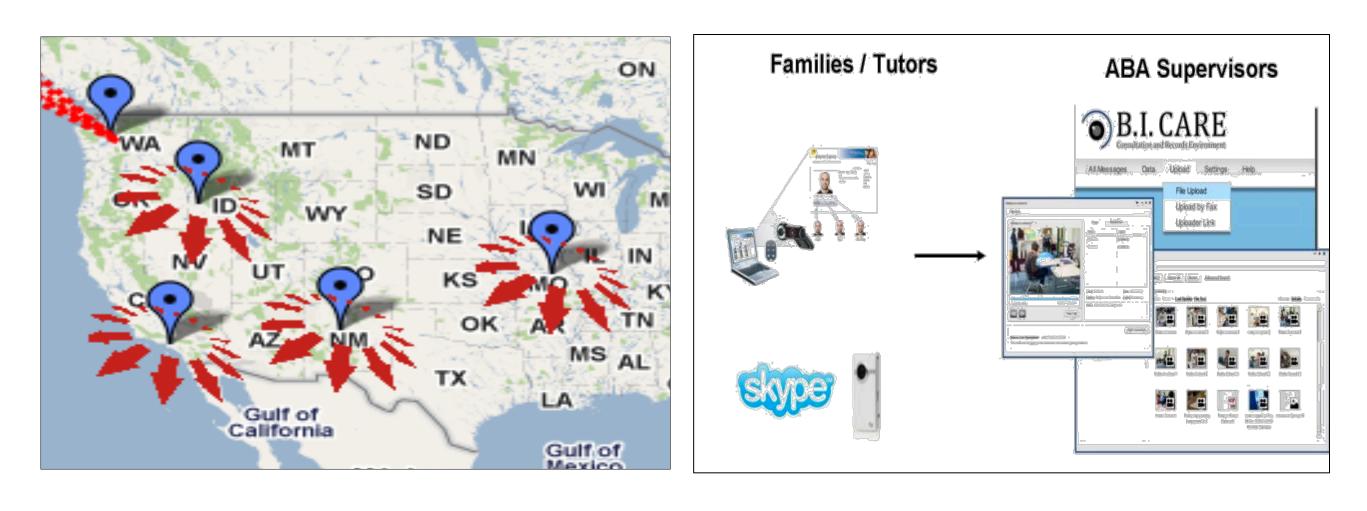
# Treating Autism in Toddlers and Adolescents through Behavior Imaging

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## Background

There is an increasing number of families nationwide with children, teens and young adults diagnosed with autism spectrum disorders. Because of limited geographic access to qualified professionals, it has been difficult to provide helpful and empirically sound therapy to many of these families. However, the application of new technologies promises to help support families in the management of such disorders in the future. An assessment was conducted to determine the perceived effectiveness of using remote consultation in supervising clinical therapies at various clinical sites nationally.

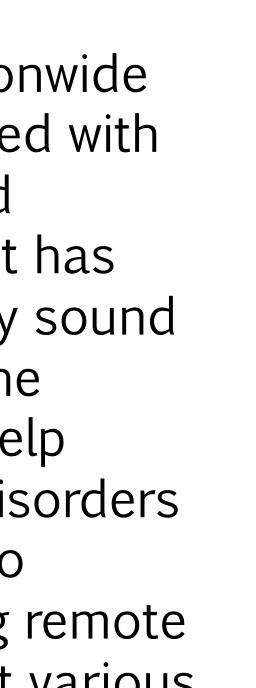


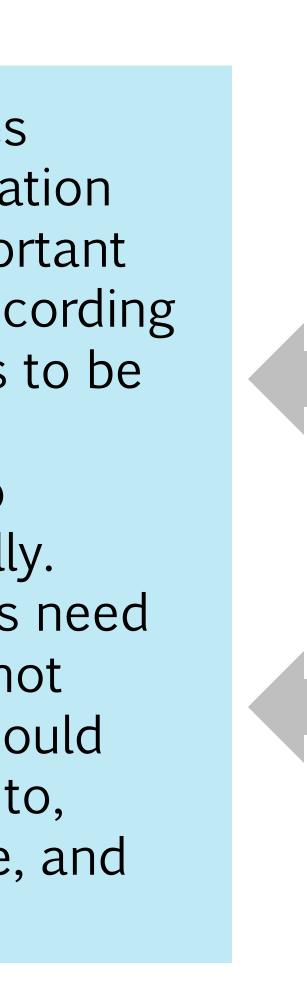
Assessment sites

Behavior Imaging equipment

## Conclusions

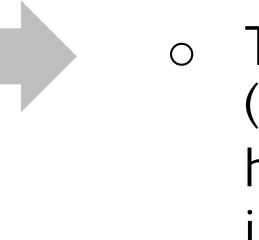
Responses by clinical supervisors and families highlight the advantages that remote consultation can provide in allowing families to share important behavior information with their therapists. Recording and storing data for medical records appears to be efficient, meaningful and safe. Use of the technology allows more individuals access to experts and specialists in healthcare nationally. However, larger and more diverse populations need to be studied including populations that are not exclusively military. Other health domains should also be considered including, but not limited to, psychiatry, family medicine, internal medicine, and pediatrics.





## **Objectives**

To evaluate strengths and Ο weaknesses of Behavior Imaging technology in treating young children and teens with diagnosed ASD who are military dependants.

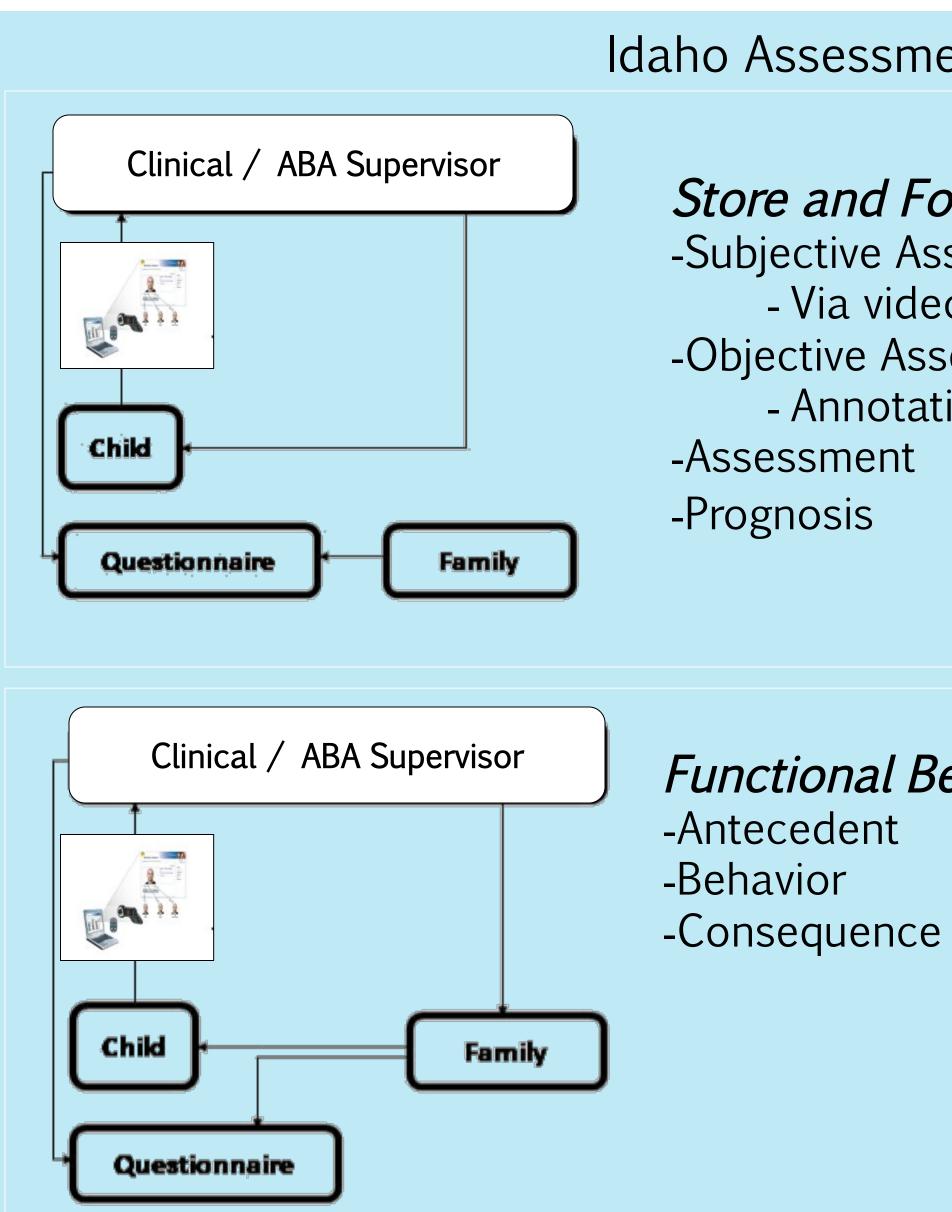


To identify select use case (s) that are found to be helpful in the treatment of individuals with ASD.

## Results

### National Assessment:

Clinical / ABA Supervisors (n=5)
Clinically sound: 100%
Effective delivery: 80%
High value: 100%
Good client relations: 100%
Ease of use: 100%



### Methods and Procedures

Teens and young adults with ASD, and families with young children with ASD were provided with the Behavior Imaging systems on preloaded laptop computers and asked to collect and send video data of events eliciting emotions / behavior of teens / young adults with ASD and children challenged with autism. Clinical supervisors trialed use of Behavior Connect to assess its capabilities for remote consultation.

All were asked to completed pre and post standardized surveys regarding usability, functionality, and applicability of the technology to their clinical care.

#### Families / tutors (n=33) Good therapy support: 75% Good clinical support: 76% Ease of use: 73%

#### Want to continue use: 85%

#### Strengths

• More meaningful and frequent contact / allowing better access to patient and their learning style • More control of patient flow in physical clinic; an alternative manner

in which to render clinical care

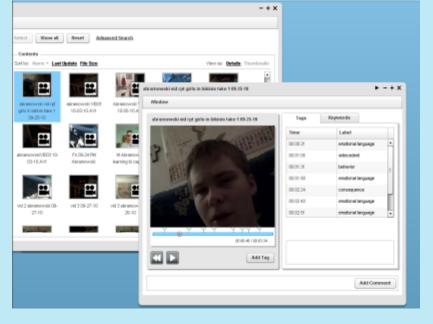
#### Weaknesses

- Need more time to adopt into practice
- Online communication environment can be more intuitive to use

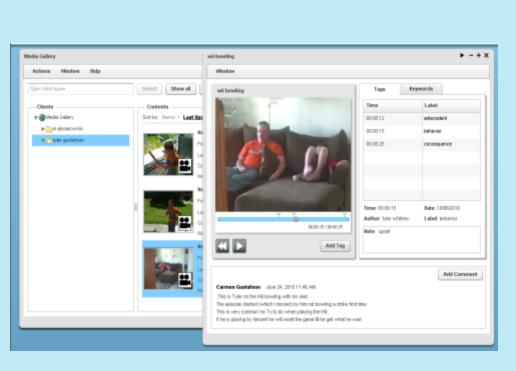
#### Idaho Assessment:

### Store and Forward Telepsychology:

-Subjective Assessment - Via video clip -Objective Assessment - Annotating



### Functional Behavior Analysis



#### Families (n=12)

Beneficiaries were 3 to 17 y.o. High functioning ASD, Aspergers Avg. travel - 25 miles (3 to 53 miles) Proposed protocol supported summer schedule

#### Strengths

• Immediate access using store and forward technology for a teen or a family to relay an event • Video record allows for many uses of in the treatment of the family or teen

#### Weaknesses

- Summertime not ideal for study



• Not conventional or comfortable for some patients

