Elevated LFTs Algorithm:

Does this patient need referral to Liver Clinic?

There are many causes of elevated liver function tests (LFTs). For those with risk factors for Metabolic Fatty Liver Disease (MAFLD) i.e., central obesity, high triglycerides, low HDL, hypertension, type 2 diabetes, pre-diabetes or insulin resistance, or steatosis on imaging, refer to MAFLD Algorithm For those with any of the following, 1) ALT > 60 on 2 or more occasions at least 3 months apart, 2) or any level of abnormal LFTs if no NAFLD risk factors or significant alcohol use, 3) or chronic elevation of alkaline phosphatase on 3 or more occasions at least 1 month apart Follow the steps below. Step 1: Complete AUDIT-C If alcohol intake is > 2 drinks/day in a If alcohol intake is ≤ 2 drinks/day in a woman or > 3 drinks/day in a man, woman or ≤ 3 drinks/day in a man, recommend cessation of all alcohol for 3+ proceed with workup below. months. Then Complete Workup (see Step 2) if LFTs remain elevated. If impression is alcoholrelated liver disease, counsel Step 2: Complete workup for liver disease to include: about alcohol use and connect patient with Liver US, GGT, lipids, A1C, HBcAb (total or IgG), HBsAg, HBsAb, HCV Ab, iron panel, and Behavioral Health services for autoimmune markers of ANA, smooth muscle antibody/actin, AMA, IgG, IgM, HIV as well treatment as CBC, ceruloplasmin if <45 yo, and LFTs if not done recently* Based on complete workup and clinical history, follow appropriate path below. If any of the above lab markers If work-up is unrevealing and are positive or if impression is If any signs of decompensated impression is metabolic associated still not clear and patient does cirrhosis or acute liver disease, fatty liver disease, refer to MAFLD not fit other categories, refer to refer to Liver Clinic Algorithm Liver Clinic for evaluation

^{*}Many drugs can cause elevated LFTs, refer to www.LiverTox.nih.gov for consideration of drugs that cause liver injury. Other non-liver causes of ALT/AST elevation may be adrenal disease, celiac disease, or thyroid disease.