Improving communication: The End of the Pager is Nigh

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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:

1. Radiologist is available and answers the page
   - Results in an interruption in workflow as radiologist likely reporting, in rounds, etc.

2. Radiologist is in a procedure
   - Radiologist answers page after procedure, clinician unavailable

3. 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

Email analysis at 3 data time periods: beginning, middle, and end of implementation

Out of scope requests (i.e. not for clarification, sent in by patient, etc.)
- Who requested?
- Why?

In scope requests
- Who requested?
- Type of request
- Turnaround time
Results

Why out of scope?

- Biopsy or imaging declined
- Booking
- Imaging/report request
- Other

Type of request

- General Clarification
- Missed or second look
- Typographical Error
- Follow up
- Other

In scope: 202
Out of scope: 49

Total requests: 251
Results

<table>
<thead>
<tr>
<th></th>
<th>Beginning</th>
<th>Middle</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown response (/100)</td>
<td>28</td>
<td>36</td>
<td>20</td>
</tr>
<tr>
<td>Average turnaround time (excluding no responses)</td>
<td>3 days</td>
<td>4 days</td>
<td>6 days</td>
</tr>
<tr>
<td>Median</td>
<td>1 day</td>
<td>1 day</td>
<td>4 days</td>
</tr>
<tr>
<td>IQR</td>
<td>4 days</td>
<td>5 days</td>
<td>8 days</td>
</tr>
</tbody>
</table>

- 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!
Thank you

- Email: nakhlaq@toh.ca
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