Strategies for Linkage to and Engagement With Care: Focus on Intervention

Thomas P. Giordano, MD, MPH
Associate Professor of Medicine
Baylor College of Medicine
Houston, Texas

Financial Relationships With Commercial Entities

- Dr Giordano has no relevant financial affiliations to disclose (Updated 05/03/17)

Learning Objectives

After attending this presentation, learners will be able to:

- Identify strategies and interventions to improve linkage to HIV care.
- Identify strategies and interventions to improve retention in HIV care.
- Discuss "rapid" treatment protocols as a strategy to improve linkage and retention.
HRSA engagement in care continuum

Early and consistent treatment are beneficial: START and SMART

Diagnosis + Treatment + Retention = Prevention
You can lead a horse to water, but you can’t make him drink...

- What if the horse isn’t thirsty?
- What if the last time the horse drank water it made him sick or tasted bad?
- What if the horse just spent the last 3 nights in the rain and mud because he has no barn and water isn’t high on his list right now?
- What if we kicked him (just a little bit) to get him to move?
- What if the trough was 30 miles away?
- What if the water costs too much for him to afford?

Linkage to care

- Defined as completed visit with a provider who can prescribe ART
- Measured as linked within 30 days of diagnosis
- Linkage should be monitored by diagnosing site and by clinical site, once a patient "touches" the clinical site
- Linkage to care efforts must be delivered with sensitivity and persistence
Linkage to care: influences and opportunities

- Patient factors
  - Demographics: young age, African American, IDU as risk factors have delayed linkage
  - Disease severity (negative correlation)
  - Socioeconomic resources, opportunity costs, and unmet needs (food, housing, money, transportation)
  - Active substance use, mental health problems, stigma

- Health system factors
  - Colocation of testing and treatment services improves linkage
  - Active linkage services (e.g., assisting the patient in setting up appointments, maintaining an active relationship with the patient until linked, and providing linkage case management) versus passive linkage (e.g., only providing names and contact information for treatment centers)
  - Copays, insurance status
  - More rapid access to treatment and ART after seeking care

Only RCT to study linkage: ARTAS

273 participants, 4 cities
78% diagnosed <6 m
90 d of strength-based case management compared to passive linkage

Replicated in ARTAS II

All service linkage workers, patient navigators, and disease intervention specialists (DIS) should be trained in ARTAS
Retention in care

- Defined with various measures:
  - Constancy measures (e.g., at least 2 visits in a year at least 90 days apart)
  - Visit adherence measures (e.g., number of missed visits)
  - Both, since both are independently associated with survival
  - Simple clinically applicable measure: how long has it been since you saw this patient (gap)?

Retention should be monitored, especially for newer patients and patients with detectable VL.
Retention in care efforts must be delivered with sensitivity and persistence.

Retention in care: other influences and opportunities

- Patient factors
  - Demographics: young age, African American, IDU as risk factors have poorer retention
  - Disease severity (negative correlation)
  - Socioeconomic resources, opportunity costs, and unmet needs (food, housing, money, transportation)
  - Active substance use, mental health problems, stigma, recent incarceration

- Health system factors
  - Copays, insurance status
  - Poorer patient-provider relationship and lower trust in provider
  - Flexible appointment schedules, expanded clinic hours, and copay, financial or insurance assistance (e.g., Ryan White program) improve uninterrupted access to care

Only one successful RCT for general US clinical setting: Retention through Enhanced Personal Contact: “REPC”

Enhanced Personal Contact With HIV Patients Improves Retention in Primary Care: A Randomized Trial In 6 US HIV Clinics

<table>
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<th>Intervention Activities, Enhanced Contact Arm</th>
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Intervention Activities: Enhanced Contact Arm
- Brief face-to-face w/ interventionist
- Enrollment at clinic
- 2-week Intervention
- Visit: SDL (e.g., VL, HLA, CD4), NPE (e.g., anti-HIV, virologic/clinical success), NPE (e.g., anti-HIV, virologic/clinical success), NPE (e.g., anti-HIV, virologic/clinical success), NPE (e.g., anti-HIV, virologic/clinical success)
Efficacy in most subgroups (detectable VL, low CD4, young, minority, public insurance or no insurance)

No efficacy in active drug users, people with at least one unmet need

Retention in care
- In-clinic opioid replacement therapy for opioid users
- Using the electronic medical record to alert providers when patients had suboptimal follow-up or high VL also improved retention in care
- Data from non-randomized studies support:
  - Clinic-wide marketing (e.g., posters, brochures, and customer service training) to promote attending visits and provide patients a welcoming and courteous experience
  - Stepped case management, social work, and outreach services
- Mixed data for navigators, supporters, peers, financial incentives

Data to care
Mixed results (Seattle, NC)

May be dependent on quality and timeliness of data, population characteristics, and model

All clinic personnel support retention by:
- providing optimal patient care experience
- constructively affirming attendance rather than criticizing non-attendance
- collaboratively problem solving with patients to overcome barriers

"Rapid Treatment" or "same-day treatment"
Audience response question: About how long do you think it takes an "average" patient without private insurance to go from "initiating contact" with your clinical site to having ART in hand?

1. 1 day
2. 2 weeks
3. 1 month
4. 2 months
5. 4 months
6. I have no idea

Early steps in the continuum of care

- Test positive
- Link to care
- Start ART
- Confirm HIV
- Get to treatment site
- Financial eligibility for care
- Prescribe (oral ART)
- Consent (prescribed ART)
- ART dispensed

Days: 0 (14), 30, 14, 45, 14, 60, 14, 60

Total: 0 - (57) - 194 days!
Should we try for 0 days?
Audience response question: You have just been magically transported into a clinic that has a same-day ART program for newly diagnosed persons.

A 31 year-old man is assigned to see you a day after his HIV diagnosis was confirmed. His other labs (CD4, VL, genotype resistance test, hepatitis screening tests, HLA test, and CBC and chemistry tests) are drawn but not yet resulted. He is asymptomatic.

He has completed all the steps to be prescribed ART (post-test counseling, eligibility, HIV education), wants to start and will pick up ART today from the pharmacy if you prescribe it. How comfortable would you be prescribing ART for this patient now?

1. Very uncomfortable
2. Somewhat uncomfortable
3. Somewhat comfortable
4. Very comfortable

Why treat same day?

• Better clinical outcomes due to less time off ART
• Engage people in care with ART before LTFU so less LTFU
• Shorter time to treatment means less anxiety, more trust
• Treatment as prevention (HPTN 052)
Why treat same day? Why not?

- Better clinical outcomes due to less time off ART
- Engage people in care with ART before LTFU so less LTFU
- Shorter time to treatment means less anxiety, more trust
- Treatment as prevention (HPTN 052)
- Clinical impact from even 2 months delay is likely minimal
- Might treat with the wrong ART (NNRTI, Hepatitis B, renal insufficiency)
- Don’t want to miss TB or other OI that requires deferral of ART
- Less time to address barriers to ART and adherence
- LTFU pre-ART doesn’t risk resistance; LTFU after ART does
- Adds logistical complexity (paying for ART, appointment scheduling)

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The evidence

- Two trials randomized at individual level
  - RapIT in South Africa (Sydney Rosen)
    - Compress pre-ART care into one visit and start ART same day
    - Shift ART start from end of pre-ART care to same day as entering clinic
  - Same Day ART study in Haiti (Serena Koenig)
  - One trial randomized at clinic level
  - START-ART in Uganda (Elvin Geng)
    - Reduce pre-ART care and change culture so start ART on same day as entering clinic
- Consistent results: more and faster suppression, same or better retention, same or better survival
  - Per-ART care can be dramatically simplified
  - More of the people lost to follow-up had started ART


RAPID

The Effect of Same-Day Observed Initiation of Antiretroviral Therapy on HIV Viral Load and Treatment Outcomes in a US Public Health Setting

- Designed for persons with acute or recent HIV; later expanded
- No changes at testing sites; all intervention at clinic
- No changes at testing sites; all intervention at clinic

- Tax vouchers if needed
- Same-day clinician, support services, and lab appointment (3-4 hours)
- Rapid financial assistance to provide emergency drug assistance
- 5-day starter pack, if needed
- DOT of first dose
- RN telephone f/u 1-7 days
RAPID

Same-day ART initiation

• How?
  – System redesign and removing barriers
  – Capacity for drop-ins
  – Financial eligibility if no universal health care
  – Same day ART if no current funding for drugs
  – Ensure uninterrupted access to ART and clinical care
  – Protocols to change ART if laboratory results dictate

Summary

• Measure linkage and retention for your clinic and provider populations
• Expand the denominators to find people in the gaps
• No magic bullet for improving engagement
• Compassionately and constructively identify and address patient and clinic barriers to consistent care
• Increase linkage by using the ARTAS linkage to care protocol, active linkage protocols, and good post-test counselling
• Increase retention by using reminders and personal contact, addressing unmet needs, and minimizing clinic barriers
• Improve patient experience / patient satisfaction and build trust
• Participate in data-to-care efforts
• Attempt to minimize delays in treatment
• Need more complete evaluations of rapid treatment strategies
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Impact of retention on survival

Retention in Care: A Challenge to Survival with HIV Infection

Missed Visits and Mortality among Patients Establishing Initial Outpatient HIV Treatment

San Antonio, Texas, August 21-23, 2017
MOC Question: According to CDC models, which group of people is thought to account for most HIV transmissions in the US?

a) Those infected but undiagnosed
b) Those diagnosed but not retained in care
c) Those retained but not on ART
d) Those on ART but not suppressed
e) Those suppressed by ART

Correct answer: b: diagnosed but not retained in care. CDC modeled the number of people in each of the above groups, the HIV RNA viral load of the people in each of the groups, and what is known about condomless sex and needle sharing in each group. Based on those models, the infected but undiagnosed account for 30% of transmissions while the diagnosed but not retained account for 61% of transmissions. See Skarbinski et al., JAMA Intern Med. 2015; 175:588-96.

Public health benefit of better engagement in care

Early treatment is beneficial: START and TEMPRANO
“Test and treat” vs “same-day treatment”

- Test and Treat, Treatment as Prevention (TasP), Fast Track initiatives, 90-90-90:
  - Universal testing followed by universal treatment
  - Strategy to improve health and end HIV
  - Taking universal treatment to population scale
- Same-day Treatment:
  - Compress the time from diagnosis to treatment
  - Process redesign to treat people faster; less about scale

Same-day ART initiation
Enrollment at clinic
2-week inter. visit
Interim phone call
Attend primary care visit
Interim phone call
Miss primary care appt
Phone call to patient who missed appt.
Reminder calls at 7 & 2 days before primary care appt.

Eligibility screen: ACASI (all enrollees); randomized: Session 1 (EC), Session 2 (EC+); Interim phone call at 7 & 2 days before primary care appt.

Phase 2 Timeline of Intervention Activities

Initiating Antiretroviral Therapy for HIV at a Patient’s First Clinic Visit: The RapIT Randomized Controlled Trial

RapIT: outcomes

47% enrolled at visit to get their CD4 cell results, so had already partly linked to care; 41% enrolled on day of diagnosis
All physically at the clinic at recruitment
Overall, more suppressed, more retained, but more on ART failed, too
Same Day ART

- Truly enrolled and treated on day of diagnosis
- Just changed time of initiation of ART to before rather than after the "pre-ART" care
- All physically at the clinic at recruitment
- No follow-up data on starts who were LTFU or not suppressed (39% in Same Day vs 42% in Standard)
- Overall, more VIs, more retained, better survival (MV only)

START-ART

Effects of a multicomponent intervention to streamline initiation of antiretroviral therapy in Africa: a stepped-wedge cluster-randomized trial

- MD champion to change culture with didactic session, coaching
- Relax treatment supporter requirements
- Assess readiness rather than assume non-readiness (rather than 3 pre-ART visits to prepare patient)
- PIMA rapid CD4 cell count machine (rather than overnight processing)
- Feedback every 6 months comparing clinics on ART initiation rates
- 20 clinics in Uganda
• True system change: implemented clinic-wide
• Radically revised pre-ART care (eliminated pre-ART visits and treatment supporter requirements)
• Proves rapid treatment is implementable and sustainable
• All patients physically at the clinic at recruitment
• No data on starts who were LTFU
• Overall, more suppressed, same retained, same survival

Question and Answer Period

• Use the microphones or Q-cards for questions
• If you are participating via the live webcast, please email your questions to RWCCwebcast@iasusa.org