

Impact of Electronic Medical Record and Revised Triage Process On Routine HIV Screening in the Emergency Department.

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Background

As part of a CDC-funded grant, PS07-768, in compliance with the 2006 CDC recommendations for HIV screening. Memorial Hermann Texas Trauma Institute, a tertiary referral center began HIV screening 6/2008.

Additional funding was received to expand testing to 6 of 8 Memorial Hermann community hospitals. All locations have positivity rates exceeding the national average with a range of 0.03% as a low to the highest of 0.11%. During the third year of the funding, the electronic medical record (EMR) platform for the ED changed and a revised triage process was initiated to reduce wait times. These modifications dramatically impacted the routine HIV screening process.

Formerly, the HIV screening field was a mandatory requirement at triage for 7 facilities that were testing and not visible to the sites uninvolved. The previous EMR had the ability to significantly “flex” functionality from site to site by location which is not possible with the new EMR. The current EMR is an enterprise wide solution with a central server. Mandatory requirements can only be used when HIV screening is present at all locations.

Split flow triage provides an immediate point of entry assessment designed to reduce wait times. Split flow does not allow for department specific screening questions at triage that a comprehensive triage obtains. Therefore routine HIV screening was moved elsewhere in the patient EMR and was not easily accessible to the RN for documentation.

These changes negatively impacted the routine HIV screening process we had implemented.

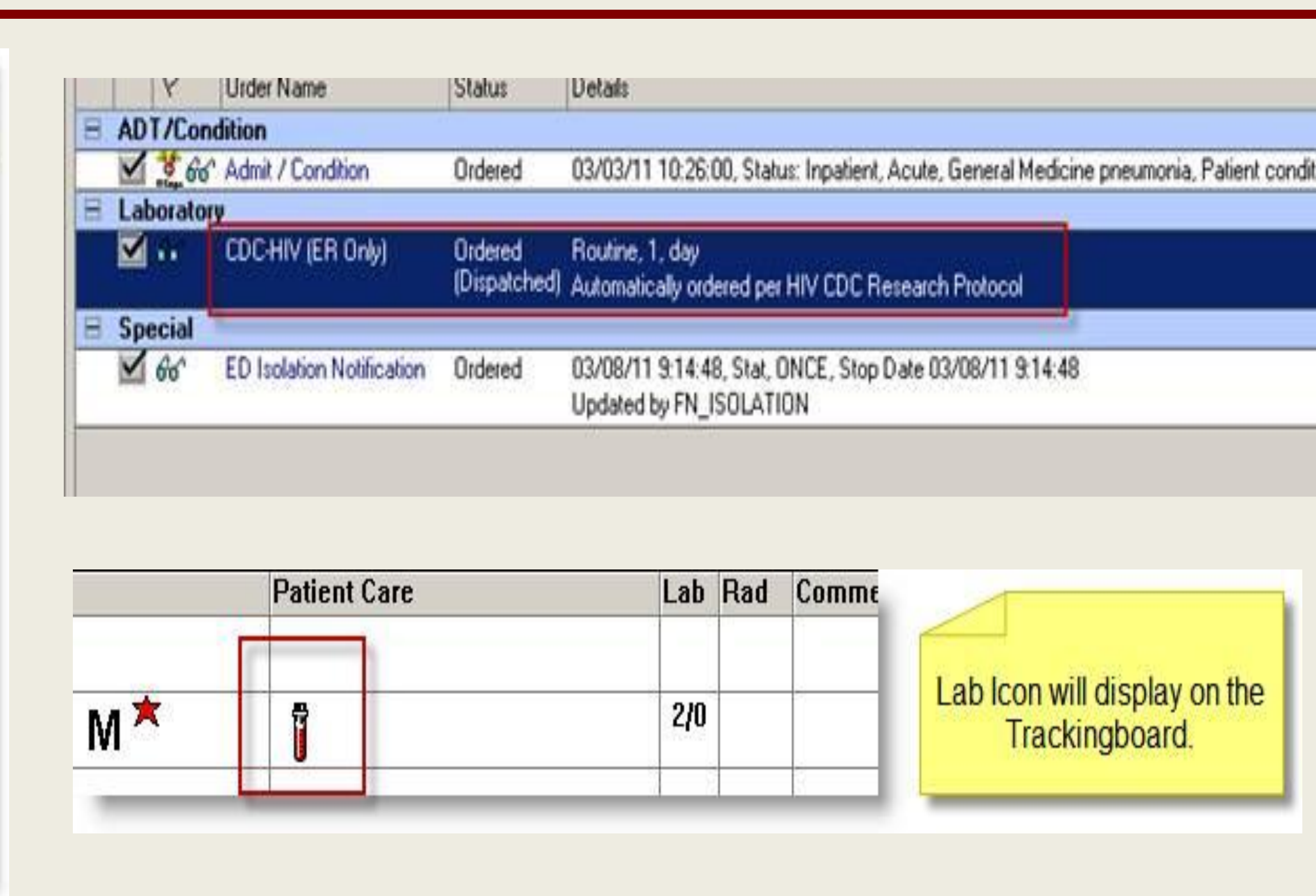
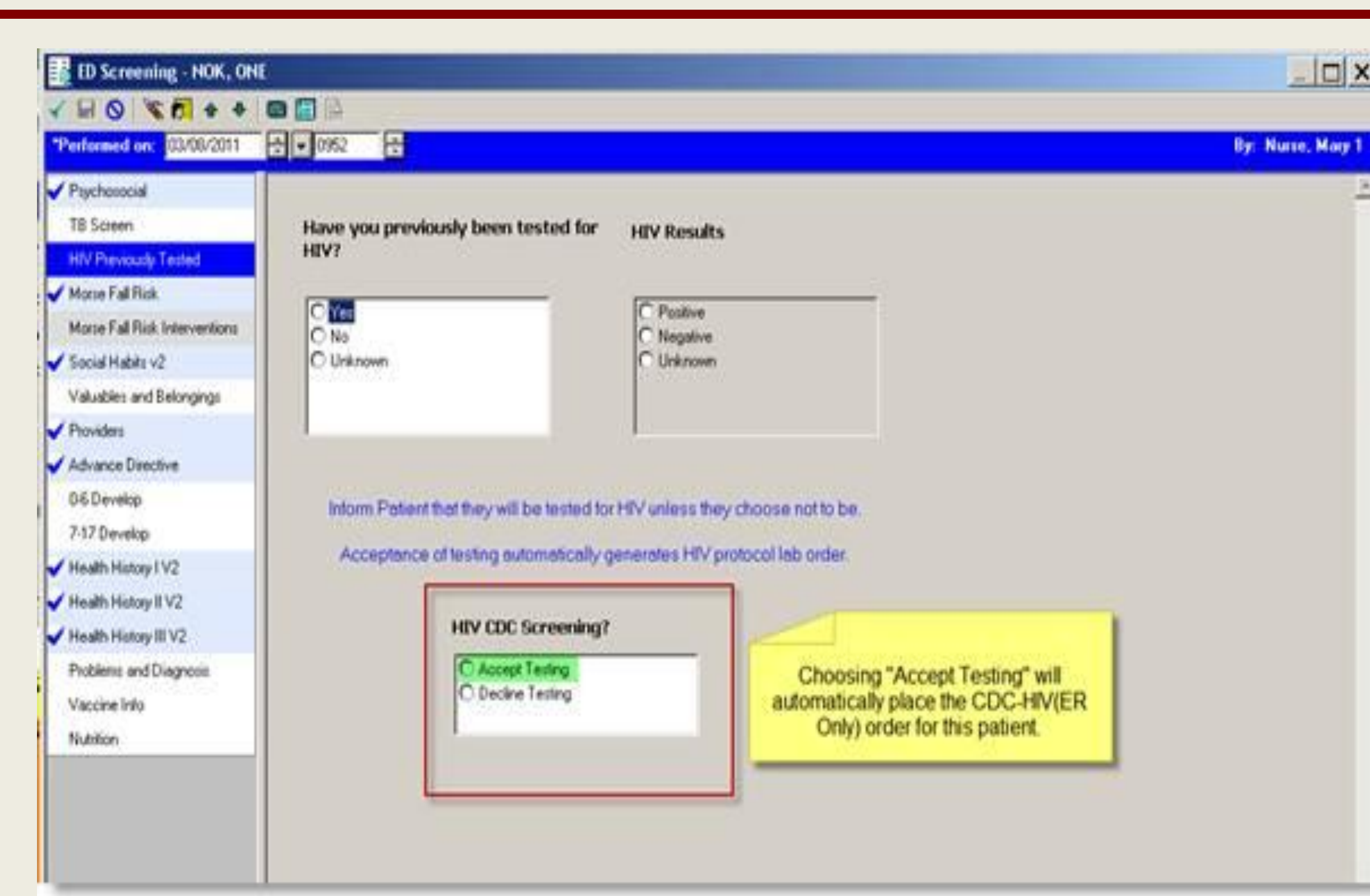
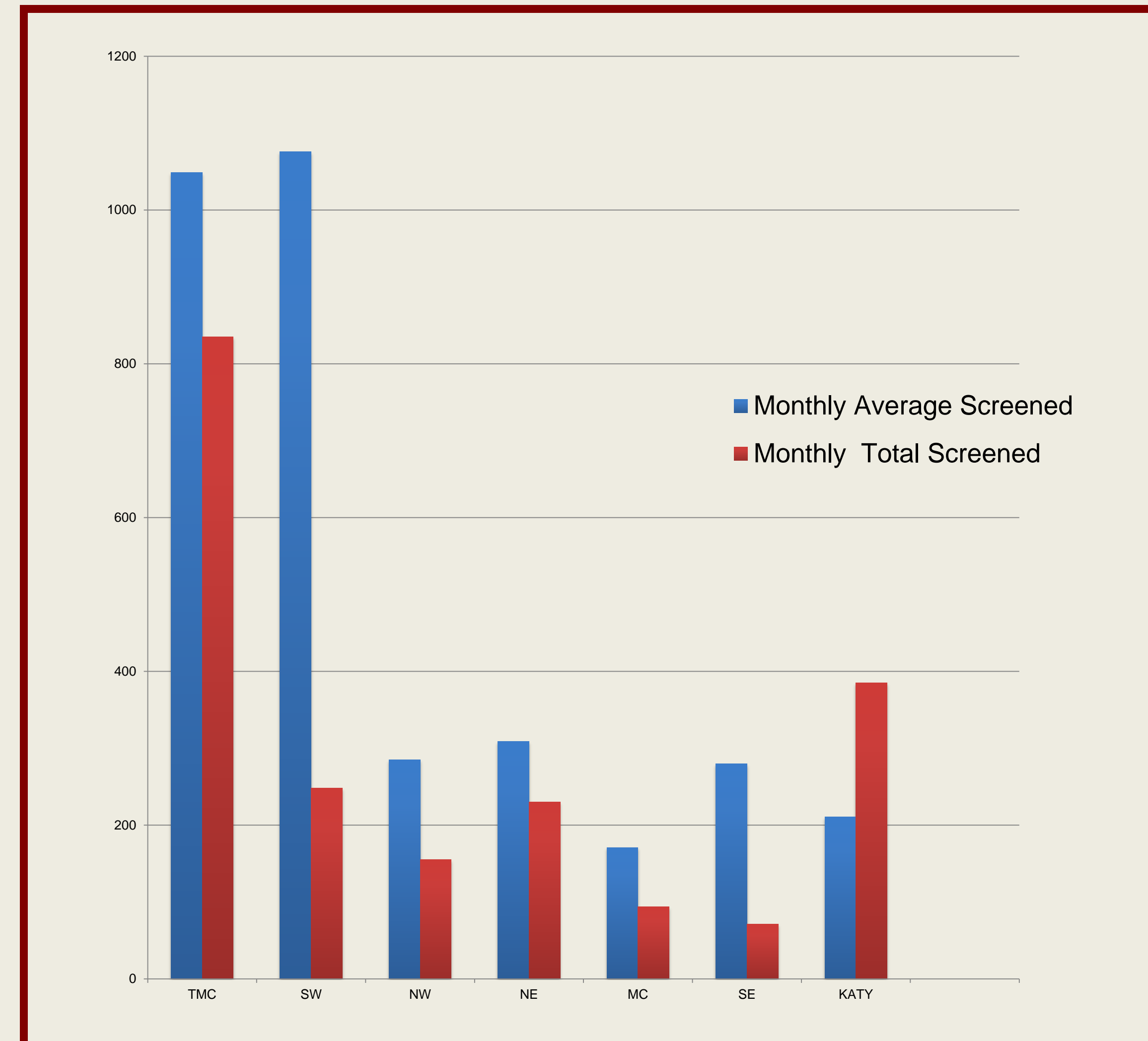
Method

We evaluated the monthly HIV screening numbers pre and post implementation.

Table 1

PRE Split Flow & EMR Change		POST Split Flow & EMR Change		Returned Screening to Triage Despite Split Flow	
TMC	1049	TMC	835		
SW	1076	SW	248		
NW	285	NW	155		
NE	309	NE	230		
MC	171	MC	94	MC	164
SE	280	SE	71	SE	192
KATY	211	KATY	385		

**Pre Split Flow vs. Post Split Flow
& improvement at 2 locations with addressing
HIV screening at triage.**



Results

The testing numbers dropped dramatically with the new EMR. Testing decreased at all but one site from 20-77%. (Table 1.) The site that increased from 211 to 385 chose to continue comprehensive triage and did not implement split flow triage. The HIV screening process has returned to triage at two facilities and within one month improved to near pre-implementation numbers.

Conclusion

While uncertain which variable had the greater impact to the HIV screening process, success with routine HIV screening is optimal when addressed at triage and when the screening tool is a mandatory field in the computer system. It assures that all patients who access the ED for services and are able to opt out of testing are screened for HIV. Testing has improved to near goal with addressing HIV screening during the triage process despite split flow requirements. The same implementation will begin at the remainder of the campuses in an effort to optimize HIV testing.



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