Improving the Tracking and Management of Actionable and Incidental Imaging Findings

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Cleveland Clinic
At Our Institution

~50,000
Actionable/incidental findings expected annually

~1/3
May not get appropriate follow up

8
Documented serious safety events over 5 years
Project Goals

Develop and implement technological tools and processes to ensure appropriate and timely management of patients with actionable and incidental imaging findings.
Multi-Pronged Information Cascade

ACTIONABLE RESULT: FOLLOW-UP
Acuity: [Actionable]
Findings: [Digestive Tract Routing Code: GI_1]
Recommendation: [MRI PANCREAS/BILIARY W/O IV CONTRAST]
Time Frame: 3-6 months
COMMUNICATION: Results will be communicated with the ordering provider via Epic staff message or phone message by Imaging Support Services within 2 business days of report finalization.
Information Cascade
### Result Tracking

#### Recommendations Needing Follow-up - CCHS ACTIONABLE FINDINGS OPEN RECOMMENDATIONS - Total Count: 3033 - Patients: 2622

<table>
<thead>
<tr>
<th>Finding/Routing Code</th>
<th>Due Date</th>
<th>Days Overdue</th>
<th>Ag</th>
<th>Par</th>
<th>MI</th>
<th>Procedure</th>
<th>Recommendation</th>
<th>Re-Order Linked?</th>
<th>Ord Comp?</th>
<th>Appt Linked?</th>
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<tbody>
<tr>
<td>Thoracic-Lung nodules Routing code: RI_1</td>
<td>09/29/2021</td>
<td>6. H. 7. CT CHEST W IVCON PE</td>
<td>Additional evaluation as described in the impression in 6-12 months.</td>
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<td>Fleischner Criteria: Solid 6-8 mm (solitary nodule)</td>
<td>09/30/2021</td>
<td>4. P. 8. CT CHEST W IVCON</td>
<td>CT Chest WO IVCON in 6-12 months.</td>
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<td>5. M. 2. CT CHEST W IVCON PE</td>
<td>CT ADRENAL WO IVCON MASS EVALUATION in 6-12 months.</td>
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<td>Liver Routing code: LV_1</td>
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<td>4. J. 8. MRI LIVER WO IVCON</td>
<td>MRI LIVER WO IVCON (add Evist in comments) in 6-12 mont...</td>
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Status of Imaging Recommendations

- 12/5/2020 Go-Live Date
- 37,674 Recommendations
- 21,097 (56%) Recommendations addressed
Analysis

Findings By Routing Code

- 5 service line report routing codes comprise ~85% of all flagged findings

Distribution by Modality Completed Exam

- CT
- MR
- US
- XR
- NM
Conclusions

• Initiative serves as a model for strong multi-institute collaboration
• Imaging acuity rating based templates drive downstream workflows
• Multi-pronged enhanced Epic notifications alert providers and patients
• Layered safety framework and time based criteria drives high reliability
References


