

Assessing HIV Care Transition Readiness among Adolescents and Youth Aged 13-24 Years: A Retrospective Cohort Study



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INTRODUCTION

- Transitioning from pediatric to adult services is associated with worsening of health outcomes and decreased retention in care among adolescents and youth living with HIV (AYLHIV).¹
- Less than one quarter of youth with complex healthcare needs successfully transition from adolescent-specific to adult care.²
- Children's National Special Immunology Services (SIS) implemented the Milestone Initiative to evaluate preparedness of AYLHIV for transitioning to adult healthcare using the Transition Readiness Assessment Questionnaire (TRAQ).³
- No studies assessed utility of the TRAQ in HIV clinical practice.

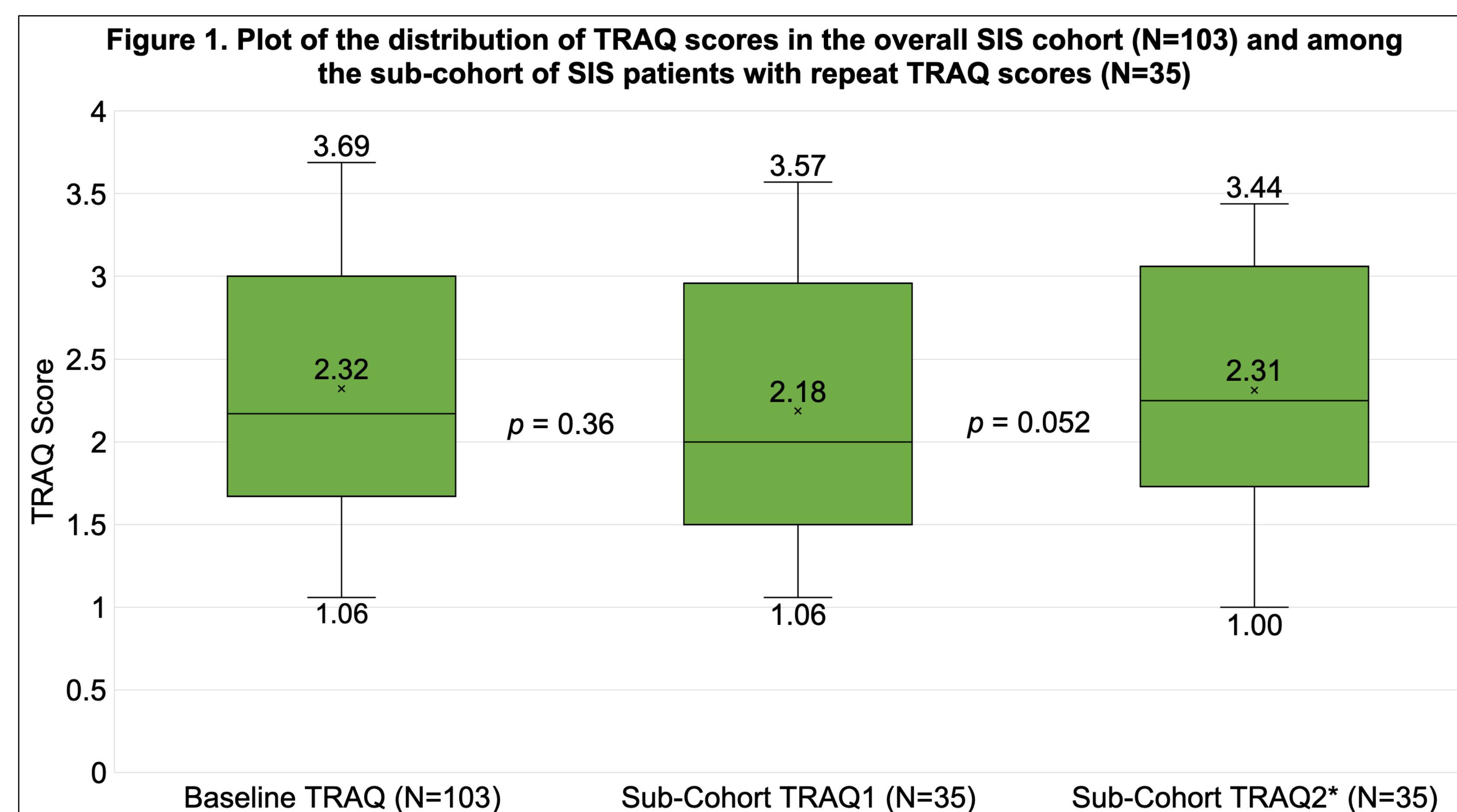
OBJECTIVES

- (1) Evaluate factors associated with HIV care transition readiness, as measured by the TRAQ, among SIS AYLHIV.
 - (2) Assess changes in HIV care transition readiness over time by demographic and health characteristics among a sub-cohort of SIS AYLHIV with repeat TRAQ scores over the study period.
- **Hypothesis:** HIV care transition readiness is dependent on one or more of age, gender, mode of HIV transmission, duration of HIV diagnosis, case management acuity level, viral suppression, chronic health conditions other than HIV, mental health comorbidities, and psychotropic medications.

METHODS

- **Study design**
 - Retrospective cohort study of SIS AYLHIV aged 13 to 24 years in care from June 1, 2019 to January 31, 2021.
 - Participants are a subset of a larger SIS observational cohort study approved by Children's National IRB.
 - Collected data from Children's National's electronic medical record (EMR)-based SIS clinical database.
- **Statistical analysis**
 - Analyzed differences in mean TRAQ scores (1-4; with 1 being the lowest preparedness) by demographic and health characteristics
 - Conducted two-sided unadjusted two-sample and paired t-tests and adjusted ANOVA with significance level set at 0.05
 - Used SAS[®] 9.4 for all analyses⁴

	Overall SIS Cohort (N=103) N(%)	SIS Sub-Cohort (N=35) N(%)
Age at enrollment, years		
13-17	31 (30.1)	14 (40.0)
18-24	72 (69.9)	21 (60.0)
Gender		
Male	51 (49.5)	15 (42.9)
Female	52 (50.5)	20 (57.1)
Mode of HIV transmission		
Perinatal	71 (68.9)	28 (80.0)
Behavioral	32 (31.1)	7 (20.0)
Duration of HIV diagnosis, years		
<1	10 (9.7)	2 (5.7)
1-5	28 (27.2)	9 (25.7)
6-10	9 (8.7)	1 (2.9)
>10	56 (54.4)	23 (65.7)
Case management acuity level		
1 (Self)	32 (31.1)	6 (17.1)
2 (Basic)	28 (27.2)	11 (31.4)
3 (Moderate)	20 (19.4)	10 (28.6)
4 (Intensive)	23 (22.3)	8 (22.9)
Viral load at baseline		
Undetectable (<200 copies/mL)	84 (81.6)	29 (82.9)
Detectable (>200 copies/mL)	19 (18.4)	6 (17.1)
Viral load at TRAQ2*		
Undetectable (<200 copies/mL)	--	25 (71.4)
Detectable (>200 copies/mL)	--	10 (28.6)
Other chronic health condition(s)		
Yes	25 (24.3)	7 (20.0)
No	78 (75.7)	28 (80.0)
Mental health diagnosis		
Yes	41 (39.8)	19 (54.3)
No	62 (60.2)	16 (45.7)
Psychotropic medications		
Yes	14 (13.6)	7 (20.0)
No	89 (86.4)	28 (80.0)



* TRAQ2 was assessed an average of six and a half months after TRAQ1.

RESULTS

- Participants were 100% non-Hispanic Black/African American.
- Mean baseline TRAQ scores differed significantly by age ($p < 0.0001$), gender ($p = 0.033$), mode of HIV transmission ($p = 0.0002$), viral suppression ($p = 0.0005$), and duration HIV of diagnosis ($p = 0.012$).
- AYLHIV diagnosed with HIV within the prior year had significantly greater mean improvement in transition preparedness compared to those living with HIV for longer than 10 years ($p = 0.013$).
- Duration since HIV diagnosis remained significantly associated with TRAQ scores over time, after adjusting for other chronic health conditions ($p = 0.010$).

CONCLUSIONS

- Progress in TRAQ scores related to duration of HIV diagnosis.
- AYLHIV diagnosed perinatally likely require additional support compared to those who acquired HIV behaviorally.
- Knowledge of factors associated with transition readiness can inform tailored, multidisciplinary interventions to increase successful transition in HIV care.
- **Strengths:** Representative sample; complete data on wide range of demographic and health characteristics; cross-sectional and longitudinal analyses.
- **Limitations:** Small sample size; single institution; restricted to one racial/ethnic group; TRAQ scores based on case managers' subjective clinical assessments.

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4. The data analysis for this paper was generated using SAS software. Copyright © 2013 SAS Institute Inc. SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc., Cary, NC, USA.