Deep Dive into *C. difficile*:

A tool to assess root causes of healthcare-onset *C. difficile* and the impact of culturing practices

Antibiotic and Laboratory Stewardship are primary drivers of healthcare-onset *C. difficile*. This tool is intended to guide analysis of culturing practices, antibiotic prescribing practices, risk factors and potential gaps.

<table>
<thead>
<tr>
<th>Patient Name:</th>
<th>DOB:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Record:</td>
<td>Date and time of admission: / /</td>
</tr>
</tbody>
</table>

From: □ home □ another hospital    SNF/LTAC/NH  
Was patient discharged from our facility in the last 30 days? □ Yes (date: ) □ No  
Any previous history of a positive *C. difficile* stool result? □ Yes (date: ) □ No  

Our clinical lab uses the following test(s) to screen stool for *C. difficile*:
- □ NAAT (stand-alone)  
- □ NAAT plus toxin  
- □ GDH plus toxin  
- □ GDH plus toxin, arbitrated by NAAT  
- □ other _____________________________________________________________________

Date and time CDI stool test was ordered:  
Where was patient at the time the CDI stool test was ordered? □ Emergency Department  
□ In-patient unit:

Date and time CDI stool specimen was obtained:  
Where was patient at the time the specimen was obtained? □ Emergency Department  
□ In-patient unit:

Did patient have 3 or more unexpected or unexplained liquid or unformed stools in the 24 hours prior to having the stool specimen collection? □ Yes □ No*  
*If ‘No’, criteria for testing not met. Investigate further to determine why specimen was ordered/submitted:

Did the patient have any of these symptoms at the time the specimen was collected? (check all that apply) □ abdominal cramping  
□ elevated WBC’s  
□ fever >100.4F/38F

Did the patient have any of these risk factors? (check all that apply)  
□ Antibiotics in the last 2 months  
   Name/Dose/Duration/Indication:  
   Was indication for antibiotic necessity re-evaluated after 48 hours? □ yes □ no  
□ Proton pump inhibitor (e.g. Protonix) daily for at least 3 days in the week prior to diagnosis? □ yes □ no
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<th>Were there other possible reasons the patient developed hospital-onset diarrhea? (check all that apply)</th>
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<tbody>
<tr>
<td>☐ laxative  ☐ enema  Note: if ‘yes’ to laxative or enema, CDI unlikely</td>
</tr>
<tr>
<td>☐ lactulose  ☐ tube feeding  ☐ IV contrast  Note: if ‘yes’, CDI indeterminate</td>
</tr>
<tr>
<td>☐ other:</td>
</tr>
</tbody>
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<th>Was the patient who occupied the room prior to this patient known to have CDI?</th>
</tr>
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<tbody>
<tr>
<td>☐ yes  If yes, was room terminally cleaned?  ☐ yes  ☐ no  ☐ unknown</td>
</tr>
<tr>
<td>☐ no, previous patient was not known to have CDI</td>
</tr>
<tr>
<td>☐ unable to determine who previously occupied room</td>
</tr>
</tbody>
</table>

Conclusions (check all that apply)

- ☐ This is a true case of healthcare associated CDI
- ☐ This patient had identified risk factors for CDI
- ☐ This patient had no identified risk factors for CDI
- ☐ This patient tested + for *C. difficile*, however did not meet the criteria for stool testing so it is possible this patient is colonized and not infected
- ☐ This patient had a history of testing positive for *C. difficile* therefore this recent test may be reflective of a history of *C. difficile* rather than a new infection
- ☐ We need to evaluate our specimen collection and processing practices
- ☐ The time from ‘test ordered’ to ‘specimen submitted’ exceeded 24 hours (consider implementing an ‘automatic stop’ order if stool not submitted in this time frame)
- ☐ Environmental cleaning practices need to be reassessed
- ☐ OTHER (describe)

Next Steps/Action Plan:

- ☐ Discuss identified gaps with care providers (e.g. no tests for cure, no tests for patients with a low pre-test probability of having CDI), clinical lab (e.g. rejecting specimens that do not conform to the shape of the container, pharmacy (e.g. PPI/antibiotic practices), environmental service (e.g. enhanced cleaning practices)
- ☐ Refer case to peer review/quality committee/patient care team, clinical lab, pharmacy, etc.
- ☐ OTHER (describe)