

# Improving communication: The End of the Pager is Nigh

Natasha Akhlaq, MD; Santanu Chakraborty, MD

Department of Medical Imaging, University of Ottawa

Université d'Ottawa | University of Ottawa



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# Problem: Antiquated technology leading to one sided communication

Clinician requiring report clarification needs to page through the switch board resulting in 3 possible outcomes:

Radiologist is available and answers the page

Results in an interruption in workflow as radiologist likely reporting, in rounds, etc.

Radiologist is in a procedure

Radiologist answers page after procedure, clinician unavailable

Radiologist is not working that day

Page never gets answered

# Problem: Antiquated technology leading to one sided communication

- Clinicians can ultimately get frustrated as they often don't know the right person to page, relying on the reporting radiologist who may or may not be available to answer pages at the time
- Results in one-sided communication and lack of closed loop communication
- Clinicians may in future avoid asking for report clarifications leading to adverse patient outcomes
- Lack of feedback mechanism to analyze commonly asked questions and clarifications on reports to improve practice

# Proposed Solution

Consolidated email at the end of each report

- Easier for clinicians to use vs paging
- Can fax (scanned to email) if no secure email
- Managed by admin

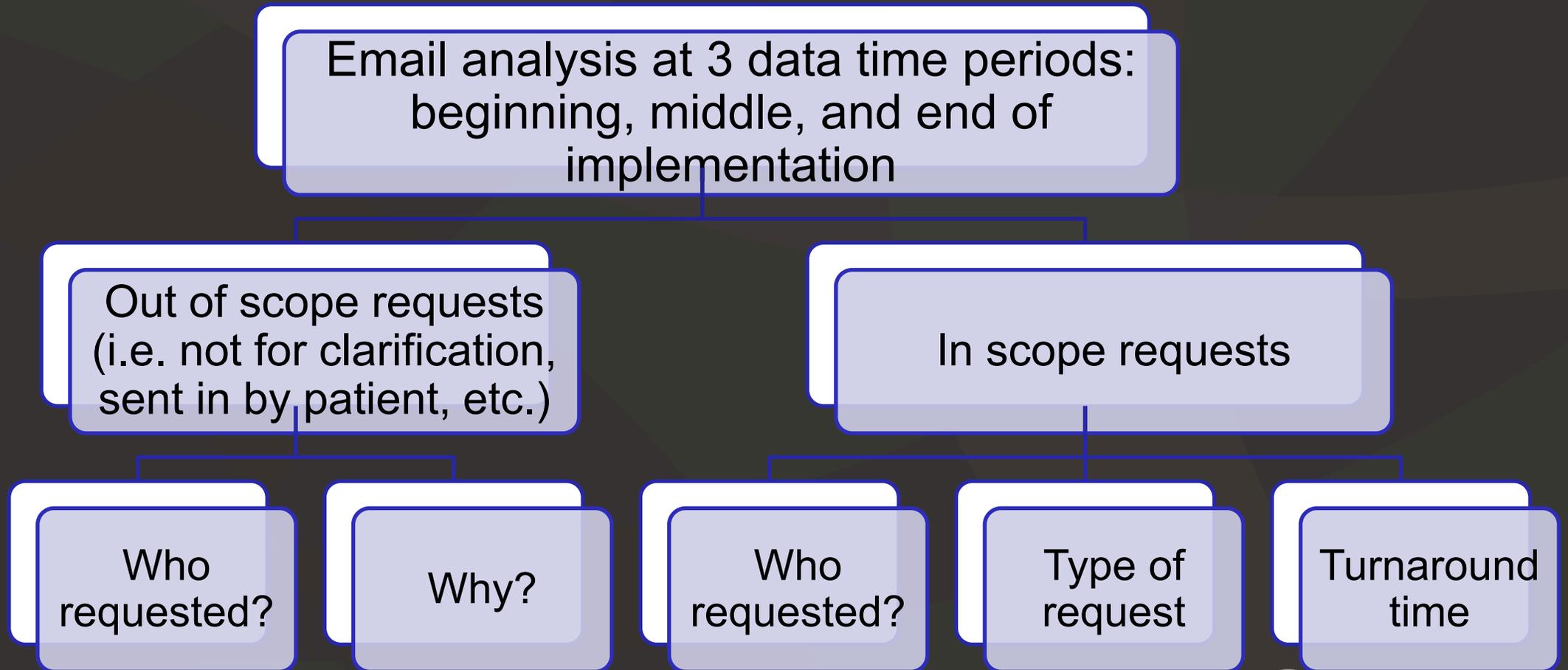
Emails forwarded to appropriate radiologists

- No disruption to work flow
- Radiologist can look at once per day and take the time to calmly answer questions

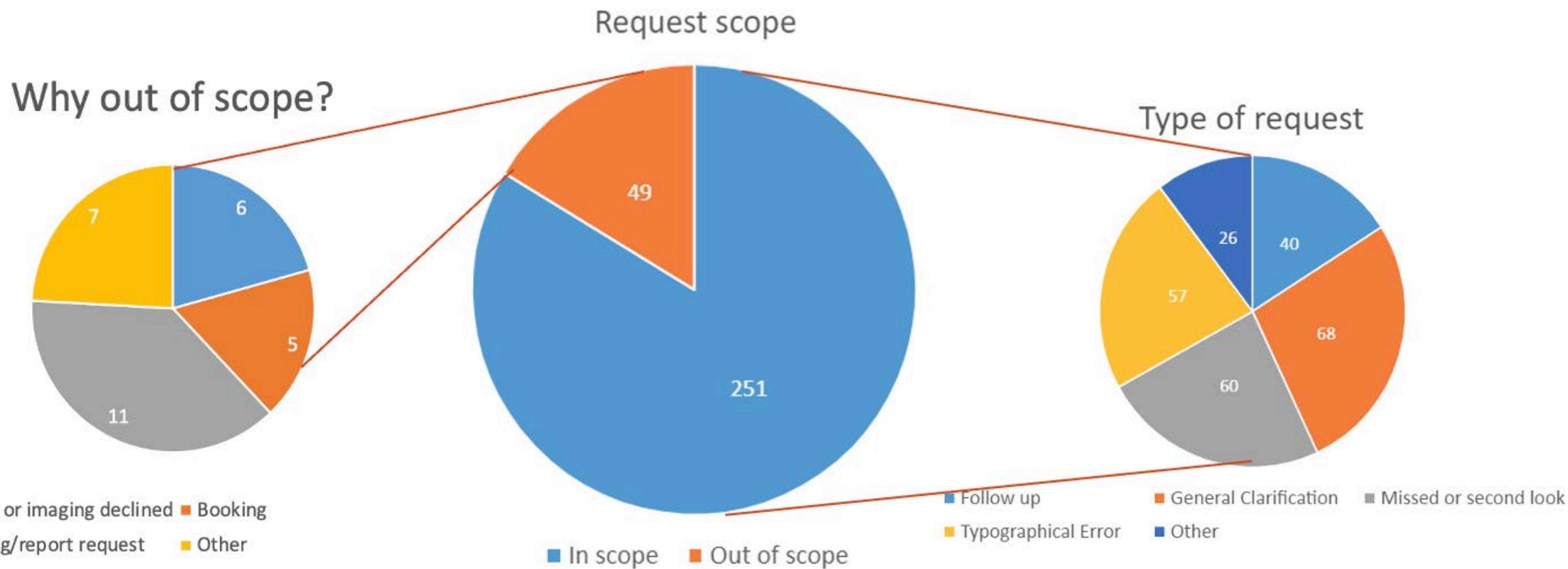
Response or addendum

- Response directly to email or via issued addendum
- Follow up by admin to ensure question answered

# Analysis Methods



# Results



# Results

	Beginning	Middle	End
Unknown response (/100)	28	36	20
Average turnaround time (excluding no responses)	3 days	4 days	6 days
Median	1 day	1 day	4 days
IQR	4 days	5 days	8 days

- Between the middle and end points, follow up protocol implemented to ensure response (closed loop communication)
- Average turnaround time increased, however significant variability with outliers skewing data



# Conclusion

- Increasing communication:
  - No data for the number of pages prior to implementation and if pages were answered
- Flow disruption:
  - No data but anecdotally less interruptions for non-urgent issues
- Improving closed loop communication:
  - Still a high number of cases with unknown responses
  - May have been resolved (i.e. an addendum issued) but no email communication
- Turnaround time:
  - Significant room for improvement
  - Radiologist to whom the email is directed to may be out of office without an automated email response leading to delays in redirection
- Common requests for clarification helping change reporting practice



# Going forward

## Short Term

- Using available new technology such as secure internal chat functions to avoid one sided communication
- Updated form included in automated response email to decrease administrative burden and allow for analysis

## Long Term

- Multi-facility EMR to ensure all healthcare team members have access to the same information and can request clarification easily via a secure method
- Inclusion of patients in communication methods
- Destroy the pager!

New form



**Report Clarification**

TOH Diagnostic Imaging Department

\* Required

\* This form will record your name, please fill your name.

1. Your full name (last, first) \*

2. Is this email address secure for confidential patient information? \*

Yes

No

3. If you answered no, please provide an alternate method of contacting you (i.e. fax or phone number): \*

4. What is your role in the patient's care? \*

Physician

Nurse

Other healthcare worker

Patient or patient family

Other

5. Patient full name (last, first) \*

6. Patient date of birth: \*

Format: M/d/yyyy

7. Patient MRN (if applicable)

The value must be a number

8. Patient Health Care Number:

9. Type of study:

X ray

CT

MRI

Ultrasound

Other

10. Date of study:

Format: M/d/yyyy

11. Reporting radiologist (if known):

12. What is your question for clarification?

# Thank you

- Email: [nakhlaq@toh.ca](mailto:nakhlaq@toh.ca)
- Thank you to Dr. Chakraborty, Amanda Barqueiro, and Lauren Schaffhauser