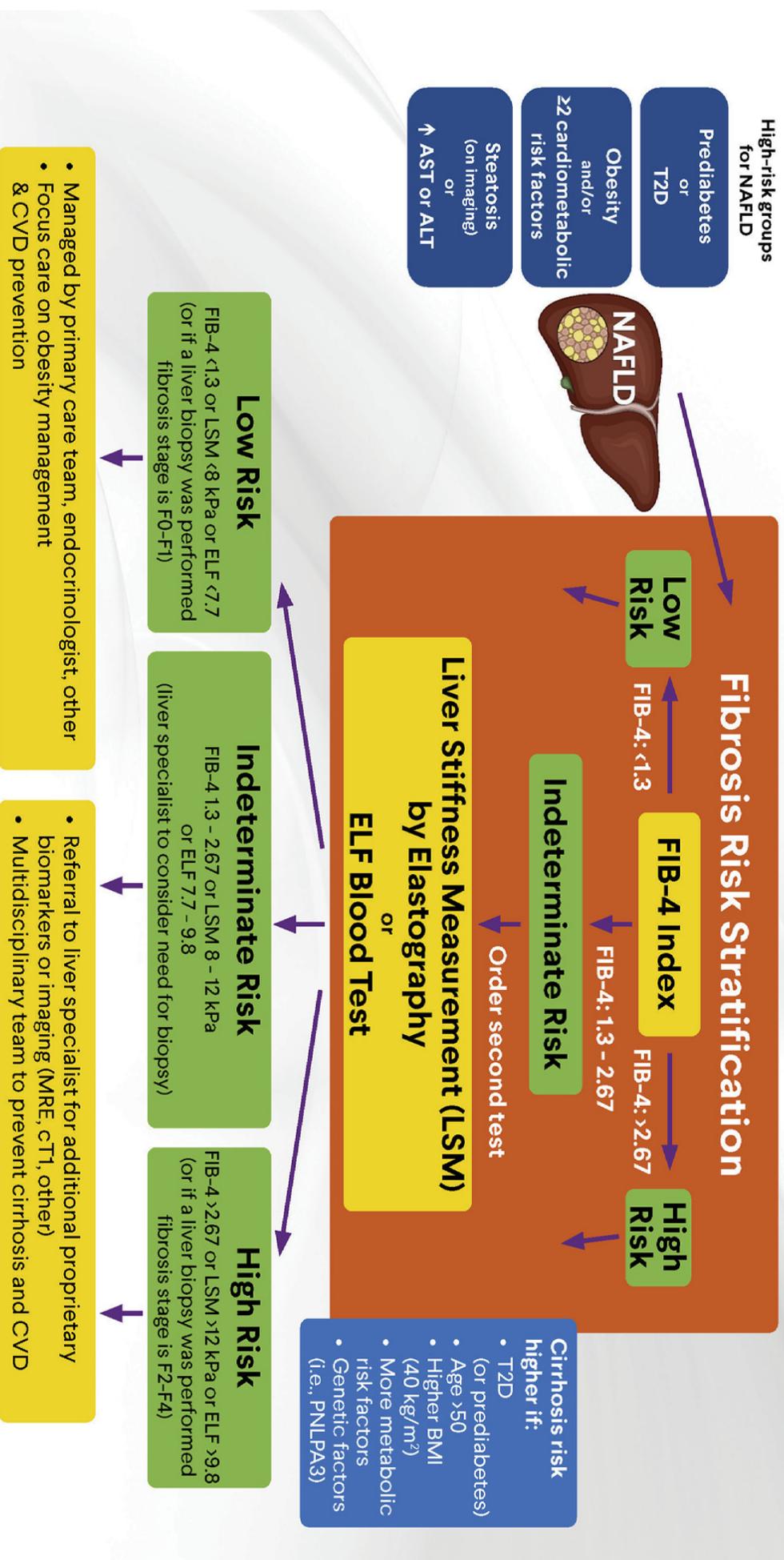


Footnotes: 1. Metabolic risk factors: central obesity, high triglycerides, low HDL cholesterol, hypertension, prediabetes, or insulin resistance. 2. For patients 65+, use FIB-4 < 2.0 as the lower cutoff. Higher cutoff does not change. 3. Other NITs derived from routine laboratories can be used instead of FIB-4. 4. Many online FIB-4 calculators are available such as <https://www.mdcalc.com/fibrosis-4-fib-4-index-liver-fibrosis> 5. Ultrasound acceptable if vibration-controlled transient elastography (VCTE, FibroScan[®]) is unavailable. Consider referral to hepatologist for patients with hepatic steatosis on ultrasound who are indeterminate or high risk based on FIB-4. 6. LSM values are for VCTE (FibroScan[®]). Other techniques such as bidimensional shear wave elastography or point shear wave elastography can also be used to measure LSM. Proprietary commercially available blood NITs may be considered for patients considered indeterminate or high risk based on FIB-4 or APRI, or where LSM unavailable. 7. Eddowes et al.³⁸ used 8.2 and 12.1 kPa as (rounded) cutoffs reported by Papatheodoridi et al.⁴¹

Figure 1. Screening for advanced fibrosis related to NAFLD/NASH.

Cirrhosis Prevention in NAFLD



Abbreviations: ALT = Alanine aminotransferase, AST = Aspartate aminotransferase, cT1 = Liver multiscan, CVD = Cardiovascular disease, ELF = Enhanced liver fibrosis test™, FIB-4 = Fibrosis-4 index, kPa = Kilopascals, LSM = Liver stiffness measurement, MRE = Magnetic resonance elastography, T2D = Type 2 diabetes mellitus
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 Algorithm Figure 2



Algorithm Fig. 2. Cirrhosis prevention in nonalcoholic fatty liver disease (NAFLD). Once the presence of NAFLD is established, fibrosis risk stratification is essential. The first test recommended is the FIB-4, which often allows separation of those at low risk versus those at high risk of liver fibrosis. However, a significant proportion of persons will fall in a “gray zone” of indeterminate risk that requires additional testing to decide referral to the liver specialist. The second test recommended is LSM or, if unavailable, an ELF blood test. This should determine the risk in most individuals. Persons with a low risk of cirrhosis should be managed in primary care and/or endocrinology clinics, while those with an indeterminate to high risk of liver fibrosis merit referral to the liver specialist and a multidisciplinary approach to management.