Increasing Utilization of the FIB-4 Score to Improve Appropriate NAFLD Consultation to the Orlando VA GI Service.

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Background

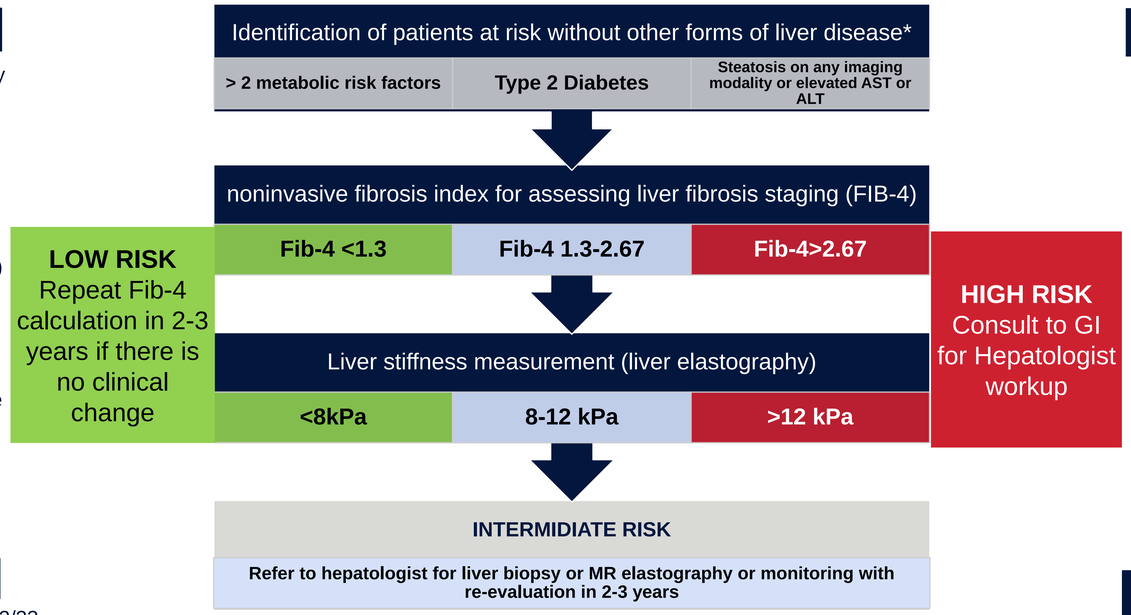
- Non-alcoholic fatty liver disease (NAFLD) is becoming increasingly common, affecting up to 33% of the population and approximately 75% of people with diabetes.
- NAFLD often presents asymptomatically, therefore optimal timing of treatment depends on accurate staging of fibrosis so risk factor screening is critical together with timely, evidence based and accessible management processes.
- To achieve this, the American Gastroenterology Association (AGA) developed a clinical care pathway providing guidelines for screening, diagnosis, and treatment of NAFLD that relay on the noninvasive fibrosis index for assess liver fibrosis staging, or the FIB-4 (Figure 1).
- Multiple studies have shown that a FIB-4 <1.3 can reliably exclude advanced fibrosis in patients with NAFLD, with a negative predictive value of more than 90%.
- At our institution, we noticed a large number of gastroenterology (GI) consults for NAFLD without appropriate workup based on the AGA's recommendation.

Aim

- Increase utilization of FIB-4 score for NAFLD consult to 30% by 1/2/23.
- Increase appropriate* consults for NAFLD to ORL Hepatology/GI services to 60% by 1/2/23. (* Age 36-64, Fib4 >1.3 and age more than 65, Fib 4 >2.0

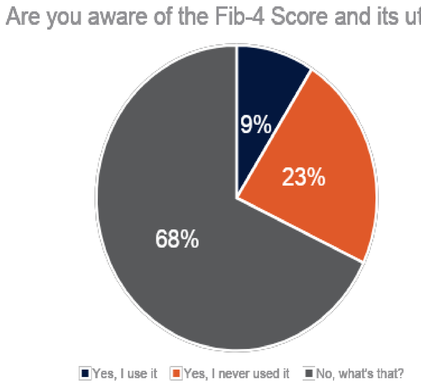
Methods

- We surveyed 48 Internal Medicine residents about their knowledge of the FIB-4 score to gain insight on possible areas to intervene.
- We conducted a retrospective chart review of all the GI/Hepatology referrals/consults that were placed from January 1, 2021 to November 16, 2021.
- All consults placed for suspected NAFLD (204/1644) were included.
- For each consult, we searched whether FIB-4 score was calculated, which provider placed the consult, and whether liver elastography was completed prior to consultation.



•**Figure 1:** Clinical care pathway for workup for suspected NAFLD adopted from Kanwal et al.

Results



- 12% consults were placed for suspected NAFLD (204/1644)
- 98% of the consults were placed by primary care (201/204)
- **None calculated FIB-4 score before placing a consult (0/204)**
- None had a liver elastography prior to consultation (0/204)
- **37% of consults were considered appropriate (76/204) based on above clinical pathway**

Discussion

- Currently, GI consults are being placed for further evaluation for suspected NAFLD with an underutilization of screening and risk stratification tools such as the FIB-4.
- This leads to increased cost and delays in care for patients that truly need referral to to GI.
- Our data suggests a general lack of knowledge of the AGA recommendation for the management of NAFLD.
- Next Steps: By educating all primary care physicians, resident physicians and advanced practice providers through grand rounds and residents didactics, changing the ordering menu for consults to include aspects of the clinical care pathway and appropriate pre-consultation workup, and flyers with QR codes to link to the FIB-4 calculation we hope to decrease the number of inappropriate GI consults.
- This in turn will empower primary care providers to begin the initial workup and ensure a fruitful initial encounter with GI if deemed necessary.
- The process for ordering liver elastography has also changed now to make it easier for primary care physicians to order this.
- This will increase patient satisfaction, decrease cost to the system and avoid delays in treatment when necessary.

Conclusion

- A large number of consults placed for GI at the Orlando VA for NAFLD evaluation, may be considered inappropriate if following the AGA's clinical care pathway.
- A lack of knowledge of non-invasive scoring systems that aid in risk stratifying patients may be a significant contributing factor.
- Our next step is to search for effective methods to engage primary care in increasing the use of FIB-4 score.

References

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