**Background & Significance**
- 90% of the brain’s function and structure is developed by age 5 (Cao et al., 2017).
- Repeated word exposure, such as reading, particularly before age 5 greatly impacts literacy, language, spatial reasoning, math, and self-regulation skills, as well as behavioral and cognitive influences later in life (Lore et al., 2018).
- Reach Out and Read (ROR) is an early literacy intervention program in which providers integrate books into child well visits from 6 months to 5 years (Fricke, 2016).
- The components of the ROR include:
  - Gives a Book
  - Models Reading Aloud
  - Anticipatory Guidance
- With the rapid transition to telemedicine during the COVID-19 pandemic, little information is known on how telemedicine impacts ROR.
- Insufficient published research on ROR via telemedicine.

**Purpose Statement**
To assess the impact of telemedicine on the implementation of the Reach Out and Read (ROR) program.

**Methods**
- In this quality improvement (QI) initiative, descriptive statistical methods were applied to secondary data from an anonymous survey N=7, via Qualtrics distributed to primary care pediatrics in a clinic by a local university to identify barriers and areas for improving the ROR program via a telemedicine platform.
- The goal of this analysis was to develop recommendations on best practices for implementing ROR using telemedicine based on the 7 survey responses.

**Measures**
- Awareness of telemedicine options for achieving ROR objectives
- The perceived need for ROR during telemedicine visits during COVID-19
- Measures of ROR compliance on ROR objectives during Telemedicine well-visits.
- Perceived impact telemedicine has on implementing ROR
- Rank specific barriers to implementing ROR via Telemedicine
- Telemedicine specific needs to improve ROR implementation

**Results**
Findings showed that:
- Telemedicine does impact ROR.
- 71% of pediatricians agreed that it is extremely important to provide the ROR program at telehealth well visits during the COVID-19 pandemic
- Pediatricians are rarely implementing ROR tenants via telemedicine due to barriers.
- Pediatricians reported specific barriers in implementing ROR via telemedicine:

**Discussion**
- Pediatricians value ROR yet indicated specific resources are needed to facilitate implementation of ROR objectives via telemedicine.
- ROR telemedicine clinics can benefit by responding to the following recommendations:
  - Provide a list of online reading resources
  - Have training materials available for how to implement ROR via Telemedicine.
  - Offer quick-reference sheets for implementing ROR telemedicine
- To address these recommendations this project:
  - Identified a telehealth quick reference guide
  - Identified educational video for providers on how to implement ROR via Telemedicine.
  - Assisted authoring a telehealth manual
- Created three child literacy resource sheets identifying free e-books, reading aloud options, and other literature activities
  - This was incorporated into the telehealth manual that is slated for inclusion in NIH funded research
  - These are available in English, Spanish, and Multilingual.

**Barriers Impacting ROR via Telehealth**

<table>
<thead>
<tr>
<th>Barriers Impacting ROR via Telehealth</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book Distribution Unavailable</td>
<td>100%</td>
</tr>
<tr>
<td>Lack of Physical Interaction</td>
<td>90%</td>
</tr>
<tr>
<td>Technology Restrictions</td>
<td>80%</td>
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<tr>
<td>Insufficient Training</td>
<td>70%</td>
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<tr>
<td>Insufficient Time</td>
<td>60%</td>
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<tr>
<td>Patient or Parental Disinterest</td>
<td>50%</td>
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</tbody>
</table>