



2021 T1D Exchange QI Clinic Practice Survey: Clinic Staffing and Structure for Adult and Pediatric Diabetes Clinics

Mary Pat Gallagher MD, Emma Ospelt MPH, Nicole Riales MA, Ruth S. Weinstock MD, Devin Steenkamp MD, Grazia Aleppo MD, Elizabeth A. Mann MD, Sonya Haw MD, Jenise Wong MD, PhD, Osagie Ebekozi MD, MPH, CPHQ

Background/Objective:

The T1DX-QI collected data on staffing ratios from participating clinics to describe the current state of adult and pediatric diabetes practices. The American Diabetes Association recommends that people with type 1 diabetes (PWD) receive care from a multidisciplinary team. We have previously reported the discordance in staffing ratios between pediatric and adult diabetes practices(1). This data will assist in creating benchmarks to optimize care for pediatric and adult populations with T1D.

Methods

Surveys were collected from October 5th to November 19th, 2021, from 34 T1DX-QI sites (25 pediatric, 9 adult). Full-time equivalents (FTEs) of different disciplines at each diabetes clinic were reported. Data were cleaned and analyzed in R studio. FTEs of diabetes team members from different disciplines per 1000 patients were compared in adult vs. pediatric sites using T-tests. Differences in support staff, weekend, and evening staff between pediatric and adult sites were also evaluated.

Results

When analyzed per 1000 PWD, the FTEs were greater in pediatric (n=25) compared to adult sites (n=9) in every discipline (Table 1). In adult clinics, the lowest staffing ratios were in social work (0.09 FTE/1000 patients) and psychology (0.06 FTE/1000 patients), vs. 0.9 and 0.4 FTE, respectively, in pediatric sites. The ratio of most support staff (community health workers, navigators, family partners, etc.) did not differ between pediatric and adult sites.

Conclusion

These data are consistent with those collected by T1D Exchange in 2015, demonstrating persistent staffing disparities between adult and pediatric clinics. Inequities are particularly notable in behavioral health support. Further study is warranted to see if this affects outcomes including any impact on successful transition of young adults into adult diabetes clinic settings. When evaluating the care of patients during evening and weekend hours, there were no statistically significant differences between the type of covering provider between the pediatric and adult clinics. The vast majority reported a traditional model with fellow and attending coverage. Sixteen percent of pediatric sites (and zero adult sites) reported NP participation in evening/weekend coverage, which may reflect an increased need for fellowship applicants in pediatric endocrinology.

Corresponding Author

Mary Pat Gallagher, MD
 The Hassenfeld Children’s Hospital, Pediatric Diabetes Center at NYU Langone
 New York, NY, USA
marypat.gallagher@nyulangone.org

Table 1. Total FTE of Diabetes Team Members in T1DX-QI Pediatric and Adult Clinics

| Total FTE of Diabetes Team Members | Overall Clinic Average FTE N=34 | Pediatric Clinic Average FTE N=25 | Adult Clinic Average FTE N=9 | Pediatric Clinic FTE Average per 1000 PWD [SD] | Adult Clinic FTE Average per 1000 PWD [SD] | Pediatric vs Adult FTE Average per 1000 PWD p-value† |
|------------------------------------|---------------------------------|-----------------------------------|------------------------------|--|--|--|
| MD/DO | 7.87 | 8.0 | 7.6 | 3.6 [2.4] | 1.6 [1.5] | 0.001 |
| NP/PA | 3.31 | 3.4 | 3.1 | 1.5 [0.8] | 0.7 [0.6] | 0.003 |
| Social Worker | 1.63 | 2.0 | 0.5 | 0.9 [0.6] | 0.09 [0.2] | <0.001 |
| RN | 4.59 | 5.3 | 2.7 | 2.3 [1.7] | 0.5 [0.8] | <0.001 |
| CDCES | 6.32 | 7.3 | 3.8 | 3.3 [1.7] | 0.8 [1.1] | <0.001 |
| Psychology | 0.7 | 0.8 | 0.3 | 0.4 [0.4] | 0.06 [0.2] | 0.003 |

†T-test

1. AGARWAL, S., et al. (2018). *Diabetes* 67(Supplement_1).