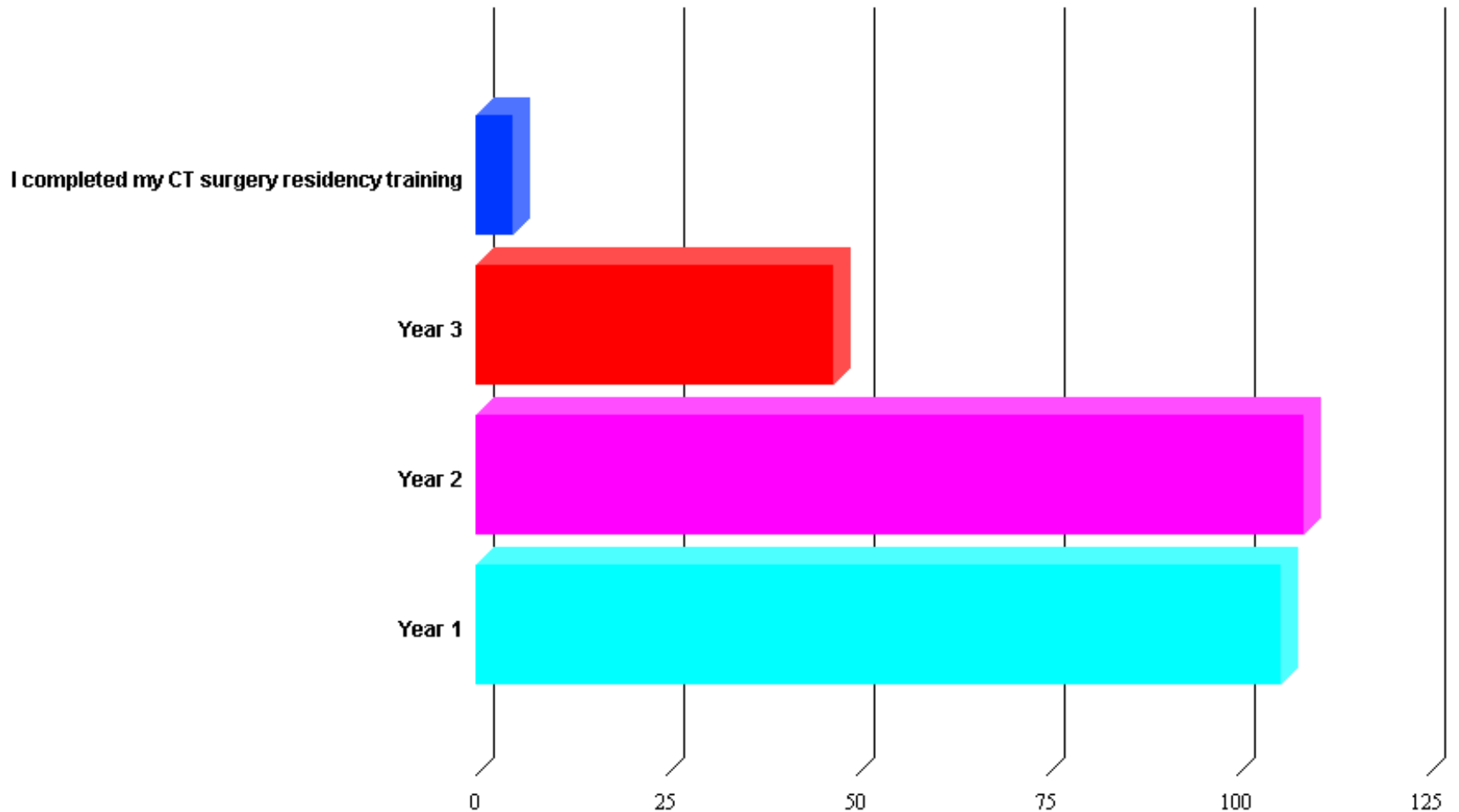




2009 TSDA In-Training Exam Residents Survey Summary

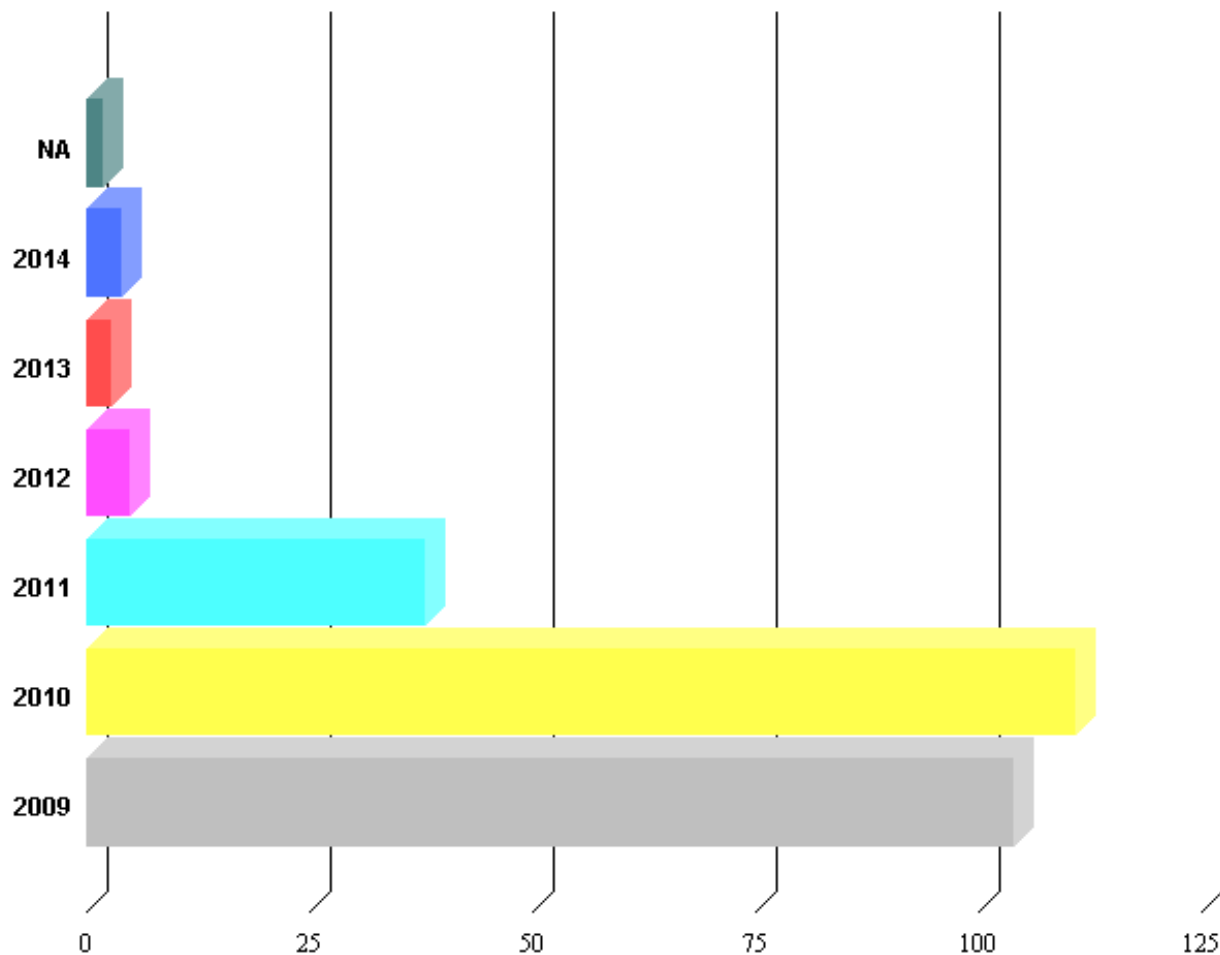


What is your current level of CT surgery residency training?



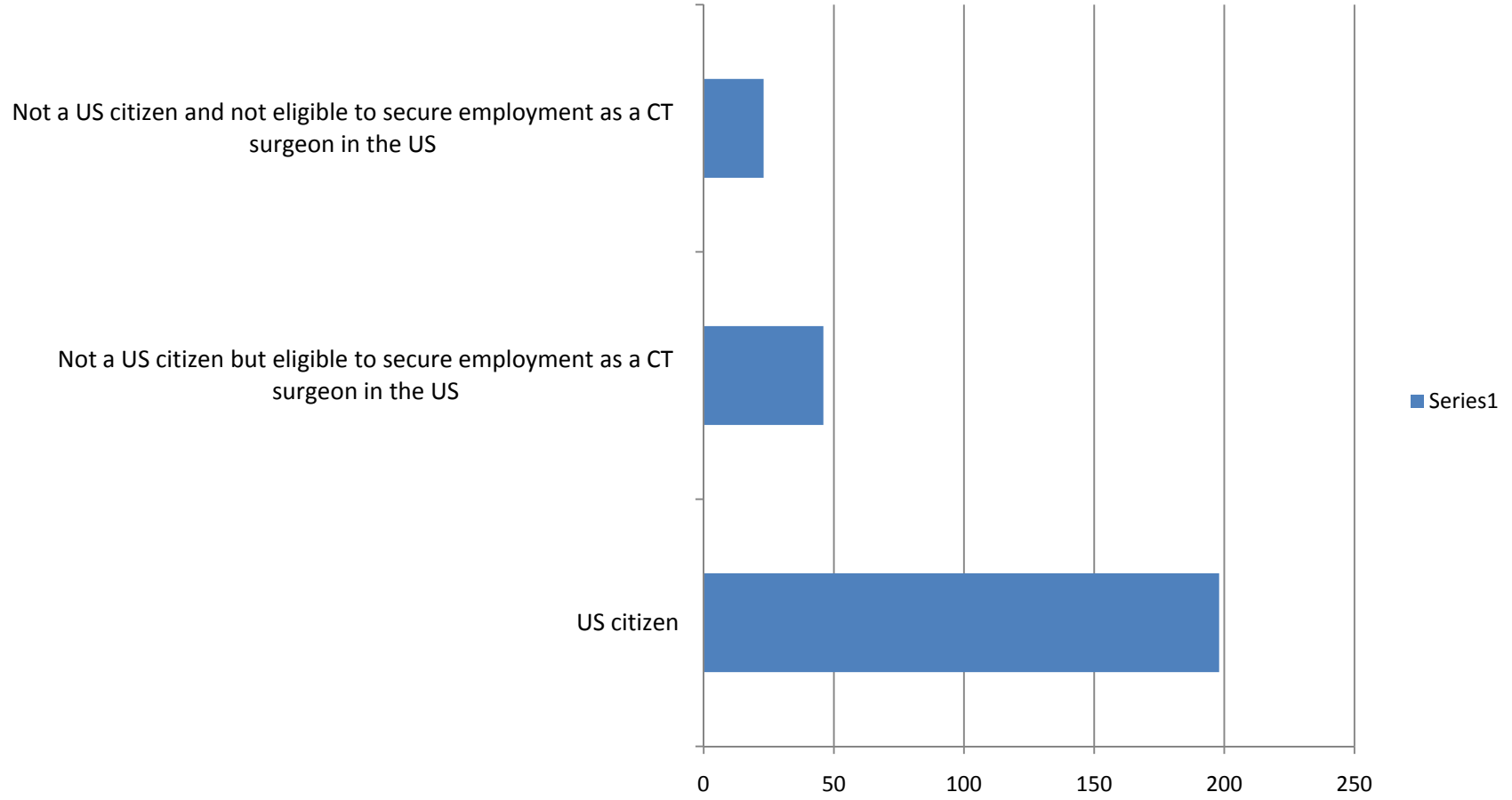


What year do you expect to graduate from your CT surgery residency program?



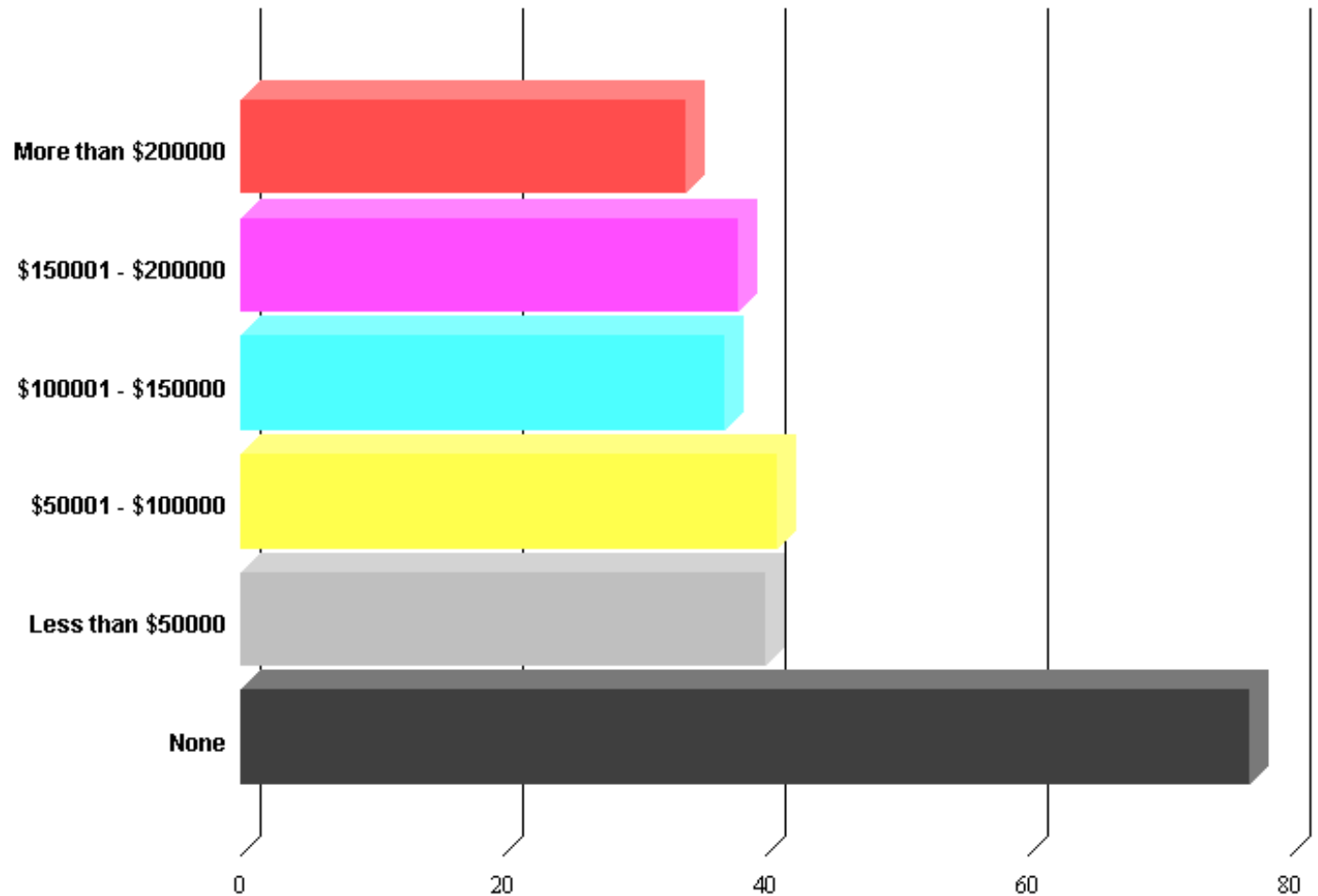


What is your citizenship status?



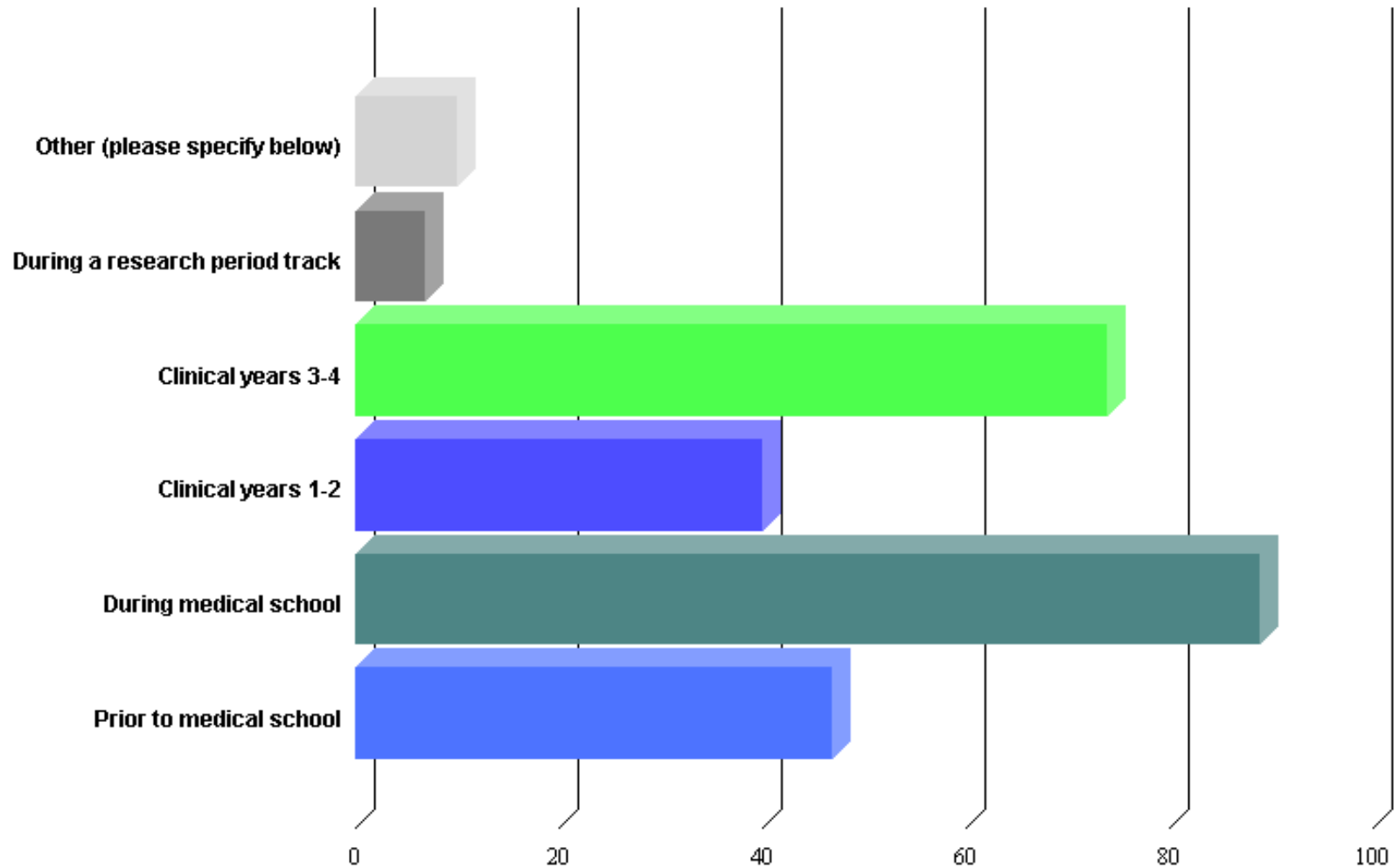


What is your current education-related debt?





At what point did you decide to choose a career in cardiothoracic surgery?

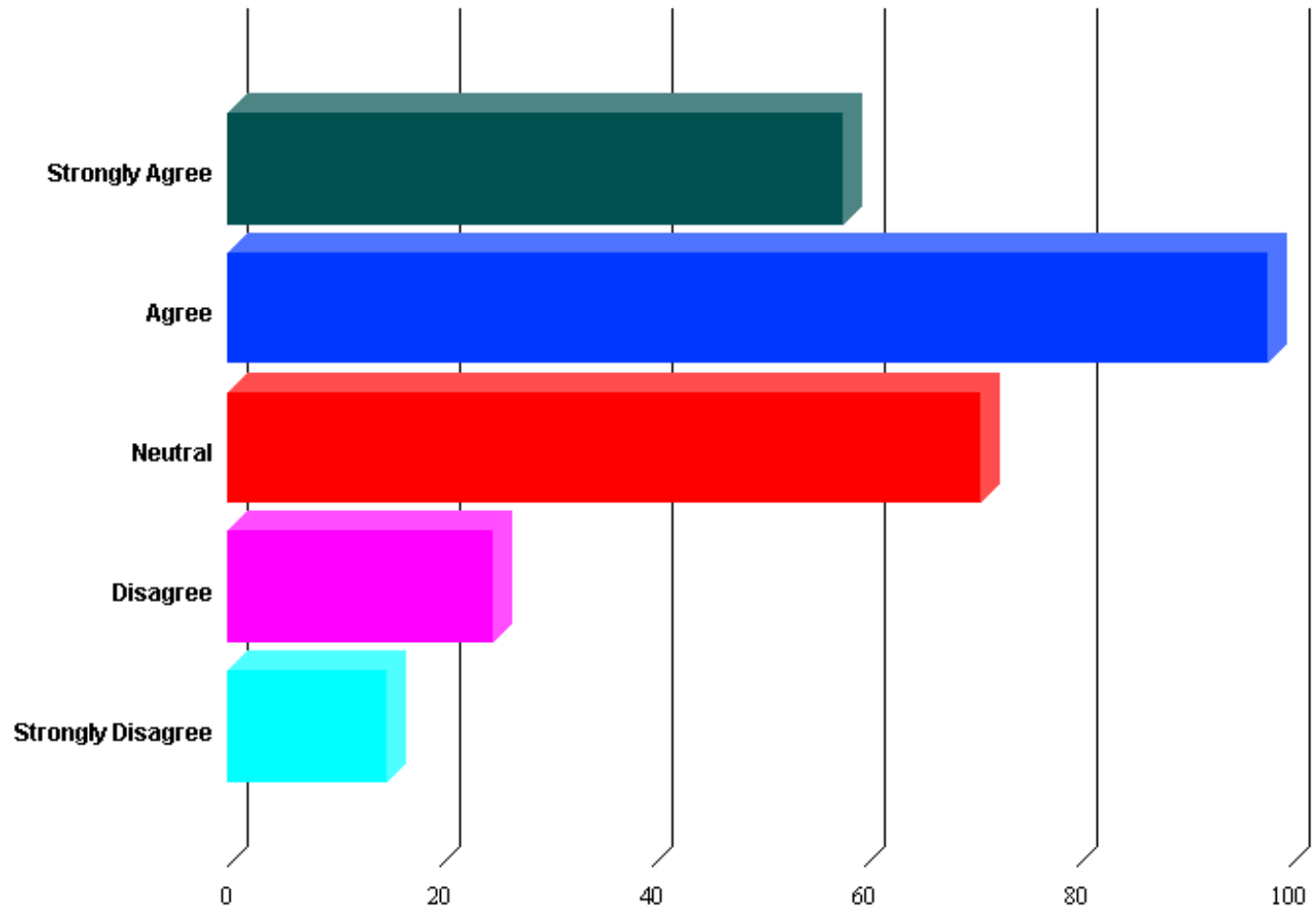


If you answered "other" to the previous question, please describe the point at which you decided to choose a career in cardiothoracic surgery.

- After 3 years as a general surgeon.
- After my general surgery training.
- 5th year of general surgery residency.
- 5th clinical year.
- When I was 4 yrs old I walked around with a stethoscope telling people I am going to fix your heart and that I wanted to be a heart surgeon.
- General surgery residency.
- I did my training in Iran and decided to go to Cardiac Surgery while I was practicing General Surgery. There was a great need for Cardiac Surgeons at the time.
- Residency in General Surgery.
- After being involved in cardiothoracic surgery as assistant to CT surgeons for over 15 years.
- 4 years of general surgery practice.

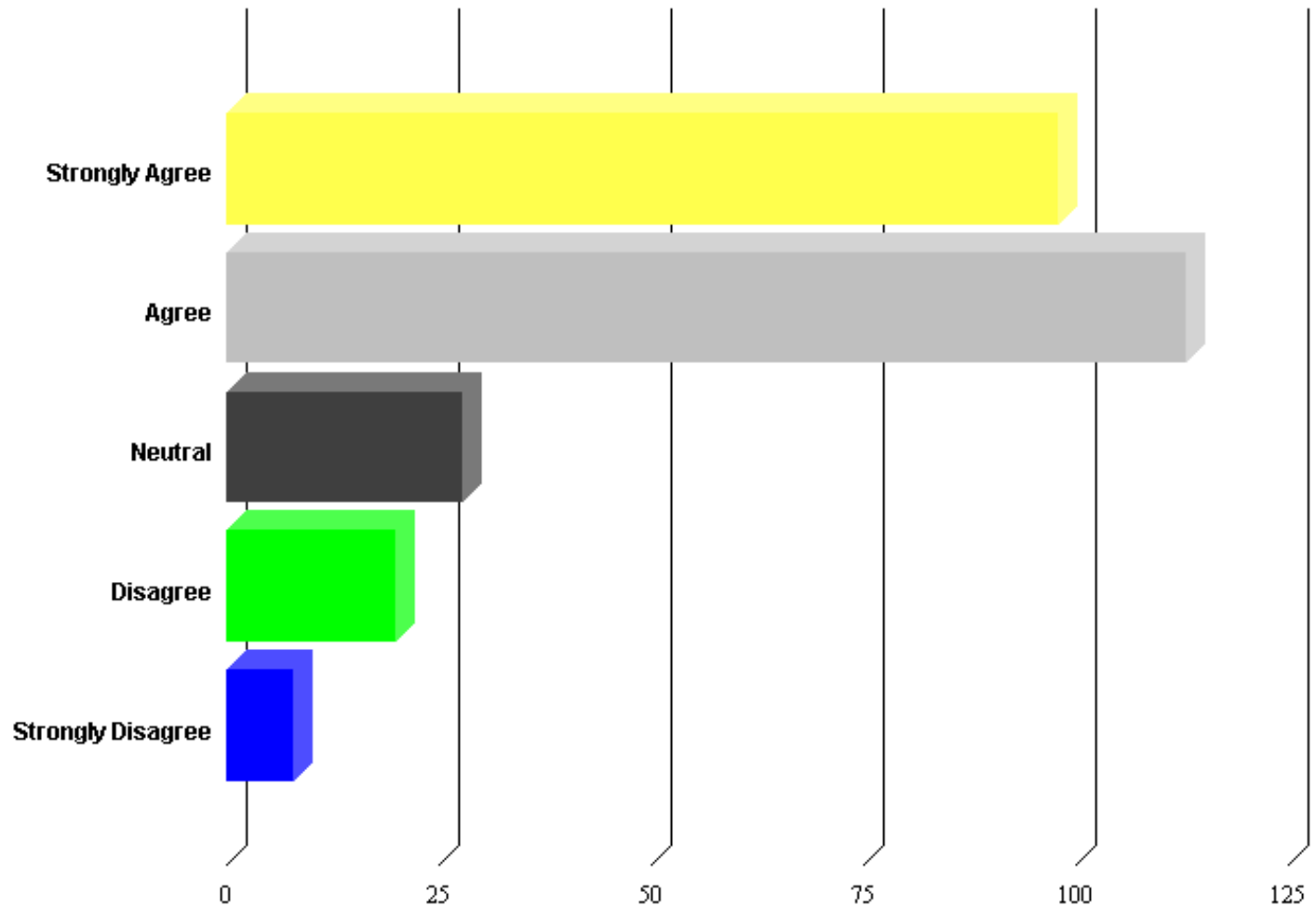


Please indicate your level of agreement with
the following statement:
I would recommend CT surgery to potential trainees.



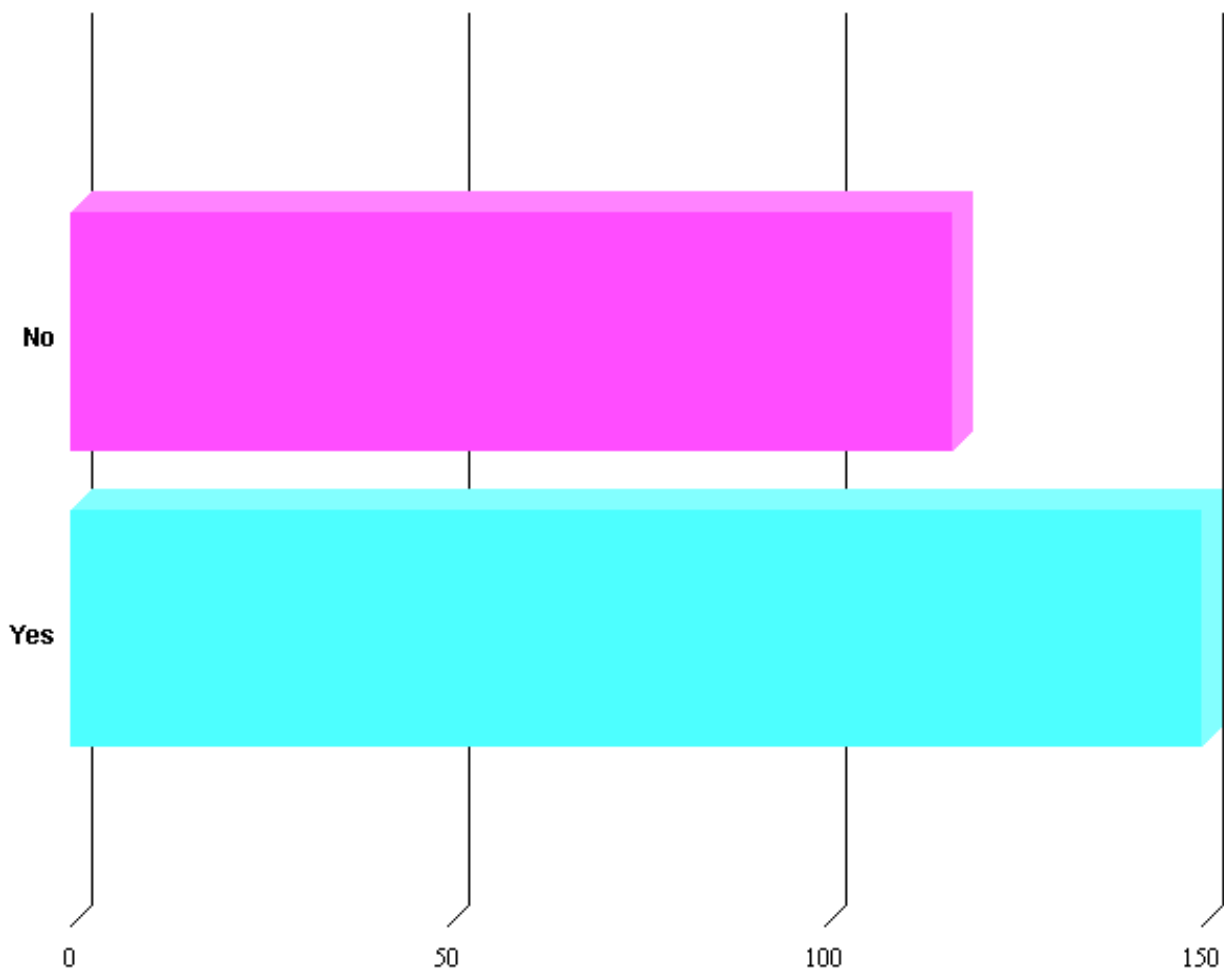


Please indicate your level of agreement with
the following statement:
I feel I am being adequately trained in my program.





Do you feel that an integrated thoracic training program is necessary to better train future cardiothoracic surgery candidates, assuming the lack of open technical skills training now seen in most GS programs?



Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- Less time spent on general surgery gets residents into practice faster, gaining experience and making money.
- I think broad based surgical training is more beneficial in producing a well rounded cardiothoracic surgeon that is able to think "outside the box."
- It cheapens the experience of those who are fully trained in general surgery and fosters bad morale.
- 2-3 years in NOT enough to master the intricacies. With less technical help available after training, new grads have a hard time unless they enter an academic program, which many of don't want to. Also, many of us have families, loans, and find it difficult to be treated poorly when we have already completed a GS residency (most of us are Board Certified and can get a decent job somewhere).
- Training more focused.
- Level of specialization required, number of skills not currently included in training (catheter skills, echo), diverging skill sets.
- General surgery residency doesn't prepare one the same way it did 10 years ago with vascular and upper abdominal experience.
- Eliminates time in Gen Surgery that is not "useful" in becoming a CT surgeon (esp. a cardiac surgeon).

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- More focused on cardiac pathology and also on cardiology.
- More dedicated time on CT-related endeavors is needed in training.
- I think a lot is learned in the general surgery training period. The complexity of the cardiac patient may not be easily learned by a 1st or 2nd year resident.
- Will allow a more complete surgical/procedural ability and hence job market.
- Learning to staple hemorrhoids is not relevant in any fashion to what we do each day.
- Training in Ct requires technical skills that require previous instruction and training.
- Will focus future candidates to a more basic and fundamental aspects of CT better skill from the beginning and more oriented diagnostic and peri-operative experience from the beginning.
- Complexity of cases have increased, CT residents can receive mentoring and independence in the final years of the integrated program.
- Allows the resident to become more fully integrated into what will become their future careers without having to endure 5 years of training that may add little to nothing to their overall education.
- It can keep potential candidates motivated.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- CT surgery is a different animal and much more difficult than gen surg.
- 1. Cuts short training time 2. Makes more sense - I spend 7 years training in general surgery that I am never going to use in my life, and three years to train in CT that I want to do lifelong!
- The track is less important than the people training you.
- I am in an integrated program. You focus more on what you want to do.
- An integrated thoracic training program would attract candidates because the current program is too long, there is no social life, no financial incentive and not many jobs. All of the above are discouraging to candidates.
- Essential skills obtained in GS residency are not something that we can do without.
- The earlier you start, the earlier you start...
- Not necessary because gen surg still includes significant open skills and laparoscopic skills which are necessary for VATS as well as lap benign esophageal work. A 3/4 or 4/3 is preferable in my mind but an integrated 6 year program is likely to work (UNTESTED as of now!) as would continuation of the 5/2 or 5/3 as we have now. But that is a lot of training!

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- The comment "assuming the lack of open technical skills now seen in most GS programs" is quite a statement. Regardless, integrated programs of the future will likely fail for the same reasons they have in the past -- asking someone to commit to something they don't understand is bound to lead to high attrition, particularly in a field as rigorous as CT. Better training is necessary both for GS and CT; integration per se does not mean improvement.
- More time spent on cardiac improves cardiac related skills; no amount of vascular surgery prepares you for cardiac; also, better for training as you work more closely w/ cardiac faculty for a longer period of time (not just two years).
- Can have parallel tracks like plastic surgery.
- I am worried that the decision-making skills that develop during the chief years of gen surgery will be missed. I do, however, think that an integrated program can give time to truly learn aspects of ct surgery such as catheterization and echo that I am learning on a case by case basis, not as an educational course or overview.
- Training in thoracic surgery will broaden the clinical knowledge and skills and represents a viable practice alternative in light of a tight job market in cardiac surgery.
- I do feel that an integrated program is advantageous, but not because of lack of GS technical skills, but because more distinct skills are needed for CT.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- I only feel that way for cardiac- cardiac surgery requires precise suturing techniques that are not required in general surgery, the only introduction to this is open peripheral vascular surgery. Open vascular cases are uncommon and utilized generally for vascular surgery fellows.
- (1) general surgery has changed, i.e. decreased vascular exposure during surgery, increased time spent on MIS (2) cardiac surgery has changed, i.e. increasing complexity and new technology.
- Ok for option, but would have eliminated me from the field as I chose to go into CT during clinical year 4. Also my clinical and technical skills after 3 years of general surgery were nowhere near where they were after 5 years and this allowed greater confidence and shorter learning curve during thoracic residency.
- I presume integrated training means early exposure to thoracic surgery. This would give a longer period for the resident to learn the skills and master them.
- The training paradigm certainly needs to change. I'm not sure what an 'integrated' program is. People need to be taken into training positions with the knowledge that they will have a desirable job at the end of training.
- Too much time wasted in general surgery.
- Residents need the General Surgery Skill set in order to perform coronary and valve anastomosis.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- I think it's still worthwhile to complete general surgery training, esp. in the latter years and to be board certified.
- If you have good teachers who let you operate it doesn't make a difference.
- Future trainees are not willing to spend 7-10 years of their life for a profession which does not have the large financial reward which it previously promised.
- Most candidates will not have made their decision by medical school.
- General surgery is a necessary prerequisite.
- Focus on subspecialty earlier.
- Not necessary- a broader scope of training gives residents an opportunity to examine their true career desires. Locking trainees in so early may be too restrictive.
- Much of general surgery training does not parallel the skills necessary for CT surgery. Moreover, a more comprehensive, integrated program will provide better CT training and skill sets.
- The clinical maturity that develops for most trainees usually happens as a senior resident. An integrated track might deter away from that experience as well as the operative experience gained from rotating through other subspecialties within general surgery.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- The clinical maturity that develops for most trainees usually happens as a senior resident. An integrated track might deter away from that experience as well as the operative experience gained from rotating through other subspecialties within general surgery.
- N/A
- I think the candidate should have a solid background in general surgery because this is the foundation of cardiac surgery. A cardiothoracic surgery needs all the surgical armamentarium from general surgery that he will need to be successful in CT surgery. I don't think there will be shortcuts. Besides the resident should know fully well what he is getting into or what he is missing by going into CT surgery.
- More exposure, better training and preparation for future job marketing issue.
- Same skills in less training.
- I think one of the strengths of the CVT surgeon is a knowledge and understanding of the whole body, including the abdomen. What is below the diaphragm should not be a mystery to a thoracic surgeon. Especially if he/she will be performing peripheral vascular surgery someday. But it is true that a lot of general surgery programs are becoming less operative and that is a big problem for general surgery training. Shaving off 1 year of general surgery and going into a 3 year cardiovascular/thoracic training is a good idea. PV training should be part of "cardiovascular and thoracic training." "Cardiothoracic" as a term should be thrown out.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- Residents will have less exposure to general surgery, which is a valuable asset in treating complex thoracic patients both in cardiac and thoracic procedures.
- Being a heart or lung surgeon you have to be comfortable in both areas. So you should have an integrated program.
- G-surg is a very important developmental tool to become a mature CT surgeon.
- I think that general surgery gave me extremely valuable experience and better understanding of many surgical issues that are related to cardiothoracic surgery. Given the fact that many programs nowadays are very top heavy, i.e. that residents start to really operate during their last two years of residency, shrinking years of training from 5 to 4 or 3 may deprive future graduates of the extremely valuable experience of the last two years of their training.
- Early exposure allows for better understanding with Gen surgery resident. Most of them have little or no exposure thus with the current job market, CT reputation is not well received.
- I think the laparoscopic experience in general surgery is very helpful for the thoracoscopic skills and any foregut surgery. No need however for 5 y of general surgery to become a cardiac surgeon.
- Much of what I learned in GS is not applicable to CT surgery, and the skills required are not the same.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- I feel that my general surgical training was invaluable to not only my technical skills but also in my maturity as a surgeon. I also disagree with the lack of open training in surgical residencies. As a former associate program director of a general surgery residency, I found that there is more than enough open training for general surgery residents. It is possible that in highly specialized academic centers this has been eroded somewhat, but I do not believe that this is can be generalized. Additionally, the laparoscopic skills obtained in year 4 and 5 of general surgery is invaluable for the performance of advanced thoracoscopic and laparoscopic procedures performed by thoracic surgeons.
- Between hours restrictions and lack of CT exposure during GS training, an integrated training program only makes sense.
- It's important to be forward thinking an the integrated program does that.
- Believe skill sets learned in GS cross into CT realm. Benefit of integrated program is to reduce training period time, but you can learn things in GS that carry over to CT surgery.
- It make more sense to spend the most number of years doing what you will ultimately practice, instead of becoming a fully trained gen surg and then cram all the CT skills in 2-3 years.
- Cardiac Surgery is so unique that the training primarily occurs when one is doing it - whether in an integrated program or not. The perceived lack of technical expertise in graduating GS residents is will just be absorbed earlier in training if we move to an integrated program.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- Field is more complex, so more exposure would be better in a shorter period of time.
- Field doesn't lend itself to skills development, i.e. no av fistula case type case for the CT resident. they will end up retracting, first assisting, and taking vein.
- I think they need General Surgery as a back up plan.
- Either more training prior to fellowship or lengthen fellowship, or possibly provide a 2-4 week "boot camp" type experience prior to starting fellowship.
- It is hard for most to know if want a career in CT surgery and what the demands are right out of medical school.
- I think 5 yrs is too long for General Surgery while most of the focus is not in line with CT Surgery. Besides, CT Surgery is getting more complicated and more time need to be spent and focused on CT than General Surgery.
- Too much wasted time in general surgery training.
- I feel the length of training gives a certain level of maturity (for both skill set and patient care/interactions). Best to limit pre-medical school years of training.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- I wasn't integrated and I feel adequately trained. I also think the chief year is an important aspect to general training.
- An integrated program will allow for more focused training in the broadening range of skills required of the practicing CT surgeon (endovascular skills, echocardiography, etc...). In addition, the proliferation of fellows in most good general surgery training programs has resulted in a loss of autonomy and training experience, particularly at the upper levels.
- It's not that it "is or is not necessary" - anyone who is even asking this question is so antiquated that they should re-evaluate everything they think about the current state of CT surgery. Integrated training is the ONLY way starting now.
- Two years is not sufficient time to adequately train CT surgeons even with the newly devised cardiac and thoracic tracks.
- Still think GS training is a valuable experience.
- Feel a bit torn on this question. I received an excellent operative experience in my general surgery training program and feel that I am a great overall physician. I fear that an integrated program will eliminate the trainees ability to adequately take care of critically ill patients and deal with intra-abdominal issues related to such procedures as a VAD.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- The bulk of the critical care and open surgery basic skills occurs during the first 3 years of General Surgery. The remaining 3 seem to emphasize advanced laparoscopic skills which are not necessary for those going on into fellowships.
- 5 years of general surgery experience is invaluable.
- I feel that the maturity you gain by doing the 4th and 5th years of general surgery help you to be better equipped with better technique and decision making skills, better preparing you to then be trained specifically in cardiothoracic surgery.
- More focused training. GS for 5 years not necessary and detracts from learning that could have been CT learning.
- A more focused training will improve specific knowledge and abilities.
- There needs to be a change in training structure. Competent CT surgeons should not be developed over 10 years after completion of training. CT residents should not spend the majority of their time observing cases and NOT doing cases.
- Will concentrate your General Surgery experience towards CT Surgery, and potentially decrease the length of training.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- An integrated program will not produce better future surgeons, perhaps just more of them since the training is shorter. The way to produce better future cardiothoracic surgery candidates is to attract the very best candidates to the field. Training a superior person will have the greatest impact on the quality of product that the training produces. The perceived length of training is not the greatest negative impact for potential applicants. It is the reduction in reimbursement and the possibility of not having a job at the end of arduous training.
- Cardiothoracic surgery has gotten so specialized that the time used for general surgery can be used for learning more of cardiothoracic surgery. I think not having the general surgery experience will have its own disadvantages but hopefully that will be overcome by the extra time in cardiothoracic training.
- In my GS training I did over 75 laparoscopic colectomies right up to my chief yr. I think all that time while not a waste could have been better spent doing thoracic surgery. In my current CV program we only do a 3 months rotation of dedicated thoracic, clearly this is not enough to make a well rounded CVT surgeon. I don't feel we need to do 5 yrs if general surgery, maybe 3 at most.
- The only draw back is that it will completely separate cardiac and thoracic training. Benefit of gs is that thoracic surgeon can do abdominal cases, especially in private setting.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- I think the current training paradigm is too inefficient and cardiothoracic surgery has become sufficiently different from general surgery that much of the general surgery training (aside from basic operative skills and vascular surgery and critical care exposure) is unrelated to cardiothoracic surgery.
- Seriously? This move should have been made 20 years ago (just like ortho, NUS, urology, and ENT). I can't believe we're even still debating it.
- If core operative skills are developed in general surgery, it is not necessarily difficult to advance to cardiac surgery.
- You should have had a neutral answer. Obviously, it depends on the trainee and the training program. It's a complicated question, with a complicated answer. There are a ton of factors.
- Nobody would like to commit after medical school into a long training without job security. It would be unethical to recommend so.
- Cases and patients are becoming more complex. We need to get started earlier in our training. Essentially the majority of the training I will need for the rest of my career currently I will receive in the 3 final years of my training.
- People do not want to train for 10 years anymore. In order to attract people to the field we need to decrease the length of training but not compromise quality.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- Cases are complex utilizing multimodality approaches that are difficult to learn in the limited time available for training.
- Decreases length of training.
- The complexity of cases and demand for technical skills in thoracic surgery necessitates an adequate basic operative skill set that can only be attained through several years (i.e. 3-4) of general surgery experience.
- Exposes you to newer techniques in thoracic surgery and allows trainees to choose career path after training.
- The thoracic surgery resident in an integrated program can now tailor his/her training to concentrate on skills necessary for current practice of cardiothoracic surgery, and not have to waste time on rotations that are invaluable. This also shortens the training period and may attract more applicants.
- Need better education and training during CT residency, doesn't matter how or when you get there.
- I don't think that all programs should be integrated. I feel the skills I learned during my chief residency year have helped me the most during fellowship.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- Integrated is better for cardiac, but not for thoracic since abdominal work is needed in thoracic.
- I think there is a lot of medical knowledge and technical skill gained in general surgery residency.
- Lots of years are being wasted during general surgery training. The specialization process needs to start early.
- 5 years may be necessary to acquire decision making capability for the subsequent fellowship.
- Open techniques will always be required.
- Shorter time, more focus.
- We need to take control of the training process from day one of residency to train thoracic surgeons.
- Greater depth and breath of experience in desired field.
- I still think GS training is important for broad knowledge of medicine and leadership training.
- Need more cardiac time earlier on.
- N/A

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

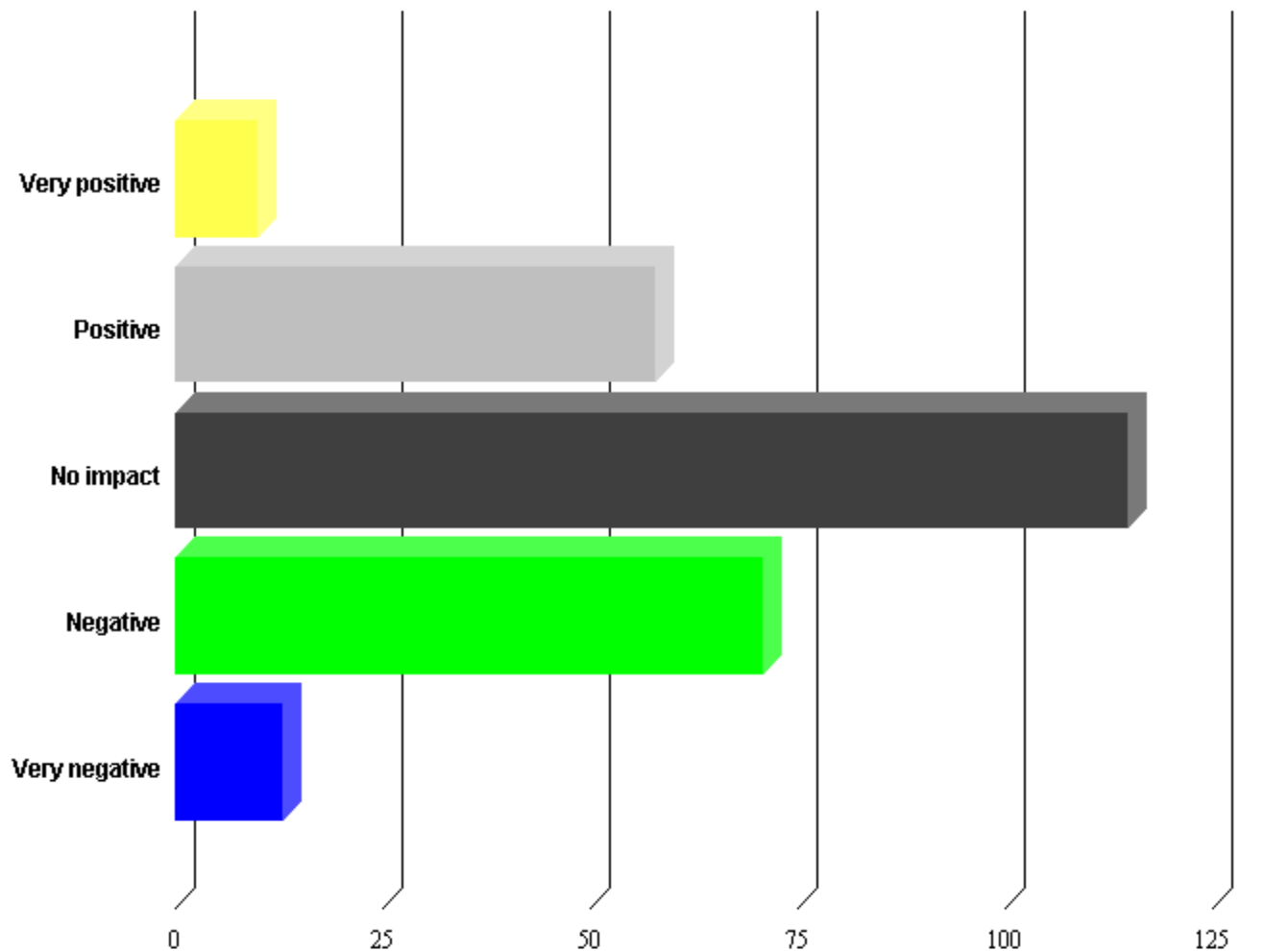
- I have no idea what you mean by 'integrated thoracic training' and I have no idea what you mean by programs lacking open technical skills training. I will say however that cardiac and thoracic surgery are totally irrelevant to each other and should be trained separately. Their only relation is historical and circumstantial and any connection of the two fields entirely artificial. Even the word cardiothoracic is a poorly conceived neologism. Cardiovascular surgery should be a training category. For someone training in cardiac surgery, time would be better spent on a medical cardiology service than on thoracic surgery. Obviously if you want to train the best cardiac surgeons, in addition to technical skill and surgical knowledge they would have detailed knowledge of functional testing, imaging, arrhythmias, heart failure management and all kinds of cardiac interventions. It is perfectly senseless to train them to do a nissen. Similarly, general thoracic surgeons don't need to learn how to do cabgs and fontans. They would be equally served learning prostatectomy and hip replacement. I will hazard a guess that eventually cardiac and thoracic surgery will trend this way by necessity as nearly every other surgical specialty has done decades ago. It is unfortunate that the leadership in the field has been so irrational and sentimental and it should come as no surprise that such a jumbled field is suffering. Cardiothoracic surgeons are competing with general surgeons (stomach, esophagus), cardiologists (cath intervention), pediatric surgeons (TEF, chest wall), radiologists (cath interventions), vascular surgeons (aorta, cath)...in an attempt to hold on to a piece of virtually every field in medicine. It is utterly ridiculous and doomed to fail. Success is not to be found in attempting to hold on to "cardiothoracic" surgery. Success will be found in focusing on a true specialty and being clearly the most skilled at doing that thing. Train excellent cardiovascular surgeons and excellent general thoracic surgeons. Tell me, does there even exist anywhere in the world a single cardiothoracic surgeon who is doing all of the things we're being trained in? Take it as a clue.

Please explain why you feel that an integrated thoracic training program is or isn't necessary to better train future cardiothoracic surgery candidates.

- More focused training aimed at cardiothoracic surgery.
- More exposure to cardiology and catheter skills; more able to treat cardiovascular disease.
- Need to get people earlier.
- There is a lot of time spent on off service training in things such as emergency medicine and general internal medicine that could be better tailored to future cv surgeons (i.e. more cardiology, more operative exposure etc.).
- It all depends on your general surgery training. In any case, the chief year experience is important and would be lost in an integrated program. Is it worth the cost? Perhaps.
- There is lack of exposure to cardiac surgery during general surgery training. Also I found that there is discouragement from general surgery programs to pursue career in CT.
- It should be an option available to some, but not a mandatory approach.
- Early exposure. Shorter total length of training.
- You don't need all that general surgery nonsense...I am in an integrated program and am feeling adequately trained already .
- General surgery very useful; eliminating the 5 years detrimental.



What impact do you feel the 80-hour work week has on your clinical experience?



Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- My working hours remain unchanged; they always exceed 80 hours.
- 80 hour work week drives a wedge between attendings and residents. They don't trust us nearly as much as our predecessors because we have become mercenaries rather than the shepherds that we ought to be.
- I have worked in both systems. There are more mid-levels now helping with the unending scut. I can spend more time on fellow-level concerns and less time renewing Tylenol orders.
- It is good in concept, but in reality it cannot be enforced due to the work ethic of good residents, which by default it penalizes.
- Can focus more on relevant aspects of training and minimize others irrelevant aspects.
- None.
- It has allowed a better lifestyle but a loss at the opportunity to do cases.
- We are still doing same number of cases.
- Surgical training is an short concentrated period during which one should learn and see all that is possible. To mandate someone to go home seems a bit unreasonable to someone who truly is interested in perfecting their skill as a physician.
- Fewer cases; attending attitudes toward residents' compliance with 80 hour work week.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- We do not have that.
- It's good for balanced life between work and other responsibilities.
- I doubt it has altered it much.
- It creates artificial protection. Makes you leave cases while keeps you in house for trivial stuff.
- I can study and give a feedback to what I have learned in the OR and unit.
- Provides for a more well-rounded life.
- 1. Forced to leave work when I can definitely do more - negative. 2. Given me a life worth living and changed the culture amongst attendings – positive.
- Too much pressure for residents to leave "on time." So much so that the focus of the residents has shifted to leaving on time.
- More time to read, to rest and to integrate the knowledge into clinical practice.
- More time to read and also enjoy family which kept me from going crazy.
- Allows time to read.
- Less exposure, more awake when exposed, better learning but less time. Better care when here but less continuity does impact care.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- Doing anything 100+ hours a week isn't healthy (fatigue, depression, poor nutrition, poor decision-making, poor interpersonal relationships). If you can't train smart, hard-working people in 80 hours/wk, you are doing something wrong.
- Allowing time for rest is imperative for you to prepare/learn from your other experiences.
- Difficult to maintain continuity of care.
- I feel that 80 hours per week is adequate to learn. More and there is less time to study independently. It has necessitated becoming more efficient and enhancing communication.
- Over many years in practice surgeons are at risk to exhaust them self over an 80-hour work week. Attention to important details might be diminished and the quality of care can be jeopardized. It is also counterproductive in terms of balancing professionalism and family life.
- Limits the number of cases available to educate me since I have to go home following a call night. It also has lead to NP/PA inpatient care-these extenders generally function independently without consultation with me, so I lose those learning opportunities.
- Missing good cases, less involvement in patient care.
- More efficient time at hospital, greater time for independent learning outside hospital and more time with family.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- This has cut out some of the mundane work that did not contribute much to learning.
- No one should 'work' 80 hours a week on a regular basis.
- Limits case numbers.
- Time off has been important.
- While we do lose some case experience, in high volume programs this has no effect and with 80 hr work week, it gives resident more time to prepare for the cases and to read...esp. important for board prep.
- No impact.
- It has impacted me by the attitudes and skill sets of my colleagues who treat our profession like shift work, and feel entitled to leave the hospital as soon as possible.
- Shift work. No dedication and sense of responsibility.
- I am still not working less than 80 hours. In this field with the complexity of cases and the critical nature of our patients it is unrealistic to believe that one can care for their patients within this time limitation. It is a full time career.
- The work week does affect my clinical training, only limits the amount of scut that a mid level provider is more than competent to handle.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- Operative experience limited by hours.
- N/A
- I think that the emphasis of education over service and 4 days off a month are 2 good aspects of the 80 hour week. It has forced programs to hire more physician extenders. But the downside to it is that it can interfere with good operative opportunities. I think things like the 10 hour off and 30 hour max rules are too rigid.
- The program has become more humane although we do need better compliance and extra ancillary staff to focus on operating rather than ICU care.
- I think it's all about being efficient with time management. Staff surgeons will have to participate and relinquish some of the responsibility from the fellow. This gives the fellow time to prepare for a case and also read.
- Allows me to be more rested and mentally clear.
- I have never been at a program that actually follows the 80 hr work week so I would say no impact. In reality, it has caused more stress than anything.
- Very frustrating. It is impractical to impose a time restriction on surgeons. It is possible to work 80 hours in a week. Most weeks I am close. It is not possible to maintain 10 hours between shifts.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- It does limit my time in the hospital, but is also forces the residency program to maximize my time spent in the hospital, thereby making my training more efficient.
- Allows me more time at home to read.
- Positive - significant fund of knowledge to be mastered in CT surgery, requires outside reading/study which is better facilitated by 80hr week.
- Allows for controlling the hours better cutting down on service and increasing educational experiences.
- It has reduced my exposure to clinical problems and reduced the time that I had to read, because now I have to go home and take care of my kids. It has made me a better husband and father, however.
- It has not affected me because I am not restrained by it.
- Not enforced and gives older surgeons something to complain about.
- Minimal impact.
- Diminishes my availability for urgent/emergent cases. Hurts continuity of care.
- Limits the number of cases.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- Most of the time we don't follow 80 hour week.
- Not much mainly because you can be at one place at the time and when you are tired there is not any learning.
- Abuse had to stop - do not need more than 80 hours/week to be trained.
- During weeks when the 80 hrs are adhered to it allows more time to read/reflect/jot down notes from cases.
- Requires supervision of multiple sign-outs among junior residents on the service. ICU care is significantly worsened by the proliferation of non surgically trained NPs/PAs in the unit.
- It does not because our training program is the best in cardiac surgery in the country, hands down.
- 80 work week is more than sufficient to train as long as the program is focused on training.
- This limits my ability to perform cases and maintain my stamina.
- The requirement to leave post-call limits OR experience.
- Doesn't interfere.
- More time spent operating and less time spent doing non-operative tasks.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- Right now the 80 hour work week still makes it possible to learn clinically, and in the OR, while preserving some quality of life. I do think you miss out on some clinical experience but not so much that will ultimately be detrimental but I do feel than any further reduction in the hours ABSOLUTELY SHOULD NOT HAPPEN b/c this will devastated the infrastructure of surgical training and compromise our education/training!!!!
- Decreases the experience.
- Less scut work, more clinical/operative experience.
- It is forcing attendings to start teaching and stop mind gaming and endurance testing. Attendings (slowly) are being forced to teach technical skills and not just using residents as labor with observational opportunities.
- Allowing some down time/free time allows you to be more productive in your work time.
- I operate less. I am unable to follow patients.
- Not much.
- You don't spend as much time taking care of the patients in the ICU. However the positive side to it is that you get to operate and can read in your spare time. In a 2 yr program you need time to read and not be scuttled out, we take call from home so it works out well.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- Decreases operative time and experience. Number of cases are increased while the training period is same.
- None, only because in my program the regulations are largely ignored. The only effect it has is the requirement to log work hours and the moral conflict I have about lying when I report my hours.
- Less resident support in the hospital; therefore, everyone is spread thin.
- Stupid policy that does more harm than good. Doesn't even accomplish its purpose. Maybe if the government gave us money to hire NP's and PA's in addition to these ridiculous regulations it would actually be a move in the right direction.
- There is essentially no real monitoring of work hours, and 80 hours often isn't enough to get things done.
- Lack of continuity of care has resulted in poorer patient care, and resident training has suffered.
- Not subjected to 80 hr work rule.
- Physician assistants and nurse practitioners are taking over all responsibilities and since residents are not as essential, attendings prefer to operate with RN-first assistants or physician assistants.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

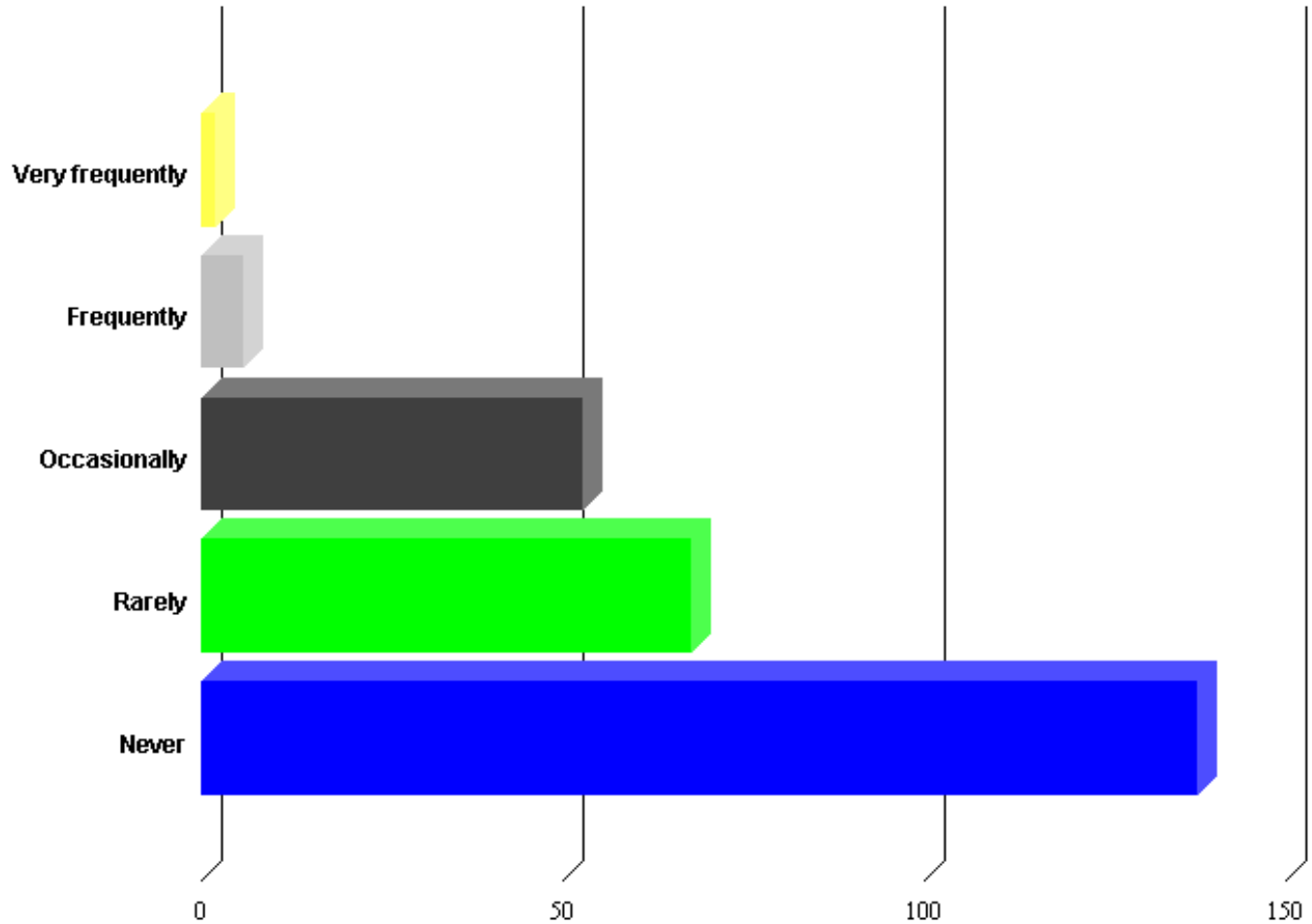
- Positive and negative. I agree with the concept but not the rigidity at which it is imposed. There are times when one should/needs to stay back because my post op patient needs to be taken back to the OR. What message does that send?
- If structure effectively, trainees can still get an excellent experience. My training has been outstanding despite the constraints placed by the 80 h week.
- More time for study.
- Not relevant.
- Allows to rest and study in some instances. Protects against prolonged working hours.
- Find comfort in the eye of danger. Our field is mostly a technical field. At the end of the day, not only does one have to make sound decisions, but one has to be able to translate these decisions into action and be able to perform in the operating room quickly and accurately. Without practice and exposure, as imposed by the 80-hour work week, one cannot be as well-trained. In the same token, if a surgeon chooses to take a break from operating, his/her skills get blunted.
- Having more than 80 hours would only increase my in-house self-directed learning.

Please describe how the impact you feel an 80-hour work week has on your clinical experience.

- The general surgery residents have a much different attitude. There is always a rush to leave and a concern about hours rather than a concern about learning.
- Nice to know that we have protected time off, even if we are always working otherwise.
- Too much emphasis is placed on duty hours, not on patient care or education.
- As it is, we already spend a great deal of our training doing "administrative" or "scut work" if you will. With the 80-hr restriction, there is a slight awareness of the appropriate use of our time and the need to spend time in the operating room.
- Maximizes the learning opportunity by having appropriate amount of rest.
- More regulated life rhythms.
- No impact. Rarely is it necessary to exceed 80 hours, even when extremely busy.
- More focus on operative training since my time is limited.
- Has not really changed it except less call in house.
- Less experience.
- We just ignore it and carry on as we always have.
- It inhibits my clinical experience.



How frequently does your program utilize simulator training?



Please describe your program's use of simulator training.

- Models of coronary anastomosis.
- I have little interest in simulator training.
- Virtual Bronchoscopy Wet lab for lung resection Full-feature heart-lung machine simulator.
- Pig year labs.
- Nonexistent.
- Endovasc reps.
- My program does not, but to improve my skills I get creative (ex. using regular lab shaker to saw anastomosis on, helps with OPCAB's).
- None.
- Bronchoscopy, PDT and EMR and stents in esophagus.
- N/A
- Pig lab available.
- Mostly for ACLS.
- Elective personal effort at the MIS lab.
- What simulator training?

Please describe your program's use of simulator training.

- Da Vinci II Robot thoracic mannequin with a pig heart practice.
- Skills lab - bronchoscopy simulator and wet pig lab for valve work.
- None.
- Running codes.
- Dedicated month of simulation.
- We have never used it so far.
- Sheep hearts for valve repair/replacement.
- We use pig hearts to simulate complex cardiac procedures.
- We have a simulation lab as well as frequent wet labs for complex cardiac procedures.
- N/A
- Worthless. Nothing beats taking care of and operating on patients.
- I have not used it to date minimal invasive tools are available for residents. Not mandatory for CT fellows but available. Most CT fellows in my program are technically proficient in their ability.
- Bronch simulator.

Please describe your program's use of simulator training.

- Occasional dry lab work.
- Between angio simulators and practicing on cow hearts with valves, there is quite a bit of simulation.
- Heart valve simulator on pig hearts.
- Cadaver labs, wet labs.
- We don't.
- Practice with the Da Vinci robot in the lab.
- We don't have simulator training.
- We do so much operating that it doesn't matter. That's the way it should be – that's the way it was when all the "grey hairs" in the field trained and all they keep saying is how "there training was so much better, blah blah blah." The programs that can't provide a saturating operative experience should be shut down, not rescued with a simulator experience. The future of the specialty depends of REDUCING the number of trainees by only taking THE BEST and putting them in integrated programs AT THE BEST PLACES. I know two programs in my city that should be shut down tomorrow but until the thoracic surgery leadership decides to man up to the reality, things will not change.

Please describe your program's use of simulator training.

- Don't use.
- We are just starting to use Cardiac Surgery simulators.
- Occasional lab once or twice a year.
- Wet and dry labs.
- No formal program set, despite the availability of a state-of-the-art simulation center.
- Meet with one attending on day off to perform one or two vascular anastomosis on left-over vein.
- Standard Laparoscopic trainers.
- Wetlab or sending residents to other wetlabs. Practice robotic anastomosis on pig hearts.
- Anastomotic work station.
- We have a state-of-the art lab at the VA and we have monthly wet labs.
- N/A
- Anastomosis simulator.
- Simple conduits and valve simulators.
- Pig lab for valve procedures.

Please describe your program's use of simulator training.

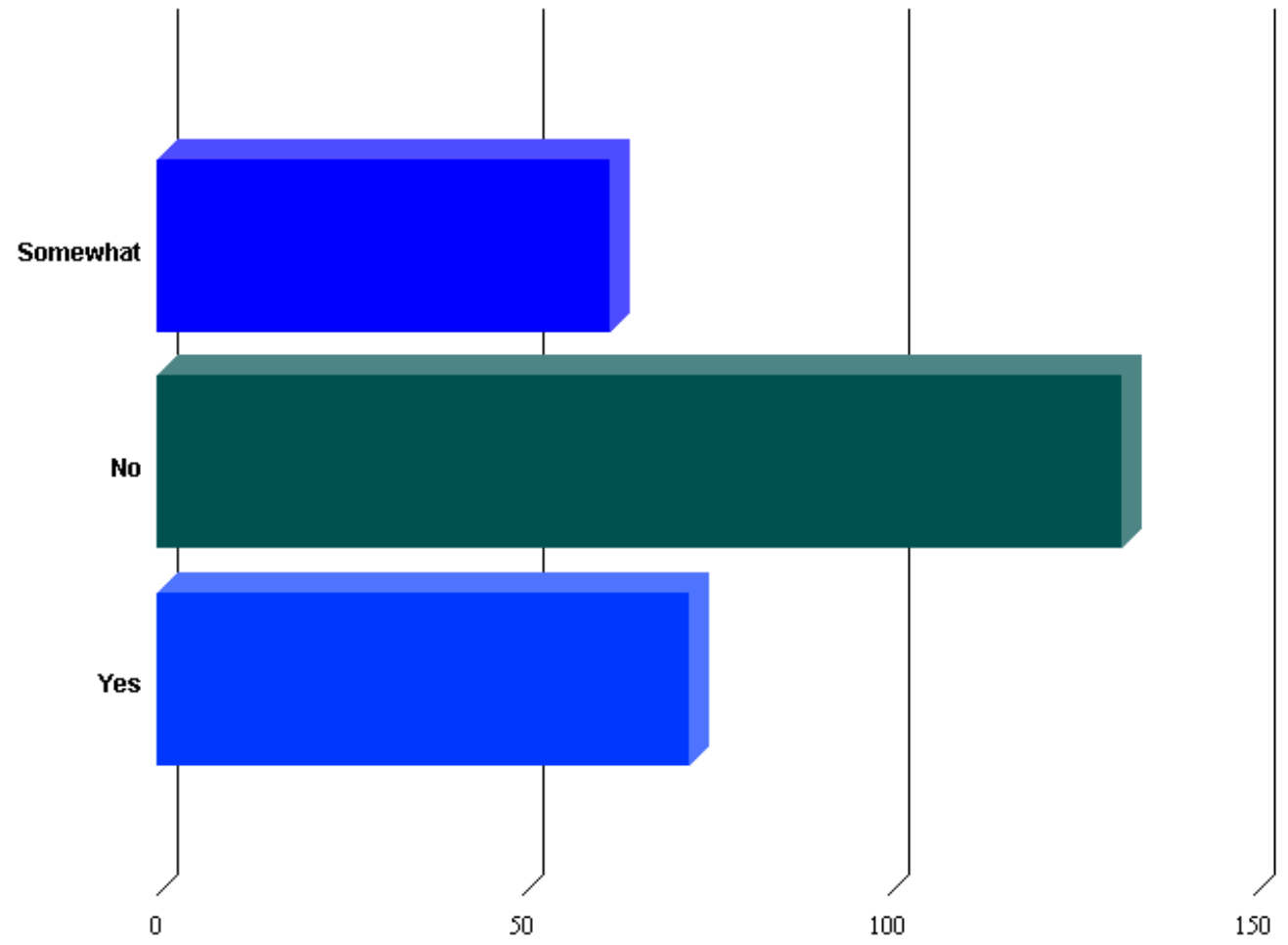
- Pig lab for valve procedures.
- Don't use it.
- ?
- Mostly for endovascular intervention and valve training.
- None.
- We have done it only once so far.
- Have fellows go to website.
- Helps hands on experience skills.
- Dry labs.
- Low and high fidelity anastomosis models, cadaver training, catheter simulators.
- Only available at industry sponsored events or courses.
- Simulation of laparoscopic procedures.
- Vascular anastomosis, Beating heart surgery, EBUS.

Please describe your program's use of simulator training.

- We have pig labs and perform procedures on pig hearts.
- Ethicon endosurgery lab. Some cadaver labs.
- Attended pig lab to learn to use RFA for treatment of a. fib. Attended lab for using endoluminal stents and use of barrex and cryo. Attended lab for ridged bronch work.
- None
- We have multiple modalities including models for suturing and a beating heart model.



Do you feel your program's simulator training is an effective teaching modality?



Please provide any comments you might have about simulator training as a teaching modality.

- It's great. It should be expanded.
- N/A
- Regularly scheduled training sessions give residents time to ask questions that might be inappropriate over a live patient.
- Minimal department support.
- We don't have simulator training as yet.
- Waste of time.
- It is excellent option, I have used it in my GS training and saw how my juniors improved with it as well.
- Allows practice and learning curve before human use.
- Should be made mandatory.
- Every program should have it.
- From my GS experience, it seemed like a lot of hype with marginal return, particularly at the senior level.
- I've tried out several simulators; they are very useful.

Please provide any comments you might have about simulator training as a teaching modality.

- Large animal surgery is better than simulation.
- Not applicable.
- Better than nothing.
- Crucial.
- Simulation is a viable adjunct, but only provides a foundation for requisite operative experience.
- It is an excellent adjunct to intraoperative teaching; I wish I had access to simulators during my training.
- N/A
- N/A
- It would be good.
- Not applicable.
- Don't use it.
- You need a someone who can supervise.
- Need more. Simple.

Please provide any comments you might have about simulator training as a teaching modality.

- The more, especially early during training, the better.
- Sharpen skills that should be mastered when performed on a real patient.
- We don't use it, I wouldn't know.
- Give the resident a basic experience and confidence and also help understand the clinical scenarios.
- I think it would be very helpful for beginning of training as long as there is a set curriculum that utilizes it.
- Don't use.
- We are just beginning to use the simulators.
- I do not believe simulator training is worthwhile in cardiothoracic surgery. Simulator technology not there yet.
- What we have is good but good probably use more opportunities.
- Provides specific technical training but it is never as stressful as the real situation.
- No experience to comment.
- I answered no cause we don't have simulators.

Please provide any comments you might have about simulator training as a teaching modality.

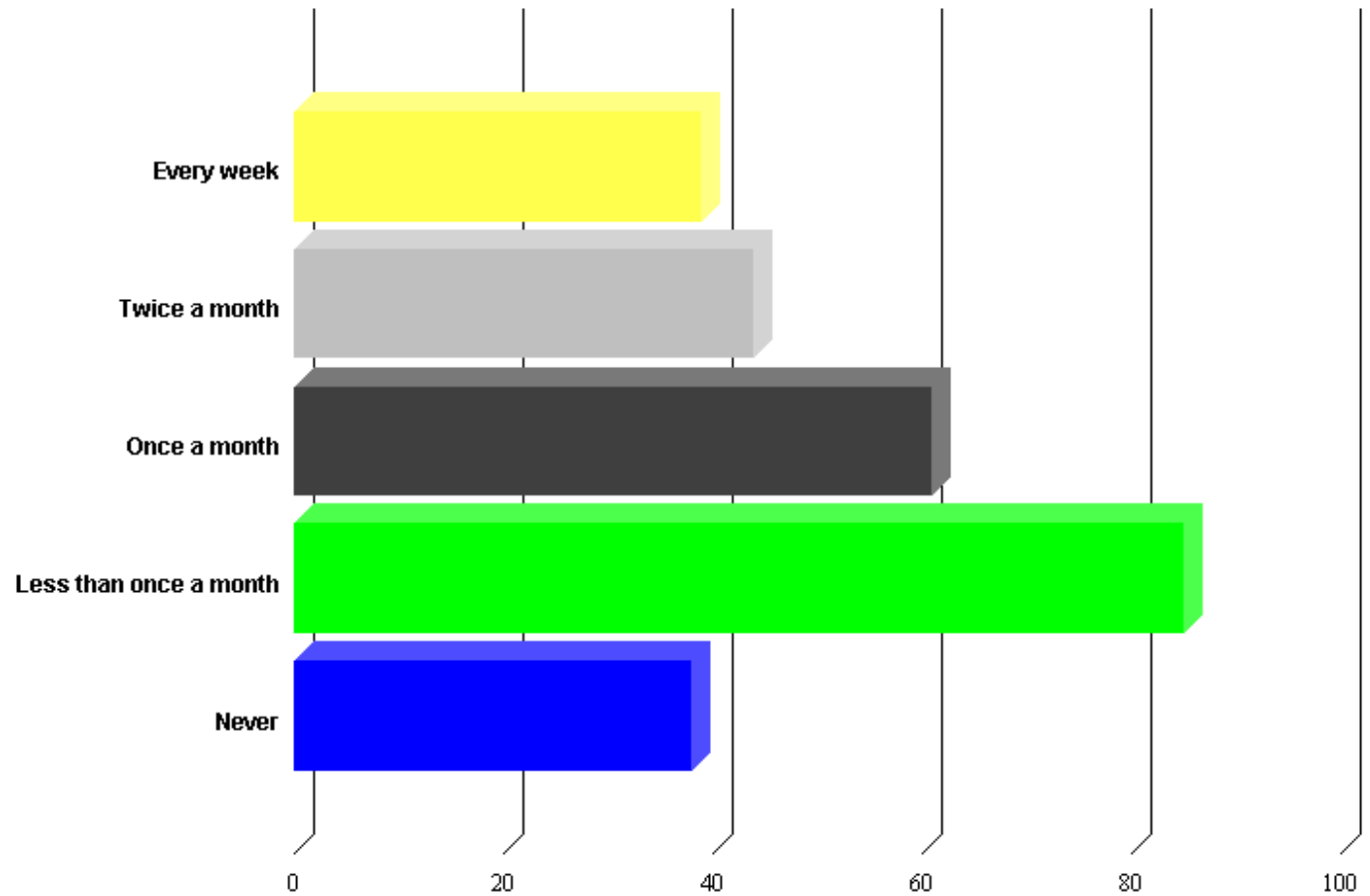
- It helps you learn things that are necessary only very very early in training.
- I think it would be a good idea.
- N/A
- Cannot comment since we do not have simulator training.
- It familiarizes one with the sequence of the procedure, and what pitfalls to avoid.
- I went to "boot camp" this year and found it very helpful.
- Somewhat helpful.
- Provides more skills in less time.
- Simulator training is useless. It is a lame surrogate espoused by those who don't have the know-how or confidence to teach real surgery. Here at the Brigham after about the first couple of months I was doing most operations from the right side as surgeon. As chief, I did virtually every operation in its entirety: valve repair, roots, cabg, arches, circ arrest, etc. I also have no doubt that with a little instruction, I could safely take a second or third year gs resident with a modicum of technical skill through most cardiac operations quickly and safely. Just the other day I took a 3rd yr resident who had never done so, through a cannulation quickly and uneventfully. I have found, almost without exception, that surgeons who are unable to teach operative surgery are subpar surgeons most of whom never were properly trained themselves.

Please provide any comments you might have about simulator training as a teaching modality.

- Have not used a simulator that I liked yet.
- Technology requires further development.
- It is excellent model for training. I still want to spend more time in the OR if I can.
- N/A
- It could be expanded and done more frequently.
- Simulators are needed for residents to help master the technical aspects of CT surgery. We, as a specialty, are far behind were we need to be in this regard.
- I believe simulation training- either computerized or in a wet lab is necessary and will be the future of surgical training.
- This should be blank, since I didn't do simulators.

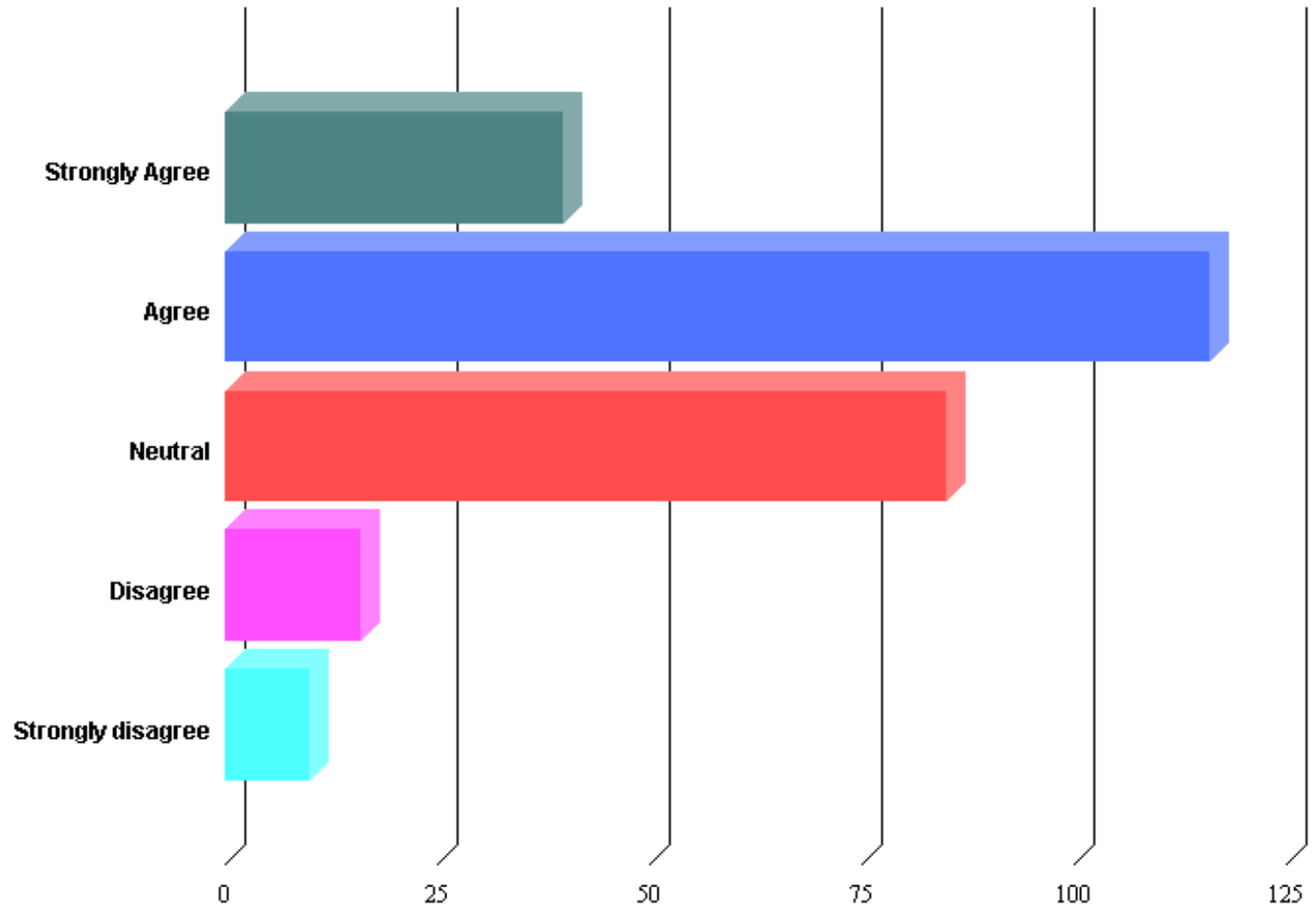


On average, how often do you personally utilize the TSDA Weekly Curricula?



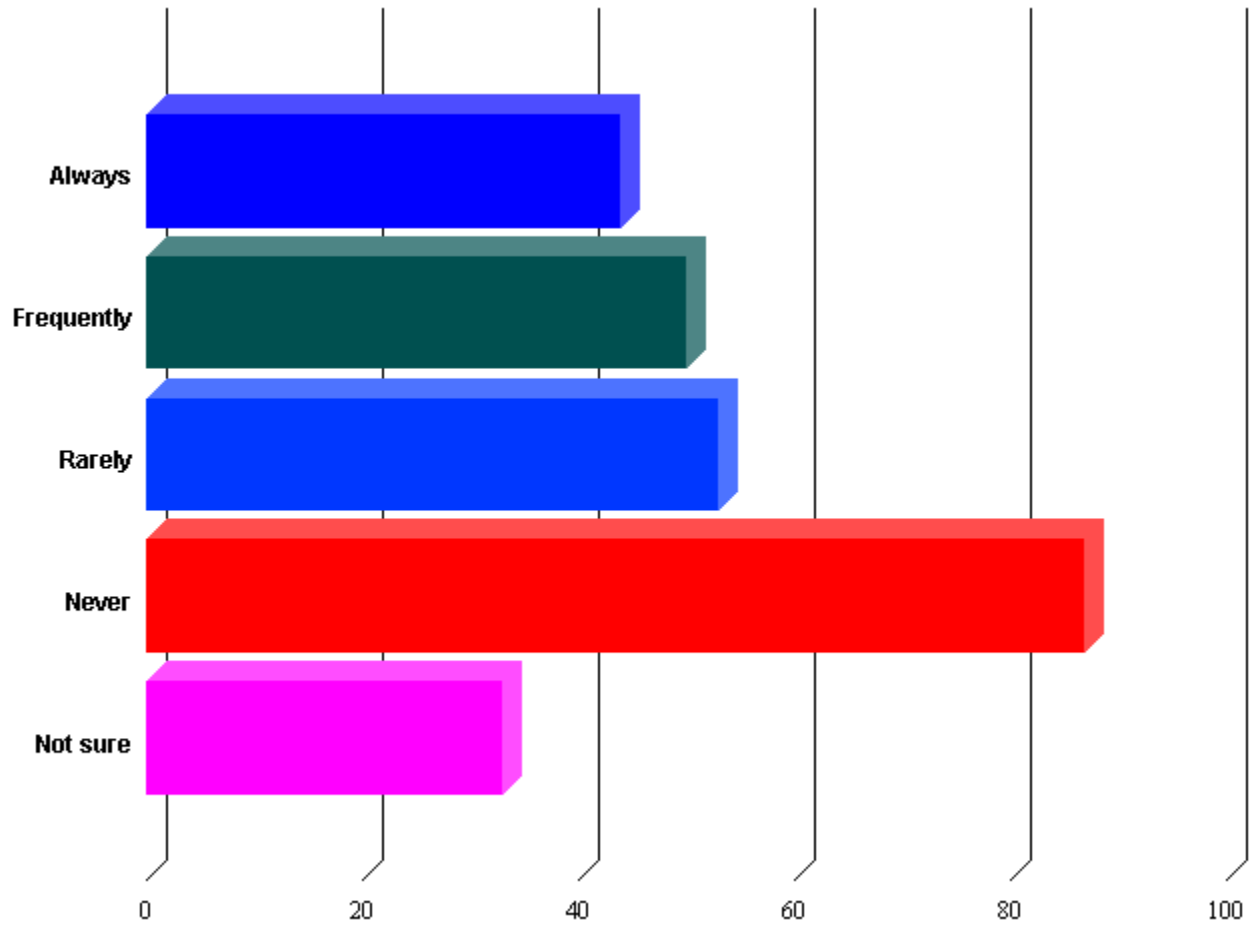


Please indicate your level of agreement with the following statement:
The TSDA Weekly Curricula is a useful study guide to support my clinical training.





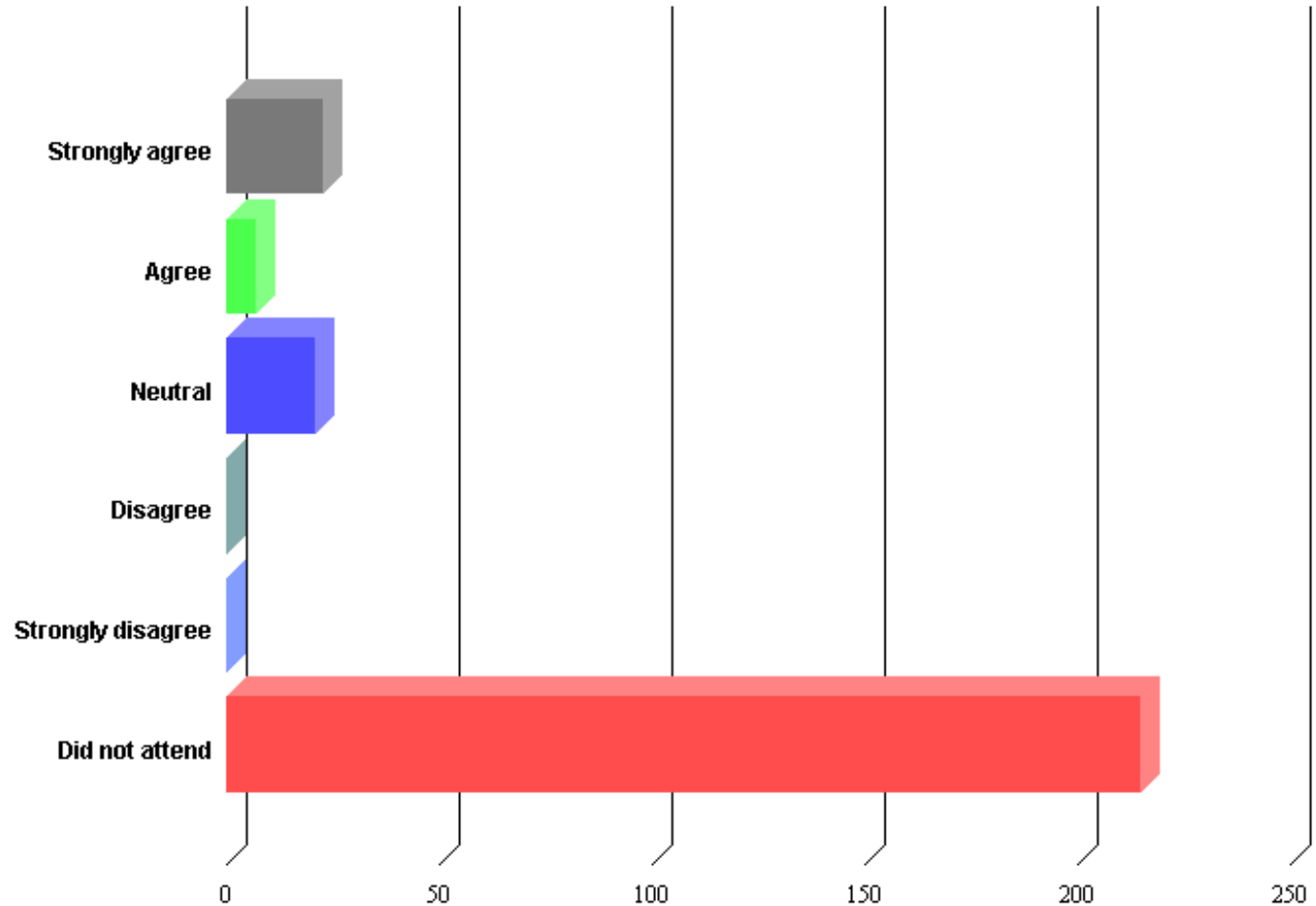
Does your training program use the TSDA Weekly Curricula as a guideline for conferences or mentored didactic sessions?





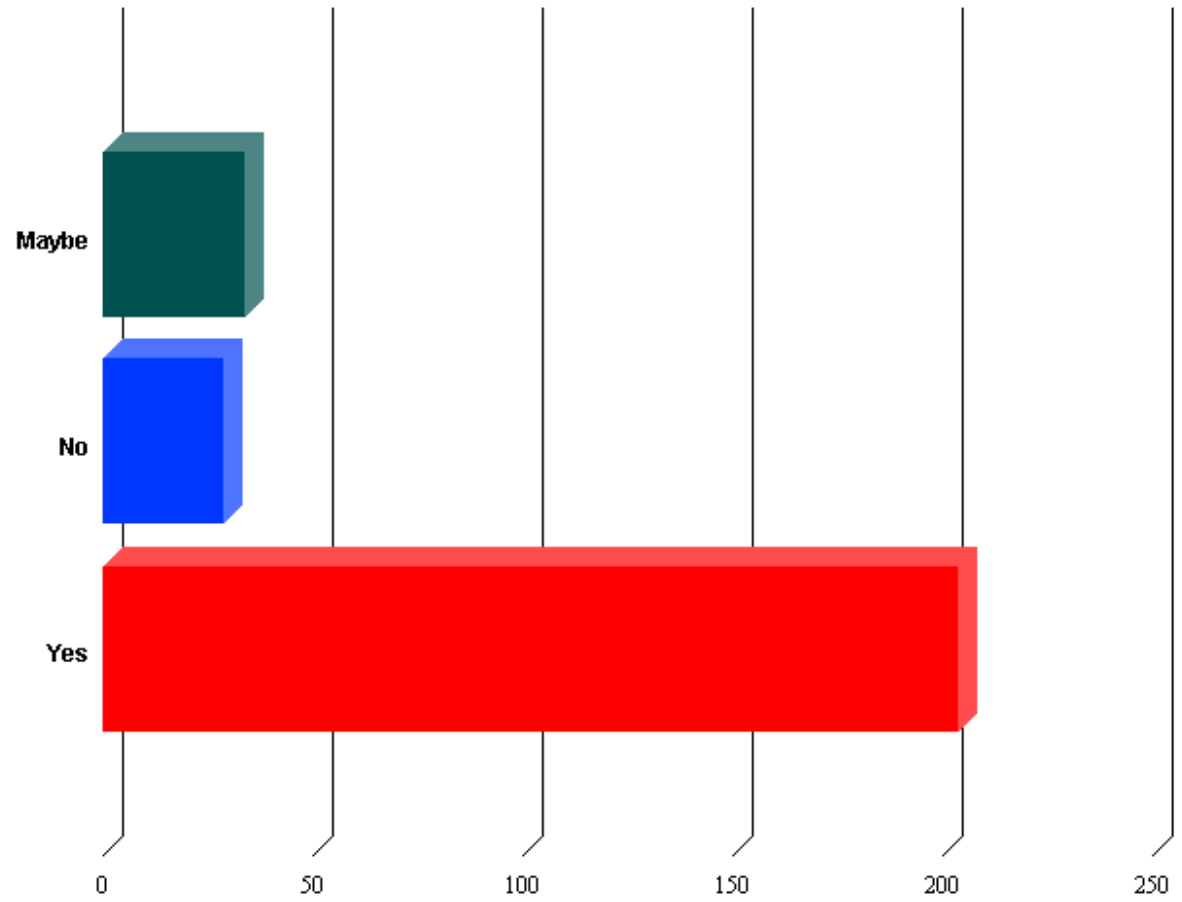
If you attended the 2008 TSDA Boot Camp, please indicate your level of agreement with the following statement:

Boot Camp was time well spent.



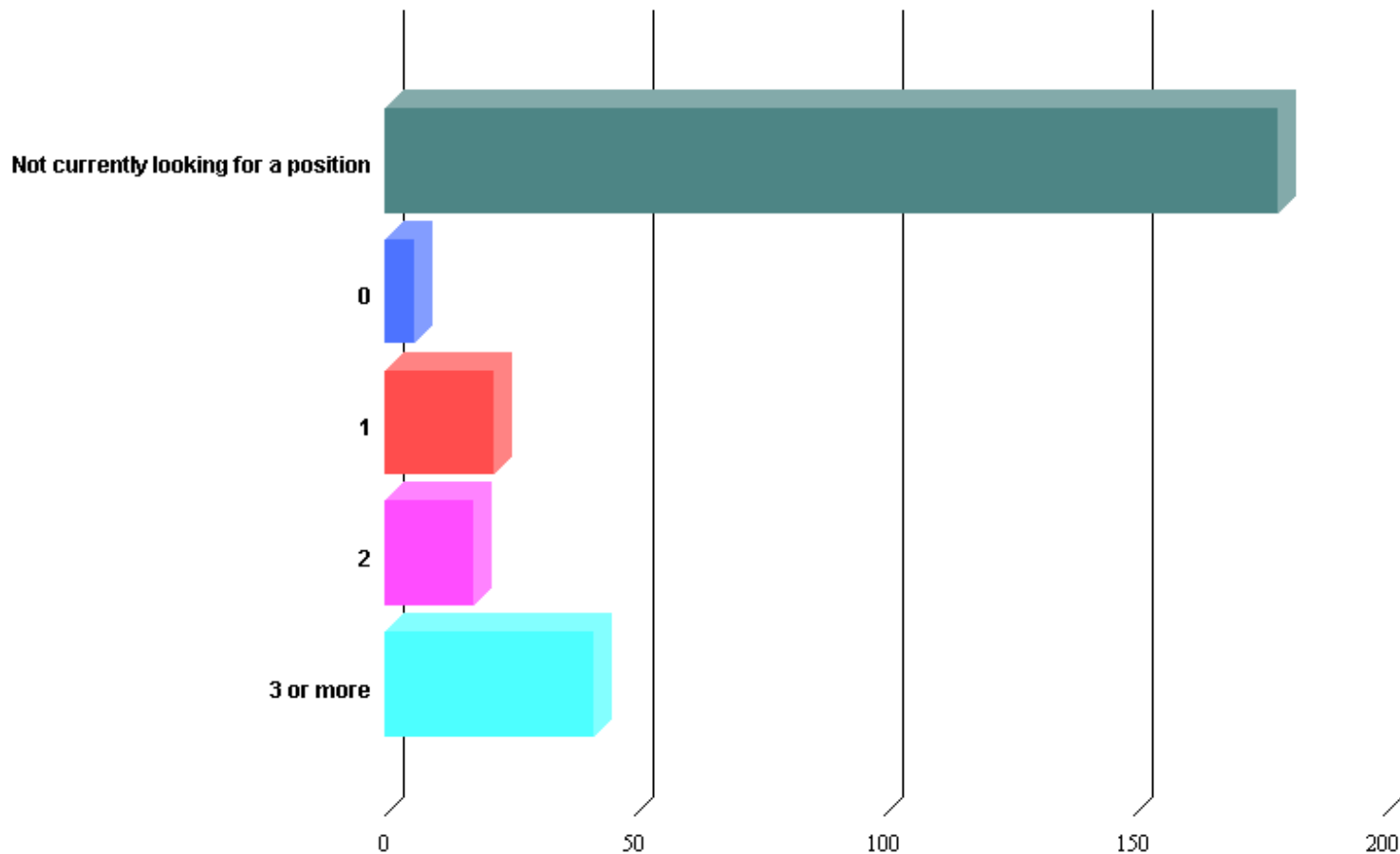


Would you be interested in attending a simulator-based education event in the future?



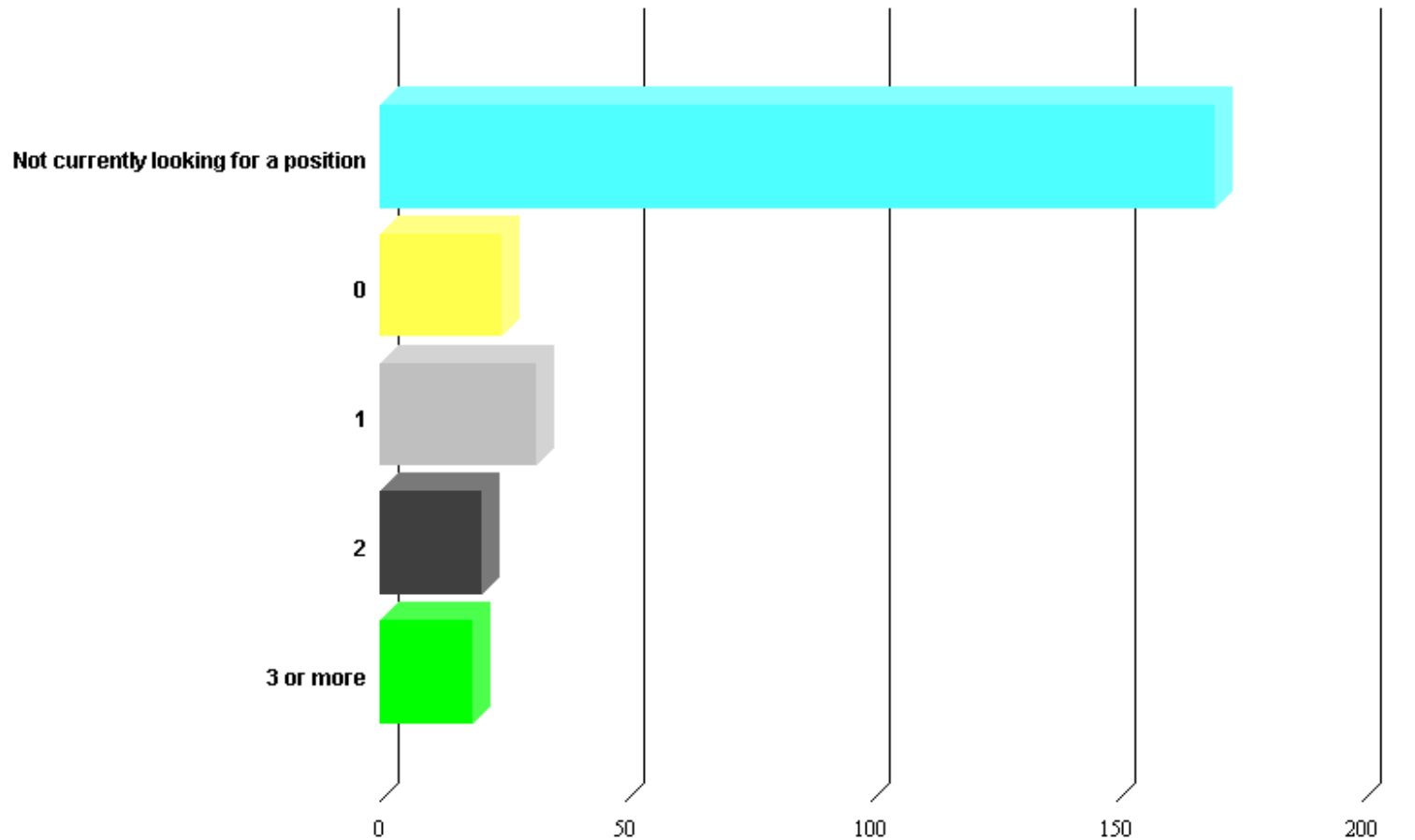


If you will graduate from a CT surgery residency in 2009, how many job interviews have you had to date?



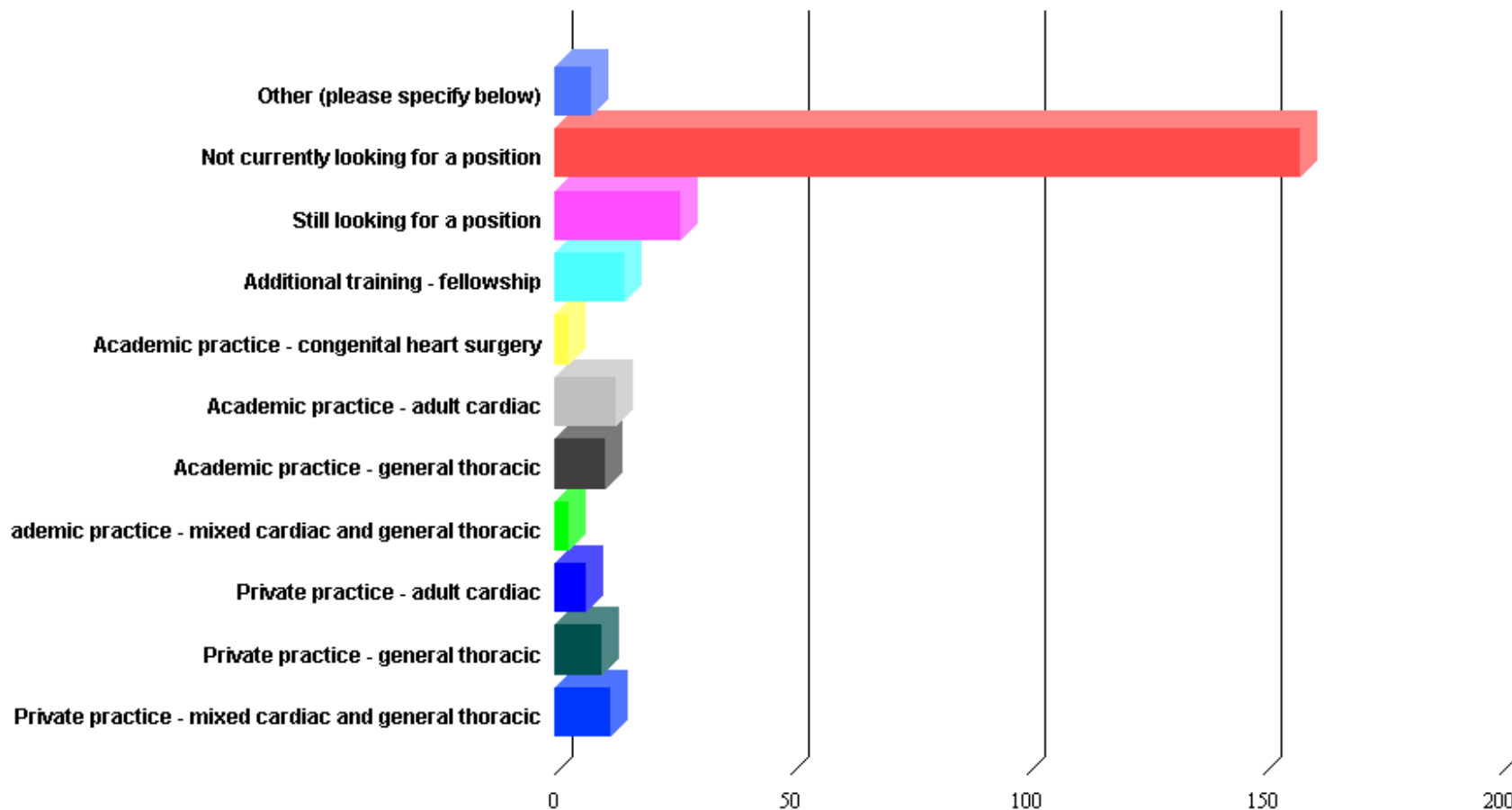


How many firm job offers have you received to date?





If you have completed your job search, what type of position did you accept?



If you answered "other" to the previous question and have completed your job search, please describe the type of position you accepted.

- I am currently deciding between 2 different offers.
- More training .
- Will be doing a congenital fellowship after the adult CT fellowship. I have a fellowship spot secured at this time.
- Am finishing additional fellowship year then fulfilling military commitment as CT surgeon.
- Private practice - Adult cardiac with mix of thoracic and vascular.
- Military commitment.
- Cardiac, thoracic and peripheral vascular.

- Since there was no space to comment on the weekly curricula I will do it here: it's a great idea and a useful tool but many of them are extremely out dated and the video software is terrible. It works on about 1 out of twenty computers. This includes multiple personal and hospital computers. Everyone else I know has the same problem. Many can't even get them to work at all. Please change the video software or make them downloadable so we can play them on our own software apple or pc. Thanks.



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