

Transitioning to 24/7 In-House  
Faculty Coverage in an Academic  
Radiology Department: Perceptions  
Regarding Patient Care and Safety

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# Nothing to Disclose



# Background

- Shift to a 24/7/365 in-house attending coverage in the academic institutions
  - 2002 – 4%
  - 2004 – 7%
  - 2005 – 14%
  - 2012 – 20%
- Pushed due to
  - Increased expectations by the ER and Trauma Departments
  - Desire to decrease discrepancies between the preliminary and final reports
  - Improved patient care
- Drawbacks
  - Negative impact on the resident education A3CR2 survey 2010
  - Decreased level of autonomy
  - Decreased overall education experience

# Purpose

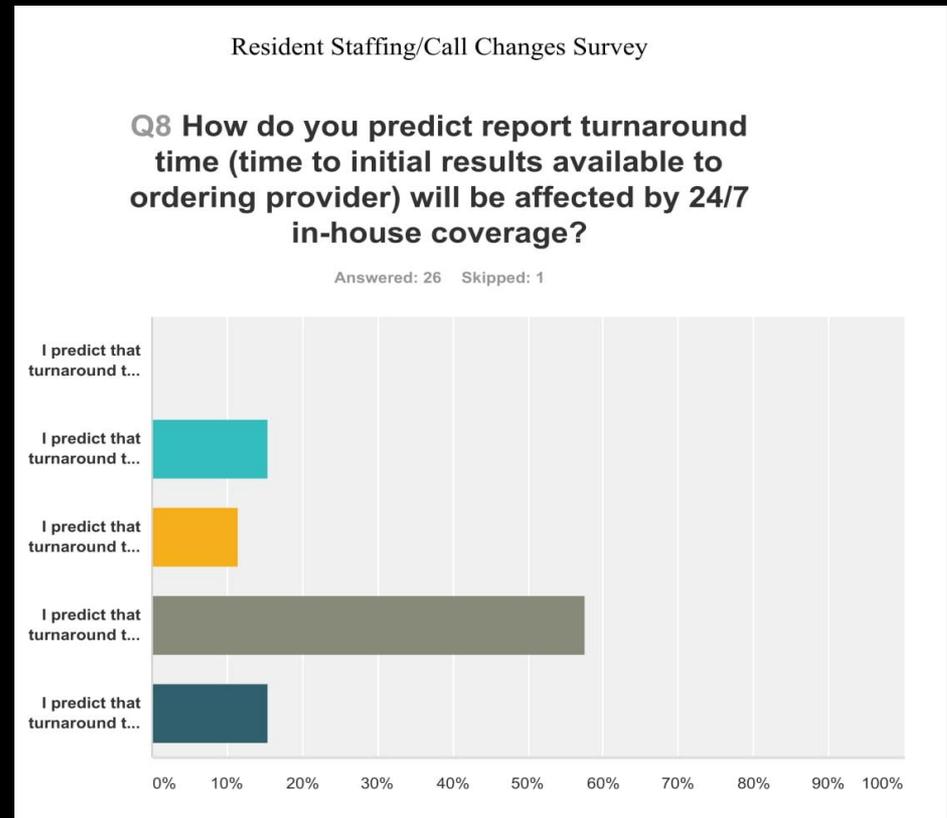
- Survey resident attitudes and opinions in advance of the transition to 24/7 in-house faculty coverage regarding patient care and safety
- Use the results to guide the development of an overnight call practice

# Materials and Methods

- Anonymous Online Survey via SurveyMonkey
  - 11 Multiple choice questions
  - 2 Free answer questions
  - Majority of the survey responders were in their R2 and R3 year
  - Overall, 26 of 32 (81%) residents responded to the survey
- What is your level of training?
  - Where would you like in-house overnight faculty to be while interpreting studies on call?
  - How do you predict 24/7 in-house attending coverage will affect the number of cases primary and independently interpreted by residents?
  - How do you feel that 24/7 in-house attending coverage will affect the development of autonomous resident decision making/problem solving?
  - Do you feel that there will be more or less time for teaching at the workstation related to your overnight call cases compared to the current system of call?
  - How do you feel the absence of post-call attendings during the day will affect your education and learning overall?
  - How do you think 24/7 in-house faculty coverage will affect radiology resident recruitment?
  - How do you predict report turnaround time (time to initial results available to ordering provider) will be affected by 24/7 in-house coverage?
  - Do you think the time constraints on wet reads/final reads is:
  - How do you feel that 24/7 in-house faculty coverage will affect the ordering of unnecessary or redundant exams?
  - In general, do you think requiring non-subspecialist faculty to issue final reports on overnight cases is:

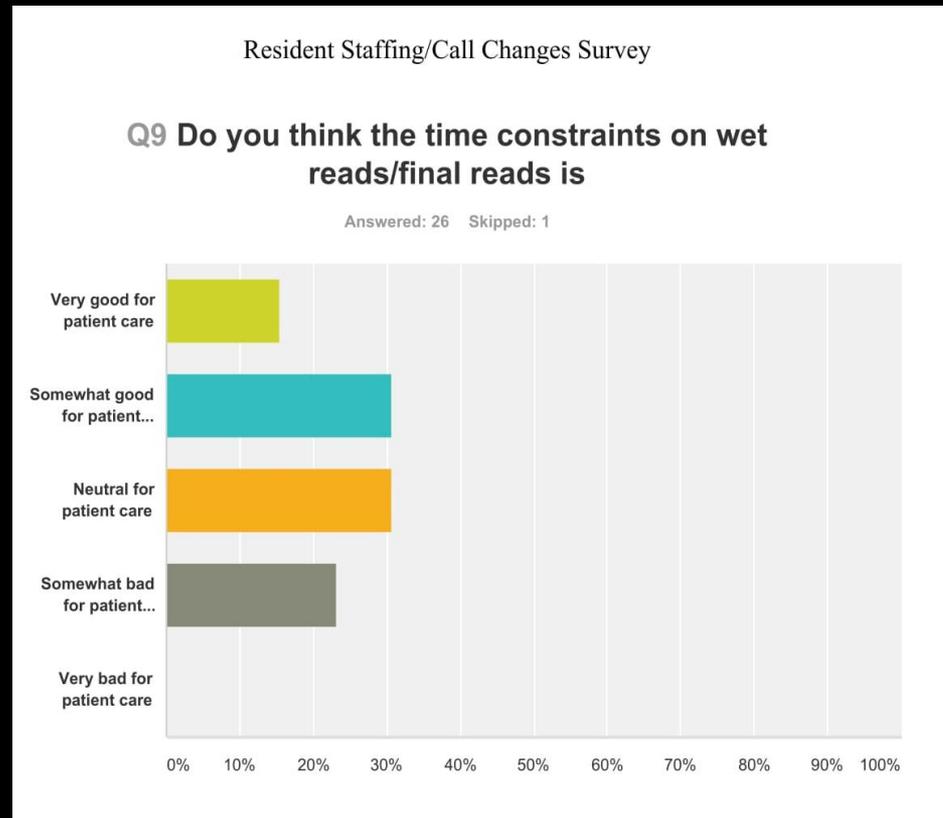
# Results

- 58% of the residents predicted report turnaround time would be slightly faster
- 16% believed the turnaround time would be either slightly slower or much faster
- 12% thought there would be no change



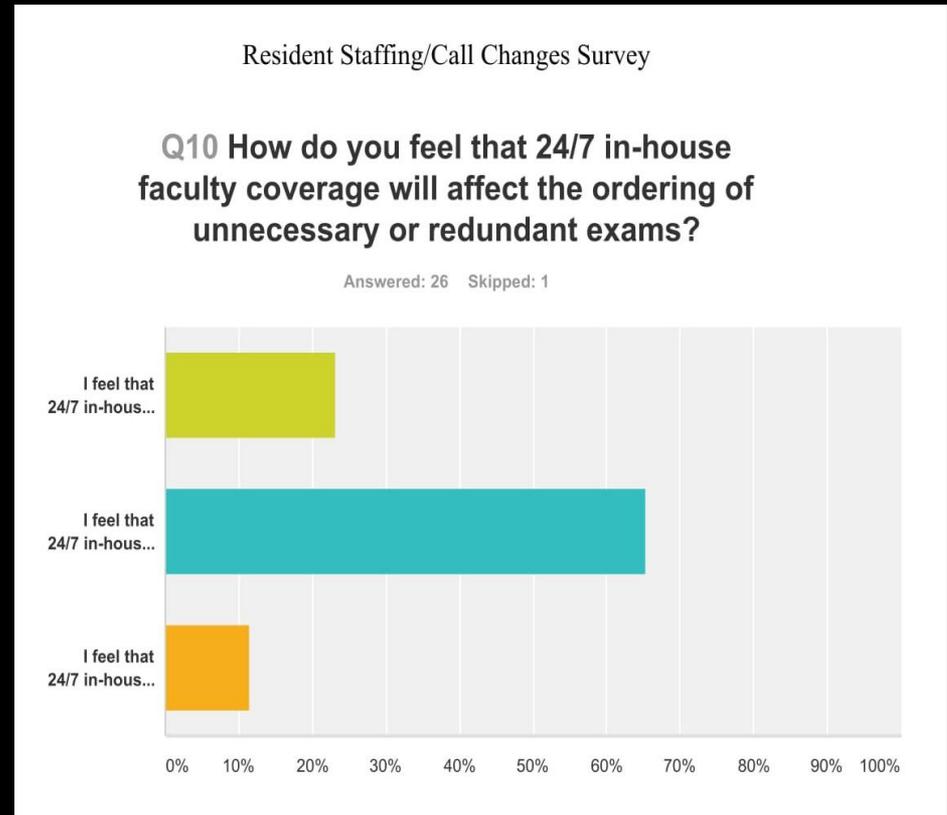
# Results

- 31% of the residents viewed time constraints on wet reads and final reads as either neutral or somewhat good for the patient care
- 23% thought time constraints were bad for the patient care
- 15% thought the time constraints were very good for patient care



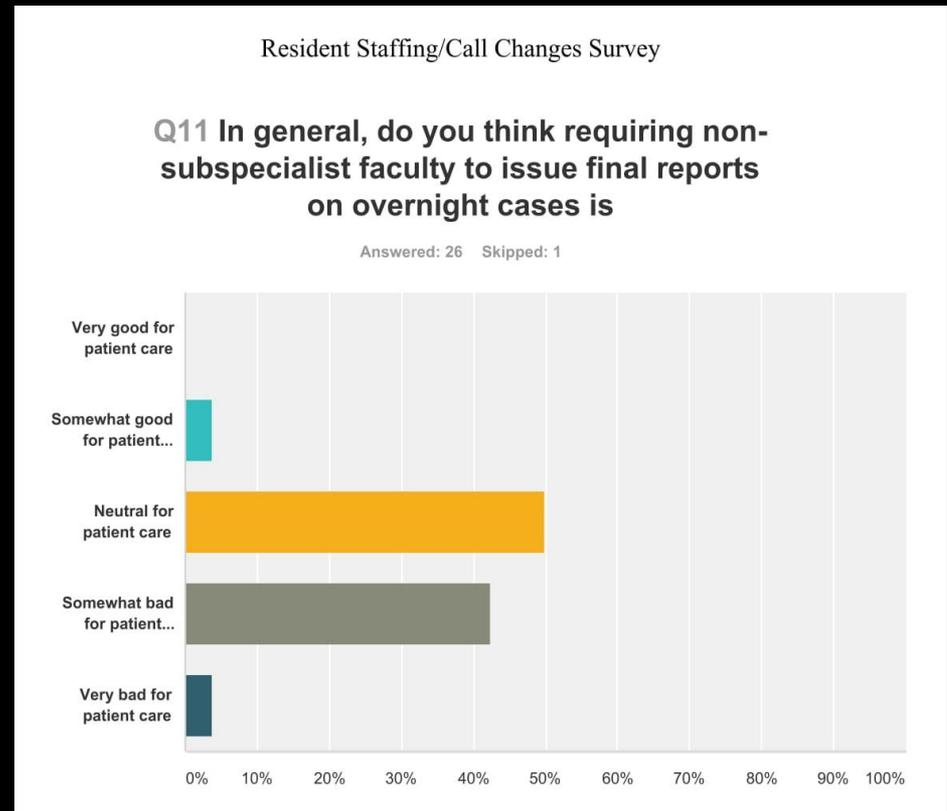
# Results

- 65% of the resident responders thought there would be no change in the ordering of redundant exams
- 23% believed there would be a decrease in redundant exam orders
- 12% thought there would be an increase in redundant exam orders



# Results

- 50% of the residents believed requiring non-subspecialist faculty to issue final reports would have no effect on patient care quality
- 42% thought it would be bad for patient care
- 4% each thought it would be either very bad or somewhat good for patient care



# Conclusion

- Transition to a 24/7/365 faculty coverage model continues to increase nationally
- Prior studies found that resident preliminary interpretation error rates are low (1.7% for major discrepancy) and have minimal effect on patient care
- According to Hoffmann, overall overnight attending coverage improves patient care
- At our institution residents believed there would be overall decreased turnaround time for a final report with an overnight attending
- There will be no change in the unnecessary exams ordered by the clinicians
- Having a non-subspecialist faculty read overnight would not effect patient care

# Conclusion

- Our initial survey revealed resident opinions prior to implementing the full 24/7/365 faculty coverage
- The initial survey and six-month follow-up survey results will guide the development of overnight call practices with an emphasis on patient care

# References

1. Hoffmann JC, Singh A, Mittal S, Peterkin Y, Flug J. Results of a National Radiology Attending Physician Survey: The Effects of In-House Late and Overnight Attending Coverage on Radiology Resident Training. *Curr Probl Diagn Radiol*. 2016 Sep-Oct;45(5):304-11.
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3. Collins et al., 2014. 24/7/365 in-house radiologist coverage: effect on resident education. *Acad Radiol*. 2014 Jul;21(7):842-50.