



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT

# Establishing an emergency department opt-out HIV screening program: preliminary results and lessons learned

Rosanne M. Sugay, MD

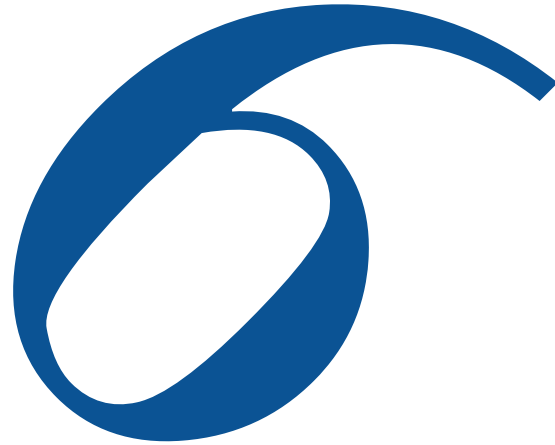
Marsha Matsunaga- Kirgan, MD

JD McCourt, MD

Dennis Fuller, PharmD

Jan Richardson, RN

# The Community Conundrum



# The Setting

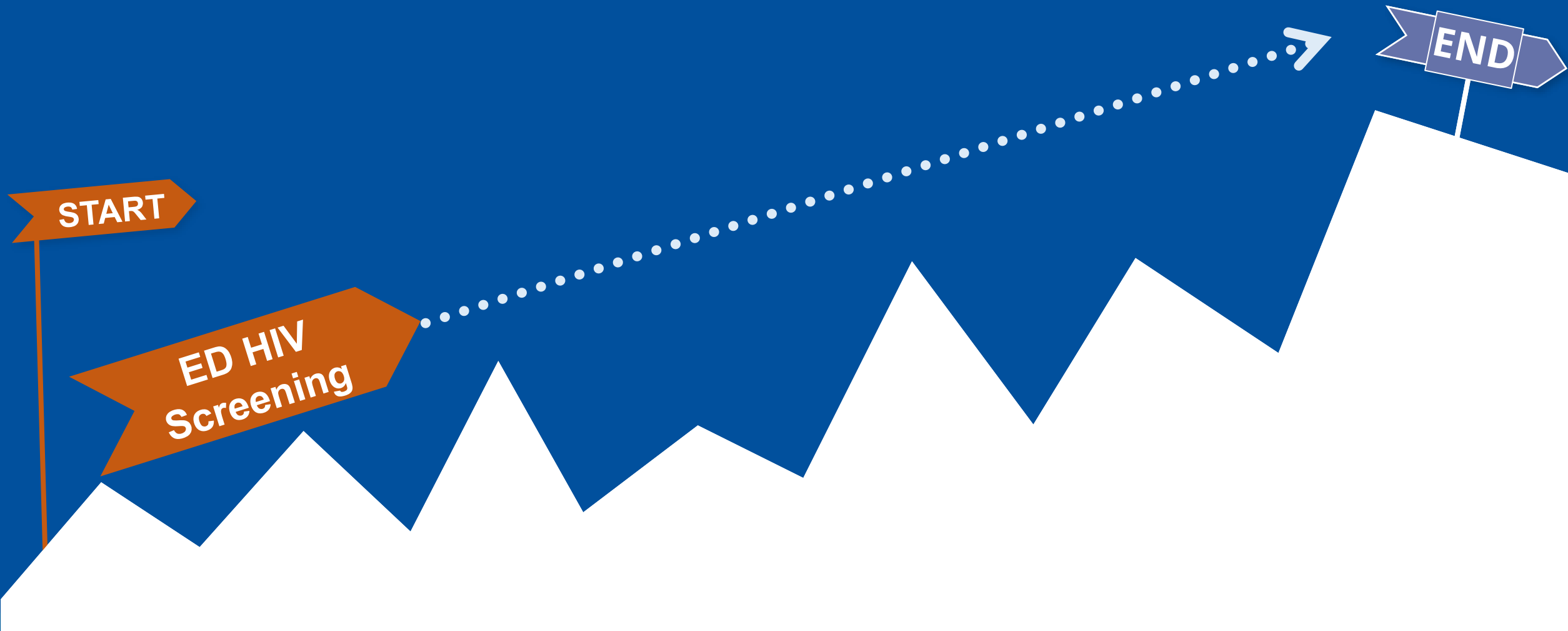
- 1931  
Established a 20-bed facility
- 2020  
Acute care, publicly funded,
  - non-profit hospital
  - ACGME programs  
(11 Residencies, 9 Fellowships)
  - ~70,000 adult ED visits  
plus a level I trauma center  
and pediatric ED



# The Road to Universal Testing



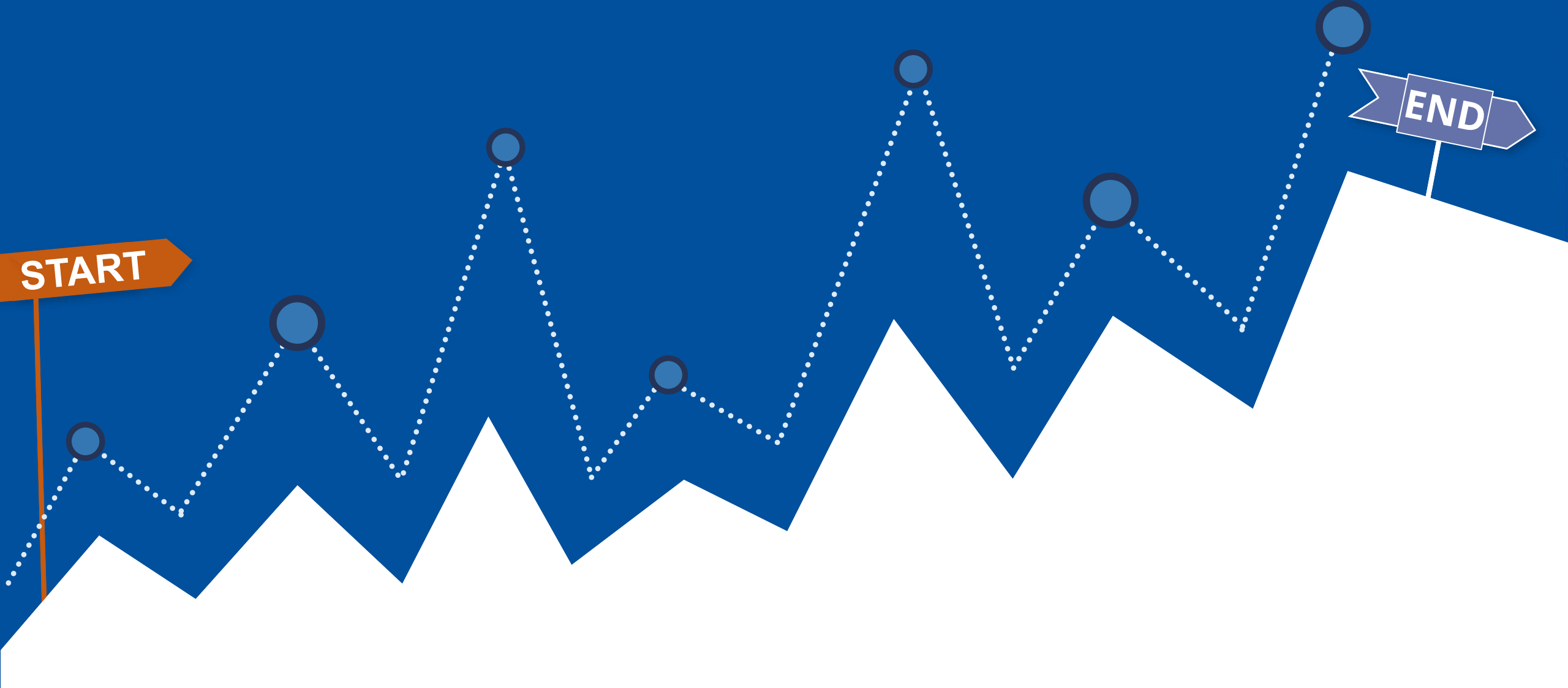
VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



# The Road to Universal Testing



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



# The Road to Universal Testing



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



START

BE READY

END

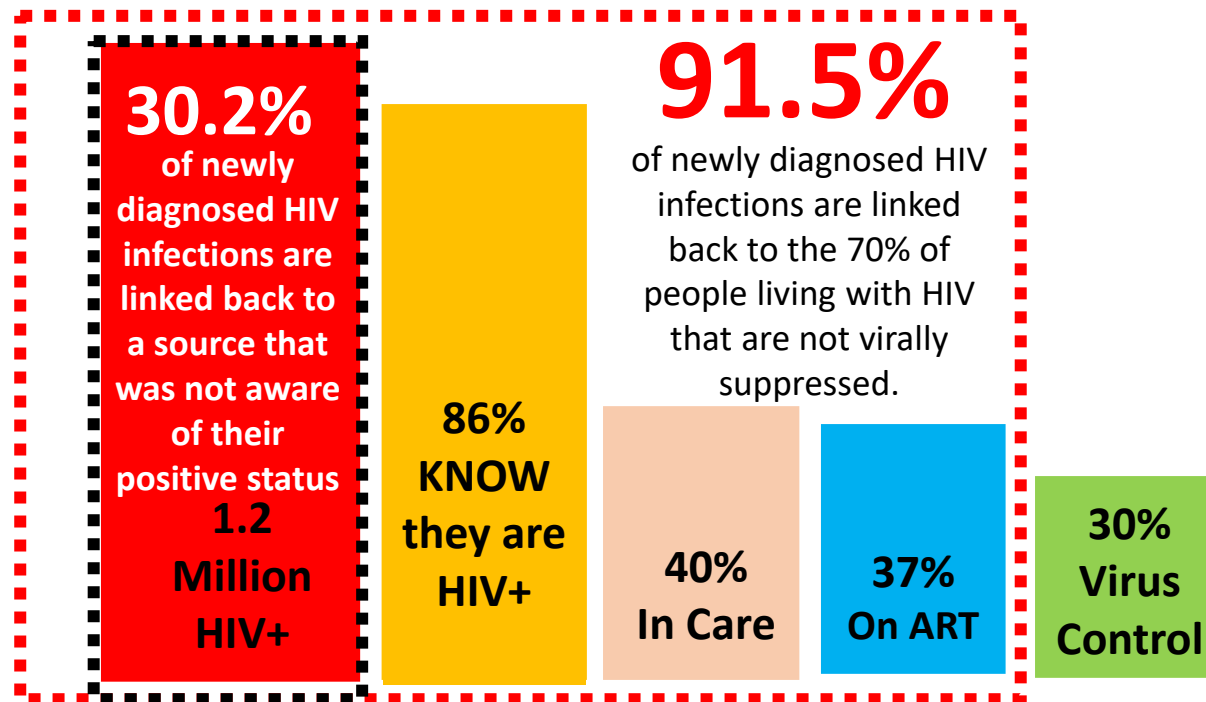
***“Chance favors the  
prepared mind.”***

– Louis Pasteur

# HIV Care Continuum

Estimated percentage of persons living with HIV infection\* by outcome along the HIV care continuum - United States, 2011

\*N = 1.2 million people living with HIV (PLWH)



Adapted from Bradley, H. et al (2014). Vital Signs: HIV Diagnosis, Care, and Treatment Among Persons Living with HIV – United States, 2011. MMWR. Morbidity and Mortality Weekly Report, 63(47); 1113-1117. Retrieved from: <http://www.cdc.gov/mmwr/pdf/wk/mm6347.pdf>



# Be Ready



- Know the context for your community:
  - 90-90-90 goal: Nevada is 85% (2012) <sup>1</sup>
  - Ending the HIV Epidemic: Clark County is 79% (2018) <sup>2</sup>
  - People newly diagnosed in Las Vegas (2018) <sup>3</sup>
    - 28 per 100,000  
vs U.S. which is 14 per 100,000
  - People living with HIV in Las Vegas (2018) <sup>2</sup>
    - 592 per 100,000  
vs U.S. which is 367 per 100,000

<sup>1</sup> <https://npin.cdc.gov/pages/hiv-and-aids-timeline>

<sup>2</sup> <https://www.cdc.gov/endhiv/priorities.html>

<sup>3</sup> <https://aidsvu.org/local-data/united-states/west/nevada/las-vegas/>

- Know your guidelines:
  - CDC (2006)
    - ALL 13 to 64 years old plus high risk individuals
    - \* *In all clinical settings*
  - USPSTF (2013)
    - ALL 15 to 65 years old plus high risk individuals

# Be Ready



- Know the laws on HIV:
  - Pre / post test counseling requirements
  - Consent for testing
  - Adolescent testing
  - Release of information requirements

- Know some good studies / facts:
  - HIV patients are **3 times more likely to visit an ED**, be **racial minorities**, and **lack insurance** than non-HIV patients
    - Rothman, R. E. et al. Academic Emergency Medicine, 14(7), 653-657. DOI: 10.1197/j.aem.2007.04.004
    - Pitts, S. R. et al. Natl Health Stat Report, 7(7), 1-38. PMID: 18958996
    - Lyons, M. S. et al Public Health Reports, 120(3), 259.
    - Bozzette SA et al. N Engl J Med. 1998;339(26):1897-1904.
  - EDs are a **safety net for people with HIV** and often their **sole point of entry into healthcare**
    - Hsieh et al Annals of Emergency Medicine, 2015; 66:69-78

*(Summary by Kathleen Jacobson, 2017)*

- Know some good studies / facts:
  - **14.5%** of PWH are not aware of their status and **account for 37.5%** **of new HIV diagnosis**
    - Li, Z. et al. (2019) Retrieved from <https://www.cdc.gov/mmwr/volumes/68/wr/mm6811e1.htm>
  - **14.5 to 23%** of newly identified HIV in ED screening are **Acute HIV Infection**
    - Geren, K. et al. (2014) Retrieved from <https://doi.org/10.1016/j.annemergmed.2014.05.021>
    - White, D. et al (2017) Retrieved from <https://doi.org/10.1016/j.annemergmed.2017.11.027>

- Acute HIV Infection (AHI)
  - Benefits of early treatment
    - Decrease viral replication
    - Decrease size of latent HIV reservoirs
    - Delay viral rebound
  - Higher viral loads during AHI
    - Possibly decrease transmission

# The Road to Universal Testing



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



# Get someone to listen



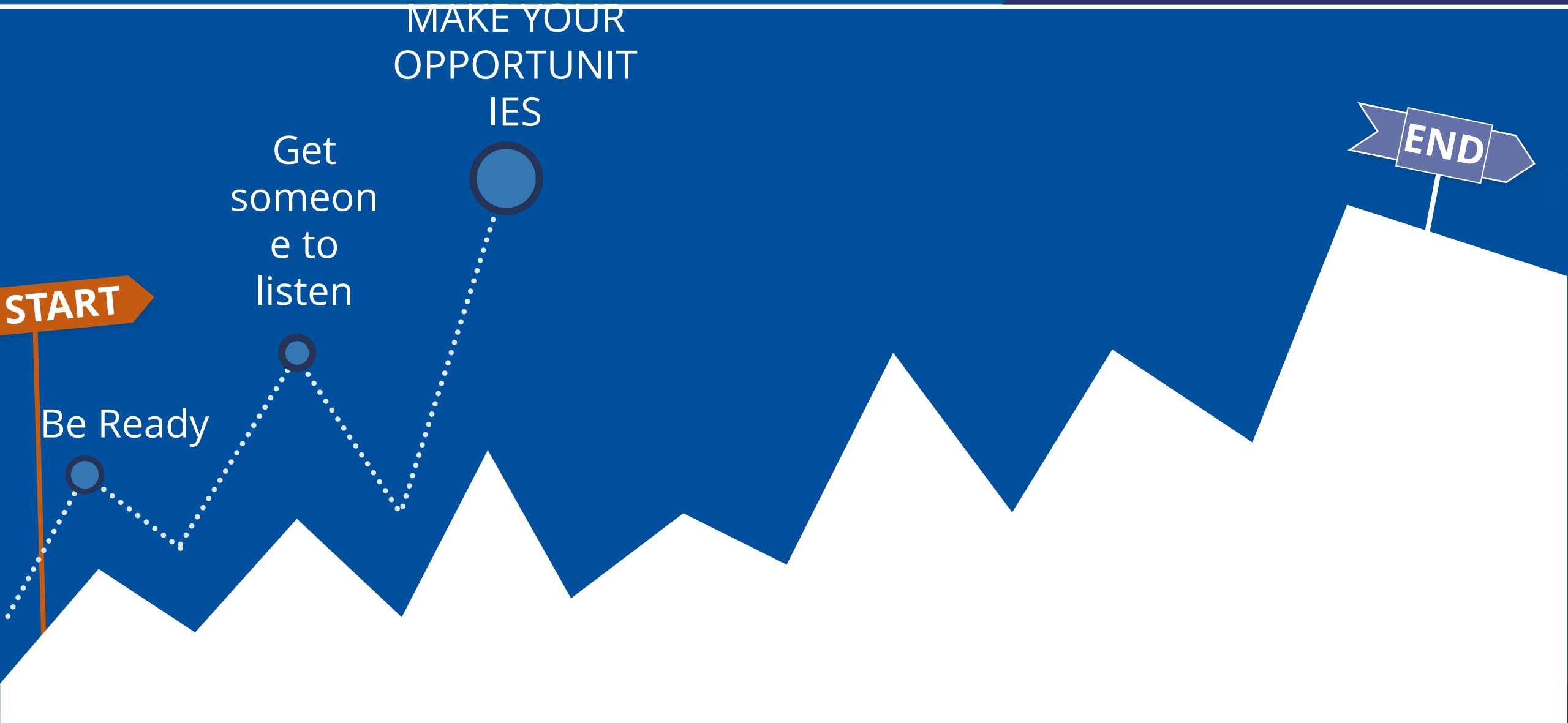
- Find the stakeholders:
  - ED physicians
  - ED nurses
  - Administration
  - *Well respected member of the organization*



# The Road to Universal Testing



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



START

Be Ready

Get someone to listen

MAKE YOUR OPPORTUNITIES

END

# Make your opportunities



- Who will do the asking?
- Get the nurses to agree.
- This is not the job of the ED.
- What happens if there's a positive?

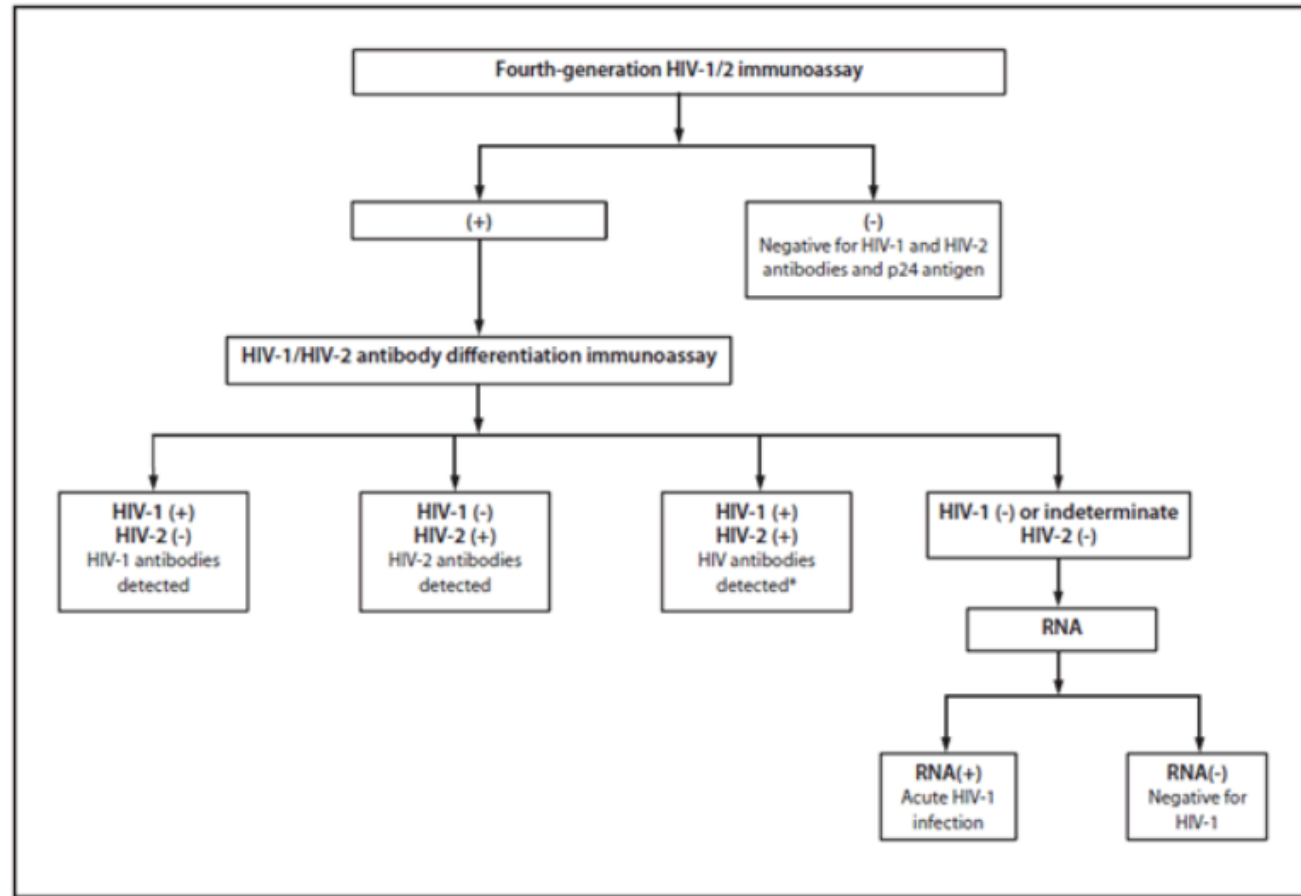


- Is this expensive?
- Is it covered?
- What is the turnaround of the tests?



- What are the consent requirements?
- What is the liability for positives not notified?
- What is the liability for false positives?

FIGURE 1. New HIV diagnostic testing algorithm evaluated – United States, 2011–2013



**Abbreviation:** HIV = human immunodeficiency virus.

\* Additional testing required to rule out dual infection with HIV-1 and HIV-2.

# Make your opportunities



- Transition to new Electronic Health Record
  - Incorporating screening into ED triage modules
  - Conditions of admission to include hospital screening activities
- Find funding / partner with non-profit organizations
  - NARES (Nevada AIDS Research and Education Society)
  - FOCUS (Frontline of Communities in the U.S.)

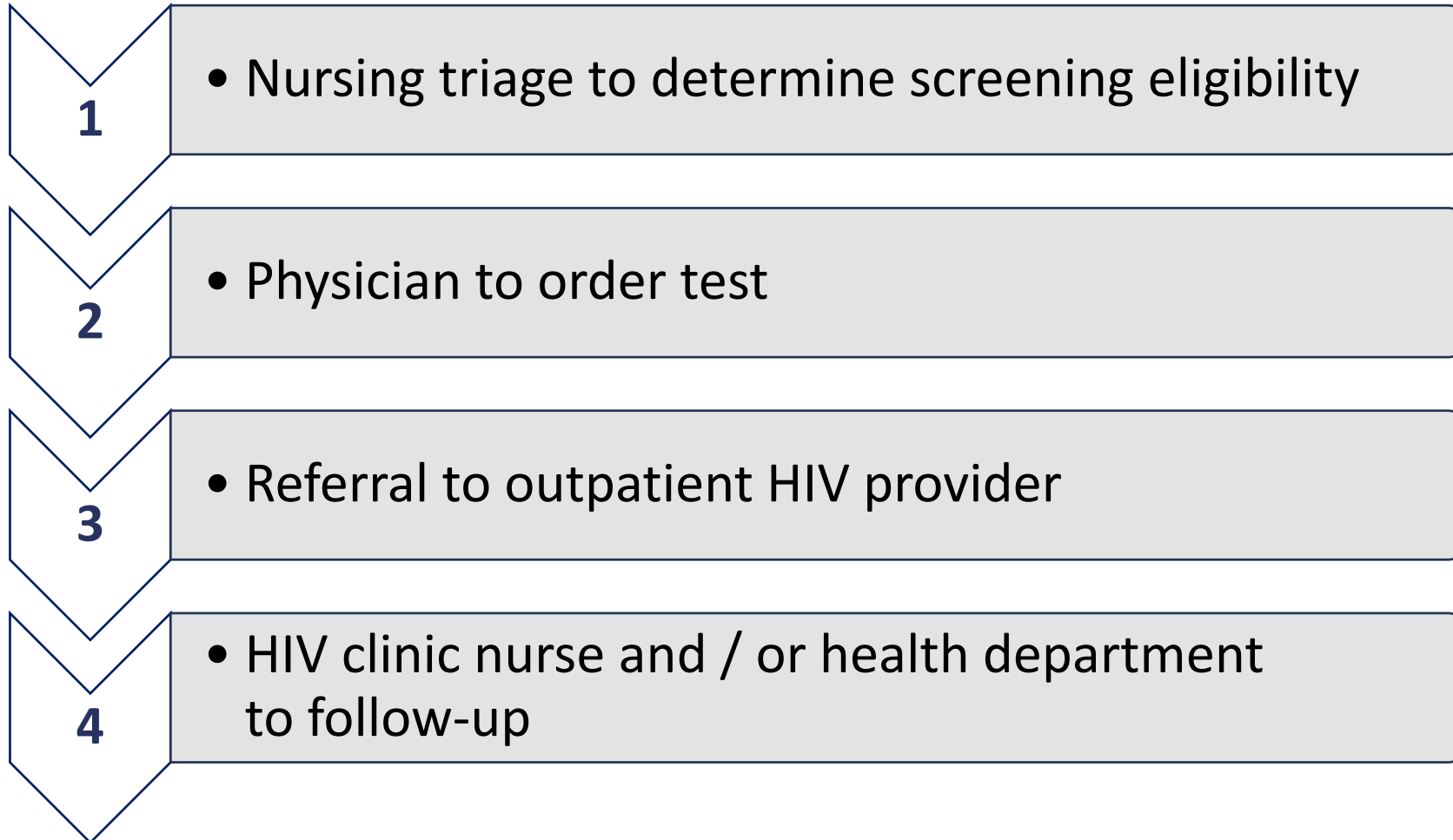
# The Team



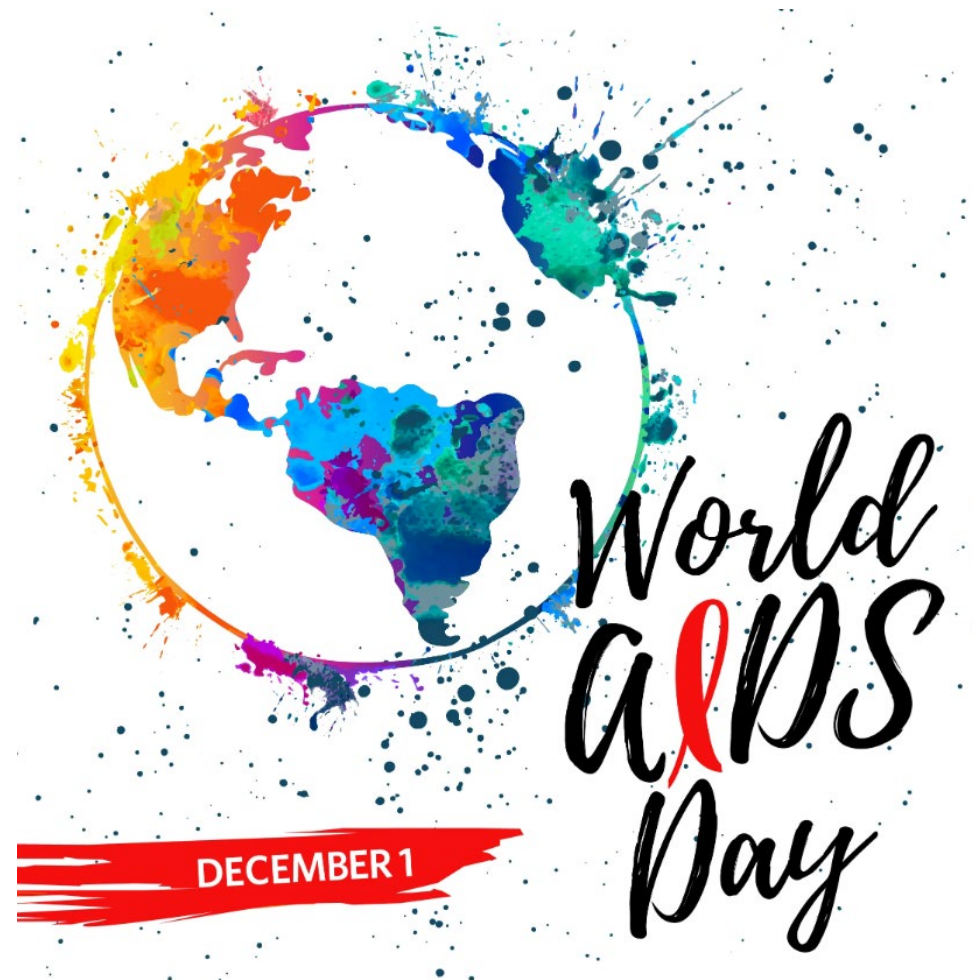
# Screening for HIV via Opt-out Universal Testing (SHOUT)



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



# Make your opportunities





***“Don’t let perfect be the  
enemy of good.”***

– Voltaire



## On World AIDS Day, UMC outlines strategy to improve HIV detection, treatment

by Marvin Clemons | Saturday, December 1st 2018

AA

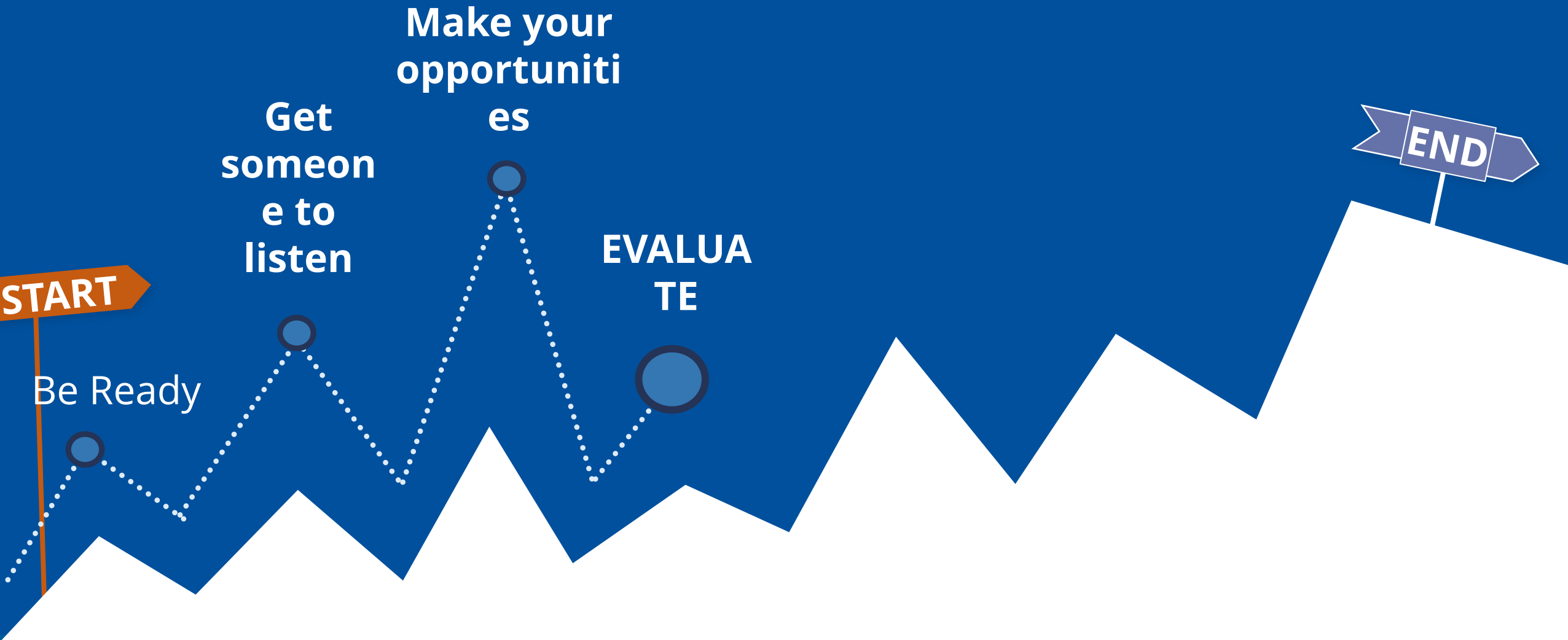


<https://news3lv.com/news/local/on-world-aids-day-umc-outlines-strategy-to-improve-hiv-detection-treatment>

# The Road to Universal Testing



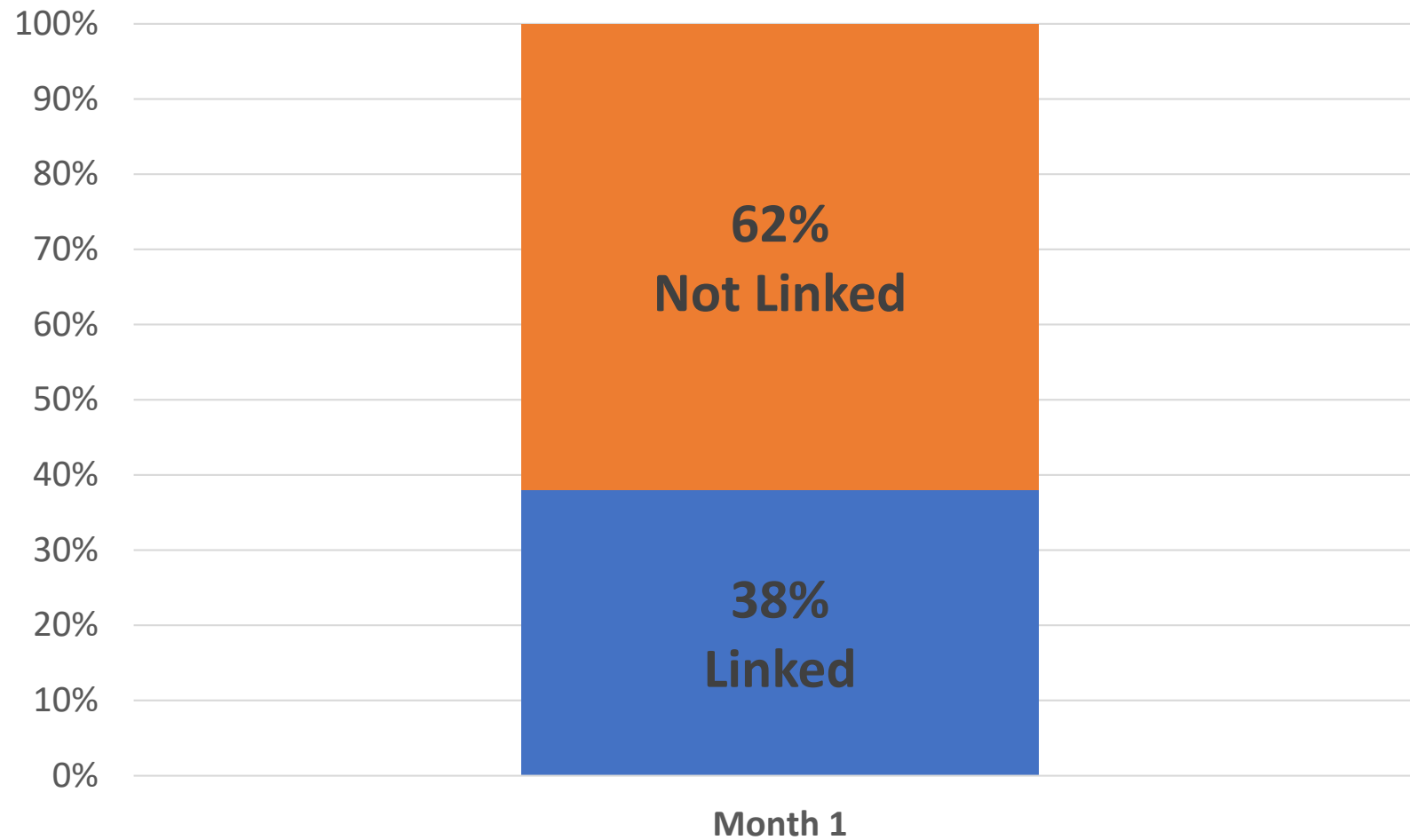
VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



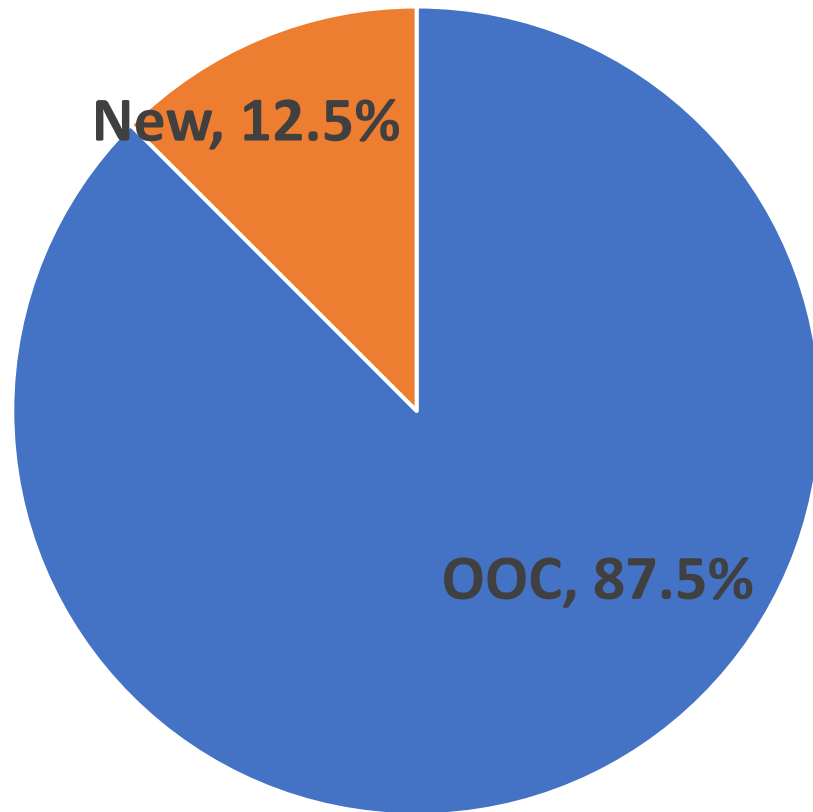
# HIV+ linkage to care from ED testing, December 2018 (n=8)



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



# HIV+ cases from ED testing, December 2018 (n=8)

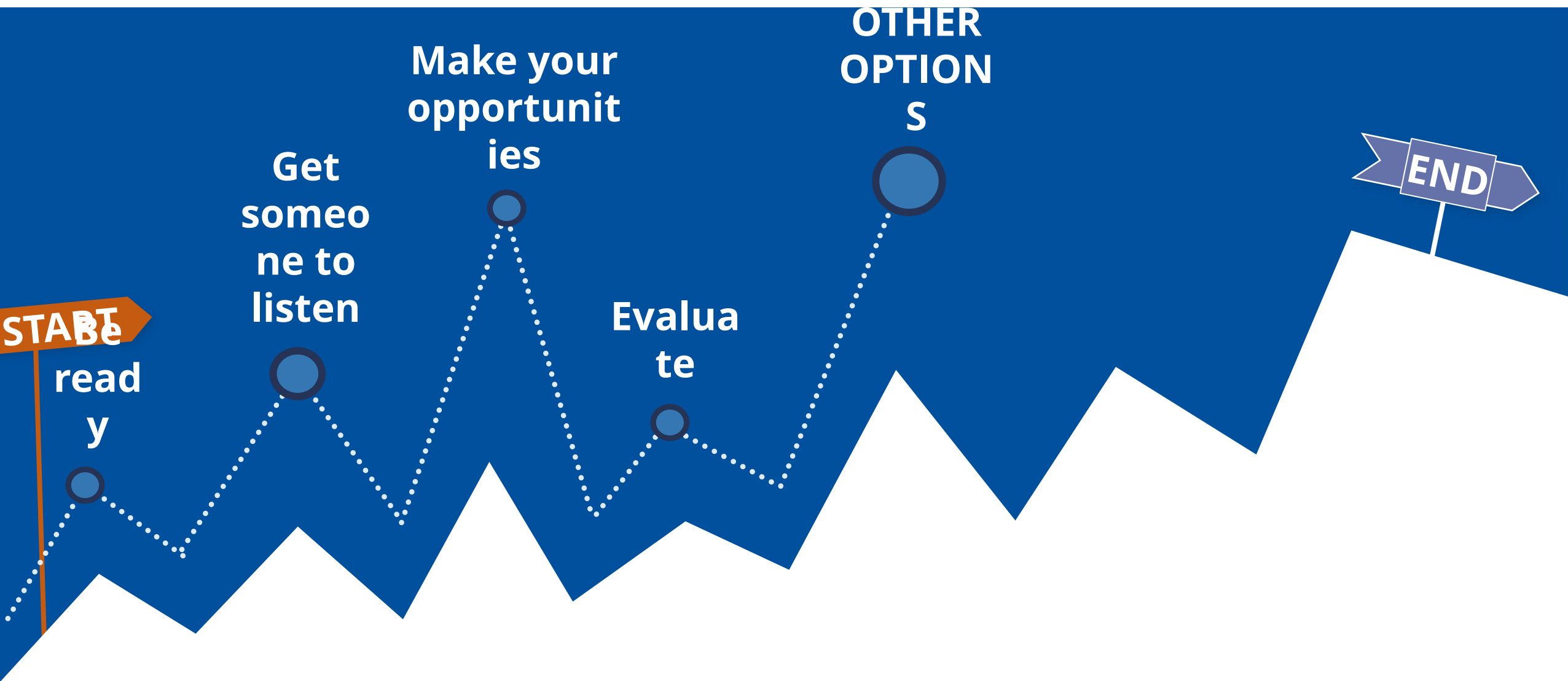


- One new patient not linked
- Unanticipated out of care population

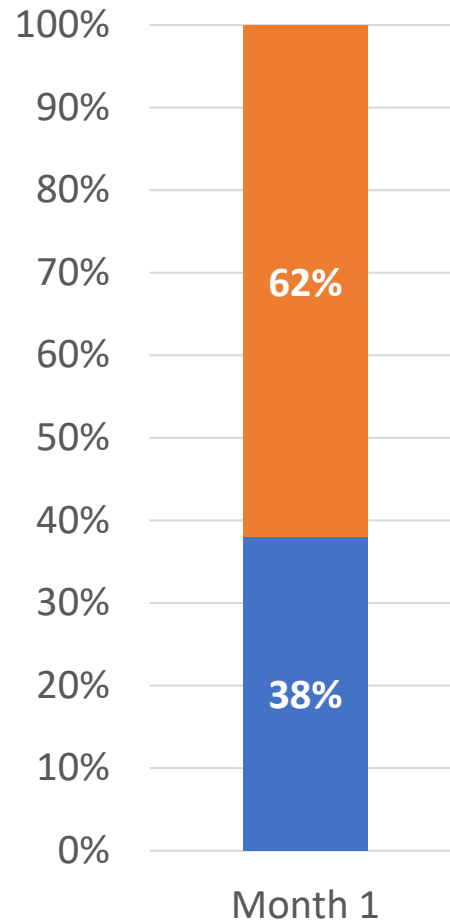
# The Road to Universal Testing



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



# HIV+ cases from ED testing, (n=92) December 1, 2018 to December 31, 2019

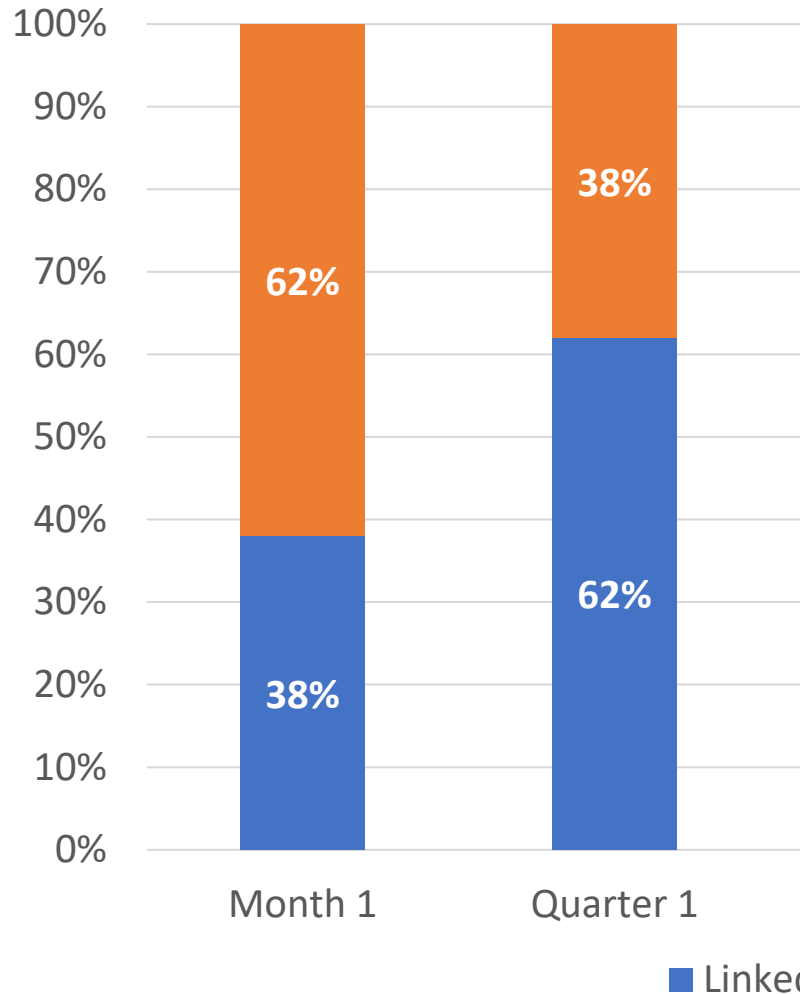


## Month 1:

- notification process needed to be streamlined
- In Basket pool created

■ Linked ■ Not Linked

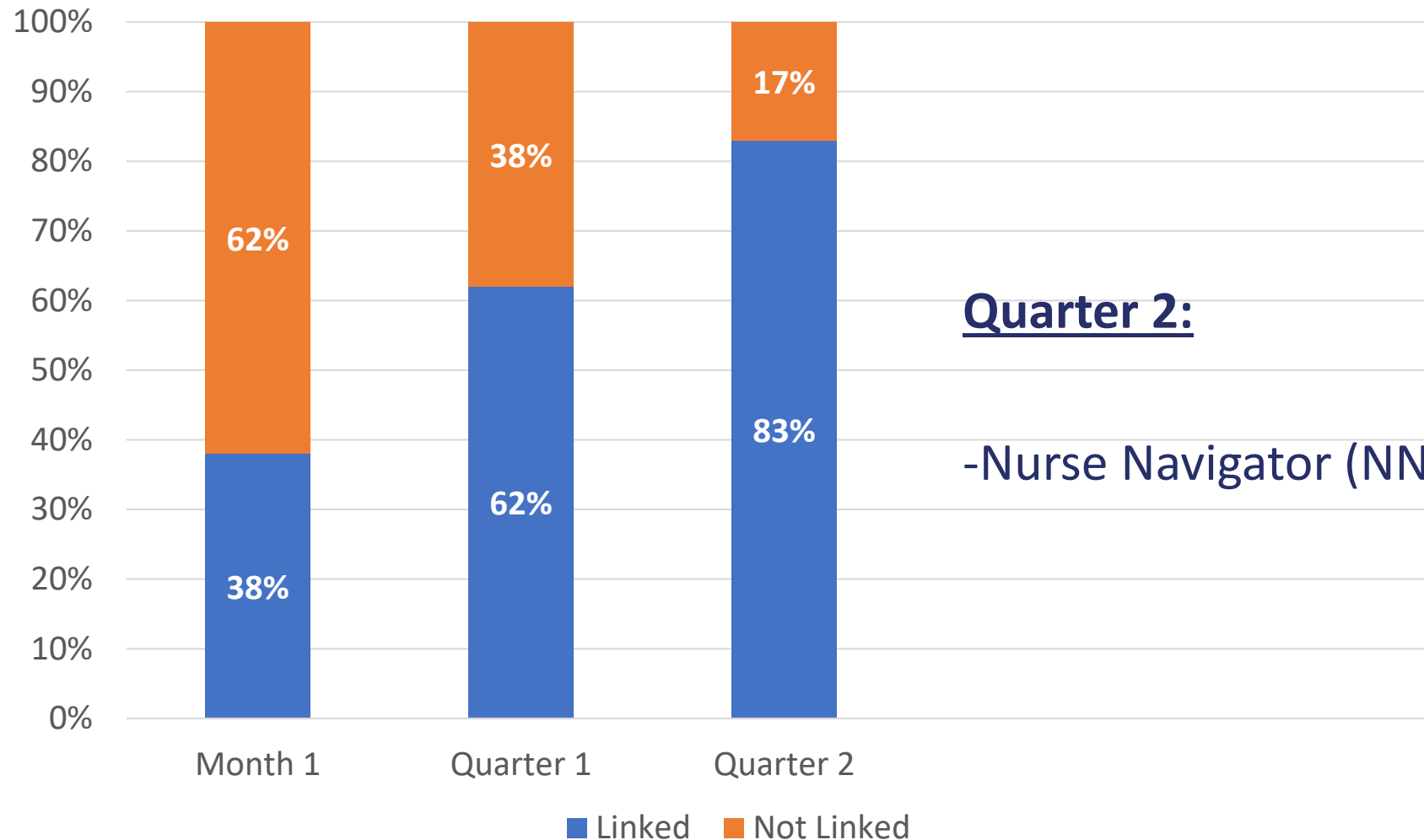
# HIV+ cases from ED testing, (n=92) December 1, 2018 to December 31, 2019



## Quarter 1:

- Monthly meetings with ED nursing to discuss any challenges / concerns
- In Basket pool re-training
- Independent lab report to validate referrals

# HIV+ cases from ED testing, (n=92) December 1, 2018 to December 31, 2019

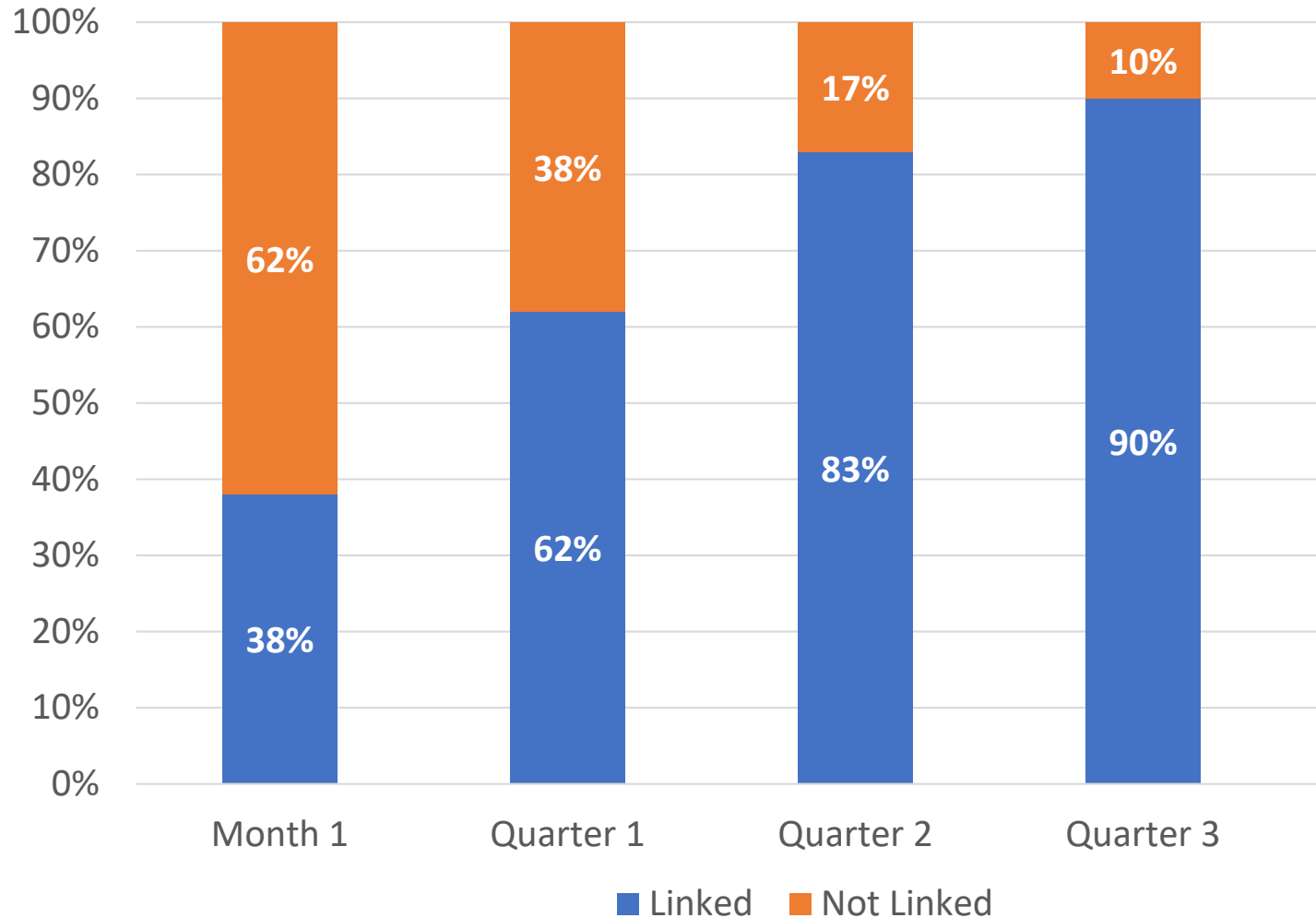


Quarter 2:

-Nurse Navigator (NN) program proposed



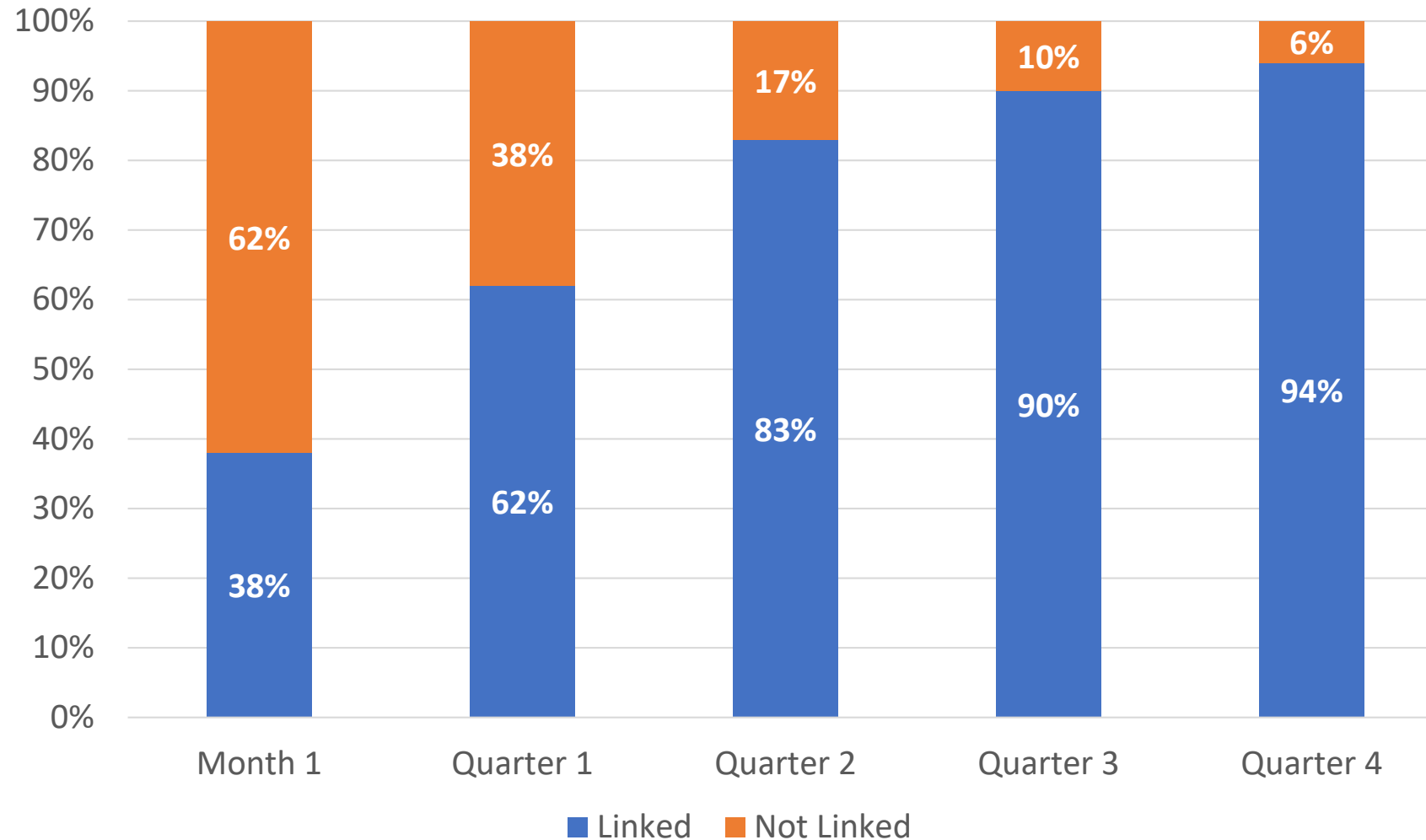
# HIV+ cases from ED testing, (n=92) December 1, 2018 to December 31, 2019



## Quarter 3:

- Meeting with ED staff to report on successful cases in the first quarter
- Securing funding for NN program

# HIV+ cases from ED testing, (n=92) December 1, 2018 to December 31, 2019

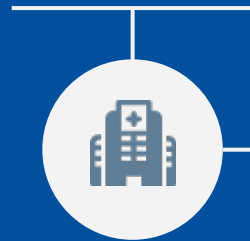


# The Nurse Navigator Program



## NURSE NAVIGATORS

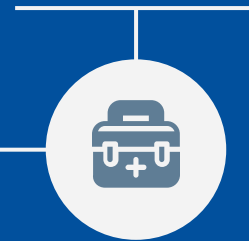
ART in  
hospital



Bridging  
Care



Medical  
home



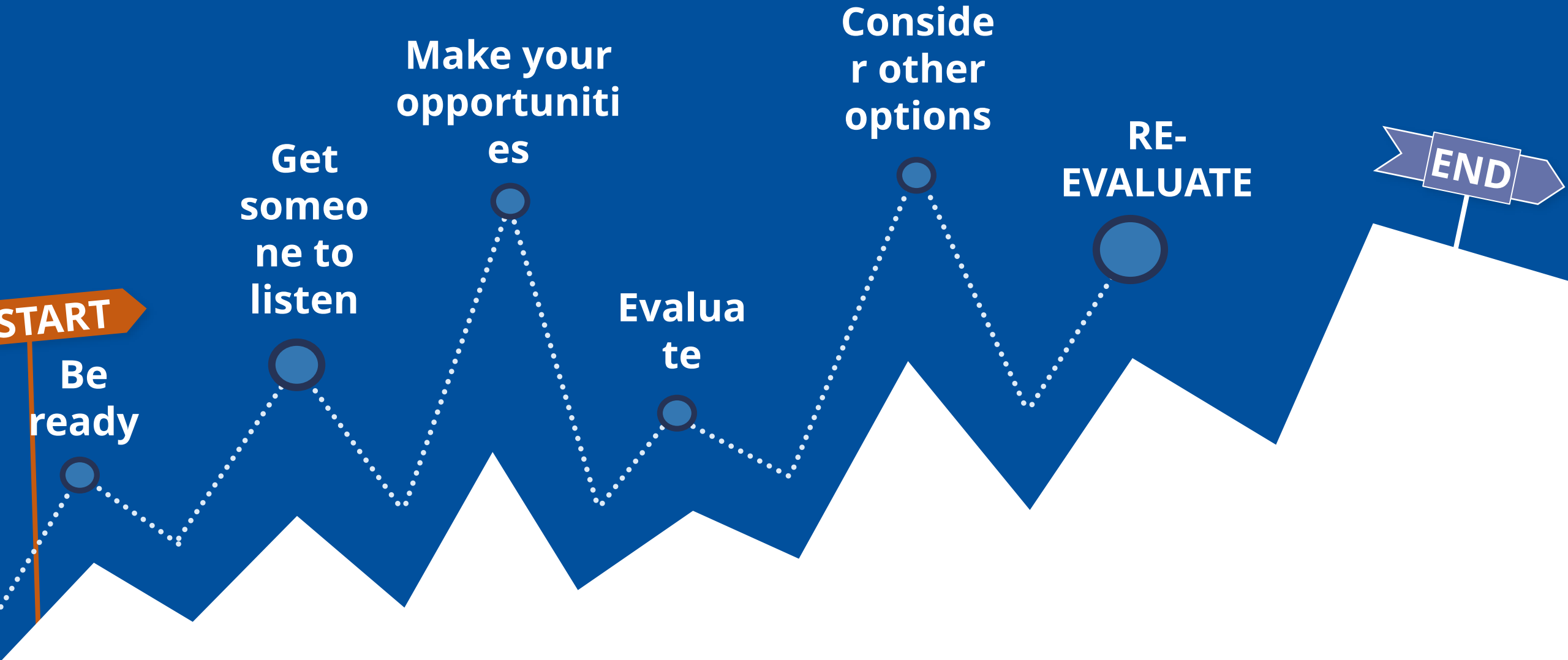
December 2019

7 days a week  
8 am to 6 pm  
Voicemail off hours

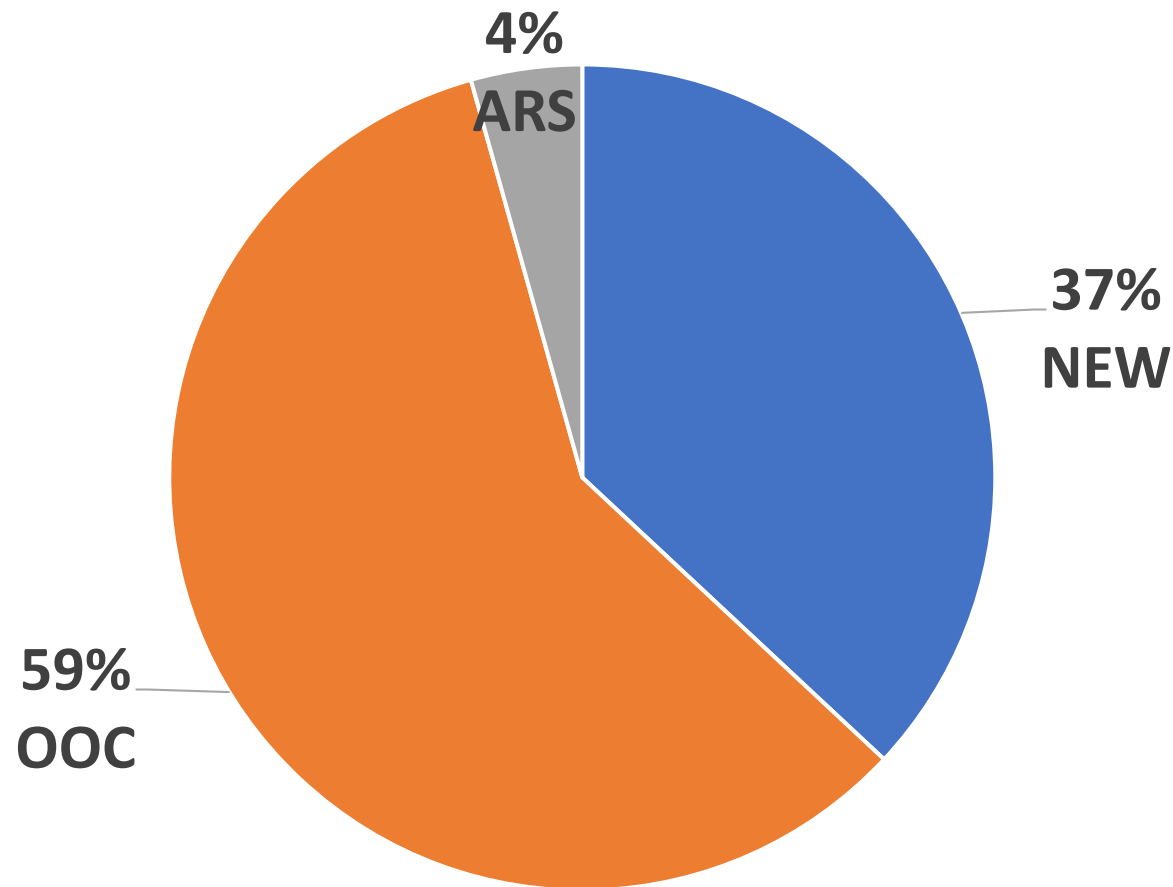
# The Road to Universal Testing



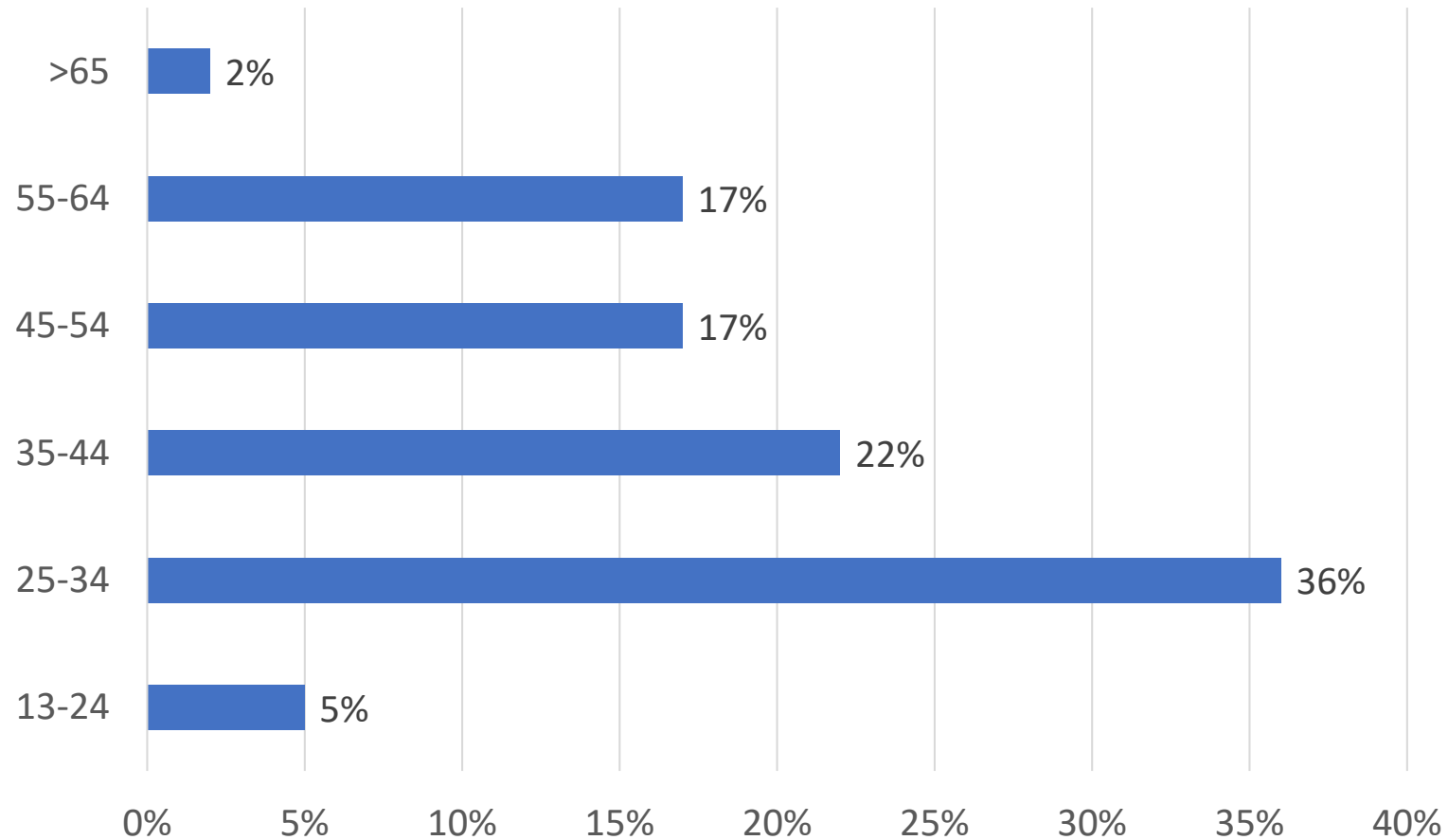
VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



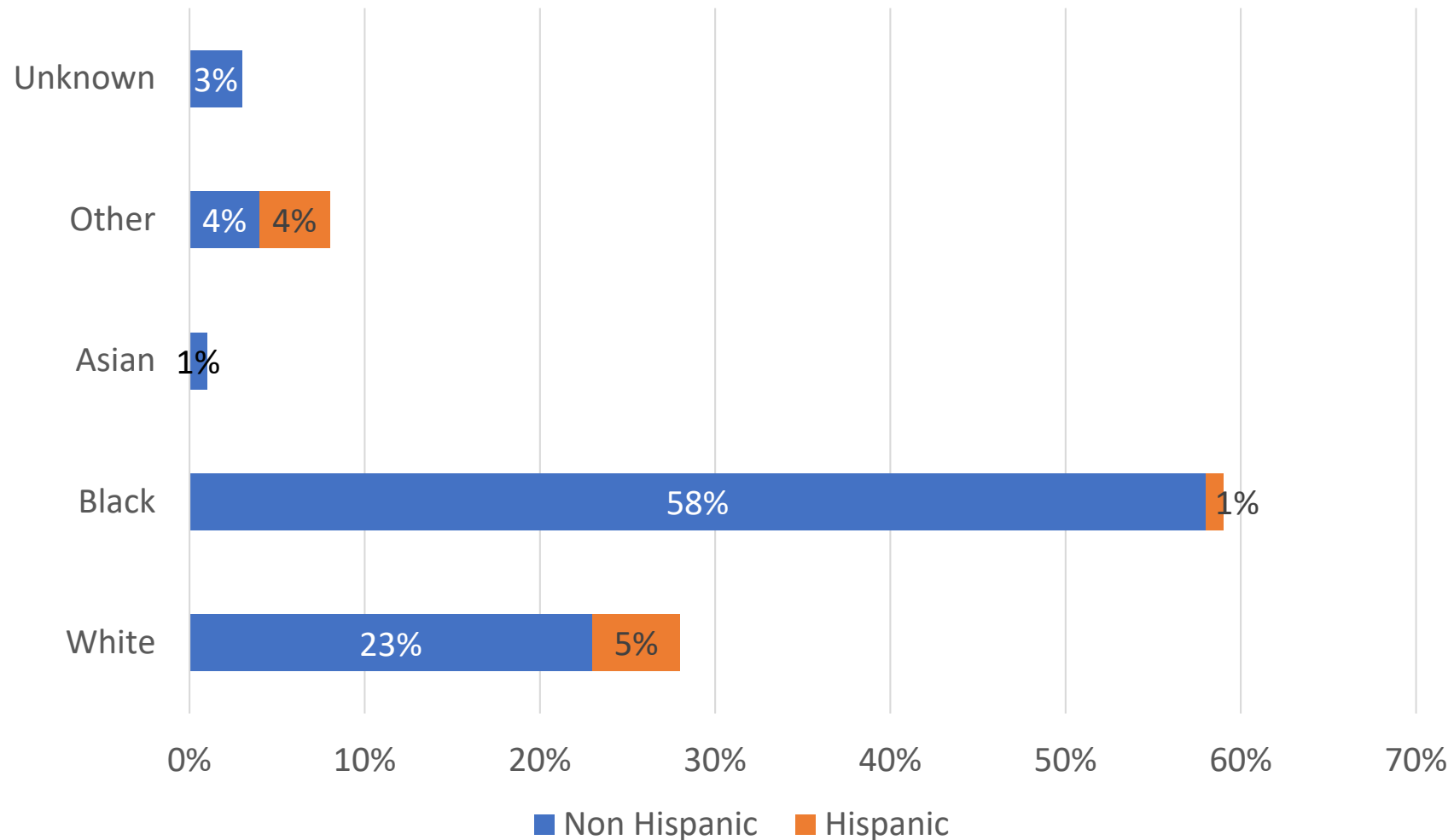
# HIV+ cases from ED testing, (n=92) December 1, 2018 to December 31, 2019



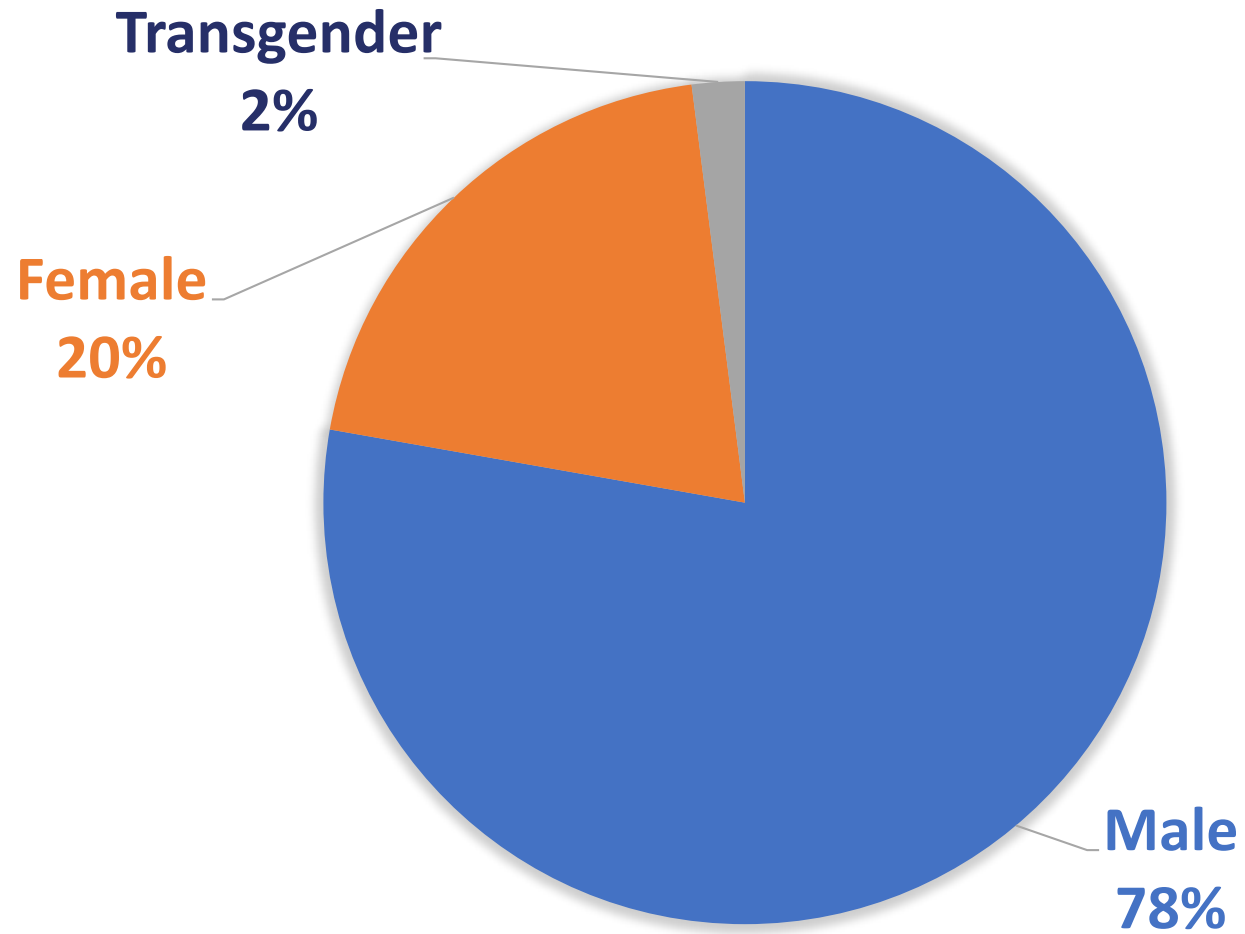
# HIV+ cases from ED testing, by age (n=92) December 1, 2018 to December 31, 2019



# HIV+ cases from ED testing, by Race/Ethnicity (n=92) December 1, 2018 to December 31, 2019



# HIV+ cases from ED testing, by gender (n=92) December 1, 2018 to December 31, 2019

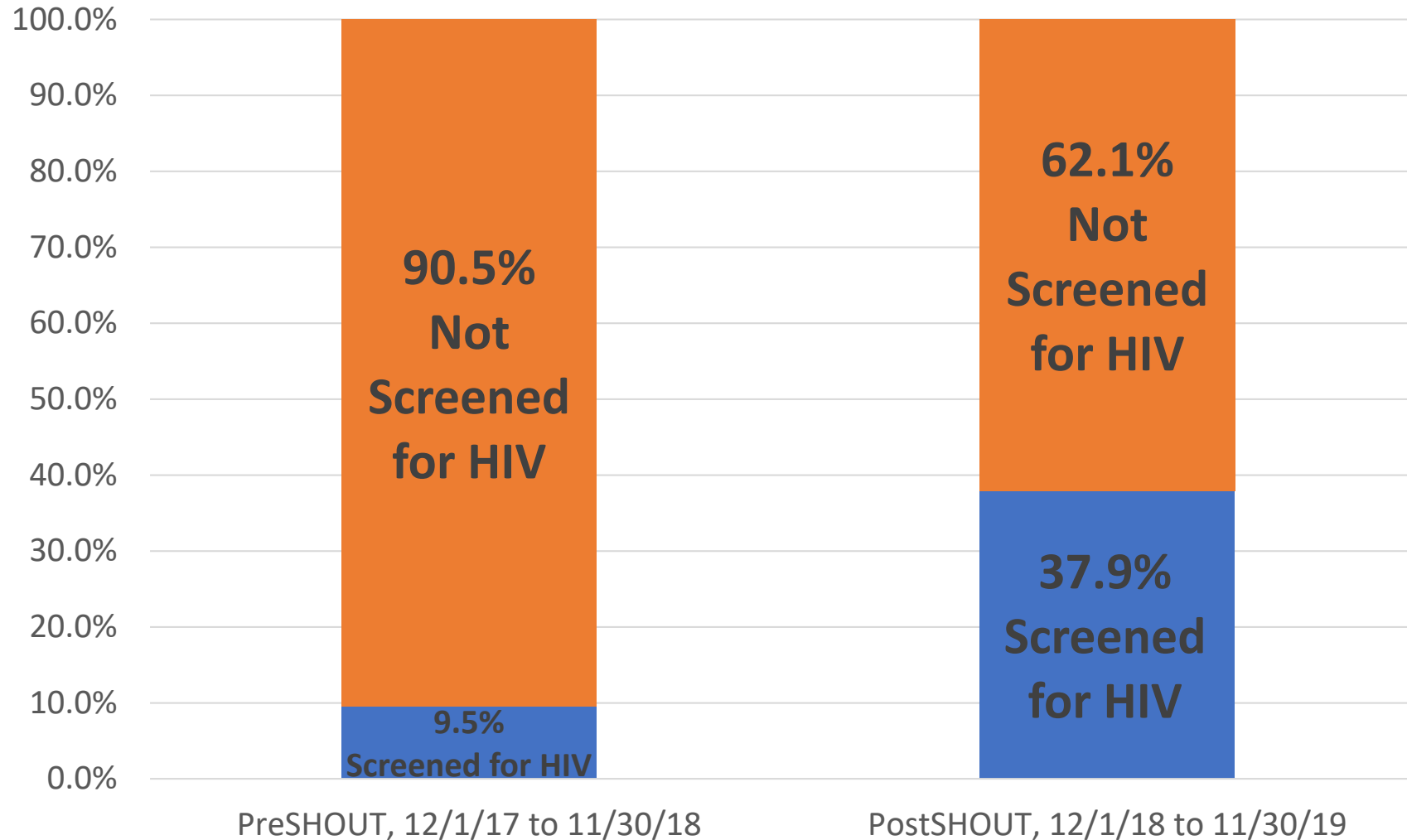




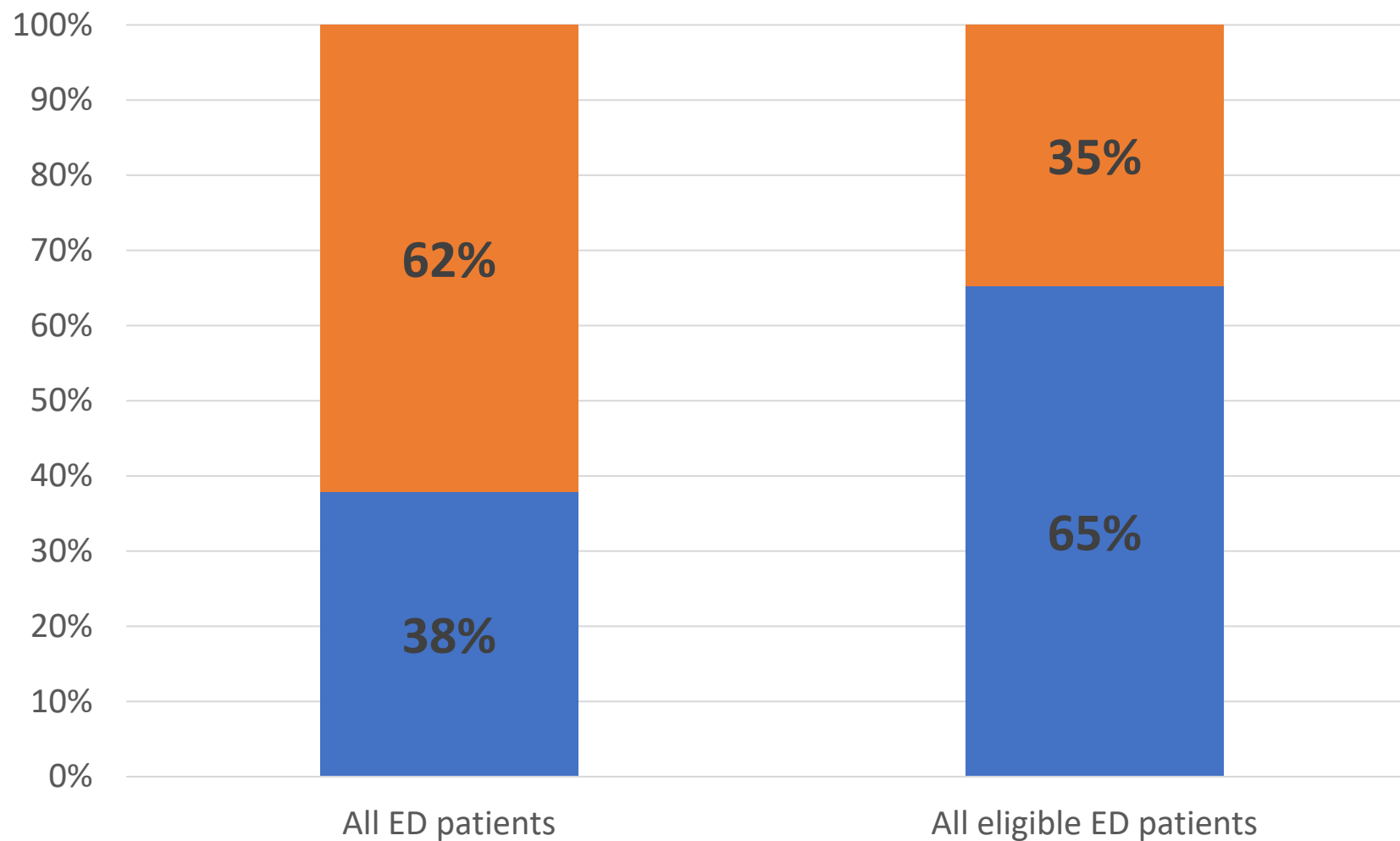
# Percent of ED patients screened for HIV 12 months before and after SHOUT



VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT



# Percent of ED patients screened for HIV



# Focus Pillars



Testing  
integrated  
into clinical  
flow

Electronic  
medical  
record  
modification

Systemic  
policy  
change

Training,  
feedback &  
quality

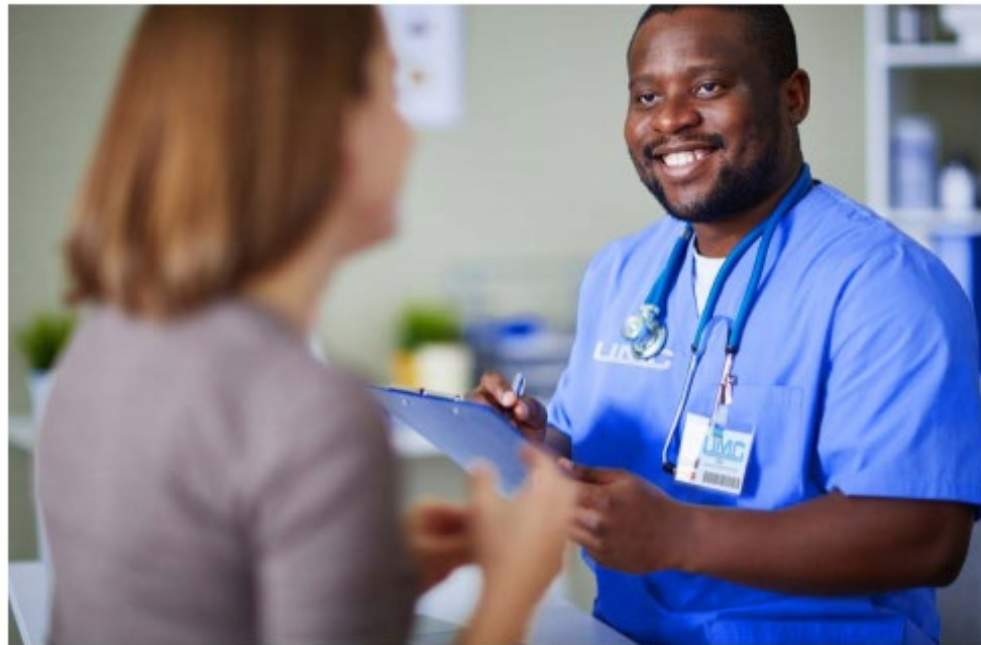
# Testing integrated into clinical flow

- Signage placed
  - Waiting area
  - Nursing triage
  - Phlebotomy stations
- Screening for eligibility done at nursing triage
- A test should be ordered by the physician if blood draw is needed to evaluate the patient's reason for ED visit



VIRTUAL  
**2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT**

# Testing integrated into clinical flow



## EXPECT THE TEST

### Universal Testing Builds a Healthier Future

Our emergency department follows public health recommendations and will routinely include HIV screening when feasible.

### Routine Lab Tests

✓	Glucose
✓	Cholesterol
✓	<b>HIV Test</b>
✓	Complete Blood Count
✓	Lipid Profile

## HERE'S WHAT YOU NEED TO KNOW ABOUT HIV TESTING

- HIV TESTING IS VOLUNTARY, AND ALL HIV TEST RESULTS ARE CONFIDENTIAL.
- HIV TESTING IS A ROUTINE PART OF HEALTH CARE, BUT YOU HAVE THE RIGHT TO OBJECT OR DECLINE AN HIV TEST.
- IF YOU WISH TO DECLINE AN HIV TEST, INFORM THE HEALTH CARE PROVIDER BEFORE YOUR BLOOD SAMPLE IS TAKEN.
- TREATMENT FOR HIV IS EFFECTIVE, HAS FEW OR NO SIDE EFFECTS AND MAY INVOLVE TAKING JUST ONE PILL A DAY.
- HIV CAN BE SPREAD THROUGH UNPROTECTED SEX, SHARING NEEDLES, CHILDBIRTH OR BREASTFEEDING.
- PARTNERS CAN KEEP EACH OTHER SAFE BY KNOWING THEIR HIV STATUS, GETTING HIV TREATMENT IF THEY ARE POSITIVE OR TAKING PRE-EXPOSURE PROPHYLAXIS (PREP) IF THEY ARE NEGATIVE.
- NOT SHARING NEEDLES AND PRACTICING SAFER SEX WILL HELP PROTECT AGAINST HIV, HEPATITIS C AND OTHER SEXUALLY TRANSMITTED DISEASES.
- IT IS ILLEGAL TO DISCRIMINATE AGAINST A PERSON BECAUSE OF THEIR HIV STATUS.

**TESTING PUTS YOU IN CONTROL OF YOUR HEALTH**





# Electronic medical record modification

- Orders placed in favorites for physicians
- Cascading questions for nursing triage built
- Cascading order notifications for physicians built



# Electronic medical record modification

**Orders**

Quick List All Orders

**Order Sets**

Suggested (2) Adult ED Analgesic Alternatives to Opioids General Adult Adm

ADULT ER Trauma Quick List Consults Adult ER PRN MEDS/ORDERS ED SEPSIS ABX NON OPIOID MGMT POC US

**ED Panels**

- Triage Pain Protocol Panel
- Chest Pain or Syncope (W/O Fever) panel
- Fever, Cough, SOB, Wheezing Panel
- Sepsis or Fever Panel
- RMA General Care Panel
- Abdominal Pain Order Panel
- Vaginal Bleeding Protocol Panel
- RMA Medical Clearance Panel
- Stroke/TIA Protocol Panel
- Eye Panel

**Radiology Studies**

- XR Chest 1 view portable (\$)
- XR Chest 1 view (\$)

**ECG**

- ECG 12-Lead

**HIV Labs**

- HIV Labs

**Labs**

- ABO/Rh type (\$\$\$\$\$)
- Acetaminophen level (\$)
- Ammonia (\$\$\$\$\$)
- B-type natriuretic peptide (\$\$\$\$\$)
- Basic metabolic panel (\$\$\$\$\$)
- Blood gas, arterial
- Blood gas, venous
- CBC with auto differential (\$\$\$\$)
- C-reactive protein



# Electronic medical record modification

5/20/2019 visit for Hospital Encounter

QUICK TRIAGE  
Arrival Info  
Arrival Doc  
Chief Complaint  
Triage HPI  
Allergies  
Primary Assess  
Vitals/Sepsis Scre...  
Quick Triage Com...  
LWBS or to L+D  
OB/Gyn Status

FULL TRIAGE  
History  
Home Medications  
**HIV Screening**  
Travel Screening

### HIV Screening - ED HIV Screening

Time taken: 1709 5/20/2019

Values By [+ Create Note](#)

If your provider today in the emergency room is going to order blood tests, we may do HIV screening which is recommended standard screening for all patients between 13-65 years old

Have you ever had an HIV test in the past?  Yes  No

HIV Informed Consent Information Provided  Yes, to patient  Yes, to patient representative  No (Comment)

Accepts/Declines HIV Test  Accepts HIV test  Declines HIV test

Restore Close Cancel





# Electronic medical record modification

DIGS ED Trauma

MEDS/ORDERS ED SEPSIS ABX NON OPIOID MGMT POC US

## ECG

ECG 12-Lead

## HIV Labs

HIV Labs - DID NOT CONSENT to

## Labs

- ABO/Rh type (\$\$\$\$\$)
- Acetaminophen level (\$)
- Ammonia (\$\$\$\$\$)
- B-type natriuretic peptide (\$\$\$\$\$)
- Basic metabolic panel (\$\$\$\$\$)

## HIV Labs - DID NOT CONSENT to screen

HIV-1 and HIV-2 antigen and antibody screen (\$\$\$\$)

STAT, today at 1413, For 1 occurrence

Frequency:

Starting:    At:

First Occurrence: **Today 1413**

Scheduled Times

07/12/19 1413

Specimen Src:

The patient has declined HIV screening

Comments:



# Electronic medical record modification

EDS/ORDERS   ED SEPSIS ABX   NON OPIOID MGMT   POC US

## ECG

ECG 12-Lead

## HIV Labs

HIV Labs - KNOWN HIV POSITIVE

## Labs

- ABO/Rh type (\$\$\$\$\$)
- Acetaminophen level (\$)
- Ammonia (\$\$\$\$\$)
- B-type natriuretic peptide (\$\$\$\$\$)
- Basic metabolic panel (\$\$\$\$\$)
- Blood gas, arterial
- Blood gas, venous
- CBC with auto differential (\$\$\$\$)
- C-reactive protein

## HIV Labs - KNOWN HIV POSITIVE

- HIV-1 Viral Load, RT-PCR Quantitative  
STAT
- CD4/T-Helper Cell Profile  
STAT

Next Required



# Systemic policy change

- Support from administration
- ED staff buy-in
- Getting all ancillary departments involved
  - Lab assisted in feedback loop of positives
  - Marketing department for signage



# Training, feedback & quality

- Constant communication
- Constant feedback
- Constant adjustments in the process

# The Road to Universal Testing

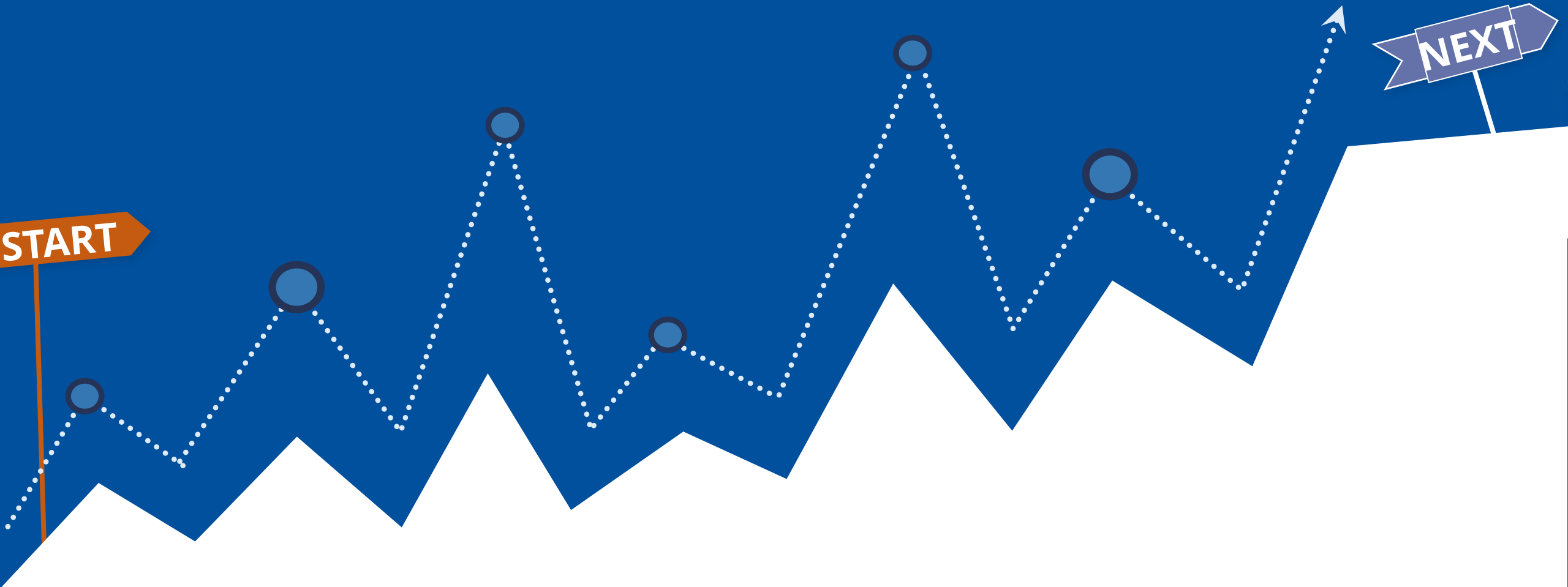


VIRTUAL  
2020 NATIONAL  
RYAN WHITE  
CONFERENCE ON  
HIV CARE & TREATMENT

KEEP GOING

START

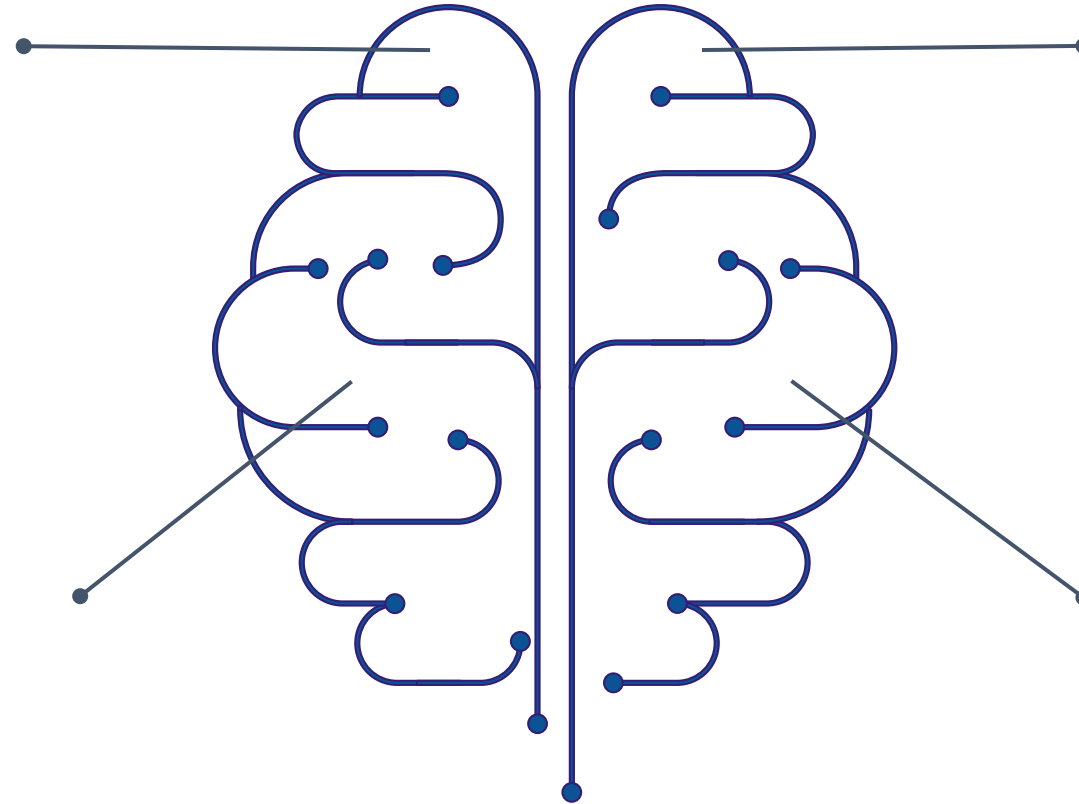
NEXT



# Lessons Learned

GET (a lot of)  
SOMEONE(s)  
TO LISTEN  
**STEP 1**

GO WITH  
THE FLOW  
**STEP 3**



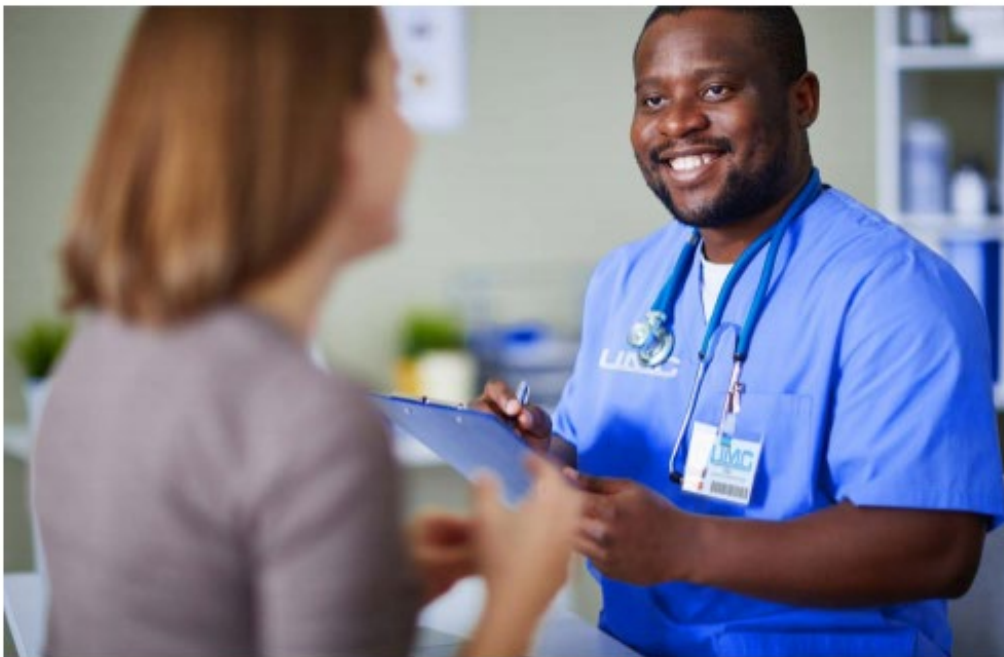
HAVE A PLAN  
from A to Z  
**STEP 2**

ACKNOWLEDGE  
THE SMALL WINS  
**STEP 5**

**“DON’T LET PERFECT BE THE  
ENEMY OF GOOD” -Voltaire  
STEP 4**



VIRTUAL  
**2020 NATIONAL  
 RYAN WHITE  
 CONFERENCE ON  
 HIV CARE & TREATMENT**



## EXPECT THE TEST

Universal Testing Builds a Healthier Future

Our emergency department follows public health recommendations and will routinely include HIV screening when feasible.

### Routine Lab Tests

✓	Glucose
✓	Cholesterol
✓	<b>HIV Test</b>
✓	Complete Blood Count
✓	Lipid Profile

### HERE'S WHAT YOU NEED TO KNOW ABOUT HIV TESTING

- HIV TESTING IS VOLUNTARY, AND ALL HIV TEST RESULTS ARE CONFIDENTIAL.
- HIV TESTING IS A ROUTINE PART OF HEALTH CARE, BUT YOU HAVE THE RIGHT TO OBJECT OR DECLINE AN HIV TEST.
- IF YOU WISH TO DECLINE AN HIV TEST, INFORM THE HEALTH CARE PROVIDER BEFORE YOUR BLOOD SAMPLE IS TAKEN.
- TREATMENT FOR HIV IS EFFECTIVE, HAS FEW OR NO SIDE EFFECTS AND MAY INVOLVE TAKING JUST ONE PILL A DAY.
- HIV CAN BE SPREAD THROUGH UNPROTECTED SEX, SHARING NEEDLES, CHILDBIRTH OR BREASTFEEDING.
- PARTNERS CAN KEEP EACH OTHER SAFE BY KNOWING THEIR HIV STATUS, GETTING HIV TREATMENT IF THEY ARE POSITIVE OR TAKING PRE-EXPOSURE PROPHYLAXIS (PREP) IF THEY ARE NEGATIVE.
- NOT SHARING NEEDLES AND PRACTICING SAFER SEX WILL HELP PROTECT AGAINST HIV, HEPATITIS C AND OTHER SEXUALLY TRANSMITTED DISEASES.
- IT IS ILLEGAL TO DISCRIMINATE AGAINST A PERSON BECAUSE OF THEIR HIV STATUS.

TESTING PUTS YOU IN CONTROL OF YOUR HEALTH



Marsha Matsunaga-Kirgan, MD  
 JD McCourt, MD and all the ED providers  
 Jeffrey Castillo, RN and all the ED RN's  
 Judy West, and the rest of EPIC IT  
 Teresa Costa and the HIM department  
 Lisa Gorlick and her laboratory staff  
 Danita Cohen and her marketing staff  
 SNHD  
 NARES  
 FOCUS (grant-funding)  
 UMC Wellness