



**Figure 3: Reduction of Inappropriate HIV Resistance Tests Performed at Outlier Facilities Before and After an Intervention (i.e., phone calls).** Total tests performed at outlier facilities before and after an intervention (gray; continuous piecewise linear spline). The red vertical line represents the timing of the intervention.

**Disclosures.** All authors: No reported disclosures.

### 1302. HIV Testing in Adults Presenting with Central Nervous System (CNS) Infections

Bert Ma, BS; Karen J. Vigil, MD; Rodrigo Hasbun, MD, MPH; The University of Texas Health Science Center at Houston, Houston, Texas

**Session:** 150. HIV: Screening and Testing

Friday, October 4, 2019: 12:15 PM

**Background.** The Centers for Disease Control and Prevention recommends that all patients be tested for HIV while in a healthcare setting. HIV testing is especially important in patients with a central nervous system (CNS) infection because it impacts the differential diagnosis. In this study, we determined the rate of HIV testing in patients who presented with a CNS infection.

**Methods.** We performed a multicenter retrospective study of 1,312 patients over the age of 17 years with community or healthcare-acquired meningitis, aseptic meningitis or encephalitis admitted to 18 hospitals in New Orleans, LA and Houston, TX from July 1, 1998 through December 31, 2017. Prospective patients were identified using ICD 9 coding, physical examination findings, and cerebrospinal fluid analysis. The electronic medical records for these patients were reviewed for HIV testing and diagnosis. Aseptic meningitis cases were also reviewed for HIV RNA PCR testing. 100 patients with a known HIV diagnosis were excluded (2 aseptic meningitis, 82 encephalitis, and 16 community-acquired meningitis).

**Results.** Out of 1,312 patients presenting with a confirmed CNS infection, 664 (50.6%) had an HIV test done. A total of 81 patients (12.2%) were newly diagnosed with HIV during admission. Patients who underwent HIV testing were more likely to be non-caucasian, have no underlying comorbidities, lower Glasgow coma scale, and more seizures on presentation ( $P < 0.05$ ). HIV testing also varied by type of CNS infection: community-acquired meningitis (98/142, 69.0%); encephalitis (180/261, 69.0%), aseptic meningitis (300/643, 46.6%), and healthcare-associated meningitis (86/289, 29.7%). In only 35 out of 547 patients (6.4%) presenting with acute aseptic meningitis was an HIV RNA PCR test ordered; 26 out of the 35 (74%) HIV RNA PCRs were positive with 9 patients being diagnosed with acute HIV seroconversion syndrome.

**Conclusion.** HIV testing is done in only one-half of patients with CNS infections with only a minority of patients presenting with acute aseptic meningitis being evaluated for acute HIV seroconversion syndrome. Clinicians should order an HIV test on all patients with CNS infections and consider testing for HIV RNA PCR in patients presenting with acute aseptic meningitis especially in those where the etiologic diagnosis remains unknown.

**Disclosures.** All authors: No reported disclosures.

### 1303. Impact of Pharmacy Type on HIV Viral Suppression at a University-Based HIV Clinic in the Midwest

Josh Havens, PharmD; Moses New-Aaron, MPH; Yangyang Gao, Pharm D; Qingfeng He; Fadul Nada, MD; Sara H. Bares, MD; University of Nebraska Medical Center, Omaha, Nebraska

**Session:** 151. HIV: Care Continuum

Friday, October 4, 2019: 12:15 PM

**Background.** People with HIV (PWH) utilize various pharmacy types beyond the traditional local pharmacy including mail order and specialty pharmacies. Some pharmacies often provide additional adherence services such as refill reminders, expedited delivery, and adherence packaging. Limited data are available describing the relationship between pharmacy type and HIV viral suppression (VS). We evaluated the impact of pharmacy type on VS.

**Methods.** We conducted a single-center, retrospective cohort study of PWH ( $\geq 19$  years) receiving care at a Midwestern HIV clinic between January 1, 2018, and

December 31, 2018, with at least 1 HIV RNA reading during the study period. We collected sociodemographic information, ART regimen, adherence (PDC—percentage of days covered), and clinical characteristics. Patients were stratified by pharmacy type: local (traditional pharmacy without adherence services), local specialty (traditional pharmacy with adherence services and same-day, couriered delivery), and mail order (mail order pharmacy with or without adherence services). Pearson Chi-squared tests and binary logistic regression were used to examine the effect of pharmacy type on VS (HIV viral load  $\leq 50$  copies/mL).

**Results.** A total of 1014 patients met study criteria; 164 (16%) utilized a local, 720 (71%) local specialty, and 130 (13%) mail order. VS rates were similar between pharmacy types: local (91%), semi-specialty local (88%), and mail order (96%). After adjusting for sociodemographic characteristics, ART regimen, ART adherence and other clinical characteristics, there was no association between pharmacy type and VS when comparing local and mail to local specialty pharmacy types (local—aOR: 0.98, 95% CI, 0.46–2.12; mail—aOR: 1.65, 95% CI, 0.46–6.0). Factors found to be negatively associated with VS were single marital status (aOR: 0.49; 95% CI, 0.24–0.95), current or historical opportunistic infection (aOR: 0.51; 95% CI, 0.26–0.99), and usage of a multiclass or dual ART regimen (aOR: 0.40; 95% CI, 0.16–0.98).

**Conclusion.** Despite additional services offered by some pharmacies, no differences were observed in HIV VS between pharmacy types.

**Disclosures.** All authors: No reported disclosures.

### 1304. Pharmacist Impact on HIV Management in a Psychiatric Patient Population

Alice Margulis, PharmD<sup>1</sup>; Stepan Uhlyar, PharmD, BCPP<sup>2</sup>; Nafeesa Chin-Beckford, PharmD<sup>1</sup>; Veronica Salazar, PharmD, BCPS<sup>1</sup>; Kailynn DeRonde, PharmD, BCIDP<sup>1</sup>; Lilian Abbo, MD, FIDSA<sup>3</sup>; Ana D. Vega, PharmD<sup>4</sup>; Jackson Memorial Hospital, Miami, Florida; <sup>2</sup>Jackson Behavioral Health Hospital, Miami, Florida; <sup>3</sup>University of Miami Miller School of Medicine, Miami, Florida; <sup>4</sup>Jackson Health System, Miami, Florida

**Session:** 151. HIV: Care Continuum

Friday, October 4, 2019: 12:15 PM

**Background.** Patients with mental illnesses are more than four times more likely to have human immunodeficiency virus (HIV) compared with the general population. HIV management can be especially challenging in these patients due to potential substance abuse, drug interactions, and nonadherence. The purpose of this study was to determine the impact of pharmacist management of antiretroviral (ARV) therapy in a psychiatric patient population.

**Methods.** This is an institutional review board-approved, single-center, retrospective study of patients admitted to a psychiatric hospital with an order for one or more ARV medication(s) between October 2016 and March 2017 (no pharmacist involvement), October 2017 and March 2018 (partial pharmacist involvement), and November 2018 and January 2019 (consistent pharmacist involvement). Patients were excluded if less than 18 years of age, pregnant, incarcerated, or taking ARV medication(s) for a non-HIV indication. The primary outcome was difference in appropriateness of ARV therapy prior to and during pharmacist involvement. Secondary outcomes were appropriateness of opportunistic infection (OI) prophylaxis and laboratory testing.

**Results.** A total of 37 patients were included per group. A greater number of appropriate ARV regimens were initiated with partial pharmacist involvement compared with no pharmacist involvement (62% vs. 32%,  $P = 0.0096$ ), as well as with consistent pharmacist involvement compared with partial pharmacist involvement (84% vs. 62%,  $P = 0.0327$ ). There was a trend toward increased HIV viral load draws with partial vs. no pharmacist involvement (54% vs. 43%,  $P = 0.24$ ) and additionally with consistent vs. partial pharmacist involvement (62% vs. 54%,  $P = 0.32$ ). With consistent pharmacist involvement, more patients had a resulted CD4 cell count (65%) than with both partial and no pharmacist involvement (57%). Of the patients requiring OI prophylaxis, appropriate prophylaxis was initiated in more patients with consistent pharmacist involvement (57%) than with partial pharmacist involvement (50%) or no pharmacist involvement (11%).

**Conclusion.** Pharmacist involvement in HIV management in a psychiatric patient population increased appropriateness of ARV therapy, laboratory testing, and OI prophylaxis.

**Disclosures.** All authors: No reported disclosures.

### 1305. Use of a Clinical Pharmacist to Reduce Inpatient ART (Antiretroviral Therapy) Errors

DeMaurian Mitchner, PharmD<sup>1</sup>; Lauren E. Richey, MD, MPH<sup>2</sup>; <sup>1</sup>University Medical Center New Orleans, New Orleans, Louisiana; <sup>2</sup>Louisiana State University, New Orleans, Louisiana

**Session:** 151. HIV: Care Continuum

Friday, October 4, 2019: 12:15 PM

**Background.** Continuous antiretroviral therapy (ART) that results in viral suppression is the goal of therapy for people living with HIV (PLWH). This results in improved clinical outcomes and prevents transmission to partners. University Medical Center is an urban charity hospital that provides the majority of inpatient care to PLWH in the city of New Orleans. HIV care providers noticed many ART errors during transitions of care, particularly during inpatient admissions. Impartial regimens and interactions can occur when non-HIV providers manage patients in the hospital leading to resistance and viral failure.