

BACKGROUND

- Squamous cell carcinoma of the anus (i.e. anal cancer), a highly preventable type of cancer, represents **0.5%** of all new cancer cases in the US in 2017 according to the National Cancer Institute's Surveillance, Epidemiology, and End Results Program².
- Over the last 10 years, incidence of anal cancer has been on a rise on average **2.2%** each year².
- It is estimated that the HIV-infected population of gay, bisexual and other men who have sex with men (MSM) is **52 times** more likely to develop anal cancer compared to the non-HIV-infected population¹.
- Research indicates that anal Papanicolaou (Pap) smear screenings can greatly reduce the prevalence of anal cancer in the HIV-infected MSM population, but **no national guidelines exist for performing anal Pap screens among the MSM population.**

PROJECT PURPOSE AND AIM

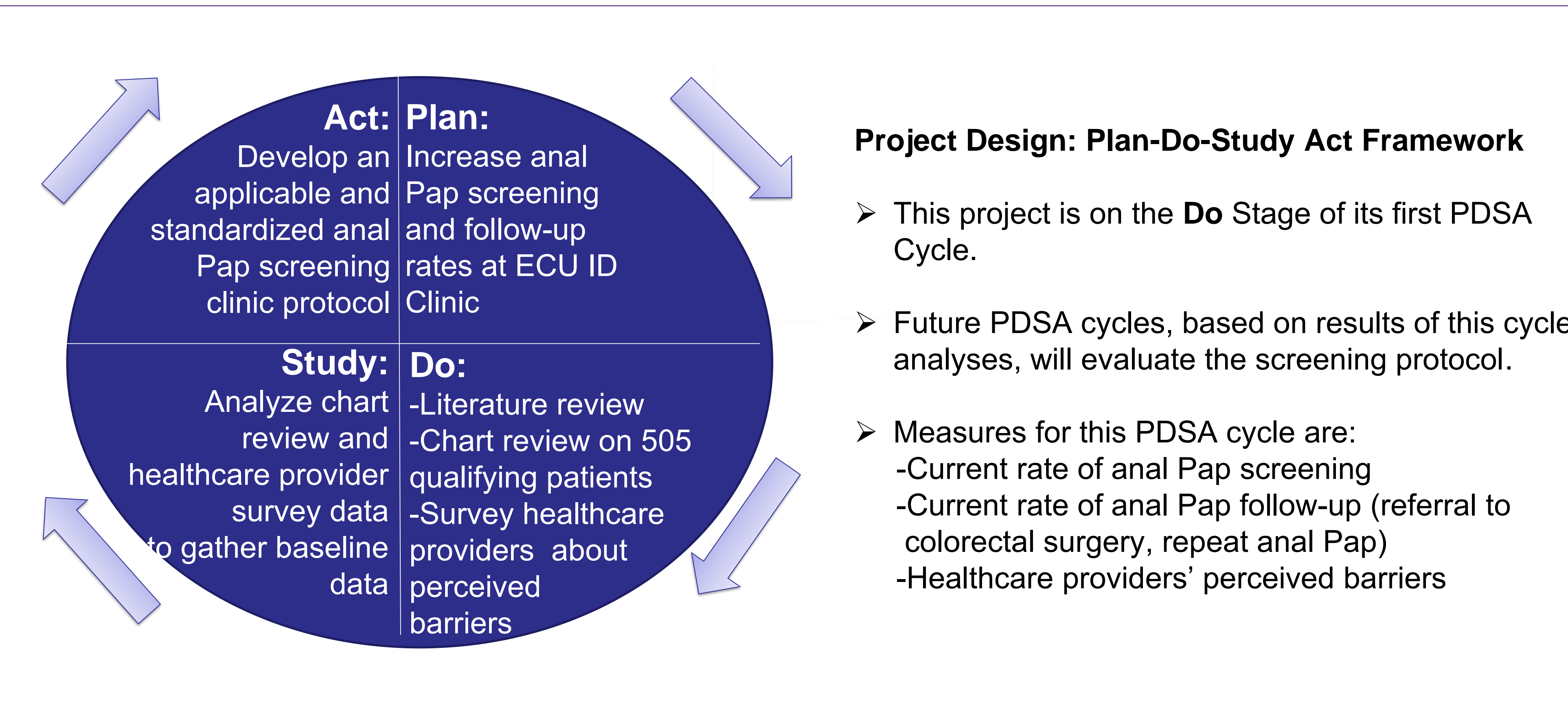
Purpose: Show the prevalence of anal Pap abnormalities and follow-up activities among MSM patients receiving HIV care at the ECU Infectious Diseases and International Travel Health Clinic (ECU ID).

Aim Statement: By August 2018, we will calculate the current rates of anal Pap screening and follow-up at the ECU-ID Clinic for HIV-infected MSM patients and identify healthcare providers' perceived barriers to completing anal Pap smears to aid in development of an applicable and standardized anal Pap screening clinic protocol.

PROJECT DESIGN/STRATEGY

- Perform a retrospective chart review on 505 qualifying HIV-infected MSM patients to collect baseline data about ECU ID Clinic's anal Pap smear screening and follow-up rates.
- Survey healthcare providers at ECU ID Clinic to understand the barriers to completing anal Pap smears among healthcare providers
- Analyze chart review and healthcare provider survey data to develop an applicable and standardized anal Pap screening clinic protocol. Our prediction is that implementation of this clinic protocol will increase anal Pap screening and follow-up rates.
- Monitor the overall anal Pap smear screening and follow-up rates at ECU ID Clinic at 6 months post-implementation of clinic protocol.

METHODOLOGY

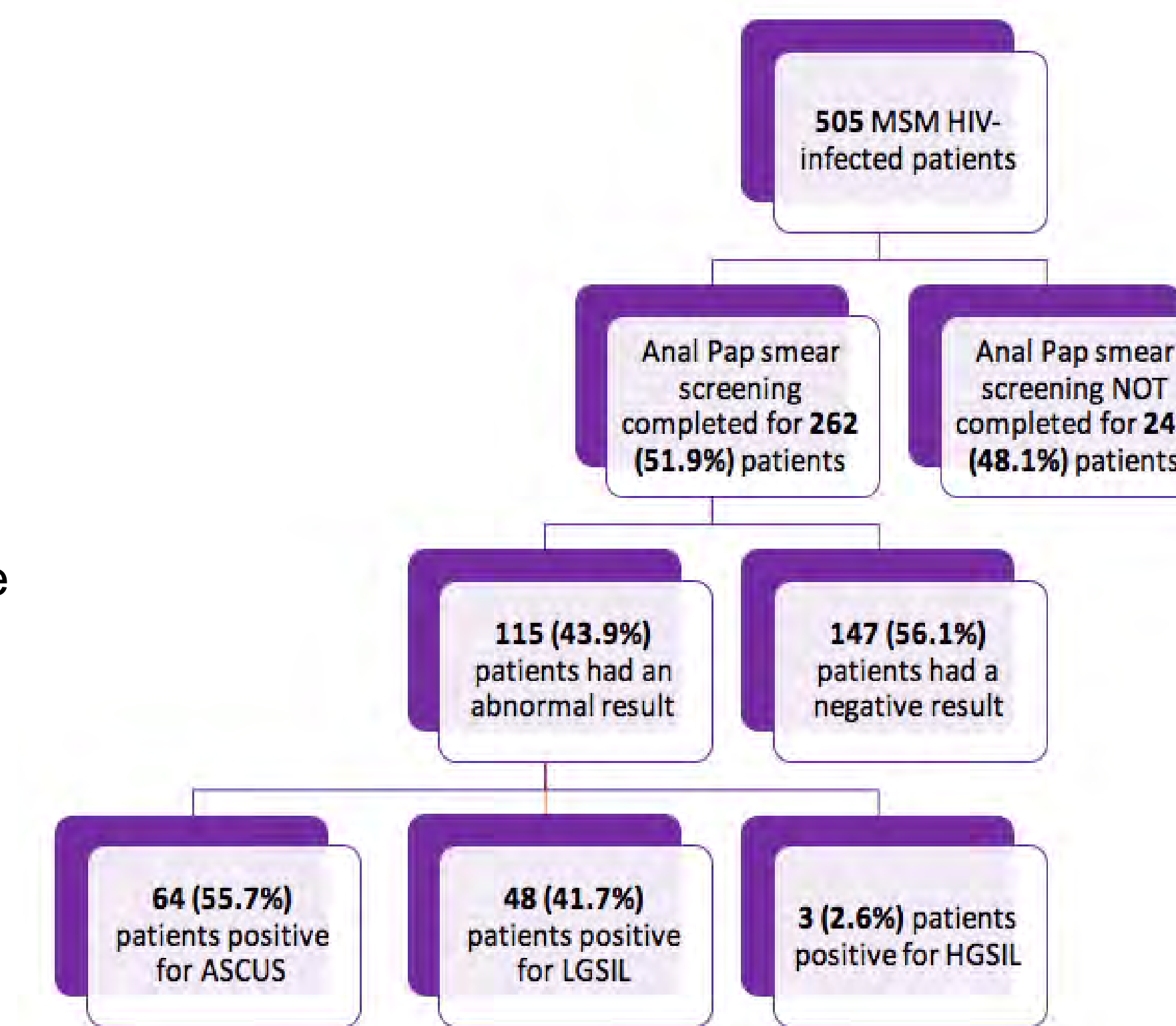


LESSONS LEARNED

- There is variation in practice among healthcare providers at ECU ID Clinic regarding the screening, the need for a follow-up, and the type of follow-up provided.
- A standardized clinic protocol is needed, along with national guidelines, which may help improve the screening and follow-up rates at ECU ID Clinic.
- A higher percentage of patients with an ASCUS result do not receive follow-up when compared to patients with a LGSIL and HGSIL result. Future research to determine the significance of follow-up for patients with an ASCUS result should be explored.
- Among the 243 patients who did not receive an anal Pap smear screening, the reason was not listed for each of them. Some documented reasons include patient deferred, patient does not have receptive anal sex, patient is transwoman, patient not sexually active currently, or patient is receiving follow-up care for anal condylomata, anal warts or history of anal cancer

RESULTS/OUTCOMES

- A total of 505 gay, bisexual or other MSM were included in the retrospective chart review. All men had a documented medical visit between January 1st, 2016 and May 31st, 2017.
- The average age of men was 42 years (range: 20-81).
- Most men were Black or African-American non-Hispanic (67.7%), and approximately 28.1% and 3.2% were White (non-Hispanic) men and Latino (Hispanic) men, respectively.
- Anal Pap smear abnormality findings: Atypical Squamous cells of undetermined significance (ASCUS), Low Grade Squamous Intraepithelial Lesion (LGSIL), High Grade Squamous Intraepithelial Lesion (HGSIL)



	ASCUS (n = 64)	LGSIL (n = 48)	HGSIL (n = 3)
No follow-up provided	18 (28.1%)	8 (16.7%)	0
Referral to colorectal surgery	22 (34.4%)	17 (35.4%)	2 (66.7%)
Repeat anal Pap	22 (34.4%)	21 (43.8%)	0
Referral + repeat anal Pap	0	2 (4.17%)	1 (33.3%)

Table 1. The type of follow-up provided for each type of anal Pap smear abnormality.

NEXT STEPS

- Currently, neither ECU Surgery or Physicians East are accepting referrals for abnormal anal Pap results. Therefore, the first next step is work on a new mechanism to refer the patients with an abnormal anal Pap result.
- The second step is surveying healthcare providers at ECU ID clinic about perceived barriers to completing anal Pap smears.
- The third step is developing an applicable and standardized anal Pap screening and follow-up clinic protocol for ECU ID clinic using the analysis of chart review and healthcare provider survey data.
- The fourth step is monitoring the overall anal Pap smear screening and follow-up rate among healthcare providers at ECU ID Clinic at 6 months post-implementation of clinic protocol.
- Comparing the baseline rates with the anal Pap smear screening and follow-up rates after clinic protocol implementation will help us know whether the clinic protocol is an improvement.

REFERENCES

- 1) Koskan, A. M., Leblanc, N., & Rosa-Cunha, I. (2016). Exploring the Perceptions of Anal Cancer Screening and Behaviors among Gay and Bisexual Men Infected with HIV. *Cancer Control*, 23(1), 52-58.
- 2) National Cancer Institute. SEER stat fact sheets: anal cancer. <http://seer.cancer.gov/statfacts/html/anus.html>. Accessed September 8, 2017.