## CASE STUDIES USING SOCIALLY ASSISTIVE ROBOTICS WITH PEDIATRIC CLIENTS

0.05 ASHA CEU and .5 Act 48 PDH

SARA LOMBARDI B.S., MICHAELA RAUB B.S.,
ERIN ROBERTS M.S., CCC-SLP, KARA THOUROT B.S.,
VICTORIA SLUSARK, LORI CIMINO M.S., CCC-SLP,
ADINA ROSENTHAL M.S., CCC-SLP, AND
MELISSA ALUNNI M.S., CCC-SLP

NO AUTHORS HAVE ANY RELEVANT RELATIONSHIPS TO DISCLOSE.

## **Learning Objectives:**

- Summarize recent research findings regarding the role of socially assistive robotics in the field of SLP.
- Explain the qualitative methodology used to analyze various sessions with and without a socially assistive robot.
- Identify potential effects of the use of a socially assistive robot during SLP treatment sessions based on the case studies discussed.



This session will explore how the inclusion of Socially Assistive Robotics (SAR) in speech-language pathology (SLP) therapy sessions affects treatment outcomes via an in-depth analysis of individual pediatric cases. SAR, which aims to assist people in learning and rehabilitation through social interaction, has shown promise in various healthcare and educational settings, targeting skills such as joint attention, collaborative play, body awareness, and eye gaze (Amirabdollahian et al., 2014; Costa et al., 2015; Feil-Seifer & Mataric, 2005, Sani-Bozkurt & Bozkus-Genc, 2020; Wainer et al., 2014). Research especially emphasizes the effectiveness of SAR use with children who have Autism Spectrum Disorder (ASD), facilitating skills such as turn-taking, imitation, and emotional recognition (Sani-Bozkurt & Bozkus-Genc, 2020; Simut et. al., 2016). Although recent studies indicate promising findings, the research on the implementation and effectiveness of SAR use within the field of SLP is limited and requires further investigation. Our lab has implemented SAR with various clients at the Misericordia University Speech-Language and Hearing Center. As part of an ongoing study, clients alternate sessions with and without the SAR, which are then recorded and qualitatively analyzed to determine (1) differences in client outcomes with and without an SAR, and (2) suggestions for facilitative clinician behaviors to successfully implement an SAR when addressing expressive language. In this presentation, we will discuss selected clients as specific case studies to investigate the impact of SAR on their treatment outcomes. These results could help clinicians more effectively utilize SAR with clients who have expressive language delays and disorders and potentially improve intervention results for general SAR-assisted therapy.