



**American Alliance
of Academic
Chief Residents
in Radiology • A³CR²**

2011 A³CR² Annual Chief Resident Survey

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American Alliance
of Academic
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Survey Format

- Confidential online survey ([surveymonkey.com](https://www.surveymonkey.com))
- Multiple choice questions (single and multiple answer), free text for additional comments

Survey Purpose

- Share facts and information about the structure of training programs
- Use information about resident benefits to increase benefits at individual programs
- Share opinions of fellow chief residents about important issues facing radiology training
- Share ideas for how to deal with these important issues

Limitations



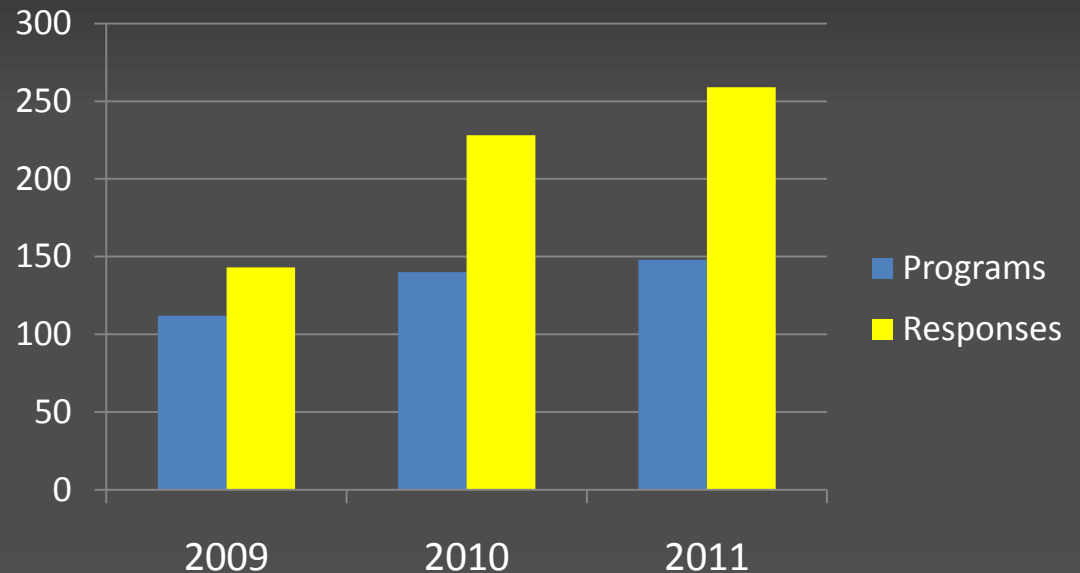
- Opinions and estimations
- Tempting to make inferences with data
- Sampling bias (only chief residents included)
- Duplicate responses from programs with multiple chief residents (tried my best to tease these out)

Survey Topics

- Recurring
 - Basic Program Information
 - Resident Benefits
 - Call and Outside Hospital Studies
 - After-Hours Attending & Resident Coverage
- New in 2011
 - Economic Impact on Programs
 - New Board Exam Format and Impact On:
 - Curriculum
 - Call System
 - Fellowships
 - Physics and Radiation Safety
 - Education

Participation

- 2011
 - 84% completed the entire survey (similar to prior years)
 - 259 individual responses
 - 148 unique programs
- 2010
 - 228 individual responses
 - 140 unique programs
- 2009
 - 143 individual responses
 - 112 unique programs
- 2008
 - 100 total responses

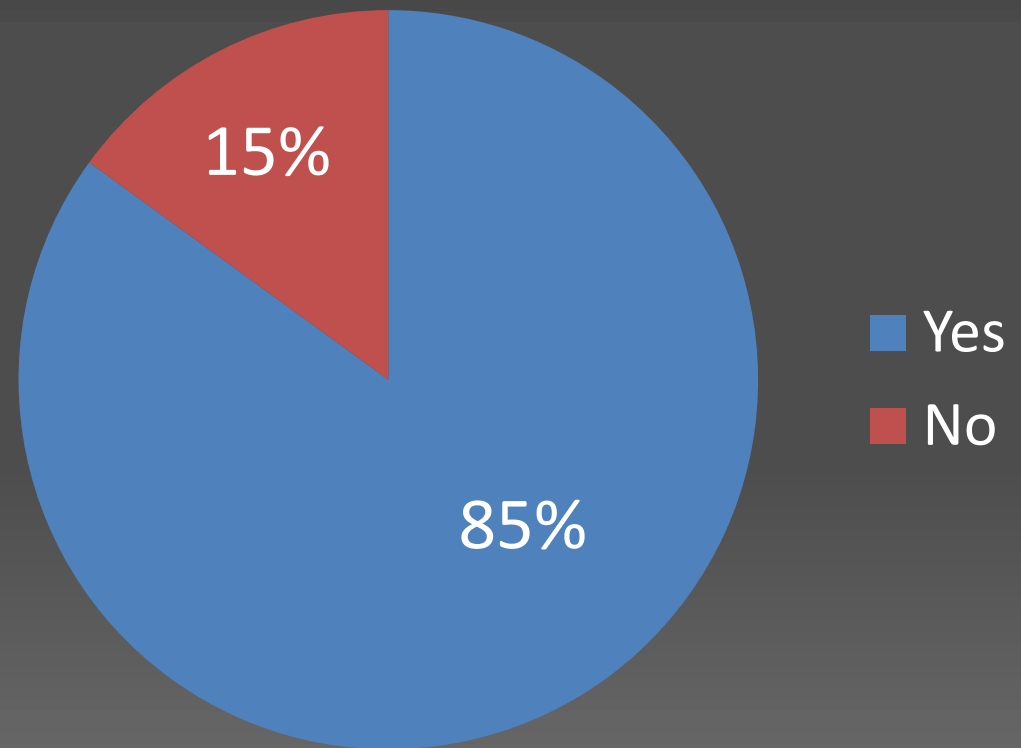


- Results will be available to A³CR² members by e-mail on request
- Results will also be available to A³CR² members in the newsletter and hopefully on the website

THANK YOU FOR PARTICIPATING!

University Affiliation

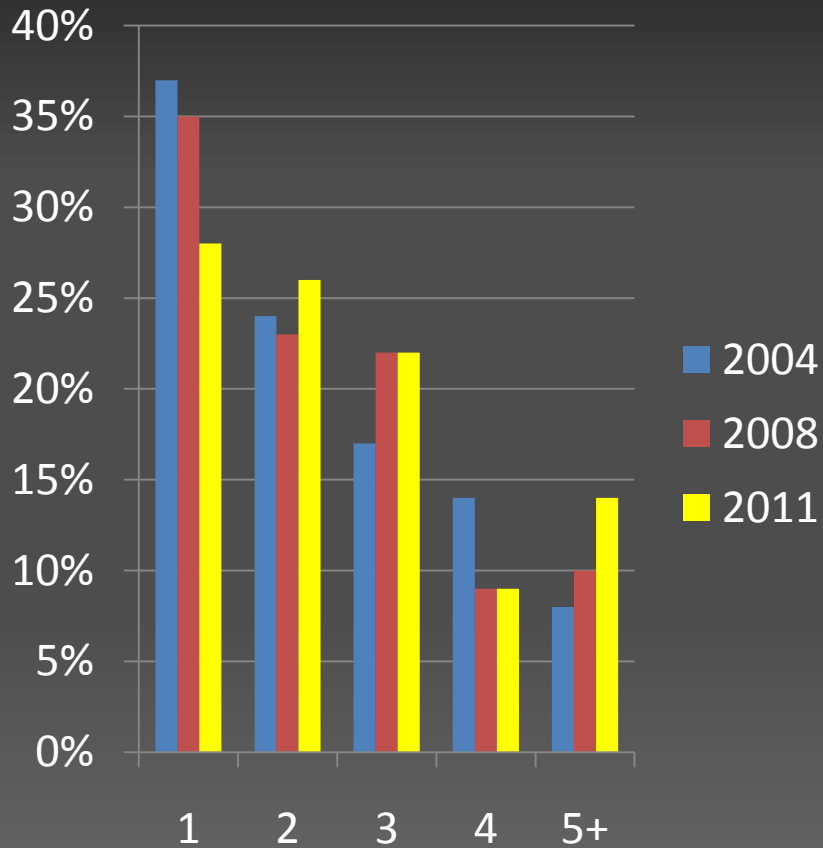
University Affiliation



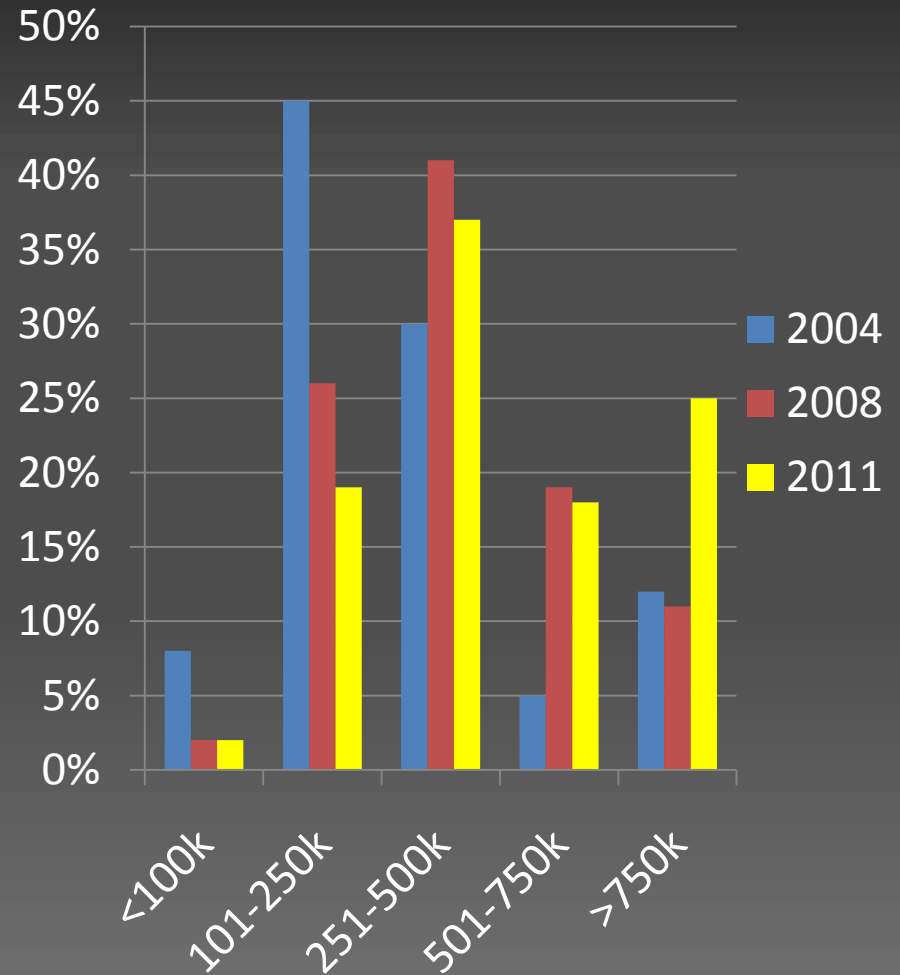
- Slight Increase from 2009 and 2010 (~80% those years)

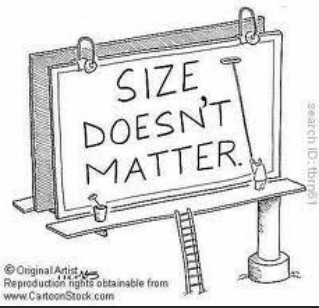
Volume

Hospitals Covered



Studies per Year





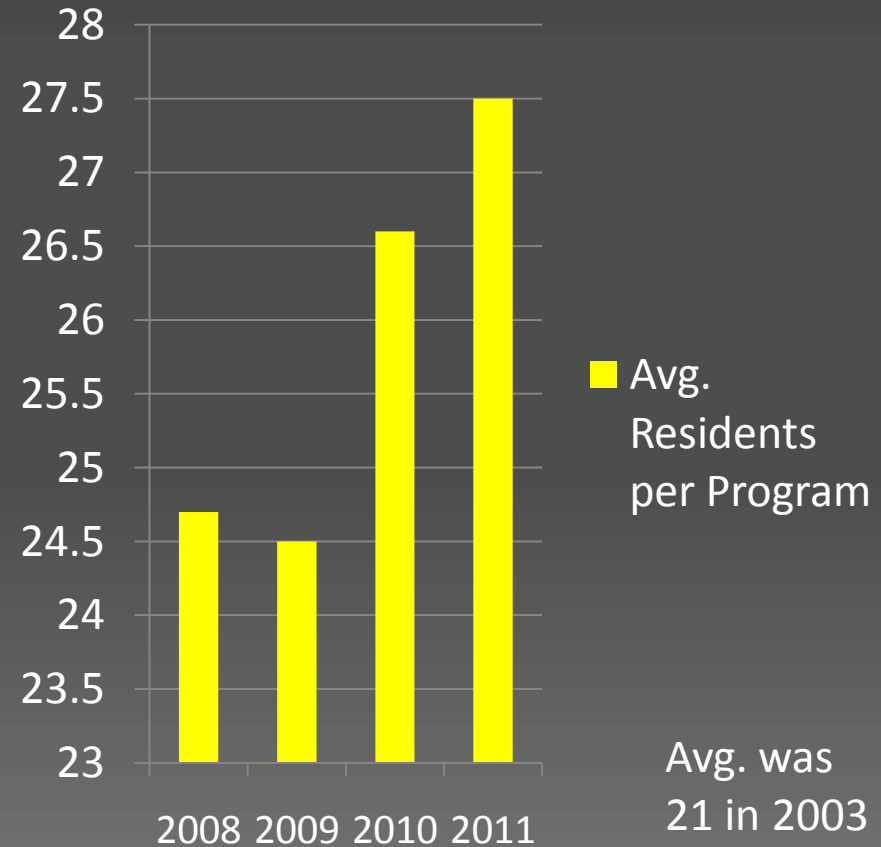
Program Size



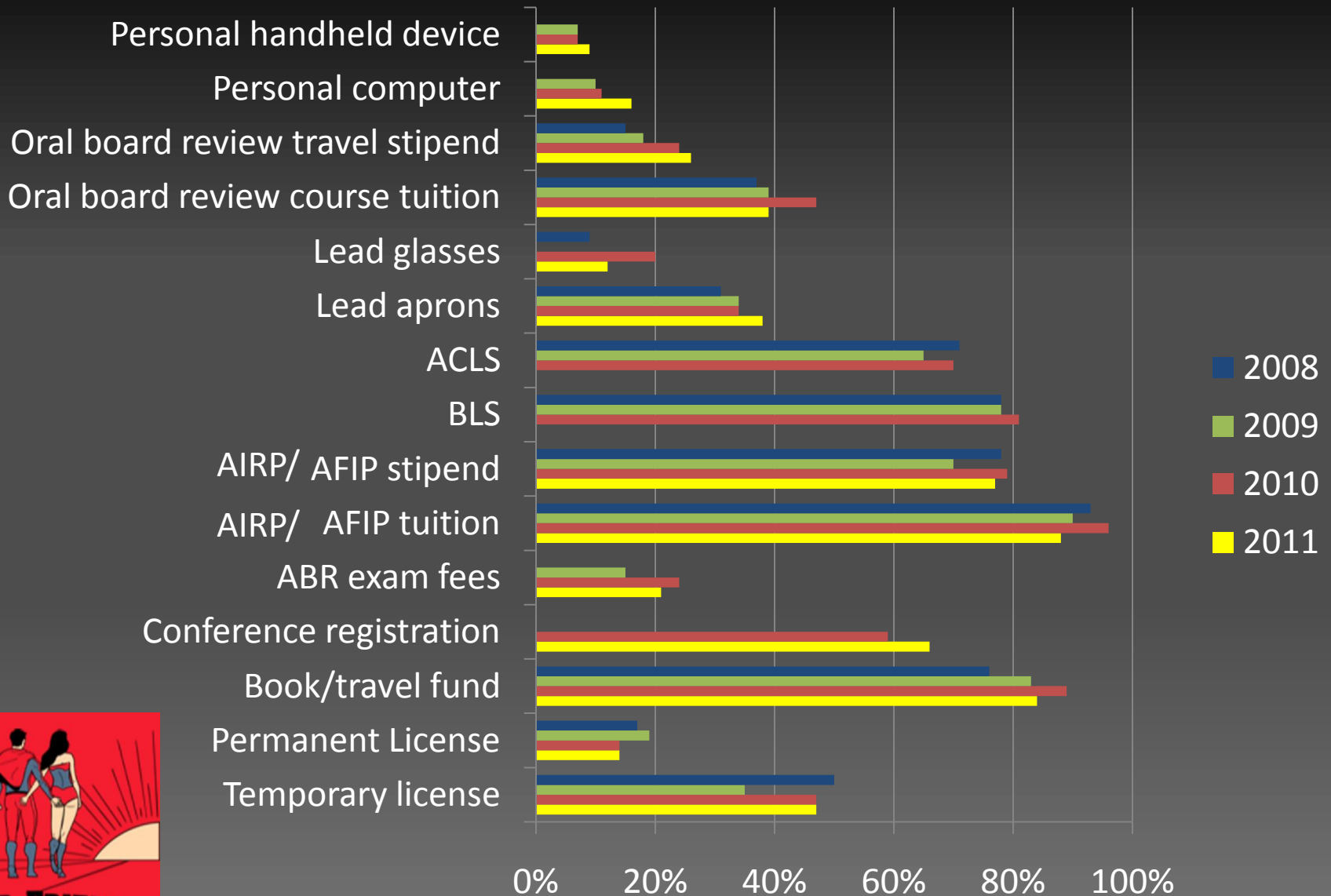
Change in Size

- 2010-2011 (2009-2010)
 - 27% increased in size (17)
 - 63% did not change in size (79)
 - 10% decreased in size (5)
- 2011-2012
 - 18% of programs plan to increase size
 - 78% plan no change in size
 - 4% plan to decrease size

Avg. Residents per Program

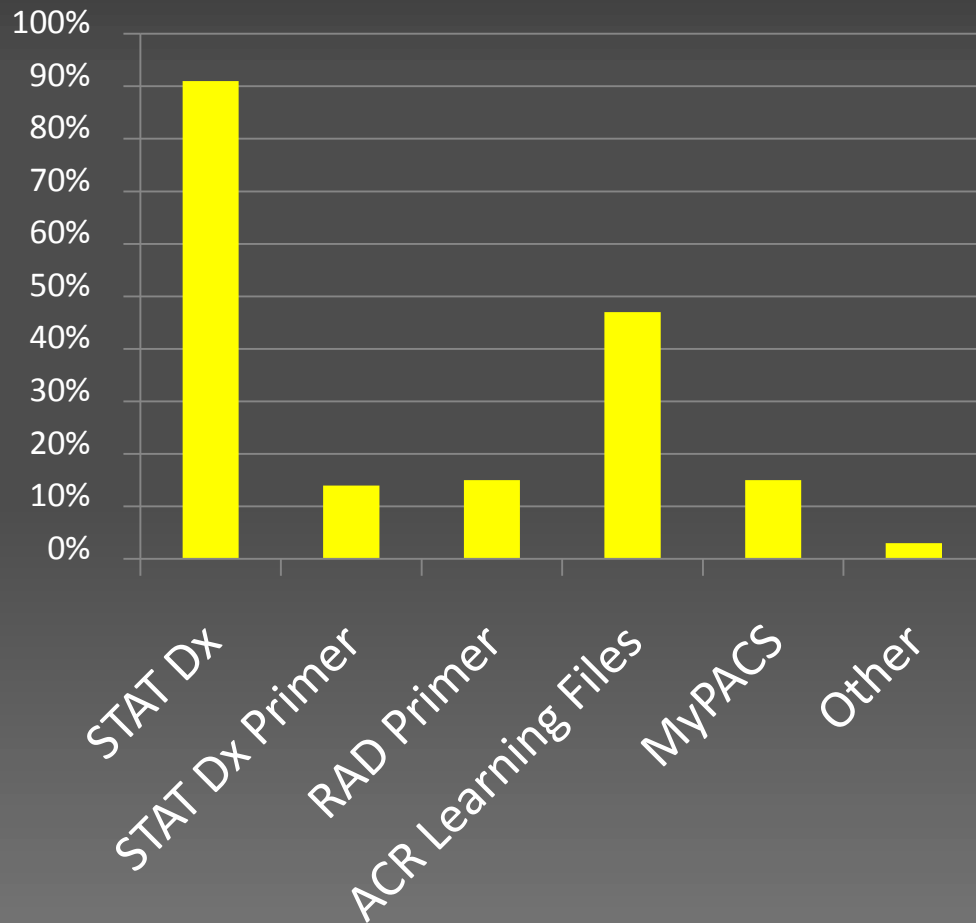


Resident Benefits

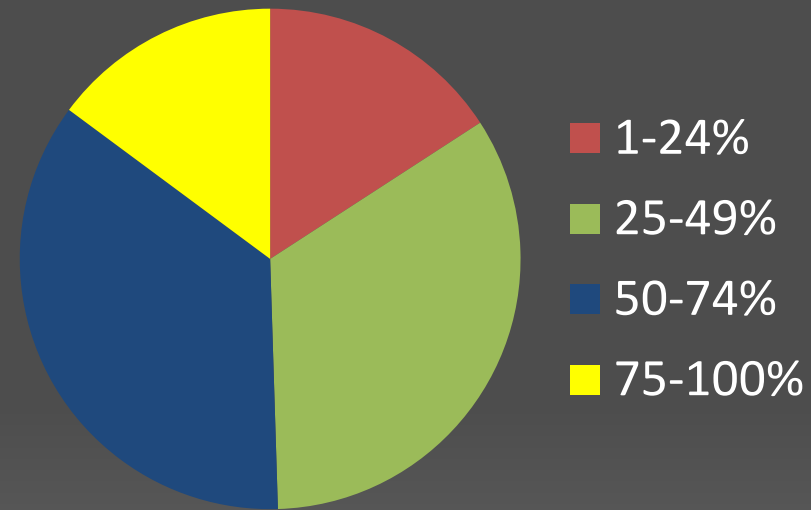


Electronic Media

Program Provides for Electronic Resources



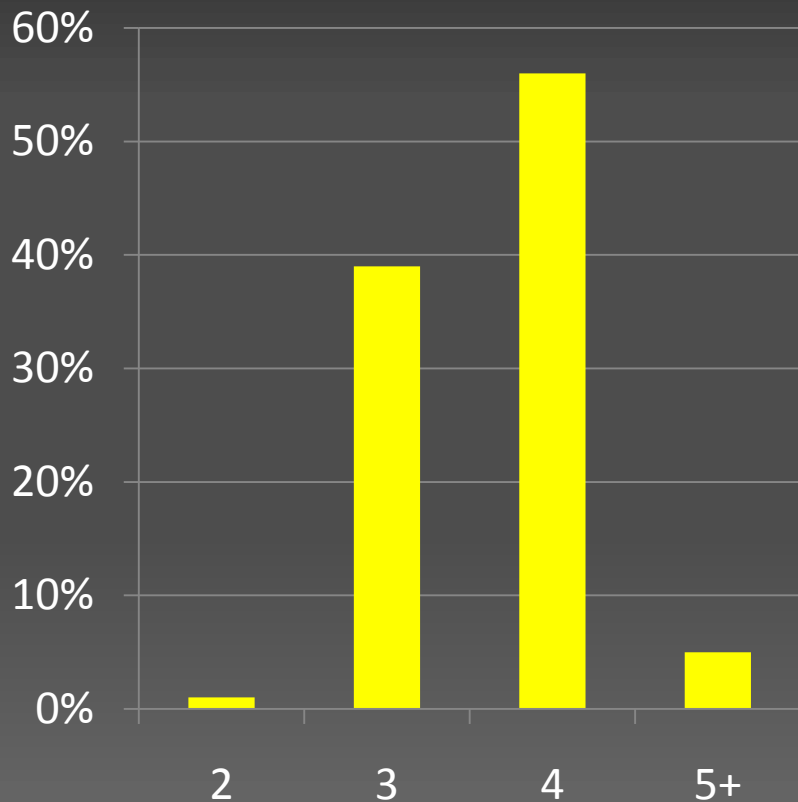
% of Resident Studying Using Electronic Resources



Vacation



Vacation Weeks



- Allocation of vacation
 - 40% of programs allocate vacation as individual days
 - 43 % as 1 or 2 week blocks
 - 35% as a combination of week blocks and individual days



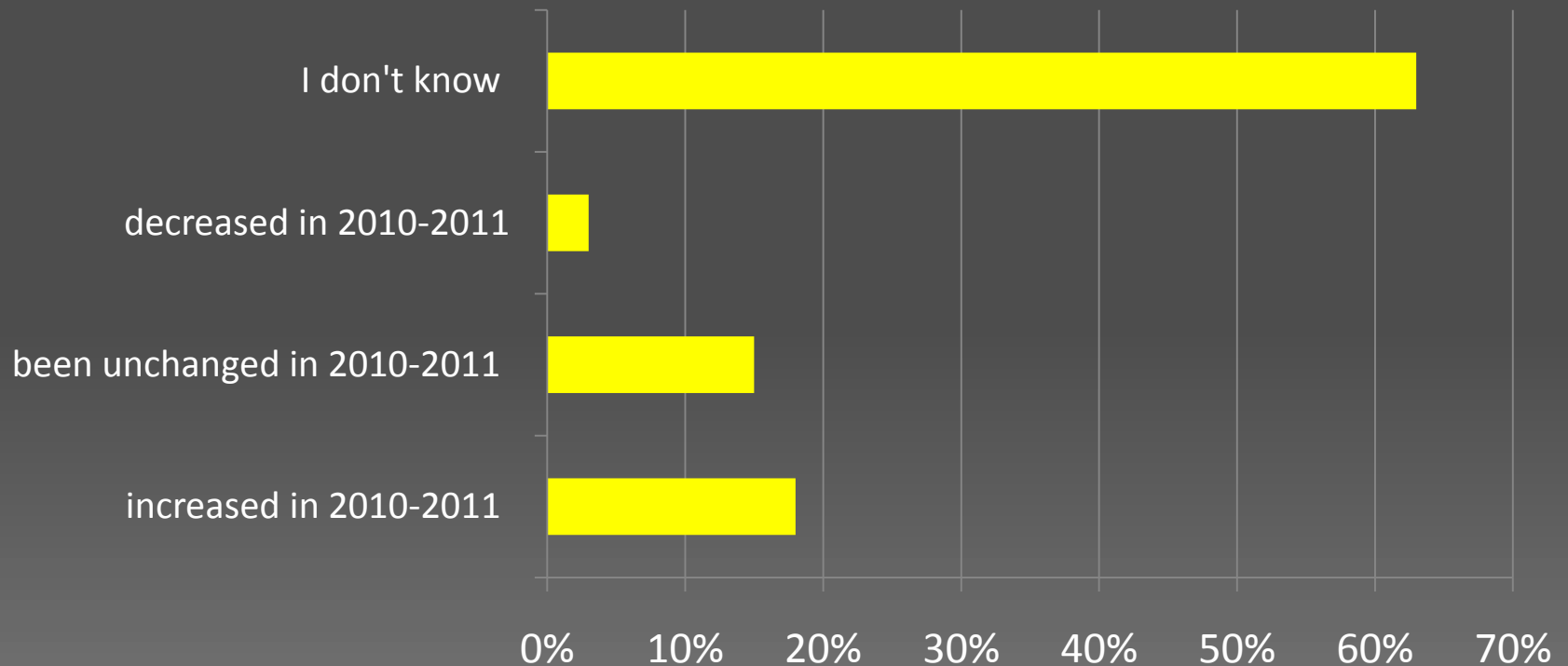
Economic Impacts



- Only ~ 5% of Chiefs are well-informed as to the state of the department's budget
- Resident salaries continue to rise for 66% as they have done for the last decade
- 33% of resident salaries were stable
- Less than 1% experienced a salary decrease

Starting Staff Salaries

- Many residents not sure what staff are making

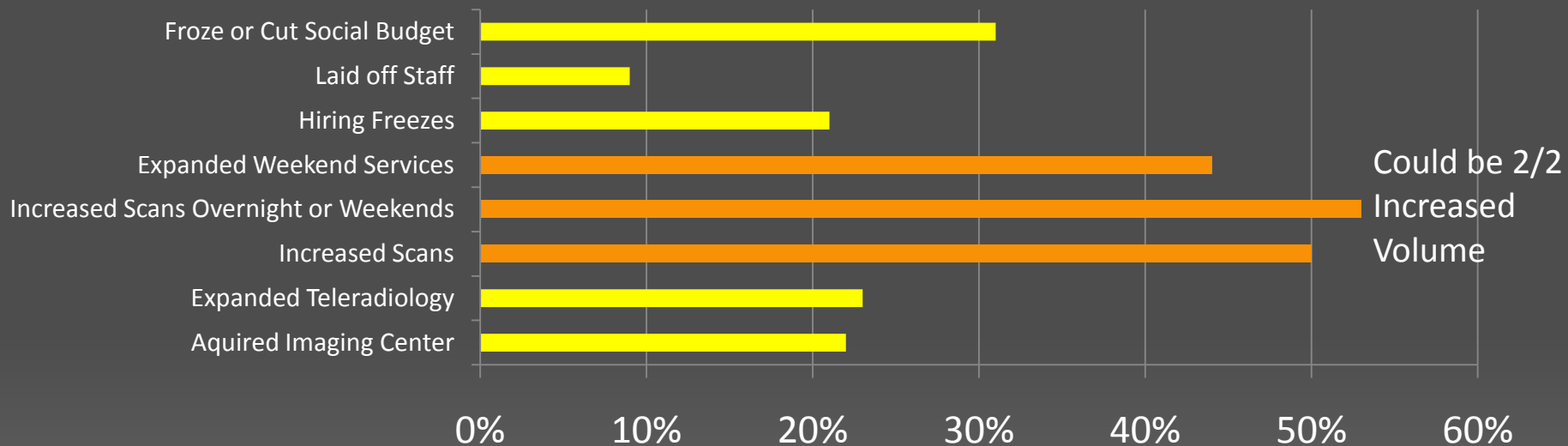


Overall Number of Faculty

- 45% of programs had an increase in the number of staff last year
- 43% of programs had no change in the number of staff last year
- 12% of programs had a decrease in the number of staff last year

Strategies for Coping

- During the 2010-2011 academic year your radiology department has (select all that apply):

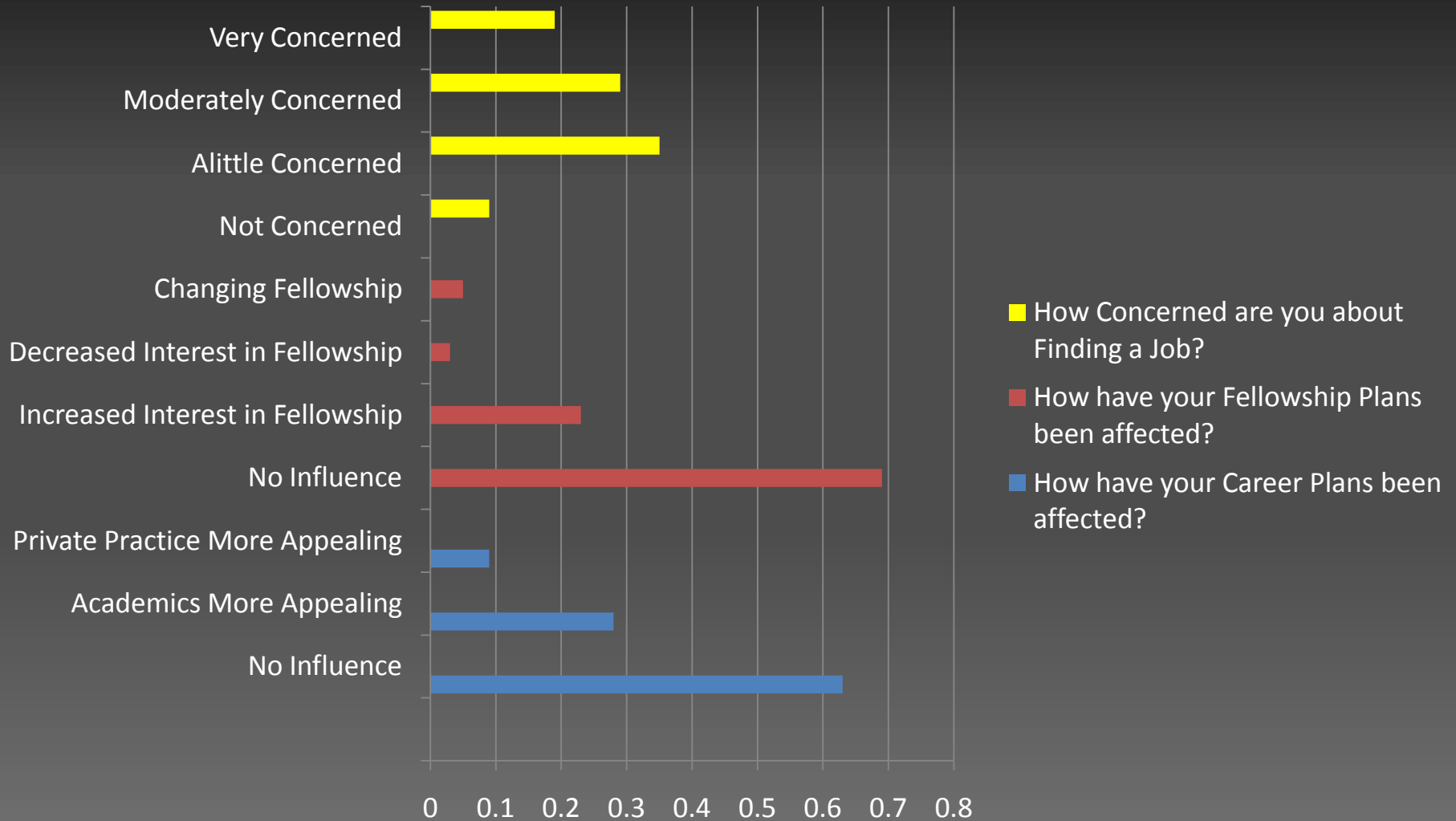


- Lots of free lunches were cut during the last 2 years (maybe there is no such thing as a free lunch)

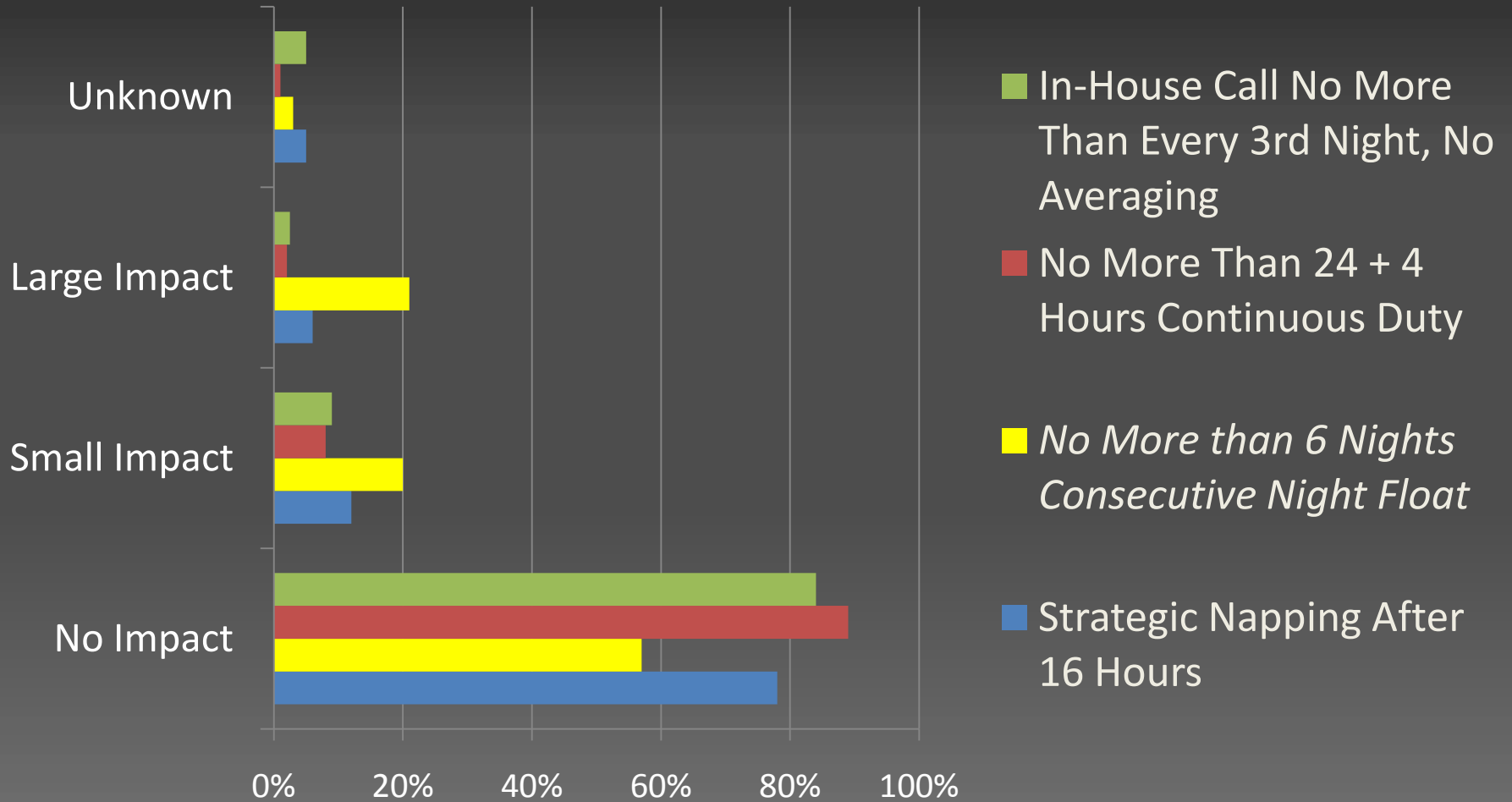
Impact on Education

- 28% of respondents feel that the economy and budget cuts have affected resident education Negatively or Very Negatively
- Everyone else failed to notice an impact

Plans for the Future

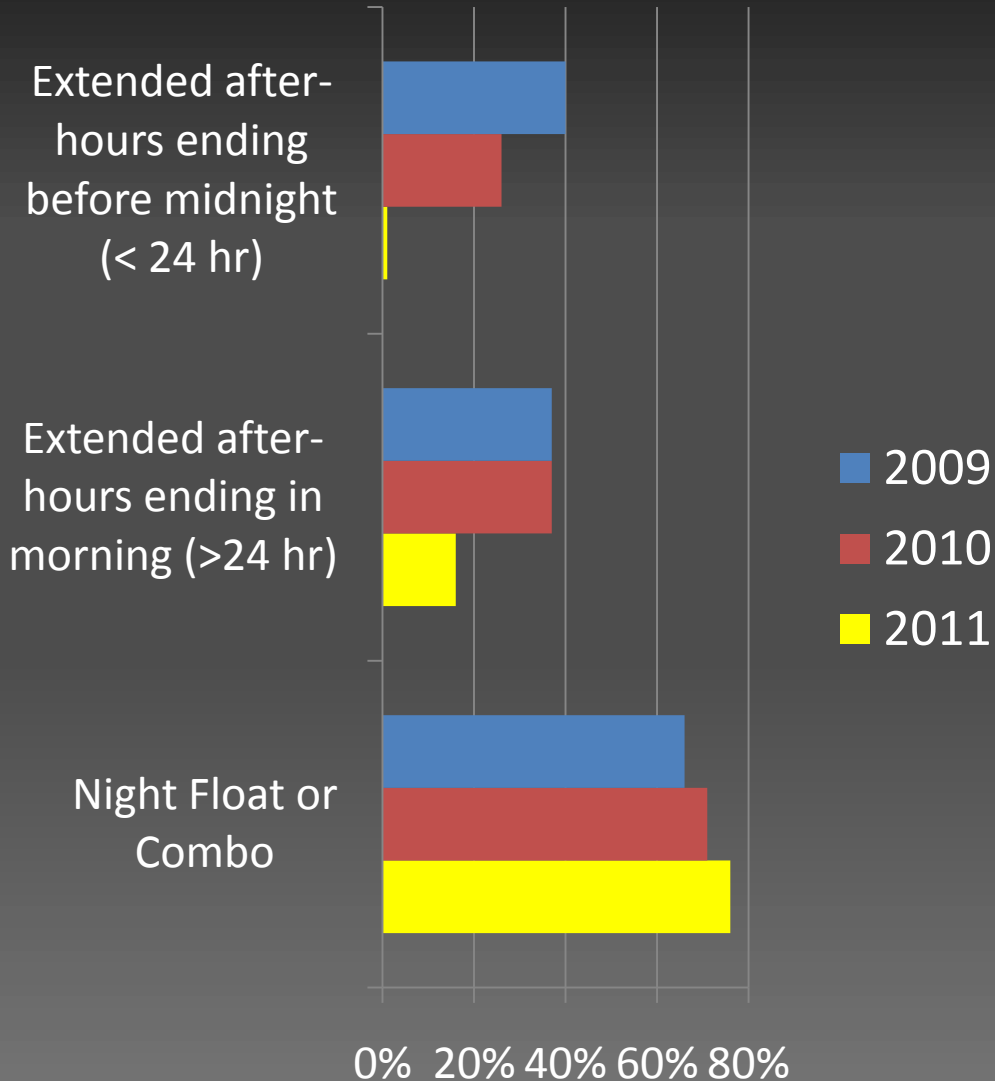


Impact of New ACGME Guidelines

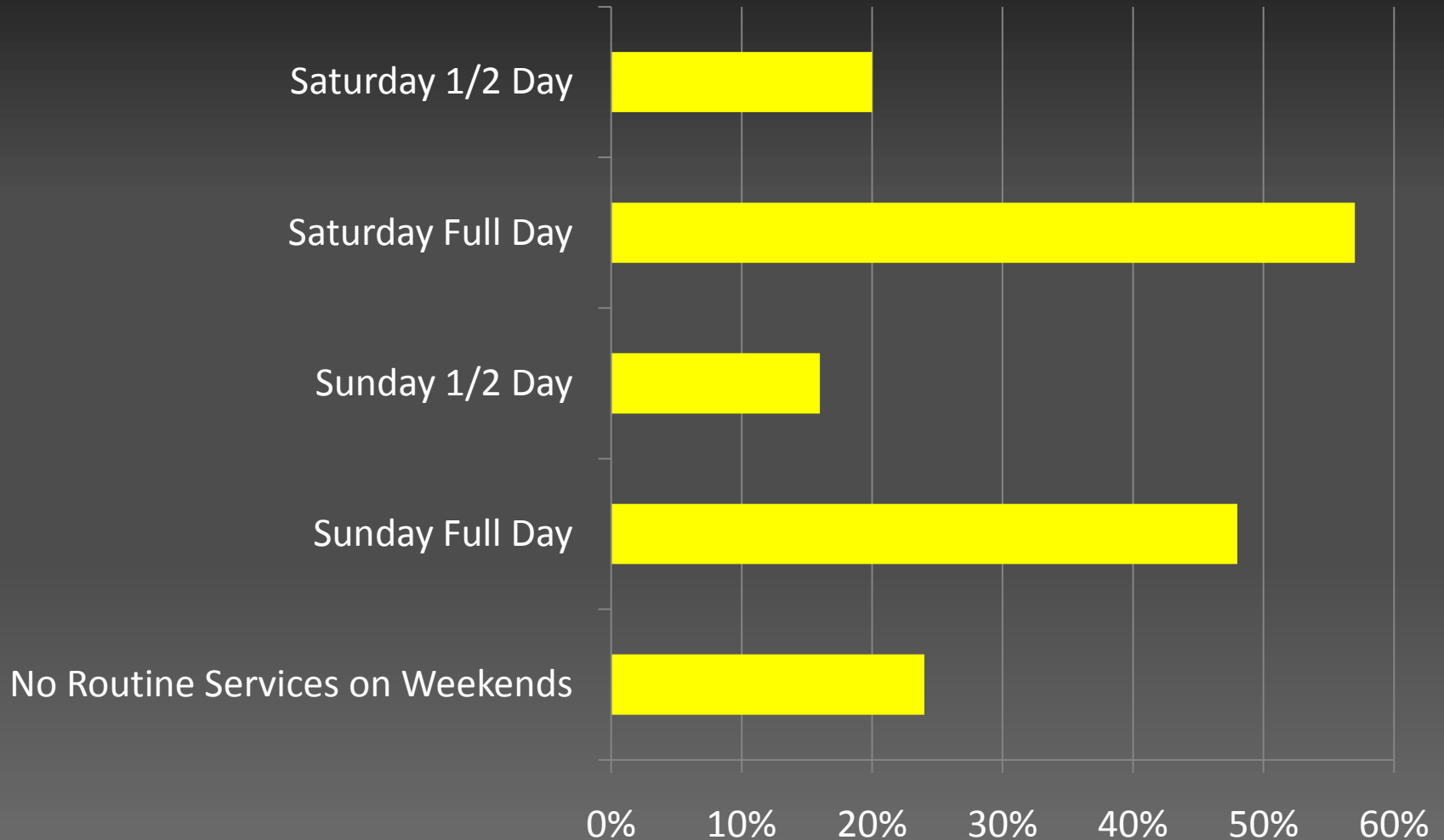


Call System Update

- 77% use night float or combo of night float and overnight call
- Total float over residency (Last Years results)
 - 22% Zero night Float
 - 1% 1-4 weeks (16%)
 - 18% 5-8 weeks (18%)
 - 27% 9-12 weeks (23%)
 - 16% 13-16 weeks (20%)
 - 15% > 16 weeks (19%)
- Number of consecutive shifts while on night float
 - 6% 2 or 3
 - 9% 4
 - 30% 5
 - 57% 6 or more
- Length of Night Float Shifts
 - 5% 8 – 9.9 hours
 - 24% 10 – 11.9 hours
 - 38% 12 – 13.9 hours
 - 11% 14 hours or more



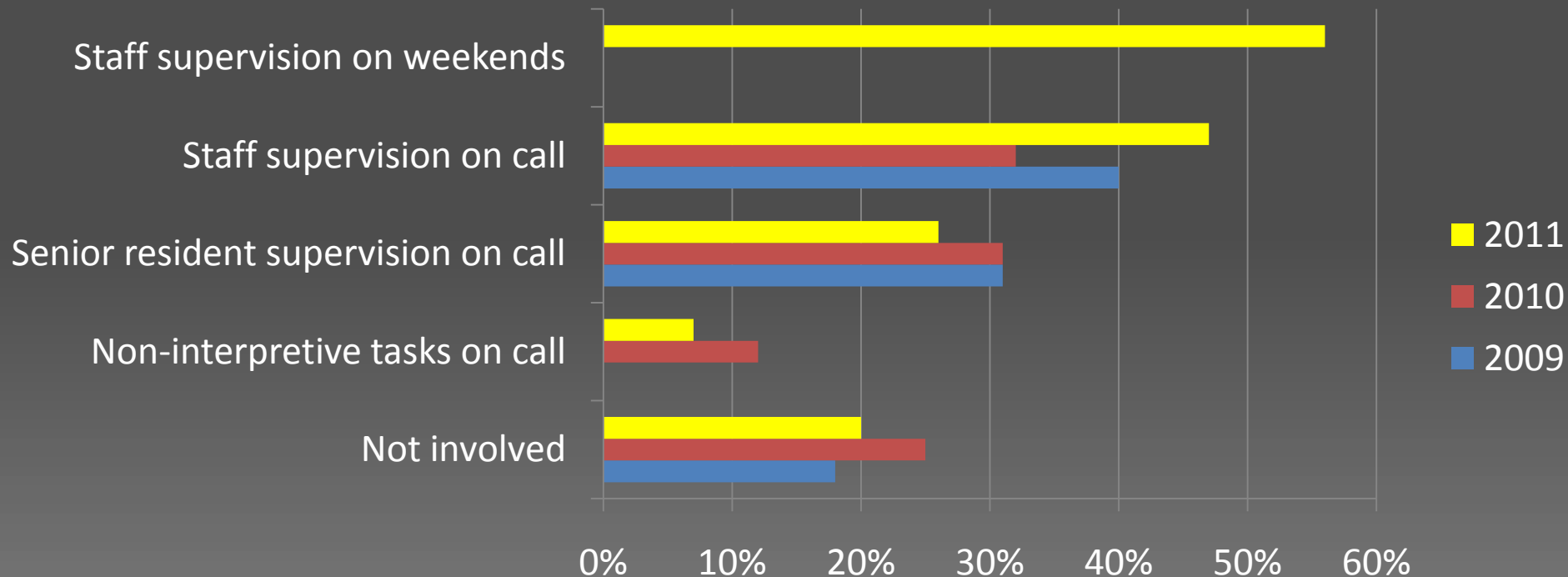
Weekend Services



* No significant change from 2010

After-Hours: PGY-2 Residents

- 2009-2010 first year PGY-2 residents not allowed to take unsupervised call
- Buddy call system still popular



Reporting and Read-Out

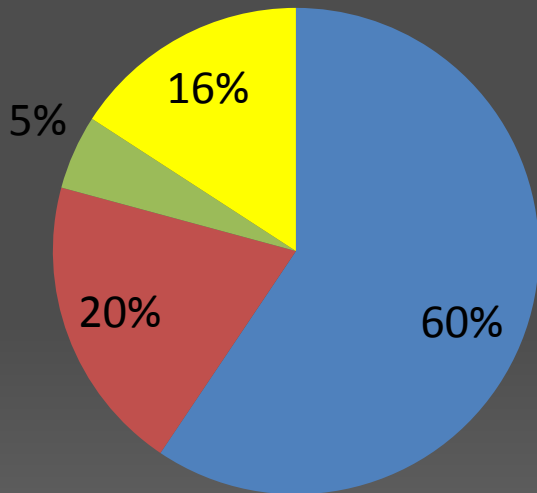
While on call, residents are expected to:

■ Dictate Full Prelim Report

■ Dictate Major Findings Only

■ Give Major Findings Via Phone

■ Dictate Finalized Report with In-House Staff



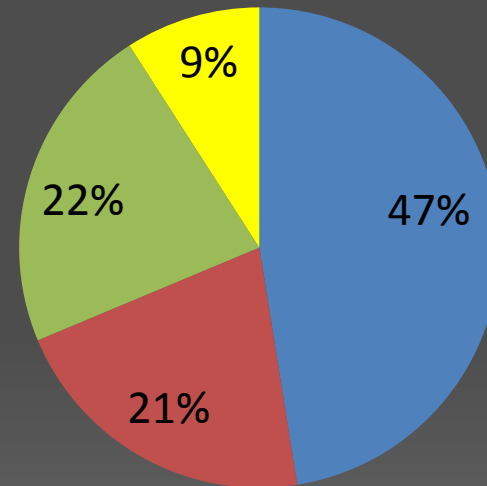
Concerning Face-to-Face Readout:

■ Always Morning Readout

■ Sometimes Morning Readout

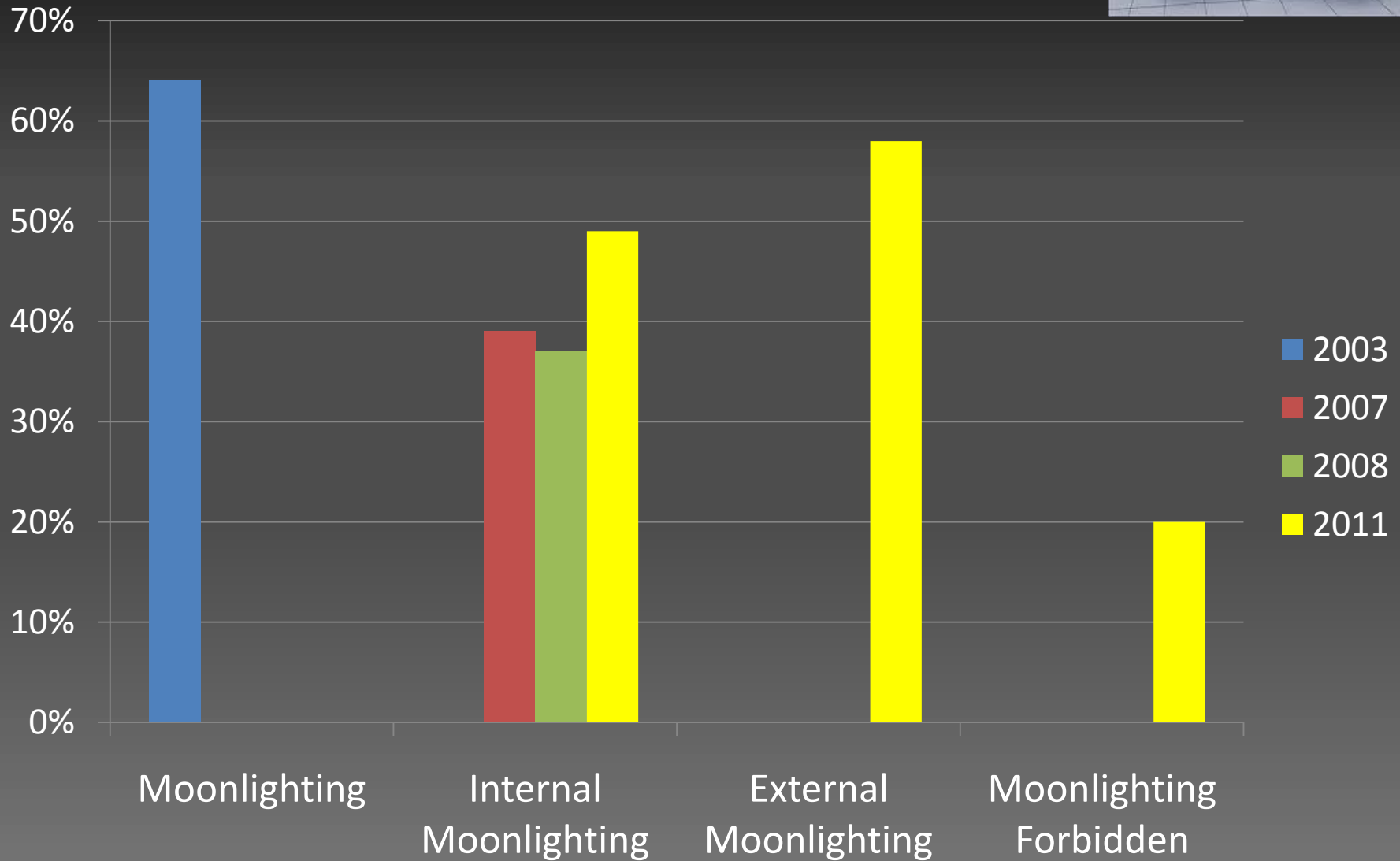
■ No Face-To-Face Readout

■ Overnight Readout





Moonlighting

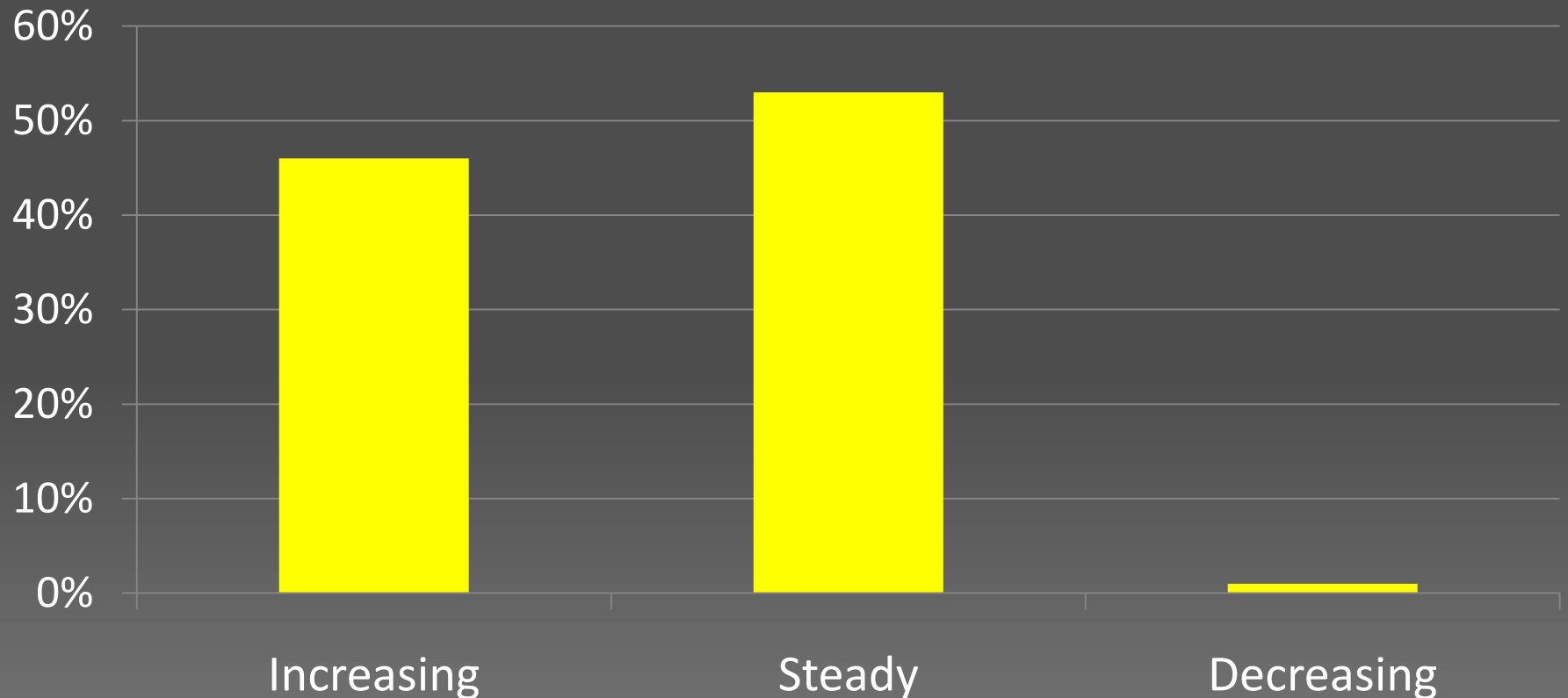


Outside Consults

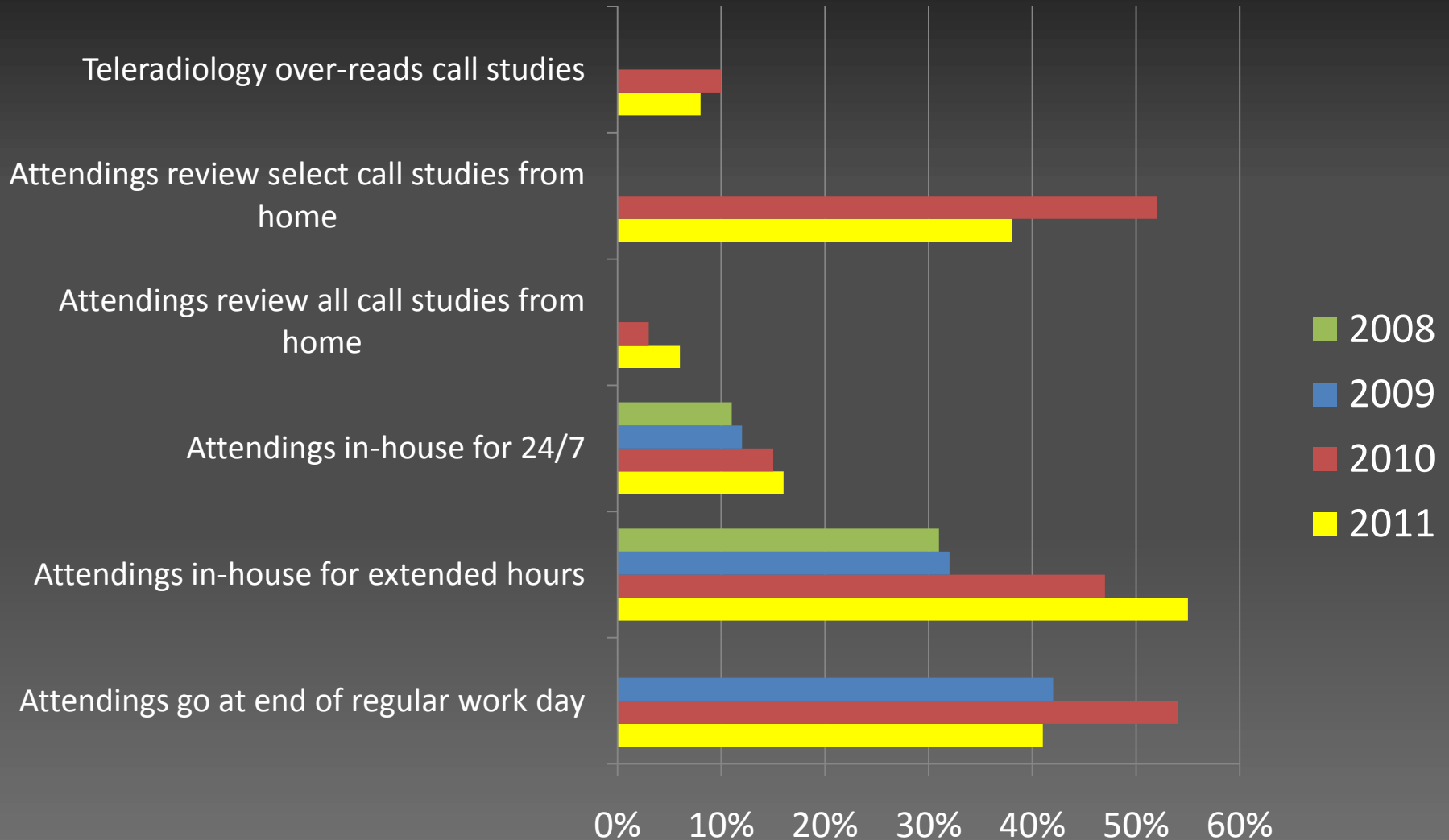
- What % of time is spend dealing with outside consults while on call?
 - **76% said less than 10% (84% last year)**
 - 11% said 11-15%
 - 8% said 16-25%
- What % of time is spend dealing with outside consults during the day?
 - **83% said less than 10% (95% last year)**
 - 7% said 11-15%
 - 5% said 16-25%

Outside Consults

- Amount of time spent dealing with outside consults while on call is . . .

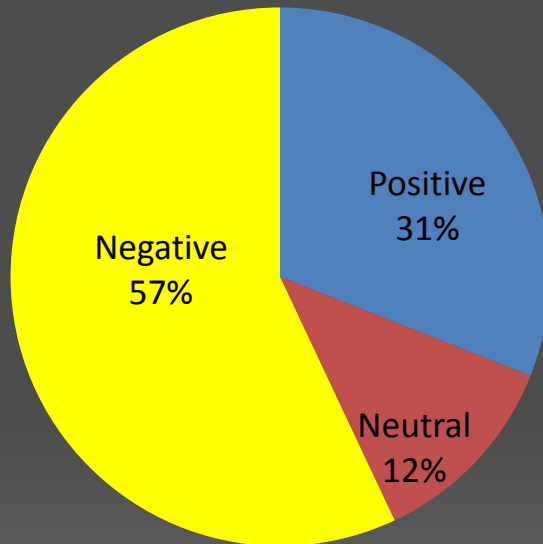


Attending Coverage

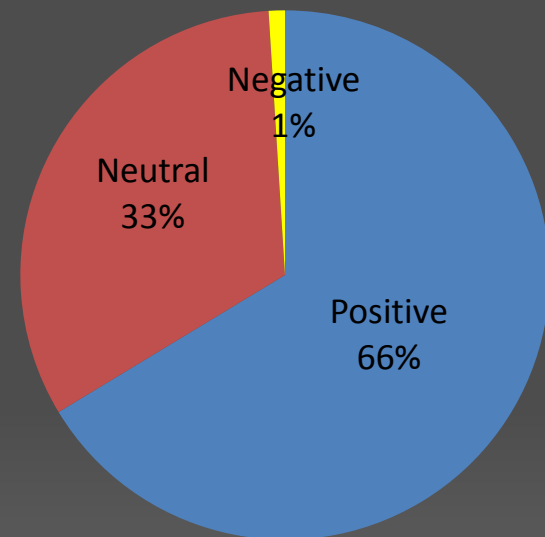


Impact of 24/7 Attending Coverage

On Resident Education



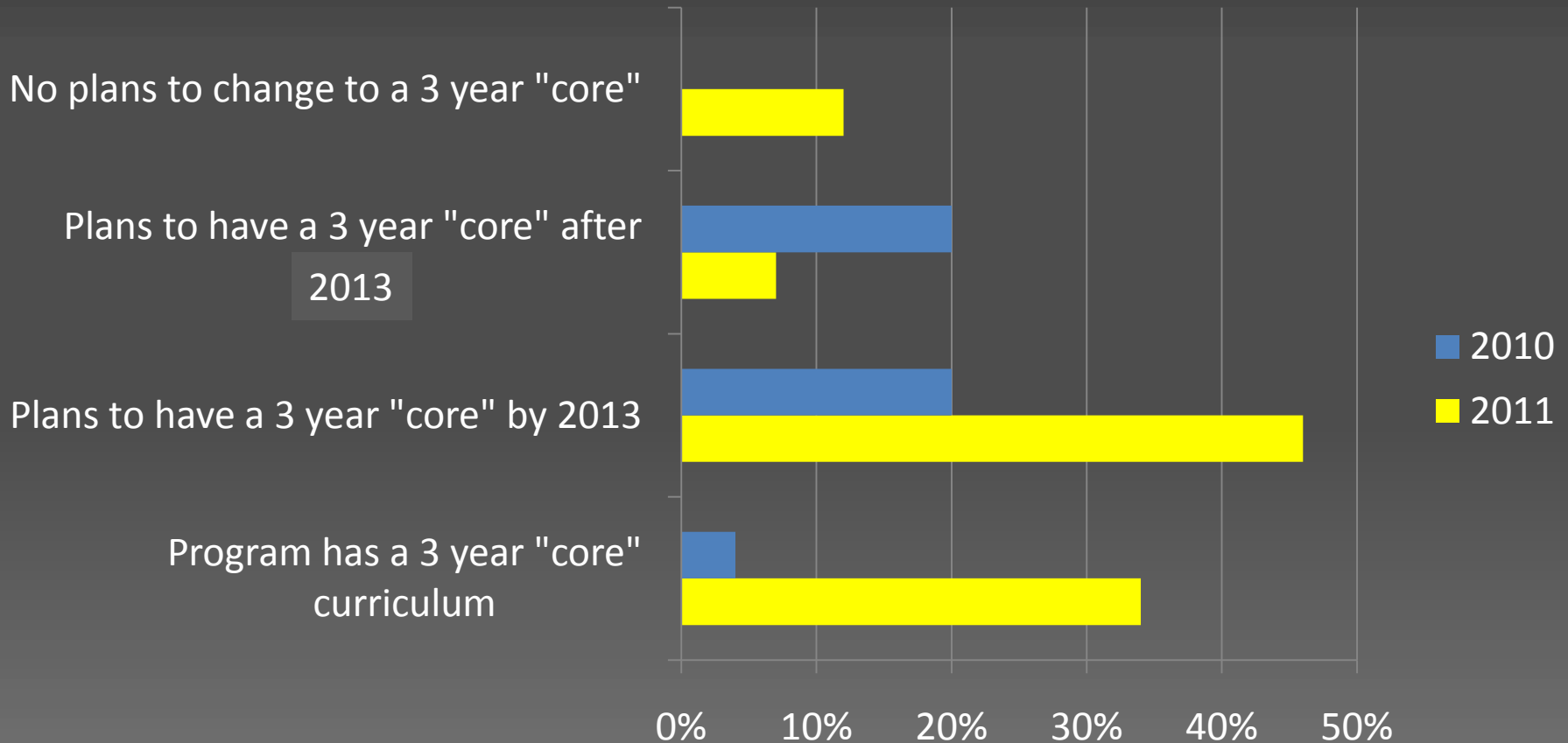
On Patient Care



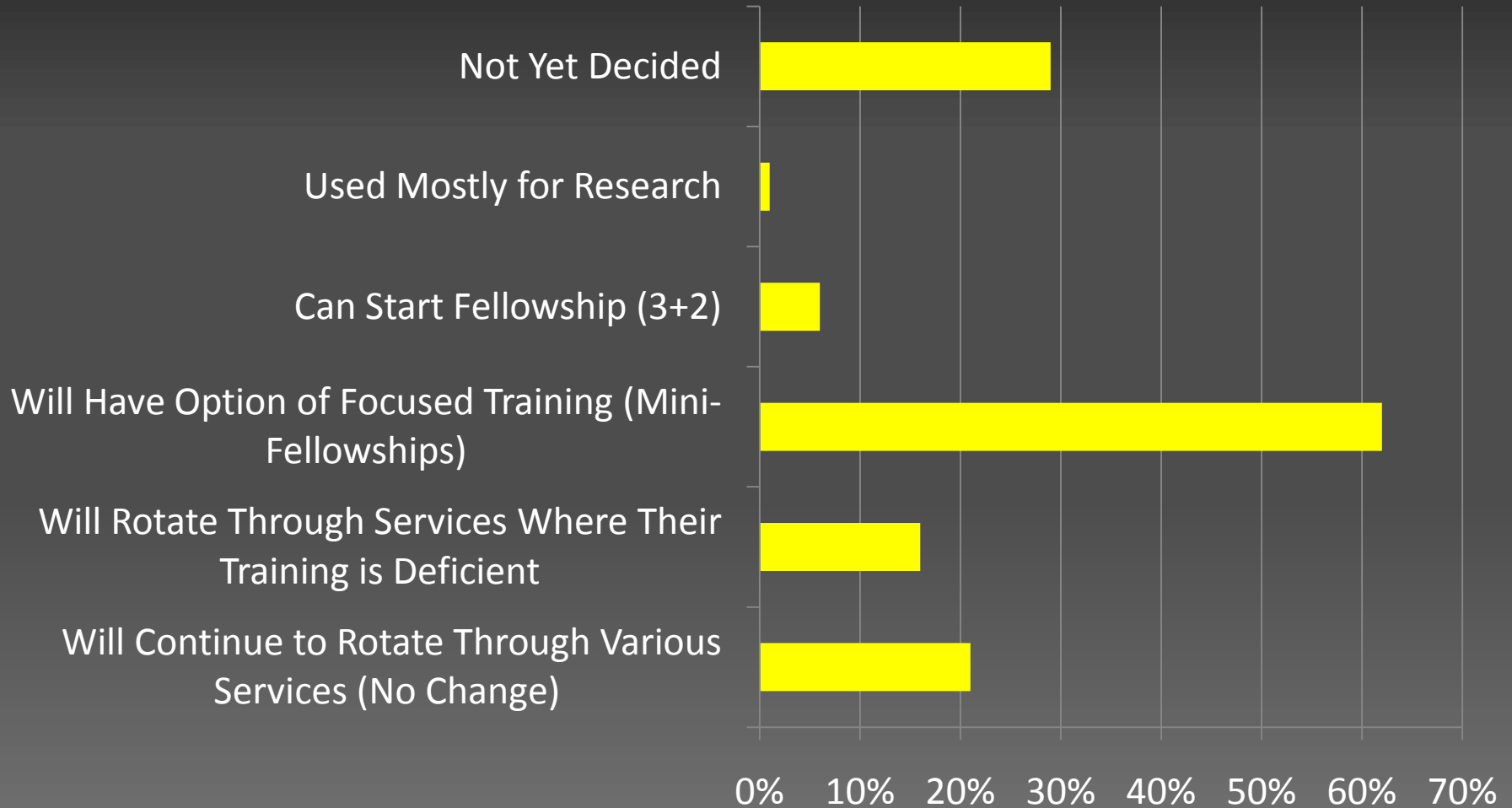
10% of programs plan to implement 24-hour in-house attending coverage during the next year, which would bring the total to ~25% of programs with 24-hour in-house coverage

Curriculum Changes

- Many programs have or are planning to change to a 3 year "core" curriculum 2/2 board exam



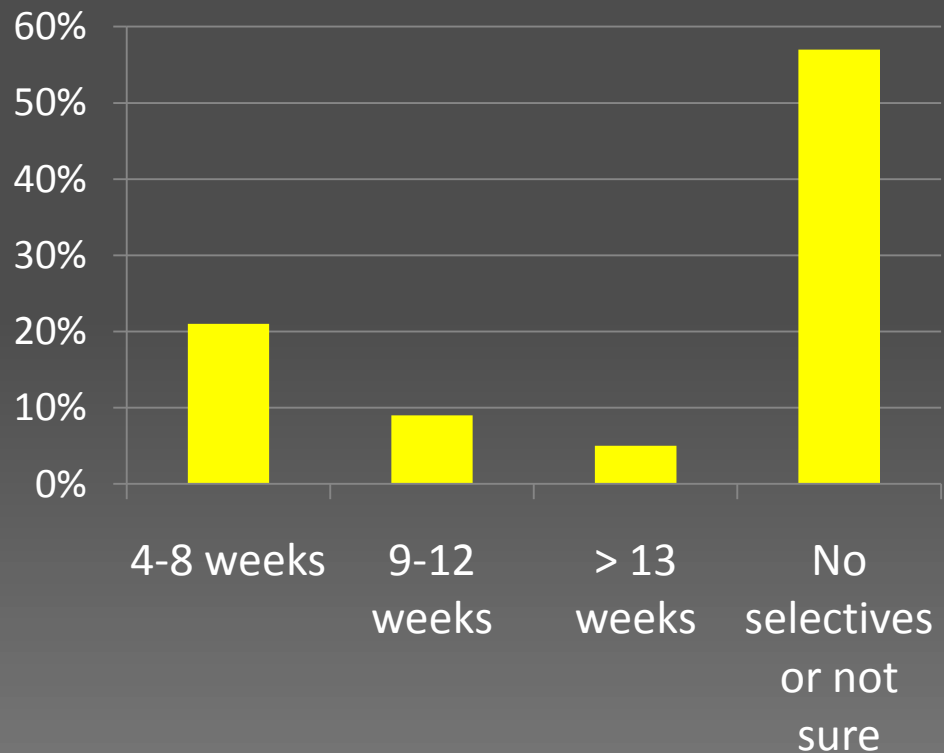
Plans for 4th Year Under New Curriculum



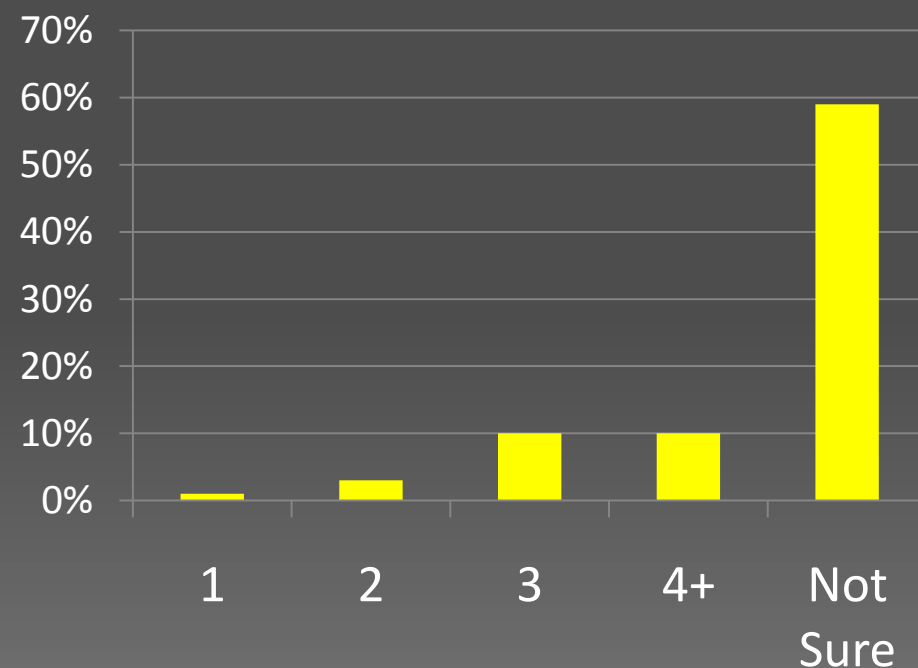
Focused Training

- Many programs plan to offer 4th years focused training (“selectives” or “mini-fellowships”)

Length of Selectives



Number of Selectives



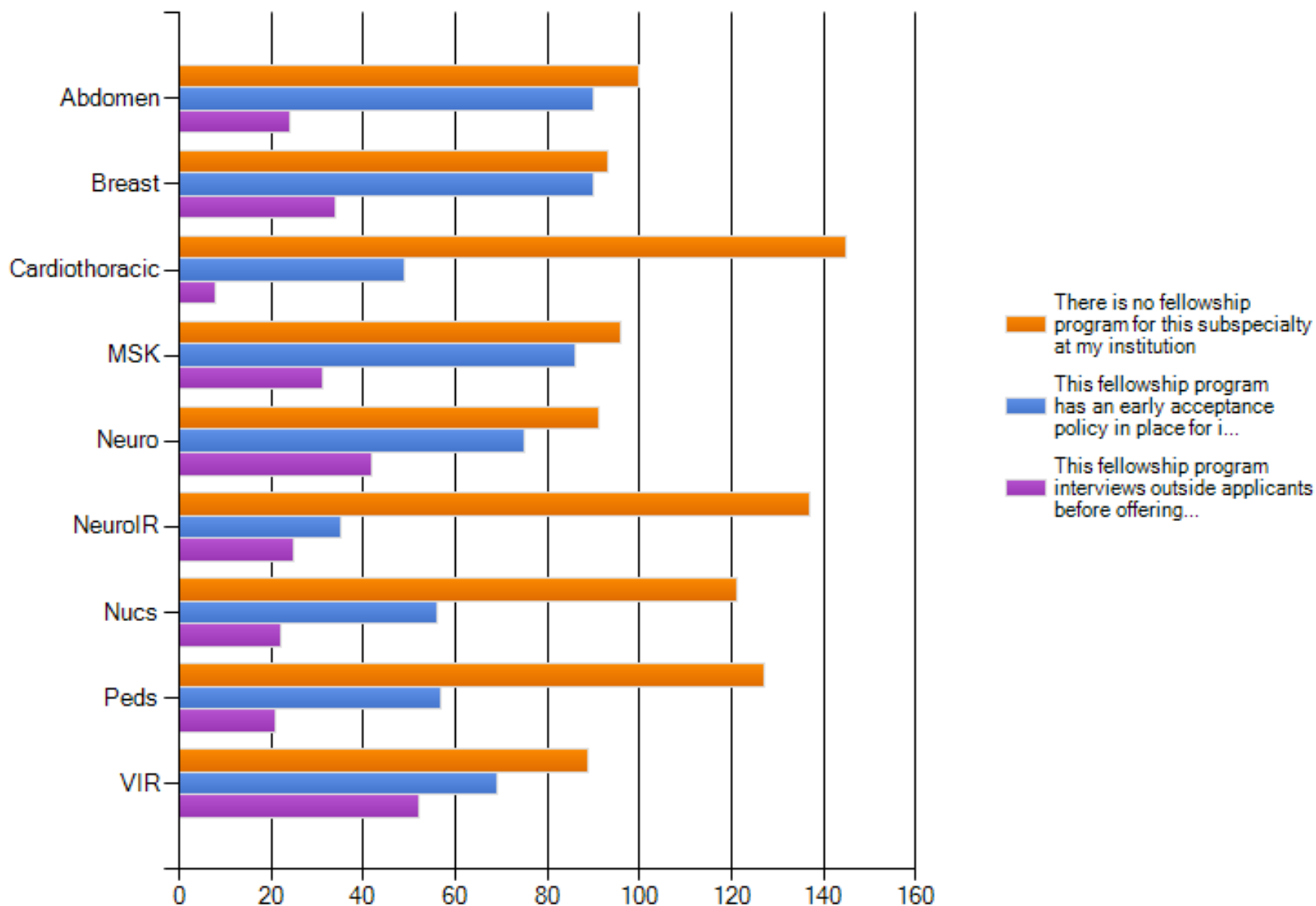
Curriculum Changes

- Concerning future PGY-4 residents preparing for the Core examination:
 - 21% of programs are planning to give them time off prior to the exam to study
 - 40% are planning to pull them out of the call pool prior to the exam
 - 45% are not yet sure how they are going to deal with this issue

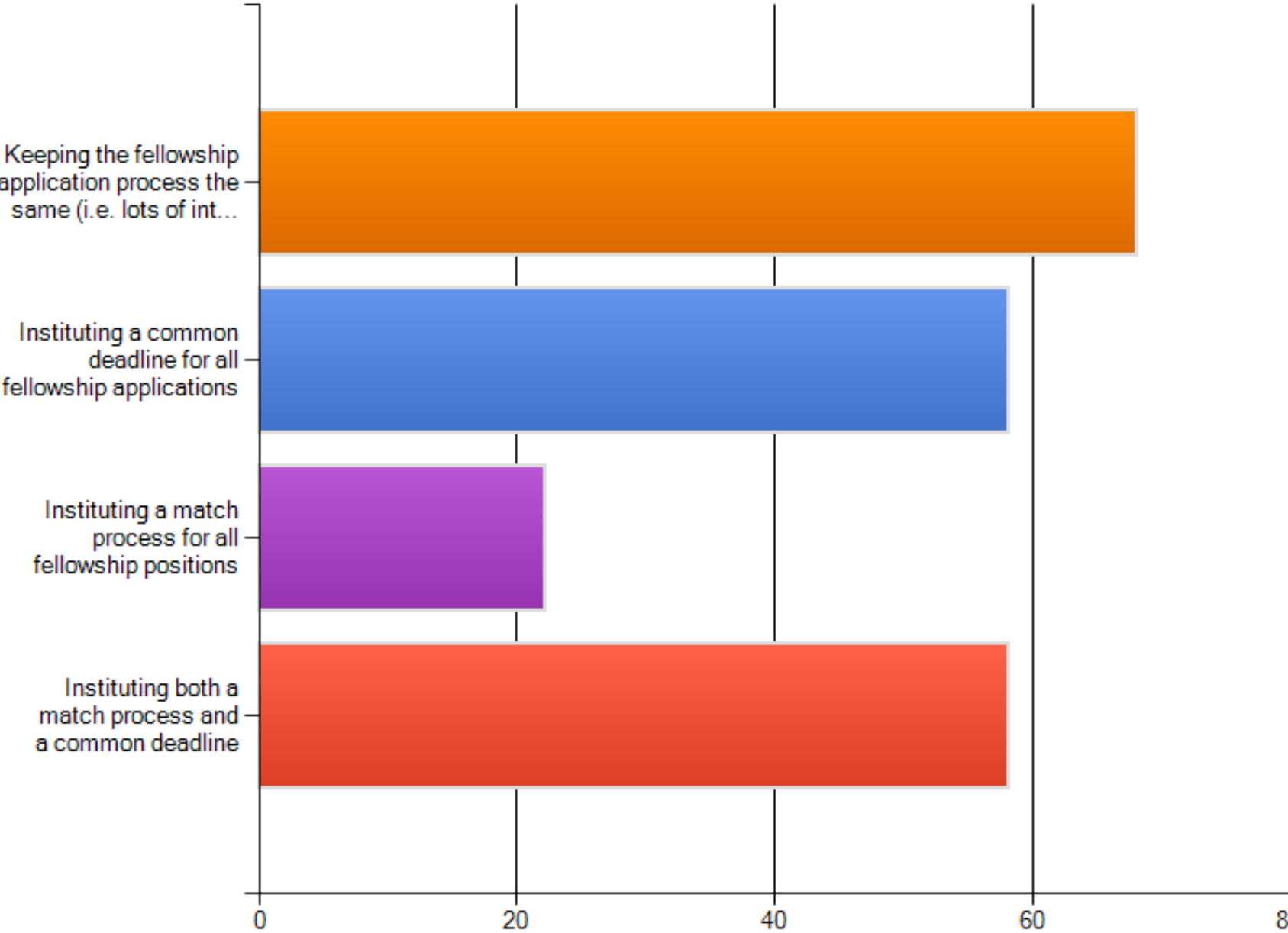
Oral Boards

- Current oral board review:
 - 79% of programs offer internal board review
 - 20% provide time for external board review
- Concerning board review under the new board exam system:
 - 29% of programs will continue to provide internal board review
 - 65% of programs are not sure how their board review will change

Regarding the application process to the various fellowship programs at your institution:



With the expected increase in number of residents seeking fellowship training you favor:



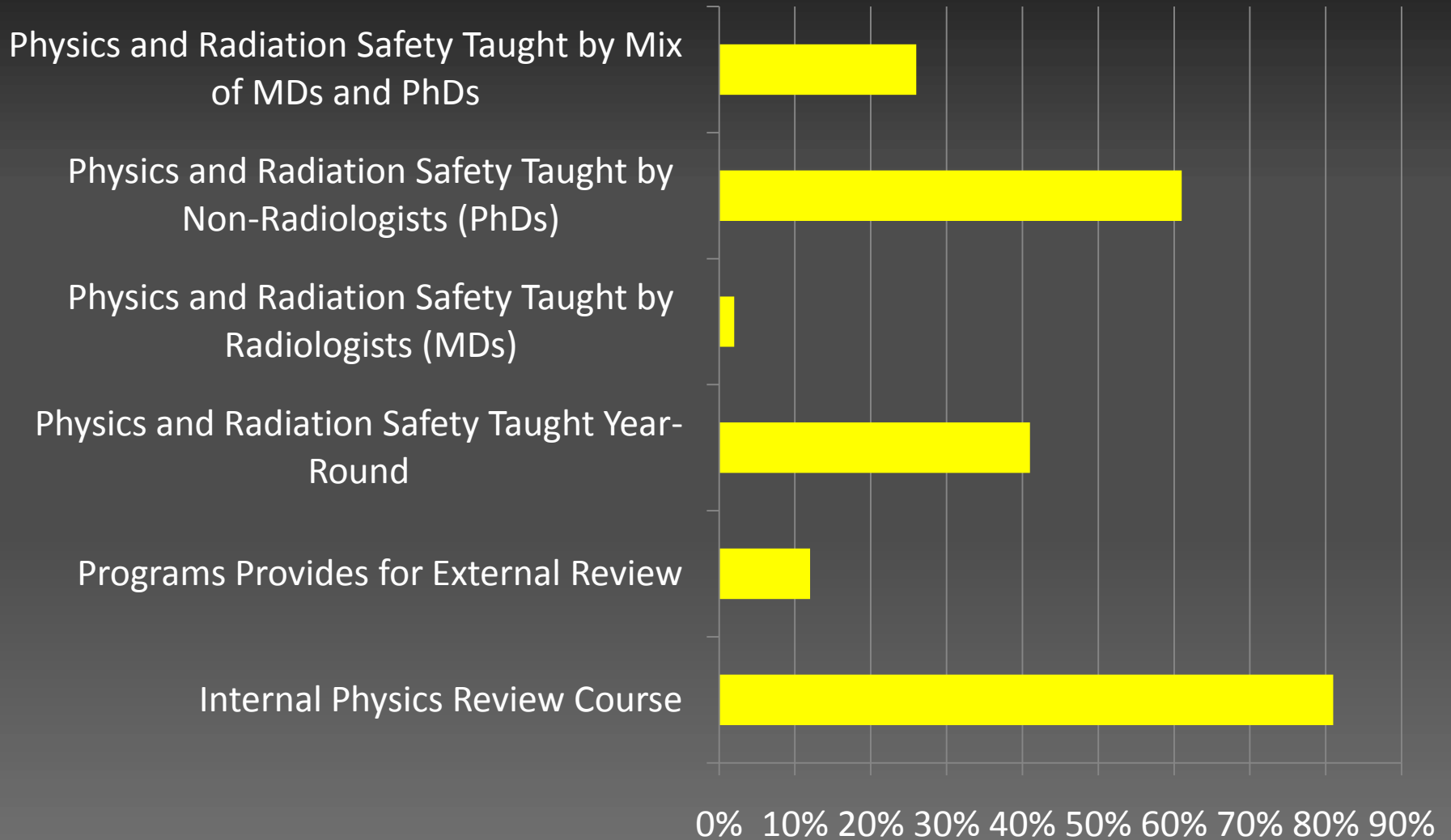


Radiation “Exposure”



- Increased public focus on radiation exposure will have what kind of impact on radiology?
 - 44% said Positive
 - 27% said No Significant
 - 30% said Negative

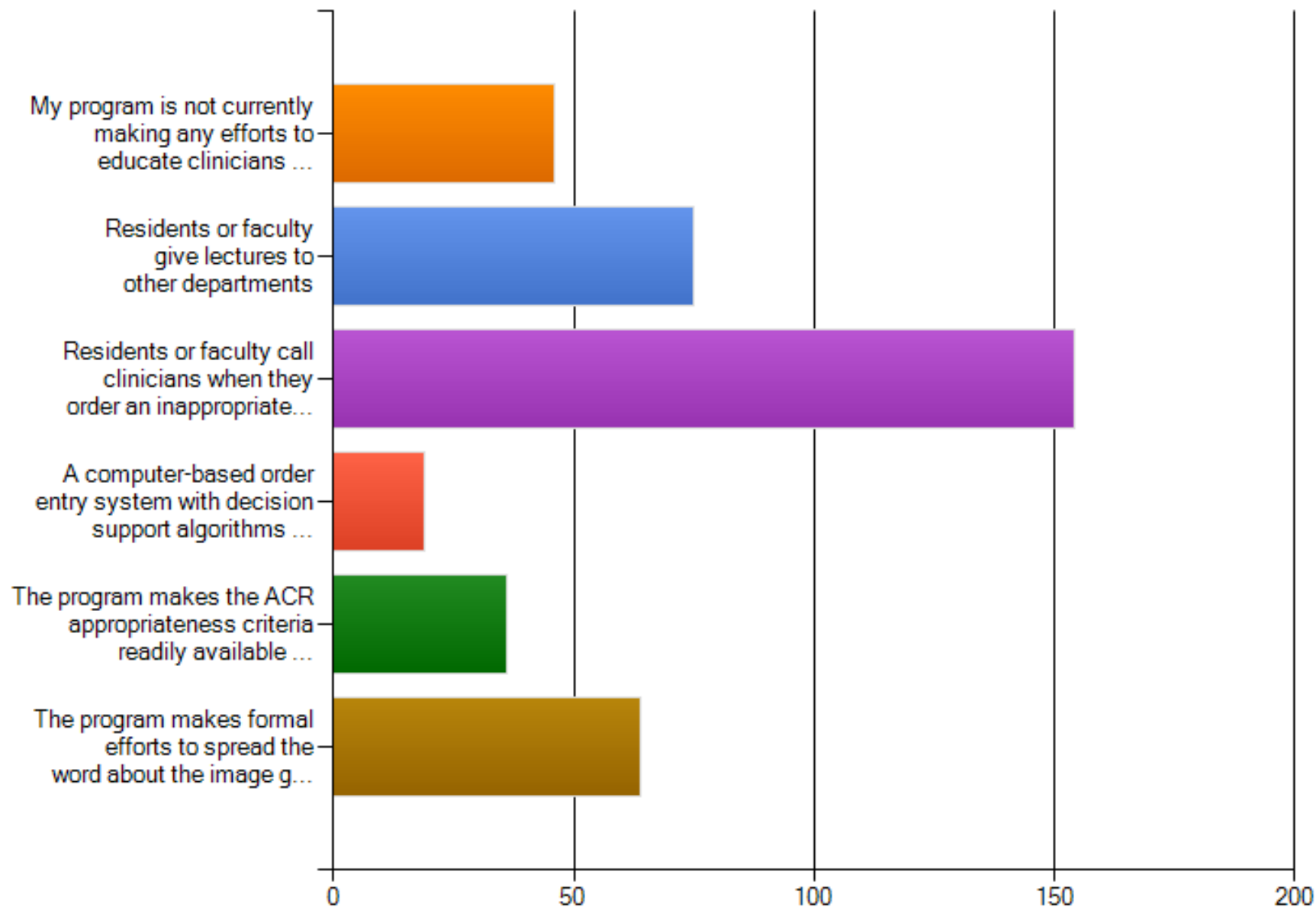
Physics Training



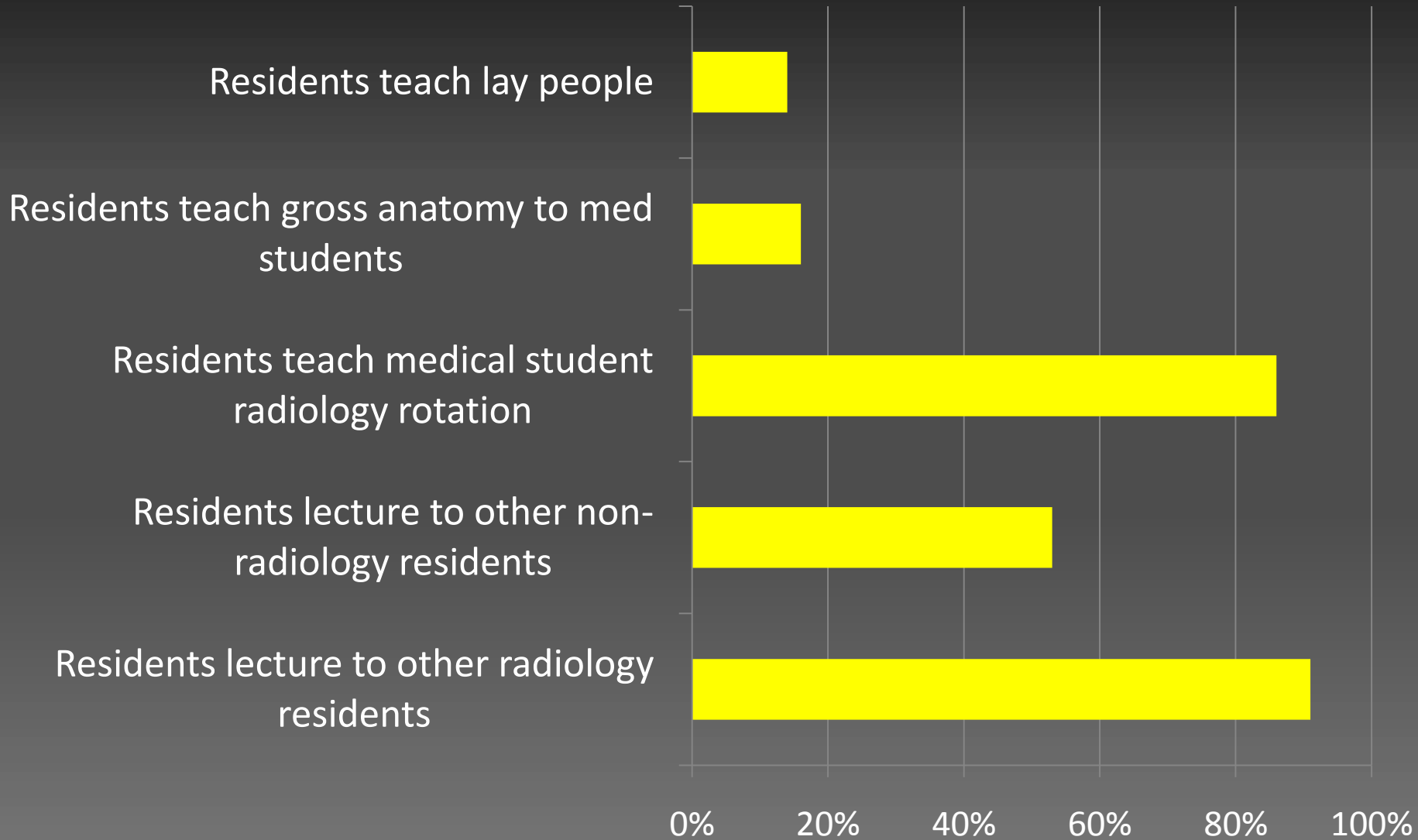
Physics and Radiation Safety

- **83%** think physics and radiation safety training is **adequate or more than adequate**
- **37%** think the new boards format will have a **negative** impact on physics and radiation safety training
 - 30% said positive
 - 34% said no change
- **90%** think that referring clinicians, taken as a whole, have **inadequate** knowledge of the levels of radiation associated with various imaging studies

Some of the things your program is doing to educate clinicians about the appropriate use of medical imaging include (select all that apply):



Education



Discussion

- Continual trend towards more participation in survey
 - Leadership doing an excellent job promoting A³CR²
- Most programs associated with universities, percentage growing
 - DRA, Falling reimbursement, harder to survive without a university affiliation?
- Resident benefits relatively stable
 - Slight downward trend in AIRP tuition compensation
- STAT Dx provided by program to ~ 90% of respondents

Discussion

- Falling reimbursement and a down economy does not yet seem to be impacting salaries or growth
 - Offset by increasing volume?
- Some programs are coping by expanding services, teleradiology, cutting residency social budgets, fewer free meals (literally and figuratively)
- Over 25% of respondents feel these factors negatively impact education
- Residents are concerned about finding jobs.
- Fellowships and academics are becoming more appealing

Discussion

- Capping consecutive night float shifts at 6 will impact a large number of programs and require overhauling of call systems
- Continued slow trend towards more night float or combo call systems
- ~80% of residents have face-to-face readout
- ~95% of residents dictate a report while on call
- Increasing internal moonlighting
 - Despite multiple comments saying moonlighting is being lost to teleradiology outfits

Discussion

- Consults on imaging studies performed at outside hospitals appear to be taking up a greater percentage of the workday
- Residents perceive that volume is either flat or increasing (~55/45)
- Strong trend towards more extended evening shifts for attendings
- Slower but steady trend towards more 24/7 in-house attending coverage

Discussion

- More residents think that increased public focus on radiation exposure will have a positive impact on radiology than negative
- Most physics taught as part of internal board review, less than $\frac{1}{2}$ of respondents cite physics and radiation safety as part of their core curriculum
- Most radiology residents are taught physics and radiation safety by non-clinicians (PhDs instead of MDs)
- A majority of respondents (90%) think referring clinicians have inadequate knowledge about the amount of radiation associated with imaging studies



Future Directions



- Better survey question design to make data processing easier
- More detailed information about resident benefits (to help chiefs improve benefits at their programs)
- Questions about AUR and A³CR² membership and dues
- Continued impact of new board exam format
- Continued impact of evolving ACGME duty hour restrictions

Thanks!

- Chief Resident Participants
- Laurie May at RSNA
- Gautham Reddy and the A³CR² Leadership
- Jennifer Gould and Jennifer Demertzis
- Caitlin Lopez, Vinnie Mellnick, Jessica Huang, Amy Fowler and Doug Kitchin
- To Request Data from this Survey:
Jokerstc@mir.wustl.edu

