Clinical Pharmacist Care Models for HCV Management

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Objectives

• Recognize the importance of the role of PharmD’s in HCV management engaging new treaters and

• Discuss how the HCV PharmD provider framework can be replicated in other settings
The Role of Pharmacists in Viral Hepatitis

- The Action Plan for the Prevention, Care & Treatment of Viral Hepatitis prepared by US Department of Health and Human Services, identified pharmacists as key stakeholders in the continuum of care of those living with viral hepatitis.
- CDC: “Pharmacists can reduce fragmentation of care, lower healthcare costs, and improve patient health outcomes.”

https://www.cdc.gov/hepatitis/hhs-actionplan.htm
The Role of a Clinical Pharmacist: Key Team Member

- Independent Prescriptive Authority
- Highly trained Advanced Practice Provider
- Practice-Area (Global) Scope of Practice to manage multiple disease states
- Panel and Population Management

IMPROVING ACCESS

- Comprehensive Medication Management (CMM) services to allow the provider to focus on other Patients with care related issues
- Bridging the gap to specialty care
- Same Day Medication management services
Scope of the Pharmacy Profession

• **Scope of practice (SOP):** authorization to perform as an advanced practice provider (APP), autonomously or collaboratively, managing all facets of a patient’s disease or condition
  – Ideal for medication-focused disease states where specific medication and monitoring guidelines exist (HCV)
  – Provide services between physicians visits

• **Collaborative Drug Therapy Management (CDTM):** Agreement between one or more physicians and a clinical pharmacist wherein the clinical pharmacist assumes professional responsibility to perform comprehensive medication management (CMM)
  – Accountability for direct patient care

• > 48 states have authorized some form of pharmacist prescribing

• **Barriers:**
  – policy and legislation
  – compensation for services
  – access to health information technology systems
Comprehensive Medication Management (CMM) by Pharmacists

- Collaborative drug therapy management
- Objective patient assessments
- Order Labs and Diagnostic Tests
- Order and administer Vaccines
- Prescribing Non-Controlled Medications
- Advanced Practice Provider Role
- Initiate, Modify, Discontinue medication
- Monitor drug therapy
- Referrals for care needs

Core Elements
Expansion of Clinical Pharmacy Specialists (CPS) in HCV Care

- Mobilized existing pharmacy infrastructure to address a need
- Over 700 Clinical Pharmacists have been trained to assist Primary and Specialty providers in HCV management
- Over 200 Clinical Pharmacists actively manage HCV patients across VA
- VA has treated over 108,000 patients since January 2014

In VA, 32% of HCV medication prescribing is done by pharmacists

Sources: VA Clinical Pharmacy Practice Office and VA Population Health Services
PharmD Competencies For HCV Care

**Screening**
- Identify and screen patient born between 1945-1965
- Identify patients at high risk for HCV (CDC criteria) and screen (repeat yearly for those at continued high risk)
- Interpret hepatitis C antibody, genotype and HCV RNA testing results
- Educate patient on risks, transmission, alcohol use, liver health, and treatment availability
- Refer HCV-infected patients for treatment/liver evaluation

**Pre-Treatment**
- Obtain / interpret HCV clinical / laboratory data: HCV genotype, prior treatment history, HCV RNA, liver fibrosis stage, liver panel, CBC, metabolic panel/renal function, HIV status, HBV status
- Comorbidities, allergies, concomitant medications
- Current substance use – refer for treatment, if necessary
- Immunizations (HBV, HAV)
- Assess patient readiness to begin treatment: (social/behavioral/personal considerations)
- Selection and/or evaluation of HCV regimen based on patient characteristics (drug interactions, resistance testing, prior treatment)
- Communication with providers for evidence-based treatment decisions

**Treatment**
- Provide proper treatment regimen and dosing
- Treat patient for appropriate duration based on disease and patient-specific characteristics
- On-treatment laboratory monitoring for effectiveness and adverse effects
- Management of patients with suboptimal “on treatment” response
- Recognize and provide treatment for common side effects
- Set patient expectations / self-management
- Review treatment plan and follow-up schedule (face to face, telephone, video, including required labs)
- Counseling /education (disease, drug regimen, adverse event management, adherence strategies, transmission, liver health)
- Assessment of sustained virologic response (SVR)
PharmD Provision of HCV Care and Benefits of PharmD Engagement

- **HCV Testing**
  - Active identification and outreach to patients who require testing

- **Identification of HCV patients as treatment candidates**
  - Report/lists of HCV viremic patients to discuss/evaluate for treatment
  - E-consults to specialists
  - Reassessment of “untreatable” patients

- **Co-management / Treatment**
  - Increase capacity

- **Data analysis and feedback**
  - Track and monitor care metrics, outcomes, and cost

- **Increased awareness of HCV in community**

- **Improved linkage to care**
- **Increase treatment rates**

- **Flexibility for patients**
- **Greater access to specialists**
- **Cost Avoidance**: reduced drug costs from optimization of regimens; reduced drug-drug interactions; facilitation of timely medication refills; closely monitored adherence

- **Improve population health**
PharmDs Improve Access and Reduce Costs
Hepatitis C-Related Encounters (Direct Patient Care)

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>HCV CPS Encounters</th>
<th>Cost/Encounter</th>
<th>Total Cost</th>
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<tbody>
<tr>
<td>GI/Hepatology</td>
<td>24,888</td>
<td>$78.13</td>
<td>$1,944,499</td>
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<tr>
<td>Clinical Pharmacy Specialist</td>
<td>24,888</td>
<td>$40.50</td>
<td>$1,007,964</td>
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Net Savings with CPS as Provider $936,535

Percent Cost Difference with CPS Utilized for All Encounters 48%

Source VA Clinical Pharmacy Program Office, data through 12/31/17; PHARMD Tool v7-9
Pharmacist Interventions for HCV Care

*Multiple interventions per encounter may be recorded; Consolidated health factors from PhARMD Tool v7 and v8; Source VA Clinical Pharmacy Program Office, data through 9/30/16
Pharmacist Delivery of Care
Think “Outside the Box”... Non-Traditional Models

Expanding Access to HCV Treatment

Clinical Pharmacist

Same site
- Face to face
- Shared medical appointment
- Integrated in clinic/wellness center
- Electronic consult

Train the Trainer

Remotely
- Videotelehealth
- ECHO
- CPS travel to clinics

Coordinate with Key Stakeholders

Patient’s Home
- Telephone
- Secure messaging

Patient’s Home
Identifying untreated hepatitis C patients

- Pharmacist reviews list of patients with untreated HCV and a future clinic appointment

- Pharmacist phones/speaks to patient at visit about HCV treatment

  - Patient wants treatment
    - Pharmacist orders labs and completes Hepatitis C Evaluation Consult
  
  - Patient does not want treatment or patient is newly diagnosed with HCV
    - Pharmacist informs Physician
      - Completes note template explaining reason and future date for review
Streamlined Treatment – PharmD HCV Management

Pre-treatment Assessment
- Interpret HCV screening tests; HCV risk counseling
- Ensure appropriate screening for HIV and HBV
- Electronically, Face to face, videotelehealth

Treatment Initiation
- Assess suitability for DAA, severity of liver disease, co-morbid/extrahepatic conditions, prior HCV treatment, potential drug interactions; review patient-specific needs; selection/evaluation of treatment regimen
- Face to face, videotelehealth

Follow-up
- Visit week 4
- Review and interpret labs (hepatic function, viral load); assess effectiveness; assess and address side effects and adherence; order labs and meds; schedule next visit
- Follow-up visit week 8 (and q 4 weeks as needed)
- Face to face, videotelehealth, or Telephone

Post-treatment assessment and follow-up
- Discuss SVR results; recommendations for follow-up care; Hepatocellular cancer screening

Interpret tests used for to assess liver disease (transient elastography, FIB-4 Score / APRI Score, Platelet count, Liver biopsy, Abdominal imaging (ultrasound, CT, MRI), ALT/AST ratio, INR

Establish treatment goals and duration based on published HCV guidelines; patient education
# CPS HCV Practice Examples

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| **Shared Medical Appointments** | • Focus on less complicated patients in a group setting  
• Group visit of 4-8 patients who will be starting treatment  
• Patients seen 2-4 times on treatment, based on duration of therapy, clinical need | | |
| **CPS Managed e-consults** | • Generate reports to identify patients needing treatment  
• Chart review to determine candidacy  
• Provide recommendations for HCV therapy initiation through electronic consult  
• Provision of clinical pharmacy support to providers, nurses, etc. in all settings | | |
| **HCV Telehealth** | • Video or telephone follow-up appointments by PharmD  
• Use ECHO model to train PharmDs to provide HCV care at their site | | |
| **Rural Care** | • Reach patients located in rural areas that would make travel to medical center clinics a barrier to accessing care  
• CPS visits community clinics to initiate treatment and follow-up with CVT or TH | | |
| **HCV Process Map** | • Flow map providing criteria of HCV patients that can be treated by PharmD  
• Develop site specific inclusion and exclusion criteria | | |
| **Regional HCV CPS Specialist** | • CPS with HCV expertise in the region provides mentoring for other PharmDs and education for other providers (NP, MD)  
• Spoke and hub model of training / resource for HCV related questions | | |
Bridging the Gap: Expanding HCV Care Provided by Pharmacists

- Clinical Pharmacy Bootcamp
  - Six training modules
- Mentorship opportunities with a trained Hep C CPS
  - Train-the-trainer, mini-sabbaticals
- Dissemination of Regional “best practices”
- Regional CPS HCV Experts as a resource
- Hepatitis C Pharmacist listserv
- Webinars
- Bimonthly Hepatitis C Pharmacist calls
  - Clinical Topic/Case based discussion, FAQs addressed