

A³CR² Chief Resident Survey

Mallinckrodt Institute of Radiology
St. Louis, MO

St. Louis: AKA The Lou, Mound City, Gateway to the West



Purpose

- Information Gathering From Training Programs
 - Demographics and composition of programs
 - Chief resident opinions regarding training process
 - Ideas for change

Survey Format

- Confidential online survey (Survey Monkey)
- Primarily multiple choice, with options for open response where appropriate
- Single response per institution

Survey Limitations

- Sampling bias
 - Only chief residents polled
 - Response rate
- Multiple responses from single institution
- Opinion-based questions

Survey Topics

■ Repeat Questions:

- Basic Program Details
- Resident Benefits
- Chief Resident Duties
- ACGME Guidelines
- Call
- Board Preparation

■ New Questions Regarding:

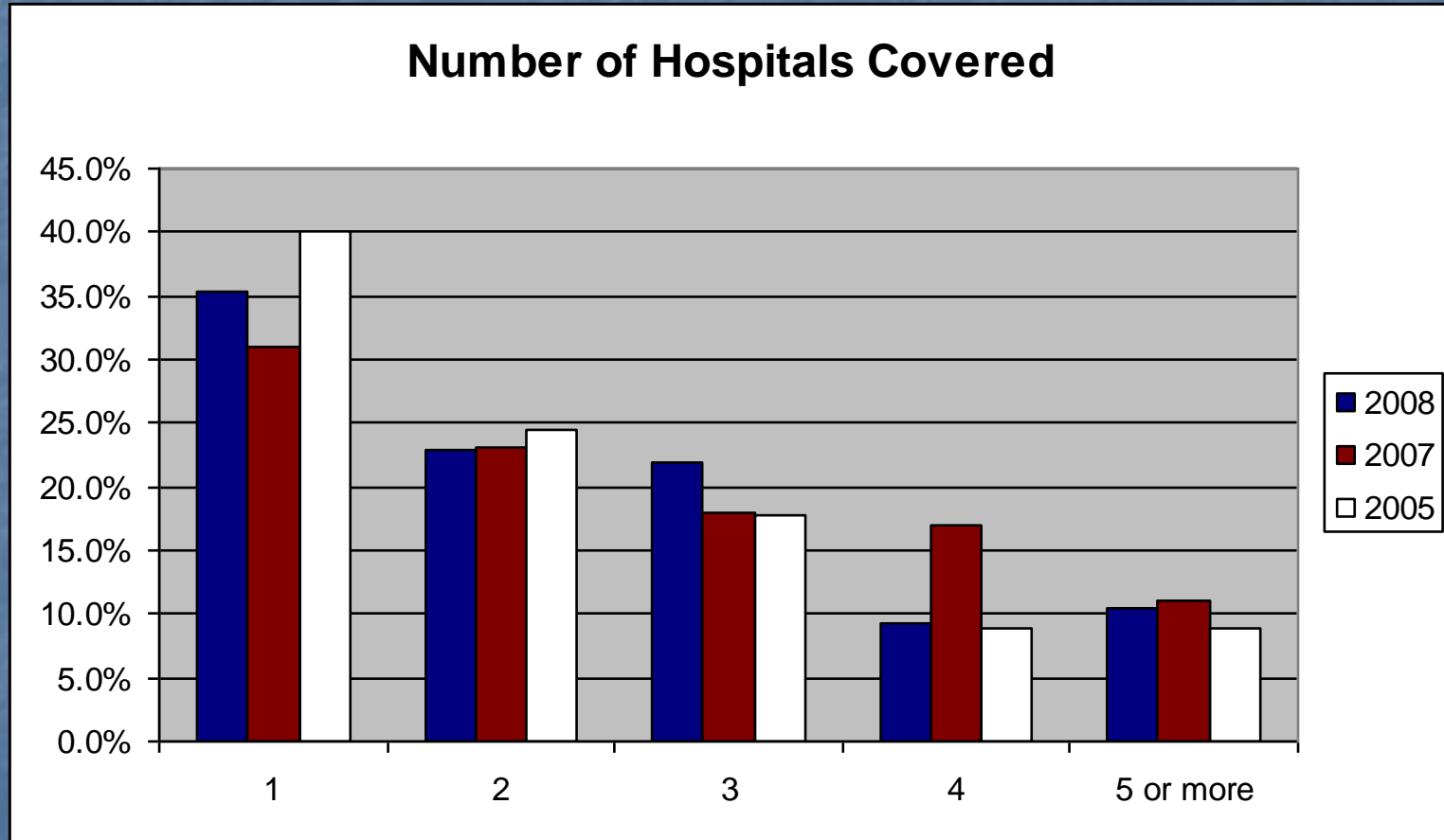
- Board Exam Review
- Resident Education
- ACGME Requirement Changes

2008 Chief Resident Survey

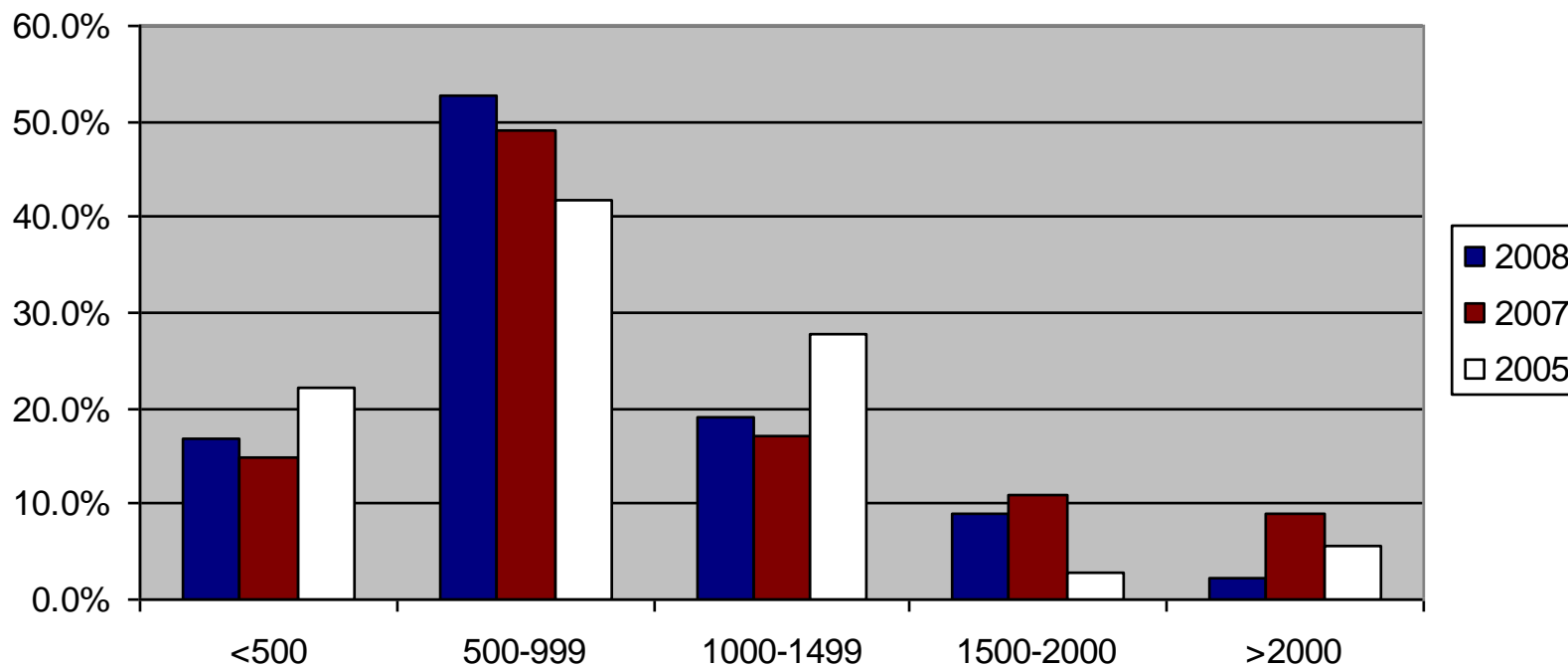
- 187 Surveys Requests
 - 100 responses received
 - 42% of respondents were incoming chiefs
 - Compared with 65% in 2007
 - 81% from university affiliated programs
 - 53% response rate (49% when excluding duplicate responses)
 - 74% in 2007
 - 28% in 2005
 - 55% 2004
- Thank you!

Results...

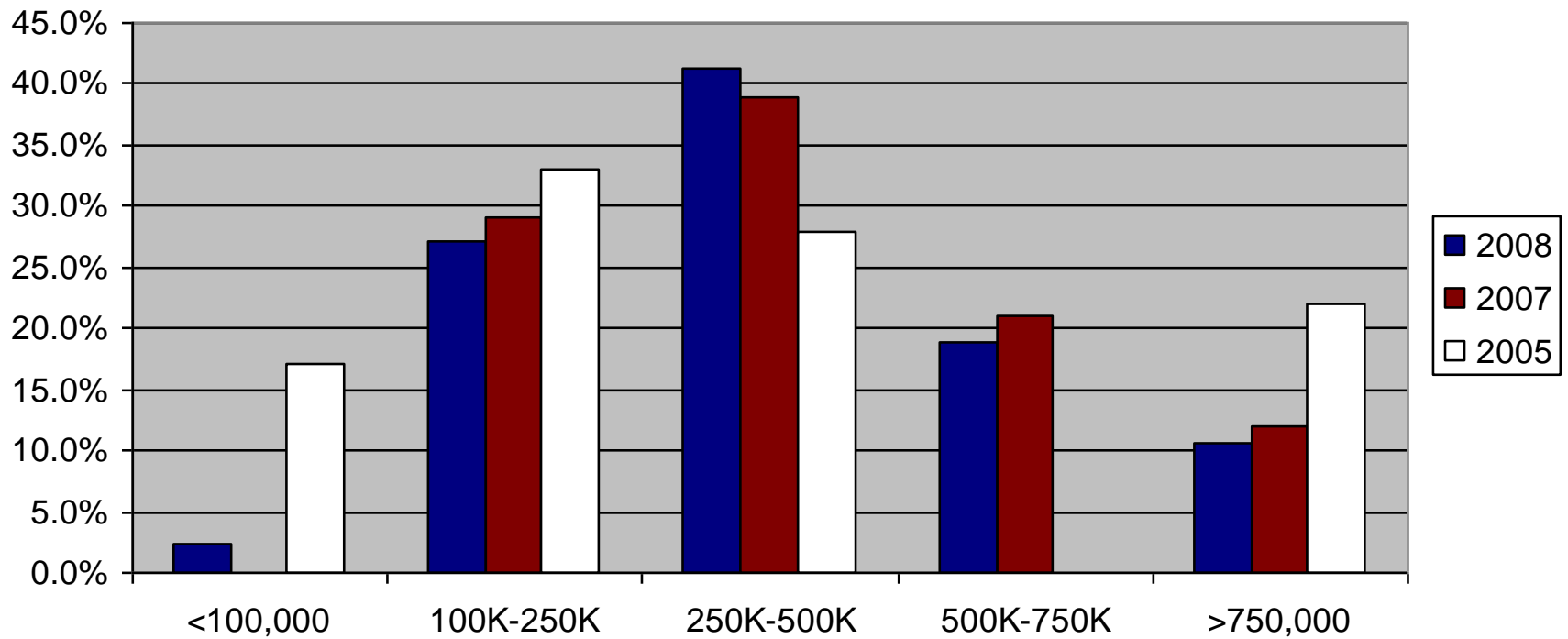
Basic Program Details



Total Number of Beds at Affiliated Institutions



Total Annual Number of Diagnostic Studies Performed

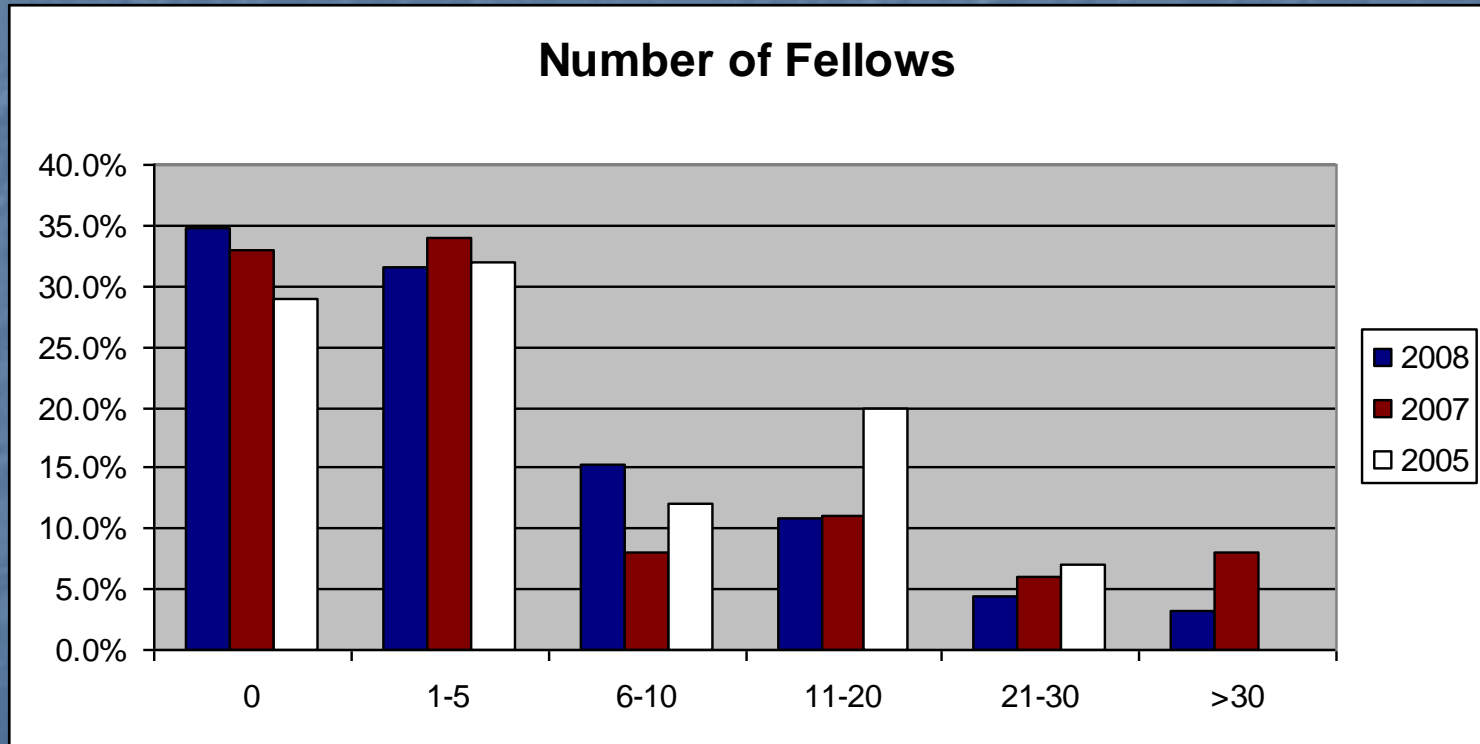


2007-08 Residents

- Total # of Residents:
 - R1: 6.3 (1-19)
 - R2: 6.3 (1-18)
 - R3: 6.0 (1-17)
 - R4: 6.1 (1-18)
 - Compared to 2007 (6.8 average for R1-R4) and 2005 (5.8 average for R1-R4)
- 28% Female
 - Compared to 27% in 2007 and 34% in 2005

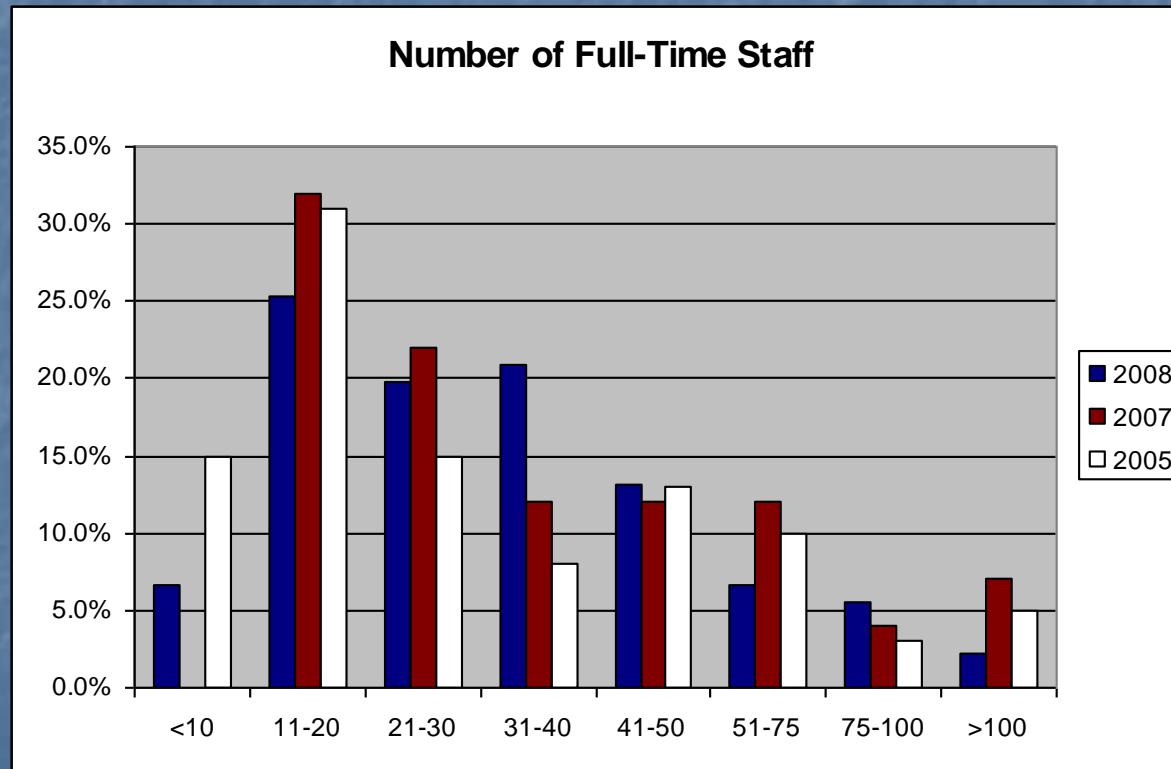
2007-08 Fellows

- 27% Female
 - Compared with 39% in 2006-07



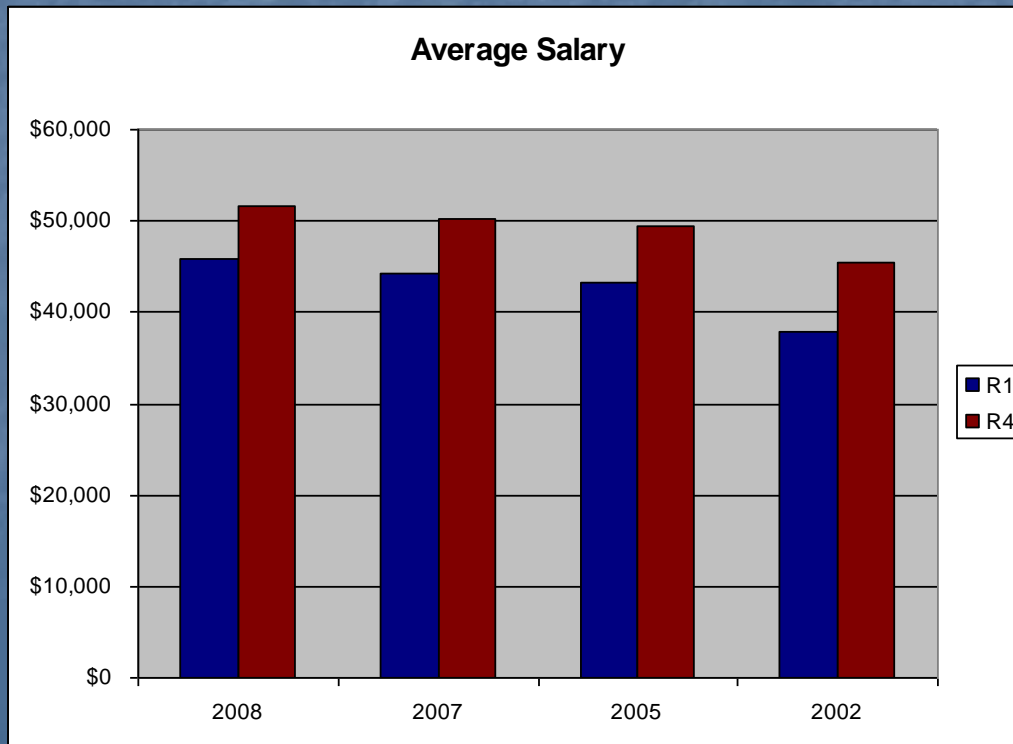
2007-08 Staff

- Female: 27%
- Compared with 26% in 2006-07



Resident Benefits

- R1 average: \$45,800 (30-70K)
- R4 average: \$51,700 (38-85K)
- Tax-Deferred Retirement Savings Plan:
 - Available to 69% of residents
 - Only 32% receive matching funds (26% in 2007)



AFIP

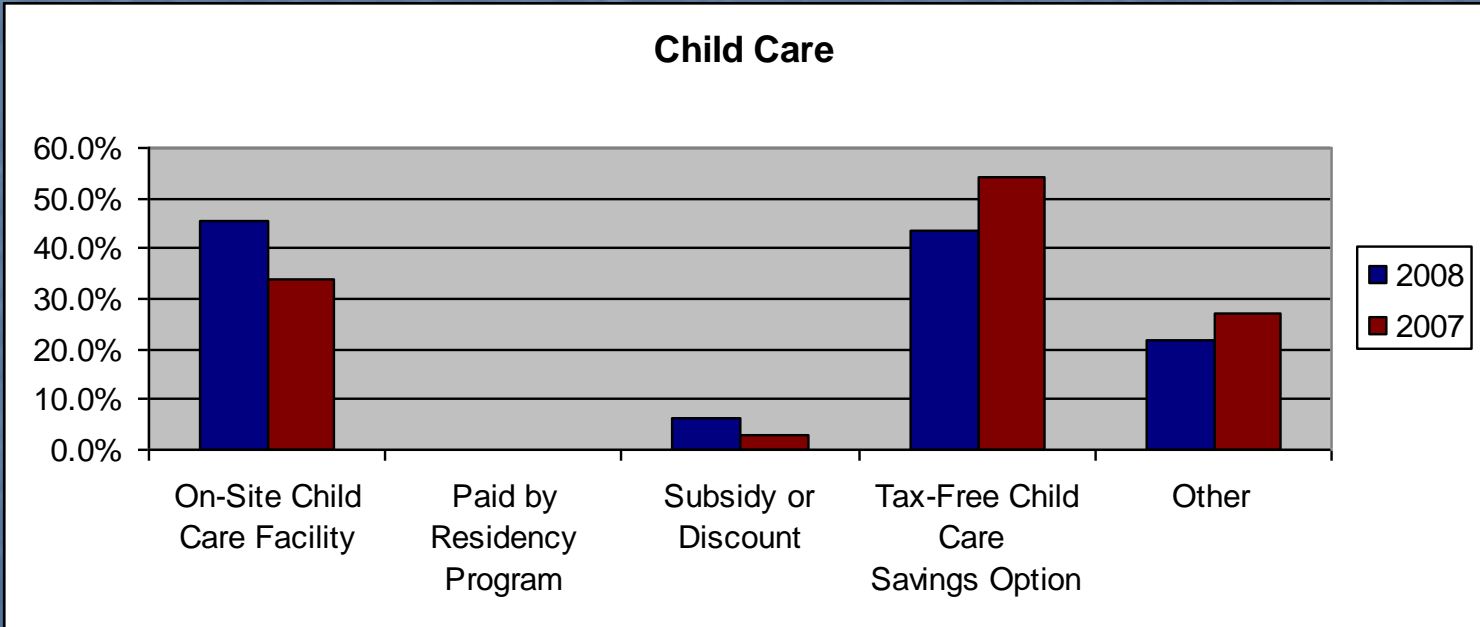
- 94% of replying programs send residents to AFIP
- With one exception, 90-100% of residents from these programs attend AFIP
- Medicare no longer funds non-clinical resident activities → 12% of respondents feel that this will affect their program's ability to send residents to AFIP

Costs Assumed by Training Program

- Temp. Med. License: 50%
 - 41% in 2007
- Perm. Med. License: 17%
 - Also 17% in 2007
- Book/Travel Fund: 76%
 - Average: \$1070
 - 81% in 2007
- Lead Aprons: 31%
 - 48% in 2007
- Leaded glasses: 9%
- BLS: 78%
- ACLS: 71%
- AFIP Tuition: 93%
- AFIP Housing Stipend: 78%
- Oral Board Review Course Tuition: 37%
- Oral Board Review Course Stipend: 15%

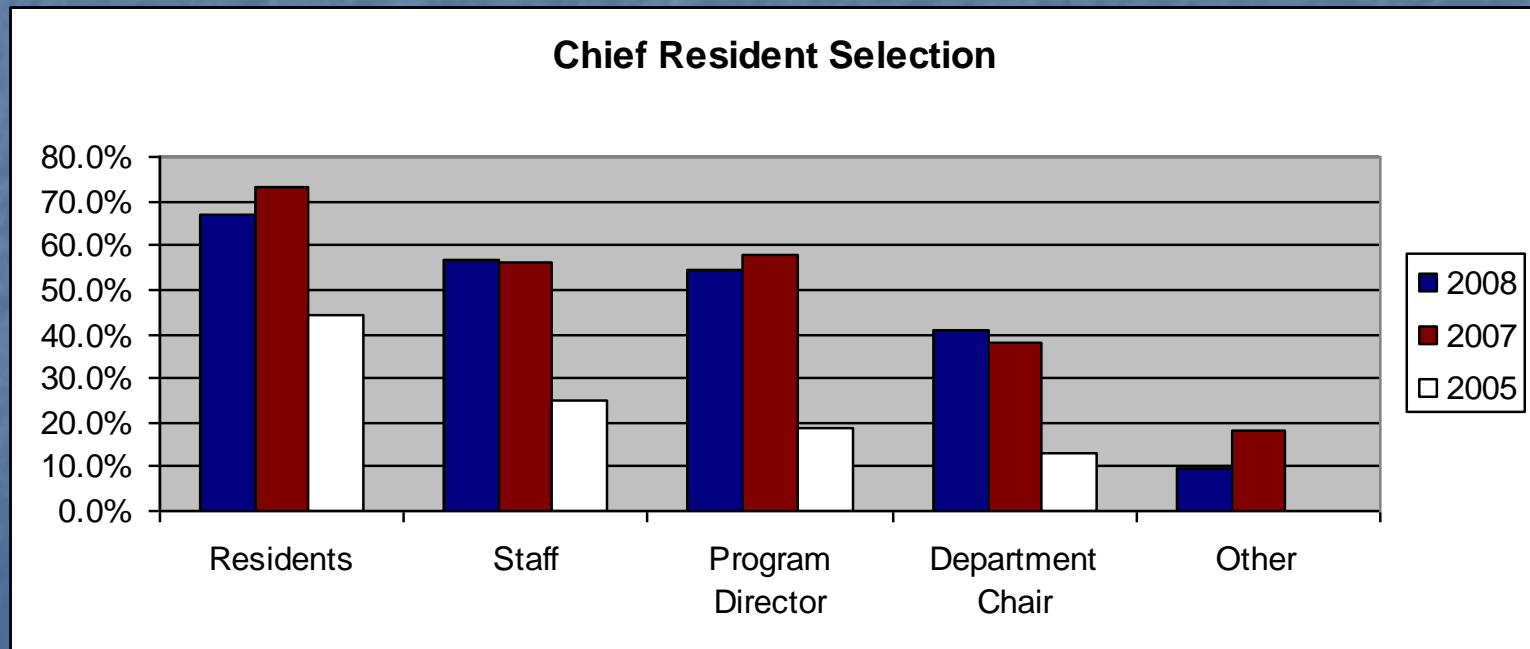
Child Care

- 90% provide paid maternity leave (80% in 2007)
 - Avg. Length: 6 wks (range 0-10 wks)
- 71% provide paid paternity leave (68% in 2007)
 - Avg. Length: 8 days (range 0-4 wks)

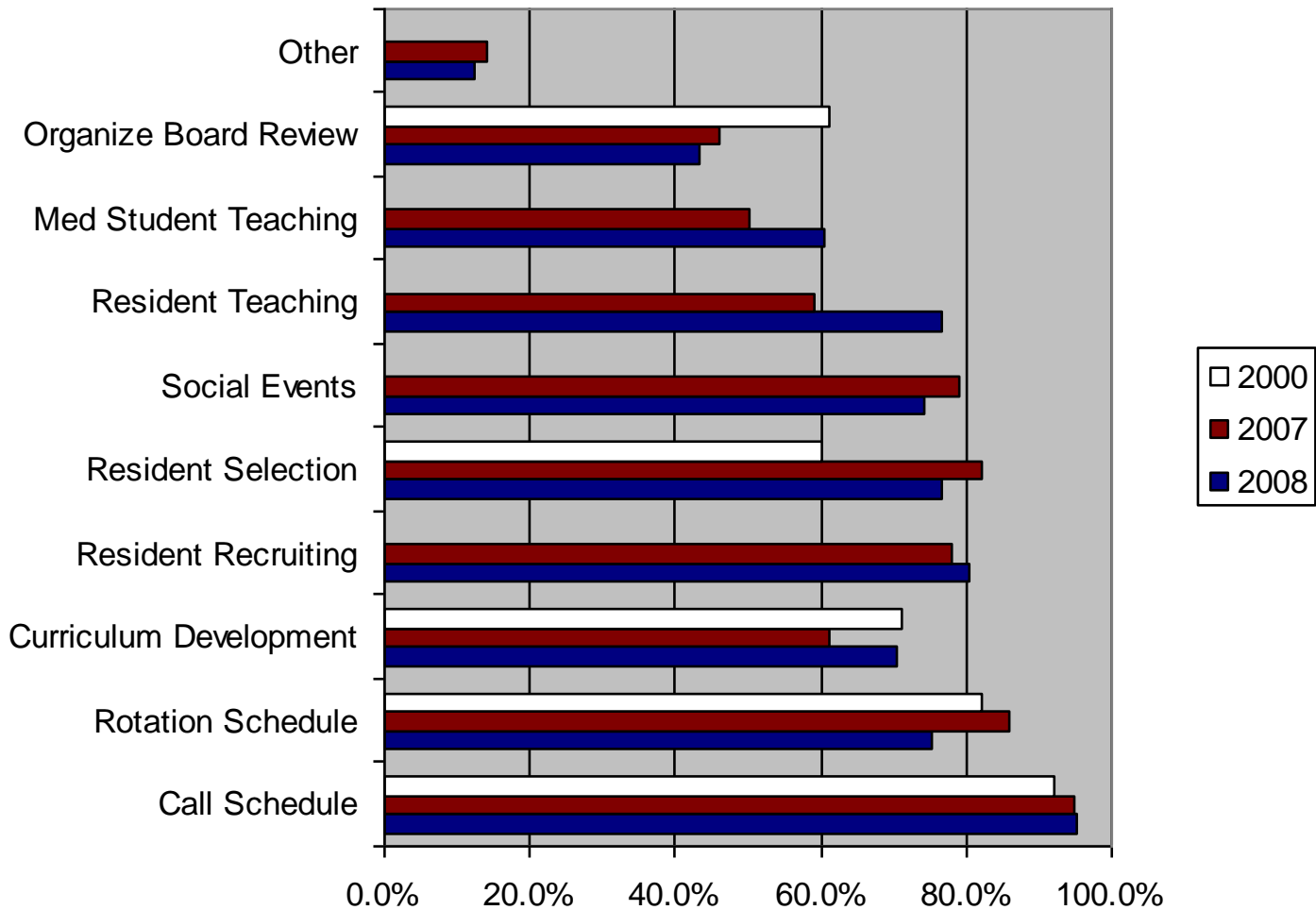


Chief Residency

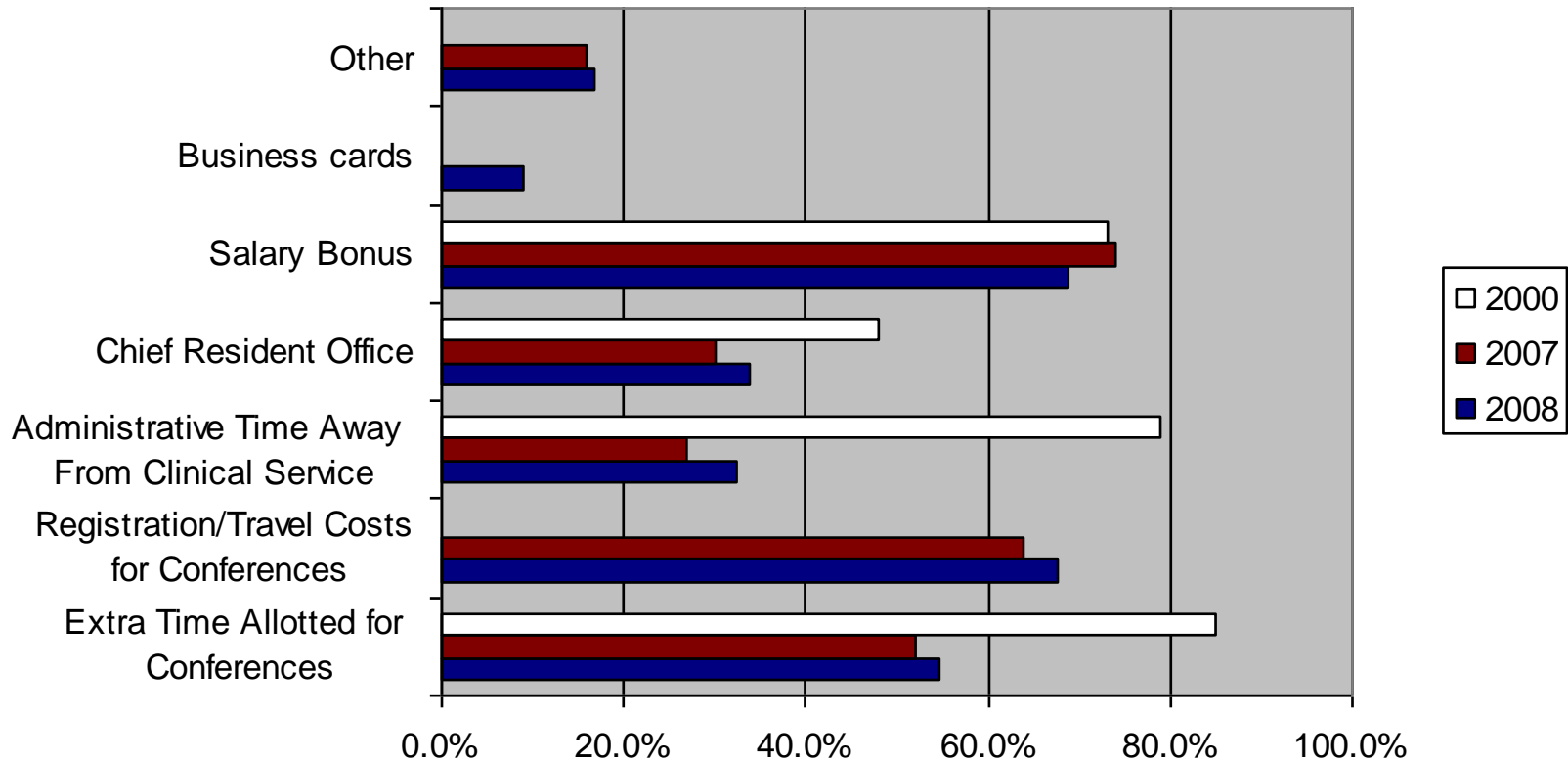
- 1-4 chiefs per program
- Term spans mid-third to mid-fourth year for 65% of respondents



Chief Resident Responsibilities



Chief Resident Benefits



- Average Salary Bonus: \$1,350 (was \$2,000 in 2007)
- Range of Bonuses from \$0-10,000
- “There are no benefits”

ACGME Compliance

- 100% report complete compliance
 - 100% report positive effect on resident quality of life
 - 90% report positive effect on resident education
- Average hours off between shifts:
 - <10: 1% 10-12: 24% 12-15: 58% >15: 18%
 - <10: 11% in 2005
- Average work week:
 - 53% Report between 51-60 hours
 - Averages on busiest rotation:
 - 61-70 hours: 33% 71-80 hours: 26% >80 hours: 6%
 - 80-hour work week is an average over 4 weeks

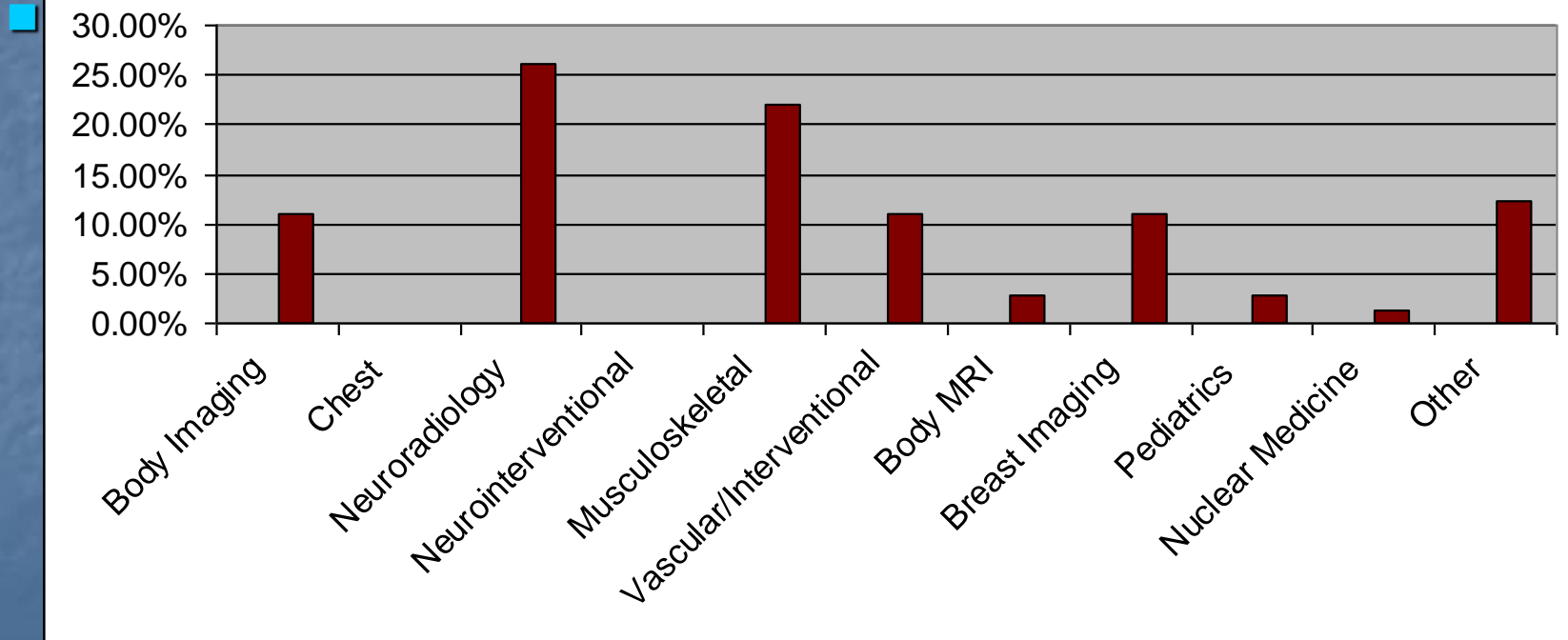
ACGME Compliance

- Required work hours log: 71% (67% in 2007)
- Average call frequency per week:
 - <1: 32% 1:48% 2: 17% 4%: 3
 - 2005 Comparison:
 - <1: 53% 1-3: 47%
- Average days off per month:
 - <4: 12% 5: 22% 6: 38% ≥7: 28%
 - 2005 Comparison:
 - 4-5: 27% 6-8: 64%

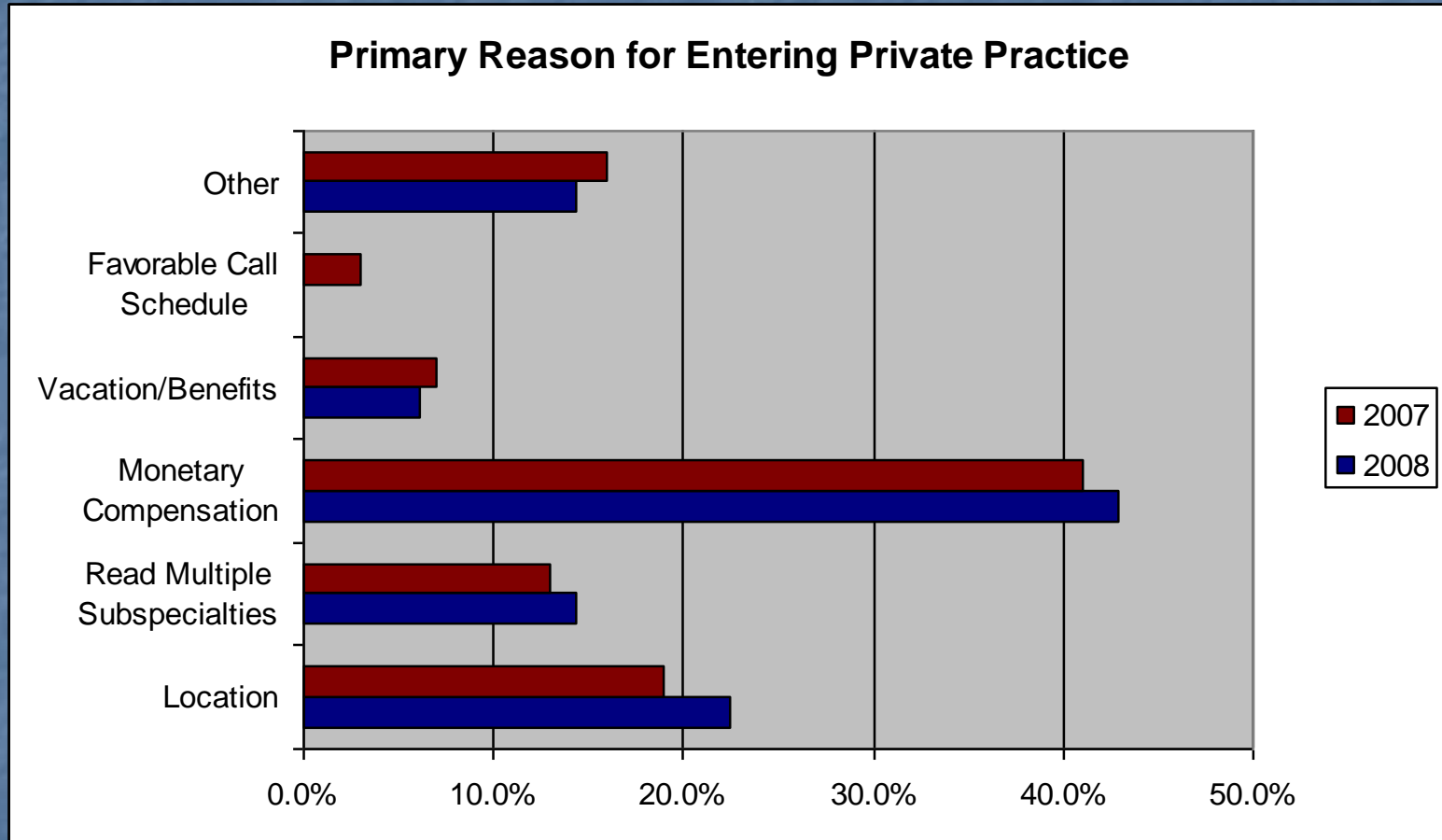
Life After Residency

- 95% plan to pursue fellowship training (91% in

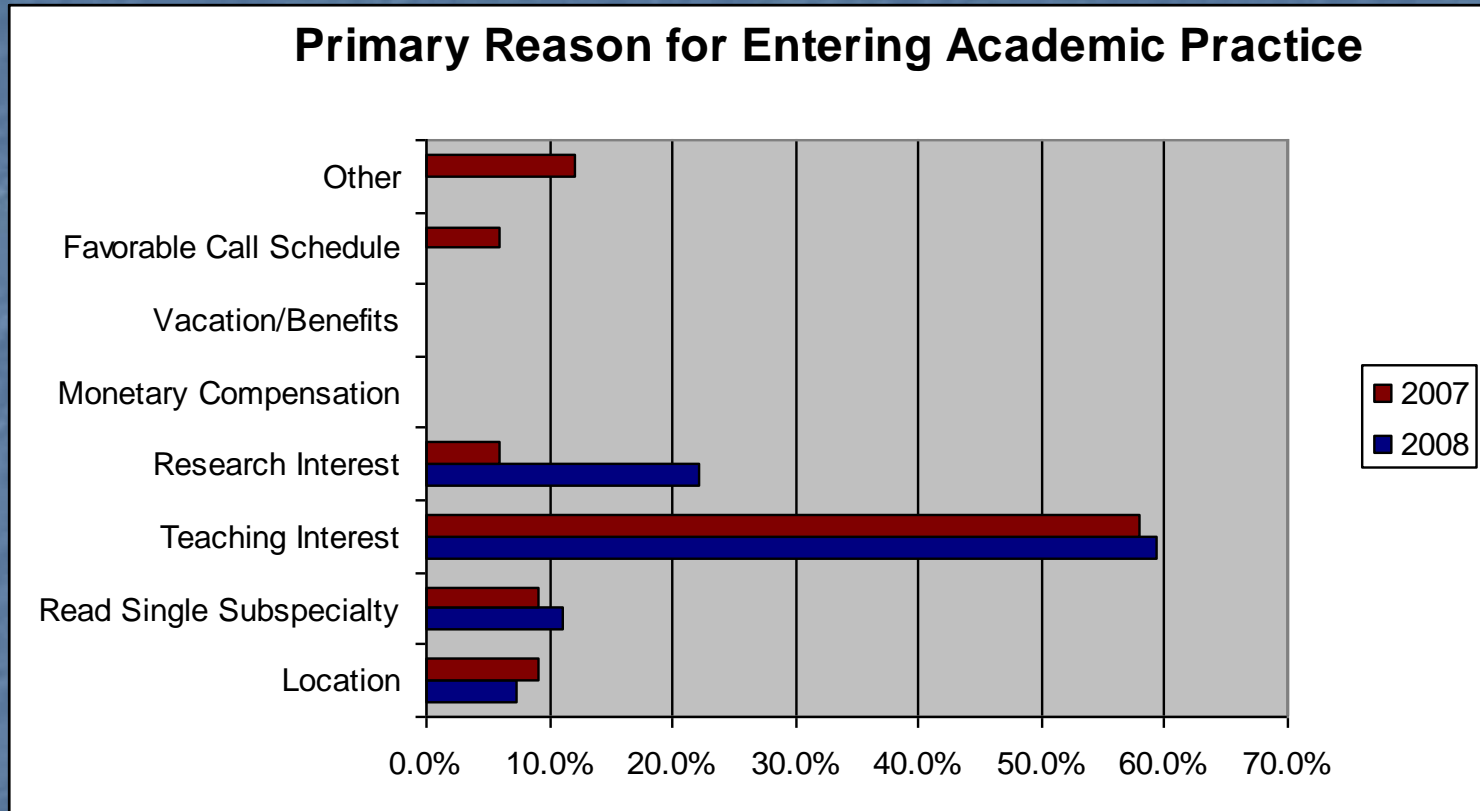
Fellowship Plans of Respondents



Private Practice: 67%



Academic Practice: 41%



- 6% of programs offer monetary incentive program for entering academic practice

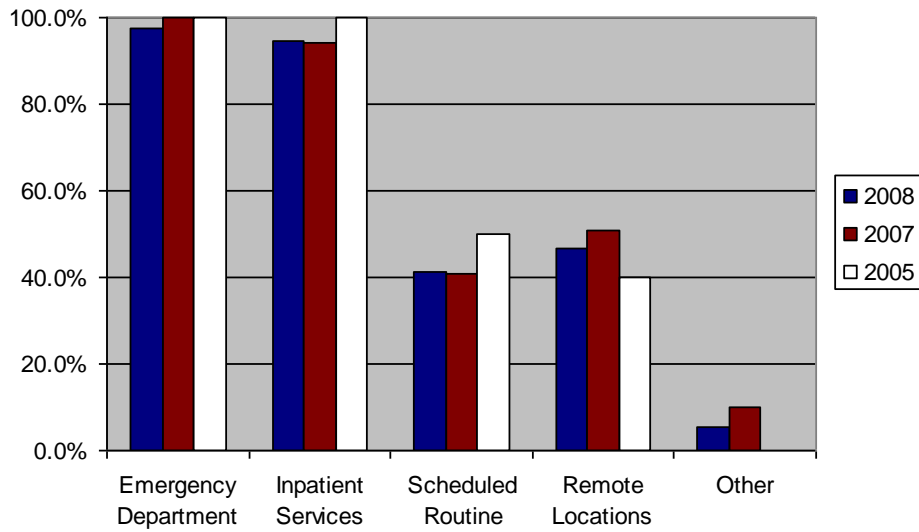
Call

- Average # of residents in-house on call: 1.4
 - Range: 0-5
- In-house call shifts (excluding NF):
 - <50: 45% 51-75: 24% >75: 31%
 - 2005 Comparison: 58 (average)
- Home/beeper call shifts (excluding NF):
 - 0: 37% 1-40: 32% 41-75: 22% >75: 10%
 - 2005 Comparison: 78 (average)

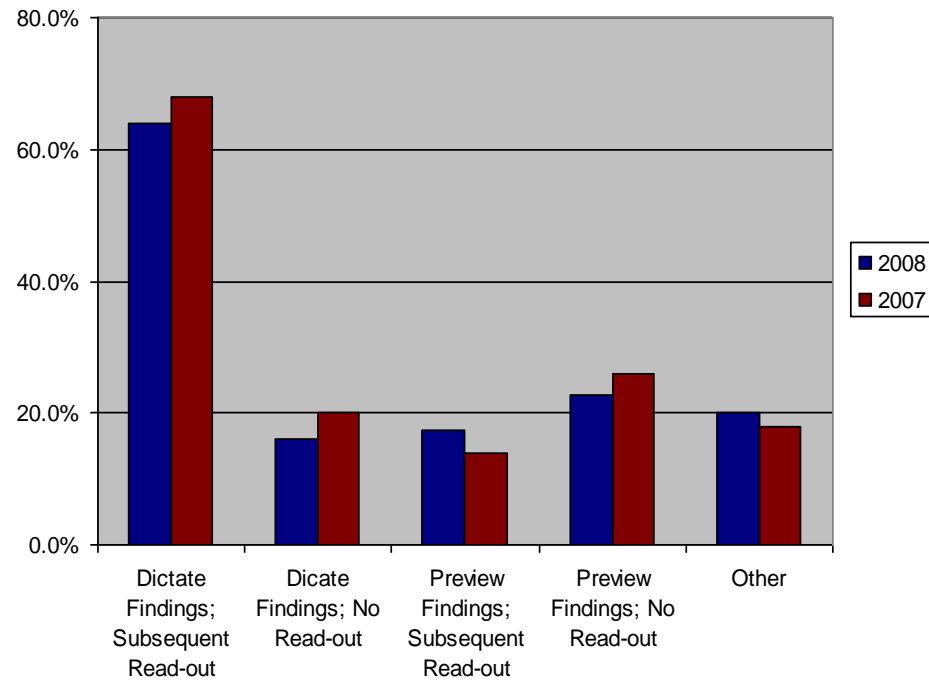
Call

- 68% of programs use night float system
 - 73% in 2007
 - 67% in 2005
 - 61% in 2004
- Weeks on night float during residency:
 - 0-4 wks: 12% 4-8 wks: 24%
 - 8-10 wks: 22% >10 wks: 42%
- Length of night float shifts (hours):
 - <8: 4% 8-10: 9% 10-12: 33%
 - 12-14: 53% >14: 2%
- Frequency of night float shifts:
 - QD: 81% (63% in 2007) QOD: 0% Other: 17%

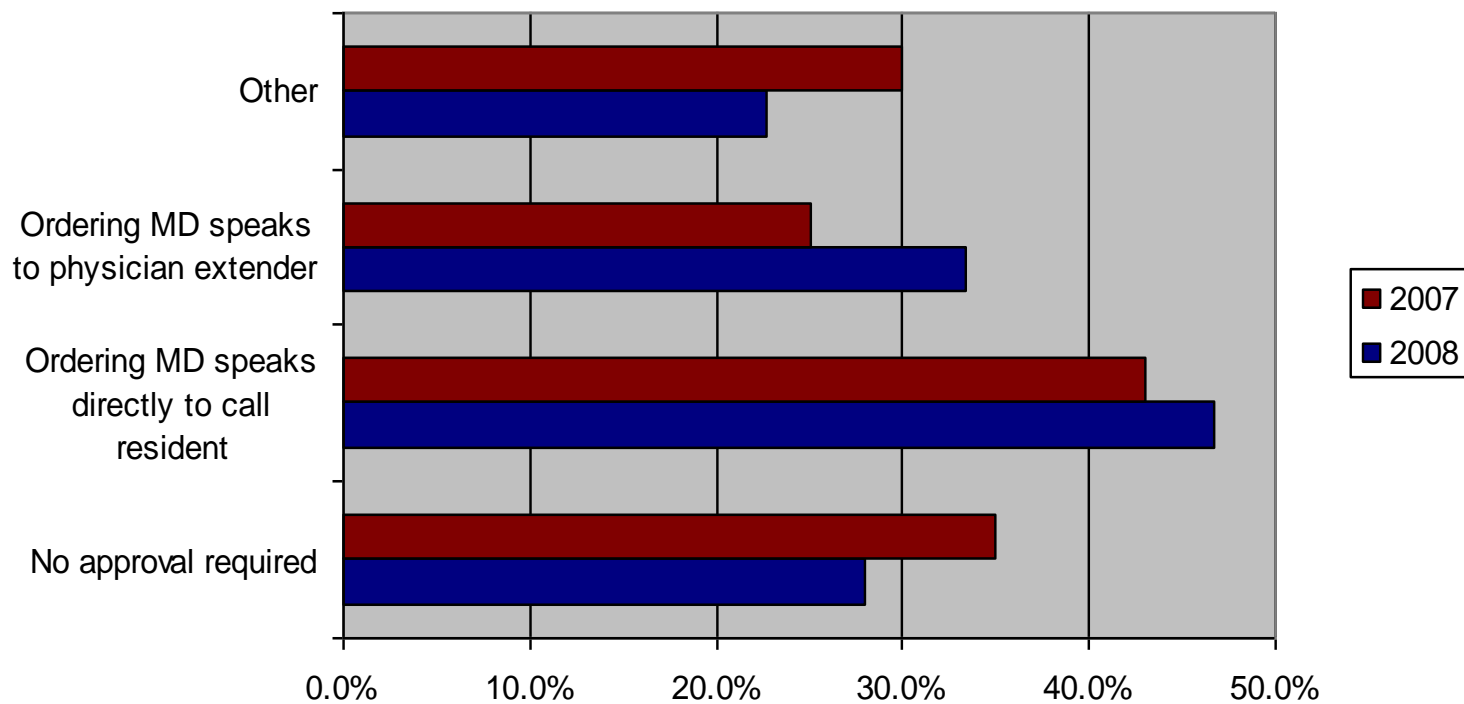
Resident Call Responsibilities



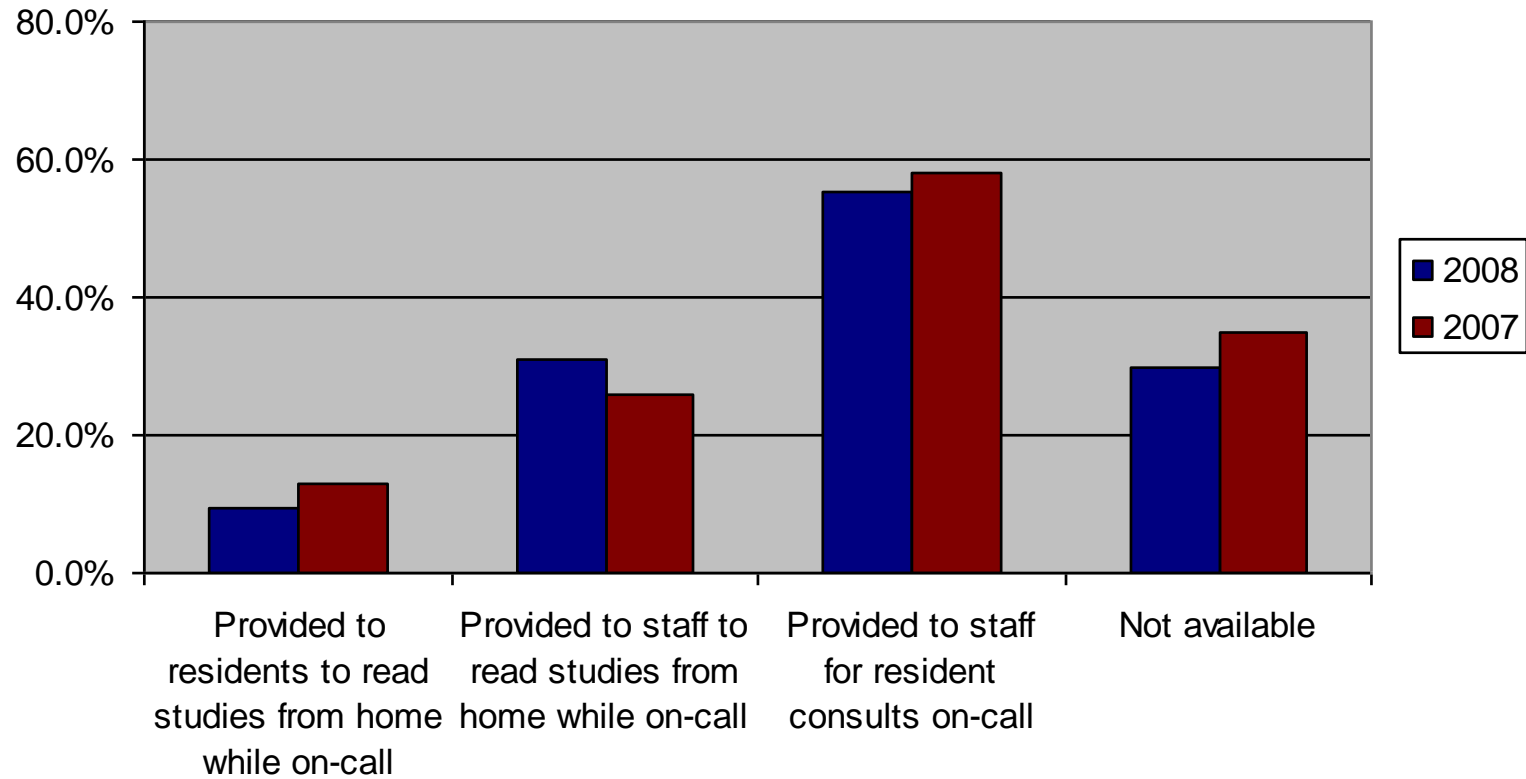
Check-Out After Call



Process for Approving Studies On-Call



Teleradiology

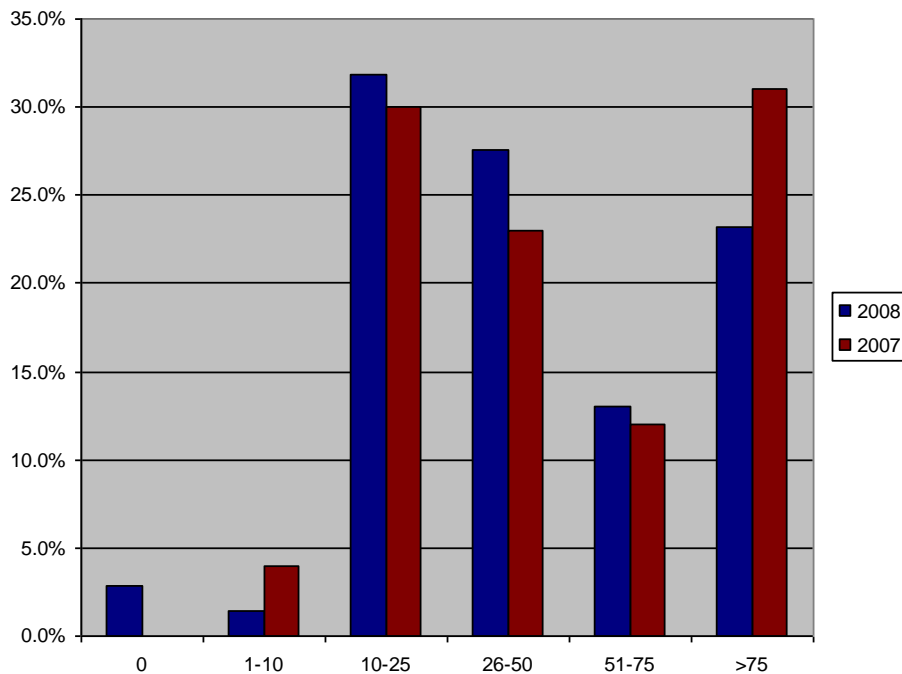


- In-house moonlighting: 37%
 - Examples:
 - MR/CT contrast Injection Monitoring: \$50-60/hr
 - Overflow ER/Inpatient Studies: \$75/hr
 - Weekend Neuro and IR assist: \$150-300/day
 - Read studies from remote location: \$25/case
- On-call meal vouchers or other free food: 81%

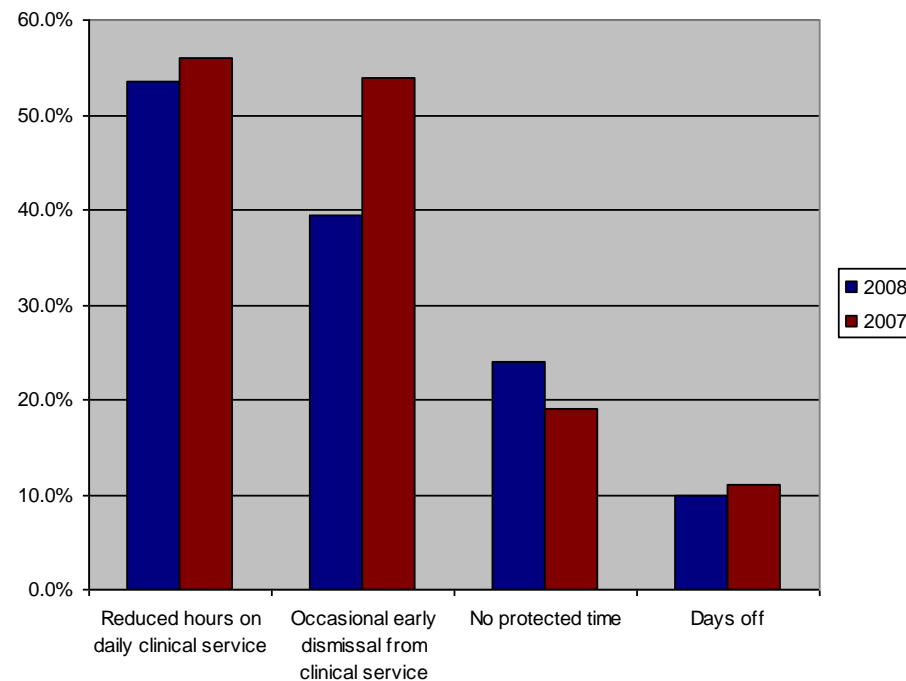
Oral Boards

- 70% of programs provide their own oral board review and curriculum (79% in 2007)
- Structured review begins:
 - Jan-Feb: 60%
 - March-April: 33%
 - Before Jan: 6%
- Oral board review:
 - Lectures given by faculty: 92%
 - Lectures organized by faculty: 29%
- 75% of programs include a mock exam as part of preparation

Hours of Oral Board Review at Home Institution



Protected Time for Oral Board Preparation



Board Exam Preparation

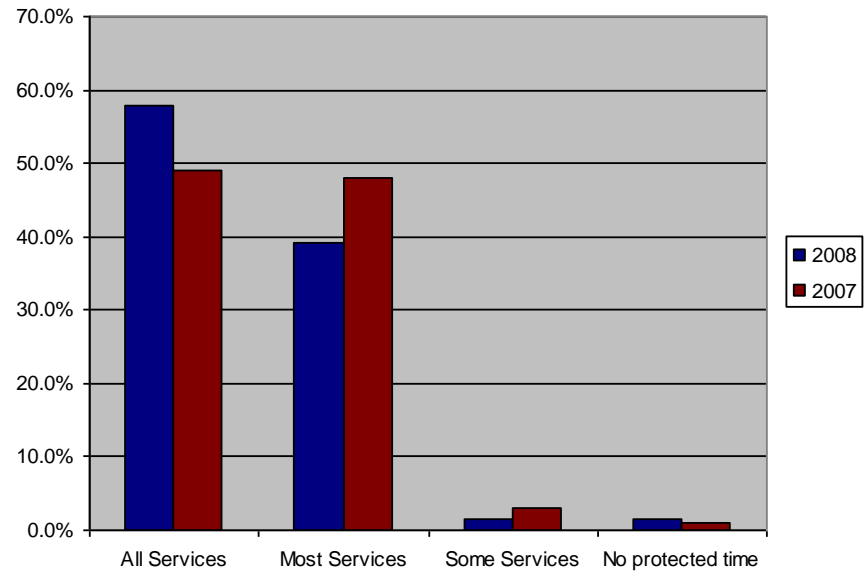
Commercial Prep Courses for Oral Board Examination

- At least some residents from 93% of respondents' programs attend commercial course to prepare for oral board exam
- On average, 85% of residents from these programs attend at least one course (range 15-100%)
- Dedicated time off to attend course: 78%
- Stipend offered by program for course tuition: 67%
- Stipend offered by program for living expenses: 20%

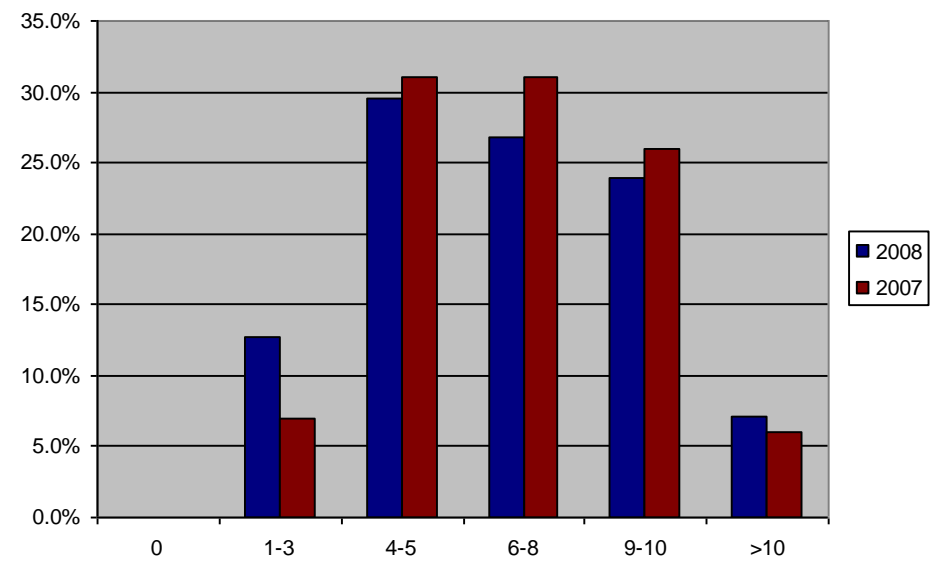
ACGME Program Requirements

- 87% have core didactic lecture curriculum (69% in 2007)
- 84% give lectures as 1-hour block/day
- 34% have alternate way of accessing lecture if unable to attend

Protected Time for Attending Didactic Lectures



Total Number of Weekly Didactic Lecture Hours

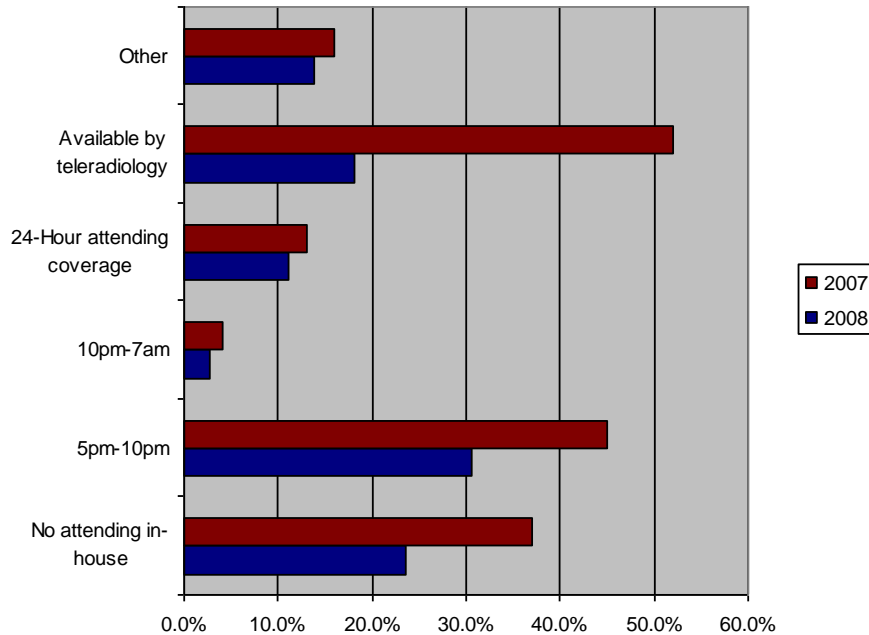


- Residents must perform a “scholarly activity”: 84%
 - 64% in 2007
- Current protected academic time for project: 41%
 - 25% in 2007

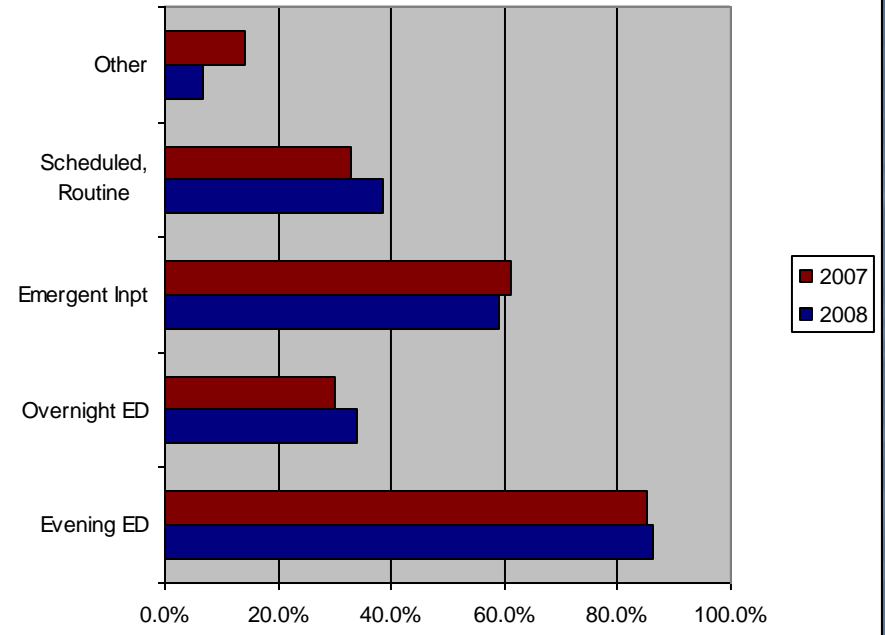
- 86% of programs currently require maintenance of a learning portfolio
 - 69% in 2007
- 80% currently employ 360° evaluations
- 99% of programs currently require an annual objective examination

- Months of training prior to start of call:
 - <6: 17% 6-9: 49% 9-12: 29% >12: 6%
- 63% of residents stop taking call midway through fourth year
 - 8% stop at end of third year
 - 17% continue throughout fourth year

After Hours Attending Coverage



After Hours Attending Responsibilities

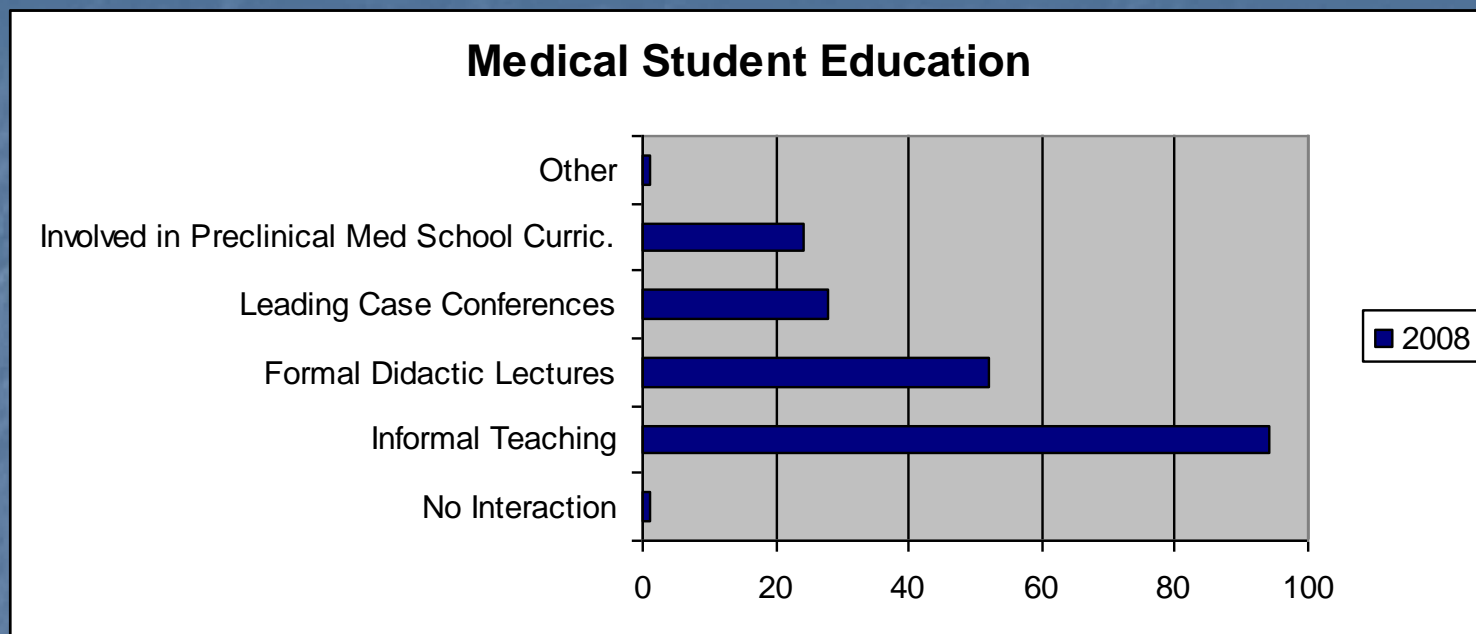


- 100% of attendings not in-house are available by pager
- 93% of resident reviewed studies on-call are currently reviewed within 24 hrs

■ R1 Call Restrictions:

- 74% of programs have changed call schedule
- 69% of programs will increase amount of call for R2-R4 residents
- 88% of respondents feel that these changes will have a negative impact on training experience

■ Medical Student Education



- 25% of Programs Have A Dedicated Teaching Resident

Discussion: R1 Call Restrictions

- Overwhelmingly negative outlook from respondents
- Effect on training experience
- Burden on R2-R4 residents and existing systems
- Smaller programs
- Starting R1 call in July
- Comments
 - “This forces a total overhaul of our system”
 - “It is a bad idea that will not result in better reads, but will delay the maturation of the new residents”
 - “At our small program we may have to require 24-hour attending coverage”
- ? Supervised call
- ? Opportunities for senior resident moonlighting

Discussion: 24 Hour In-House Attending Coverage

- Many programs have or are planning to move to 24 hour in-house attending coverage
- Patient care vs. training experience
 - Resident independence
- Contemporaneous vs. intermittent read-out

Discussion: AFIP

- Loss of Medicare funding of non-clinical resident activities
 - “Potentially may not allow us to go”
 - “Changes anticipated, but not well-defined at this point”
 - “This will negatively affect our stipend”

Discussion: Academics vs. Private Practice

- 41% of respondents entering academics
 - ? Selection bias
- \$\$ listed as primary reason for entering private practice
 - Better retirement savings plans for residents and staff
 - Loan repayment programs
 - Monetary incentive programs to encourage academic careers
- Teaching interest listed as primary reason for entering private practice
 - Majority of chiefly duties are administrative
 - Consider more teaching opportunities, involvement in curriculum development, academic days and teaching electives

- Special Thanks To:

- Jennifer Demertzis, M.D.
- Laurie May
- AUR and A3CR2