## GUNDERSEN HEALTH SYSTEM ULTRASOUND DEPARTMENT POLICY AND PROCEDURE MANUAL

SUBJECT: Surveillance for HCC (Hepatocellular Carcinoma) in the Setting of Cirrhosis SECTION: Radiology Ultrasound

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**Exam Protocol:** Liver ultrasound is recommended as the primary surveillance modality for HCC. Routine screening is recommended for HCC in adults with cirrhosis.

**Imaging Protocol:** The following images will make up the "surveillance for HCC" sonogram.

- Transverse liver with all hepatic veins: take more than one image if necessary to be sure all three hepatic veins are imaged.
- Transverse image of the liver with the portal vein.
- Longitudinal liver with images to include:
  - left lobe of liver with prox. aorta.
  - left lobe of liver with left portal vein.
  - liver with IVC labeled.
  - right lobe of liver with right portal vein.
    - right lobe of liver / right kidney interface / RUQ looking for ascites
- Main portal vein with color Doppler as it enters the liver demonstrating the direction of blood flow (into or out of the liver).
- Gallbladder: at least three images to include long and transverse supine and long LLD.
- Color Doppler image of the gallbladder wall if the wall is thickened.
- Long CHD one image with internal diameter measurement.
- Long CBD one image with internal diameter measurement.
- Long spleen with maximum length measured.
- Transverse spleen with transverse and AP measurement.
- Long spleen / left kidney interface / LUQ looking for ascites
- RLQ and LLQ looking for ascites
- A cine clip through the RT and LT lobes of the liver should be recorded. This may be performed in either transverse or longitudinal orientation the method that provides the best documentation.