

# “TechQuity” and Peer Support to Reduce Disparities in Glycemic Outcomes in Children with Type 1 Diabetes

Jenise C. Wong, MD PhD; Barbara Liepman, RN MS CDCES; Katie Craft BS CCLS; Diana Arellano RN BSN CDCES; Mackenzie Allen RD; Kathy Love, RD CDCES; Annapurna Vishnubhotla, RN MSN; Angel Nip, MD

## Background

- Disparities in glycemic outcomes exist between publicly and privately insured children with type 1 diabetes (T1D).
- During fiscal year 2021 (FY21), publicly insured patients with T1D at Benioff Children's Hospitals (East and West Bay) had a 1.3% higher median hemoglobin A1c (A1c) than did privately insured patients.
- There are also disparities in the use of technologies known to improve A1c between those with public versus private insurance.

## Objectives

### Project goal

Reduce the monthly median A1c gap to  $\leq 1.24\%$  (5% reduction) between publicly and privately insured children with T1D by end of December 2021, and further reduce to  $\leq 1.17\%$  (10% reduction) in April-June 2022 without either population's median A1c increasing above baseline.

### Global aim

Achieve health equity for children with diabetes seen at Benioff Children's Hospitals (BCH).

## Methods

A multidisciplinary Task Force was established in May 2021 to identify, test, and implement change ideas.

### Hypotheses

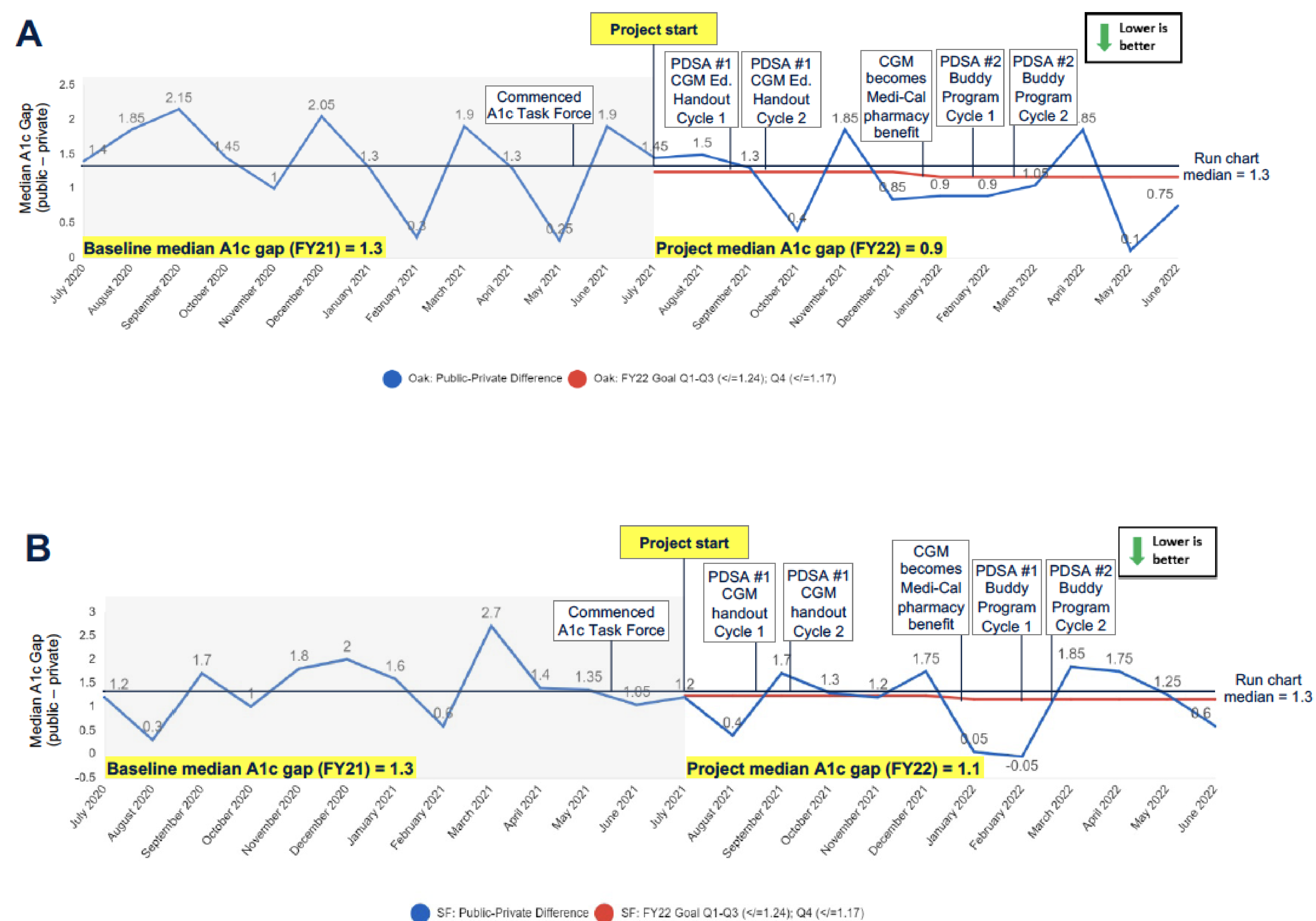
- Establishing “TechQuity” (the strategic development and deployment of technology to advance health equity) and providing peer support will improve glycemic control.
- Education on continuous glucose monitoring (CGM) will lead to increased CGM use and improvement in glycemic control
- A peer support, or “buddy”, program will improve diabetes self-management, leading to more optimal glycemic control.

### Interventions

- An educational handout on CGM was created and made available to staff to distribute to patients not using CGM.
- Patient voice was captured by survey, and patients identified peer support to help with diabetes management.
- The Task Force worked with Diabetes Youth Families, a local nonprofit, to establish a peer support “buddy” program.

## Results

Figure 1. Run Chart of Gap in Median A1c between Publicly and Privately Insured Children with T1D in (A) East Bay Clinics and (B) West Bay Clinics



## Conclusions

- Establishing a Task Force, increasing CGM education and awareness, and creating opportunities for patients to connect with peer support was associated with reduction in disparities in A1c.
- Limitations:
  - Focused on interventions with high impact and lower effort due to staffing and resource limitations.
  - Considered ethical concerns about distributing CGM samples while awaiting insurance coverage to avoid gap in CGM access.
  - In-person interventions were impacted by increased use of telehealth due to the COVID pandemic.
- Future interventions will support increased CGM use and outreach to patients with A1c levels above goal.
- Patient and community voice will continue to inform future interventions.