Understanding the Barriers to Providing Mental Health Services to Children with Type 1 Diabetes Mellitus Through Consultative and Liaison Services to an Outpatient Pediatric Endocrinology Practice

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Background
Insulin dependent diabetes mellitus or type 1 diabetes is the third most common chronic condition in young people under 16 years.1 Incidence estimates in the US have been as high as 23.6 per 100,000 children,2 and data from the CDC show that more than 13,000 children and adolescents are diagnosed with type 1 diabetes each year, resulting in a prevalence rate of 1.7 per 1000.3

Type 1 diabetes has been considered one of the most psychologically and behaviorally demanding of the chronic illnesses, in part because almost all of the disease management is conducted by the patient.4 Management of diabetes involves diet, exercise and insulin administration with a daily routine including blood sugar monitoring via fingerstick multiple times per day, multiple insulin injections per day or use of an insulin pump requiring subcutaneous catheter changes every few days, dietary management including carbohydrate counting to determine appropriate insulin dosing, managing hyper- and hypoglycemic episodes, managing sick days, and communication via in person appointments as well as telephone and/or email with an endocrinologist as well as dietitian, nurse educator and school nurse on a regular basis.

The combination of the demanding nature of diabetic self-care, the risk of future medical complications, and possibly the pathophysiology of the illness itself have all been considered factors that may increase vulnerability of diabetics to develop psychiatric disorders.6 One study reported prevalence rates of depression in youth with type 1 diabetes to be estimated at approximately 20% compared to 7% in those without diabetes.5 Some studies have even indicated a statistically significant correlation between psychiatric comorbidity and poor metabolic control.

Methods
A quality improvement project was recently started at the Hofstn North Shore Long Island Jewish School of Medicine, as a collaborative effort between the departments of Pediatric Endocrinology and Child and Adolescent Psychiatry.

Aspects of this project include:
• psychiatric consultations are performed on a weekly basis, free of charge, to patients with a decline in metabolic control in the pediatric endocrinology outpatient department
• the Social Worker is offered assistance with coordination of care and appropriate referrals
• liaison services are provided to the team to assist with triaging and making decisions about difficult cases
• the potential of providing psychopharmacological recommendations for management of the diabetic child to the treating endocrinologist is considered

A secondary goal of this collaborative work is to provide psychoeducation to those involved in early recognition of psychiatric comorbidities, triage decisions, as well as to identify barriers that exist to providing those in need with appropriate mental health services.

Results

Barriers identified through this collaborative project:

• Parental resistance: This played a role in each of the cases referred, and continues to play a role even following consultation. This speaks to the need to provide more psychoeducation to patients and families regarding the importance of mental health treatment as part of disease management, and to the need to reduce stigmatization of such.

• Family systems problems: Five of the patients seen come from divorced or single parent families. The burden of caring for a child with diabetes, even when well controlled is large, and so the addition of mental health needs can be burdensome for a single parent.

• ACS: Three of the identified patients had open ACS cases at the time of consultation, one of which was referred by ACS to family therapy prior to consultation. Despite this fact, for varying reasons, ACS was not helpful in overseeing that treatment recommendations were carried out.

• Confidentiality: Due to confidentiality restrictions, the endocrinology social worker cannot confirm that follow up appointments were scheduled and/or attended for those referred outside of the health system without consent from families, which was not always provided.

• Delegation of responsibility for the patient: Once psychiatric consultation was provided and recommendations were discussed with the referring team at the clinic, the responsibility of confirming referral was delegated to the social worker. However, the social worker is employed on a part time basis and has many other responsibilities in the service. Coordinating care for complex cases takes a large amount of time.

• Financially: Nearly all of the services required for coordination of care for such complex cases is non-billable. In addition, providing services such as group therapy or parent training sessions by the social worker in the clinic is also non-billable, which decreases incentive.

• Administrative: Provision of embedded services is complex and impractical in this health system due to OMH regulations at this time.

• Lack of resources:

1. Outside referral sources within reasonable geographic boundaries are limited. In addition, the process of obtaining an intake/screening appointment followed by potential for referral to another provider in the clinic is onerous. Further, this process is complicated by limitations in insurance plans accepted by different clinics.

2. Time consuming: Managing diabetes is a time consuming task which includes multiple medical appointments per month, in addition to time dedicated to managing blood sugars, filling prescriptions, and collaboration with providers over the phone or email. The addition of weekly therapy or monthly medication management for psychiatric treatment adds a large burden to the treatment regimen.

Conclusions
The fact that none of the patients seen to date have been successfully provided with appropriate psychiatric services is both heartbreaking and alarming, and speaks to the immense need for increased access to psychiatric care.

Embedding psychiatric services in a pediatric endocrinology practice may be one way to help youth with type 1 diabetes mellitus to overcome some of the barriers to receiving mental health treatment.

Embedded services have the potential to decrease stigmatization of psychiatric evaluation and treatment, promote more of an ongoing dialog between psychiatrist and endocrinologist regarding treatment planning, hasten and simplify the referral process for patients, and provide psychoeducation to pediatric specialists.

In addition, evidence based methods for working with this population in a way that does not require strict adherence to classical weekly therapy and/or monthly medication management may help to engage these patients who already have a high burden of medical service use.

Finally, in addition to being clinically necessary and beneficial, embedded services have been shown to be cost effective in adult models in the primary care setting. Considering the increased risk that youth with chronic medical illness have for psychiatric disorders, and the severe shortage of child psychiatrists, it is likely that this model would be equally, if not more cost effective in this population.

References