LifeWise
Health Plan of Washington

MEDICAL POLICY – 2.01.536

Noninvasive Tests for Hepatic Fibrosis

Ref. Policy: PA-101

Effective Date:	Dec. 1, 2024	RELATED MEDICAL POLICIES:
Last Revised:	Nov. 25, 2024	None
Replaces:	N/A	

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Introduction

Liver fibrosis is a process where healthy liver tissue is replaced by scar tissue from repeated injury or inflammation. It can be caused by diseases like hepatitis. The scar tissue causes stiffness in the liver and can lead to more serious liver disease. Certain noninvasive tests can be used to detect and monitor liver fibrosis. These include blood tests and imaging studies that use ultrasound and magnetic resonance imaging. This policy describes when noninvasive testing for liver fibrosis may be considered medically necessary.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria

Service	Medical Necessity
• **Enhanced Liver Fibrosis (ELF) Test**	**Enhanced Liver Fibrosis (ELF) Test and Fibro Test (FT) - Acti Test/HCV - Fibrosure may be considered medically necessary**

Service	Medical Necessity
• **Fibro Test (FT) - Acti Test/HCV- Fibrosure**	**for the detection and prognosis of liver fibrosis in persons with chronic liver diseases when the following criteria are met:** • To evaluate hepatic fibrosis in chronic hepatitis C individuals **OR** • To diagnose fibrosis in carriers of chronic hepatitis B virus **OR** • To evaluate hepatic fibrosis in co-infected HIV carriers **OR** • To provide access to new-generation non-interferon treatment for hepatitis **OR** • To evaluate fibrosis in individuals suffering from metabolic conditions (non-alcoholic fatty liver disease) and individuals who consume excess alcohol **Performance of Fibro Test (FT) - Acti Test/HCV- Fibrosure test more than twice per year or within 6 months following a liver biopsy or transient elastography is considered not medically necessary.** • The advice of a liver disease specialist should be sought for interpretation in chronic states in which the components of the test could be modified, such as chronic hemolysis, particularly in individuals with a cardiac valvular prosthesis; Gilbert disease; protease inhibitors used in HIV treatment, which can increase unconjugated bilirubin (Indinavir, Atazanavir); or gamma glutamyltransferase (GGT) and alanine aminotransferase (Ritonavir). **Fibro Test (FT) - Acti Test/HCV- Fibrosure is considered investigational for all other indications.** **Note:** See **Related Information** below for **Limitations**
Magnetic Resonance Elastography	**Magnetic resonance elastography may be considered medically necessary for non-alcoholic steatohepatitis (NASH), and hepatic fibrosis or cirrhosis is known or suspected.**

Service	Medical Necessity
	Magnetic resonance elastography is investigational for: • Distinguishing hepatic cirrhosis from non-cirrhosis in persons with hepatitis C or other chronic liver diseases • All other indications (e.g., prediction of ascites in persons with chronic liver disease)
Transient Elastography (TE) (e.g., FibroScan)	**Transient Elastography (TE) (e.g., FibroScan) may be considered medically necessary for the following indications:** • Initial assessment of fibrosis of individuals with a diagnosis with hepatitis C **OR** • Follow-up assessment of fibrosis of individuals with a diagnosis of hepatitis C and previously documented F0, F1, or F2 per **METAVIR** staging guidelines **OR** • Assessment of advanced fibrosis (F2 or greater) versus minimal or no fibrosis (F1 or F0) **TE (e.g., FibroScan) is considered not medically necessary when any of the following is present:** • The individual has a BMI of <19 kg/m2 or >30 kg/m2 • Ascites • Focal lesions within the liver (e.g., tumor) • Acute liver injury • Previously documented liver fibrosis of F3 or F4 • The individual is pregnant • Alanine transaminase (ALT) level five or more times the upper limit of normal (55 units per liter) • Implanted metal device (e.g., pacemaker, automated implantable cardioverter defibrillator (AICD), or any other implantable defibrillators) • TE performed within the previous 12 months • Liver biopsy performed within the previous six months **TE is considered investigational for all other indications.**

Service	Investigational

Detection or monitoring of hepatic fibrosis in persons with hepatitis C or other chronic liver diseases	**The following are considered investigational for the detection or monitoring of hepatic fibrosis in persons with hepatitis C or other chronic liver diseases (e.g., NAFLD) (not an all- inclusive list):**
	• Acoustic Radiation Forced Impulse (ARFI)
	• Hepatic Artery Resistive Index
	• Serum Marker Tests including:
	  ○ Angiotensin converting enzyme
	  ○ FibroMAX
	  ○ FibroSpect
	  ○ HepaScore
	  ○ LIVERFAST
	  ○ Micro-fibrillar associated glycoprotein 4 (MFAP4)
	  ○ MicroRNA-21
	  ○ miR-29a and miR-122
	  ○ miRNA-221 and miRNA-222
	  ○ NASH FibroSure
	  ○ Plasma cytokeratin-18
	  ○ Signal-induced proliferation associated 1 like 1 (SIPA1L1)

Coding

Code	Description
CPT	
0014M	Liver disease, analysis of 3 biomarkers (hyaluronic acid [HA], procollagen III amino terminal peptide [PIIINP], tissue inhibitor of metalloproteinase 1 [TIMP-1]), using immunoassays, utilizing serum, prognostic algorithm reported as a risk score and risk of liver fibrosis and liver-related clinical events within 5 years (ELF) (code termed 1/1/2024)
76981	Ultrasound, elastography; parenchyma (e.g., organ)
76982	Ultrasound, elastography; first target lesion
76983	Ultrasound, elastography; each additional target lesion (List separately in addition to code for primary procedure)

Code	Description
81517	Liver disease, analysis of 3 biomarkers (hyaluronic acid [HA], procollagen III amino terminal peptide [PIIINP], tissue inhibitor of metalloproteinase 1 [TIMP-1]), using immunoassays, utilizing serum, prognostic algorithm reported as a risk score and risk of liver fibrosis and liver-related clinical events within 5 years
81596	Infectious disease, chronic hepatitis C virus (HCV) infection, six biochemical assays (ALT, A2-macroglobulin, apolipoprotein A-1, total bilirubin, GGT, and haptoglobin) utilizing serum, prognostic algorithm reported as scores for fibrosis and necroinflammatory activity in liver (Fibro Test (FT) - Acti Test/HCV- Fibrosure)
91200	Liver elastography, mechanically induced shear wave (e.g., vibration), without imaging, with interpretation and report

Related Information

Tests

- Enhanced Liver Fibrosis (ELF) Test: measures three direct markers of fibrosis: hyaluronic acid (HA), procollagen III amino-terminal peptide (PIIINP), and tissue inhibitor of matrix metalloproteinase 1 (TIMP-1)
- Fibro Test (FT) - Acti Test/HCV- Fibrosure: consists of an algorithm of five fibrosis markers (alfa2-macroglobulin, apolipoproteinA1, haptoglobin, GGT, bilirubin, plus alanine aminotransferase)

Limitations – FibroTest-ActiTest

Detection and prognosis of liver fibrosis in persons with chronic liver diseases:

Defer the test in transient situations that could modify the components of FibroTest-ActiTest, such as:

- Acute hemolysis, which could decrease haptoglobin and increase unconjugated bilirubin

- Acute hepatitis, whether drug-induced, viral (superinfection by hepatitis A virus: HAV, hepatitis B virus: HBV, Epstein-Barr virus: EBV), or autoimmune. Massive hepatic necrosis leads to a large increase of transaminases and total bilirubin.
- Acute inflammation, as with concomitant bacterial or acute viral infection: bronchopulmonary or urinary tract infection. The large increase of haptoglobin can lead to false-negative results.
- Extrahepatic cholestasis, such as gallstones

Transient elastography (TE):

METAVIR Scoring System	
Activity Grade	
A0	No activity
A1	Mild activity
A2	Moderate activity
A3	Severe activity
Fibrosis Stage	
F0	No fibrosis
F1	Fibrous portal expansion (mild fibrosis)
F2	Few bridges or septa (moderate fibrosis)
F3	Numerous bridges or septa (severe fibrosis)
F4	Cirrhosis

Evidence Review

Background

Fibrosis and inflammatory activity are the two main causes of liver disease.

FibroTest-ActiTest estimates the levels of fibrosis and cirrhosis in the liver as well as the level of necroinflammatory activity. The estimation is made by measuring five fibrosis markers (gamma-glutamyl transferase, total bilirubin, alpha-2-macroglobulin, apolipoprotein A1, haptoglobin, plus alanine aminotransferase). The activity score is a measure of liver inflammation caused by disease. Results from these tests are combined with the individual's age and sex to estimate hepatic fibrosis and inflammatory activity scores.

Hepatic fibrosis is typically compared to a form of scar tissue that progresses throughout the liver. The most serious stage of fibrosis is known as cirrhosis.

Fibrosis is a scarring process that replaces damaged liver cells, causing inflammation and leading to the formation of fibrous scar tissue in the liver. Transient Elastograhy (TE) is a non-invasive technique for the evaluation of fibrosis in chronic liver disease. TE serves as an alternative to liver biopsy, the gold standard for evaluating liver fibrosis. TE measures liver stiffness by tracking the wave speed through ultrasound.

The only system suitable for performing TE is the FibroScan System (Echosens SA; Paris, France), as approved by the US Food and Drug Administration (FDA) on April 5, 2013.

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History

Date	Comments
09/16/19	New policy, approved August 13, 2019, effective January 1, 2020. Transient Elastography (TE) (e.g., FibroScan) may be considered medically necessary for the indications listed in this policy; otherwise, considered investigational.

Date	Comments
11/01/20	Annual Review, approved October 22, 2020. No changes to policy statement, references updated.
05/01/21	Annual Review, approved April 1, 2021. No changes to policy statement, references updated. Added CPT codes 76981, 76982 and 76983.
02/01/22	Annual Review, approved January 24, 2022. Title changed from “Transient Elastography” to “Noninvasive Tests for Hepatic Fibrosis”. Added Medically Necessary criteria for non-invasive blood tests: considered medically necessary for the detection and prognosis of liver fibrosis in persons with chronic liver diseases and criteria for Magnetic Resonance Elastography. References updated. Added CPT codes 0014M and 81596.
01/01/23	Interim Review, approved December 12, 2022. No changes to policy statement, references updated. Changed the wording from "patient" to "individual" throughout the policy for standardization.
01/01/24	Annual Review, approved December 11, 2023. Formatting changes made to policy statement table to clarify that criteria applies to both the Enhanced Liver Fibrosis (ELF) Test and the Fibro Test (FT) - Acti Test/HCV – Fibrosure; policy statements unchanged.
03/01/24	Coding update. Removed termed code 0014M and added CPT code 81517.
12/01/24	Annual Review, approved November 25, 2024. No changes to policy statement, references updated.

Scope: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy only applies to Individual Plans.