## 4. EPA Title: Manage liver diseases

**Detailed Description:** Gastroenterologists diagnose and manage the broad spectrum of acute and chronic liver problems encountered in a typical gastroenterology practice. This includes an understanding of liver disease in general, with an ability to recognize, diagnose and treat routinely seen acute and chronic liver diseases. Separate EPAs cover the management of cirrhosis and its complications, nutritional aspects of liver disease and endoscopic management of variceal bleeding.

Knowledge	<ul> <li>Describe the anatomy, physiology, pharmacology, histology and molecular biology related to the liver</li> <li>Describe the pathophysiological mechanisms of liver injury</li> <li>Interpret abnormal liver chemistries</li> <li>List the indications, contraindications, limitations, complications and techniques of liver biopsy and interpret the results</li> <li>Interpret genetic markers and apply them in the management of liver disease</li> <li>List options for treatment of liver diseases encountered in a typical gastroenterology practice</li> <li>Recognize liver disorders associated with pregnancy</li> <li>Summarize the indications and limitations of liver imaging modalities, and be able to interpret the results of CT, MRI, MRCP, hepatic angiography and ultrasound (including Doppler evaluation of vasculature)</li> </ul>
Skills	<ul> <li>Obtain a relevant history and perform a focused physical examination in patients with acute and chronic liver disease and develop a comprehensive differential diagnosis</li> <li>Order appropriate labs and studies to assess patients with acute and chronic liver disease</li> <li>Counsel patients about lifestyle modifications relevant to liver disease (alcohol, drugs, diet)</li> <li>Diagnose and manage patients with liver diseases encountered in a typical gastroenterology practice including: acute infectious hepatitis, acute liver injury and failure, chronic infectious hepatitis, alcoholic liver disease, nonalcoholic fatty liver disease, Wilson's disease, primary sclerosing cholangitis, autoimmune hepatitis, hemochromatosis, alpha-1 antitrypsin deficiency, vascular liver disease to a hepatologist</li> <li>Identify patients at risk of complications of liver disease including progression to advanced stages</li> <li>Assess preoperative risk in patients with liver disease</li> <li>Provide efficient, cost-effective consultative care with timely feedback to referring providers</li> </ul>

Attitudes	<ul> <li>Incorporate evolving management guidelines in the care of patients with liver disease</li> <li>Demonstrate cultural and socioeconomic sensitivity to devising individualized management plans</li> <li>Develop an awareness of the stigma related to liver disease, including the stigma associated with alcohol and drug-related causes.</li> </ul>			
Check ACGME co	mpetencies applicable to EPA			
Patient Care (PC)				
Systems-Based Practice (SBP)				
Practice-Based Learning & Improvement (PBLI)				
Professionalism (PROF)				
	erpersonal & Communication Skills (ICS)			
	cencies are needed to achieve mastery?	Approximate Time Frame Trainee Should Achieve Stage		
Patient Care (PC)				
• Gathers and synthesizes essential and accurate information to define				
	clinical problem(s) (PC1)			
<ul> <li>Develops and a patient (PC2)</li> </ul>	achieves comprehensive management plan for each			
Medical Knowled	lge (MK):			
Possesses Clinical knowledge (MK1)				
Knowledge of diagnostic testing and procedures (MK2)				
Systems-Based P	ractice (SBP):			
•				
•				
	earning & Improvement (PBLI):			
	tice with a goal for improvement (PBLI1)			
	proves at the point of care (PBLI4)			
Professionalism				
• Has professional and respectful interactions with patients, caregivers and members of the interprofessional team (e.g. peers, consultants,				
nursing, ancilla				
9	ach patient's unique characteristics and needs (PROF3)			
Interpersonal &	Communication Skills (ICS):			
•				
•				
Stage of training reached:	at which supervision level 4 is expected to be			

Potential information sources/assessments to gauge progress	S			
Chart stimulated recall				
Chart audits				
Direct observations				
Standardized patient				
In-training examination				
360 Global Rating				
Patient Survey				
Simulation				
Portfolios				
Other				
Basis for formal entrustment decision by the Clinical Competency Committee:				
Program director				
Faculty				
Other				
Implications of entrustment for the trainee: Entrustment allows the fellow to independently				
perform consultation for patients with acute and chronic liver diseases in the inpatient and outpatient				
setting.				