Utility of Symptoms-Based Admission Diagnosis in Observation-Level Patients
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With changes in healthcare law and expansion of accountable care organizations, there will be increasing pressure to tighten the spigot for borderline admissions. The emergency department physician, practicing at the interface between in-patient and out-patient medicine, will need increasing expertise in deciding whom it is safe to send home. Here, it is sought to determine if symptom-based admission diagnosis is sufficient for safe, quality care of admitted observation (OBS) patients.

Observation patients represent a cohort of clinically stable patients expected to stay less than 48 hours. Some OBS patients are admitted because of uncertainty of diagnosis, often receiving symptom-based rather than specific pathophysiologic diagnosis.

Study Design

- Retrospective chart review of 367 consecutive OBS admissions during 2 pre-COVID-19 pandemic months
- Categorized as symptom-based vs pathophysiologic diagnosis
- Comparison of symptom-based admitting diagnosis to discharge diagnosis
- Outcomes assessed for significant change in diagnosis or symptom-based diagnosis not suggestive of final diagnosis

Results

Figure 1: Most significant symptom-based diagnoses

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest pain</td>
<td>80</td>
</tr>
<tr>
<td>Syncope/Dizziness</td>
<td>15</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>12</td>
</tr>
</tbody>
</table>

Figure 2: Percentage of changes in symptom-based diagnoses

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest pain</td>
<td>33%</td>
</tr>
<tr>
<td>Syncope/Dizziness</td>
<td>17%</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>8%</td>
</tr>
</tbody>
</table>

Outcomes: 107 symptom-based admissions

- 80 chest pain patients, 6 diagnosis changes:
  - 1 NSTEMI
  - 1 pneumonia
  - 5 cocaine-related chest pain
- 15 dizziness/syncope, 5 diagnosis changes:
  - 5 substance use
- 12 abdominal pain, 2 diagnosis changes:
  - 1 congestive heart failure
  - 1 pneumonia

No mortality or significant morbidities related to symptom-based diagnosis

92 patients with <2 days length of stay

Conclusion

- Symptom-based diagnostic impressions are useful and safe for OBS patients.
- In some scenarios, substance use creates uncertainty in the final diagnosis.
- Abdominal pain impression more likely to have final diagnosis not suggested by admitting symptom.

Future Directions

With increasing emphasis on cost-effective use of resources, delineation of criteria for OBS admissions will be important in terms of Pathophysiologic vs Symptom-based admitting diagnoses.

References


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