The CrescentCare Start Initiative:
A Rapid Start Intervention in New Orleans, Louisiana

Jason Halperin, MD MPH
Where is HIV now in the United States?

HIV has always been about what you do; today it is also about where you live.

92% of new U.S. HIV diagnoses occur in 25% of counties.

...these three cities have the highest new HIV diagnoses rates in America.
U = U

A person living with HIV who has an undetectable viral load does not transmit the virus to their partners.

The International AIDS Society is proud to endorse the U = U consensus statement of the Prevention Access Campaign.

New HIV Diagnoses in San Francisco

No change since 2012 in the proportion of PLWH virally suppressed at 65%

PrEP Users (est.): 400, 4,700, 12,500

Viral Suppression: 65%, 65%, 67%

Adapted from SF DPH, HIV Epidemiology Annual Report, Published September 2017.
Standing on the Shoulders of Giants: SDART in Haiti and Ward 86 in SF

Same Day ART

Standard vs. Same-day ART

RAPID: Long-term Viral Suppression 2013–2017

Time From ART Start to First VL <200 Copies/mL and Percentage With VL <200 Copies/mL at Last VL Recorded, N=225

Patients Ever Achieving VL <200 Copies/mL 1 Year After ART Start

Patients With VL <200 Copies/mL at Last VL Recorded

% of patients with viral load <200 copies/mL

Years Since ART Start


Slide: Koenig S, WEAE0202, AIDS 2016, Durban, SA
CrescentCare Start Initiative (CCSI):
Patients newly diagnosed with HIV are seen by a provider within 72 hours (optimally same-day) and provided 30 days of ART.

Early Intervention Services (EIS):
Same protocol but patients contacted our clinic over 72 hours since diagnosis.
Range: 4 days – 25 years
What Is CrescentCare?

- Started as an ASO in 1983.
- FQHC in 2014
- Primary care for adults, adolescents, and children
- Specialty care for people living with HIV
- Free HIV and STI testing through our sexual wellness clinic
- Community-wide/venue based HIV/STI Testing
- Dentistry
- PrEP clinic
- Transgender clinic
- Psychiatric services
- Addiction Medicine
- Case management, behavioral health, peer support, insurance enrollment assistance
Total numbers

- Project started: 12/1/2016
- First CCSI Patient Seen: 12/6/2016
- Expanded to EIS: 12/21/2016

Total numbers: 368
- 227 CCSI
- 141 EIS
Procedure/Methods

Medical Provider Visit:
- HIV Lifecycle, importance of adherence, U=U discussed
- Comorbidities assessed
- Physical Examination
- Provider option to not rx, alter medications if suspected resistance
- 30 day-supply of TAF/FTC/DTG
- DOT

Post-Provider Visit:
- Enroll in insurance programs
- Intake Labs obtained
- Social Work services for those with urgent needs
CCSI/EIS Data Review

• Inclusion Criteria: clients enrolled into CCSI or EIS program from December 2016 through March 1, 2018.

• Lab values were then followed for an additional six months to develop a Continuum of Care.

Total included for data review = 199

• 130 CCSI
• 69 EIS
Data Review Presented Today

• 4 CCSI Patients referred but not linked and lost to follow up.

• All CCSI patients were started on ART on day of linkage

• 1 EIS patient was referred from the hospital but never linked – (She Passed away before ever linking)

• 1 EIS patients refused ART on day of diagnosis
Age & Gender

- Median Age (CCSI) = 29 (1/3\textsuperscript{rd} under 25)
- Median Age (EIS) = 29 (1/3\textsuperscript{rd} under 25)

**CCSI**
- Male, 74.80%
- Female, 21.10%
- Transgender, 4.10%

**EIS**
- Male, 84.10%
- Female, 10.23%
- Transgender, 5.68%
# Demographics

<table>
<thead>
<tr>
<th>Category</th>
<th>Race</th>
<th>%</th>
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<tbody>
<tr>
<td>CCSI</td>
<td>Black/AA</td>
<td>64.8%</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>Latinx/Other</td>
<td>11.2%</td>
</tr>
<tr>
<td>EIS</td>
<td>Black/AA</td>
<td>70.6%</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>20.6%</td>
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<tr>
<td></td>
<td>Latinx/Other</td>
<td>8.8%</td>
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<table>
<thead>
<tr>
<th>Category</th>
<th>Risk Factor</th>
<th>%</th>
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<tbody>
<tr>
<td>CCSI</td>
<td>Heterosexual Activity</td>
<td>38.1%</td>
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<tr>
<td></td>
<td>MSM</td>
<td>57.9%</td>
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<tr>
<td></td>
<td>PWID</td>
<td>4.0%</td>
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<tr>
<td>EIS</td>
<td>Heterosexual Activity</td>
<td>31.9%</td>
</tr>
<tr>
<td></td>
<td>MSM</td>
<td>60.9%</td>
</tr>
<tr>
<td></td>
<td>PWID</td>
<td>7.2%</td>
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# STIs with diagnosis

<table>
<thead>
<tr>
<th>Category</th>
<th>Dx</th>
<th>%</th>
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<tbody>
<tr>
<td>CCSI</td>
<td>Syphilis</td>
<td>23.81%</td>
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<tr>
<td></td>
<td>Gonorrhea or Chlamydia</td>
<td>26.03%</td>
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<tr>
<td></td>
<td>Hepatitis B or C</td>
<td>4.76%</td>
</tr>
<tr>
<td>EIS</td>
<td>Syphilis</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Gonorrhea or Chlamydia</td>
<td>24.1%</td>
</tr>
<tr>
<td></td>
<td>Hepatitis B or C</td>
<td>9.1%</td>
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### Poverty Level, Insurance, Mental Health Diagnosis

#### Federal Poverty Level

<table>
<thead>
<tr>
<th>Category</th>
<th>FPL</th>
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<tbody>
<tr>
<td>CCSI</td>
<td>Under 100%</td>
</tr>
<tr>
<td>EIS</td>
<td>Under 100%</td>
</tr>
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#### Insurance at Baseline

<table>
<thead>
<tr>
<th></th>
<th>Insured</th>
<th>Uninsured</th>
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<tbody>
<tr>
<td>CCSI</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>EIS</td>
<td>44%</td>
<td>56%</td>
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</tbody>
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#### Mental Health Diagnosis by ICD 10 Code

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<tbody>
<tr>
<td>CCSI</td>
<td>20%</td>
</tr>
<tr>
<td>EIS</td>
<td>33.3%</td>
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Linkage time for CCSI (Hours from Knowledge of Diagnosis to Appointment with a Provider)

- Under 12 hours: 47%
- 24 hours: 29%
- 48 hours: 14%
- 72 hours: 11%
## Baseline Data

### Baseline CD4

<table>
<thead>
<tr>
<th>Category</th>
<th>CD4 Median</th>
<th>CD4% Median</th>
</tr>
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<tbody>
<tr>
<td>CCSI</td>
<td>444 cells/mm³</td>
<td>25.7%</td>
</tr>
<tr>
<td>EIS</td>
<td>271 cells/mm³</td>
<td>18%</td>
</tr>
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### Baseline Viral Load

<table>
<thead>
<tr>
<th>Category</th>
<th>Viral Load Median (copies/ml)</th>
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<tbody>
<tr>
<td>CCSI</td>
<td>42,600</td>
</tr>
<tr>
<td>EIS</td>
<td>70,150</td>
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</table>
Achieved Viral Suppression

CCSI Viral Suppression
- Suppressed: 99%
- Non-Suppressed: 1%
- 125/126 Patients achieved Viral suppression

EIS Viral Suppression
- Suppressed: 94%
- Non-Suppressed: 6%
- 65/69 patients achieved viral suppression
## Results

1. **Time from Diagnosis to First Viral Load Suppression: CCSI**
2. **Time from Linkage to Care to First Viral Load Suppression: EIS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Median (days)</th>
<th>Mean (days)</th>
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<tbody>
<tr>
<td>CCSI</td>
<td>28</td>
<td>40.4</td>
</tr>
<tr>
<td>EIS</td>
<td>27</td>
<td>51.28</td>
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**CD4 Count, Viral Suppression, Transmitted Resistance**

**CCSI:**
- All but two patients received TAF/FTC + DTG
- 118/126 genotypes were performed and reviewed.
- 22/118 (19%) with transmitted resistance
- 18 with NNRTI resistance
- 3/22 with M184V/I with two previously on PrEP
- 4/22 with multiple PI mutations including L90M
- All patients with transmitted resistance achieved viral suppression.
- No ART changes due to renal/hepatic toxicity

**EIS:**
- All but three patients received TAF/FTC + DTG
- 63/69 genotypes were performed
- 6/63 (9.5%) with transmitted resistance.
- 5 with NNRTI mutations
- 2/6 with M184V/I no previous PrEP exposure
- All patients with transmitted resistance achieved viral suppression
- No ART changes due to renal/hepatic toxicity
• Retention in care: Defined as 2 provider visits separated by 3 months in past 12 months

• Viral Suppression: Less than 200 copies/ml and HIV RNA in past six months

• Median Enrollment 14 months (range: 6 months – 21 months)
Care Continuum: CCSI Cohort Compared to EIS Cohort

December 1st, 2016 – January 31st, 2019

- Linked: 100% CCSI, 100% EIS
- Same day ART: 99.5% CCSI, 97% EIS
- Achieved Viral Suppression: 97% CCSI, 93% EIS
- Retained in Care: 87% CCSI, 75% EIS
- Viral Load <200 between Jan 31st 2019 - July 31st 2019: 85.5% CCSI, 67% EIS
- Suppressed 7/18-7/19: 91% CCSI, 79% EIS

28 Days!
Median Enrollment: 20 months (range: 6 months – 33 months)
Key Facilitators of RAPID Intervention

- Same-day appointments
- Flexible provider scheduling (on call backup)
- ART-regimen preapproval prior to genotyping or lab testing
- Availability of ART starter packs
- Accelerated process for health insurance initiation
- Observation of first ART dose in clinic (recommended)
- Guarantee sustained access to ART
Rapid Start Supports Equity

• AA men are more likely to have delays in ART initiation even after seeing a prescribing provider.\(^1\)

• AA men and women are more likely to be prescribed a second line agent (most often a PI) when compared to white men and women.\(^2\)

• No better demonstration of commitment to a community than same-day immediate access to a provider.
Concluding Comments

• Both cohorts demonstrate that starting patients on the day of diagnosis or linkage, before labs are obtained, is highly accepted, safe and well-tolerated.

• Rapid entry/initiation improves
  – Time to viral suppression
  – Viral suppression at 12 months
  – Retention in care at 10–12 months
  – Survival at 12 months (international studies)

• Rapid entry/initiation is feasible in a variety of settings

• There are differences though in engagement between newly diagnosed patients (viral suppression 90%) and those who deferred immediate linkage (viral suppression 77%) P - 0.0071.

• Immediate ART leading to rapid viral suppression will be a key component of ending the HIV epidemic.

<table>
<thead>
<tr>
<th>Year</th>
<th>Diagnoses</th>
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<tbody>
<tr>
<td>2013</td>
<td>523</td>
</tr>
<tr>
<td>2014</td>
<td>459</td>
</tr>
<tr>
<td>2015</td>
<td>433</td>
</tr>
<tr>
<td>2016</td>
<td>422</td>
</tr>
<tr>
<td>2017</td>
<td>354</td>
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Thanks

• Our Patients
• Fran Lawless and the New Orleans Mayor’s Office
• New Orleans Regional Planning Council
• Katie Conner
• Pam Holm
• Nicholas Van Sickels
• Isolde Butler
• CrescentCare Staff