How accurate are we at predicting Estimated Date for Discharge?

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AIM

We aim to determine the accuracy of estimating the date for discharge (EDD) during the Consultant post-take ward round (PTWR) for medically admitted patients at Aintree University Hospital. Our secondary aim is to investigate whether age, sex or presenting symptom is associated with an inaccurate EDD.

METHOD

Data was collected from case-notes for every 5th consecutive patient, admitted with an overnight stay, from the period 1st to 7th September 2015. The following assumptions were made:

- If the PTWR time was not recorded, then it was assumed to have taken place at 10:00am;
- If the patient was clerked after 10:00am and post-taked the same day, then the PTWR time was assumed to be the same as the clerking time;
- The time for the EDD was 12:00pm.

Accuracy was calculated by subtracting the EDD from the time of discharge or time declared medically fit.

RESULTS

77 notes were examined, of which only 55 (71.4%) had an EDD recorded on the PTWR.

22 (40.0%) of cases were discharged on the EDD and a further 7 (12.7%) were discharged the following day. Overall 10 (18.2%) were discharged prior to the EDD and 16 (41.8%) were discharged after the EDD. (Graph)

The group characteristics, and the presenting complaint of cases discharged before or on the EDD and those discharged afterwards are displayed in the table.

<table>
<thead>
<tr>
<th></th>
<th>Discharged before or on the EDD</th>
<th>Discharged after EDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>Mean age (95% C.I.)</td>
<td>63.8 years (44.9 – 82.6 years)</td>
<td>65.8 years (56.9 – 74.6 years)</td>
</tr>
<tr>
<td>M:F ratio</td>
<td>1:1.9</td>
<td>1:1.1 (p-value = 0.406)</td>
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</tbody>
</table>

DISCUSSION

Our findings are comparable with other studies with one study finding the accuracy to be 29.5%\(^1\) and another study found that 55.2% were discharged on or before the EDD\(^2\). Overall there is little research to be found on the accuracy of EDD.

We did not achieve statistical significance in investigating our secondary aim.

Setting an EDD is seen as a priority to improve patient flow, however, Consultants can predict EDD with only 40% accuracy. Therefore, over reliance on the setting of an EDD may not result in improved patient flow.

There may be an inconsistency in clinicians interpretation of EDD. Some perceive the EDD as the date the patient no longer requires inpatient medical treatment; others perceive it as the date the patient leaves the hospital. Setting an accurate EDD is challenging therefore it might be time for more training and guidance in estimating the date of discharge.

REFERENCES