Policy Number	**SUR701.043**
Policy Effective Date	**11/01/2025**

Endoscopic Ultrasound-Guided Direct Hepatic Portosystemic Pressure Gradient Measurement

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Related Policies (if applicable)
None

Disclaimer

Carefully check state regulations and/or the member contract.
Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Coverage

Endoscopic ultrasound-guided direct hepatic portosystemic pressure gradient measurement **is considered experimental, investigational and/or unproven.**

Policy Guidelines

None.

Description

Portal hypertension (PH) is a serious complication of liver cirrhosis. Clinical manifestations may include the formation of varices with associated gastrointestinal bleeding, ascites, encephalopathy or hepatorenal syndrome. (2) The hepatic venous pressure gradient or portal pressure gradient (PPG) reflects the degree of PH and is a good prognostic indicator in liver disease. Liver biopsies, once almost universally performed using percutaneous or transjugular

approaches, are now often performed via endoscopic ultrasound (EUS). PPG is usually measured in the context of transjugular liver biopsies, however EUS-guided PPG (EUS-PPG) measurement has recently emerged as an alternative.

The EchoTip® Insight™ is a system used to provide endoscopic access to the portal and hepatic veins to measure local blood pressure. An endoscopic transhepatic venous access needle is inserted through the liver into the patient's portal/hepatic venous system under endoscopic ultrasound guidance. Once stabilized, a measurement reading is taken. (3)

Regulatory Status

In November 2019, the U.S. Food and Drug Administration (FDA) granted De Novo authorization for the EchoTip® Insight™ Portosystemic Pressure Gradient Measurement System (Cook Ireland Ltd.) as a Class II device. The device is indicated to directly measure pressures in the hepatic and portal venous vasculatures and is used in conjunction with an ultrasound endoscope. Product code: QIJ. (3)

Rationale

This policy is based on the American Society for Gastrointestinal Endoscopy Technology Committee's Report on Emerging Technology: EUS-guided portal vein interventions.

Practice Guidelines and Position Statements

American Society for Gastrointestinal Endoscopy

In 2017, the American Society for Gastrointestinal Endoscopy Technology Committee, provided a report on emerging technology addressing endoscopic ultrasound (EUS)-guided portal vein interventions. (1) The report provided information and addressed potential applications including portal vein (PV) pressure measurement. The authors noted that direct percutaneous transhepatic portal pressure measurement is fraught with technical challenges and risk for adverse events and is thus not routinely performed. Instead, indirect pressure measurements derived from a wedged hepatic portal vein pressure gradient serve as a surrogate for portal pressure but noted that the wedged hepatic portal vein pressure gradient may not reliably reflect the actual portal pressure, particularly for the pre-hepatic and post-hepatic etiologies of portal hypertension. The report further noted that EUS also may facilitate the direct monitoring of PV pressure and has been evaluated extensively in animals and in a preliminary human study. The first human pilot study included 28 participants. The report's summary included the following: "EUS-guided PV access and therapeutic interventions represent an exciting new technical advance in interventional EUS. Several technical applications have been shown to be feasible in animal models and in small, preliminary human studies. For this field to continue to advance, well-designed studies will be needed to establish the efficacy and safety profile of these interventions, particularly in comparison to any current competing techniques. The development of devices specifically designed and approved for these applications is critical. Although EUS guided PV interventions remain largely investigational at present, they represent a promising new frontier with the potential to enhance diagnostic and therapeutic capabilities

in patients with pancreaticobiliary malignancies and portal hypertension."

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	None
HCPCS Codes	C9768

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References

1. American Society for Gastrointestinal Endoscopy Technology Committee. EUS-guided portal vein interventions. Gastrointest Endosc. May 2017; 85(5):883-888. PMID 28320514
2. Huang J, Samarasena J, Tsujino T, et al. EUS-guided portal pressure gradient measurement with a simple novel device - a human pilot study. Gastrointest Endosc. May 2017; 85(5):996-1001. PMID 27693644
3. Food and Drug Administration. EchoTip® Insight™ Portosystemic Pressure Gradient Measurement System Classification Order (DEN180062). Available at: <https://www.accessdata.fda.gov> (accessed May 7, 2025).

Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at <https://www.cms.hhs.gov>.

Policy History/Revision

Date	Description of Change

11/01/2025	Document updated with literature review. Coverage unchanged. Reference 1 added, others removed.
08/15/2024	Document updated with literature review. Coverage unchanged. The following references were added: 7-14.
07/15/2023	Reviewed. No changes.
01/01/2023	Document updated with literature review. Coverage unchanged. Added references 5, 6.
01/01/2022	Reviewed. No changes.
10/01/2020	New medical document. Endoscopic ultrasound-guided direct hepatic portosystemic pressure gradient measurement is considered experimental, investigational and/or unproven.