Guidelines for HCV Screening and Treatment in Primary Care

Adapted from Community Health Center of Franklin County

# Section 1: Screening

All persons aged 18+ should be screened once for HCV, and all pregnant women should be screened each pregnancy (in settings where HCV prevalence is > 0.1%; CDC, USPSTF).

At-risk persons can be screened more often depending on risk: IV or intranasal drug use; transactional sex, sex with IVDU, MSM or anal receptive sex; clotting factors prior to 1987 or transfusion or organ transplant before 1992; hemophiliacs and persons on hemodialysis; persistently abnormal ALT levels; needle stick exposure; children of HCV positive women; persons with HIV; history of incarceration or unregulated tattoos.

* Routine testing is best done with reflex testing (antibody->RNA viral load->genotype)
* For post-exposure testing 2-12 weeks after exposure, order RNA viral load instead, as HCV Ab seroconversion does not occur until 8-12 weeks.
* HCV Ab remains positive for life after exposure, whether chronically infected, self-cleared or cured with medication, so in the latter two cases, subsequent screening must be done using RNA viral load.
* Screening should be performed at least annually for continued high risk behaviors, and can be done as often as every three months.

# Section 2: Follow Up Testing

1. If reflex testing is not available and the patient screens positive for HCV Ab, order an HCV RNA viral load; if negative, this indicates either cleared infection, prior treatment, or (less commonly) a false positive HCV Ab. Consider retesting in 4-6 months depending on level of risk.
   1. If HCV RNA viral load is positive, order HCV genotype (if not already done via reflex), CBC, LFTs, BMP, HIV, HAV IgG, HBV cAb/sAb/sAg, INR and urine HCG if of childbearing potential. Calculate Child-Pugh class (A=5-6, B=7-8, C=9+)
   2. ***Acute Hepatitis C*** (first 6 months of infection): prior guidance recommended waiting to see if patient will self-clear. More recently, from a public health standpoint of reducing HCV transmission, patients should now be offered treatment whenever diagnosed, regardless of sobriety, when they are ready and able to engage in treatment.
   3. ***Chronic Hepatitis C*** (infection > 6 months): calculate FIB-4 using AST, ALT, platelets and age.
      1. F0 or F1 (<1.45): FIB-4 reliable, no further fibrosis testing is needed and the patient needs no HCC screening pre- or post-treatment.
      2. F2 or F3 (1.45-3.25): FIB-4 less reliable, so obtain transient elastography (Fibroscan) to determine fibrosis stage, as stage 3 or higher warrants HCC screening before and after treatment (lifelong q6mo US).
      3. F4 (>3.25) or clinical evidence of cirrhosis: FIB-4 is reliable, no Fibroscan needed, need HCC screening with q6mo US (lifeltime). Risks for advanced fibrosis include: alcohol abuse, age > 40, male sex, coinfection with HBV or HIV, NASH and organ transplant patients.
      4. Primary care clinicians can treat the vast majority of uncomplicated, Child-Pugh Class A patients, and some Class B patients with no history of hepatic decompensation.
      5. Patients with cirrhosis or Child-Pugh Class C disease, particularly those with any history of hepatic decompensation (such as with ascites, esophageal varices, coagulopathy or encephalopathy) should be referred to Hepatology for HCV treatment, EGD to screen for or follow esophageal varices and to evaluate for liver transplant.

**Section 3: Treatment**

1. Sobriety is no longer a precondition for treatment; rather, patients must simply be ready to take the medications, do lab work and engage in care.
2. Treatment is guided by genotype, presence or absence of cirrhosis, and prior treatment history.
3. Most patients may be treated with pan-genotypic medications for 8 weeks (Mavyret =glecaprevir/pibrentasvir) or 12 weeks (Epclusa = sofosbuvir/velpatasvir). Consult [www.hcvguidelines.org](about:blank) to determine the regimen and duration that is appropriate for each individual patient.
4. Check for drug interactions between the chosen agent and the patient’s other medications; a recommended resource is the Liverpool University HCV Medication Interaction tool, found at [www.hep-druginteractions.org/checker](about:blank) .

**Section 4: Adverse Reactions**

Serious:

1. Patients with HBV cAb+ are at risk for HBV reactivation when HCV is treated (risk is higher in patients with HBV viremia); see additional lab monitoring in Section 6.
2. Harvoni only - bradycardia, angioedema.

More Common: Headache, fatigue, pruritis, nausea, asthenia, diarrhea, bilirubin elevation, myalgia, cough, dizziness, irritability, dyspnea. However, most patients have no side effects and these medications are generally very well-tolerated.

**Section 5: Treatment Initiation Appointment/Patient Education**

* Screen and vaccinate as needed for Hepatitis A and B, vaccinate for flu and pneumonia.
* Screen for ETOH use and advise reduction of use or cessation. Refer to treatment if needed.
* HCV is not spread by kissing, hugging, sneezing, coughing, food or water sharing, eating utensils, drinking glasses or casual contact.
* Counsel on the importance of using clean needles, cookers, cottons, water. Provide naloxone if needed. Advise cessation of street drugs and offer treatment. Refer to [https://www.mass.gov/info-details/syringe-service-program-locator](about:blank) for syringe services toolkit.
* Avoid sharing toothbrushes, razors.
* Advise condom use for anal intercourse.
* NSAIDs should be avoided in those with cirrhosis due to risk of bleeding varices.
* Use of up to 4 grams of Tylenol in 24-hour period is safe for non-cirrhotic patients, 2 grams if cirrhotic.

**Section 6: Follow Up Appointments and Testing**

1. Appointments: (basic schedule; more may be added depending on patient need; may do in-person or via telehealth depending on patient preference, stage of disease and comorbidities)
   1. Pre-treatment assessment, order labs.
   2. Review labs, prescribe medication if patient ready.
   3. Week 1: adherence check-in phone call from HCV patient navigator.
   4. Week 4: reminder call from HCV patient navigator to do 4wk labs
   5. Week 5: provider visit to review 4 week viral load, check adherence, manage side effects, etc.
   6. Week 8 or 12: end-of-treatment phone call from HCV patient navigator to confirm treatment completion, check for adherence problems.
   7. Week 12 post-treatment: lab reminder phone call from HCV patient navigator
   8. Week 13 post-treatment: provider visit to review SVR result.
2. Testing (routine): this is moving towards a minimalist approach:
   1. 4 week viral load to confirm treatment adherence and efficacy
   2. 12 week post-treatment viral load to confirm a sustained virologic response (SVR), or cure.
   3. 24 week post-treatment viral load confirmation of SVR is recommended if the 4 week viral load was not undetectable, or if there were any issues with adherence.
3. Testing (special cases):
   1. For patients with initial transaminitis, check LFTs along with the 4wk labs to look for paradoxical worsening liver inflammation, which is extremely rare with the direct-acting antiviral (DAA) meds, as opposed to prior interferon-based treatments.
   2. For patients with HBV cAb+: follow LFTs q4wks during and for one month after treatment and check HBV VL if see worsening transaminitis. Refer to GI or an FM/HBV specialist for management of HBV flares.
   3. For patients of childbearing potential: ensure effective contraception and/or test for pregnancy during treatment (DAA medications are not approved for use in pregnancy).