

# Improving Rates of STI Screening Among PrEP Consumers through Electronic Medical Record System Enhancements

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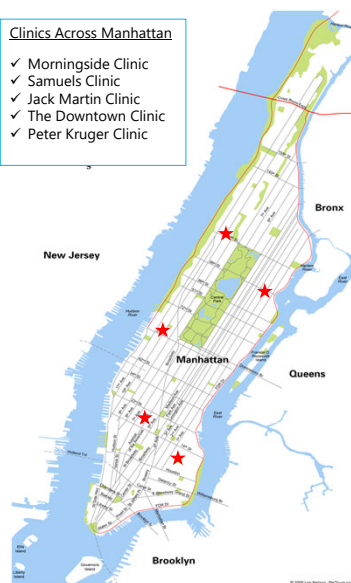


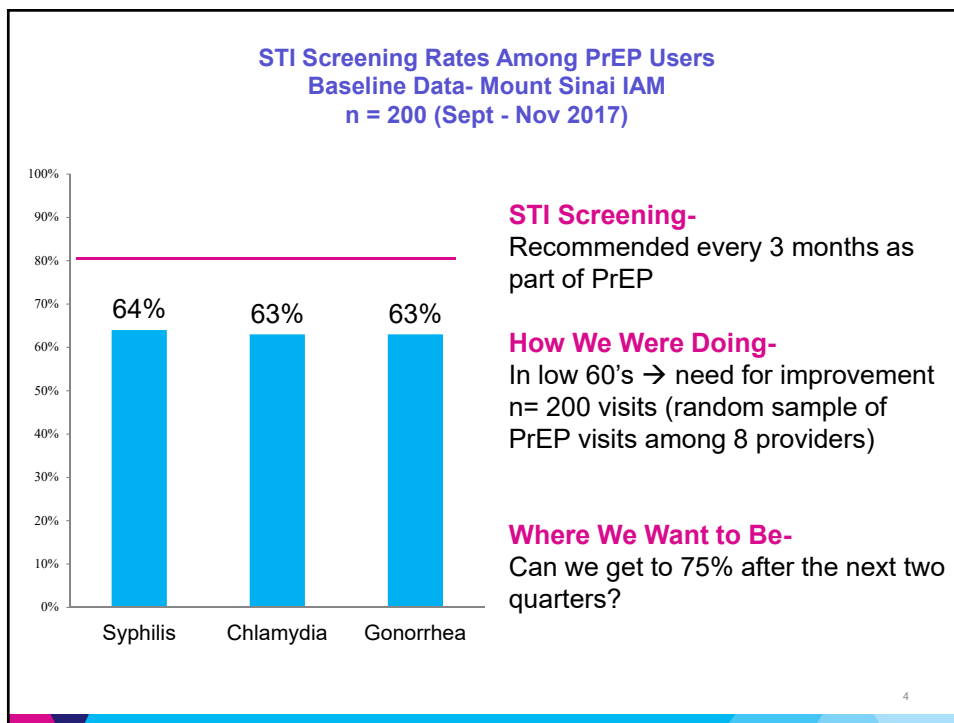
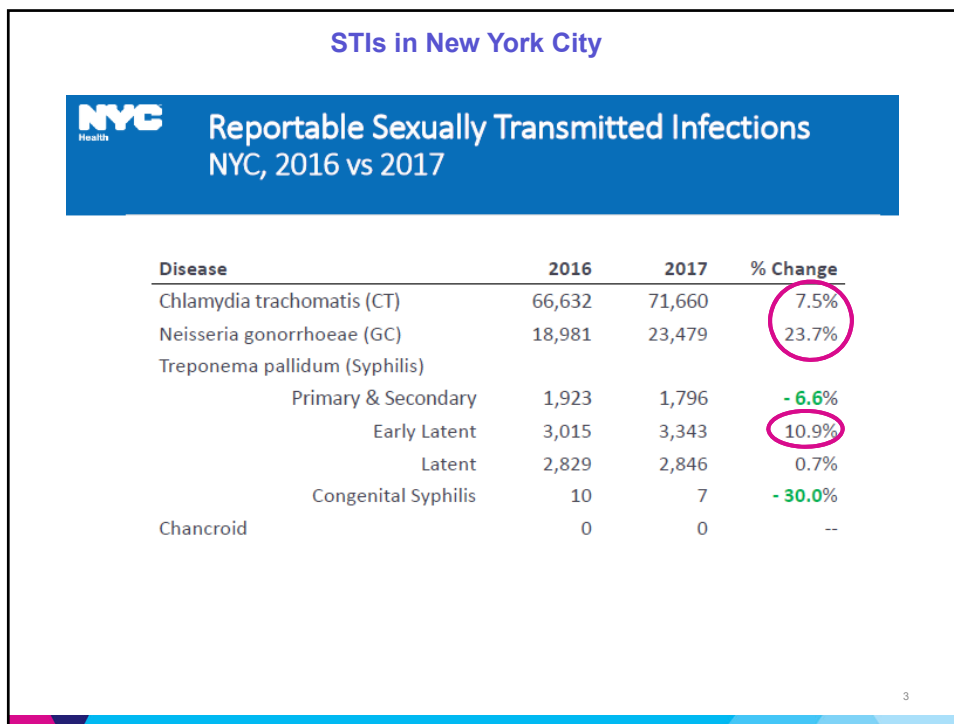
## Who We Are Mount Sinai Institute for Advanced Medicine

- Five-site network of hospital and community-based clinics caring for more than 13,000 people with and at-risk for HIV
- Co-located, comprehensive services to reduce barriers and increase a patient-centered approach to care
- This QI Initiative took place across the five clinics among primary care providers who prescribe PrEP

### Clinics Across Manhattan

- ✓ Morningside Clinic
- ✓ Samuels Clinic
- ✓ Jack Martin Clinic
- ✓ The Downtown Clinic
- ✓ Peter Kruger Clinic





## Methods- Intervention

Electronic Medical Record Enhancements were being developed which included:

- Counseling and education language regarding STI treatment and prevention
- Bundled lab orders (SmartSets) that could promote ordering of STIs in tandem with other labs

EMR enhancement guidance was paired with clinical guideline education for PrEP provision and delivered to all 5 clinic sites.

- Baseline STI data was shared
- Goals were identified
- Barriers were identified

EMR enhancements also have benefits for project team

- PrEP consumers are identified much more easily
- Selections made in enhancements are now variables that can be queried with less reliance on free text

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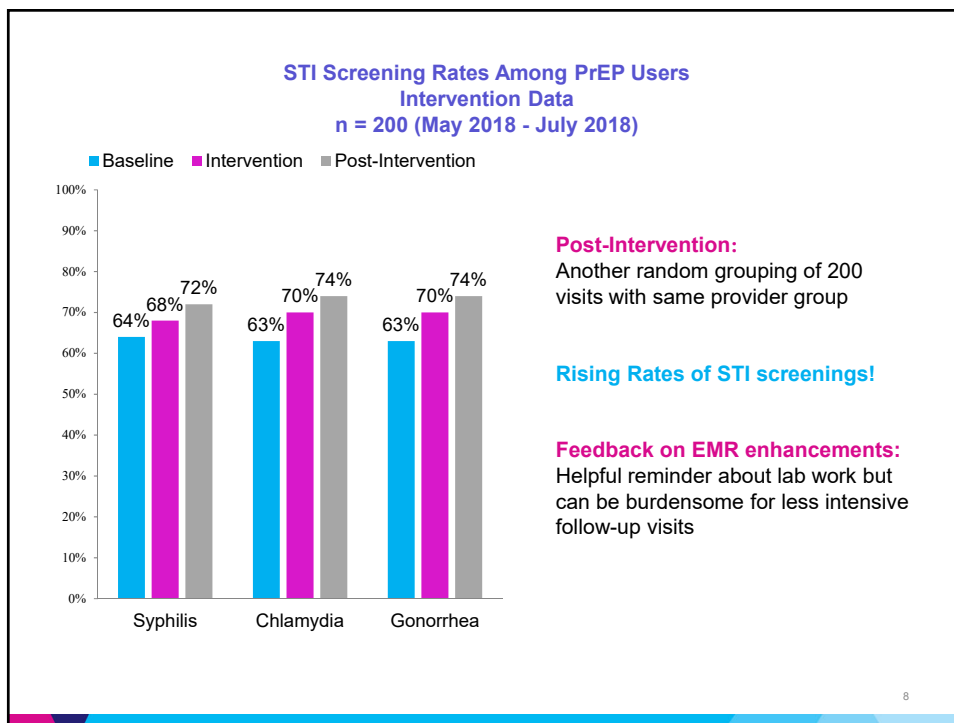
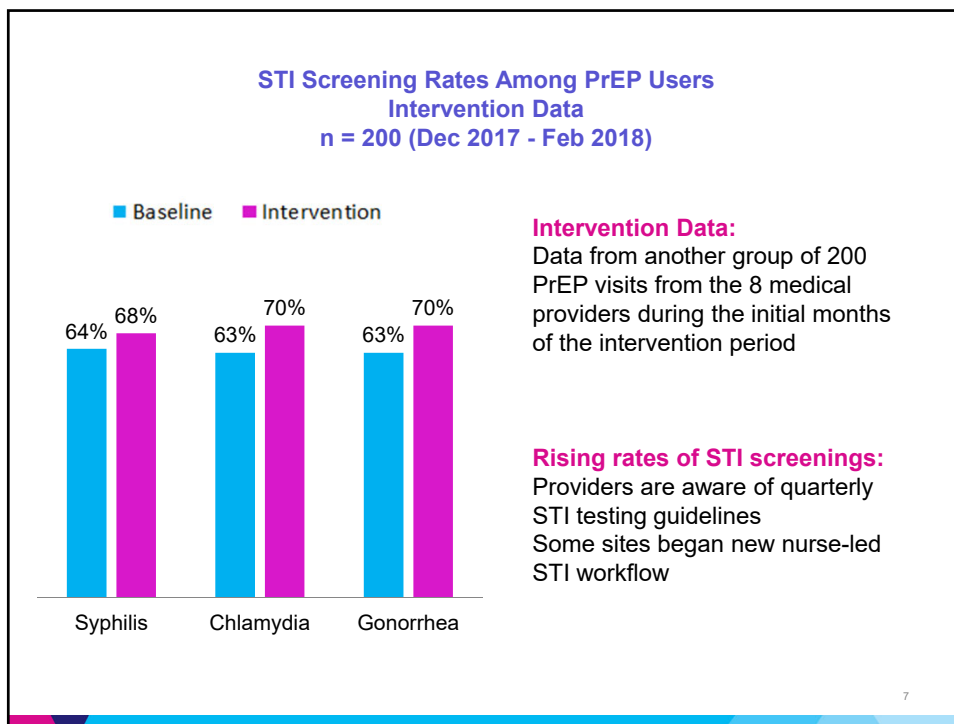
### Electronic Medical Record (EMR) Enhancements

The screenshot displays two main components of the EMR system:

**SmartSets:** A sidebar menu on the left lists various lab and medication bundles. The 'STD Testing (Initial, 6 months, 12 months)' category is highlighted with a pink box. Under this category, 'PrEP STD Testing' and 'STI Therapy' are also highlighted with a pink box.

**NoteWriter:** The main window shows a form titled 'HPI for PrEP'. It is divided into three columns: 'Gender specific Questions', 'Evaluation for PrEP', and 'Patient Education'. The 'Evaluation for PrEP' column contains a table of questions with 'Yes' and 'No' response options. The 'Patient Education' column contains a table of educational topics with 'Yes' and 'No' response options. A red box highlights the 'Must contact provider in any symptoms of seroconversion' row in the Patient Education table.

Gender specific Questions	Evaluation for PrEP	Patient Education
Gender: <input type="radio"/> male, <input type="radio"/> transgender MTF, <input type="radio"/> female, <input type="radio"/> transgender FTM	Current meds reviewed: Yes No	Discussed with patient: How PrEP works: Yes No
Partner: <input type="checkbox"/> male, <input type="checkbox"/> transgender MTF, <input type="checkbox"/> female, <input type="checkbox"/> transgender FTM	Possible drug interactions with PrEP: Yes No	PrEP part of comprehensive prevention plan: Yes No
	Febrile illness last 6 wks: Yes No	Efficacy dependent on adherence: Yes No
	Substance abuse: Yes No	Decreases transmission risk but does not protect against STDs: Yes No
	Mental health issues: Yes No	Consig. need for sequential doses for effectiveness, condom use in interim: Yes No
	Barriers to adherence: Yes No	What to do when doses missed: Yes No
	Lacks insurance: Yes No	Common side effects (nausea, HIA, not best) & usually subside after one month: Yes No
	Lacks PCP: Yes No	Criteria for stopping: misuse of meds, non-adh with meds or apppt, change in risk behavior: Yes No
	Unstable housing: Yes No	Must contact provider in any symptoms of seroconversion: fever, rash, joint pain, oral ulcers, fatigue, night sweats, sore throat, malaise, pain in muscles or loss of appetite: Yes No
	HIV/H partner: Yes No	



### Takeaways/Next Steps

- ▢ Medical providers use of EMR Enhancements showed to be correlative of higher STI screenings
  - EMR enhancements could be a feasible way to support medical providers to stay within PrEP provision guidelines
  - Did NOT account for 3 site testing, was just looking at the presence or absence of chlamydia or gonorrhea testing
  
- ▢ Future work can look at:
  - Which demographics of patients were more likely to have STI screening vs. demographics of patients least likely, if any difference
  - Which providers were more likely to utilize enhancements, and did they adhere better to STI guidelines than providers who documented without them
  - Other screening tests such as HIV, Hepatitis serologies, etc
  - Expanding beyond subsets - looking at the whole population
  
- ▢ How long does progress last?
  - What steps are needed to continue momentum?

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### MS IAM Prevention Dashboard



#### IAM PrEP Dashboard

Report Date: 11/7/2018  
HIV Negative patients age 13+

Clinic	HIV Negative	Ever On PrEP	At Risk for HIV	Initial Visit	Initial Rx	Retained 1st Yr	Retained Est.
IAM	6831	1194	5964	499	1131	6	0
Downtown	3003	868	2766	393	821	5	0
Jack Martin	1217	120	975	13	113	0	0
Morningside	1253	70	1109	21	69	0	0
Peter Krueger	188	21	142	12	20	1	0
Samuels	459	78	400	59	75	0	0
CTMS	711	37	572	1	33	0	0

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### MS IAM Prevention Dashboard

Downtown - Patients At Risk for HIV Infection										Total # of Risk(s)
Last Visit Date	Next Visit Date	Ever On PREP_YN	PEP in last 12 mos.	STI last 12 mos.	Race and Ethnicity	Target Zip Codes	Sexual Orientation	Drug Use	Flowsheet Documentation	
05/10/2018	05/24/2018	N	Y	Y	Y	Y	Y	Y	Y	7
		N	Y	N	Y	Y	Y	Y	Y	6
12/15/2017		N	Y	Y	Y	Y	Y	Y	N	6
		N	Y	Y	Y	Y	Y	N	Y	6
		Y	Y	Y	Y	Y	Y	N	Y	6
05/01/2018		N	Y	Y	N	Y	Y	Y	Y	6
		Y	Y	Y	Y	Y	Y	N	Y	6
		Y	Y	Y	Y	Y	Y	N	Y	6
		Y	Y	N	Y	Y	Y	Y	Y	6
05/15/2018	05/22/2018	Y	Y	Y	N	Y	Y	Y	Y	6
04/11/2018		Y	Y	Y	N	Y	Y	Y	N	5
02/26/2018	06/11/2018	Y	N	Y	Y	Y	Y	Y	N	5
02/15/2018	05/22/2018	Y	N	Y	Y	Y	Y	Y	N	5
03/06/2018	05/22/2018	Y	N	Y	Y	Y	Y	Y	N	5
05/01/2018	06/01/2018	N	Y	Y	N	Y	Y	N	Y	5
10/31/2017		N	Y	N	Y	Y	Y	Y	N	5
11/30/2017		N	Y	Y	N	Y	Y	Y	N	5
07/17/2017		N	Y	Y	N	Y	Y	Y	N	5
10/31/2017		N	N	Y	Y	Y	Y	Y	N	5
		N	Y	Y	N	Y	Y	Y	N	5
10/10/2017		N	N	Y	Y	Y	Y	Y	N	5
04/17/2018		N	N	Y	Y	Y	Y	Y	N	5
		N	Y	N	N	Y	Y	Y	Y	5
02/14/2018		N	Y	Y	N	Y	Y	Y	N	5
08/21/2017		N	Y	N	Y	Y	Y	Y	N	5
02/01/2018		N	Y	Y	N	Y	Y	Y	N	5
12/19/2017		N	Y	Y	N	Y	Y	Y	N	5
01/16/2018		Y	Y	Y	Y	N	Y	Y	N	5
04/25/2018		N	Y	N	Y	Y	N	Y	Y	5
05/01/2018	06/05/2018	N	Y	Y	N	Y	Y	N	Y	5
01/04/2018		N	Y	Y	N	Y	Y	Y	N	5

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