

Autism Therapy Shines Bright:

Early Intervention, Improved Access and Individualized Care Change Lives

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Autism Spectrum Disorder (ASD) is the nation's fastest-growing developmental disorder, one that touches each child and family in unique and complicated ways. A lifelong condition, ASD requires individualized treatments that are now increasingly available in communities across the United States.

The rise in access to these services can be attributed to enhanced awareness and advocacy, along with the recognition that there are positive long-term social, economic and emotional outcomes that result from higher-quality, proactive care. The passage of Autism Parity laws in 48 states reflects this awareness and has helped encourage government and private payers to reimburse providers more consistently and comprehensively.

In response, innovative companies now provide therapy services in a variety of settings, including freestanding centers,

at home and in schools. The therapy services administered in these programs provide a growing population of individuals—particularly children—with the opportunity to live longer, healthier, and more socially integrated lives.

The changing policy and market dynamics have begun to fuel a significant influx of capital investment to autism provider groups and technology-enabled solutions, creating the opportunity for both existing and newly created platforms to scale quickly.

As the autism space undergoes rapid transformation, the next few years will be an important time for investors seeking high-growth opportunities. This is welcome news for the children and families who are gaining access to previously unavailable, life-changing services.

DEFINING THE DISORDER

ASD is a developmental condition that affects an individual for life, both as a child and an adult. ASD people experience numerous symptoms at varying levels of severity. While more than half of those with ASD demonstrate above average intellectual ability, most find social interaction and communication

difficult, including over one third who are nonverbal. Many are also hypersensitive to sound, taste, texture and/or light, and are prone to engage in repetitive behaviors.

Families that care for ASD children confront an all-consuming challenge that requires exceptional emotional strength, hard work, time and significant resources. It can be difficult to secure and coordinate the appropriate education, therapies and healthcare services. Parents must also work closely with their children at home, as treatment for children with ASD does not cease when a therapist is no longer present.

Historically considered a cognitive and social disorder, practitioners now view ASD as a lifelong “whole-body” condition. Co-morbidities greatly complicate therapeutic interventions. ASD patients disproportionately experience seizures, gastrointestinal disorders, difficulty with eating, feeding and sleeping, ADHD, anxiety, depression, bipolar disorder and schizophrenia. Even when treatable, these aligned conditions can reduce average lifespans significantly, in some instances by half.

Individual treatment plans for ASD individuals appropriately engage numerous caregivers across multiple settings while also incorporating complementary technologies. The primary goal is to provide broad access to the therapies that drive behavior



change early in childhood, typically beginning at age 3. Early treatment can dramatically impact an individual's ability to function independently throughout his or her life.

Because the societal cost is considerable, the focus on providing a pathway to enhanced independence for those impacted with autism is of great importance. An astonishing 1 in 59 children (1 in every 37 boys) exhibit autistic symptoms and behaviors, a 121 percent increase since 2000.¹ Lifetime care costs exceed \$2.3 million per child. Taxpayer-funded public programs (federal, state and local) and Medicaid largely fund autism treatment, although private insurance coverage continues to grow.

Persistent advocacy has resulted in positive changes and increased funding from both insurers and policymakers. UnitedHealth's 2017 decision to cover autism in a similar manner to other health conditions was precedent setting.² Other large commercial payers are beginning to follow suit. Given the state parity laws that have been enacted to ensure coverage for therapy, large employers are beginning to offer benefits in their coverage plans. The Individuals with Disabilities Education Act (IDEA) also mandates that schools provide the therapy and services ASD children need to enjoy a successful learning environment.

BETTER SCREENING, DIAGNOSIS, TREATMENT & OUTCOMES

ASD's biological causes remain uncertain, and misinformation regarding the disease is abundant. Environmental risk factors, such as pollution or viruses, may be causal factors. Children of older parents are at higher risk. Boys are five times more likely than girls to be diagnosed on the autism spectrum.

Advocacy groups such as Autism Speaks have increased awareness by promoting earlier diagnosis and more effective therapeutic intervention—both of which change lives. Early diagnosis and screening efforts have also, in part, contributed to the increase in the number of people diagnosed with ASD. Directed brain development in very young ASD children improves learning, communication, and social skills over a lifetime.



Despite improvements, there is not yet an objective test for ASD diagnosis. Clinicians presently diagnose based on observable behaviors. While the average age of diagnosis in the U.S. is four

years old, symptoms can be identified in children as young as two.³ Children do not need to be formally diagnosed to begin receiving services.

Applied Behavioral Analysis (ABA) has become the “gold-standard” therapy for ASD. Developed in the 1960s, ABA uses positive reinforcement to produce constructive behavior changes. Clinicians apply ABA to help children with autism learn to amplify useful behaviors and reduce counter-productive behaviors that interfere with learning and social interaction. They tailor treatments to individual needs in both structured and unstructured settings.

Intensive interventions for ASD children can begin before age 4 and involve 25 to 40 therapy hours per week.⁴ Studies demonstrate that children often make significant progress through high-quality ABA therapy.⁵ Families and caregivers reinforce learning and skill practice, with ongoing assessment of progress and refinement of care plans. It is imperative that data and information be collected and shared to coordinate care and facilitate care-plan adjustments.

Outcomes still vary based on the abilities and circumstances of each child. Some ASD children can gain the ability to participate in regular classrooms with little or no support, while a small percentage do not show improvement regardless of care plan.⁶

COSTS, COVERAGE AND ACCESS TO CARE

Accessing care effectively through a host of uncoordinated providers can be challenging to families who have a child diagnosed with autism. In addition to intensive ABA therapy, 70 percent of ASD children also receive speech, occupational and physical therapy. Care is more effective when it is coordinated, holistic and measured.

As a lifelong condition, ASD comes with a lifetime of costs. During childhood, annual care costs average \$60,000 per child. Over a lifetime, the residential care, special education, supportive services and intensive therapies needed add up rapidly. For society, this economic burden is enormous. ASD is the fourth-most expensive condition in the U.S. In 2015, the yearly cost of treatment was estimated to be \$268 billion, with projections that the amount could rise to \$461 billion by 2025.⁷

Effective and early therapeutic interventions sharply bend the growing cost curve. According to The Economist, a 2013 study found that early coaching programs paid for themselves within eight years.⁸ The surge in demand for ASD services has created coverage gaps, however. ASD provider organizations are rushing to fill these gaps by scaling both their systems and services.



A SECTOR POISED FOR GROWTH

Healthcare services scale rapidly when payment aligns with demand. As commercial payers expand their funding for autism therapies, their focus is on measurable outcomes, skill development, best practices and cost reduction. They increasingly select “best-in-class” providers with domain expertise, high-quality therapists and scalable capabilities for their preferred networks.

Clinicians often provide services in three settings: in clinics/ centers, at home and in schools. Clinic-based programs provide assessment, training and focused-practice services for ASD children in controlled settings. Some centers provide a 360-degree approach with more expansive services, including speech, occupational and physical therapy.

The vast majority of treatment centers offer ABA overseen by Board Certified Behavioral Analysts (BCBAs) who serve as the case lead, applying the specific training principles of ABA therapy. The BCBA is supported by Registered Behavioral Technicians (RBTs) and other therapists. The supply and demand imbalance of available BCBAs relative to need has created a significant shortage. Given this dynamic, providers are taking varied approaches to training, hiring and identifying these difficult-to-find therapists.

Home-based therapies incorporate many of the methods utilized in schools and clinic-based programs, but also allow children to learn in a natural environment in which they are comfortable. Home-based therapies can also incorporate parental involvement more easily.

In schools, therapists provide services (such as speech, occupational and physical therapy) alongside teachers. State and local school districts fund these services with Medicaid dollars, taxes and targeted grants. Increasingly, school districts outsource delivery of ASD therapies to specialized service providers.

Business models for autism care providers vary according to setting, although some innovative models extend care across multiple settings, spanning the clinic, school and home. Most importantly, one model doesn't fit all children diagnosed with autism. The least restrictive/most effective point of care is ideal to ensure optimal outcomes.

There are many notable autism care providers in the marketplace. Here are a few of the more dynamic companies.



Center-Based Providers

Florida Autism Centers

Headquartered in Lake Mary, FL, and a portfolio company of Shore Capital Partners, Florida Autism Centers (FAC) was founded in 2005 and currently has more locations than any other ABA provider in the Southeast. FAC CEO Kristy Rohwedder leads 25 existing centers and over 50 BCBA's serving over 400 clients. FAC has developed a corporate infrastructure and de novo model providing early intervention, group therapy, social skills and parent training across its patient-centered programs. With significant growth plans, network access to high-quality therapists and an operationally focused management team, the business has the discipline and infrastructure to rapidly scale and address significant supply/demand imbalance in current and new markets.

Hopebridge

Based in the Midwest, Hopebridge started in 2005 as a single clinic. Over the past 24 months it expanded the number of employees, and expects to have approximately 30 clinics across four states by year end, partly facilitated by an investment from Baird Capital. Scaling at that pace requires strong systems and automation. With a retail background, CEO Dennis May understands brand importance. Clinic footprints for Hopebridge have expanded from 3,000 square feet to 10,000 with a consistent look and feel that is highly functional but "fun" for children who may spend up to 30 hours a week in care. The Hopebridge model provides comprehensive services, knowing that two-thirds of children also require occupational, physical and speech therapy. "Having all services under one roof," May notes, "improves care coordination, delivers better outcomes and provides great support for families." Hopebridge tracks and measures every aspect of care electronically and adjusts as needed. May says: "Our proudest day at Hopebridge is when a child leaves us and transitions back to school."



Trumpet

Trumpet is a national ABA provider that provides services in both clinics and homes, though the organization has shifted more of its services into clinical settings over the last few years. Trumpet also works in conjunction with both educators and other healthcare professionals. The organization emphasizes close coordination with providers in other fields for children with multiple co-morbidities. As CEO Ned Carlson notes, "There's a big opportunity to provide great service efficiently by building a highly coordinated horizontal care delivery model." Carlson believes that payers are becoming increasingly selective in their care provision partners and desire scientifically rigorous care plans, clear outcomes and measurable progress.

Home-Based Providers

Autism Learning Partners

Founded in 1988, Autism Learning Partners was acquired in 2018 by FFL and serves children with autism and other developmental disorders across 12 states. Led by CEO Jeffrey Winter, the company offers clinic-based services and also operates as a resource center for families to help them navigate the insurance system, locate diagnosticians and access resources necessary to manage ASD therapy for their child.



Center-Based and Home-Based Providers

Behavioral Innovations

Behavioral Innovations, a Shore Capital Partners portfolio company, provides center-based and in-home ABA therapy as well as speech and occupational therapy services to children with ASD and other related developmental disabilities. In addition, Behavioral Innovations offers adult services on a private pay basis in community-based treatment settings. Led by Dino Eliopoulos, the company has a strong legacy of clinical and operational excellence inside its 13 clinics in northern Texas and its center in Oklahoma, creating a meaningful footprint in a large, highly fragmented region.

Blue Sprig Pediatrics

Blue Sprig Pediatrics, a portfolio company of KKR, is a platform of clinics providing ABA services for children diagnosed with ASD. While operating primarily in the state of Texas, the company has opened new clinics and partnered with existing providers to build a national organization that fulfills the unmet need for compassionate, high-quality interventions for ASD patients. Blue Sprig is led by Keith Jones, a leader in pediatric healthcare services.



CARD (Center for Autism and Related Disorders)

Acquired in April by private equity firm Blackstone, CARD is the grandfather of autism service providers and one of the largest providers in the world. Founded in 1990 by CEO Doreen Granpeesheh, a student of Dr. Ivar Lovaas, the first researcher to apply ABA techniques to autism, CARD offers autism-related behavioral therapy in centers, schools and in homes. CARD practices an evidence-based, customized approach to treating patients, tracking progress and treatment plans and offering skill training with technology, based on the premise that early and intensive therapeutic interventions serve ASD children best.

Diversified Community Settings

Invo Healthcare Associates

Invo, a Wicks, Jordan, and Post Capital Partners portfolio company, was founded in 1993 to provide a range of specialized therapeutic and early intervention services to special needs children in school districts, charter schools and community-based agencies. Invo is led by Anthony Manley, who has expanded the company into a national platform operating across 28 states serving 60,000 children annually. While historically focused on the school environment, in October 2017, Invo acquired Autism Home Support Services, broadening its services into the home. The Company is supported by a highly scalable infrastructure of training, referral sourcing and back-office systems. Invo's long-term goal is to be the dominant provider of behavioral health services in schools and communities.

Learn Behavioral

Learn Behavioral is a network of providers serving children with ASD and related disorders. Services are delivered in multiple settings, including the home, the community, in schools or clinics. As a platform organization, Learn Behavioral focuses on a culture of clinical excellence and professional growth with an infrastructure that can deliver quality services at scale.



CEO Michael Maloney observes that payers are better able to differentiate providers today based on an organization's ability to deliver appropriate service efficiently. This benefits organizations with strong compliance cultures that employ systematic data collection, like Learn Behavioral. Families are also becoming more "discriminating buyers" of autism services. Smaller clinics increasingly turn to organizations like Learn Behavioral for help with back-office functions such as compliance, training and billing, and sophisticated systems for data collection, reporting, treatment justification and the demonstration of measurable outcomes.

School-Based Therapy Providers

Stepping Stones Group

Headquartered in Chicago, IL, and a portfolio company of Five Arrows Capital Partners (Rothschild), The Stepping Stones Group is a provider of therapeutic and behavioral services to children with special needs and autism. Led by Tim Murphy, who previously served as CEO of Beacon Health Options, the company was formed through a combination of five founder-owned companies across various markets. This platform currently provides a network of 1,300 clinicians serving over 320 school districts and 42,000 children across more than 25 states in speech, occupational, physical and behavioral therapy, as well as school psychology and special education. Stepping Stones has a highly sophisticated recruiting infrastructure using an integrated technology system focused on clinical quality.

Rethink Autism

Rethink has built a leading technology platform designed for caregivers and behavioral health professionals. Web-based clinical tools provide access to a large video library of best practices and help providers work more effectively and collaboratively with children and their parents. Rethink's online training modules support professional training and development. Its automated practice-management tools help care providers with intervention planning, data collection, progress tracking,



billing and scheduling. CEO and co-founder Dan Etra says, "We're unique in the market in that we serve the member-patient across all entities involved in delivering care to that individual." This allows everyone to work as a coordinated team, sharing access to training, intervention goals, skill plans and progress. Rethink works with hundreds of school districts, the Department of Defense, large employers, providers and payers. Etra observes, "If you're not leveraging technology and a platform-based approach, you're probably not getting the best outcomes. Technology is the only way to scale and ensure standardization and clinical efficacy in care delivery."



HIGH-QUALITY THERAPEUTIC SERVICES BENEFIT ALL

A decade ago, physical therapy was a highly fragmented sector characterized by a lack of standardization, subpar customer service and wide variation in outcomes. Consumer demand for better services drove industry consolidation and organic growth for superior providers. This same phenomenon is repeating itself with ASD services.

As both insurers and consumers of ASD services become more discerning purchasers, higher-quality service providers are emerging and growing to meet increasing demand. Those with superior therapeutic systems and robust technologies are best positioned to scale quickly.

As the ASD market matures, it is anticipated that service providers will consolidate into larger, more effective care platforms with enhanced coordination. For institutional investors, this creates a significant opportunity to fund innovative, high-quality providers in a growing market.

Superior ASD therapy companies will differentiate themselves by doing the following:

- Providing patient care in the most convenient, least restrictive setting
- Offering access to a network of high-quality therapists, particularly BCBA's
- Defining continuity and/or linkage between the school and the community
- Developing effective referral networks and payer relationships
- Focusing on "outcomes," which can be payer dependent based on geography
- Establishing "brand awareness," which can apply locally, regionally, or nationally
- Integrating new providers into holistic care delivery platforms
- Providing exceptional clinical and organizational leadership

For children with ASD and their families, this ramp-up in access to high-quality services represents a brand-new day. Those who live on the spectrum are gaining the opportunity to participate more widely in society, schools and the workforce.

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