



DEVELOPMENT OF AN INPATIENT UNIT FOR ADULTS WITH NEURODEVELOPMENTAL DISABILITIES

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Abstract

Background: The majority of children with Special Health Care Needs (SHCN) will live to adulthood. This group of patients represents a unique challenge for providers of adult care. We work in a medical home (Comprehensive Care) for children and adults with SHCN that provides inpatient care to our own patients. We are part of a tertiary care academic medical center that includes a Children's Hospital and a full complement of adult medical services.

Description: We established an inpatient unit for adults with SHCN in 2007. This is part of a medical-surgical floor (8B) in our adult hospital. Special training sessions were held with the 8B nurses in the care of nonverbal patients and Family-Centered Care. Extra monitoring equipment was purchased. Arrangements were made for parents/caregivers to stay during the night if desired. Physician coverage was provided by the Pediatric and Internal Medicine-Pediatric attendings of Comprehensive Care and by the resident staff assigned to the Pediatric Inpatient Service.

Data: In the first year of operation, we had 63 admissions of 38 patients. There were 378 patient days with an average census of 1.03 patients. The mean admission was 6.0 days and the mean age of patients was 33.6 years. 29 admissions were for feeding intolerance, malfunction of feeding tube, vomiting, diarrhea, or other GI disturbance; 9 admissions were for pneumonia or asthma exacerbation; 6 admissions were for seizures. 31 patients had IDD; 2 had spina bifida, 1 had spinal cord injury, 2 had CP without IDD, 1 had MELAS, 1 had short gut syndrome. 7 admissions were accompanied by severe psychiatric problems requiring constant supervision during the admission. All patients survived to discharge and one died later in hospice.

Significance: We successfully established an inpatient unit for adults with SHCN, primarily neurodevelopmental disabilities. We face an important challenge as we transition the unit to coverage by Internal Medicine physicians and residents. This is one model for integrating adults with SHCN into the usual practice of adult medicine while providing for their special needs.

Background

The Division of Comprehensive Care at MetroHealth Medical Center (Comp Care) has been a medical home for Children with Special Health Care Needs (SHCN) for 50 years. We have two full-time physicians, one part-time hospitalist, two nurse practitioners and three part-time physicians. Of these physicians, two are Neurodevelopmental Pediatricians, one is a Developmental Pediatrician, and four are dually trained in Internal Medicine and Pediatrics.

We care for X patients with SHCN. Approximately one-third of the patients are over age 18.

We have always had our own inpatient service for our patients who needed admission to the hospital. They were cared for by Pediatric residents and Pediatric nurses.

Over time, many of our admissions were patients older than what is typically seen in Pediatrics. We worked with both the departments of Pediatrics and Internal Medicine to create an inpatient unit for Adults with Special Health Care Needs.

Institutional Setting

MetroHealth Medical Center is a tertiary Academic Medical Center affiliated with Case Western Reserve University School of Medicine. We have a full complement of medical and surgical services for both adults and children, with 731 inpatient beds. We have 27 residency programs, including Pediatrics, Internal Medicine, and combined Internal Medicine-Pediatrics. We are the safety net hospital for Cuyahoga County.

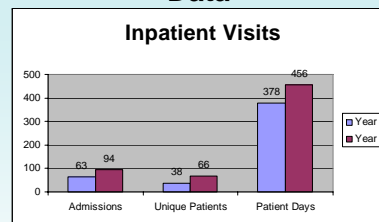
Program Description

In 2007, we established a four bed inpatient unit for adults in our program who required admission to the hospital. These beds are located on 8B, a medical-surgical floor. Prior to accepting patients, we held special training sessions with the 8B nurses to familiarize them with the care of nonverbal patients. Pediatric nurses participated in this training.

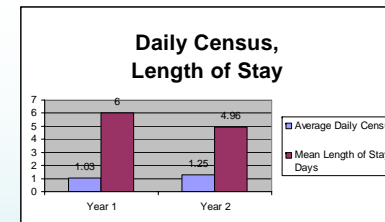
Cardiorespiratory monitors were installed to assist in monitoring nonverbal patients.

Initially, the patients were admitted to the Comp Care service, staffed by Comp Care attendings and the Pediatrics team. After the first 20 months, primary responsibility for transferred to the Internal Medicine service, with Comp Care acting in a consultative role.

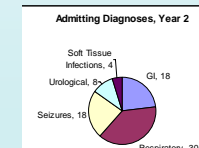
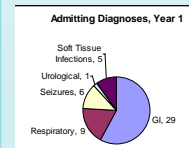
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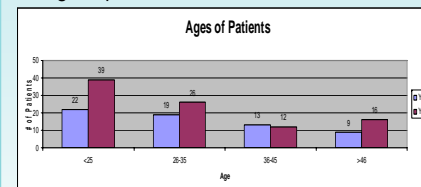
In the first year, 38 patients were admitted 63 times. In the second year, 66 patients were admitted 94 times. Our average daily census grew from 1.03 patients per day to 1.25. The mean length of stay dropped from 6.0 days to 4.96 days.



Patients were admitted with common diagnoses, predominantly respiratory and gastrointestinal problems.



The age of patients extended well into adulthood.



Conclusion

We successfully established an inpatient unit for adults with SHCN, primarily neurodevelopmental disabilities. We are able to maintain continuity between the inpatient and outpatient settings for adults, as well as children. Our model also significantly increases the exposure of Internal Medicine residents to adults with SHCN.