Anatomic Pathology Department: A Solution to JCAHO and ACGME Mandates for Optimizing Patient “Handoffs”

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BACKGROUND

• Transfer of patient care from one provider to another carries a risk for introducing error, delay, or suboptimal quality of care. These risks are compounded in a training setting where resident-physicians rotate frequently between different patient care services.

• ACGME and JCAHO have recently mandated hospitals to enact patient care transfer procedures that incorporate both verbal and written communication between the transferring and the receiving physician.

• Preliminary data from our program showed we were not meeting the aforementioned mandates.

• Preliminary data from 2010-2011 academic year showed only 8% of trainees were compliant for 90-100% of transitions, while a third of trainees were never compliant over a 10 month period of time.

• We developed a web-based, automated tracking system to facilitate patient handoffs in a multi-site, multi-rotation, academic anatomic pathology department.

METHODS

I. Web-based handoff portal

• The system is a HIPAA compliant web-based handoff portal that tracks all incomplete cases on the last working day of each month in our training program’s 3 hospitals, including a tertiary care hospital (UCSF), a county hospital (SFGH) and a Veteran’s Administration hospital (VA).

• Data fields in portal include:
  - Rotation
  - Case number
  - Case status
  - Accessioned
  - Grossed
  - To Do
  - Pending
  - Complicated gross
  - Final complete
  - Nothing to do
  - Free text area

• Automated data upload from CoPath was programmed at the tertiary care hospital.

• Manual data entry by the outgoing resident occurred at the other hospitals.

Figure 1. Screen shots of handoff website.

A) Home screen after login; portal to select method of handoff: no hand off, manual entry, or CoPath upload.

B) home screen after login; portal to select method of handoff: no hand off, manual entry, or CoPath upload. Also shows number of pending cases at the top of the screen. C) Individual case entry screen for manual input or editing from upload. Dropdown menus facilitate easy entry. Free text used to detail pending issues on cases, which can be automatically populated from CoPath. C) Upload sort list. Allows residents to prioritize cases on their handoff list and remove cases which are complete and sent to the attending for signout. D) Example of final, prioritized handoff list. Each case can be opened to see further details if needed.

RESULTS

II. Handoff process

On the last working day of each rotation:

Outgoing resident
1. Changes resident name in CoPath to incoming resident.
2. Logs onto portal to input/edit data on incomplete cases.
3. Physically transfers incomplete cases (slides) to incoming resident

Incoming resident
1. Logs onto portal to review cases being received in transfer.

Both residents
1. Arrange verbal discussion of status of each incomplete case.
2. Outgoing resident uses portal checklist to document verbal discussion.

III. Implementation

• A standard operating procedure was established.

• An initial training session was given.

• Monthly email reminders were sent out.

• Modifications to the procedure were clarified by email.

IV. Evaluation of compliance

• Compliance was assessed by whether individual trainees completed a handoff on the portal with both written and verbal documentation.

• Percent compliance was tracked monthly and sub-categorized according to residents, fellows, and total trainees.

• Non-compliant trainees were contacted via email regarding the necessity of this procedure.

Table 1. Individual handoff data, highlighting various forms of non-compliance, 10-month review

<table>
<thead>
<tr>
<th>Category</th>
<th>Residents (n=19)</th>
<th>Fellows (n=9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of handoffs</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Percent complete</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Non-handoffs</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>-NH</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>NH + No handoff needed</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Number of cases verbally discussed</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>Number of cases uploaded</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Figure 2. Percent total residents & fellows completing a verbal & written handoff

Figure 3. Percent total residents & fellows completing a verbal & written handoff

CONCLUSIONS

• A web-based tracking system can facilitate transfer of patient care between residents at the end of rotations.

• Although automated data entry by linkage to the existing pathology information system reduces labor on residents, the handoff itself represents a system and culture change which may not be as readily adopted by senior trainees.

• Implementing a new system requires frequent analysis. Using cycles of PDCA (Plan-do-check-act) are needed to ensure continual improvement and success of pilot program.

FUTURE DIRECTIONS

• In order to assure quality patient care, automated reminder emails to residents/fellows and notification of faculty members if residents are non-compliant is being pursued.

• Further study into benefits for turnaround time and quality assurance are needed.