**Enhancing Interventions to Impact Healthcare Transition Readiness and Preparation of HIV Infected Young Adults**

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**Introduction**

Adolescents and young adults with HIV are often unprepared to transition their healthcare to adult care settings and need assistance to develop essential knowledge and critical transition skills.

Outcomes of poor HIV transition to include:
- Disruptive in care
- Development of multi-drug resistant viruses
- Deterioration of the immune system
- Increased morbidity and mortality
- Possible transmission of HIV to others

Transition guidelines emphasize:
- Continual assessment of transition readiness
- Use of validated tools to measure transition skills
- Adoption of interventions based on transition assessments to enhance transition preparation

Many clinics do not assess health care transition readiness skills or incorporate measured assessments of transition readiness into routine care.

Use of validated tools to measure transition readiness can assist providers to assess knowledge, develop patient goals and evaluate essential skills.

**Objectives**

- To describe multidisciplinary Infectious Disease (ID) health care provider interventions among 22- to 24-year-old HIV positive patients who are preparing for healthcare transition before and after the use of TRAQ
- To describe healthcare transition readiness through the use of TRAQ and HIV disease specific knowledge
- To explore demographic factors associated with healthcare transition readiness and provider interventions

**Methods**

**MATERIALS**

Transition Readiness Assessment Questionnaire (TRAQ) 20 item, 5 domain, skill-focused, validated tool. Each item is scored by the patient on a scale of 1 to 5:

1 = “No, I do not know how”
5 = “Yes, I always do this when I need to”

**RETROSPECTIVE CHART REVIEW**

| TRAQ initiated | Nov 2015 | Nov 2016 | Feb 2017 |

**DATA COLLECTED**

- 12 months prior TRAQ
  - Appointment history
  - CD4 and viral load
  - Transition interventions similar to TRAQ by the nurse practitioner or social worker

- 3 months after TRAQ
  - Appointment history
  - CD4 and viral load
  - Transition interventions related to TRAQ by the nurse practitioner or social worker

**Results**

**DEMOGRAPHICS**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35 (72.9)</td>
</tr>
<tr>
<td>Female</td>
<td>13 (27.1)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>17 (35.4)</td>
</tr>
<tr>
<td>23</td>
<td>25 (52.1)</td>
</tr>
<tr>
<td>24</td>
<td>6 (12.5)</td>
</tr>
<tr>
<td>Route of Infection</td>
<td></td>
</tr>
<tr>
<td>Behavioral</td>
<td>42 (87.5)</td>
</tr>
<tr>
<td>Perinatal</td>
<td>6 (12.5)</td>
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</tbody>
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**TRAQ SCORES**

<table>
<thead>
<tr>
<th>TRAQ Domains</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Medications</td>
<td>4.12</td>
<td>4.50</td>
</tr>
<tr>
<td>Appointment keeping</td>
<td>4.03</td>
<td>4.29</td>
</tr>
<tr>
<td>Talking with providers</td>
<td>4.64</td>
<td>5.00</td>
</tr>
<tr>
<td>Tracking health issues</td>
<td>3.41</td>
<td>3.25</td>
</tr>
<tr>
<td>Managing Daily Activities</td>
<td>4.34</td>
<td>4.67</td>
</tr>
<tr>
<td>Total score</td>
<td>4.04</td>
<td>4.15</td>
</tr>
</tbody>
</table>

**Most Common Skill Deficits reported by patients**

- Applying for health insurance
- Knowing what your insurance covers
- Keeping a list of appointments
- Following up on lab tests/referrals
- Making a list of questions for the doctor

**Lowest TRAQ score Tracking Health Issues (3.41)**

<table>
<thead>
<tr>
<th>Items</th>
<th>Tracking Health Issues (3.41)</th>
</tr>
</thead>
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<tr>
<td>Applying for health insurance</td>
<td>Knowing what your insurance covers</td>
</tr>
<tr>
<td>Keeping a list of appointments</td>
<td>Following up on lab tests/referrals</td>
</tr>
<tr>
<td>Making a list of questions for the doctor</td>
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**STATISTICAL ANALYSIS**

Demographic variables and TRAQ scores

No statistically significant relationship between age or CD4/viral load and TRAQ scores or interventions delivered.

**Nurse practitioner and social worker interventions related to TRAQ**

**Pre TRAQ vs. post TRAQ**

Nurse practitioner (NP) and social worker interventions (SW) were greater pre TRAQ than post TRAQ related to medication management (MM), appointment keeping (AK), and tracking health issues (THI) (p < .01)

- More NP interventions related to MM and HIV education (HIVE)
- More SW interventions related to AK and THI

**Pre TRAQ vs. TRAQ day**

Patients were more likely to receive NP and SW interventions related to MM, THI and HIVE more frequently pre TRAQ than on TRAQ day (p < .05)

NPs provided more interventions on TRAQ day related to MM, THI and HIV compared to SWs

**Conclusions**

- Assessment of transition skills is imperative to enhance preparation and transition readiness
- HIV positive young adults are not proficient in many critical transition skills
- TRAQ can assist in identifying critical areas of skill deficit and guide providers to target interventions based on these deficits
- Provider interventions were similar to 3 TRAQ domains (MM, AK, THI) prior to initiating TRAQ
- Two domains (Talking with Providers and Managing Daily Activities) may be more relevant and applicable in younger age cohorts
- Use of TRAQ provided specific patient-reported skill deficits not previously documented by providers
- Extra time may be needed to address essential skills: navigating the healthcare market place/maintaining insurance, learning critical components of their medical history, and filling out a medical history form
- Continual use of TRAQ over time may lead to identification of factors related to a successful transition and evaluation of the effectiveness of evidence-based interventions

References available upon request. Contact sandra.jones2@stjude.org