Results of the 2005 A³CR² Annual Chief Resident Survey

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Greetings from St. Louis!
Purpose:

• To elicit the opinions of the chief residents in Diagnostic Radiology regarding many different resident issues

• Results are compared with previous years and trends are identified
Survey Format:

• Confidential on-line survey

• One response per training program, but no way to assure this

• Mostly multiple choice questions, with space available for text insertion where appropriate
Limitations of the Survey:

- Usefulness of the data limited by response rate
- We are eliciting opinions
- Sampling bias – only chief residents are included in the survey
- Occasionally had more than one response per program
Survey Topics:

- **Repeated questions:**
  - Resident population
  - Salary, benefits, etc.

- **New questions:**
  - ACGME compliance
  - Boards preparation
  - Call systems
  - Night float details
Results...
2005 Chief Resident Survey:

- 185 surveys sent out and 52 responses received
  - 28% response rate
    - 55% in 2004
    - 41% in 2003

- Why was the response rate so low?
  - Bad luck?
University Affiliation:

- 83% of respondents affiliated with a university
  - 80% in 2004
Number of Hospitals Covered:

![Bar chart showing the number of hospitals covered in 2004 and 2005.](chart.png)
Number of Hospital Beds:

- 0%
- 20%
- 40%
- 60%
- 80%
- 100%

- Fewer than 500
- 500-999
- 1000-1499
- 1500-1999
- Greater than 2000

2005
2004
Number of Annual Diagnostic Procedures:

- Fewer than 100,000
- 100,000 to 249,000
- 250,000 to 499,000
- 500,000 to 749,000
- Greater than 750,000

2005 vs. 2004
ACGME Requirements:

- Effective July 1, 2003:
  - 80 hour weekly work limit
  - 10 consecutive hours off between shifts
  - Up to 24 hour work shifts with up to 6 additional hours for education/continuity of care
  - 1 of 7 days off averaged over 4 weeks
  - Call no more frequent than q3 days/night
ACGME Requirements:

- 78% stated that the call experience is now better (85% in 2004)
  - Many stated **no real change**
  - **Better** → More time to rest & study
  - **Worse** → Having to deal with the ramifications of other services’ duty hours changes (other residents not as knowledgeable about their patients), lots of forms to fill out, higher number of call shifts

  - “It has required so much change in our call structure that the system is somewhat fragmented. At times, this detracts from the educational experience.”
ACGME Requirements:

- 86% stated that their educational experience is better
  - 90% in 2004
  - No change
  - **Better** → More time to rest, study, more likely to participate in the daily work b/c less tired
  - **Worse** → More forms to fill out, getting in trouble for not filling out forms, “duty hour quiz”, miss teaching conferences, rushed AM readout – less time for teaching
ACGME Compliance

- 96% of programs fully compliant
ACGME Compliance

Number of Work Hours per Week (Heaviest Rotation)

- < 30
- 30-40
- 41-50
- 51-60
- 61-70
- 71-80
- > 80
ACGME Compliance

• Call frequency:
  - 1-3 times per week → 47%
  - <1 per week → 53%
ACGME Compliance

• Number of days off per month:

  – 4-5 → 27%
  – 6-8 → 64%
  – >8 → 9%
ACGME Compliance

Number of Hours Off Between Shifts

- < 8
- 8-10
- 10-12
- 12-15
- >15
Night Float

• 67% of programs have night float system
  – 61% in 2004
  – 44% in 2000
  – 42% in 1996

• Wide variety of night float systems
  – Daily or almost daily shifts (12 in 13, 7 in 7)
  – QOD (7 in 14, 14 in 28)
Night Float

- 100% responsible for ED studies
- 100% responsible for inpatient studies
- 40% responsible for remote studies from other locations

(10 respondents)
Call

- When does call begin?
  - 1\textsuperscript{st}-6\textsuperscript{th} months $\rightarrow$ 7%  5% in 2004
  - 6\textsuperscript{th}-12\textsuperscript{th} months $\rightarrow$ 64%  74% in 2004
  - After 12\textsuperscript{th} month $\rightarrow$ 29%  22% in 2004
Call

- Residents take an average of 58 in-house and 78 beeper call shifts during their residency
  - 114 in house calls in 2004
  - 62 beeper calls in 2004

(14 respondents)
Call

- 50% are responsible for scheduled, non-emergent studies after-hours
  - 53% in 2004

- Extra pay?
  - 0% yes
  - 6% yes in 2004
What do residents pre-dictate on call?

- Radiographs → 100%
- CT → 70%
- US → 80%
- MR → 20%
- Fluoro → 70%
Morning Read-Out

• How do residents check-out after call/NF?

  – Real-live attending/fellow → 53%
  – Write down your findings → 20%
  – No check-out → 20%
  – Other → 33%

  • 24 hour staff coverage
  • Graduated system (1\textsuperscript{st} years check out, 4\textsuperscript{th} don’t)
Call

- On the post-call day (excluding NF)
  - 29% excused from work
  - 71% N/A (entirely NF system)
## Call

**Interpretations primarily provided by:**

<table>
<thead>
<tr>
<th>Modality</th>
<th>Resident</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED plain films</td>
<td>86%</td>
<td>29%</td>
</tr>
<tr>
<td>Inpt plain films</td>
<td>86%</td>
<td>36%</td>
</tr>
<tr>
<td>VIR</td>
<td>15%</td>
<td>92%</td>
</tr>
<tr>
<td>US</td>
<td>93%</td>
<td>21%</td>
</tr>
<tr>
<td>Nucs</td>
<td>85%</td>
<td>23%</td>
</tr>
<tr>
<td>CT</td>
<td>93%</td>
<td>21%</td>
</tr>
<tr>
<td>MR</td>
<td>71%</td>
<td>43%</td>
</tr>
</tbody>
</table>

(14 respondents)
Call

- 33% provide on-call teleradiology
- 75% receive call meal coupons
Staffing

Number of Full-Time Faculty

- < 10
- 11-20
- 21-30
- 31-40
- 41-50
- 51-75
- 76-100
- > 100
Staffing

Number of Fellows
Staffing

• Resident coverage in ED from 5-10PM?
  – Yes – 88%
  – 97% in 2004

• Resident coverage between 10PM-6AM?
  – Yes – 88%
  – 98% in 2004
Staffing

• In-house faculty coverage between 5-10PM?
  – Yes – 35%
  – 45% in 2004

• In-house faculty coverage between 10PM-6AM?
  – Yes – 14%
  – 7% in 2004

• 100% available by phone/pager if not in-house
Staffing

- In-house faculty coverage between 10PM-6AM
  - 90% - attending covers the ED
  - 50% - attending covers inpatient studies
Residents

- Number of residents:

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>First year</td>
<td>5.7</td>
<td>6.2</td>
</tr>
<tr>
<td>Second year</td>
<td>5.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Third year</td>
<td>6</td>
<td>5.8</td>
</tr>
<tr>
<td>Fourth year</td>
<td>5.6</td>
<td>5.8</td>
</tr>
</tbody>
</table>
Residents

- Percentage of women residents:
  - 1st year → 34%
  - 2nd year → 25%
  - 3rd year → 30%
  - 4th year → 24%

- Women made up about 25% of their residency programs in 1992
Residents

• Increased number of residents compared to 5 years ago?
  - 50% yes $\rightarrow$ 53% in 2004
  - 12.5% no $\rightarrow$ 6% in 2004
  - 38% no change

• Number increased by an average of 2 residents
Resident Benefits

• Average Salary

- 1\textsuperscript{st} year $\rightarrow$ $43,195 \quad ($37,913 in 2002$)
- 4\textsuperscript{th} year $\rightarrow$ $49,407 \quad ($45,522 in 2002$)
Resident Benefits

- 50% of programs pay for temporary licenses
- 31% pay for permanent licenses

- 81% provide a book-and-travel fund
  - 75% in 2004
  - Average sum $722 (unchanged) in the form of an expense account
Resident Benefits

- **Maternity Leave** –
  - Average of 6 weeks
    - Range from 2 wks to 6 months

- **Paternity Leave** –
  - Average of 2 weeks
    - Range from 1 day to 3 months

- **Child care provided by 13%**
Chiefdom

• 81% of respondents (n=16) were outgoing chiefs

• 19% were incoming chiefs

• Average number of chiefs per program → 2

• 69% serve their chief year in their 3rd year of residency
How Chosen as Chief Resident

- Elected by Residents: 40%
- Elected by Staff: 20%
- Residency program director: 20%
- Department chair: 10%
- Rotated among all senior residents
- Previous chief residents
Chief Responsibilities

“many monotonous tasks”
Chief Benefits

“This position does not seem to be beneficial at all”

Chief Benefits

Opportunity to attend additional meetings
Other (Salary Bonus)
Additional administrative time away from clinical service
Own office or shared with other chief(s)

0% 20% 40% 60% 80% 100%

1996
2000
2004
2005
Chief Benefits

- 69% receive a salary bonus

- **Average bonus amount** → $1615
  - Range $300-3600
  - $1475 in 2000

“too small to characterize by monetary criteria”
Board Review

- 67% of programs have their own board review

- Reviews begin:
  - Before Jan → 9%
  - Jan-Feb → 43%
  - March-April → 46%
  - May-June → 3%

- Mostly faculty-run in 91%
Board Review

• Number of hours per week for reviews:
  – < 5 hrs → 34%
  – 5-10 hrs → 43%
  – >10 hrs → 23%

• 44% of programs have protected time off for seniors to study for boards
  – Shorter hours → 27%
  – Days off → 13%
  – Occasional early dismissal → 37%
  – Other → 23%