Supplemental Information

SUPPLEMENTAL TABLE 3 Race/Ethnicity Disparities in Diabetes Management and Clinical Outcomes Overall and Stratified According to Highest Parental Education Level

Characteristic	Non-Hispanic White	Non-Hispanic Black	Hispanic	*P*: Values White Versus Black/White Versus Hispanic/Black Versus Hispanic
Overall	*n* = 8841	*n* = 697	*n* = 1166	
Insulin pump use[a]	5389 (61)	181 (26)	454 (39)	<.001/<.001/<.001
SMBG[b]	6.1 ± 2.4	5.4 ± 2.3	5.6 ± 2.3	<.001/<.001/.59
HbA1c[c]	8.4 ± 1.4	9.6 ± 1.9	8.7 ± 1.6	<.001/.04/<.001
≥1 SH event in past 12 mo[d]	328 (5)	70 (13)	49 (6)	<.001/.62/<.001
≥1 DKA event in past 12 mo[e]	641 (7)	153 (23)	137 (12)	<.001/.04/<.001
Highest parental education level: less than high school diploma	*n* = 2378	*n* = 321	*n* = 599	
Insulin pump use[a]	1103 (46)	67 (21)	175 (29)	<.001/<.001/.09
SMBG[b]	5.8 ± 2.3	5.1 ± 2.1	5.3 ± 2.1	<.001/<.001/.70
HbA1c[c]	8.8 ± 1.6	9.8 ± 1.8	8.8 ± 1.6	<.001/.81/<.001
≥1 SH event in past 12 mo[d]	109 (6)	38 (14)	27 (6)	<.001/.64/<.001
≥1 DKA event in past 12 mo[e]	289 (12)	80 (25)	93 (16)	<.001/.14/.007
Highest parental education: associate or bachelor degree	*n* = 3602	*n* = 216	*n* = 298	
Insulin pump use[a]	2311 (64)	65 (30)	165 (57)	<.001/.12/<.001
SMBG[b]	6.2 ± 2.3	5.5 ± 2.3	6.0 ± 2.3	.06/.02/.91
HbA1c[c]	8.3 ± 1.3	9.6 ± 2.0	8.4 ± 1.4	<.001/.12/<.001
≥1 SH event in past 12 mo[d]	110 (4)	23 (13)	14 (6)	<.001/.09/.04
≥1 DKA event in past 12 mo[e]	240 (7)	50 (23)	23 (8)	<.001/.72/<.001
Highest parental education level: graduate degree	*n* = 2339	*n* = 72	*n* = 135	
Insulin pump use[a]	1701 (73)	34 (47)	86 (64)	<.001/.04/.01
SMBG[b]	6.5 ± 2.5	5.9 ± 2.3	6.5 ± 2.5	.27/.55/.59
HbA1c[c]	8.1 ± 1.2	8.9 ± 1.7	8.1 ± 1.4	<.001/.04/.001
≥1 SH event in past 12 mo[d]	91 (5)	4 (8)	3 (3)	.55/.40/.29
≥1 DKA event in past 12 mo[e]	79 (3)	9 (13)	8 (6)	<.001/.11/.14
Highest parental education level: not provided	*n* = 522	*n* = 88	*n* = 134	
Insulin pump use[a]	274 (53)	15 (17)	28 (21)	<.001/<.001/.91
SMBG[b]	5.8 ± 2.5	5.5 ± 3.5	4.9 ± 2.6	.88/.02/.13
HbA1c[c]	8.6 ± 1.5	9.8 ± 1.9	9.0 ± 1.8	<.001/.13/.12
≥1 SH event in past 12 mo[d]	18 (7)	5 (14)	5 (6)	.20/.89/.33
≥1 DKA event in past 12 mo[e]	33 (10)	14 (27)	13 (14)	.03/.81/.09

Data are presented as *n* (%) or mean ± SD.

[a] A total of 44 participants were using both an insulin pump and injections and were not included in the analysis. Binary mixed models were adjusted for age, diabetes duration, interaction between age and diabetes duration, gender, highest parental education level (missing data imputed for ordinal variable and missing indicator included in model), annual household income (missing data imputed for ordinal variable and missing indicator included in model; not included in stratified models), and random site effect.

[b] A total of 394 participants were missing self-reported SMBG per day data (8552 white, 652 black, and 1106 Hispanic subjects). Linear mixed models were adjusted for age, insulin method, continuous glucose monitoring use, gender, highest parental education level(missing data imputed for ordinal variable and missing indicator included in model), annual household income (missing data imputed for ordinal variable and missing indicator included in model; not included in stratified models), and random site effect.

[c] Linear mixed models were adjusted for age, insulin method, continuous glucose monitoring use, SMBG per day, highest parental education level (missing data imputed for ordinal variable and missing indicator included in model), annual household income (missing data imputed for ordinal variable and missing indicator included in model; not included in stratified models), and random site effect.

[d] A total of 4298 participants were missing SH data due to a change in how an SH event was defined during the enrollment period (6406 white, 525 black, and 1120 Hispanic subjects). Binary mixed models were adjusted for age, diabetes duration, gender, insulin method, SMBG per day, highest parental education level(missing data imputed for ordinal variable and missing indicator included in model), annual household income (missing data imputed for ordinal variable and missing indicator included in model; not included in stratified models), and random site effect.

[e] A total of 307 participants were missing DKA event data (8618 white, 659 black, and 1120 Hispanic subjects). Binary mixed models were adjusted for age, diabetes duration, gender, insulin method, SMBG per day, highest parental education level(missing data imputed for ordinal variable and missing indicator included in model), annual household income (missing data imputed for ordinal variable and missing indicator included in model; not included in stratified models), and random site effect.

SUPPLEMENTAL TABLE 4 Race/Ethnicity Disparities in Insulin Pump Use According to Demographic Characteristics

Characteristic	Race/Ethnicity					
	Non-Hispanic White		Non-Hispanic Black		Hispanic or Latino	
	N	Pump Use, *N* (%)	*N*	Pump Use, *N* (%)	*N*	Pump Use, *N* (%)
All	8807	5389 (61)	696	181 (26)	1157	454 (39)
Age group, y						
<6	529	278 (53)	35	12 (34)	53	16 (30)
6–<13	4040	2560 (63)	329	86 (26)	535	223 (42)
13–<18	4238	2551 (60)	332	83 (25)	569	215 (38)
Gender						
Female	4192	2636 (63)	374	102 (27)	594	244 (41)
Male	4615	2753 (60)	322	79 (25)	563	210 (37)
T1D duration group, y						
1–2	2445	1190 (49)	209	46 (22)	334	101 (30)
3–5	2790	1735 (62)	236	69 (29)	403	164 (41)
6–9	2309	1593 (69)	172	37 (22)	293	130 (44)
≥10	1263	871 (69)	79	29 (37)	127	59 (46)
Highest parental education level						
Less than high school diploma	2373	1103 (46)	321	67 (21)	596	175 (29)
Associate or bachelor degree	3585	2311 (64)	215	65 (30)	292	165 (57)
Graduate degree	2330	1701 (73)	72	34 (47)	135	86 (64)
Missing	519	274 (53)	88	15 (17)	134	28 (21)
Household income, $						
<50 000	1575	702 (45)	286	65 (23)	417	120 (29)
50 000–<100 000	2464	1549 (63)	101	36 (36)	195	102 (52)
≥100 000	2488	1815 (73)	58	26 (45)	155	103 (66)
Missing	2280	1323 (58)	251	54 (22)	390	129 (33)
Insurance						
Private insurance	6369	4218 (66)	232	83 (36)	481	265 (55)
Other insurance	1637	762 (47)	356	75 (21)	455	128 (28)
No insurance	35	12 (34)	4	1 (25)	15	2 (13)
Missing	766	397 (52)	104	22 (21)	206	59 (29)

SUPPLEMENTAL TABLE 5 Mean HbA1c and Blood Glucose From Meter Download According to Race/Ethnicity Among Participants with an Available Home Glucose Meter Download at Enrollment

Characteristic	Race/Ethnicity					
	Non-Hispanic White		Non-Hispanic Black		Hispanic or Latino	
	N	Mean ± SD	*N*	Mean ± SD	*N*	Mean ± SD
HbA1c, %	4640	8.3 ± 1.3	300	9.5 ± 1.8	755	8.5 ± 1.4
Mean glucose, mg/dL	4640	208 ± 52.6	300	234 ± 67.4	755	213 ± 53.4
Meter glucose by HbA1c group, %						
<6.5	142	143 ± 31	4	162 ± 36	24	163 ± 60
6.5–<7.5	960	171 ± 30	25	179 ± 46	151	174 ± 27
7.5–<8.5	1721	199 ± 34	63	189 ± 39	261	198 ± 32
8.5–<9.5	1063	225 ± 40	61	234 ± 40	173	233 ± 39
9.5–<10.5	449	253 ± 52	63	242 ± 57	72	254 ± 61
≥10.5	305	287 ± 76	84	282 ± 77	74	278 ± 65

A meter download from the most recent clinic visit was available in 52%, 43%, and 65% of white, black, and Hispanic participants, respectively.