

# Screening for HIV infection in the Emergency Department of a Comprehensive Cancer Center: Recommendations and Challenges

T Rice, Z Shelal, K Merriman, H Bazerbashi, P Brock, C Gonzalez, J Henderson, R Massey and B Granwehr.  
University of Texas M.D. Anderson Cancer Center, Houston, TX.

## Background

- HIV infection increases the risk of many AIDS-defining cancers (ADC) and non-AIDS-defining cancers (NADC).
- Cancer is one of the leading causes of death in HIV patients.
- Diagnosis of HIV infection in cancer patients is imperative since HIV therapy improves the outcome of treatment of most cancers.
- The Centers for Disease Control and Prevention (CDC) and US Preventive Services Task Force (USPSTF) recommend routine opt-out HIV testing of patients 13-65 years of age.
- Despite screening recommendations, the rate of routine HIV testing in US emergency departments (EDs) and cancer survivors continues to be low.
- There is no published data regarding HIV testing in EDs of cancer centers.

## Objectives

- Our aim was to increase HIV screening in the emergency department (ED) of a comprehensive cancer center.
- We also sought to educate cancer patients and providers regarding the relationship between HIV infection and cancer.

## Methods

- A joint effort was initiated by the departments of Emergency Medicine and Infectious Disease to perform routine HIV testing (as recommended by the Centers of Disease Control [CDC]) in new patients presenting to the institution through the ED.
- We conducted educational activities on the relationship between HIV and cancer, recommendations for routine HIV testing, and state legal requirements to the ED staff and institutional committees. Patient education was also provided.
- Enhancements were made to the ED electronic health records to facilitate ordering and documentation of patient notification.
- We also devised an algorithm for result verification, reporting, and linkage to care.

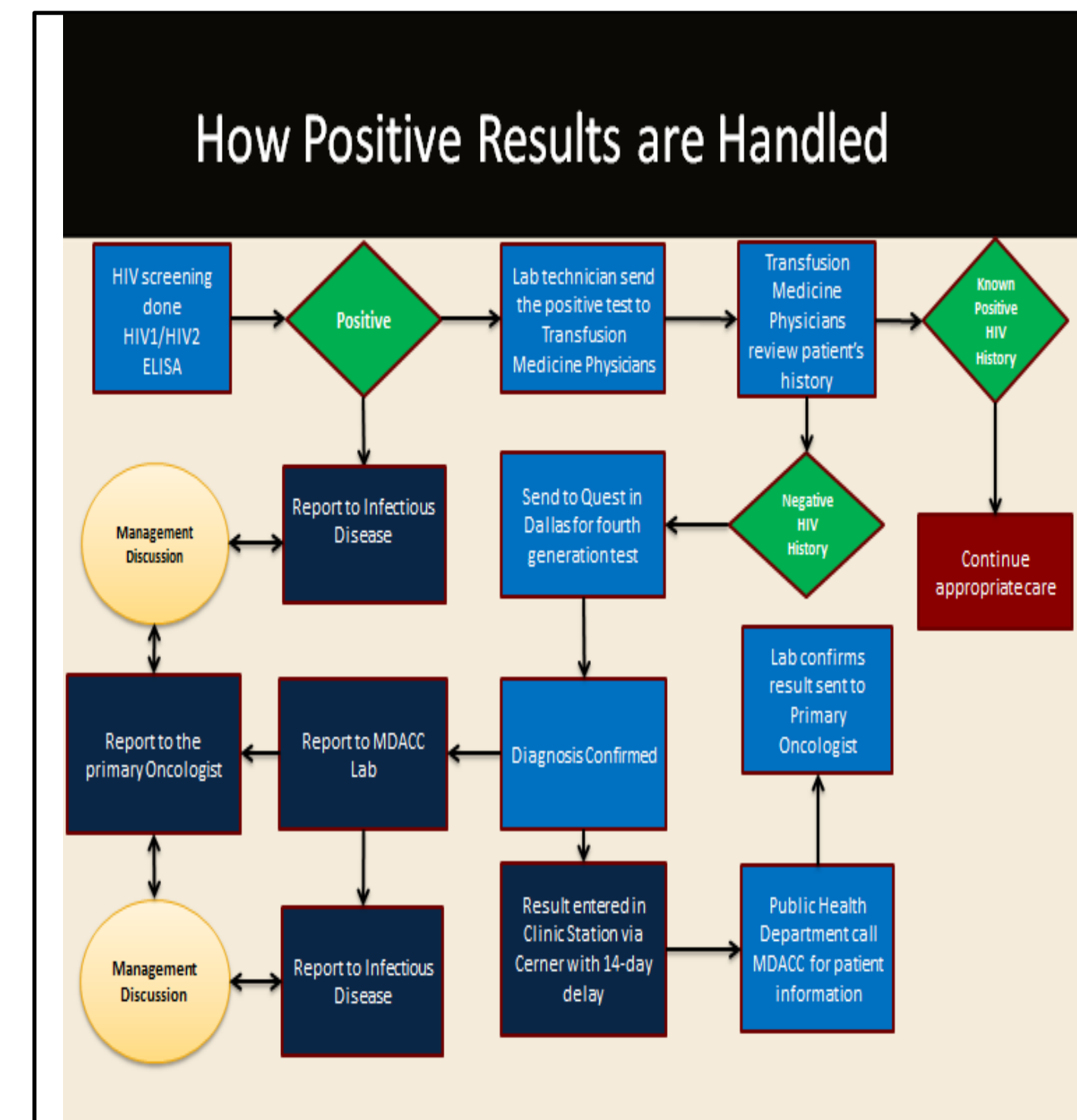


Fig.1 Flow Charts for HIV Testing at the ED of MD Anderson Cancer Center (MDACC)

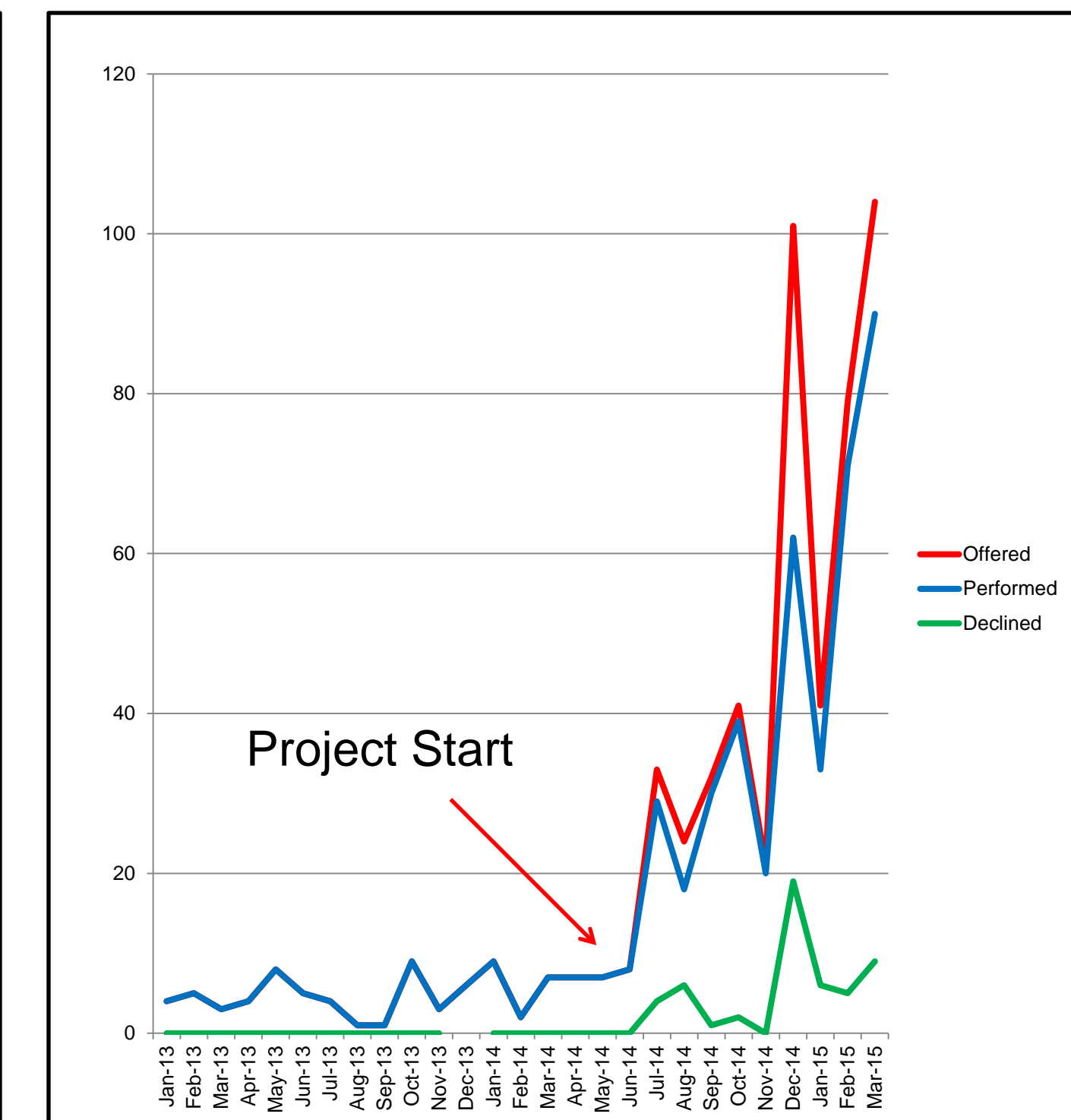


Fig.2 Run chart of HIV tests in the ED of MDACC during the years 2013 - 2015

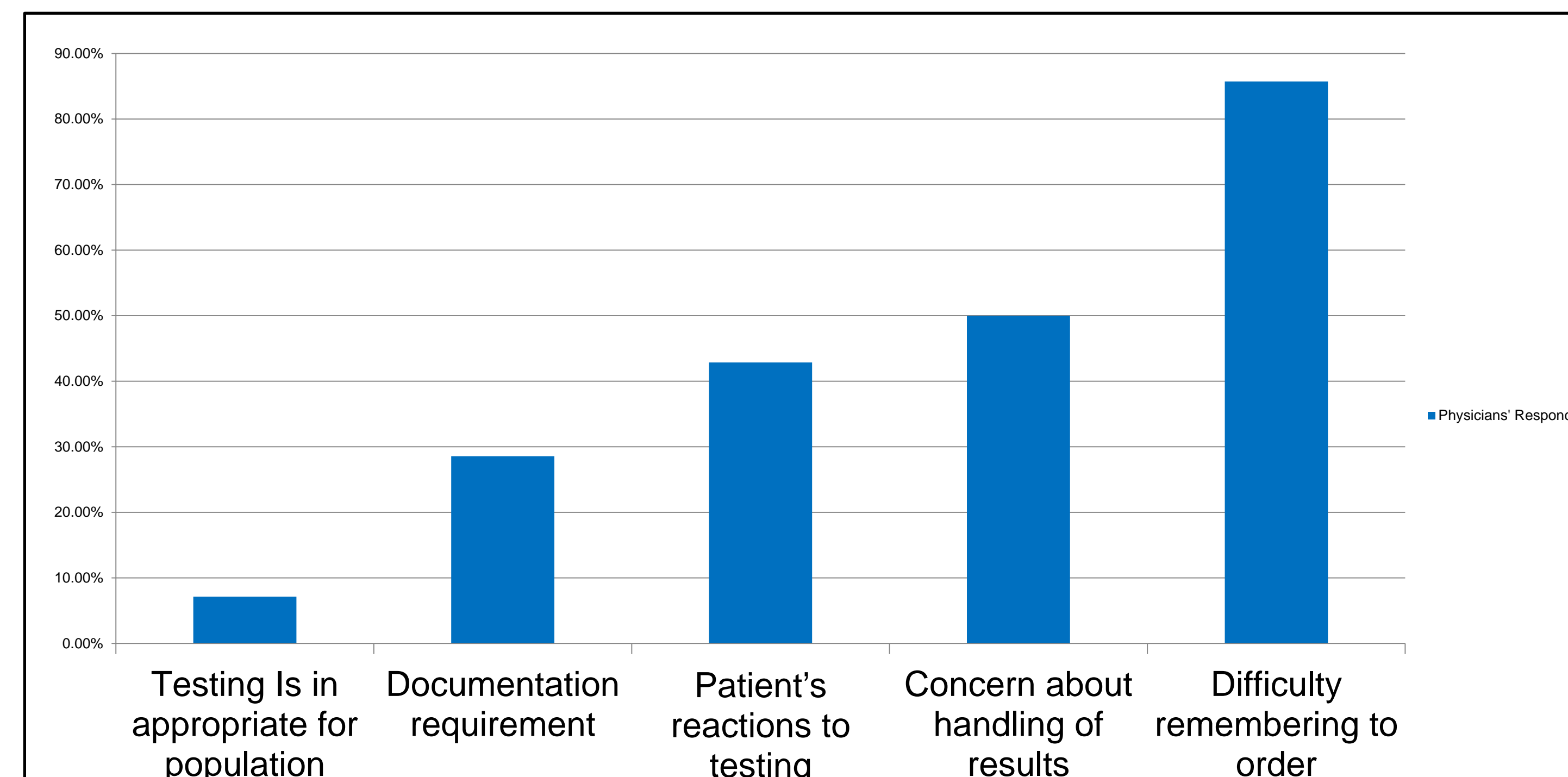


Fig.3 Perceived impediments to HIV testing in the ED of MDACC as seen by physicians

## Results

- HIV testing in the ED increased 5 fold in the 6 months that followed the initiation of our program in July 2014 (201 patients tested from July-December 2014 vs. 40 patients tested from January-June 2014).
- A total of 296 patients were offered HIV testing from July 2014 to the end of January 2015.
- Only 12% (38/296) of patients declined testing, while 8% (24/296) of tests were canceled
- The rate of positive HIV test was 0.8% (2/234), including one incident case (0.4%).
- Institutional approval for the addition of HIV testing to the institutional consent for treatment form was recently obtained.

## Conclusion

- Implementation of routine opt-out-testing for HIV in our cancer center ED was not feasible because of:
  - Difficulty in identifying appropriate patients
  - Failure to obtain samples from patients who agreed to testing
  - Initial difficulties in ordering tests
- Barriers to testing included lack of knowledge of :
  - The relationship between HIV and cancer
  - CDC and USPTF guidelines
- Full impact of implementation of routine HIV screening in the EC of our cancer center was impeded by inability to conduct opt-out testing.
- The HIV testing rate, however, is rapidly increasing.
- Implementation of ED testing may improve with the recent modification to the institutional "front door" consent, which now includes routine opt-out language.
- This will reduce the burden of physician documentation and eliminate the challenge of patient identification.
- An ongoing educational initiative outside of the ED may enhance testing in other departments.