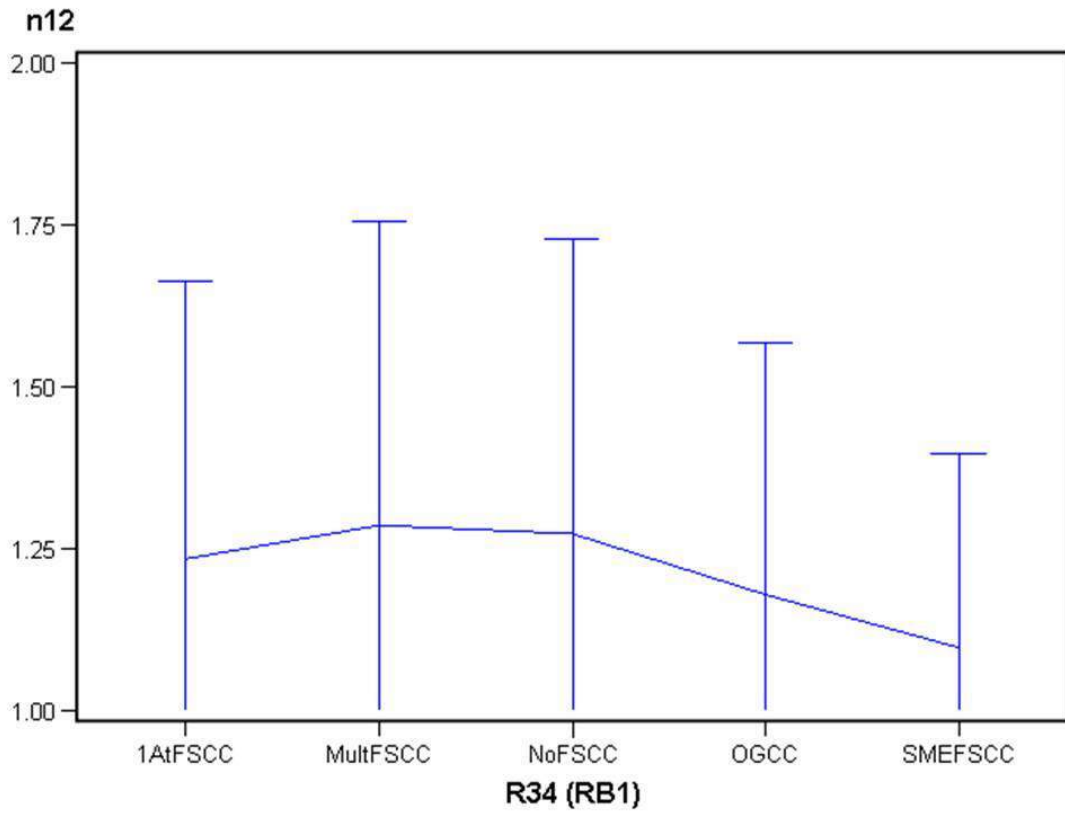
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	0.61433338	0.15358334	0.94	0.4448
Error	137	22.46313141	0.16396446		
Corrected Total	141	23.07746479			

R-Square	Coeff Var	Root MSE	n12 Mean
0.026620	33.62537	0.404925	1.204225

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	0.61433338	0.15358334	0.94	0.4448

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One-Way Analysis of Variance
Plots
Plot of n12 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: q13 (Significant)

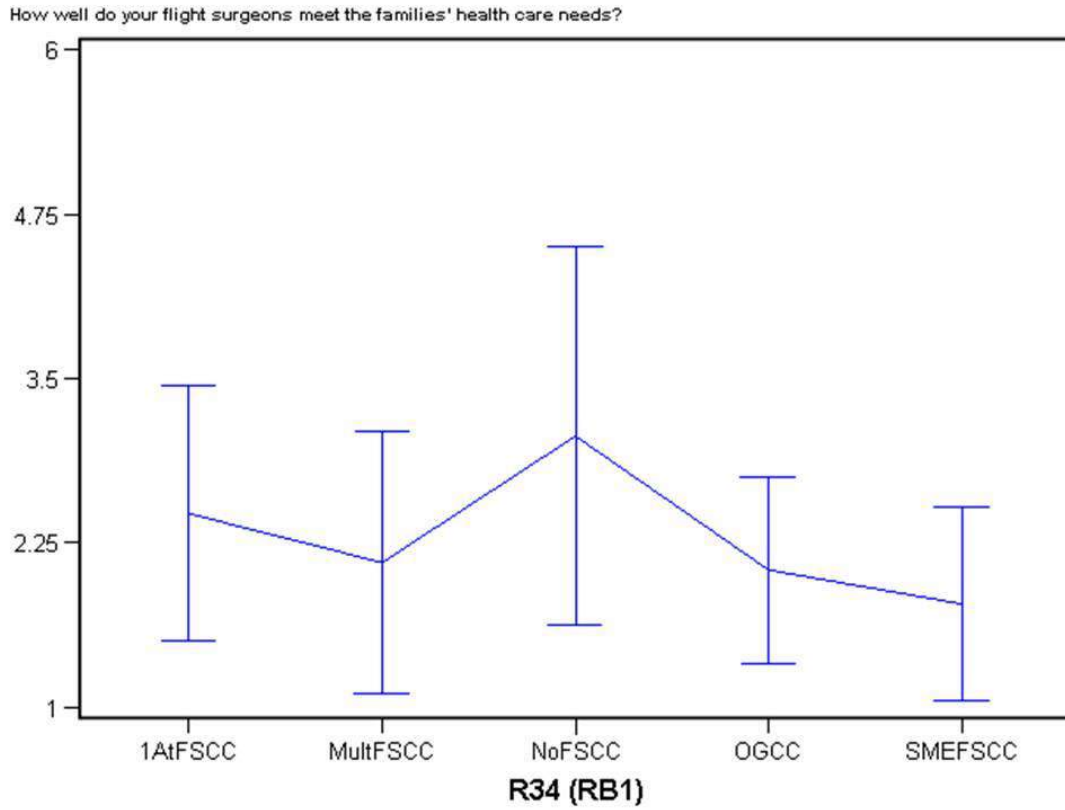
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	19.5548686	4.8887171	5.36	0.0006
Error	108	98.4805297	0.9118568		
Corrected Total	112	118.0353982			

R-Square	Coeff Var	Root MSE	q13 Mean
0.165670	42.15041	0.954912	2.265487

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	19.55486855	4.88871714	5.36	0.0006

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One-Way Analysis of Variance
Plots
Plot of q13 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for q13

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	108
Error Mean Square	0.911857
Critical Value of F	2.45577

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.5903	-0.3090	1.4895	
NoFSCC - MultFSCC	0.9625	-0.2440	2.1690	
NoFSCC - OGCC	1.0190	0.0447	1.9933	***
NoFSCC - SMEFSCC	1.2768	0.3388	2.2147	***
1AtFSCC - NoFSCC	-0.5903	-1.4895	0.3090	
1AtFSCC - MultFSCC	0.3722	-0.6976	1.4421	
1AtFSCC - OGCC	0.4287	-0.3702	1.2277	
1AtFSCC - SMEFSCC	0.6865	-0.0676	1.4406	
MultFSCC - NoFSCC	-0.9625	-2.1690	0.2440	
MultFSCC - 1AtFSCC	-0.3722	-1.4421	0.6976	
MultFSCC - OGCC	0.0565	-1.0771	1.1902	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
MultFSCC - SMEFSCC	0.3143	-0.7883	1.4168	
OGCC - NoFSCC	-1.0190	-1.9933	-0.0447	***
OGCC - 1AtFSCC	-0.4287	-1.2277	0.3702	
OGCC - MultFSCC	-0.0565	-1.1902	1.0771	
OGCC - SMEFSCC	0.2578	-0.5845	1.1000	
SMEFSCC - NoFSCC	-1.2768	-2.2147	-0.3388	***
SMEFSCC - 1AtFSCC	-0.6865	-1.4406	0.0676	
SMEFSCC - MultFSCC	-0.3143	-1.4168	0.7883	
SMEFSCC - OGCC	-0.2578	-1.1000	0.5845	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n015_1 (Significant)

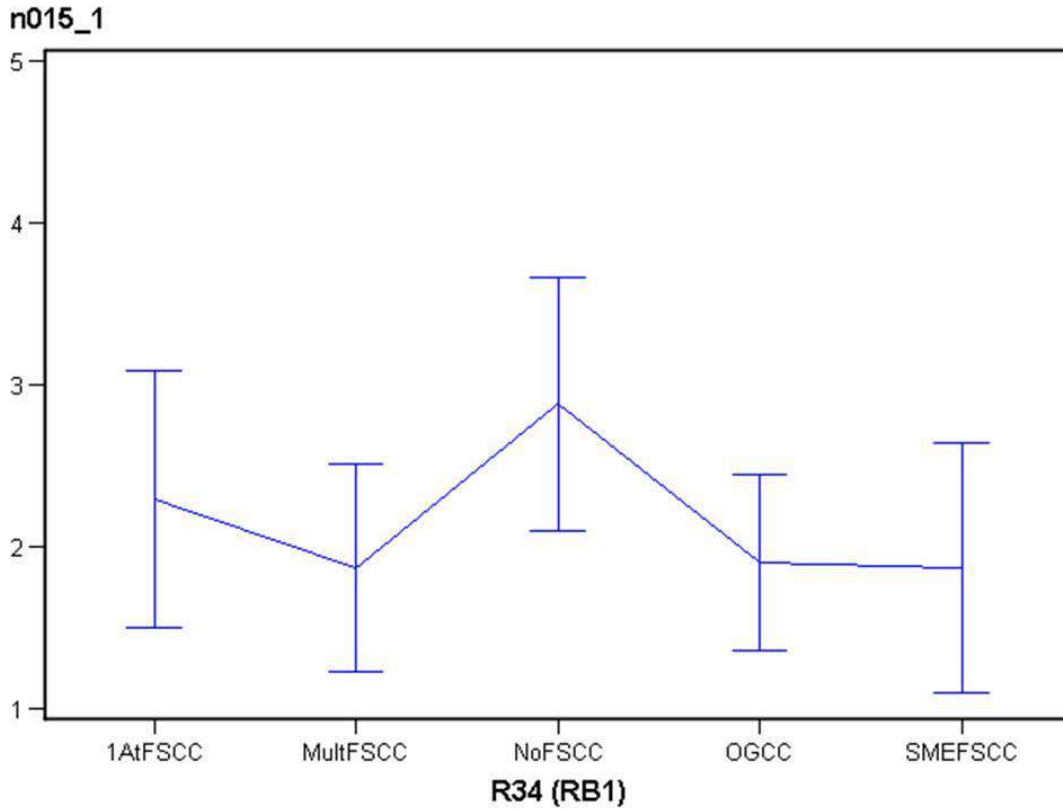
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	15.56148459	3.89037115	7.34	<.0001
Error	135	71.58137255	0.53023239		
Corrected Total	139	87.14285714			

R-Square	Coeff Var	Root MSE	n015_1 Mean
0.178574	33.98129	0.728171	2.142857

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	15.56148459	3.89037115	7.34	<.0001

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One-Way Analysis of Variance
Plots
Plot of n015_1 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure

Scheffe's Test for n015_1

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	135
Error Mean Square	0.530232
Critical Value of F	2.43874

Comparisons significant at the 0.05 level are indicated by ***.				
Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.5907	-0.0512	1.2326	
NoFSCC - OGCC	0.9824	0.2919	1.6728	***
NoFSCC - MultFSCC	1.0157	0.2100	1.8213	***
NoFSCC - SMEFSCC	1.0157	0.3253	1.7061	***
1AtFSCC - NoFSCC	-0.5907	-1.2326	0.0512	
1AtFSCC - OGCC	0.3917	-0.1376	0.9210	
1AtFSCC - MultFSCC	0.4250	-0.2477	1.0977	
1AtFSCC - SMEFSCC	0.4250	-0.1043	0.9543	
OGCC - NoFSCC	-0.9824	-1.6728	-0.2919	***
OGCC - 1AtFSCC	-0.3917	-0.9210	0.1376	
OGCC - MultFSCC	0.0333	-0.6859	0.7525	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
OGCC - SMEFSCC	0.0333	-0.5539	0.6206	
MultFSCC - NoFSCC	-1.0157	-1.8213	-0.2100	***
MultFSCC - 1AtFSCC	-0.4250	-1.0977	0.2477	
MultFSCC - OGCC	-0.0333	-0.7525	0.6859	
MultFSCC - SMEFSCC	0.0000	-0.7192	0.7192	
SMEFSCC - NoFSCC	-1.0157	-1.7061	-0.3253	***
SMEFSCC - 1AtFSCC	-0.4250	-0.9543	0.1043	
SMEFSCC - OGCC	-0.0333	-0.6206	0.5539	
SMEFSCC - MultFSCC	0.0000	-0.7192	0.7192	

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One-Way Analysis of Variance
Results

The ANOVA Procedure

Dependent Variable: n015_2 (Significant)

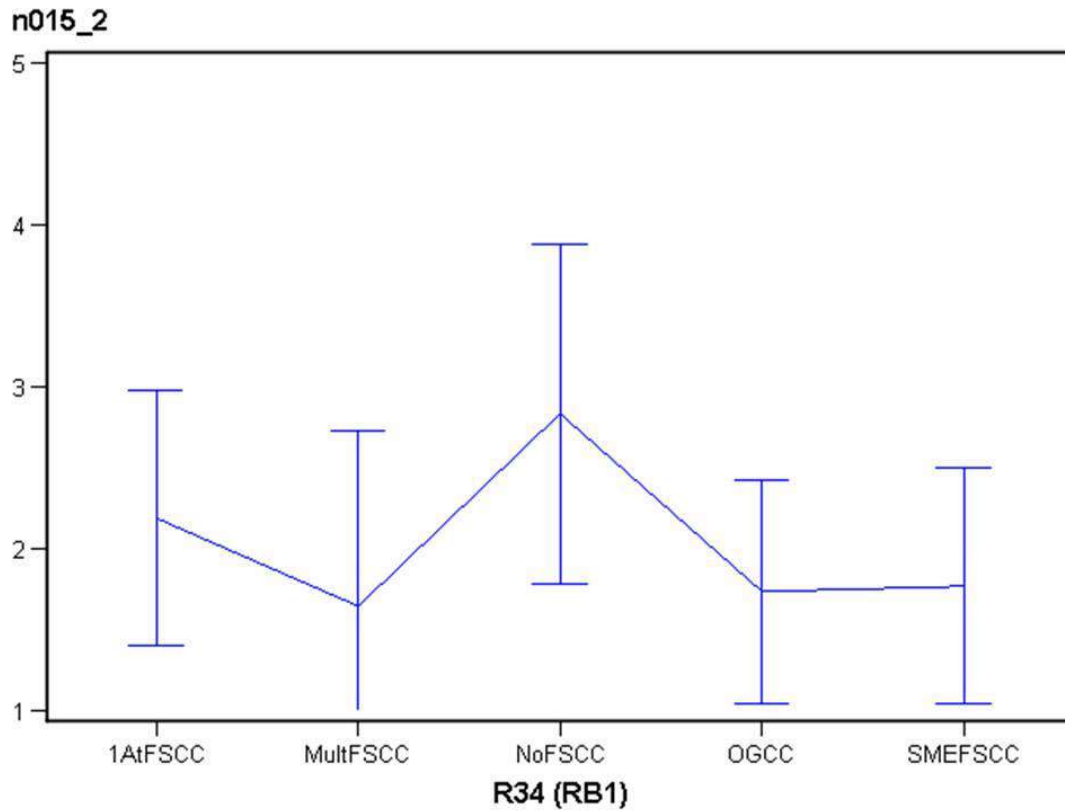
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	23.3517531	5.8379383	8.31	<.0001
Error	141	99.0934524	0.7027904		
Corrected Total	145	122.4452055			

R-Square	Coeff Var	Root MSE	n015_2 Mean
0.190712	40.66299	0.838326	2.061644

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Group1	4	23.35175310	5.83793827	8.31	<.0001

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One-Way Analysis of Variance
Plots
Plot of n015_2 by Group1



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One-Way Analysis of Variance
Results

The ANOVA Procedure
Scheffe's Test for n015_2

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	141
Error Mean Square	0.70279
Critical Value of F	2.43585

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
NoFSCC - 1AtFSCC	0.6458	-0.0084	1.3000	
NoFSCC - SMEFSCC	1.0667	0.3500	1.7833	***
NoFSCC - OGCC	1.1000	0.3834	1.8166	***
NoFSCC - MultFSCC	1.1905	0.3105	2.0705	***
1AtFSCC - NoFSCC	-0.6458	-1.3000	0.0084	
1AtFSCC - SMEFSCC	0.4208	-0.1882	1.0299	
1AtFSCC - OGCC	0.4542	-0.1549	1.0632	
1AtFSCC - MultFSCC	0.5446	-0.2502	1.3395	
SMEFSCC - NoFSCC	-1.0667	-1.7833	-0.3500	***
SMEFSCC - 1AtFSCC	-0.4208	-1.0299	0.1882	
SMEFSCC - OGCC	0.0333	-0.6423	0.7090	

Comparisons significant at the 0.05 level are indicated by *.**

Group1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
SMEFSCC - MultFSCC	0.1238	-0.7232	0.9708	
OGCC - NoFSCC	-1.1000	-1.8166	-0.3834	***
OGCC - 1AtFSCC	-0.4542	-1.0632	0.1549	
OGCC - SMEFSCC	-0.0333	-0.7090	0.6423	
OGCC - MultFSCC	0.0905	-0.7565	0.9375	
MultFSCC - NoFSCC	-1.1905	-2.0705	-0.3105	***
MultFSCC - 1AtFSCC	-0.5446	-1.3395	0.2502	
MultFSCC - SMEFSCC	-0.1238	-0.9708	0.7232	
MultFSCC - OGCC	-0.0905	-0.9375	0.7565	

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One-Way Analysis of Variance
 Results
 Means and Descriptive Statistics

R34 (RB1)	Mean of n3	Mean of n4	Mean of n5	Mean of n6	Mean of n7	Mean of n8	Mean of n9	Mean of n10	Mean of n011_ 1	
	1.640 52	1.844 44	2.074 07	1.200 00	2.168 92	2.372 26	1.945 95	1.993 38	2.480 00	2.6
SMEFS CC	1.322 58	1.766 67	1.866 67	1.100 00	1.733 33	2.178 57	1.935 48	1.677 42	2.366 67	1.0
1AtFSC C	1.800 00	1.883 72	2.116 28	1.255 81	2.285 71	2.541 67	1.979 17	2.040 82	2.510 20	2.9
MultFS CC	1.500 00	1.666 67	2.000 00	1.066 67	2.000 00	2.000 00	1.875 00	1.625 00	2.000 00	1.0
NoFSC C	2.192 31	2.117 65	2.470 59	1.857 14	3.000 00	3.066 67	1.916 67	2.640 00	3.200 00	2.5
OGCC	1.300 00	1.800 00	2.033 33	1.120 00	1.866 67	2.133 33	1.965 52	1.900 00	2.200 00	1.0

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Appendix E

Graphical Depiction of Line of the Air Force Leader Survey Results

APPENDIX F

SOCIETY OF USAF FLIGHT SURGEONS SURVEY QUESTIONS

Note: The actual web-based presentation may have been slightly different than this depiction

Demographics

1. What is your primary AFSC?
 - A. 48G
 - B. 48F
 - C. 48A
 - D. 40C0C

2. Does this AFSC match your primary duties?
 - A. YES
 - B. NO

3. Which of the following describes your current primary job or position?
(Circle all that apply)
 - A. SME Flight Surgeon (FS)
 - B. MTF-assigned FS
 - C. Flight commander
 - D. Squadron commander
 - E. MTF Commander
 - F. HQ Staff
 - G. Other

4. Which aerospace medicine jobs have you held (check all that apply)
 - A. SME FS or SOFME FS
 - B. MTF FS
 - C. Chief of Aerospace Medicine (“SGP”)
 - D. Flight Commander
 - E. Squadron Commander
 - F. Group Commander
 - G. MAJCOM Aerospace Medicine Staff
 - H. MAJCOM Chief of Aerospace Medicine
 - I. Aerospace Medicine Staff at USAF/SG
 - J. Chief of Aerospace Medicine at USAF/SG
 - K. USAFSAM Staff/Instructor

- L. USAFSAM Staff/Clinical
- M. Other Staff (IG, AFSA, SGX, etc.)
- N. Other operational (Pilot Physician, NASA, etc.)

5. Are you board-certified in Aerospace Medicine?
- A. Yes
 - B. No
6. Are you board certified in another specialty
- A. Yes
 - B. No
7. In what other specialty(s) are you certified (check all that apply)
- A. Family Practice
 - B. Internal Medicine
 - C. Pediatrics
 - D. Surgery
 - E. Occupational Medicine
 - F. Preventive Medicine
 - G. Psychiatry
 - H. Other
8. How long ago did you graduate from the Aerospace Medicine Primary (AMP) Course?
- A. < 1 year ago
 - B. 1-5 years ago
 - C. 6-10 years ago
 - D. > 10 years ago
9. If board-certified or eligible in Aerospace Medicine, how long ago did you graduate from the RAM program?
- A. < 1 year ago
 - B. 1-5 years ago
 - C. 6-10 years ago
 - D. >10 years ago
 - E. I am Board-certified in Aerospace Medicine, but not a USAFSAM RAM.
17. I have moved approximately every _____ years since becoming a flight surgeon
- 1
 - 2
 - 3

4
5
N/A

TRAINING

1. The AMP course prepared me well for my duties as a FS.

1 2 3 4 5
(Strongly disagree) (Strongly agree)

10. Sustainment and refresher training are available/adequate after the AMP to maintain the skills I need to perform my duties.

1 2 3 4 5
(Strongly disagree) (Strongly agree)

11. The RAM program prepared me well for my duties as an aerospace medicine specialist.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

DEPLOYMENT

12. I have been deployed _____ months in the past three years

0
1-4
4-8
8-12
>12

13. I was well trained to perform the patient care duties while deployed.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

14. My training prepared me well to accomplish the operational tasks required of me while deployed.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

15. My family was prepared for my deployment.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

16. My family was well cared for during my deployment.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

17. While deployed the right equipment in good repair was available for my team.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

18. My support staff was well trained for the deployment mission.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

19. I deployed with the right complement of professional and support staff.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

JOB

20. The most important mentor(s) I have had in my military career has/have been the following: (circle all that apply)

Peers
Instructors/professors
Supervisors/commanders
Senior 4FOXs
Other leaders
I have not been mentored well.

21. I have the greatest difficulty or feel most uncomfortable with

Medical Skills
Accomplishing Flying events
Deployed operations
Administrative requirements
Officership/military personnel requirements

22. The top three barriers to performing my job are

Training
Staff

- Guidance
Leadership
Equipment/Space
23. I am well trained to perform patient care duties expected of me
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | |
| (Strongly disagree) | | | | | (Strongly agree) |
24. I am well trained to perform operational/deployment support taskings
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | |
| (Strongly disagree) | | | | | (Strongly agree) |
25. I am well trained to perform command and leadership functions expected of me
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | |
| (Strongly disagree) | | | | | (Strongly agree) |
26. I plan to become a medical leader in the Air Force (commander, command surgeon, etc.)
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | N/A |
| (Strongly disagree) | | | | | (Strongly agree) |
27. I feel well trained to do my job well
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | N/A |
| (Strongly disagree) | | | | | (Strongly agree) |
28. I have the tools and equipment to do my job well
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | N/A |
| (Strongly disagree) | | | | | (Strongly agree) |
29. The Air Force provides me with adequate guidance to do my job well
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | N/A |
| (Strongly disagree) | | | | | (Strongly agree) |
30. My enlisted support staff is trained and sufficient to help me do my job well
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | N/A |
| (Strongly disagree) | | | | | (Strongly agree) |
31. My leadership supports me and encourages me to do my job well
- | | | | | | |
|---------------------|---|---|---|---|------------------|
| 1 | 2 | 3 | 4 | 5 | N/A |
| (Strongly disagree) | | | | | (Strongly agree) |

38. Professional autonomy

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

39. Confidence in leadership

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

40. Input into the assignment process

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

41. Time Available to Take Leave

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

42. Sense of duty

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

44. Quality work environment

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

45. Health benefits for the family

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

46. Lifestyle

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

47. Frequency of PCS

1	2	3	4	5	N/A
(Strongly disagree)				(Strongly agree)	

48. Frequency / length of deployments

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

49. Unique challenges of aerospace medicine

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

50. Opportunity to fly

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

FAMILY

51. My family's healthcare, financial, and legal needs were met during the last 12 months.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

52. My spouse has been able to maintain a satisfying career while I have been on active duty.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

53. My family is supportive of my Air Force career.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

ORGANIZATIONAL SUPPORT

54. The Aerospace Medical Association (AsMA) annual meeting is valuable for my professional development.

1 2 3 4 5 N/A
(Strongly disagree) (Strongly agree)

55. The Association of Military Surgeons of the U.S. (AMSUS) annual meeting is valuable for my professional development.

APPENDIX G

Specific Responses to Society Questionnaire

48 G Responses

n=63

9 respondents of 48Gs >10 yrs since AMP graduation,

2/9 AFSC did NOT match duties

4 are FP board cert, 1 is IM board cert, 1 Peds board cert, 2 "other"

2 are SQ/CC, 4 MTF FS, 2 SME FS, 1 "other"

9/9 AMP adequately prepared them, 9/9 sustainment training adequate

Average PCS Frequency since became FS, 3.25 yrs (5 answered N/A)

Deployment AVG in last 36 mos has been 2.2/5, or just over 1-4 months

1/9 did not deploy in last 36

6/9 deployed 1-4 mo " "

1/9 deployed 4-8 mo " "

1/9 deployed 8-12 mo

5/9 plan to stay in beyond retirement; 4/9 plan to stay until retirement (9/9 plan to stay in to retirement or beyond)

8/9 flying operations keeping them in aerospace medicine, 6/9 deployments keeping them in AM

6/9 felt that the one of the top three barriers to performing job was equipment/space, 5/9 felt guidance, 4/9 leadership was one of the top three barriers

7/9 felt peers were important mentors, 5/9 felt supervisors/commanders were the most important mentors,

3/9 felt they were not well-mentored

6/9 felt admin req most difficult aspect of job

5 48G respondents from AMP 6-10 years ago,

5/5 AFSC matched duties

2/5 were board certified (1 is FP board cert, 1 is IM board cert)

2/5 are SME FS, 3 are MTF-assigned FS

5/5 AMP adequately prepared them, 5/5 sustainment training adequate

Average PCS Frequency since become FS, 2 yrs (3 answered N/A)

Deployment AVG in last 36 mos has been 2/5, or 1-4 months

2/5 were not deployed

2/5 were deployed 1-4 months

1/5 was deployed 8-12 months

4/5 plan to stay to retirement, 1/5 plan to stay until training commitment

3/5 rated flying ops as top 3 keeping in aero med, 2/5 clinical environment, 2/5 future mil opportunities

4/5 rated leadership as 1 of top 3 barriers, 3/5 rated guidance, 3/5 staff

3/5 felt peers, 2/5 felt senior 4 foxes, and 2/5 supervisors/commanders were the most important mentors.

2/5 felt they were not well-mentored

2/5 felt admin req most difficult aspect of job; 2/5 felt flying req was most difficult.

32 48G respondents from AMP 1-5 years ago

31/32 AFSC matched duties

4/32 are board cert, including 1 FP board cert, 1 Pediatric board cert, 2 OM board cert, 2 "other"

15/32 are SME, 17/32 are MTF assigned FS

32/32 AMP adequately prepared them, 31/32 sustainment training adequate

Average PCS Frequency since become FS, 2.2 yrs (22/32 answered N/A)

Deployment AVG in last 36 mos has been 2.5/5 (or between 3-8 months); 8/32 have had none, 8/32

deployed 1-4 months, 8/32 deployed 4-8 months, 8/32 have been >12

18/32 plan to stay to complete training commitment, 3/32 plan to stay beyond commitment, 4/32 until

retirement, 7/32 plan to stay beyond retirement (11/32 plan to stay until retirement or beyond)

21/32 rated flying ops as top 3 keeping in aero med, 12/32 "other", 10/32 deployments

20/32 rated staff as 1 of top 3 barriers, 16/32 rated training, 14/32 guidance, 14/32 leadership
21/32 felt peers, 16/32 felt senior 4 foxes, and 14/32 supervisors/commanders most important mentors
7/32 felt they had not been well-mentored
17/32 felt admin req most difficult aspect of job, 7/32 rated officership/military personnel req

17 48G respondents from AMP <1 yr ago

17/17 AFSC matched duties

0/17 were board certified

11/17 SME FS, 6/17 MTF FS

17/17 AMP adequately prepared them, 13/17 sustainment training adequate

Average PCS Frequency since become FS, 1 yr (14/17 answered N/A)

Deployment AVG in last 36 mos has been 1.4/5 (less than 1-4 mos)

10/17 had not deployed, 4/17 deployed 1-4 months, 1/14 deployed 4-8mo

9/17 plan to stay until training commitment, 5/17 plan to stay until retirement or beyond (4/17 until, 1/17 beyond)

7/17 rated flying ops as top 3 keeping in aero med, 5/17 "other", equally split 3/17 between other choices

9/17 rated guidance as 1 of top 3 barriers, 8/17 rated training, 7/17 staff

10/17 felt peers, 7/17 supervisors/commanders most important mentors

4/17 felt they had not been well-mentored

9/17 felt admin req most difficult aspect of job, 5/17 officership and 5/17 medical skills

3 respondents did not answer "time from AMP course"

48R Responses

n=96

32 respondents of 48Rs >10 yrs since AMP graduation,
 5/32 AFSC did NOT match duties
 13 are FP board cert, 6 are IM board cert, 2 AM/RAM board cert, 2 are Peds board cert, 3 Surgery, 3 OM, 2 PM, 2 Psych, (7 "other"), no AM/OP/PM.
 2/32 are MTF/CC, 5 are SQ/CC, 5 are Flight Commanders, 11 MTF FS, 5 SME FS, 1 HQ Staff, 3 "other"
 32/32 AMP adequately prepared them, 32/32 sustainment training adequate
 RAM adequately prepared them, 4.5/5
 Average PCS Frequency since became FS, 3.3 yrs (13 answered N/A)
 Deployment AVG in last 36 mos has been 2.55/5, or between 1-4 and 4-8 months
 7/32 did not deploy in last 36
 9/32 deployed 1-4 mo " "
 3/32 deployed 4-8 mo " "
 3/32 deployed 8-12 mos
 4/32 deployed >12 mo
 17/32 plan to stay in beyond retirement; 12/32 plan to stay until retirement (28/32 plan to stay in to retirement or beyond)
 25/32 flying operations keeping them in aerospace medicine, 13/32 deployments keeping them in AM, 12 future military opportunities keeping them in AM
 21/32 felt that the one of the top three barriers to performing job was staff, 16/32 felt leadership was one of the top three barriers, and 14/32 felt equipment/space was a barrier
 17/32 felt peers were important mentors, 15/32 felt supervisors/commanders were the most important mentors, 12/32 felt senior 4Fs
 4/32 felt they were not well-mentored
 11/32 felt admin req most difficult aspect of job

19 48R respondents from AMP 6-10 years ago,
 15/19 AFSC matched duties
 18/19 were board certified (11 are FP board cert, 4 are IM board cert, 1 is Peds, 3 "other")
 6/19 are MTF-assigned FS, 4 are flight commanders, 3 are SME flight surgeons, 3 SqCC, 2 HQ staff, 1 "other"
 19/19 AMP adequately prepared them, 19/19 sustainment training adequate
 Average PCS Frequency since become FS, 3.7 yrs (3/19 answered N/A)
 Deployment AVG in last 36 mos has been 2.2/5, or just over 1-4 months
 8/19 were not deployed
 5/19 were deployed 1-4 months
 1/19 was deployed 8-12 months
 4/19 were deployed 8-12 months
 1/19 was deployed >12 months
 6/19 plan to stay to retirement, 8/19 beyond retirement, (14/19 to retirement or beyond), 1/19 until training commitment, 4/19 beyond training commitment
 14/19 rated flying ops as top 3 keeping in aero med, 8/19 deployments, 7/19 future mil opportunities
 14/19 rated staff as 1 of top 3 barriers, 10/19 rated guidance, 10/19 rated leadership
 11/19 felt supervisors/commanders, 9/19 peers, 8/19 felt senior 4 foxes were the most important mentors
 5/19 felt they were not well-mentored
 11/19 felt admin req most difficult aspect of job; 5/19 felt officership req was most difficult.

35 48R respondents from AMP 1-5 years ago
 30/35 AFSC matched duties
 34/35 are board cert, including 26 FP board cert, 3 IM, 2 surgery board cert, 4 "other"
 15/35 are MTF assigned FS, 11/35 are SME, 3 flight commanders, 3 "other", 3 SqCC
 35/35 AMP adequately prepared them, 34/35 sustainment training adequate
 Average PCS Frequency since become FS, 2.4 yrs (16/35 answered N/A)

Deployment AVG in last 36 mos has been 2.7/5 (or close to 4-8 months); 4/35 have not been deployed, 15/35 have been 1-4 months, 8/35 have been 4-8 months, 4/35 have been 8-12 months, 4/35 have been >12
6/35 plan to stay to complete training commitment, 7/35 plan to stay beyond commitment, 13/35 until retirement, 9/31 plan to stay beyond retirement (22/35 plan to stay until retirement or beyond)
28/35 rated flying ops as top 3 keeping in aero med, 13/35 clinical environments, 13/35 future military
21/35 rated staff as 1 of top 3 barriers, 20/35 rated leadership, 17/35 guidance
21/35 felt peers, 14/35 felt supervisors/commanders, 11/35 felt senior 4 foxes most important mentors
6/35 felt they had not been well-mentored
24/35 felt admin req most difficult aspect of job, 9/35 rated officership/military personnel req

9 48R respondents from AMP <1 yr ago

9/9 AFSC matched duties

6/9 were FP board certified, 1 IM board certified, 2 "other"

4/9 MTF FS, 3/9 flight commanders, 2/9 SME FS

9/9 AMP adequately prepared them, 9/9 sustainment training adequate

Average PCS Frequency since become FS, 1 yr (8/9 answered N/A)

Deployment AVG in last 36 mos has been 2.1/5 (1-4 mos)

5/9 had not deployed, 1/9 deployed 1-4 months, 1/9 deployed 4-8mo, 1/9 deployed >12 mo
3/9 plan to stay until training commitment, 1/9 plan to stay beyond training commitment, 4/9 until retirement, 1 beyond retirement

8/9 rated flying ops as top 3 keeping in aero med, 6/9 deployments, 3/9 future military, 3/9 "other"

5/9 rated staff as 1 of top 3 barriers, 5/9 rated leadership, 4/9 rated guidance, 4/9 equipment

6/9 felt peers, 3/9 supervisors/commanders most important mentors

2/9 felt they had not been well-mentored

7/9 felt admin req most difficult aspect of job, 3/9 officership

1 48R did not answer "how long since AMP"

48A Responses

n=60

7 respondents Of RAMs >10 yrs since RAM graduation,
 All aerospace medicine board certified, 1 is FP board cert, 4 are OM board cert
 2 are HQ staff and 5 are SQ/CC
 6/7 AMP adequately prepared them, 7/7 sustainment training adequate, RAM 4.1/5 for adequacy
 Average PCS Frequency since become FS, 2.7 yrs
 Deployment AVG in last 36 mos has been 1-4 months
 7/7 all plan to stay beyond retirement
 5/7 flying operations keeping them in aerospace medicine, 5/7 military lifestyle
 5/7 felt that the one of the top three barriers to performing job was staff,
 5/7 felt senior 4 foxes and , 3/7 supervisors/commanders were the most important mentors

13 respondents from RAM 6-10 years ago,
 All Aerospace medicine board certified, 11/13 OM board cert, 6/12 are FP board cert
 1 is MTF /CC 5 are HQ staff, 3 are Sq/CC, 4 are Flt/CC
 13/13 AMP adequately prepared them, 13/13 sustainment training adequate, RAM 3.8/5 for adequacy
 Average PCS Frequency since become FS, 2.4 yrs
 Deployment AVG in last 36 mos has been 1-4 months
 7/13 plan to stay beyond retirement, 6/13 plan to stay until retirement
 11/13 rated flying ops as top 3 keeping in aero med, 5/13 deployments, 5/13 clinical environment
 8/13 rated staff as 1 of top 3 barriers, 6/13 rated guidance, 4/13 training, 5/13 equipment/space
 10/13 felt senior 4 foxes , and 9/13 supervisors/commanders were the most important mentors
 5/13 felt admin req most difficult aspect of job

23 respondents from RAM 1-5 years ago
 22/23 AM board cert, 7/23 FP board cert, 1/23 IM board cert, 9/22 OM board cert, 3/23 PM
 1 is an SME, 5/23 are MTF assigned FS, 8/23 are Flight/CC, 6/23 are Sq/CC, 3/23 are "other"
 23/23 AMP adequately prepared them, 23/23 sustainment training adequate, RAM 3.4/5 for adequacy
 Average PCS Frequency since become FS, 2.5 yrs
 Deployment AVG in last 36 mos has been 2.6/5 (or nearly 4 mos), one has been >12, 6 have had none
 8/23 plan to stay beyond retirement, 12/23 plan to stay until retirement, 3/23 until commitment
 17/23 rated flying ops as top 3 keeping in aero med, 9/23 deployments, 7/23 pay/bonuses
 21/23 rated staff as 1 of top 3 barriers, 11/23 rated leadership, 8/23 guidance
 8/23 felt senior 4 foxes, 7/23 other leaders , and 12/23 supervisors/commanders most important mentors
 10/23 felt admin req most difficult aspect of job, 6/23 rated officership/military personnel req

10 respondents from RAM <1 yr ago
 10/10 AM board cert, 6/10 FP board cert, 1/10 IM, 1/10 PM, 0/10 OM,
 1/10 MTF FS, 3/10 Flight/CC, 1/10 Sq/CC, 5/10 other
 10/10 AMP adequately prepared them, 10/10 sustainment training adequate, RAM 4.2/5 for adequacy
 Average PCS Frequency since become FS, 2.9 yrs
 Deployment AVG in last 36 mos has been 1.8/5 (nearly 1-4 mos), one has been 4-8, 3 have had none
 8/10 plan to stay beyond retirement, 2/10 plan to stay until retirement
 8/10 rated flying ops as top 3 keeping in aero med, 6/10 military lifestyle, 4/10 future military opportunities
 8/10 rated staff as 1 of top 3 barriers, 5/10 rated leadership, 3/10 guidance
 6/10 felt instructors/professors, 5/10 senior 4 foxes , and 5/10 peers most important mentors
 6/10 felt admin req most difficult aspect of job