

# Adolescent Preferences on the Use of Social Media by Diabetes Care Teams to Support Type 1 Diabetes Management

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## Background

- Social media offers new opportunities in diabetes management, particularly in terms of how healthcare team members may provide tailored education and support
- Approximately 90% of teens report use of some form of social media and many cite a preference for communication via social networking sites
- Diabetes care teams have the potential to engage with adolescents via social media without the costs and constraints of more conventional intervention approaches

## Objective

To examine adolescent preferences related to social media as a tool to manage their type 1 diabetes (T1D) with their diabetes care team

## Methods

- Survey items were generated to explore adolescent interest in communicating with their diabetes care team over social media by a study team with expertise in pediatric endocrinology, adolescent medicine, social media and survey research
- Cognitive interviews were conducted (n=35) to improve survey comprehension and flow
- A random voluntary sample of adolescents with T1D (13-18 years old) in western Washington State was surveyed from August 2019 to December 2019
- Participant demographics, along with current use of diabetes technology and glycemic control data, was abstracted from the medical record



Random sample of adolescents with type 1 diabetes mailed surveys  
n = 450

Excluded  
• Incorrect mailing address, n=8  
• Did not have type 1 diabetes, n=1

Eligible sample of adolescents  
n = 441

Completed survey responses  
n = 231  
Response rate: 52.4%

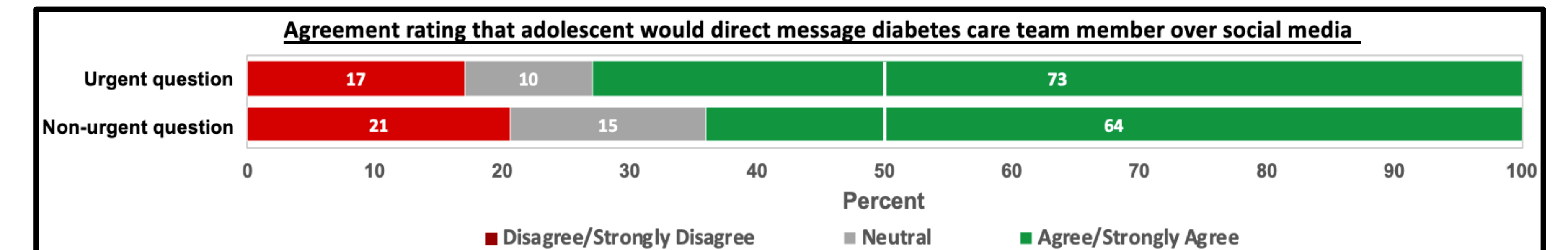


TABLE 1: Participant characteristics

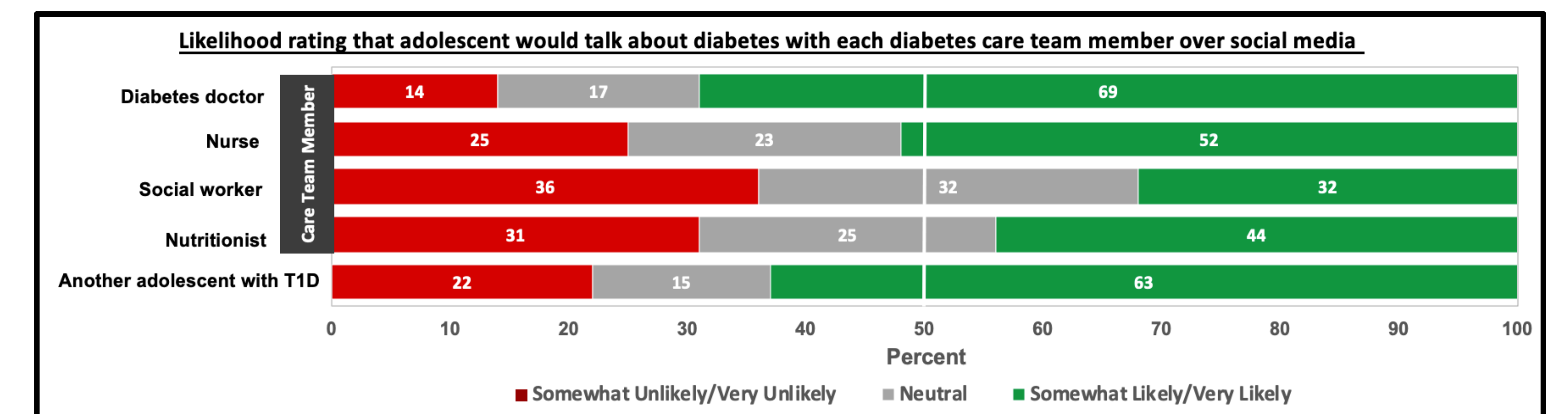
Age at study recruitment (years), mean (sd)	16.0 (1.6)
Sex, n (%)	Female 104 (45.0)
	Male 127 (55.0)
Race/Ethnicity, n (%)	Non-Hispanic White 154 (66.6)
	Non-Hispanic Black 12 (5.2)
	Hispanic 21 (9.1)
	Other 19 (8.2)
	Refused/Missing 25 (10.8)
	Insurance, n (%)
	Public (State/Tricare) 52 (22.5)
	Uninsured (Self-Pay) 1 (0.5)
HbA <sub>1c</sub> %, mean (sd)	8.7 (1.9)
Diabetes duration (years), mean (sd)	6.7 (4.2)
Diabetes technology use, n (%)	Wear CGM 142 (61.4)
	Use insulin pump 151 (65.4)
Have used social media, n (%)	217 (93.9)
Currently use social media, n (%)	Almost constantly 32 (15.2)
	Hourly or more 94 (44.5)
	Daily (less than hourly) 71 (33.6)
	Few times per week or less 14 (6.6)

## Results

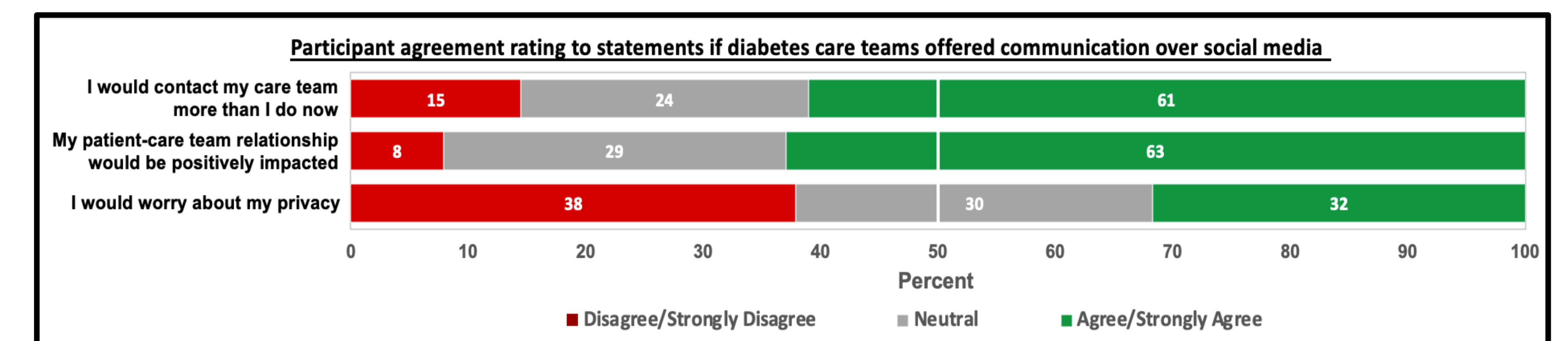
- Over 70% of adolescent participants agreed or strongly agreed that they would use direct messaging to ask urgent questions of their diabetes care team if a social media communication option was available



- A majority of participants agreed or strongly agreed that they would want to receive educational material (62%) and insulin dose adjustment support over social media (58%)
- Nearly 70% of adolescent participants indicated that if given the option, they were very likely or somewhat likely to communicate with their diabetes provider on social media
- A large percentage of participants (63%) were interested in engaging with another adolescent with T1D on social media to provide support related to diabetes



- Most adolescent participants agreed that social media communication would facilitate increased independent communication (61%) and positively impact patient-care team relationships (63%)
- A minority of participants (32%) reported privacy concerns



## Conclusions

- Adolescents with T1D express interest in using social media to support diabetes management and increase direct engagement with their diabetes care team
- Future research should explore the use of social media by healthcare teams to provide tailored support to adolescents with T1D

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