# NATIONAL RYAN WHIE CONFERENCE ON HIV CARE & TREATMENT



# Targeted HIV-Testing in the Emergency Department with Linkage to Care Using an HIV Risk Score

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#### Introduction

- Individuals at risk for HIV present to the emergency department (ED) for many reasons.
- These visits provide an opportunity for HIV testing and linkage to care
- CDC Universal screening guidelines
  - High cost
  - High false positive rate in low risk population
  - In ED setting, difficult giving people timely results
- Targeted HIV testing as alternative



### Introduction (2)

- Denver HIV Risk Score
  - Nursing driven tool in the ED used to identify people at risk for HIV infection
  - Developed at Denver Health Medical Center (J.Haukoos)
  - Adapted for use at University of Colorado Hospital (UCH)
- Study at Denver Health
  - Compared universal testing to testing using an HIV Risk Score
    - Included demographic and behavioral measures



#### **UCH Emergency Department**

- 620 bed hospital
- 73 beds in ED
- More than 120,000 visits per year
  - 15% are between the ages of 15 and 24
  - 55% between 25 and 60
  - 50% are women



#### **Methods**

- Adapted a previously developed electronic medical record (EMR) tool for HIVrisk assessment and offered testing
- All patient ≥ 18 years old with visits to the main ED received screening tool
  - Patients in ED urgent care and triage areas were not screened with the tool
- Used 4<sup>th</sup> generation HIV screening test with send-out confirmatory differentiation assay
  - Screening test run in the UCH laboratory
  - Confirmatory sent to the UCH north campus
    - Only performed M,W,F

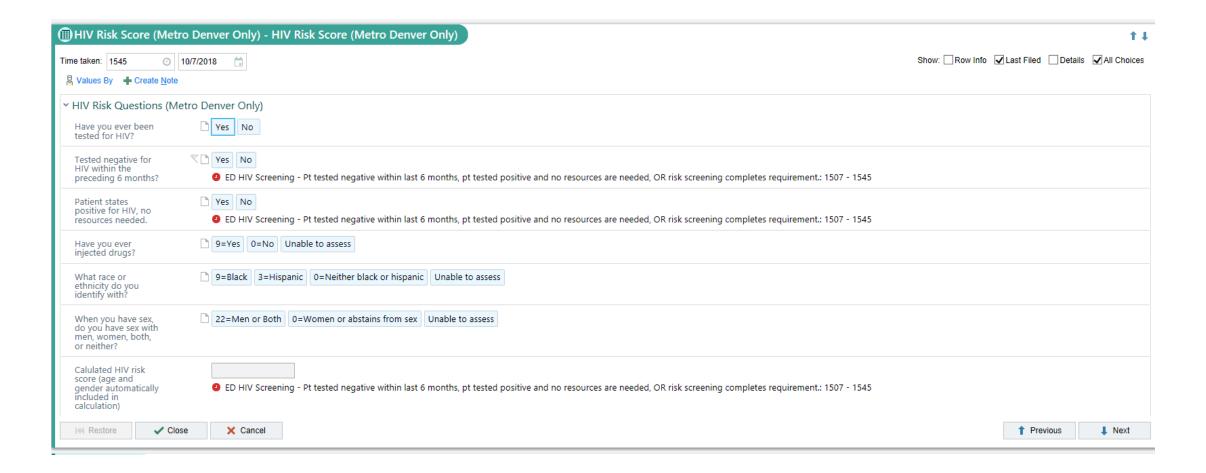


#### Methods

- ED staff contacted the linkage coordinator who met with patient
- If after business hours, a behavioral health provider met with patient
  - Behavioral Health provider coordinated follow up in the ID clinic with the linkage coordinator within 1-2 days
    - Dot phrase was entered in EPIC message
    - EPIC message was routed to linkage coordinator and medical director



#### **Denver HIV Risk Score as in EPIC**





#### **Denver HIV Risk Score questions**

- Have you ever been tested for HIV?
  - Tested negative in the last 6 months?
  - Patient states already positive for HIV
- Have you ever injected drugs?
- What race or ethnicity do you identify with?
- When you have sex, do you have sex with men, women, both or neither?



#### **Denver HIV Risk Score**

#### Denver HIV Risk Score

The Refined Denver HIV Risk Score		Score
Patient age		
22-25 or 55-60	+ 4	
26-32 or 47-54		
	+ 12	
Male gender	+ 21	
Patient self-repor		
Black	+ 9	
Hispanic	+ 3	
Does the patient		
women, or both?		
Men or both	+ 22	
Has the patient e		
Yes	+ 9	
Has the patient e	ver been tested for HIV?	
Yes	- 4	
	Total Score	

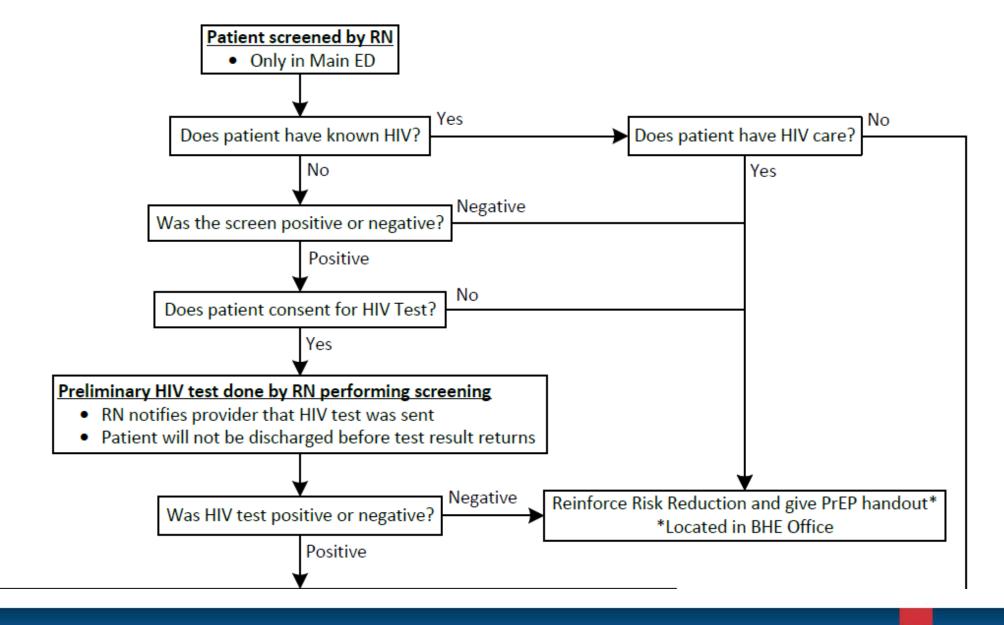


#### **Denver HIV Risk Scoring**

- Ages ≥13 years old (for UCH tested ≥ 18)
- Risk scores
  - ≥ 50 Very high Risk
  - ≥ 40-49 High Risk
  - ≥ 30-39 Moderate Risk
  - ≥ 20-29 Low Risk
  - <20 Very Low Risk</p>
- HIV testing for score ≥ 35 at UCH (≥ 30 at Denver Health)
- Opt-in testing
- Initial HIV Ab/Ag, confirmatory testing if positive

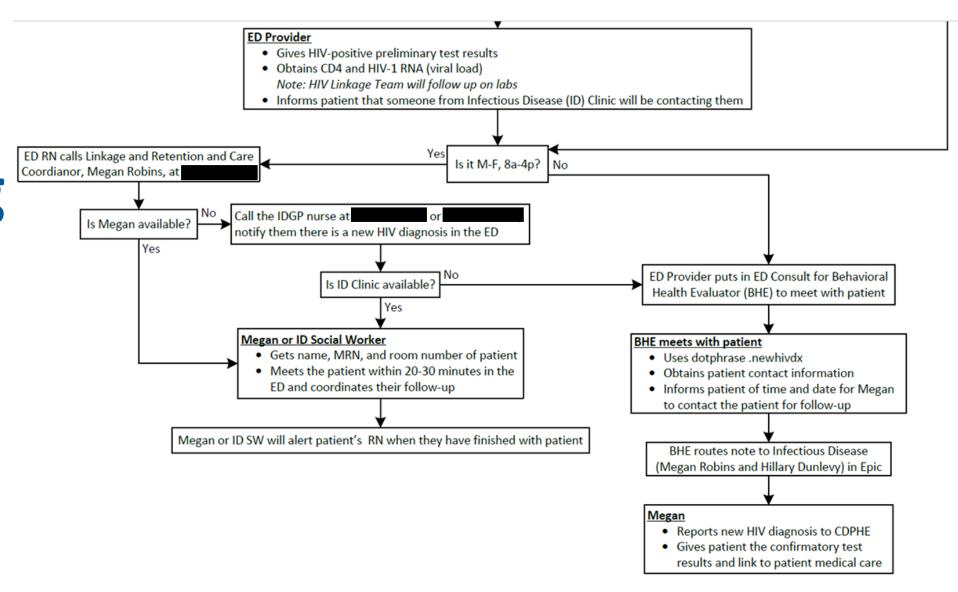


### ED HIV Screening Pathway





# ED HIV Screening Pathway Cont.





#### EPIC .newhivdx dot phrase

#### **After Hours New HIV Diagnosis Consult**

- What is your preferred name?
- What pronouns do you prefer?
- Are you currently pregnant?
- How do you prefer that we contact you (phone call, text message, email, mail)?
- What is your current address?
- Primary phone number:
- May we leave a detailed message on this phone?
- Other phone number:

- May we leave a detailed message on this phone?
- Who can we call discreetly if we can't get a hold of you?
  - Name:
  - Relationship:
- Do you have reliable transportation to come to the ID clinic?
- If no, was bus pass given to patient to get to clinic?
- Arranged time and date for ID Linkage to Care Coordinator to call patient to discuss scheduling visit to get test results:



#### Results

- 70,023 visits to the main ED
- 36,882 received the HIV screening tool (53%)
- 1,698 had a 4<sup>th</sup> generation HIV test in the ED (4.6% of those screened)
- 16 positive tests
  - 3 false positives
  - 13 new diagnoses



## Number of HIV tests and diagnoses

	April 2016-March 2017	April 2017- March 2018
Number of tests in the ED	1125	1698
Number of positive HIV tests in ED	8	13
Number linked to care	7	11

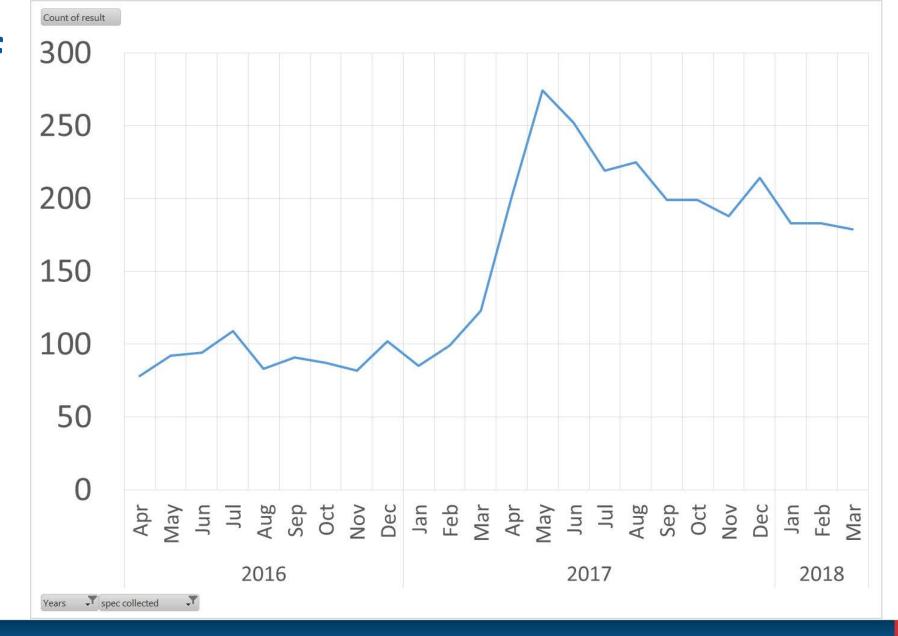


#### **Results - continued**

- 5 new diagnoses in April through August 2018
  - All with linkage to care



#### Number of Tests in ED by Month





#### Benefits of the EPIC tool

- Multi-disciplinary HIV-Testing and Linkage Task Force:
  - Infectious diseases (physician, linkage coordinator, AETC and RW manager and physician and social work from Children's Hospital Colorado), Emergency Department (physician, nursing, social work, data team), Lab Director
- Communication protocols assist with smooth handoff from ED to linkage coordinator
- Laboratory released HIV Ab/Ag result to the ED after the first positive result to shorten turnaround time to 1 hour
- ED director and Nursing advocate use of the screening tool, leading to new HIV diagnoses.
- Strong linkage rates for new HIV diagnoses through the linkage pathway



#### **Barriers to the EPIC tool**

- Some staff discomfort over asking HIV screening questions
  - Nursing advocate offered support
- Decreased adherence to HIV screening tool over time
  - ED director and nursing advocate for use
- HIV test turnaround time
  - Slow turnaround time in the ED
  - Laboratory director releases HIV screen positive results quickly
- Discharge from ED prior to results
  - Obtain contact information
  - Notify linkage team through EPIC message



### Thank you



University of Colorado Anschutz Medical Campus

