

# Trainee and Faculty Perceptions of Remote PACS Workstations and Next Steps in a Large Academic Institution

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# PURPOSE

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Remote workstations were deployed in our academic radiology practice in late March 2020 to select faculty in response to the COVID-19 pandemic.

Regarding the transition to remote work, we hypothesized:

- Faculty were unaffected
- Residents perceived that their education had suffered
- Residents would want to discontinue remote work in the academic setting following the pandemic

# METHODS

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An anonymous survey of trainees, faculty with a remote workstation (“remote”), and faculty without a remote work station (“onsite”) was conducted in **October 2020** (“Survey 1”).

Questions aimed to assess:

- Impact on education
- Impact on faculty wellness
- Desired trajectory for remote work following the pandemic

# METHODS

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Following Survey 1,

1. Educational tools were provided to remote faculty to improve teleconferencing techniques for remote readout. Remote faculty were encouraged to:
  - Screen share
  - Edit report on shared screen
  - Remain in teleconferencing platform throughout the day
2. Teleconferencing was made standard for all remote readouts.

The same group of trainees and faculty was re-surveyed with the same questions in **April 2021** (“Survey 2”) to assess for improvement.

# RESULTS: Educational Impact

## Survey 1



## Survey 2



65% (n=16/31) of trainees reported improved teleconferencing techniques in Survey 2

- 51% (n= 20/39) of all trainees reported negative impact, greatest among lower level residents (p<0.001)

- 30% (n=14/47) of faculty reported a negative impact

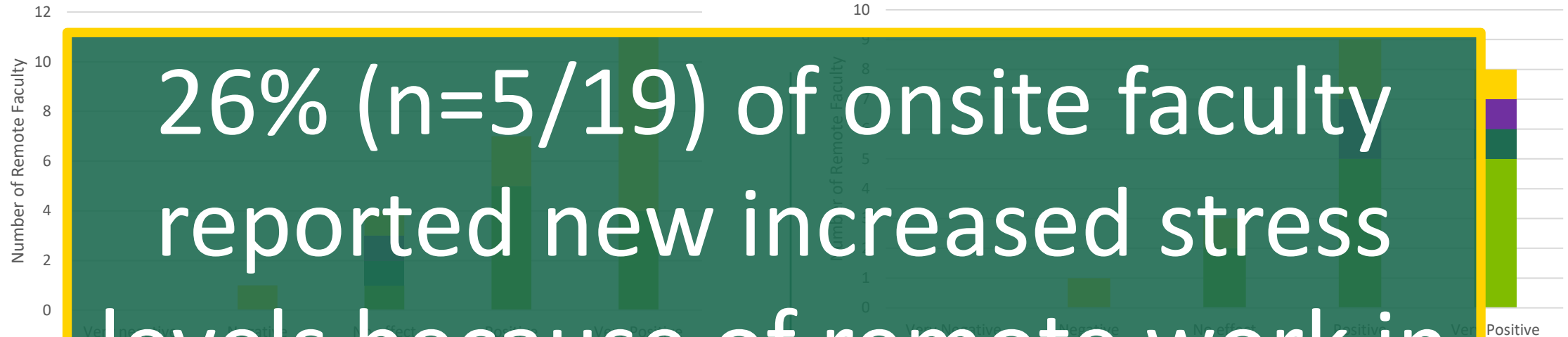
- 52% (n= 16/31) of all trainees reported negative impact, still greatest among lower level residents (p<0.001)

- 53% (n=21/40) of faculty, most of whom were remote, reported negative impact

# RESULTS: Faculty Wellness

## Survey 1

## Survey 2



26% (n=5/19) of onsite faculty reported new increased stress levels because of remote work in Survey 2

- 78% (n=18/23) of remote faculty reported improved wellness
- 81% (n=17/21) of remote faculty reported improved wellness

- 88% (n=22/25) of remote faculty reported decreased stress levels

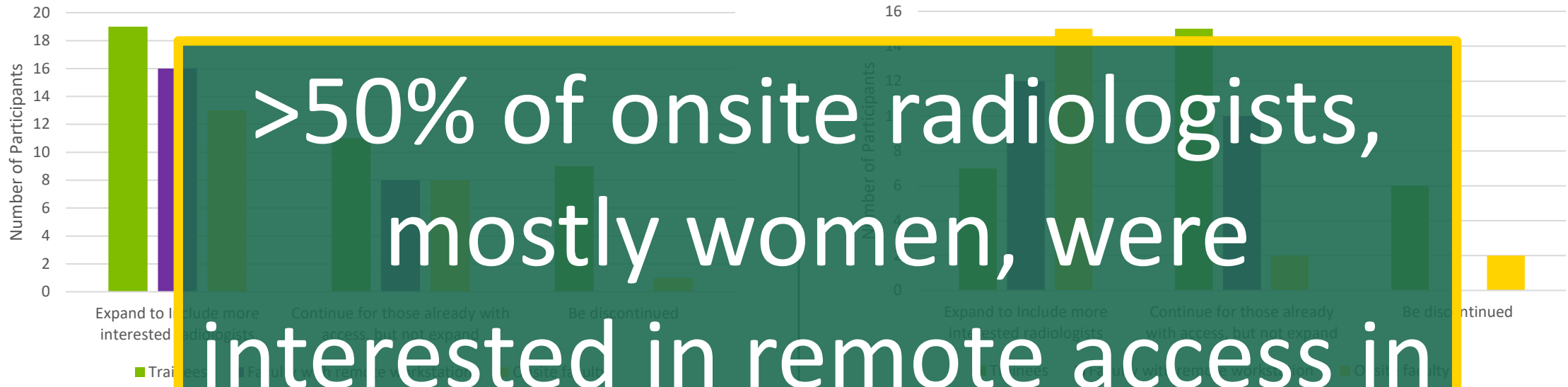


Wellness benefits were not significantly affected by how often the workstation was utilized

# RESULTS: Future Directions

## Survey 1

## Survey 2



>50% of onsite radiologists, mostly women, were interested in remote access in the future in Survey 2

- 77% (n=30/39) of trainees and 63% (n=29/46) of faculty voted to continue or expand remote work
- No remote faculty voted to discontinue access
- 79% (n=22/28) of trainees and 65% (n=27/41) of faculty voted to continue or expand remote work
- 77% (n=30/39) of trainees were interested in a remote work option in future career

# CONCLUSION

1. Optimized remote readouts with improved teleconferencing techniques **were insufficient** for education of lower level residents. In-person readouts should be prioritized for all residents, with particular emphasis on the R1 and R2 residents.
2. There are **wellness benefits** to access to a remote workstation regardless of how often it was used.
3. Increased **stress levels among onsite faculty** raised concern, and may be secondary to increased onsite responsibilities for procedures, resident education, telephone consultations, and study protocols.



# CONCLUSION

4. Despite aforementioned challenges, the majority in our academic department **voted to continue or expand remote work.**
5. A **hybrid model** for remote work should be considered in academic radiology.
  - Offers advantages in flexibility while maintaining fairness among shared in-person responsibilities
6. Remote faculty may best be used for:
  - List decompression with rising study volumes
  - Performing readouts for more independent, upper level trainees

## CONCLUSION

Wider distribution and sustainable integration of remote work may **improve** the overall **longevity** of a radiologist's career and may help **recruit** the next generation of **diverse** radiologists into academics.