**Background**

- Children from Spanish speaking only (SSO) households are more likely to experience barriers to medical care compared to children from English speaking households.
- Specific barriers include:
  - Increased difficulty with transportation to medical visits
  - Communication with health care professionals
  - Scheduling appointments
  - Less likely to have a stable primary care medical home
- Barriers often result in delayed or missed care.
- Children with Down syndrome (DS) require frequent visits with primary care and subspecialty medical providers, along with recommended laboratory and imaging studies. Barriers to these services for children with DS from SSO households may result in poorer health and developmental outcomes.

**Objectives**

- To survey primary care providers about their experiences with barriers to medical care for their SSO patients with DS.
- To evaluate the outcomes of the incorporation of a bilingual health navigator in a multidisciplinary Down syndrome clinic.

**Methods**

- SSO program data from a multidisciplinary clinic for children with DS were analyzed. A bilingual health navigator was employed to work with SSO caregivers of patients with DS. The health navigator conducted interviews with caregivers (n=114) during the clinic visit regarding medical and resource needs for their child with DS.
- Community primary care providers (PCPs) (n=16) were surveyed regarding potential barriers and challenges of both English and Spanish speaking only families of children with DS.

**Primary Care Provider Feedback**

- Sixteen primary care providers were surveyed to determine barriers for the patients with DS on their patient panel.
- Independent t-tests were run to determine significant differences between Spanish-speaking and English-speaking families regarding barriers (Table 1).

**SSO Family Interviews**

- Patients (n=114, Medicaid=94%) from SSO households participated.
- Overall, 83% of parents reported that language/communication was a barrier to meeting their child’s health needs.
- Parents were asked if they agree or disagree with multiple statements (Graph 1).

**SSO Program Impact**

- Percentages of existing resource connections before the SSO program versus resource connections needed/provided through the SSO program are outlined in Graph 2.
- To determine the need of a targeted SSO program, Fisher's exact tests were conducted comparing resource connections between families with prior experience in a DS clinic without the targeted SSO program and new DS clinic patients (PCP only experience) on all 13 resources listed above. There was no statistical difference (p > 0.05) between the two groups.

**Demographic Patient Information**

- Data indicates that our clinic’s patient population captures approximately 88% of the state of Colorado’s population of children with DS.
- Targeted community outreach efforts by our clinic have been made to the Hispanic and Latino communities. Our Hispanic/Latino patient population is higher for families of children with DS compared to the state of Colorado (30.0% versus 21.8%).

**Results**

**Table 1. On a scale of 1-7, where 1 is very easy and 7 is very difficult, how easy or difficult is it for your SPANISH-SPEAKING/ENGLISH-SPEAKING parents of children with Down syndrome to do the following tasks?**

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Spanish Speaking Mean (SD)</th>
<th>English Speaking Mean (SD)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule follow up appointments with children</td>
<td>3.56 (1.55)</td>
<td>2.14 (1.10)</td>
<td>0.008</td>
</tr>
<tr>
<td>Schedule subspecialty appointments for their child</td>
<td>4.31 (1.54)</td>
<td>2.86 (1.56)</td>
<td>0.016</td>
</tr>
<tr>
<td>Obtain recommended laboratory tests</td>
<td>3.75 (1.65)</td>
<td>2.43 (1.28)</td>
<td>0.022</td>
</tr>
<tr>
<td>Obtain recommended radiology studies</td>
<td>3.73 (1.48)</td>
<td>2.38 (1.33)</td>
<td>0.018</td>
</tr>
<tr>
<td>Obtain mental health care services for their child</td>
<td>4.86 (1.51)</td>
<td>3.33 (1.92)</td>
<td>0.033</td>
</tr>
<tr>
<td>Obtain behavioral support services for their child</td>
<td>4.69 (1.74)</td>
<td>2.93 (1.82)</td>
<td>0.011</td>
</tr>
<tr>
<td>Find developmental therapy supports for their child (Examples: physical, occupational, speech therapy)</td>
<td>4.5 (1.86)</td>
<td>2.43 (1.55)</td>
<td>0.003</td>
</tr>
</tbody>
</table>

**Graph 1. I have the __________ resources to meet my child’s health needs.**

**Graph 2. Initial Access to Resources vs. SSO Program Support**

**Conclusions**

- Community primary care providers reported that SSO patients with Down syndrome had more difficulty accessing medical, mental and behavioral health care, and developmental therapy supports compared to English speaking patients.
- Children with DS from SSO households are at increased risk of barriers than result in poorer access to medical care.
  - Over ¾ of SSO parents of patients with Down syndrome report communication barriers that affect their child’s health care.
  - Prior to the addition of a bilingual health navigator in a DS multidisciplinary clinic, there was no difference in connection with the local CCB in new or established patients.
  - The bilingual health navigator connected patients with a wide variety of resources to improve access to medical care and community agencies.

**Implications**

- Children with DS from SSO households experience barriers to health care.
  - Without a targeted intervention, SSO children with DS are at risk for poorer health outcomes due to these barriers.
  - A bilingual health navigator in a multidisciplinary Down syndrome clinic has connected SSO families to a variety of community and medical resources.
  - Next steps include evaluating completion of recommended testing and medical visits in this group of patients.

**Disclosures**

The authors declare that they have no conflict of interest with respect to the research, authorship, and/or publication of this article. The authors received no financial support for the research, authorship, and/or publication of this article.