Improved HbA1c Levels in Pediatric Medicaid Patients with Type 1 Diabetes

- **Submitting Physicians:** Carla Demeterco-Berggren, MD; Karen Klein, MD; Ron Newfield, MD; Mary Patterson, MD; Jane Kim, MD
- **Location:** Rady Children’s Hospital, San Diego, CA

**WHAT PROBLEM (GAP IN QUALITY) DID THE PROJECT ADDRESS?**

HbA1c levels in our public-insured patients with type 1 diabetes are significantly higher than our private-insured patients, reflecting the known disparities in access to care faced by this population and the impact of social determinants of health.

**WHAT DID THE PROJECT AIM TO ACCOMPLISH?**

We aimed to decrease the percentage of public-insured patients with high-risk type 1 diabetes (HbA1c >8%) by 10% from baseline of 65% to 55% in 12 months.

**MEASURES:**

- **Measure Name:** HbA1c
- **Goal:** Reduce to 55%
- **Unit of Measurement:** Percentage of patients with HbA1c > 8%
- **Data Source:** EHR
- **Collection Frequency:** Monthly

**NOTABLE CHANGE STRATEGIES:**

- **Strategy #1:** Develop a patient-and family-centered assessment tool to review patient's diabetes outcomes, diabetes management, social determinants of health, and mental health.
- **Strategy #2:** Train staff including nurse care navigators, nurse practitioners, and MD providers to completed assessment tool.
- **Strategy #3:** Establish monthly patient-and family-centered Comprehensive Review Meeting with nurse care navigators and the diabetes team.
- **Strategy #4:** Create a documentation tool in the electronic medical record in order to track recommendations and goals discussed at the monthly Review Meeting.
- **Strategy #5:** Add a Child Life Specialist to the team.
- **Strategy #6:** Establish follow-up review sessions to check on progress.
Key Driver Diagram

Ensure Access to care and regular follow-up, Promote Health Equity

Decrease the percentage of CKC patients T1D HbA1c >8% by 10% from May 2020 baseline of 65% to 55% by May 2021

Be Patient-centered

Develop Assessment Tool to Assess High Risk Patients with A1c >8%

Conduct Monthly Comprehensive Review meeting

Coach on checking BS 4 x/day Offer CGM support & problem solving skills

Motivational interviewing, shared decision making, goal setting, action planning

Ensure that patients who need psychosocial support receive and complete referrals

Improve Glucose Monitoring

Improve Psychological Support

Percentage of public insured patients with T1D with HbA1c >8%

First Comprehensive Review Meeting & Surveys Implemented

New EPIC Documentation

Follow-up Review Started

Child Life

Median

Target: 55%

52%

Desired Direction

Month
**OUTCOME:**

Over the course of this project, public-insured patients with high-risk type 1 diabetics decreased from 65% to 52% in 12 months.

CKC (California Kids Care) is a patient-and family-centered pilot providing comprehensive, coordinated care to children. Our teams recognize the profound impact social determinants of health (SDOH) can have on the health of individuals and communities, beyond personal choices such as their life experiences, physical, social, and economic environments. Social determinants are multilevel and include factors such as individual and neighborhood poverty level, literacy, educational attainment, food security, and adverse childhood experiences, among others. Children with complex diseases complicated by social determinants puts them at risk for worse outcomes than other children with the same conditions.

Before CKC, families of children with T1D often experienced communication challenges across multiple healthcare providers, supply delays, and fragmented care. CKC team currently serves 130 members with T1D, 51.5% of which are Hispanic, 23.1% Non-Hispanic White, 18.5% Other, and 6.9% Non-Hispanic Black. 54.6% of the population is female and the average age of members is 10 years with an age range from 3 to 16 years.

**QUESTIONS?**

To learn how to create your own quality improvement project, visit https://www.abp.org/content/your-own-qipr or contact our MOC Support Center at 919-929-0461 or moc@abpeds.org.