



# Using Telehealth to Provide Early Intervention

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## BACKGROUND

Early Intervention (EI) is a system developed for young children with developmental disabilities or delays that aims to provide families with resources, supports, and services and promote development.

Telehealth is a promising solution to these challenges:

- Significant shortage of providers,
- Difficulty providing services to individuals living in remote communities,
- Lack of parent/caregiver involvement, and
- Limited generalization of skills.

## OBJECTIVES

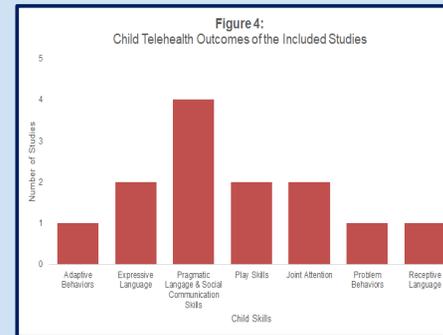
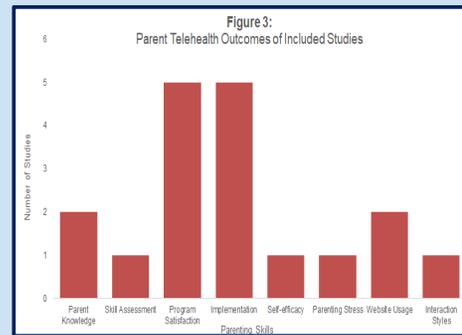
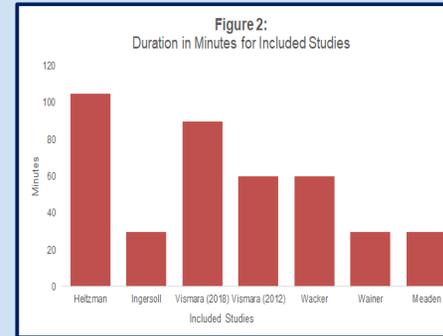
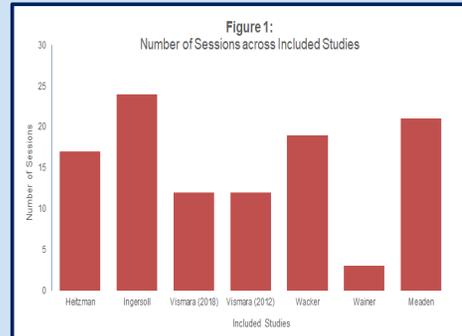
To evaluate the extent of literature investigating the use of telehealth in EI to determine if:

- Telehealth is an effective way to provide behavioral consultation to families with young children with developmental delays or disabilities
- Telehealth affects the efficiency of achieving outcomes
- Existing studies have demonstrated positive outcomes

## METHODS

- **Study Design:** Meta-analysis
- **Types of Searches:** Electronic data-bases, recent issues of journals, ancestral searches
- **Data Collection:** A researcher-developed coding protocol was used to evaluate telehealth procedures which include number of participants, child/parent outcomes, main findings, and telehealth procedures (i.e., setup & logistics, preparation and descriptions of sessions, follow-up treatment).
- **Reliability:** Inter-rater reliability was calculated for included studies and data extraction.
- **Analysis:** Calculated frequencies of child and parent outcomes for all included studies. Information regarding number and duration of sessions was extracted and averages were calculated for both.

## DATA ANALYSIS



## RESULTS

A total of seven studies were coded which included a total of 93 parents and 86 children. Four of these studies were single case studies, two were RCT, and one was quasi-experimental study. Different approaches were used to provide telehealth services, for example some studies used telehealth only (n=2) while others used a hybrid approach (n=5) where participants engaged in both online or paper-based self-directed learning with live coaching sessions.

All studies focused on children with a diagnosis of autism. The average duration of sessions was approximately 60 minutes with a range from 30 to 105 minutes per session (Figure 2). The average number of sessions conducted in these studies was approximately 15 (rounded) with a range from 3 to 24 sessions total sessions (Figure 1). Most of the studies targeted program satisfaction and implementation as the primary parent outcomes (Figure 3). The most common child outcomes measured pragmatic language and social communication changes (Figure 4).

## DISCUSSION

Telehealth is a promising service delivery approach that contributes to improvements in child development and parenting skills. All articles examined suggested positive parent and child outcomes. Surveys completed by parents indicated satisfaction with telehealth services. Interestingly, telehealth services frequently utilized a combination of online learning modules in addition to live coaching sessions. Due to the success of the examined literature a hybrid approach is recommended. Currently, there is a limited amount of research that explores telehealth and early intervention, therefore more research is needed in this area. Additionally, future research should expand the populations of participants beyond autism.