

# Assessment of the Implementation of Collaborative Pharmacy Practice Agreements in an Integrated Health System Specialty Pharmacy

Ailsa Watson<sup>1</sup>, Autumn D. Zuckerman<sup>2</sup>, Amy Mitchell<sup>2</sup>, Bridget Lynch<sup>2</sup>, Chelsea P. Renfro<sup>2</sup>

<sup>1</sup>Vanderbilt Specialty Pharmacy Student Research Program; <sup>2</sup>Vanderbilt Specialty Pharmacy, Vanderbilt Health



## Purpose

Collaborative Practice Agreements (CPAs) within integrated health-system specialty pharmacies (IHSSPs) allow pharmacists to prescribe medications and order tests for specialty medication management

The purpose of this study was to determine outcomes of CPA implementation in an IHSSP

## Study Design and Setting

Single-center, retrospective cohort analysis of data collected from an electronic medical record

Evaluated Vanderbilt Specialty Pharmacy (VSP) integrated clinics with a newly implemented CPA from September 2021 – June 2022 with 6 months of follow-up from date of CPA implementation

## Figure 1. CPA Implementation Timeline

### 2021 SEPTEMBER

Multiple Sclerosis and Neuroimmunology (MS)  
September 1, 2021

Viral Hepatitis/Infectious Diseases (ID)  
September 20, 2021

### 2022 APRIL

Hemostasis (Adult and Pediatric)  
Hepatology (Adult and Pediatric)  
April 6, 2022

### JUNE

Neurology-Movement Disorders  
June 1, 2022  
Cystic Fibrosis (CF)  
June 6, 2022

## Study Methods

### Included Clinical Areas

Viral hepatitis/infectious diseases, multiple sclerosis and neuroimmunology, hemostasis, hepatology, neurology-movement disorders, and cystic fibrosis

### Outcome Measures

- 1) Patient encounters (defined as documented patient contact)
- 2) Prescription orders
- 3) Laboratory orders
- 4) Safety concerns identified on quarterly audits

### Data Collection and Analysis

Data were collected retrospectively from the electronic medical record system for 6 months post CPA implementation and analyzed using descriptive statistics

## Conclusion

- Pharmacists in a CPPA in an IHSSP can contribute to the number of patients cared for, number of medication and lab orders, and maintain a high medication and allergy list review compliance
- Implementing CPPAs can allow more patients to be cared for by lowering providers' workloads and expanding pharmacists' responsibilities

## Results

Figure 2. Patient Encounters 6 Months Post-Implementation by Clinic

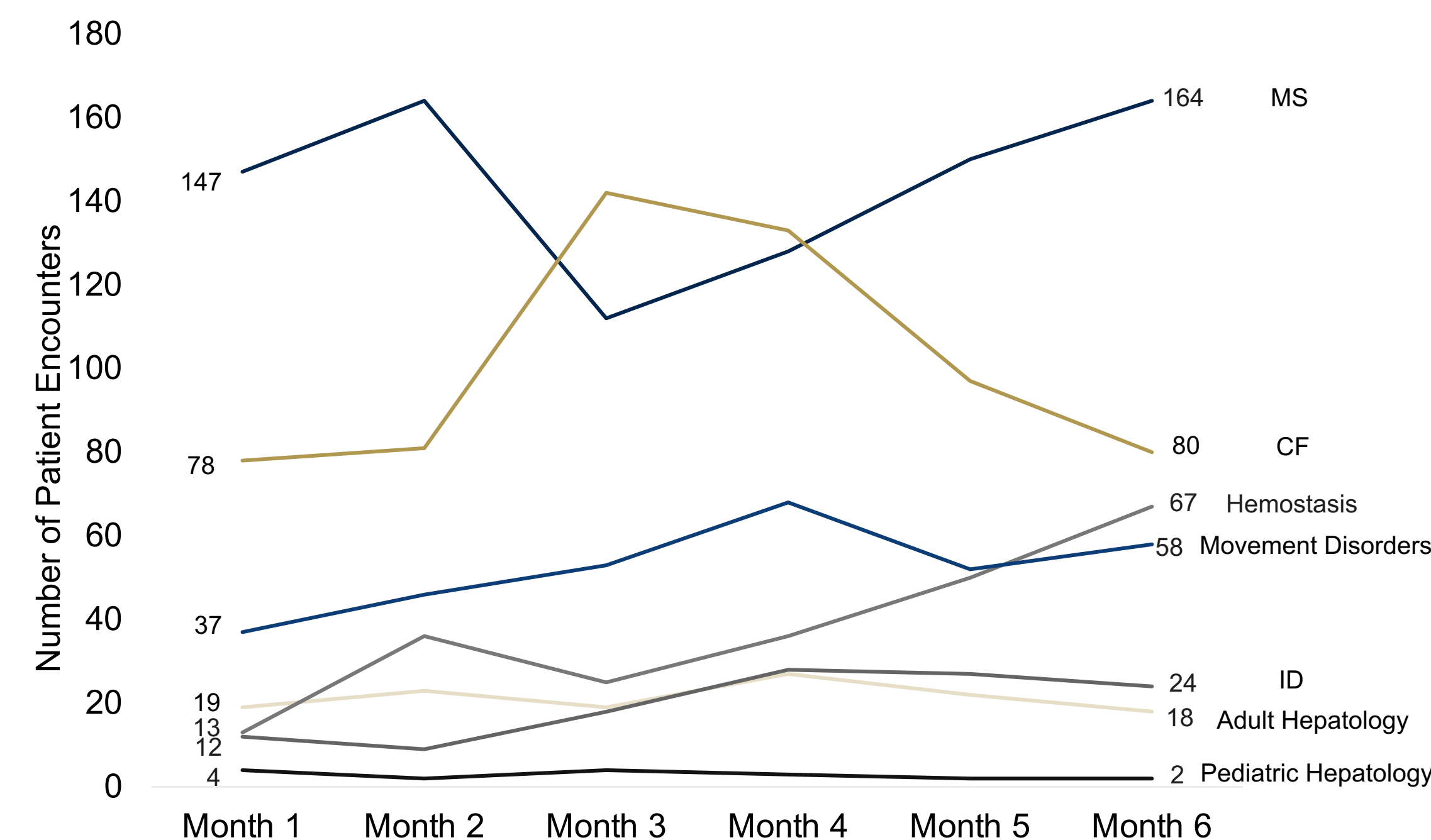
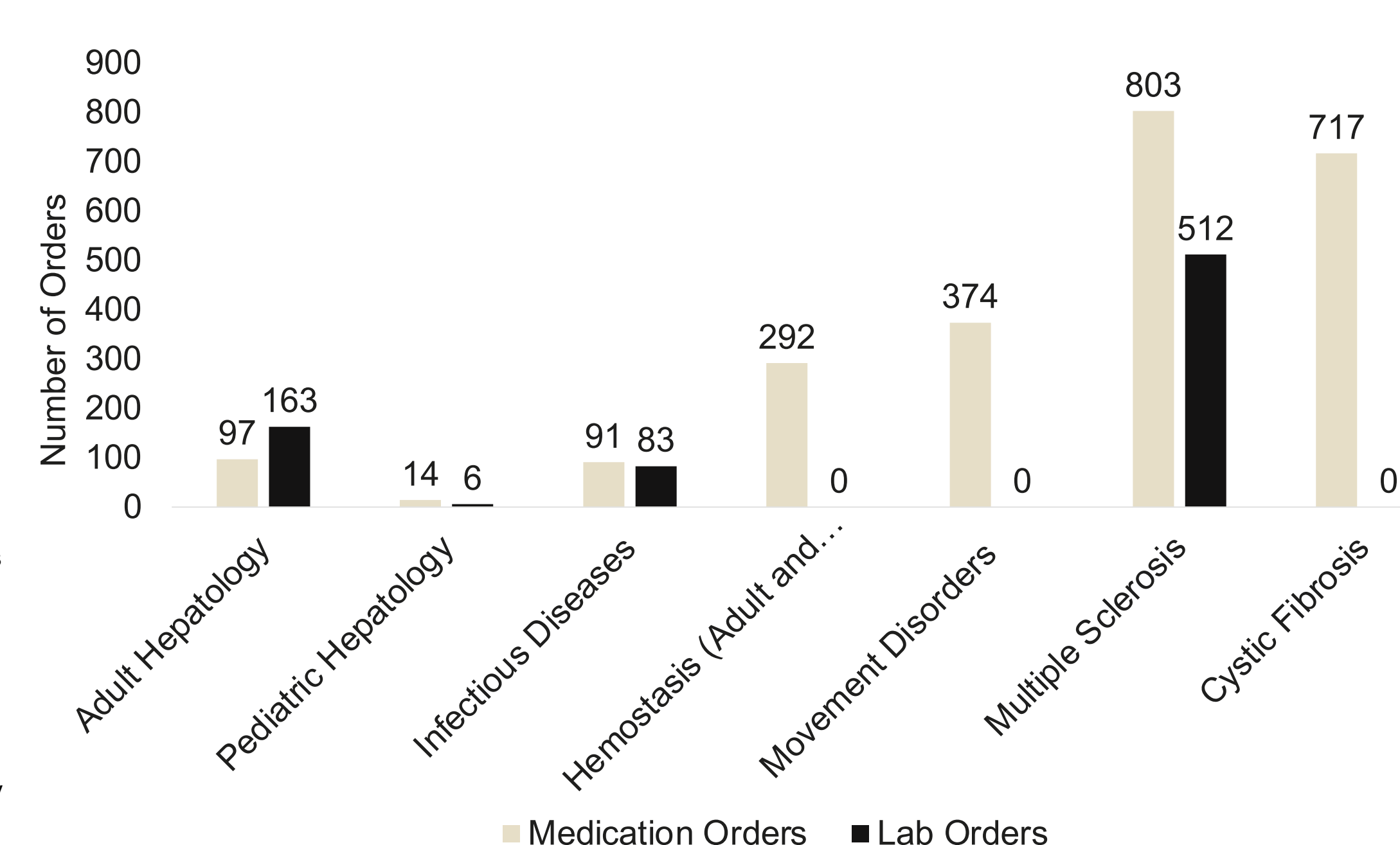


Figure 3. Number of Prescription and Laboratory Orders



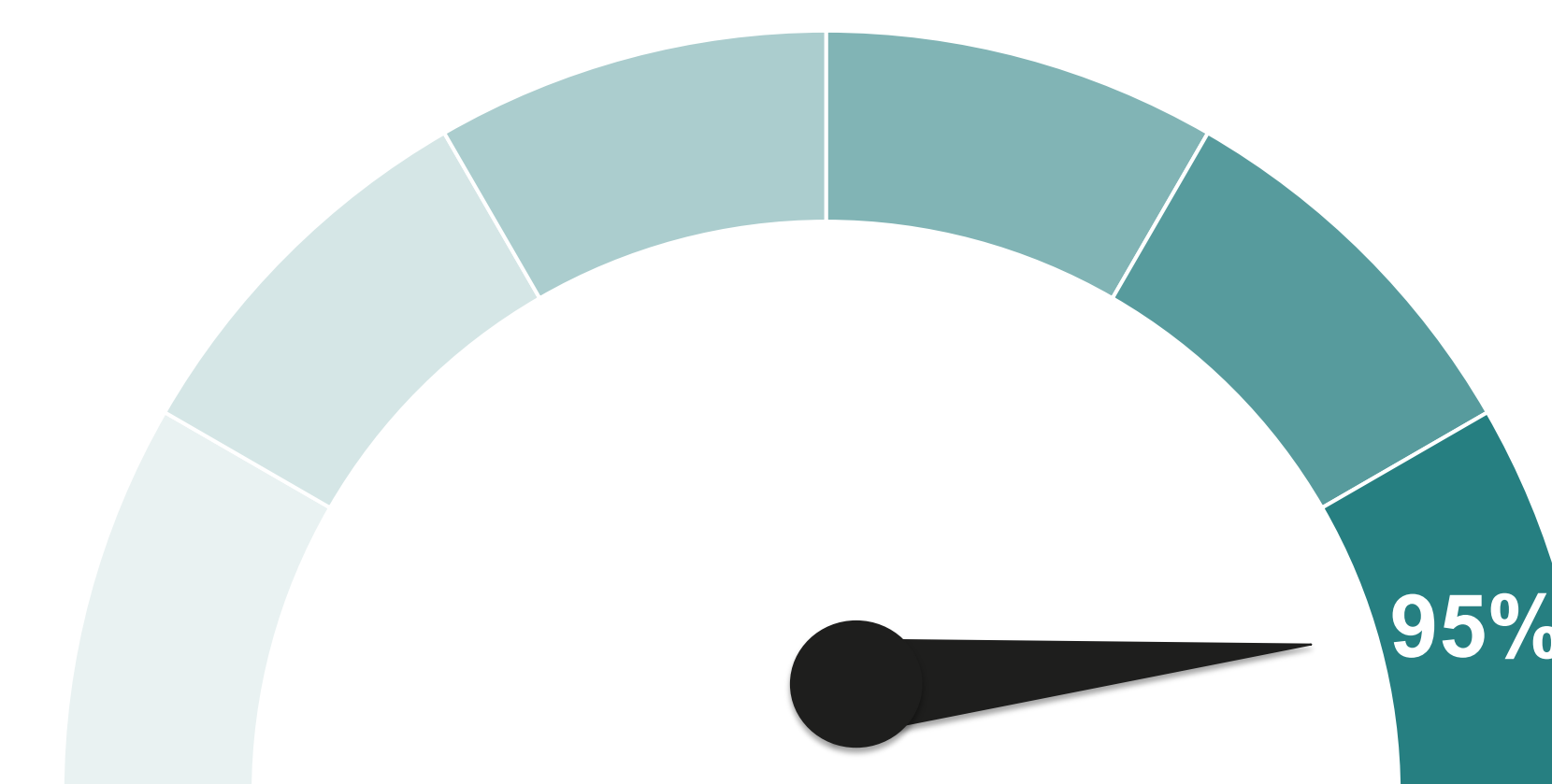
Not all clinical areas included laboratory orders in their CPA, therefore the 6-month post-CPA implementation order total equaled zero

Table 1. Most Common Types of Laboratory Orders by Clinic

Adult Hepatology (n=163)	n (%)
PCR Hepatitis C Virus, Quant	58 (36)
Comprehensive Metabolic Panel (CMP)	27 (17)
Hepatic Functional Panel	27 (17)
Complete Blood Count (CBC)	21 (13)
Viral Hepatitis/Infectious Diseases (n=82)	n (%)
Comprehensive Metabolic Panel (CMP)	18 (22)
HIV P24 Antigen and HIV 1/2 Antibody	16 (20)
PCR Hepatitis C Virus, Quant	13 (16)
CBC with Differential	8 (10)
Multiple Sclerosis and Neuroimmunology (n=512)	n (%)
CBC with Differential	248 (48)
Comprehensive Metabolic Panel (CMP)	174 (34)
Thyroid-stimulating hormone (TSH)	22 (4)
Immunoglobulin G (IgG)	14 (3)
Hepatis Function Panel	14 (3)

PCR = polymerase chain reaction; HIV = Human Immunodeficiency Virus

## Medication List and Allergy Review Compliance on Quarterly Audits



Post-CPA implementation, medication list and allergy review compliance was at or above 95% in all clinics