

A Comparison of MELD Score Calculation in Cirrhotics Between Medicine and Hepatology Clinic Visits

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BACKGROUND

- The Model for End-Stage Liver Disease (MELD) is a validated tool used to determine severity of liver disease.
- MELD is composed of serum creatinine, total bilirubin, INR, sodium and whether patient had recent dialysis.
- MELD score calculation is vital in accurately assessing the clinical status of a patient with cirrhosis, so as to determine whether they may require liver transplantation, a potentially life-saving intervention.
- We investigate whether MELD scores are being routinely calculated in patients with Cirrhosis seen at the Academic Internal Medicine Clinic (AIMC).

METHODS

- Medical records of patients seen at the AIMC were accessed via EPIC electronic medical record, with IRB approval obtained beforehand.
- 259 charts of patients with cirrhosis were accessed.
- Inclusion Criteria: Above 18 years old, seen at the AIMC, diagnosis of cirrhosis.
- MELD calculations were extracted from office visit notes from both AIMC and hepatology clinics for each patient.
- Average MELD scores were calculated and compared for all cirrhotics seen at either clinic.

RESULTS

- Out of a total of 259 patients with cirrhosis, 130 were seen by both the AIMC and hepatology clinics. 11 patients were seen only at the AIMC and not the hepatology clinic.
- All hepatology clinic notes had MELD scores calculated. 48 AIMC notes had MELD scores.
- The average MELD score of all patients seen at AIMC was 13.33.
- The average MELD score of all patients seen at hepatology clinic was 12.74.

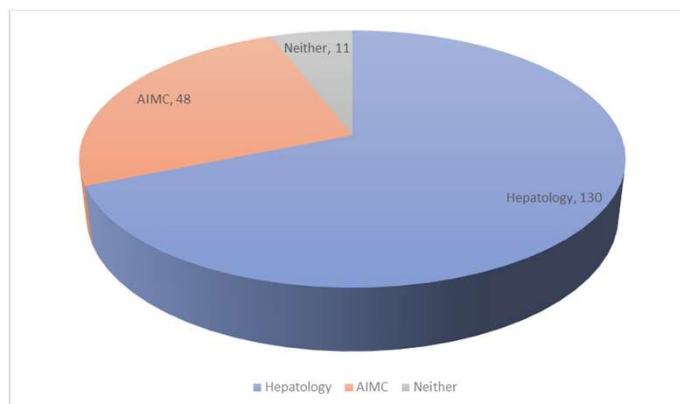


Figure 1 Differences in MELD Calculation Rates Among the Internal Medicine and Hepatology Clinics

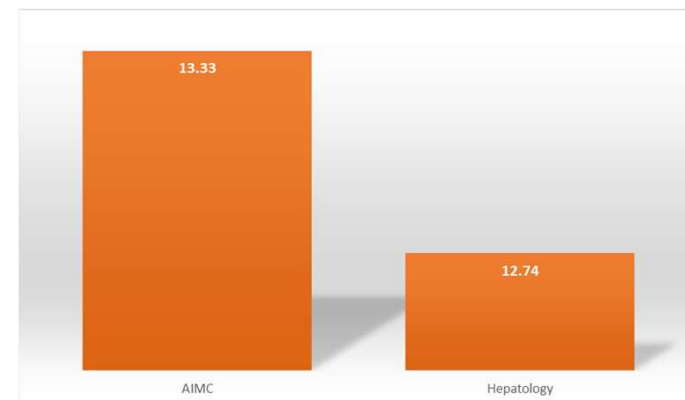


Figure 2 Average MELD Scores Across Both the Internal Medicine and Hepatology Clinics

CONCLUSIONS

- Less than half of patients seen at the AIMC had calculated MELD scores.
- MELD score calculation must be consistently done for each patient with cirrhosis to accurately assess their clinical status and disease severity.
- Study limitations include limited sample size.
- Documentation regarding patients with cirrhosis can be improved.
- Possible future interventions include addition of a prefilled template to automatically calculate MELD scores in patients with a predetermined diagnosis of Cirrhosis.