Increased HIV Testing among Hospitalized Patients who Declined Testing in the Emergency Department

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BACKGROUND

- Healthcare systems seeking to implement routine HIV testing must develop complementary strategies across care settings
- Many patients who are hospitalized arrive via the Emergency Department (ED) where they may have been offered HIV testing
- The yield of reoffering HIV testing to hospitalized patients who declined testing in the ED is unknown

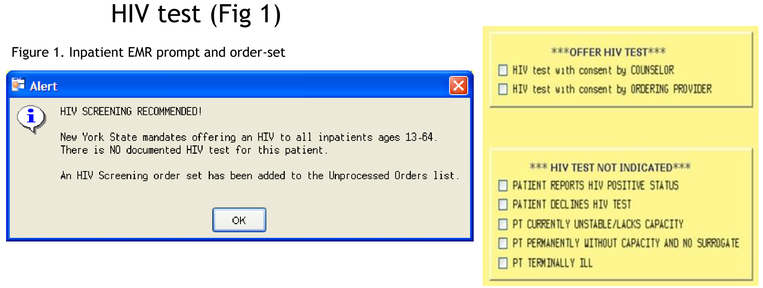
OBJECTIVE

- To determine whether an intervention to increase HIV testing among hospitalized patients with unknown HIV status was associated with an increase in testing specifically among patients who declined a test in the ED

METHODS

- **SETTING:** Urban, academic, tertiary care hospital in a region of high HIV prevalence
- **DESIGN:** Pre-Post
- **PATIENTS:** Unique patients 21-64 years old who:
  1) Had no prior HIV test in the affiliated healthcare system
  2) Declined HIV testing in the ED
  3) Were hospitalized from the ED to non-obstetric services in the 8 week periods pre- and post implementation of the intervention
- **HIV TESTING PROCEDURES:**
  ED: Opt-in offer by ED nurse or HIV counselor with documentation of offer, consent/decline in EMR
  Inpatient:
  Pre-intervention: Opt-in offer by provider or HIV counselor. Documentation of offer, consent/decline not routinely captured
  Post-intervention: Electronic medical record (EMR) prompt and order-set appearing to providers placing EMR orders on hospitalized patients who had no documented HIV test (Fig 1)

Figure 1. Inpatient EMR prompt and order-set



- **OUTCOME:** Performance of HIV test prior to hospital discharge
- **DATA SOURCE:** EMR
- **ANALYSIS:** Patient characteristics pre- and post-intervention compared using Chi-squared test and Wilcoxon rank-sum test. Proportions of patients with HIV test performed prior to discharge compared using Chi-squared test

RESULTS

Figure 2. Pre- and Post-Intervention Cohorts

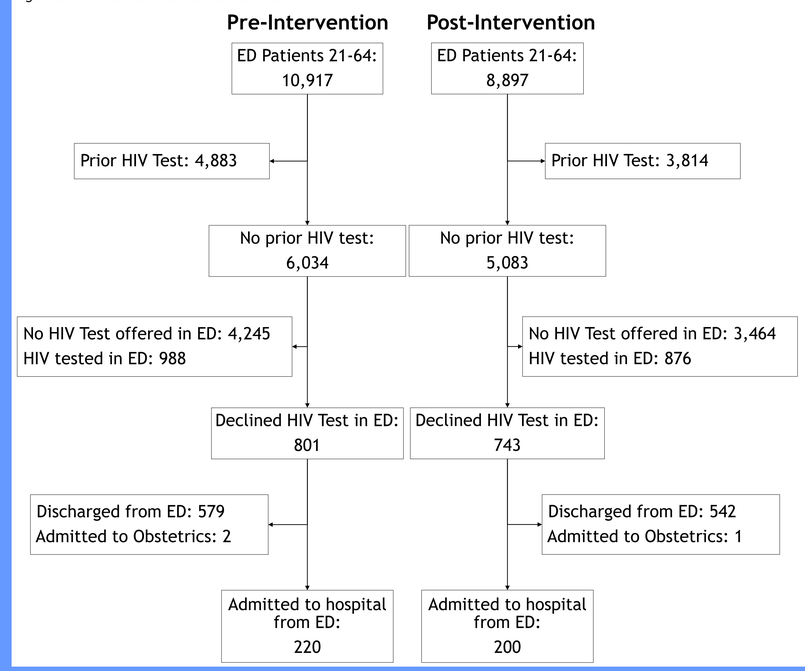
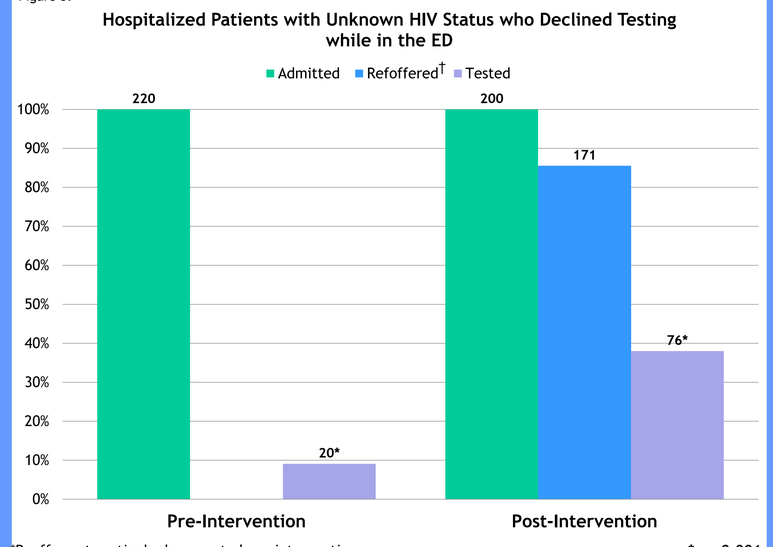


Table 1. Patient characteristics

Characteristic	Pre-Intervention (N=220) N	%	Post-Intervention (N=200) N	%	p value
Sex					0.64
Female	116	53	110	55	
Age (median years, IQR)	52	41-57	52	45-58	0.43
Race/ethnicity					0.16
Hispanic	92	42	87	44	
Black, non-Hispanic	81	37	74	37	
White, non-Hispanic	31	14	16	8	
Asian, non-Hispanic	2	1	6	3	
Other	9	4	14	7	
Unknown/Missing	5	2	3	2	
Preferred Language					0.42
English	184	84	172	86	
Spanish	33	15	23	12	
Other	3	1	5	3	
Insurance					0.77
Public	153	70	133	67	
Private	60	27	61	31	
Uninsured	7	3	6	3	
Admission Service					0.32
Medicine	168	76	152	76	
Surgery	36	16	40	20	
Neurology	8	4	2	1	
Psychiatry	5	2	5	3	
Gynecology	3	1	1	1	
Inpatient length of stay (median days, IQR)	2	0-6	2	0-5	0.81

RESULTS (continued)

Figure 3.



†Reoffer not routinely documented pre-intervention

*p < 0.001

LIMITATIONS

- Observational design
- Limited sample size
- Substantial resources required to develop EMR-based intervention as well as support HIV counselors
- Findings may not be generalizable to non-hospitalized patients or patients who decline HIV testing in other care settings

CONCLUSIONS

- HIV testing increased among hospitalized patients who declined a test in the ED after implementation of an EMR-based intervention
- A substantial proportion of patients who declined testing in the ED ultimately consented to a test after it was reoffered during hospitalization

IMPLICATIONS

- Decision to undergo HIV testing is a dynamic process and testing should be reoffered to patients who previously declined
- EMR-resources may be an effective tool for implementing expanded HIV testing

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