Standardized Reporting in Pancreatic Protocol CT: Implementation across 3 community hospitals

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Standardized Reporting in Pancreatic Protocol CT: Implementation across 3 community hospitals

Jacob Miller MD, James Banks MD, Kevin Carr MD, and Nisha Mani MD | HCA

Introduction and Background

- Pancreatic adenocarcinoma is the fourth most common cause of cancer-related death in the United States. Early diagnosis of resectable disease provides the greatest chance for effective therapy. 1
- The National Comprehensive Cancer Network (NCNN), Society of Abdominal Radiology, and the American Pancreatic Association have published guidelines for imaging practices and reporting practices that call for the use of standardized reporting in pancreatic protocol CT. 1,2
- Utilization of standardized reporting has been shown to change treatment decisions in roughly 1/3 of patients by providing complete and pertinent information regarding tumor resectability and disease extent. 3
- Three community hospitals used three different pancreatic protocols for the evaluation of pancreatic masses.
- All hospitals were served by the same 23 radiologists and diagnostic radiology residency.
- No standardized reporting template existed before implementation of pancreatic protocol reporting template.
- To the best of the author’s knowledge, no studies have been performed which have examined practitioner satisfaction with standardized reporting templates for pancreatic protocol CT in the community care center.

Aim

“Our goal is to improve baseline practitioner satisfaction with imaging and reporting practices (5.1 and 5/10, respectively) and decrease baseline “time-to-biopsy” (5 days) by 12 months to 10/10, 10/10, and 3 days by protocol standardization and implementation of standardized reporting.”

Leaders: Jacob Miller, MD and Kevin Carr, MD
Faculty Mentor: Nisha Mani, MD
Project Coach: James Banks, MD
Radiology CT Coordinators: Gloria, Cameron, and Kristin

Methods

PLAN-DO-STUDY-ACT

Baseline characteristics

<table>
<thead>
<tr>
<th>Overall comprehensiveness (n=36)</th>
<th>60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphologic Evaluation</td>
<td>84%</td>
</tr>
<tr>
<td>Vascular evaluation</td>
<td>51%</td>
</tr>
<tr>
<td>Extrapancreatic evaluation</td>
<td>74%</td>
</tr>
<tr>
<td>Practitioner satisfaction (n=6)</td>
<td>Imaging protocol</td>
</tr>
<tr>
<td></td>
<td>Reporting practices</td>
</tr>
<tr>
<td>Time-to-biopsy (n=12)</td>
<td>5 days</td>
</tr>
</tbody>
</table>

Conclusion

- Project is on-going as baseline satisfaction with imaging and reporting practices established opportunity for improvement.
- Uncommon dictation system and imaging archive, technologist and radiologist vigilance, and institutional barriers required unique solutions. Some inefficiencies were mitigated, but not eliminated. Turn-around time was likely increased.
- Even with reporting checklist, “comprehensive” reporting requires standardized imaging practices, strict protocol adherence, frequent educational reinforcement, and strong cooperation between radiologists, hospital administrators, technologists, and practitioners.
- Additional benefits of this project include improved report accessibility for future analysis of management decisions, hospital stay, surgical outcomes, and disease-free survival.

References


Quarterly report comprehensiveness

Axial CT Pancreas protocol in portal venous phase with 4 centimeter pancreatic head mass (straight arrow) demonstrating superior mesenteric vein encasement and narrowing (white arrow). The abdominal aorta (blue star) and superior mesenteric artery (curved arrow) are uninvolved.