

Integrated Diabetes Education and Support: The IDEAS Program



Tamara Hannon, Anna Neyman, Kathryn Haberlin-Pittz

ABSTRACT

Background/Objective: To improve education and support for patients with post diabetes diagnosis DKA, we established the Integrated Diabetes Education and Support Program (IDEAS).

Methods: A multi-disciplinary team was assembled to co-design a structured in-person and virtual follow-up program including clinical, social, and health coaching services. Several X PDSA cycles have been completed. A descriptive analysis was performed to assess short-term outcomes.

Results: Fifty-eight established diabetes patients had a diagnosis of DKA in 2022 (12.9 y, 55% F, 69% Non-Hispanic White). Of these, 14 were referred to IDEAS and 11 attended the initial IDEAS visit. (13.9±1.8 y, 46%F, 57% white non-Hispanic, 36% black non-Hispanic, 71% public insurance, 50% using CGM, 7% using an insulin pump, mean HbA1c 12.2%). The most common etiology for DKA was insulin omission (85%).

After improvements in scheduling, 100% of those referred to IDEAS attended (6/6). There was a trend toward decrease in HbA1c (mean decrease of -2.3%, p=0.16). All participants consulted with a LMSW, 1 completed x weeks of health coaching which was associated with a reduction in Hba1c (-1.9%). One participant had a history of 5 DKA episodes in the prior year and has had one DKA admission after enrolling in IDEAS. This participant has not been admitted to the hospital in past 4 months and HbA1Chas decreased from 14.4% to 12.3%.

Conclusion: Youth with repeated episodes of DKA who have a standardized follow-up program with clinical, social, education, and health coaching support may have improvement in diabetes follow-up and outcomes.

BACKGROUND

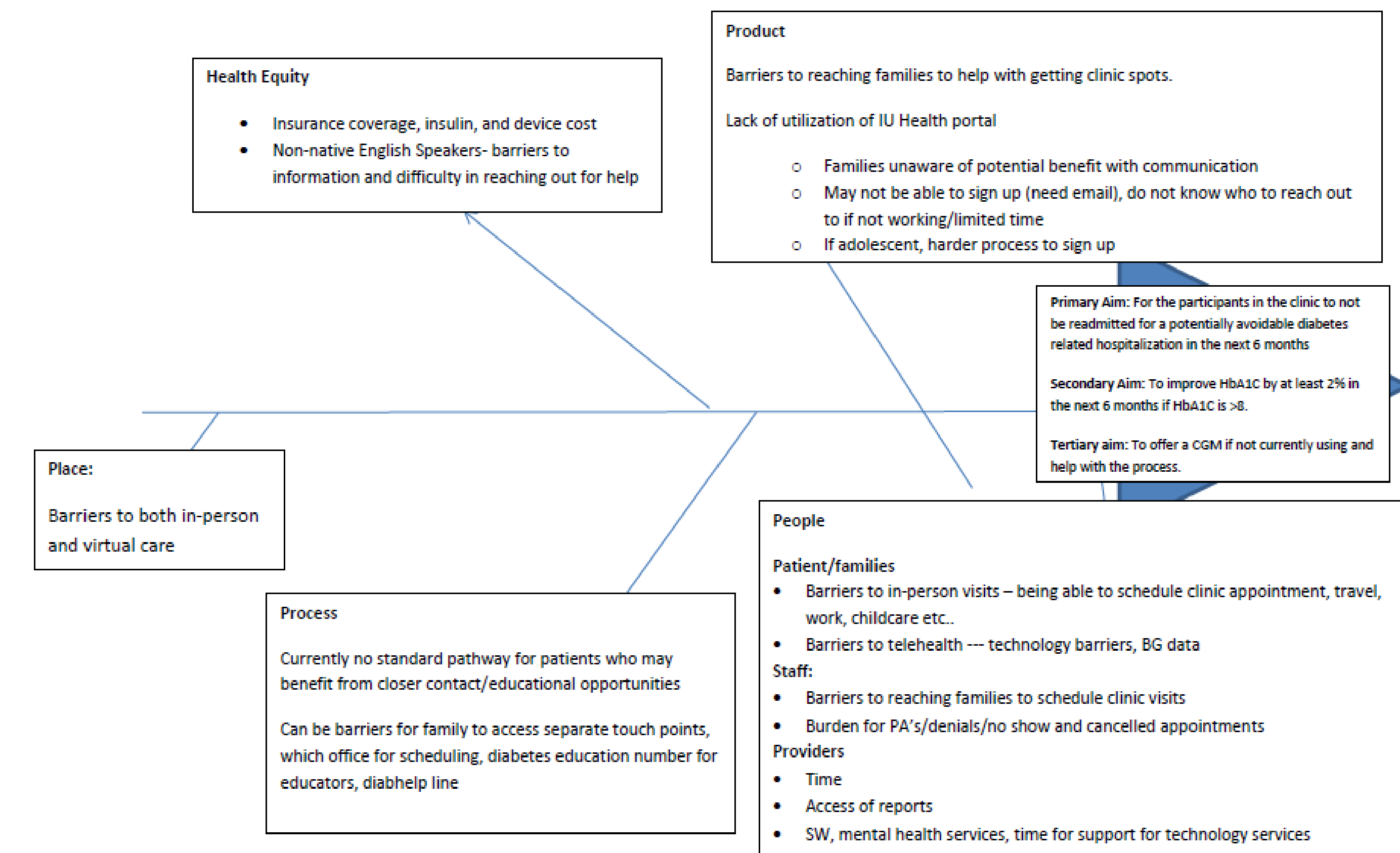
At our Diabetes Center in 2022, the percent of patients with T1D who were admitted to the hospital with DKA or another acute complication of diabetes:

- 7% of youth with T1D and public insurance
- 2% of youth with T1D and private insurance

The national rate of DKA in youth with established T1D is 6-8%.

- We started the IDEAS program to:
 - Organize the resources and support available for families struggling to maintain metabolic control (financial, social, school, and health behavior support);
 - Increase patient knowledge of how to reduce the risk of having a repeat diabetes related hospitalization;
 - Better direct clinic and outpatient resources toward higher risk patients.
- Pilot program
 - Patients who were admitted in the hospital/or in the ED for diabetes related reason who are at high risk for readmission in the next 2 years as determined by provider/diabetes educator, should be referred to the IDEAS Program.

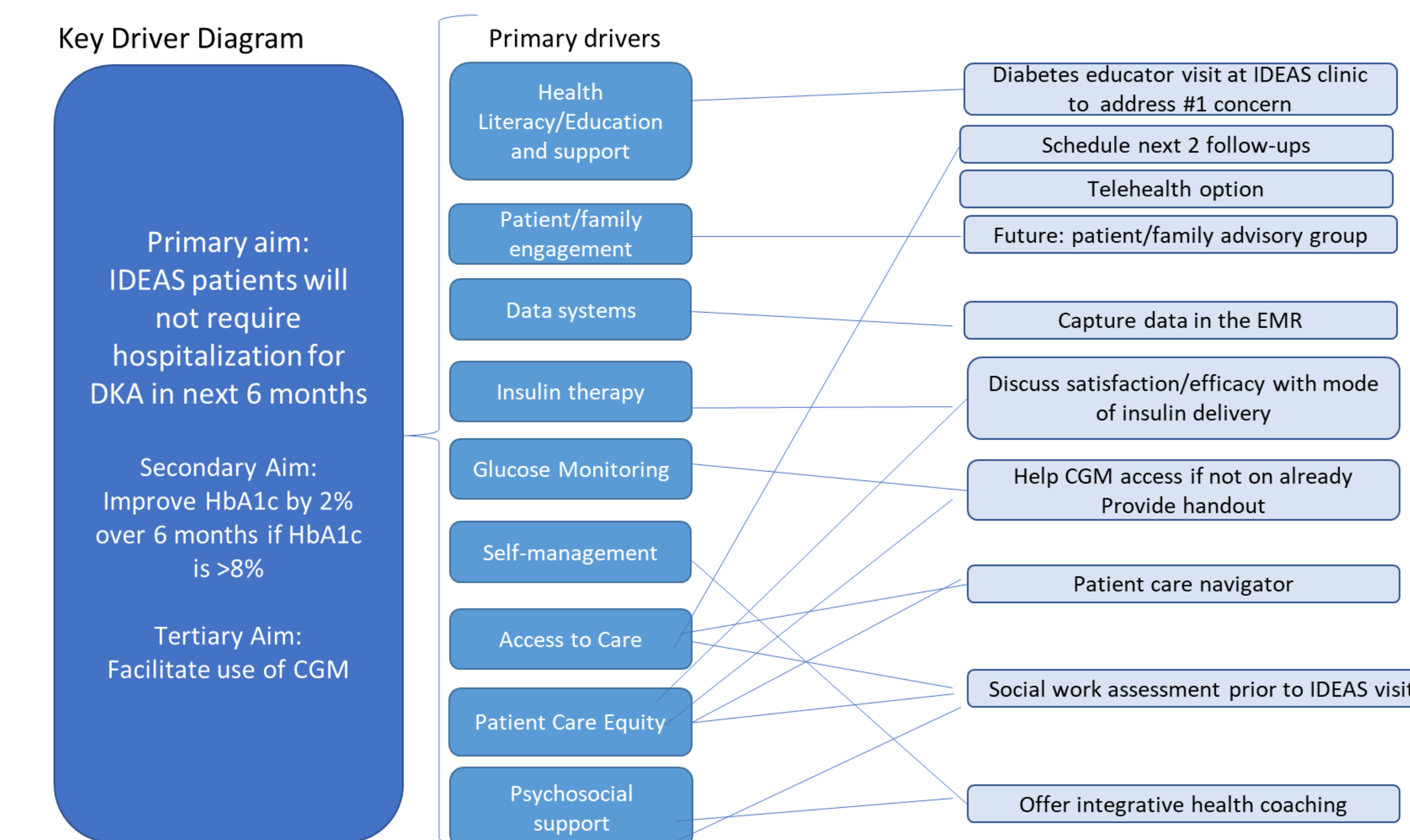
Fishbone Diagram



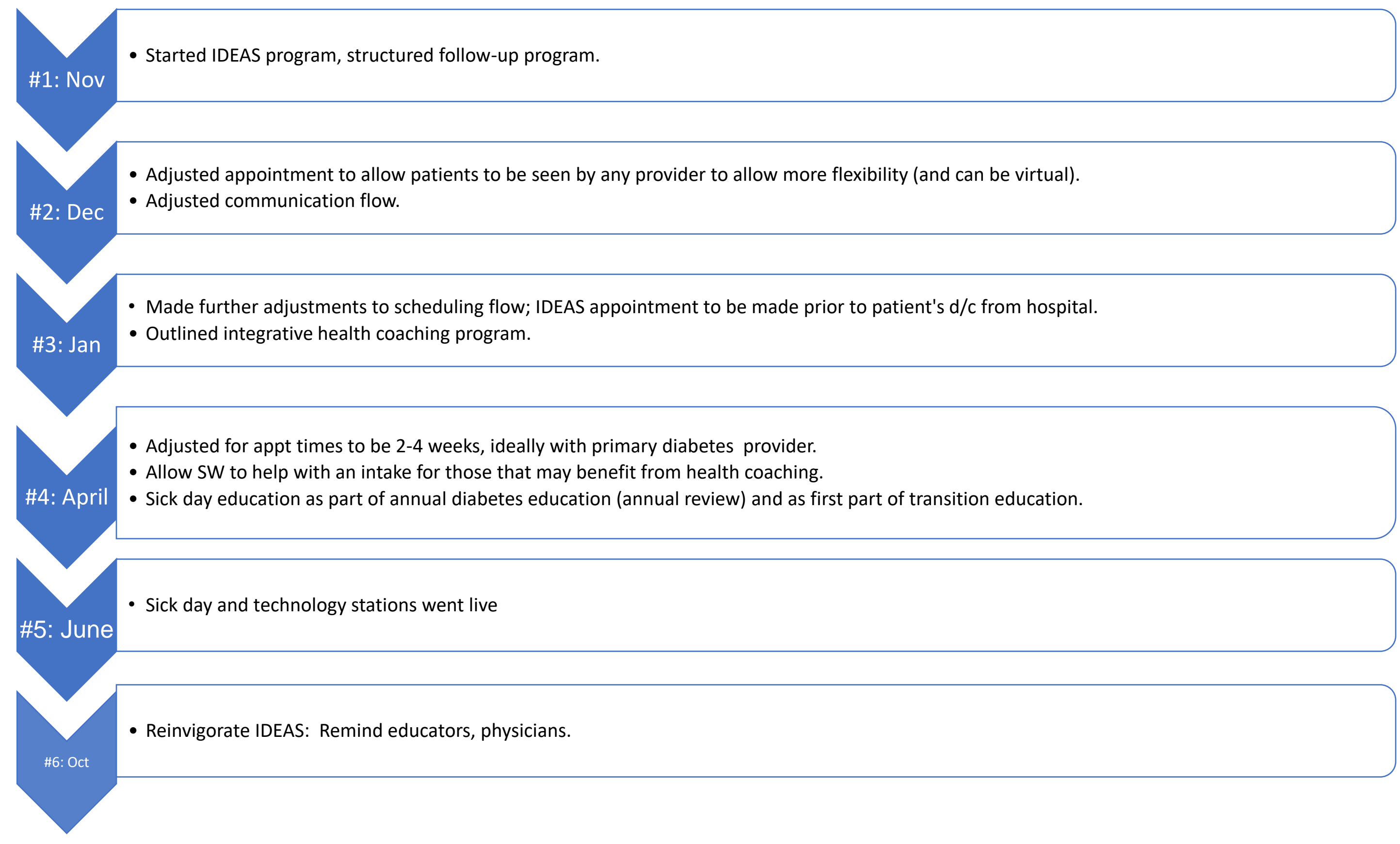
WE CAN IMPROVE DIABETES OUTCOMES AFTER DKA WITH A STANDARDIZED IDEAS PROGRAM

- SUPPORT FROM SOCIAL WORK
- RESOURCES for TECHNOLOGY and SICK DAYS
- ONGOING DIABETES EDUCATION
- HEALTH AND WELLNESS COACHING

Key Drivers



PDSA Cycles



RESULTS

	2022 DKA (n=58)	IDEAS Referrals (n=14)
Age at the time of hospitalization, mean [SD], years	12.91 [3.47]	13.9 [1.8]
Sex (%)	45% M	64% M
Race/ethnicity		
Non-Hispanic Black	18%	36%
Non-Hispanic White	69%	57%
Hispanic	5%	7%
Unknown	8%	
Insurance	71% public	71% public
Technology use		
CGM	Prescribed- 79%	Using CGM- 50%
Pump	18%	7%
Most recent HbA1c (%), mean [SD]	10.0% [2.1]	12.2% [2.5]
# DKA events*, mean [SD]	1.82 [1.27]	0.92 [1.5] (insulin omission most common)

