Improving Time to Antiretroviral Therapy Initiation in Newly Diagnosed PLWH in a Nonurban Clinic

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BACKGROUND

- Current guidelines for the use of antiretroviral therapy (ART) in HIV recommend that ART be initiated as soon as possible after diagnosis
- Rapid ART can decrease the time to viral suppression, increase virologic suppression rates, and increase retention in care
- At the University of Virginia Health (UVA) Ryan White Clinic, patients with newly diagnosed HIV had been experiencing delays to the initiation of ART due to a variety of barriers
- Uninsured patients in Virginia can enroll in the Virginia Medication Assistance Program (VAMAP), a Virginia Department of Health program to assist ART prescription coverage

PURPOSE

- If we can decrease the delay to starting therapy in this patient population, we can improve clinical outcomes and provide better access to essential medications in a vulnerable patient population.

PROBLEM STATEMENT

- Patients with newly diagnosed HIV seen at the Ryan White Clinic for their initial visit between April 2019 and March 2020 experienced a mean delay of 7 days between the date that ART was prescribed and the initiation of anti-retroviral therapy.

AIM STATEMENT

- Our goal is to decrease time to ART initiation by 30-50% from our starting baseline.

PRE-INTERVENTION METHODS

- Reviewed clinic patients from 4/1/2019 to 3/1/2020 and identified 65 patients
- Excluded patients that were returning patients and transfers of care
- Included patients that were initial visits for newly diagnosed HIV. 30 patients were identified for pre-intervention analysis

RESULTS

Figure 1. Time to ART Initiation in Patients with Newly Diagnosed HIV

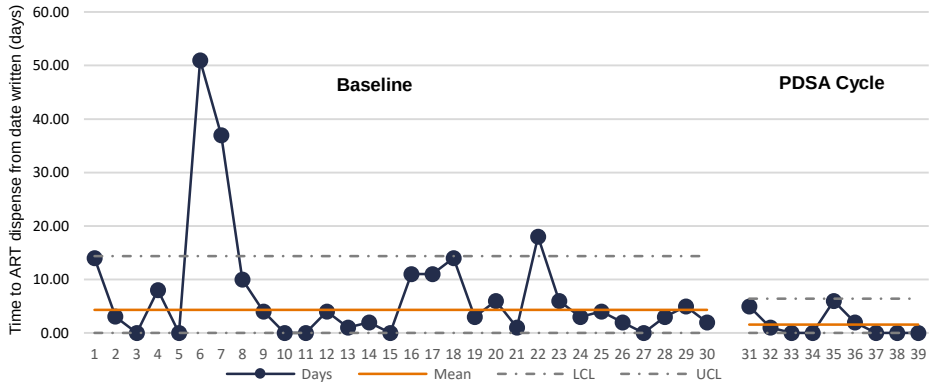

Table 1. COMMON BARRIERS PRE-INTERVENTION

Barriers Experienced	Patients Affected (N=30) n (%)
Lack of Insurance	11 (37)
Other barrier besides lack of insurance	18 (60)
Pharmacy out of Network	7 (23)
Delay in VAMAP Approval	7 (23)
Insurance/copay issue	6 (20)
Shipment setup issue	3 (10)
Prior Authorization	2 (7)
Other issue	4 (13)

Table 2. TIME TO ART INITIATION PRE VS POST INTERVENTION

Pre-Intervention Time to ART	Time, days (N=30)
Median, range	**3.5 (0-51)**
Mean	**7.4**
Post-Intervention Time to ART	**(N=9)**
Median, range	**0 (0-6)**
Mean	**1.6**
Post-Rapid Start Time to ART	**(N=51)**
Median, range	**0 (0-14)**
Mean	**0.3**

INTERVENTION

Interventions Through PDSA Cycle:

- Pre-visit benefits investigation
- Manufacturer immediate access program enrollment
- Sending first Rx to UVA Pharmacy for transparency
- ID Pharmacist received additional training to process prescriptions at UVA Pharmacy
- Post-prescriptive follow-up calls to confirm access
- Creation of Linkage to Care email list-serv to streamline communication during first-visits

DISCUSSION

- In January 2021, a formal Rapid Start Program was established at UVA with standard work heavily influenced by above countermeasures.
- Rapid start funding could be used in lieu of emergency medication access funding.
- Interventions largely pharmacist-focused
- Pre-visit benefit investigations and post-prescriptive follow-up calls were greatly benefited by the addition of a new nurse coordinator and community health worker

CONCLUSION

- Implementation of countermeasures has led to a reduction in time to ART initiation, with patients experiencing an average time to initiation of 1.6 days and a median of 0 days, which was improved and sustained through introduction of a formal rapid start program.

FUTURE DIRECTION

- Will continue evaluating patients that meet inclusion criteria and implementing countermeasures as routine standard work.
- Will evaluate potential clinical and economic benefits of our interventions,

REFERENCES

- Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescent with HIV. Department of Health and Human Services. Available at http://ww.aidsinfo.nih.gov/contentfiles/adultandadolescentGL.pdf. Accessed November 1, 2021.