Routines Are Meant To Be Broken: Non-Routine Communication Standard Compliance at a Single Institution
Authors

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The presenter and authors do not have any financial conflict of interests regarding the context of this presentation.
Purpose

To assess the proportion of radiologic examinations at our institution necessitating non-routine communication as well as to evaluate the compliance of our radiology department in providing non-routine communication in these scenarios we deemed necessary.
Background

• Effective communication is a critical component of diagnostic imaging

• Quality patient care is dependent upon conveying study results in a timely fashion to those responsible for treatment decisions

• An effective method of communication should:
  • Promote optimal patient care and support the health care provider
  • Be tailored to satisfy the need for timeliness
  • Minimize the risk of communication errors

• Communication of information is only as effective as the system that conveys the information
Materials & Methods

- Single center retrospective study
- 2374 total imaging reports reviewed between 7 teams (5 per team) of staff radiologists and residents
- Teams reviewed final reports from the perspective of the ordering physician
- Categorized reports into three categories:
  - Non-routine communication not necessary, non-routine communication necessary and was provided, non-routine communication necessary but not provided.
- Imaging categories:
  - Plain radiographs, mammography, MRI, Ultrasound, CT
## Results

<table>
<thead>
<tr>
<th></th>
<th>Positive and unexpected – non-routine communication performed</th>
<th>Positive and unexpected – non-routine communication NOT performed</th>
<th>Non-routine communication not needed</th>
<th>% Needed extra non-routine communication</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain radiographs</td>
<td>14</td>
<td>12</td>
<td>501</td>
<td>5%</td>
<td>54%</td>
</tr>
<tr>
<td>Mammography</td>
<td>8</td>
<td>0</td>
<td>447</td>
<td>1.7%</td>
<td>100%</td>
</tr>
<tr>
<td>MRI</td>
<td>43</td>
<td>19</td>
<td>447</td>
<td>12%</td>
<td>69%</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>11</td>
<td>9</td>
<td>425</td>
<td>4.5%</td>
<td>55%</td>
</tr>
<tr>
<td>CT</td>
<td>31</td>
<td>24</td>
<td>383</td>
<td>13%</td>
<td>56%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>107</strong></td>
<td><strong>64</strong></td>
<td><strong>2,203</strong></td>
<td><strong>7%</strong></td>
<td><strong>63%</strong></td>
</tr>
</tbody>
</table>
Results

• In total, non-routine communication was *necessary* in 7% of the examinations

  • Most common in CT exams (13%) and least common in mammography (1.7%)

• In situations in which non-routine communication was deemed necessary, non-routine communication was only performed in 63% of cases

  • 54% plain radiographs, 55% ultrasounds, 56% CTs
Discussion

• While our diagnostic imaging department stresses the importance of communication and quality improvement measures, we only demonstrated a 63% compliance rate with non-routine communication in situations in which it was deemed necessary due to unexpected findings deemed potentially pernicious.

• This rate could be falsely low due to failure to document communication.
  • Documentation preserves a history for the purpose of substantiating certain findings or events and should be included in all non-routine communications.
Discussion

• We plan on implementing Phase II of this trial in the near future which will consist of:

  • Reviewing Phase I data
  • Developing methods to increase compliance with non-routine communication policy
    • Email reminders, presentation at our monthly difficult case conferences, recently implemented “supplemental communication” tool in our Powerscribe program
  • Re-measuring compliance and comparing data
Conclusion

- Non-routine communication of unexpected or emergent findings are of paramount importance for appropriate and timely management
- Interpreting physicians should document all non-routine communications
- Although unexpected imaging findings of which are potentially deleterious to patient health is not infrequent, failure to communicate these findings unfortunately occurs in a significant proportion of cases
Thank you!

Any questions?
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