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The Importance of Coordinated Care for Complex Cases

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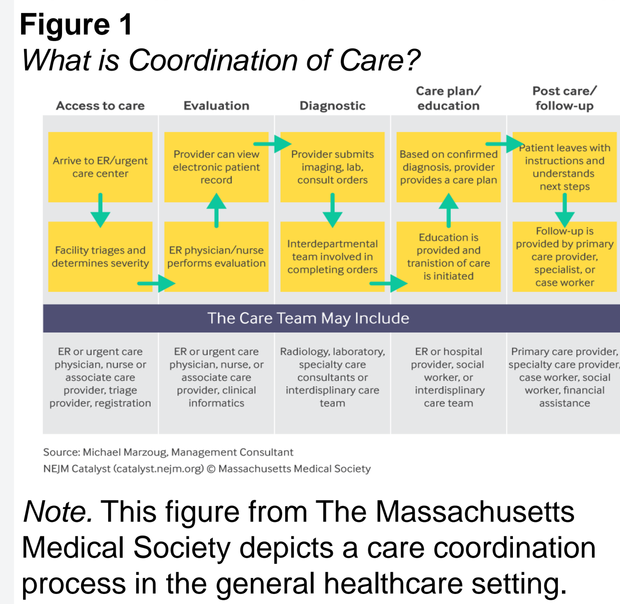
Introduction

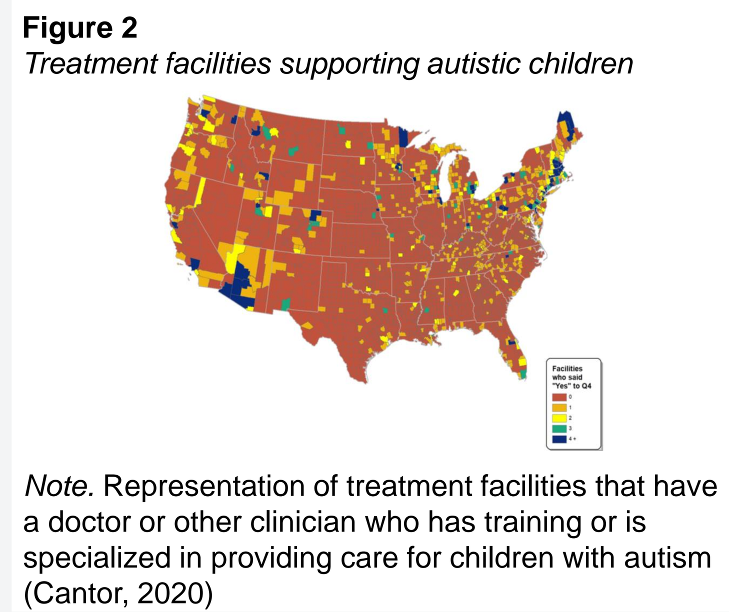
- Supporting consumers with complex medical and behavioral needs requires extensive collaboration across providers and a comprehensive treatment approach, which becomes increasingly crucial as case complexity rises (Smith et al., 2018).
- Circumstances like foster care, comorbid mental health diagnoses, trauma history, need for psychiatric support, or dangerous behaviors add layers of complexity (Jones, 2020).
- Essential components of coordination include communication and collaboration among the multidisciplinary team, including resources, materials, settings, and authorizations required before service initiation (Brown & Taylor, 2019).
- The development of a comprehensive treatment package based on assent-based procedures and Skill Based Treatment (SBT; Hanley et al., 2014) is required.
- Training and monitoring of the implementation of this treatment across inpatient, clinic, and home settings is necessary, and coordinating care for complex cases necessitates a multifaceted, multidisciplinary approach spanning various providers and settings (Weisz et al., 2017).

Figure 1
What is Coordination of Care?



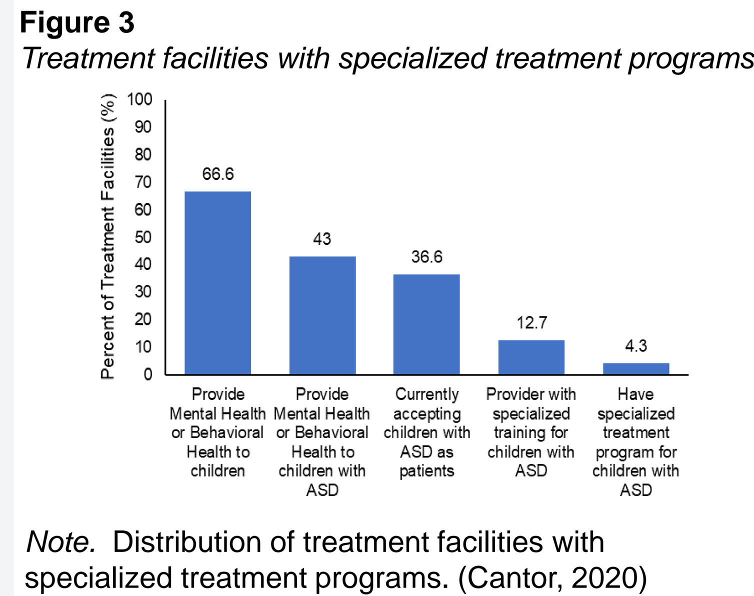
Note. This figure from The Massachusetts Medical Society depicts a care coordination process in the general healthcare setting.

Figure 2
Treatment facilities supporting autistic children



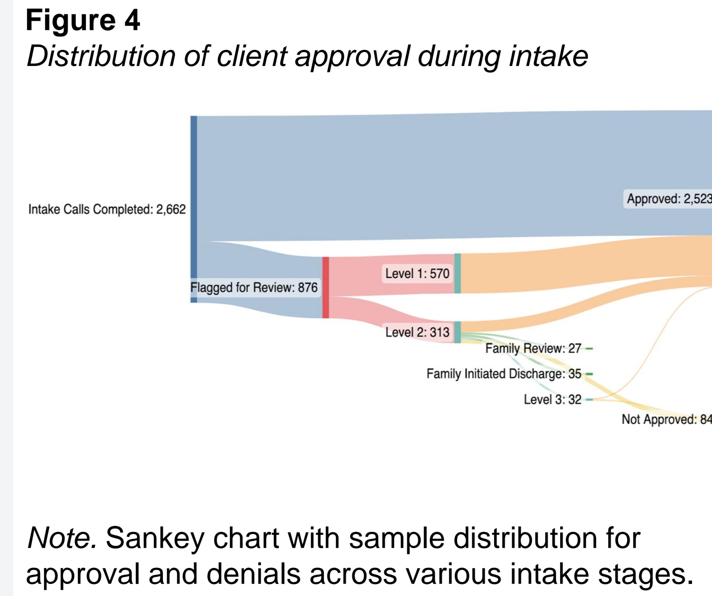
Note. Representation of treatment facilities that have a doctor or other clinician who has training or is specialized in providing care for children with autism (Cantor, 2020)

Figure 3
Treatment facilities with specialized treatment programs



Note. Distribution of treatment facilities with specialized treatment programs. (Cantor, 2020)

Figure 4
Distribution of client approval during intake



Note. Sankey chart with sample distribution for approval and denials across various intake stages.

Methodology

Participant

- Max was 9 years old at the start of the care coordination process.
- Diagnosed with ASD, ADHD, PTSD, DMDD, and Focal Seizures.
- Medications include antipsychotics, mood stabilizers, antiepileptics, and emergency PRN's.
- At least 1 of Max's biological parents has a history of mental health problems.
- Throughout his childhood he faced trauma and neglect which ultimately led to him being removed from the biological parents care and into the foster systems.

Areas of Concern

- Aggression, self-injury, elopement, and property destruction which lead to frequent hospitalization and crisis calls.

Setting

- Max was first removed from foster care and hospitalized in emergency room departments across 3 different hospital.
- ABA care started in the inpatient hospital setting and transitioned to home and center-based ABA services.

Procedure

The clinical team participated in care coordination meetings and then began direct ABA service delivery.

- Care coordination meetings across the payor, supports coordination, hospital and ABA took place 1-2 times per week.
- The clinical team conducted an initial evaluation to determine medical necessity of ABA and make recommendations.
- 40 Hours of 2:1 ABA with 100% BCBA supervision and 5 hours of parent training per week were recommended.
- Direct ABA started in the inpatient setting for 2 months before transitioning to the center-based setting.
- After Max was discharged from the hospital, he transitioned into his foster home for 3 days, where we implemented our foundational plan in the home setting to set and generalize boundaries and establish synthesized reinforcement.
- Max then transitioned into full time center-based services.

Treatment

- FP Implementation (hospital):
  - This involved identifying reinforcers and establishing an environment for synthesized reinforcement to occur non-contingently for as much of Max's day.
  - Setting the minimal but necessary health and safety boundaries to shape down dangerous and high intensity behaviors in response to those boundaries.
  - Creating guidelines for how we as people in Max's environment, engage with him while minimizing EO's.
- FP Implementation (Home): The plan from the hospital setting was generalized to the home environment. A new context for synthesized reinforcement was created. New boundaries were set and established from the start – this was previously missing in the home environment which led to hospitalization.
- FP Implementation (Center): Once services transitioned to the center, the foundational plan was customized for the center.
- Practical Functional Assessment: After Max transitioned to the center a functional analysis was conducted.
- Skill Based treatment: Following the PFA, SBT was started. SBT focused on several branches: academic, leisure and play, and coping skills. Challenges included completing independent work, extended durations of peer play, and independence in daily living skills.
- Parent Training:
  - Parent training occurred for up to 5 hours per week in the hospital, home and center environment.
  - Parent training focused on generalizing the implementation of the FP to the caregivers and sibling.

Table 1
The Foundational Plan (FP)

Components	
• Happy Relaxed & Engaged	• Therapeutic Alliance
• Optimal Therapeutic Environment	• Challenging Contexts
• Boundaries	• Responding to Interfering Behaviors
• Assent and Assent Withdrawal	• Crisis Plan

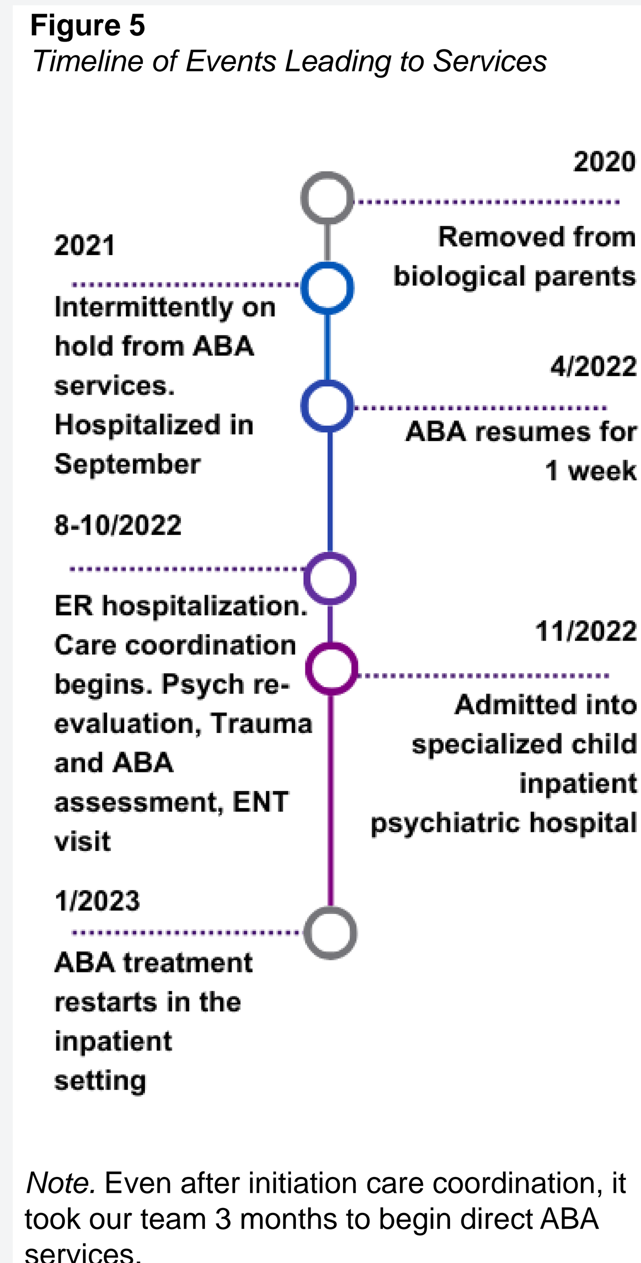
Note. FP components individualized for two settings

Table 2
Interdisciplinary Team

Members
Client and Family
Department of Health
Prepaid Inpatient Health Plan
Foster Care
Hospital Staff and Administrators
School Staff and Administrators
Inpatient Psychiatry
Clinically Responsible Service Provider
Respite and Community Supports
2 Centria Clinical Vice Presidents
8 Centria BCBAs
5 Centria Behavior Technicians

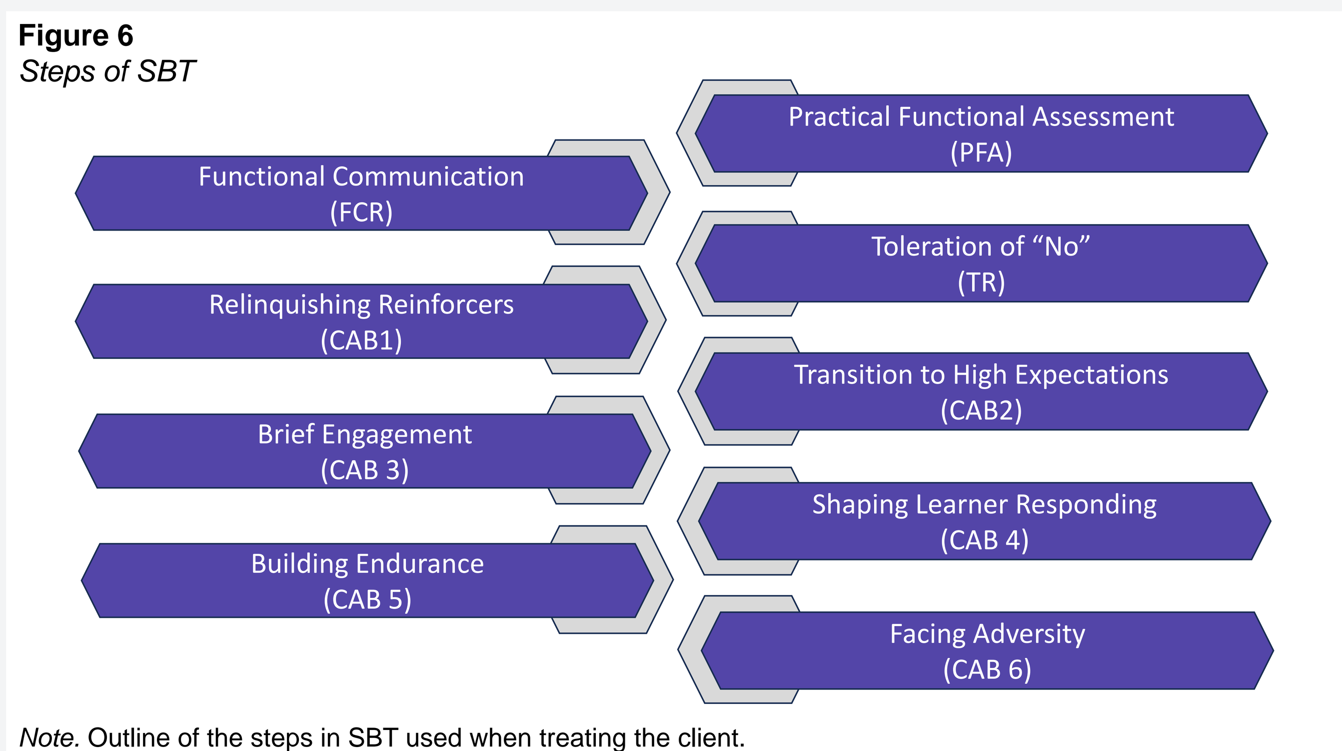
Note. Team members worked together across several settings with constant communication.

Figure 5
Timeline of Events Leading to Services



Note. Even after initiation care coordination, it took our team 3 months to begin direct ABA services.

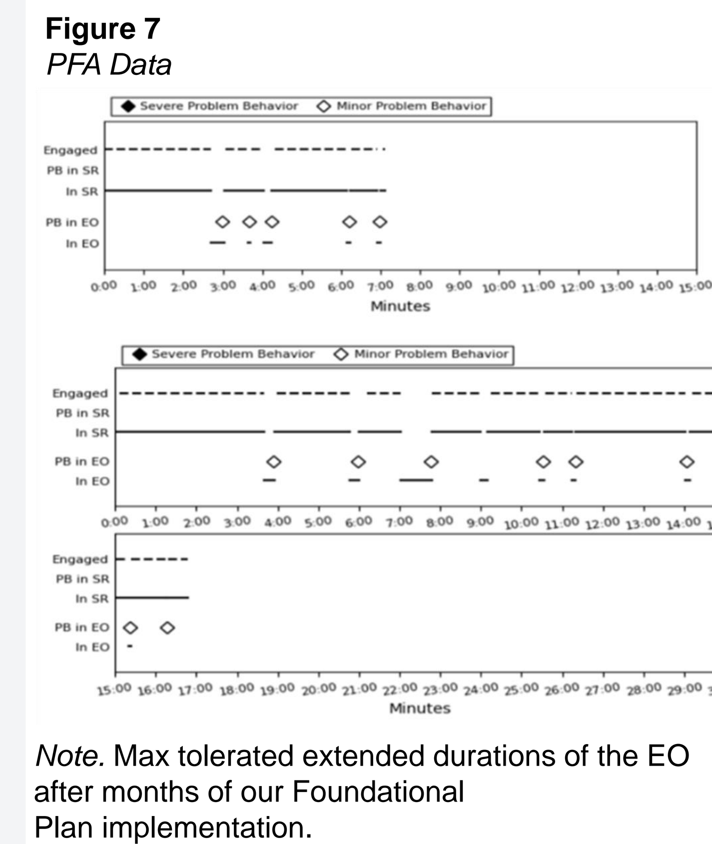
Figure 6
Steps of SBT



Note. Outline of the steps in SBT used when treating the client.

Results

Figure 7
PFA Data



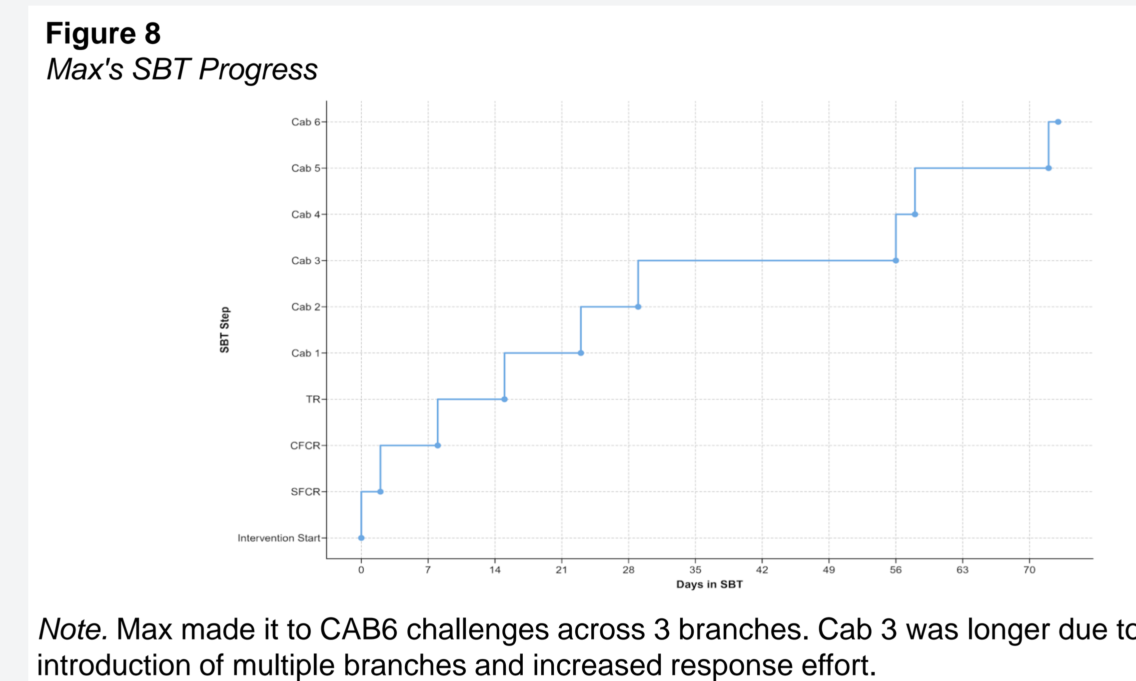
Note. Max tolerated extended durations of the EO after months of our Foundational Plan implementation.

Table 3
Parent and staff report

Anecdotal summary of progress
Tolerating "Hard no's"/boundaries
Attending swimming meets for brothers
Living safely at foster home
Improved relationship with sibling
Safely attending additional services (OT/SLP)
Increase requesting and complexity of requests
Safely visiting parks
Attending baseball practices
Maintain consistent services in home and clinic

Note. Max can safely participate with his family across a variety of settings.

Figure 8
Max's SBT Progress



Note. Max made it to CAB6 challenges across 3 branches. Cab 3 was longer due to the introduction of multiple branches and increased response effort.

Discussion

- The results of this study indicate that establishing a care coordination team for a client with multiple complexities increases the likelihood of successful treatment implementation in the hospital, home and center environment.
- The results of this study also indicate that establishing a care coordination team to begin ABA treatment can also increase the likelihood of foster placement for a client with comorbidities and complexities.
- The results of this study also indicate that implementing the FP as a standalone intervention is successful in reducing dangerous behaviors as indicated by discharge from the hospital and transition into home services.
- The results of this study indicate that implementation of an FP and progress made during SBT can increase the likelihood that clients can access new environments for learning (i.e. SLP/OT).
- Allocating resources for complex cases can reduce the future cost of healthcare. Before care coordination started, Max was hospitalized several times. After care coordination was established and from Max's discharge he has not been re-hospitalized.

Limitations:

- IOA data was not taken on implementation of the foundational plan or the data collection of interfering behaviors.
- Interfering behavior data was not included.
- Care coordination meetings occurred weekly but were not billable services.
- Regulations prevented ABA service delivery from beginning sooner than when it was started.

Future Research:

- Research on how care coordination can reduce wait times for clients to receive adequate services.
- Research on if care coordination can reduce the likelihood that concerns worsen while clients wait for services.
- Component analysis of the various services provided across the care coordination team to determine if some components or combination of components are more effective than others.
- Research on if medical necessity of services was determined to be different, if similar outcomes could be achieved (i.e. 3 hours of parent training vs 5 hours per week)
- Determine if care coordination can be increased by allowing providers to co-treat and bill for indirect services and time spent.