

# Innovative Pharmacy Collaboration: Playing a Role in Viral Suppression and Retention in Care

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# Learning Objectives

- Identify resources for starting an on-site pharmacy and summarize the impact an on-site pharmacy can have on patient care outcomes
- List the differences between a 340b pharmacy and a traditional pharmacy
- Identify collaborative strategies to build capacity, encourage ART adherence and improve viral load suppression



# UTMC Ryan White Program



- Leading center for HIV treatment in northwest Ohio since 1985
- Located in Toledo, Ohio
- > 800 HIV positive individuals enrolled
- 4 Infectious Disease Physicians
  - 3 adult
  - 1 pediatric



# UTMC Ryan White Program

- Staff includes:
  - ID Physicians
  - Psychiatrists
  - Nurse Practitioners
  - Registered Nurses
  - Clinical Pharmacist
  - Substance Abuse Counselor
  - Program Manager
  - Many more
- Multitude of Services Offered Include:
  - Nutritional Counseling
  - Women's Health Care Services
  - Mental Health Services
  - HIV Testing
  - Community Outreach and Education
  - Financial Counseling
  - On-site 340b Pharmacy



# UTCare Pharmacy

- Outpatient 340b pharmacy located within ID clinic
- Use of the pharmacy is voluntary
- 2 registered pharmacists and 2 certified pharmacy technicians
- Fill approximately 1000 prescriptions/month
- Services offered
  - Automated refill line or online refills
  - Adherence calls and reminders
  - MTM services
  - Prescription pick-up or mail delivery
  - Many more
- Generate over \$5.4 million in revenue FY15-16
- Over \$1.3 million annual profit to UTMC Ryan White Program

# Patient Care Outcomes



# Patient Care Outcomes B Lauer, et al.

## Outcomes

### Primary Outcome:

- To evaluate the clinical response of viral load suppression in individuals receiving their prescription medications from the on-site pharmacy compared to an off-site pharmacy

### Secondary Outcomes:

- Compare the retention in care between pharmacy groups
- Evaluate screening for sexually transmitted infections and cervical cancer

## Study Design

- Retrospective cohort
- Patients of the Ryan White Clinic
- Patients stratified based on preferred pharmacy
- Data obtained from on-site pharmacy records, EMR, and CAREWare



# Study Definitions

- Time frame - calendar year 2015
- Viral load suppression
  - < 40 copies/mL at last HIV RNA lab measurement in 2015
- Treatment naïve
  - Enrolled in care during first 6 months of 2015 or last 3 months of 2014
- Treatment experienced
  - Enrolled in care prior to October 2014
- Retention in care
  - 2 clinic visits and/or 2 viral load/CD4 during 2015
- On-site pharmacy – Ryan White 340B clinic pharmacy
- Off-site pharmacy – retail or mail order



# Study Participation Criteria

## Inclusion criteria

- HIV-1 positive
- $\geq 18$  years of age
- Enrolled in the Ryan White Program in 2015
- Prescribed ART

## Exclusion criteria

- $< 18$  years of age
- Not prescribed ART
- Pre-exposure prophylaxis (PreP)
- Post-exposure prophylaxis (PEP)
- Incarcerated patients
- Deceased patients
- Relocated patients
- Enrolled during last 6 months of 2015

# Study Population

792 patients evaluated

5 patients <18 years old  
58 patients not on ART  
7 patients deceased  
13 patients incarcerated,  
discharged or relocated  
21 enrolled in last 6 months of 2014  
13 no viral load in 2015

148 on-site pharmacy

527 off-site pharmacy



# Baseline Demographic Characteristics

Characteristic	On-site pharmacy (n=148)	Off-site pharmacy (n=527)	P-value
Age (years)	50 (43 – 57.75)	46 (39 – 54)	< 0.001
Male	105 (70.9)	380 (72.1)	0.956
Female	42 (28.4)	144 (27.3)	0.956
Treatment experienced	142 (95.9)	510 (96.8)	0.624
Race			0.481
Caucasian	85 (57.4)	275 (52.2)	
African American	53 (35.8)	206 (39.1)	
Other	10 (6.8)	46 (8.7)	

\*all data is reported as median (IQR) or n (%) as appropriate

# Baseline Financial Characteristics

Characteristic	On-site pharmacy (n=148)	Off-site pharmacy (n=527)	P-value
Income Bracket			< 0.001
\$0 - \$10,000	44 (29.7)	240 (45.5)	
\$10,001 - \$25,000	44 (29.7)	164 (31.1)	
\$25,001 - \$50,000	34 (23)	77 (14.6)	
> \$50,001	25 (16.9)	40 (7.6)	
Not reported	1 (0.7)	6 (1.1)	

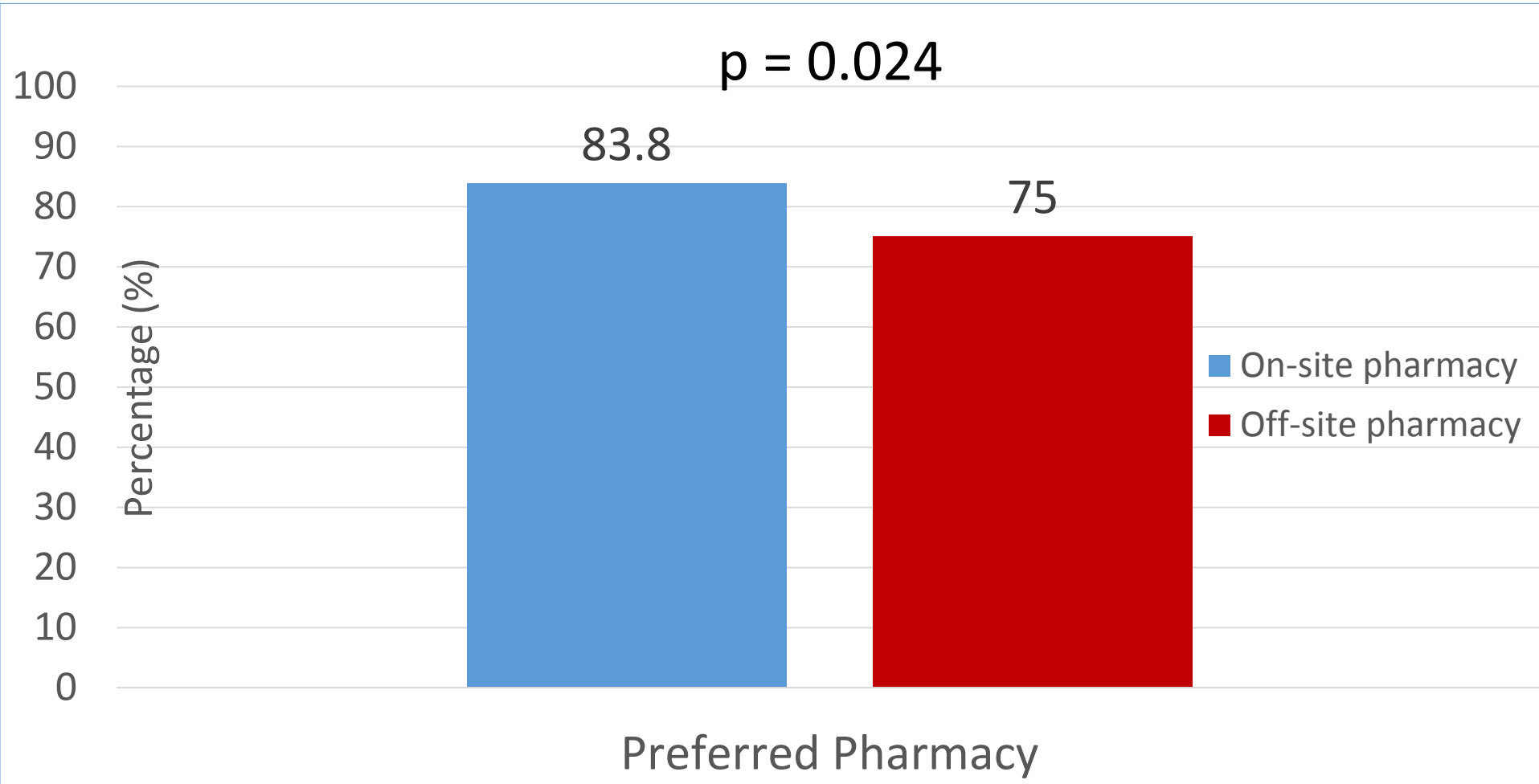
\*all data is reported as median (IQR) or n (%) as appropriate

# Baseline Medical Coverage

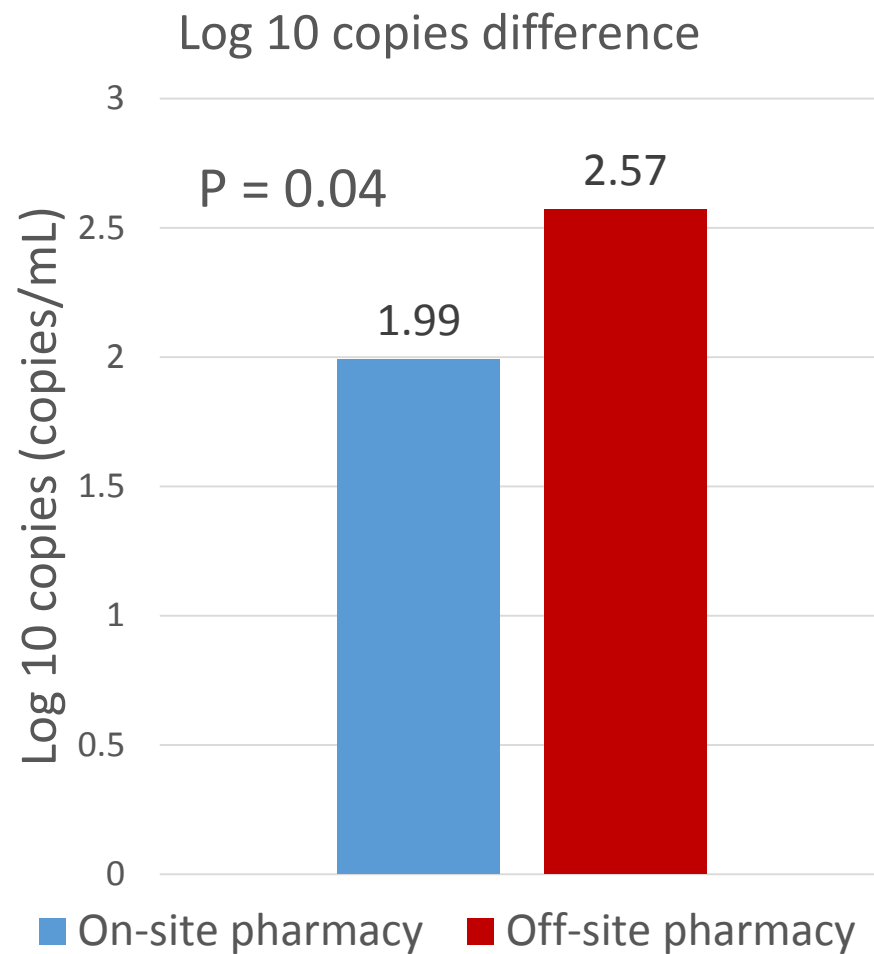
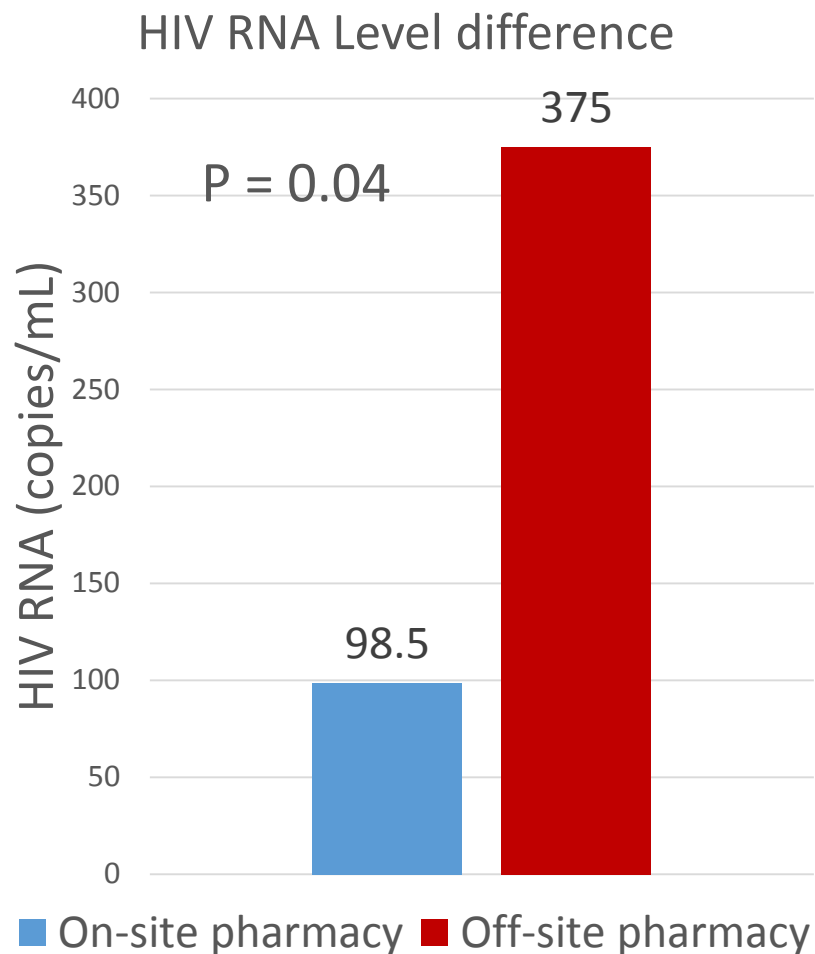
Characteristic	On-site pharmacy (n=148)	Off-site pharmacy (n=527)	P-value
Medical coverage			< 0.001
Medicaid	26 (17.6)	237 (45)	
Medicare	68 (45.9)	140 (26.6)	
Private insurance	53 (35.8)	134 (25.4)	
No insurance	0 (0)	13 (2.5)	
Other	1 (0.7)	3 (0.6)	

\*all data is reported as median (IQR) or n (%) as appropriate

# Viral Load Suppression

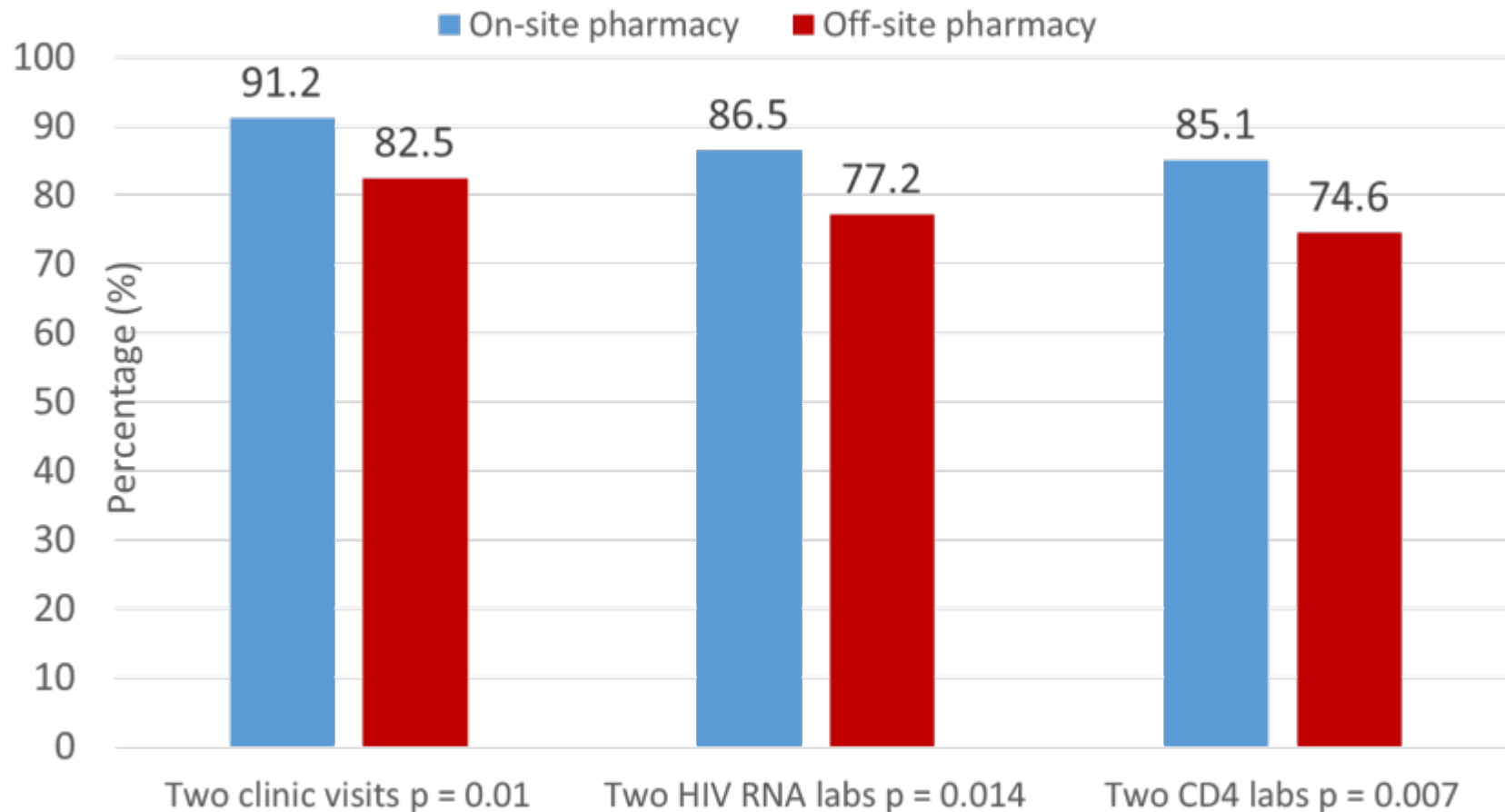


# Not Virally Suppressed

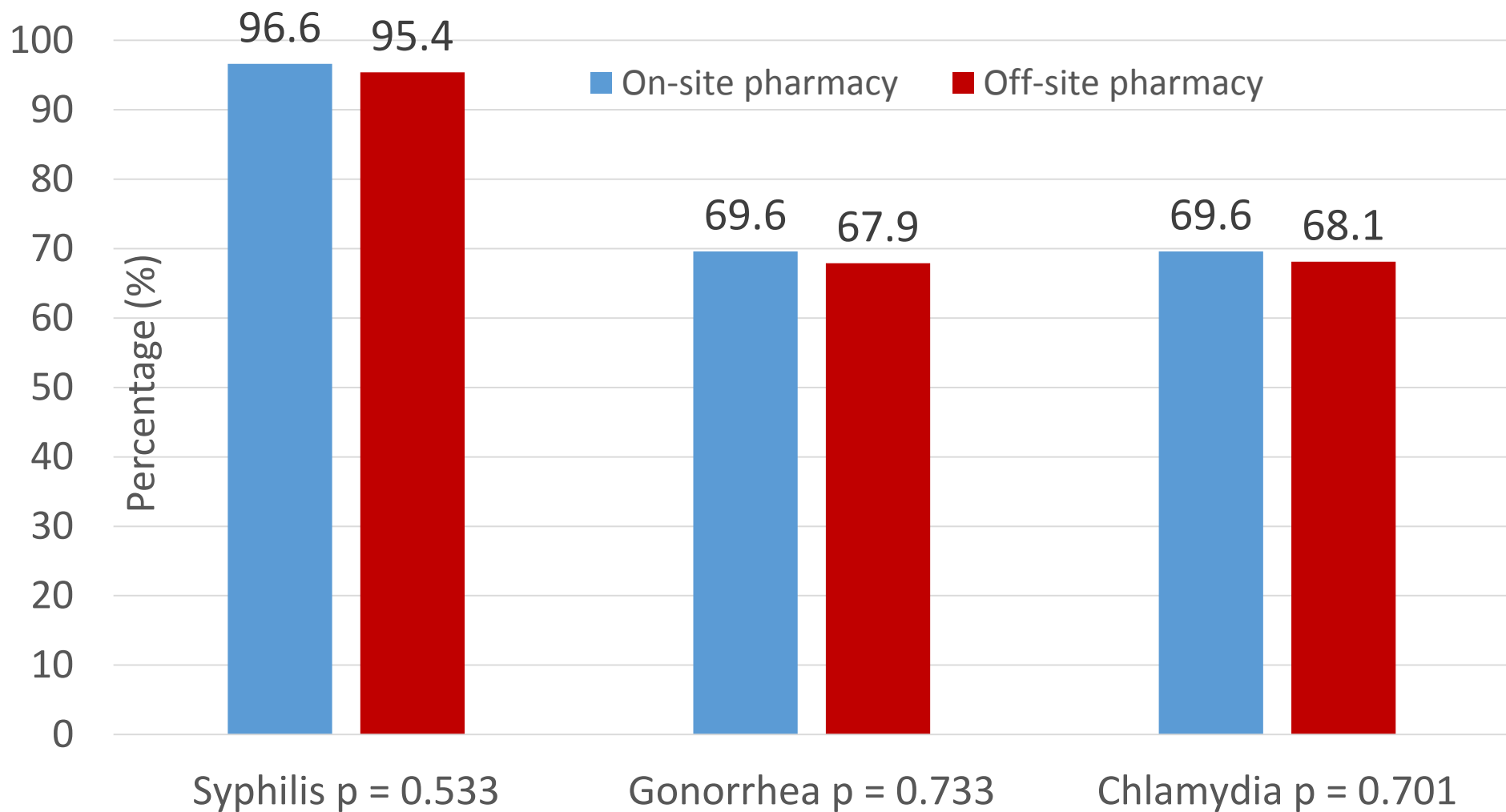




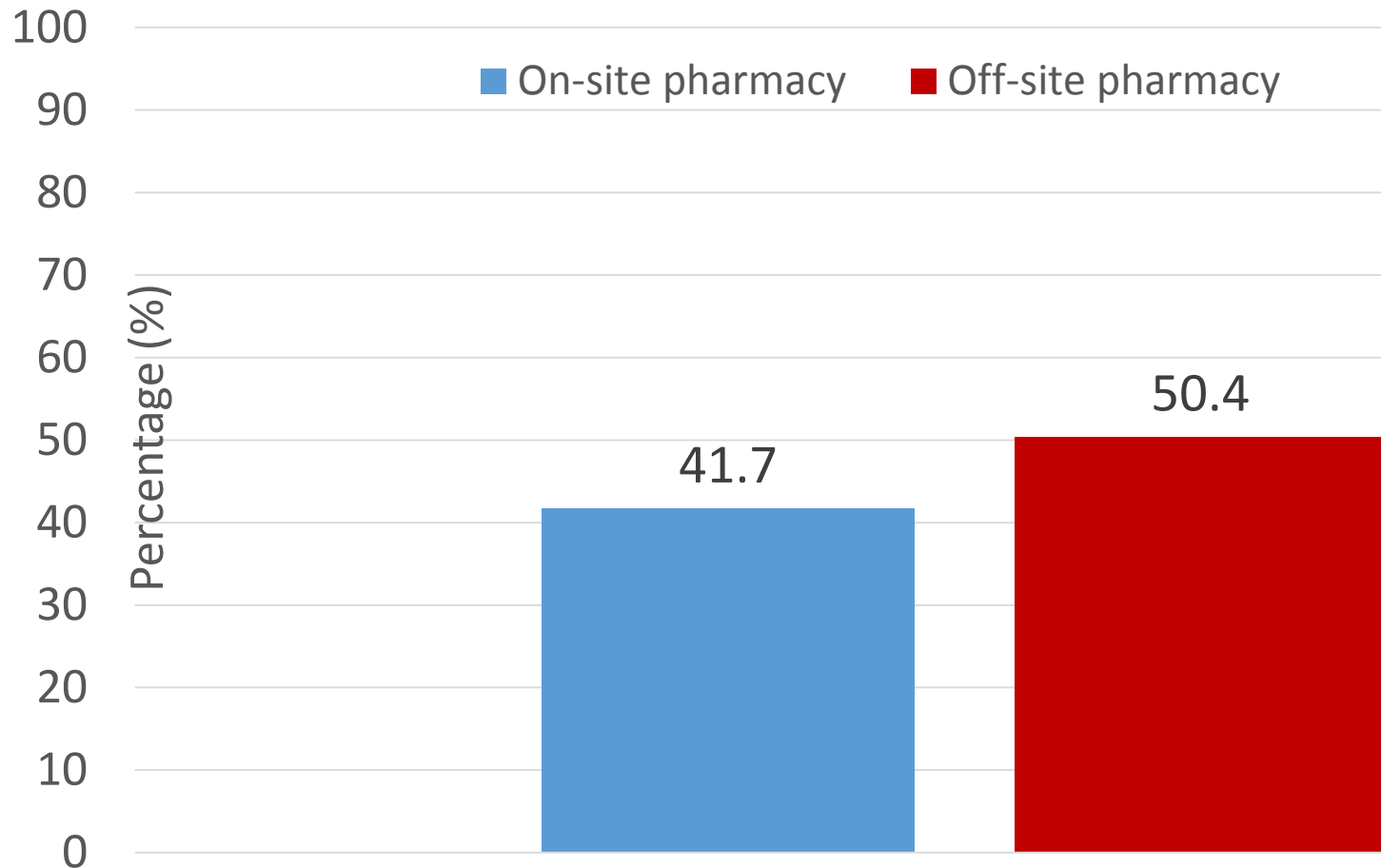
# Retention in Care



# STI screening



# Cervical Cancer Screening



Preferred pharmacy  $p = 0.357$



# Conclusions

- Primary Endpoint
  - Overall rates of viral load suppression were higher with on-site pharmacy
- Secondary Endpoints
  - On-site pharmacy patients were more likely to have two clinic visits and sets of labs
  - No difference for STI and cervical cancer screening

# Limitations

- Retrospective chart review
- Errors in data reporting
- Channeling bias
- Complete year 2015 vs. 1 year follow-up from entry to care
- Last viral load in 2015
- No adherence data

# 340B Basics

# What is 340B

- Established under the Veterans Health Care Act of 1992, Section 340b of the Public Health Service Act
- Purpose: stretch the federal resources to give access to more patients and provide more services



# To be or not to be 340B

## 340B

- Patient restrictions
  - Only RW patients
  - Medicaid Carve in/out
  - Only written by RW providers
- Billing complexities
- Reduced drug cost
- Revenue is directed

## Traditional

- Only restricted by contracts and received prescriptions
- Standard billing
- Contract purchase price
- Revenue as needed



# Key planning/Steps

- Work with your Ryan White Program coordinator to establish a business plan/structure for pharmacy
- Determine 340B Member Eligibility
- Licensing/Regulations/Set Up
- Wholesaler/ Prime Vendor
- Information Technology

# Business Structure



# Implementation

## 340B Member Eligibility

- Establish eligible prescriber list
- Determine assistance programs and member eligibility to receive benefits
- Voucher program

## Regulatory/Licensing

- Contact State Board of Pharmacy for appropriate licensure
- Contact DEA for terminal distributor license
- Establish NPI and NABP numbers
- Establish carve-in vs. carve-out of Medicaid prescriptions
  - State Medicaid ID number if applicable

# Implementation

## Information Technology

- Pharmacy software
- Access to EMR

## Wholesaler/Prime Vendor

- Set up 340B account with wholesaler
- Register with HRSA's Prime Vendor Program Apexus for valuable resources, advice, Q & A
- 340B University

# Obtaining CME/CE Credit

If you would like to receive continuing education credit for this activity, please visit:

<http://ryanwhite.cds.pesgce.com>

# The 4 Things We Learned

1. Rome wasn't built in a day
2. There is no "I" in team
3. It's all in the details
4. If you build it, they will come



# Resources Available

- HRSA
  - <http://www.hrsa.gov/opa/>
  - <http://www.hab.hrsa.gov/>
- Apexus Prime Vendor Program
  - <https://www.340bpvp.com/>
  - 340b University
- APha
  - <http://www.pharmacist.com/safety-net>
  - Peer-to-Peer Program
- Colleagues/ Existing Programs
- Consultant