

CARE MODEL CASE STUDY: PATIENT AND FAMILY-CENTERED SPECIALTY CARE MEDICAL HOME

Introduction

Neurologic, neurodevelopmental, and neuropsychiatric disorders combined are the leading cause of disability worldwide. However, there are many gaps in delivering health care to these special needs populations that produce suboptimal clinical outcomes and increase the cost of care. Such flaws and breaches include fragmentation of care leading to over-utilization of hospital-based services and other health care resources, overuse of pharmaceuticals, lack of access to specialists, lack of appropriate adolescent to adult transitioning of lifespan disorders, and prolonged “diagnostic odysseys” in search of proper or accurate diagnoses and treatments. Thus, there is a need for innovative health care delivery models that can provide comprehensive, coordinated, and cost-effective care.

The AAN’s Care Delivery Subcommittee, under the guidance of the Medical Economics and Practice Committee, continues to seek out and to better understand different and complex care delivery models, their core functions, and features, as well as the professional and personal advantages and disadvantages of these models for neurologists and neurology APPs. One such model is the concept of “medical homes” contained within independent/private practices. The Subcommittee’s Dr. Mark Mintz¹ shares his insights and experience in creating and founding a unique and innovative version of the medical home, the “Specialty Care Medical Home®” (SCMH).

The Care Model

Founded in 2005, NeurAbilities Healthcare is an independent organization employing an empirically based, comprehensive, personalized, compassionate, holistic, interdisciplinary, patient and family-centered health care delivery model. Classic medical home models have been based on primary care providers (PCP) as the central “home” and coordinators of care, with specialists acting as “neighbors” whose involvement occurs only at the request of the PCP.ⁱⁱ However, for certain special needs populations, neurologists are the “principal care provider” and, thus, the SCMH is centered around neurologists and other related professionals, while continuing to communicate and coordinate with the PCP. NeurAbilities Healthcare provides outpatient, ambulatory care within office, home, school, and community-based venues, as well as via telemedicine. Its integrated multidisciplinary and interdisciplinary clinical team consists of neurologists, including child neurologists, developmental-behavioral pediatricians, medical geneticists, advanced practice providers, neuropsychologists, clinical psychologists, Board Certified Behavior Analysts, registered behavior technicians, licensed professional counselors, cognitive behavioral therapists, creative arts therapists, neurotechnologists, and medical assistants. NeurAbilities Healthcare has a sister organization, the Clinical Research Center of New Jersey (CRCNJ), which provides patients access to industry-sponsored clinical trials and physician-initiated research. Our clinical team works collaboratively and seamlessly for patients and families seeking answers and solutions for complex neurologic, neurodevelopmental, behavioral, and cognitive issues, such as autism spectrum disorders, neurodevelopmental and intellectual disabilities, epilepsy, neurogenetic disorders, neuropsychiatric

The Value Proposition

Value Proposition to the Patient

- + High patient satisfaction
- + Improved patient outcomes
- + “One stop shop” approach for specialty care
- + Access to novel approaches and treatments (e.g., neurogenomics program, high density electroencephalography, clinical trials program)

Value Proposition to the Provider

- + Increased communication and collaboration among the care team members
- + Increased access to academic opportunities
- + Positive work-life balance implications (e.g., minimal call, not wRVU-based)

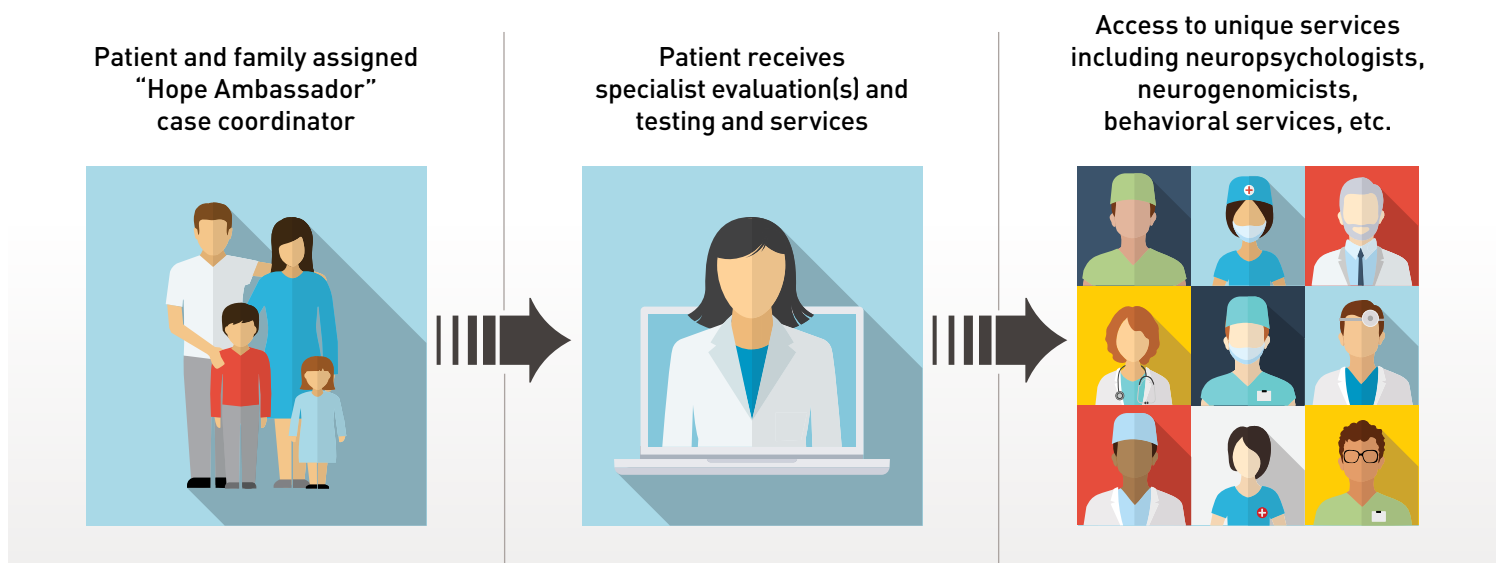
Value Proposition to the Health System

- + Increased cost savings due to reduction in emergency room admissions and hospitalizations
- + Increased opportunity for improved outcomes and patient satisfaction
- Relies heavily on fee-for-service payment system

disorders, brain injury, Tourette disorder, and more across the lifespan. This clinical model focuses on defining both a clinical and biological phenotype, which allows for treatments targeting and disrupting pathophysiological mechanisms of disease, as well as alleviating symptoms. The SCMH organization employs over 250 staff spread over eight facilities in New Jersey and Pennsylvania, with over 10,000 medical and behavioral patient visits yearly.

How It Works

The NeurAbilities Healthcare “Hope Ambassadors” are the first contact into this SCMH system, helping patients and families navigate the system and schedule assessments and evaluations based on their concerns and needs. Most are initially evaluated by a physician specialist, and then based on initial findings and diagnoses will be scheduled for additional neurodiagnostic testing provided internally such as neuropsychology, neurogenomics, high density electroencephalography, computerized testing; or externally, including neuroimaging, laboratory testing or referral to other medical specialists and testing. Patients and families are subsequently provided interdisciplinary follow-up visits to review results; such visits are attended by the principal treating specialist, often a neurologist, as well as the other evaluator, such as neuropsychologists or neurogenomicists. NeurAbilities Healthcare established its unique neurogenomics program that relies primarily on whole genome sequencing and a bioinformatics re-analysis of the raw DNA sequencing data, identifying genetic variants not reported by laboratories and yielding actionable results in over 50 percent of cases. Therapeutic recommendations are personalized and formulated based upon evaluation and testing results, with particular attention to biological causes and contributions to the patient’s diagnoses, symptoms, and signs. Treatments can range from pharmacological, dietary/nutraceutical, various therapies, lifestyle recommendations, and more, or, if interested, patients and families are advised of eligibility for access to a clinical trial.



Reimbursement for services at NeurAbilities Healthcare include traditional fee-for-service, school and government contracts, other types of contracts, and research grants. They are also working towards participating in value-based alternative payment models. The SCMH model of care reduces overall health care costs through improved access to relevant clinicians, reduction in hospitalizations and emergency room visits, medication simplification, providing lifespan services obviating the need for adolescent-to-adult transitioning, continuity of care, and ending costly “diagnostic odysseys.”

Patient experience is measured by post-evaluation surveys yielding overall patient satisfaction ratings of 4.82/5.00 for medical services and peak net promoter scores (NPS) of 88.9% for behavioral services. Video and written patient and family testimonials are used to augment survey rating approaches. Another benchmark is the 2016 American Academy of Neurology set of standard practices for measuring neurologic issues in children, with NeurAbilities routinely subscribing to eight of the 11 recommendations. Furthermore, the behavioral team routinely utilizes analytical behavior analysis (ABA) methodologies that produce quantified and measurable behavioral data that is used to adjust medical and behavioral interventions and management.

The Provider Experience

Clinical staff are allotted weekly administrative time and have various types of research opportunities. Despite being an independent organization, providers have teaching opportunities through the organization's post-graduate neuropsychology training program, APP clinical training, and various medical residents and medical students rotating for clinical electives and research projects. Staff actively present at academic meetings and conferences, and for community-based webinars, lectures, and other educational opportunities for patients and families. Professional staff continue to publish academic and clinical literature. Work-life balance has been improved with the introduction of telemedicine, and flexibility in clinical scheduling. Furthermore, there are no inpatient responsibilities, and on-call burden is minimal. Providers can provide better patient management and continuity through professional interdisciplinary collaboration and by accessing important clinical services internally rather than referring outside. With an emphasis on quality and improved patient outcomes, providers are not compensated by work relative value units (wRVU) production. As an independent organization serving individuals with neurologic disorders, NeurAbilities Healthcare's vision and mission is not competing with other institutional agendas and non-neurological specialists as occurs in hospitals and other institutions.

For more information, visit aan.com/practice/other-value-based-care-options

ⁱDr. Mintz is Chief Medical Officer, Owner and Founder of NeurAbilities Healthcare, CNNH NeuroHealth and CRCNJ; is a Board Member of CNNH Management, Inc.; and is President and Founder of CNNH-II, a 501(c)(3) public charity. Dr. Mintz has functioned as principal investigator for clinical trials research, contracted through the Clinical Research Center of New Jersey (CRCNJ), and sponsored by the following companies: Aquestive Therapeutics, Curemark, Nuvelution Pharma Inc., Otsuka, PhenoSolve, Teva, and UCB Pharma. Dr. Mintz is on the scientific advisory board of NeuroNeeds.

ⁱⁱAHRQ . (2014). Defining the PCMH. AHRQ Patient-Centered Medical Home Resource Center. Retrieved December 13, 2021, from <https://pcmh.ahrq.gov/page/defining-pcmh>.