

The Mayo Clinic-Florida State University College of Medicine Healthy Liver Program: A collaborative liver cancer interception endeavor



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Background

- Metabolic-associated steatotic liver disease (MASLD) is rapidly rising in the U.S. affecting 1 in 3 people over age 40.
- MASLD is a clinically silent process, usually presenting in late stages in which irreversible damage or liver cancer is present.
- Early detection of MASLD in its reversible stage could reduce morbidity and mortality related to end-stage liver disease and liver cancer.
- Currently, there are no standardized methods of screening for MASLD in primary care

Aim

- Develop a novel collaboration between a tertiary and a primary care center to identify patients in resource-constrained settings who are at high risk of liver fibrosis and provide early intervention to reduce development of liver cancer.
- Pilot project: Feasibility of FibroScan® adoption and early detection of liver disease in the primary care setting.

Target Population

- Patients in the underserved primary care setting with metabolic associated risk factors including type 2 diabetes mellitus, obesity, and hyperlipidemia, as well as alcohol use, obstructive sleep apnea, and hepatitis B or C.
- Currently, the area served by FSU Primary Health (Leon County/Big Bend Area) has only one other FibroScan® in the community.

Methods

- Mayo Clinic donated a portable transient elastography machine (FibroScan® Mini+ 430, Echosens) to FSU Primary Health™.
- FSU Primary Health™
 Tallahassee clinicians received didactic and hands-on training in MASLD and FibroScan® use.
- Clinicians performed FibroScan® in patients deemed at risk for MASLD and triaged to local gastroenterology referral when disease was identified

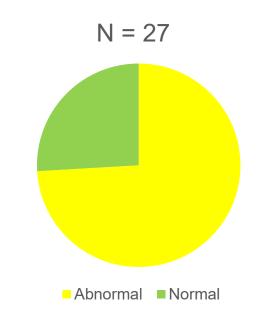
FibroScan® Mini+ 430

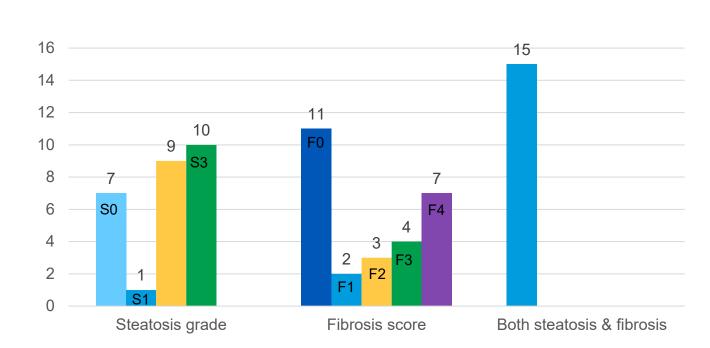




Results

 74% of patients scanned had abnormal results, including elevated steatosis scores, fibrosis scores, or both.





Conclusion

- FibroScan® screening in primary care is feasible.
- From June to August 2024, FibroScan® screening in one primary care practice has detected abnormal results in 74% of patients scanned, resulting in increased gastroenterology referrals.
- Screening at the primary care level can increase access and allow for earlier interventions in an at-risk, underserved population.
- FibroScan® has the potential to become an integral component of the primary care physician's toolkit, along with the blood pressure measuring cuff, stethoscope, and glucometer.
- Future directions:
 - Scale operations to other FSU COM campuses.
 - Program expansion to include research, health policy, industry support, and societal involvement.
 - Additional goals are promotion of lifestyle modifications, identification and targeting of social determinants of health, and long-term follow-up to assess for changes in degree of liver fibrosis.

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