

Expediting Linkage to HIV Care by Facilitating Patient Scheduling within a Large Hospital System

Julia Zefirova, Sarah McBeth, Becky McDermott, Linda Despines, Marianne Driscoll, Deborah McMahon
 UPMC, Pittsburgh, PA

Introduction:



Linkage to care defined as:

- persons seen by physician within a month from diagnosis or
- one VL or one CD4 count performed within a month from diagnosis¹

- Delayed linkage to care is a major barrier to “treatment as prevention”. It contributes to less retention in care, decreased rates of viral suppression, increased HIV transmission^{2,3}.
- In 2017 CDC reported that 78% of persons diagnosed with HIV were linked to care within 30 days; the national goal for 2020 is 85%.
- To improve linkage to care at Ryan White clinic in Pittsburgh a direct phone line was established to facilitate an appointment for newly diagnosed patients. Only one call was received within a 12 month period.
- We assessed barriers to rapid linkage to care through chart review of the patients newly-diagnosed with HIV, and implemented interventions to expedite appointment scheduling.

Methods:

- Retrospective chart review of patients newly-diagnosed and established between January, 2018 – October, 2019 including HIV infection status and linkage to care parameters.
- Quality improvement interventions being:

1. Providing a rapid referral phone number (“hot line”) with HIV antibody assay results within our EMR

Component	Value
HIV 1 Antibody	Reactive †
HIV-1 Antigen (P24), Qual.	Non reactive
HIV 2 Antibody	Non reactive

HIV ASSAY COMMENT
 For any questions regarding interpretation of these results, please contact the HIV physician on call. They may be reached at (412) 647-7228.
 For patients newly diagnosed with HIV, please call (412) 647-1307 M-F 8:30am-5pm for an appointment within 24 hours at the PACT clinic.

Result Specimen Action List

HIV Assay Comment
 For patients newly diagnosed with HIV, please call (412) 647-1307 M-F 8:30am-5pm for an appointment within 24 hours at the PACT clinic.

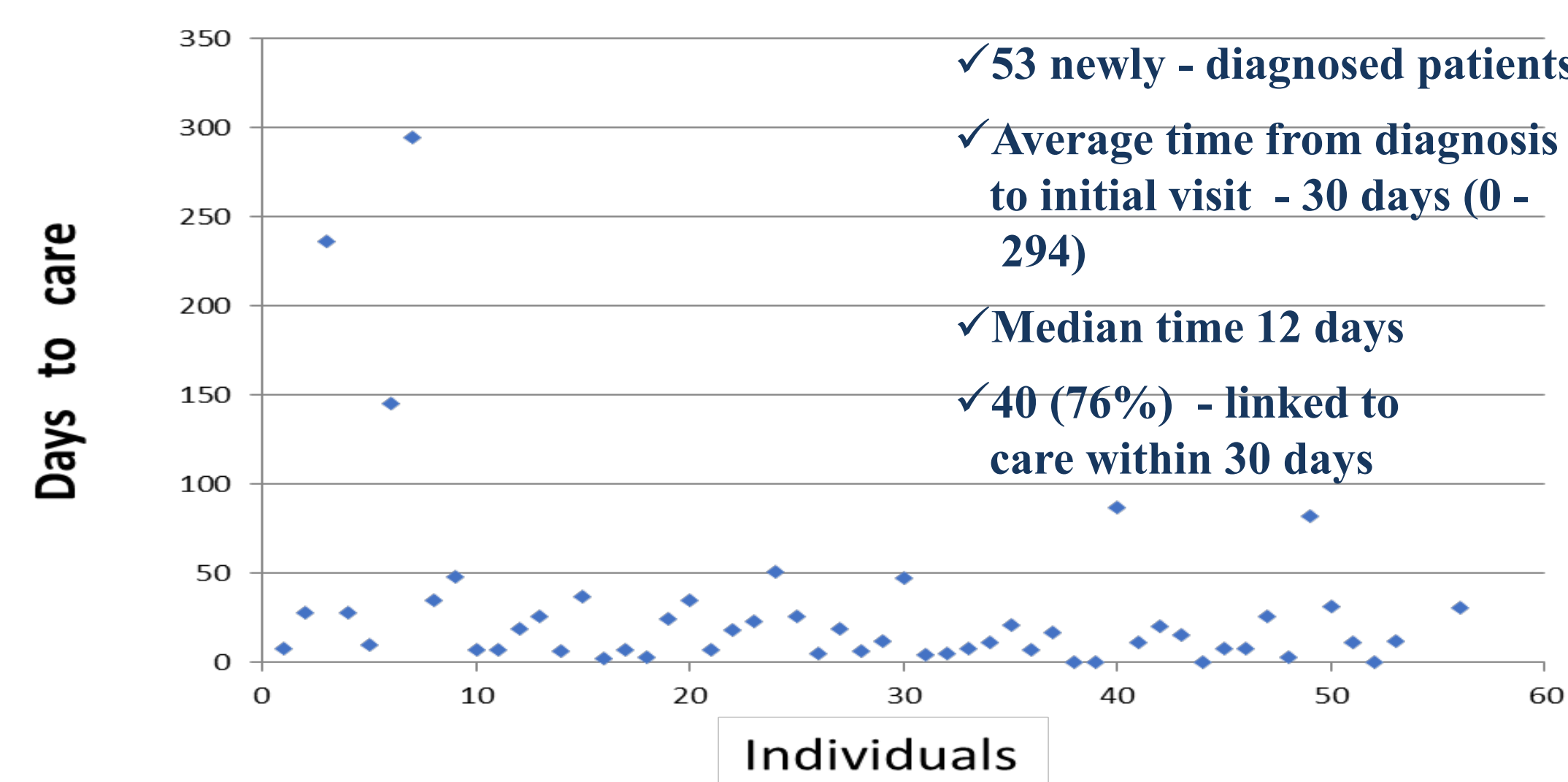
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 Contributor System SUNQUEST

2. Changing the algorithm for the central scheduling team so that new patients are connected immediately to a coordinator within the HIV clinic who offers them appointments within 24 hours. If no new patient slots are readily available, the coordinator seeks physician volunteers to see the patient

- Linkage-to-care indicators (kept medical visits, ART prescribed, viral load suppression, retention) and barriers to rapid linkage were reassessed quarterly.

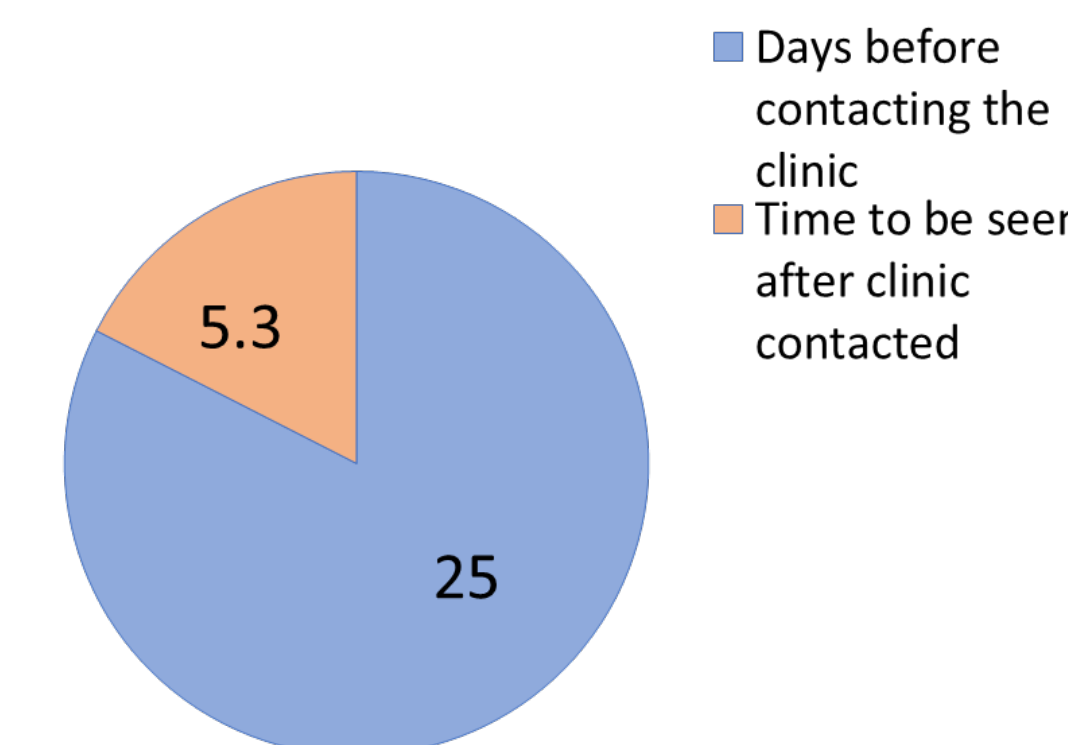
Results: Baseline data and demographics

Days from HIV Diagnosis to First PACT Visit: 1/2018 - 10/2019

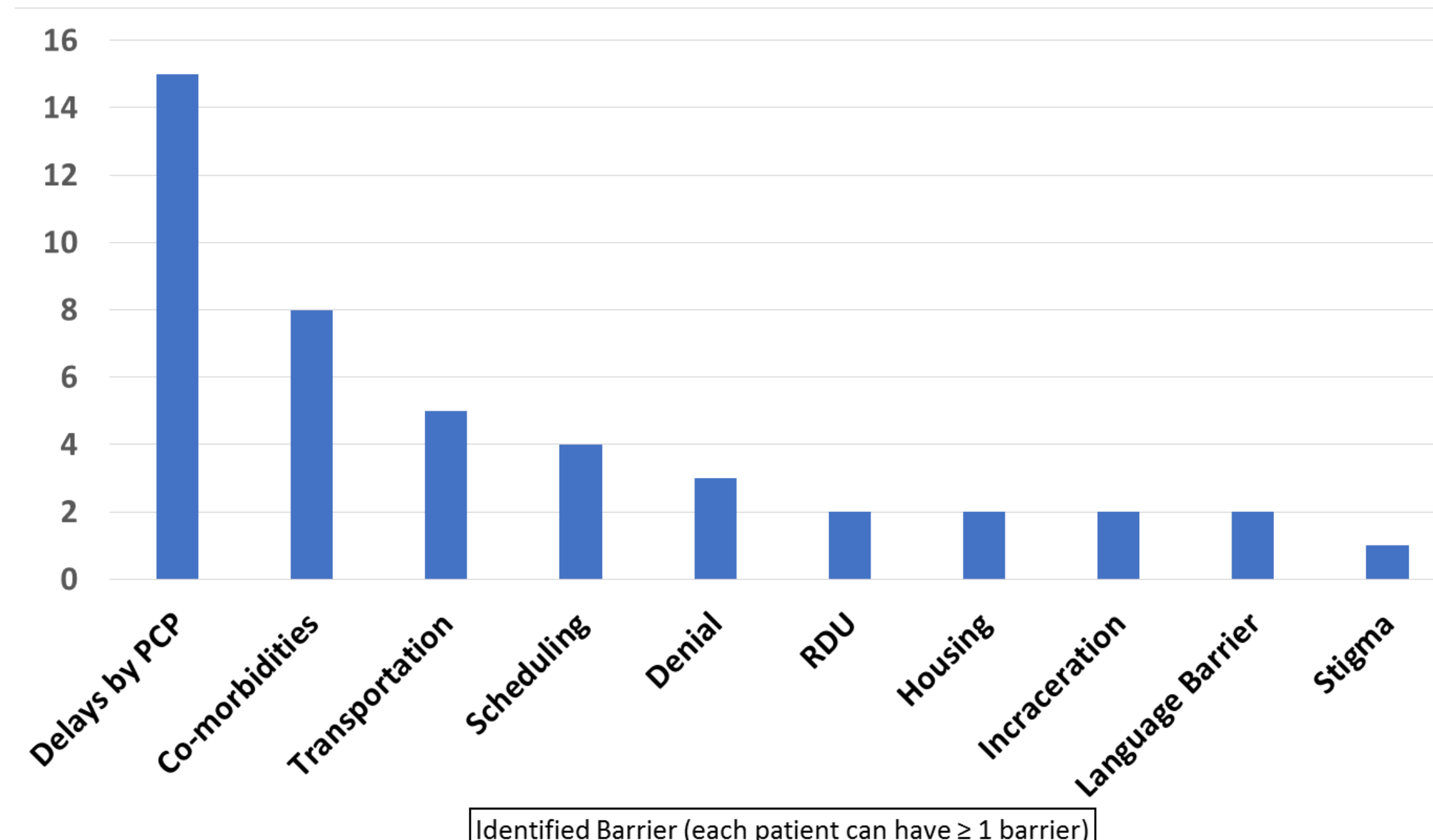


Patients newly-diagnosed with HIV and established at PACT (n=53)		
Average Age		39.9 years (range 16 - 62 years)
Gender	Males	45/53 (84.9%)
	Transgender males to females	1/53 (1.8%)
Linkage to care	Average time to linkage to care	30 days (range 0 to 294 days)
	Within 30 days	40/53 (75.5%)
	Within 90 days	50/53 (94.3%)
	Referred from the hospital	7/53 (13.2%)
	Referred from the hospital with AIDS	6/53 (11.3%)
Started on ART at first visit		53 (100%)
Follow up within 6 weeks		49/53 (92.5%)
Follow up within 6 months		53 (100%)
No show rate		16.4%

Viral load after 6 weeks of ART	
Less than 40	29/53 (54.7%)
Less than 200	41/53 (77.4%)
Above 200	3/53 (5.7%)
Not available	9/53 (16.9%)

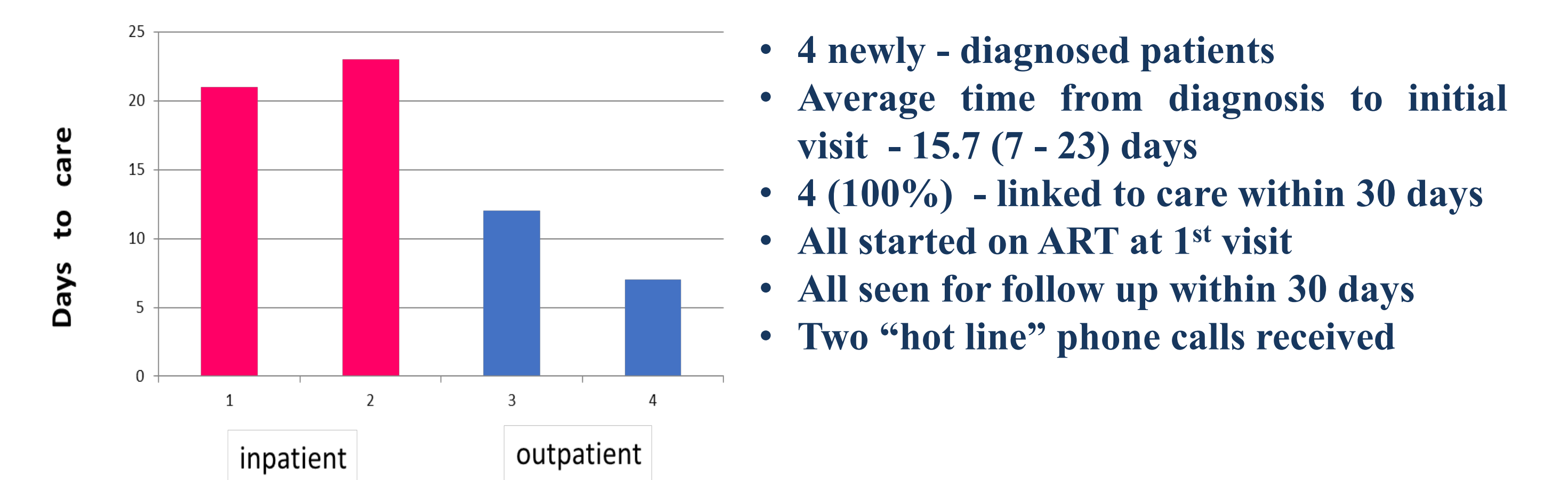


Results: Common barriers to linkage to care



Post intervention Results: November 2019 - May 2020

Days from HIV Diagnosis to First PACT Visit: 11/2019 - 5/2020



Discussion:

- ✓ Average time from diagnosis to initial visit decreased by 2 weeks
- ✓ Small sample size
- ✓ Unnecessary confirmatory testing in outpatient setting and delayed linkage to care following inpatient diagnosis
- ✓ Once referred, all patients were seen within 2-4 days
- ✓ Small number of newly-diagnosed patients may be due to:
 - decline in HIV testing due to COVID-19 epidemic
 - decline in number of newly-diagnosed persons

Lessons learned:

Ensuring rapid linkage to care requires commitment at all levels from scheduling team to physicians.

Challenges:

- Educating referring physicians that a confirmatory HIV RNA level is not necessary for referral for HIV care.
- Improvement needed with transition from inpatient to outpatient for those newly diagnosed in the hospital.

Bibliography:

1. www.cdc.gov
2. Kitahata et al. Effect of early versus deferred antiretroviral therapy for HIV on survival. NEJM. 2009;360:1815-26.
3. Cohen et al. prevention of HIV-1 infection with early antiretroviral therapy. NEJM. 2011;365:493-505.