



## **Beatrice State Developmental Center Medical/Professional Services**

The Division serves individuals with significant medical, mental, psychological, dental, and rehabilitative needs. Accordingly, the Division has made it a priority to recruit and retain medical, dental, nursing, and allied health professionals who can provide optimal support and care to individuals with intellectual and developmental disabilities (IDD). Dr. Nabih Ramadan leads these divisional efforts as the Chief Medical Officer, and Dr. Todd Stull leads the operations of the Medical/Professional Unit as its Medical Director

### ***Medical/Professional Services, General Progress***

In August 2007 (when BSDC experienced regulatory difficulties with the Centers for Medicare and Medicaid and the Department of Justice), medical services at BSDC were provided to over 300 individuals by four primary care providers, a contracted neurologist for four hours every two weeks, a dentist, and occasional consults by a contracted psychiatrist. Today, the medical unit at BSDC is staffed by three full-time primary care providers, two full-time psychiatrists, two neurologists, and one full-time dentist. These professionals provide primary, specialty, advanced specialty (e.g., musculoskeletal neurology). Dental care is provided to individuals at BSDC, and to others who have moved to the community from BSDC. Additionally, select specialty services from the Medical/Professional Services unit now provide consultative services at BSDC and via tele-health to some individuals who have left BSDC to integrate into the community. These primarily are neurology and psychiatry.

### ***Public Health Clinic***

Our medical team provides medical and clinical services at our licensed public health clinic (PHC), which is the only State of Nebraska PHC that is devoted exclusively to the care of individuals with IDD. The medical providers at the PHC conduct in-person primary care evaluations such as annual health promotion and prevention, immunization, routine treatments, electrocardiography, and others. Our specialists conduct both in-person and tele-health clinics, which are designed to provide maximal flexibility while mitigating geographical barriers. To date, specialty clinics are: primary neurology, behavioral neurology, musculoskeletal neurology, pain medicine, psychiatry, spine and gait clinic, and physical nutritional management. In addition, our medical team conducts pre-operative physical examinations on individuals who require dental treatment under general anesthesia.

### ***Allied Health Professionals***

The medical providers work side-by-side with a full complement of allied health professionals. The allied health professionals are integral to the functions of the musculoskeletal –spine and gait clinic, and the physical nutritional management support group. A comparison of the caseload (individuals to professional ratio) between 2007 and 2012 is worth noting and is depicted in the table below.

Allied Health Professionals	Individuals to professional ratio	
	2007	2012
<i>Physical therapist, physical therapy assistants</i>	112:1	132:4
<i>Occupational therapists, occupational therapy assistants</i>	335:1	132:5
<i>Speech and language pathologists</i>	168:1	132:3
<i>Registered dieticians</i>	84:1	132:4
<i>Audiologist</i>	335:1	132:1
<i>Respiratory therapist</i>	None	132:1

To date, our allied health professionals are:

- Four full-time occupational therapists and one contracted certified occupational therapy assistant
- Three full-time physical therapists, one physical therapy assistant, and three physical therapy aides.
- One contracted part-time audiologist
- Four full-time registered dieticians
- One full-time respiratory therapist
- Three full-time speech and language pathologists (and 2 part time)

### ***Behavior Support Team***

The Medical/Professional Unit at BSDC seamlessly integrates medical and behavioral support services. To date, twelve behavior professionals (15:132 case load), including five behavior analysts, six HSTSs (Human Service Treatment Specialist, which are an extension of the behavior analyst), evaluate and manage psychological and behavior needs of individuals with IDD collaboratively with psychiatrists and neurologists. It should be noted that behavior analysts acquire unique skills that allow them to practice applied behavioral analysis, which can contribute greatly to the mental health and welfare of individuals with IDD. As a part of the Behavioral Support Team there are 3 full time Psychologists with a doctorate degree and two Pre-doctoral Interns-in-Ttraining. Six additional Behavioral Support Analysts have been added and report to the ICF administrators. Their role is to coordinate and provide services to the individuals in each ICF and serve as a liaison. Today's behavioral support staffing, expertise and capabilities are light years ahead of 2007 when (a) the mental health professional case load was

30:1; (b) neurological and psychiatric services were scarce; and (c) no behavior analyst was on staff.

Through the QI Department, the BST has been tracking Behavior Support Plan goals accomplished throughout 2012, and those have confirmed the anticipated success. The BST has tracked reduction in medication use due to behavioral improvement and that has shown expected improvements during 2012. The BST also tracked the use of restrictive procedures in Behavior Support Plans, and those have steadily decreased during 2012 such that we are supporting behavior change using the least restrictive methods possible. An even more impressive accomplishment for BSDC as a whole that has been tracked and noted during 2012 is the complete lack of mechanical restraint use for the entire year! This remarkable change brings BSDC fully into the modern era where such restrictions of freedom are no longer needed or used. The use of physical holds has continuously decreased such that fewer and fewer people require such safety procedures and, when those are used, the average duration is typically below 5 minutes.

### ***Physical and Nutritional Consultative Services (PNCS)***

The Medical/Professional Unit at BSDC has assembled a highly trained, specialized group of allied health practitioners who are dedicated to providing Physical and Nutritional Supports (PNS) to our individuals with IDD. This team includes a core leadership group of two registered nurses, a dietitian director, a speech-language pathologist, and an occupational therapist who meet daily to discuss the changing needs of our individuals.

Upon meeting criteria, the full group of dedicated PNCS therapists and home support staff will convene for a more in-depth, comprehensive assessment and support evaluation which also includes physical therapy, respiratory therapy, dental expertise, family, guardians, home staff, medical provider(s), and the individual. In these meetings, the PNCS team develops strategies and recommends therapies, equipment, dining techniques, supplements, and other supports to enhance wellness and quality of life. The team creates and updates practical reference tools for staff to have on hand at key times during the day when an individual might be at higher risk of choking or aspirating, or need additional support and safety measures.

Our PNCS team is gaining state and national recognition through our presentations at the Nebraska Nurses Association and the American Association on Intellectual and Developmental Disabilities in 2012, and at the upcoming 2013 Developmental Disabilities Nurses Association

### ***Spine and Gait Services***

Individuals with IDD and moderate-to-severe brain/body impairments present the most complex physical/medical challenges of any patient group. The myriad of chronic musculoskeletal, and brain conditions (also known as 'Neuromuscular Disorders') encountered among the individuals served at BSDC are currently addressed by a constellation of integrated clinical services which come together in a multidisciplinary format the Neuromuscular Clinic known as the Spine and Gait Clinic.

Originally developed as an extension of General Neurology Clinic, the Spine and Gait Clinic has evolved into a stand-alone, multidisciplinary clinic from which clinical solutions to complex anatomical and musculoskeletal conditions arise. Through the education and exposure of BSDC staff to recent bio-scientific theories and developments, the complicated clinical scenarios of brain, behavior, and body that characterize our aging DDI population can be approached systematically and coherently.

Some successes of the 3-year Spine and Gait endeavor include:

- Increased clinical attention to non-visible CNS/PNS conditions manifesting as impaired physicality and/or behavior (examples include fall trends, exacerbation of self-injurious behaviors, etc);
- Increased Medical Team awareness of ‘hidden’ conditions of the body, through identification of root causes of clinical deterioration, progression, and decline (e.g., wasting syndromes, subtle and complex spine conditions, systemic manifestations of neurological diseases, etc), thus allowing for appropriate and timely interventions; and
- An increased understanding and appreciation by staff and caregivers of chronic, overlapping disorders of brain, spine and body/soft tissues, thus promoting early interventions and reduced morbidity/mortality – in particular, those arising from respiratory conditions, GI motility and/or elimination disorders, urinary stasis, and other conditions affecting viscera and the internal milieu of the body;

### ***Education***

The Medical/Professional Unit at BSDC provides direct medical care as well as medical education and training. Educational activities were either non-existent or poorly organized in 2007, and BSDC did not have the dedicated staff to realize such educational and training opportunities. In contrast, with the assistance of clinical nurse trainers and two nurses dedicated to physical nutritional management services, BSDC now provides professional, paraprofessional, and community education on diverse medical, clinical and nursing topics, which arm support staff, the community, and the professionals equally with the knowledge and skills needed to support people with IDD. To date, members of the medical unit have provided training on ethics, epilepsy, gait and posture, pain, medication, psychiatric diagnosis, management of constipation, enteral feeding, to mention only a few topics. Presentations in the last year at national conferences include the following topics: *Development and Implementation of a Health Risk Screen for Individuals with IDD; Development and Implementation of a Spine and Gait Clinic; and Development and Initial Implementation of a Physical Nutritional Support Program.*

Members of the Medical/Professional Unit are scholarly and nationally recognized and have presented at conferences. Also, our tele-psychiatry experience was presented at a national conference. The Behavior Support Team has received additional training and support from OMNI Behavioral Health, Paradigm and the Consortium of Innovative Practices in further deepening their expertise.

### *Equipped for the Future*

The Medical/Professional Unit provides evidence-based and best services to BSDC residents, and is fully poised to increase its support as a valuable advisory and consultative resource to individuals with IDD in Nebraska and beyond. Our professionals have made remarkable achievements, notably reducing unnecessary treatments, increasing individuals' ambulation, reverting people to normal oral feeding after years of tube-feeding, providing timely health preventions and illness interventions, reducing unnecessary emergency department visits, and assisting in comfort and palliative care to the dying.

We built upon past accomplishments and learned from mistakes. The future of IDD health care in Nebraska is bright and evolving. The dedication of employees, staff, administration, support groups, families and guardians, likely will continue to lead us to fulfilling our vision of a nationally recognized IDD center-for-excellence.