



DIABETES SIG

Society of Pediatric Psychology

SIG Newsletter

Issue 2 Spring 2015

Please enjoy the Semi-Annual Newsletter published by APA Div. 54/SPP Diabetes Special Interest Group. The goal of the newsletter is to share new information with SIG members from the larger diabetes community, foster collaboration among members, and support the training and mentoring of our students and fellows. In each issue, we share updates to enrich our members' clinical, research, and training programs. Enjoy this Spring 2015 edition with a focus on upcoming events at the 2015 SPP Annual Conference in San Diego!

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Resources for Living with Diabetes



The College Diabetes Network (CDN) is a national 501c3 non-profit organization, whose mission is to empower and improve the lives of students living with diabetes through peer support and access to information and resources.

College can be a challenging time for anyone, as the demands of studying, jobs, sports, late nights, questionable choices, and poor nutrition take their toll. Diabetes only compounds the stress as students are often isolated, at risk of depression, under pressure to be “normal”, and have limited access to healthcare and nutritional food options. For many students, this is the first time that they are solely responsible for their own health.

The desire to be responsible for one’s own health must come from within each person. CDN chapters provide a way for students to meet in person and connect, talk, laugh, and share the ups and downs of college life with diabetes on campus. The CDN Chapter Network is comprised of over 75 chapters across the United States. Chapters vary considerably in size, activity, and structure, but have one common purpose: to create a supportive community for students with Type 1 on their campus. Each chapter is created for students, by students, and are student led. Chapters hold regular meetings, and may hold events on their campus or in partnership with local community organizations.

In addition to the CDN Chapter Network, the CDN website has become “the Hub” of information for information and resources directly relevant to the lives of young adults with diabetes. CDN’s website provides the tools for living a healthy life, and making the transition to college and independence, right at your fingertips, and written in a way that is relevant to a young adult’s life.

You may want to direct the parents that you work with to the following resources:

[CDN’s Looking at Schools Guide](#)

[CDN’s Preparing to Move Out – a Timeline](#)

[Family Communication Contract](#)

[Important Diabetes Contact List Template](#)

You may want to direct the teens that you work with to:

[Having the “Talk” with Friends and Roommates](#)

[Type 101: A Guide to Diabetes \(for friends!\)](#)

[CDN’s Touchy Topics Page](#)

[CDN’s Burnout Page](#)

For more information, visit collegediabetesnetwork.org

Large Scale Diabetes Research

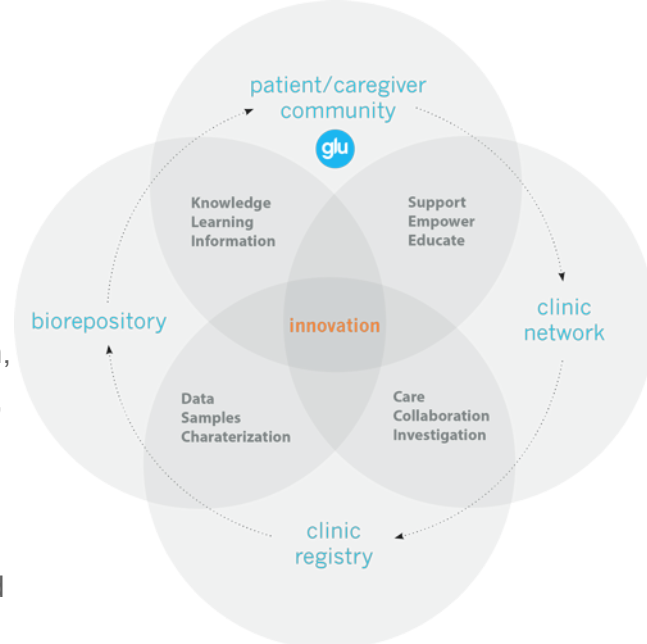
**T1D Exchange:
Much More than a National Registry**

Susana R. Patton, PhD, CDE, University of Kansas Medical Center

Launched in 2009, the T1D Exchange is an innovative virtual platform for researchers,

clinicians, and patients with type 1 diabetes to network and share experiences and knowledge to improve care and accelerate the discovery and dissemination of new treatments. The T1D Exchange was first established through funding by the Leona M. and Harry B. Helmsley Charitable Foundation, but now operates as a program of Unitio, a non-profit organization. Currently, the network includes over 70 clinics, a clinic registry with records for more than 26,000 patients with type 1 diabetes, and a biorepository to store and process

biological data. It also operates an active online patient and caregiver community called GLU (myglu.org), with over 12,000 community users. The mission of the Exchange is “to improve the lives of people touched by type 1 diabetes by facilitating better care and accelerating new therapies on the path to cures.” Its model (on the right) is patient-centric, with all of the components of the Exchange operating to speed up the pathway from research and discovery to implementation and improved patient care. The T1D Exchange currently has several research projects underway and data from its clinic registry are currently available for open access. In addition, members of the Exchange can propose new project ideas to continue to build our available knowledge about the experiences of persons living with type 1 diabetes. Below are some recent publications from the Exchange.



1. Willis, S et al., *Racial-ethnic disparities in management and outcomes among children with type 1 diabetes*. Pediatrics. 2015, 135: 424-434.
2. Wong, J et al., *Real-time continuous glucose monitoring among participants in the T1D Exchange clinic registry*. Diabetes Care. 2014, 37: 2702-2709.
3. Maahs, D et la., *Contrasting the clinical care and outcomes of 2,622 children with type 1 diabetes less than 6 years of age in the United States T1D Exchange and German/Austrian DPV registries*. Diabetologia. 2014, 57: 1578-1585.
4. Campbell, M. et al., *A contrast between children and adolescents with excellent and poor control: the T1D Exchange clinic registry experience*. Pediatric Diabetes. 2014, 15: 110-117.



The Environmental Determinants of Diabetes in the Young

The TEDDY Study

Kimberly Driscoll, PhD

Florida State University College of Medicine

The Environmental Determinants of Diabetes in the Young (TEDDY) is a collaborative scientific effort between the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institute of Allergy and Infectious Diseases (NIAID), National Institute of Child Health and Human Development (NICHD), National Institute of Environmental Health Sciences (NIEHS), Juvenile Diabetes Research Foundation (JDRF), and the Centers for Disease Control and Prevention (CDC). The overall objective of TEDDY is to complete studies that aim to identify the environmental causes of (e.g., infectious agents, dietary factors) and psychosocial factors associated with type 1 diabetes in people who are genetically at-risk. There are 6 clinical centers (Washington, Colorado, Georgia/Florida, Sweden, Finland, and Germany) and a data coordinating center (Tampa, Florida). 8,668 children were initially enrolled in TEDDY between September 2004 and March 2010 and participants are followed every 3 months for 4 years. After 4 years, children are seen every 6 months until 15 years of age. A blood sample is collected at every visit to test for a reaction against beta cells, called autoantibodies, and 3 different autoantibodies. Additional biological (cortisol swabs, stool samples, nail clippings), dietary (in the form of recalls) and psychosocial (child behavior, stress, caregiver anxiety and depressive symptoms). More than 40 empirical articles have been published on behalf of the TEDDY study group. For more information about TEDDY, please visit <https://teddy.epi.usf.edu>.

Behavioral Intervention Research for Youth with Type 2 Diabetes: The TODAY Trial

Barbara J Anderson, PhD & Marisa E Hilliard PhD
Baylor College of Medicine, Houston Texas

Over the past 20 years, the prevalence of type 2 diabetes in youth has grown rapidly, most notably among adolescents from minority racial and ethnic backgrounds. Youth with type 2 diabetes often come from families with histories of type 2 diabetes and with low socioeconomic status (American Diabetes Association, 2000). Moreover, overweight and obesity are linked with type 2 diabetes, meaning that many of these youth are in effect faced with the management challenges of two chronic conditions: diabetes and obesity (Nadeau & Dabelea, 2008). Despite the growing public health problem related to type 2 diabetes in youth, behavioral and medical research in this area has lagged behind other conditions (Tamborlane et al, 2013); to address this, the National Institutes of Health and the Centers for Disease Control and Prevention have prioritized funding large-scale prospective and intervention trials research over the past decade, including the Treatment Options for Type 2 Diabetes in Adolescents and Youth (TODAY) Study.

The TODAY Study is a multi-site study that aimed to document the clinical course of type 2 diabetes in youth and to test the efficacy of different treatments on glycemic control. The outcome of treatment failure was defined as worsening glycemic control resulting in A1C of at least 8.0% for at least 6 months or requiring insulin therapy (TODAY Study Group, 2012). Participants were 699 youth under age 18 diagnosed with type 2 diabetes for less than 2 years, who met specific medical criteria. TODAY participants were followed for 2-6 years, depending on time of enrollment. Enrollment and treatment occurred between 2004 and 2009, and the study is currently in the long-term follow-up observational phase with annual physical assessments. Using a randomized controlled trial design, the TODAY Study compared metformin mono-therapy with metformin plus a

second pharmacologic agent (rosiglitazone) or metformin plus an intensive behavioral “lifestyle” intervention. Across conditions, substantial efforts were made to facilitate high adherence to the treatments in order to evaluate their impact when taken as prescribed. Trained research staff delivered the behavioral intervention individually to youth and parents at home or convenient community locations. The intervention focused on behavioral strategies for self-monitoring, improved nutrition, increasing physical activity, and decreasing sedentary behaviors.

The TODAY Study demonstrated that metformin alone resulted in “treatment failure” or worsening glycemic control in slightly more than one-half of the study participants, and metformin plus rosiglitazone had better outcomes, with treatment failure in less than 40% of participants. The behavioral intervention results were intermediate but not statistically different from metformin alone or metformin plus rosiglitazone (TODAY Study Group, 2012). In addition to substantial worsening of glycemic control in approximately half of study participants across conditions, complications including hypertension and microalbuminuria approximately tripled over the course of the study (TODAY Study Group, 2013). Together, these results suggest that type 2 diabetes is particularly aggressive when diagnosed in youth and likely requires multiple treatment approaches including medications, behavior change, and/or insulin therapy shortly after diagnosis to prevent serious glycemic decompensation. Systematic, well-designed research is needed to better understand and enhance behavioral, psychological, and family contributors to successful prevention and treatment of type 2 diabetes in youth (Linder et al., 2013).

1. American Diabetes Association. (2000). Type 2 diabetes in children and adolescents. *Diabetes Care*, 23, 381-389.
2. Linder, B.L., Fradkin, J.E., & Rodgers, G.P. (2013). The TODAY Study: An NIH perspective on its implications for research. *Diabetes Care*, 36, 1775-1776.
3. Nadeau, K., & Dabelea, D. (2008). *Epidemiology of Pediatric and Adolescent Diabetes*. New York, NY: Informa Healthcare USA.
4. Tamborlane, W., & Klingensmith, G. (2013). Crisis is care: Limited treatment options for type 2 diabetes in adolescents and youth. *Diabetes Care*, 36, 1777-1778.
5. TODAY Study Group. (2012). A clinical trial to maintain glycemic control in youth with type 2 diabetes. *The New England Journal of Medicine*, 366, 2247-2256.
6. TODAY Study Group. (2013). Rapid rise in hypertension and nephropathy in youth with type 2 diabetes: The TODAY Clinical Trial. *Diabetes Care*, 36, 1735-1741.

Student Spotlights

Meg Nicholl

Meg Nicholl is a second year clinical psychology doctoral student at Nova Southeastern University. Currently, Meg also serves on the medical staff at a diabetes camp in the Northeast, assisting camp staff with behavioral issues of campers and providing psychoeducation to campers. She has been involved with designing and implementing a research study to evaluate the experiences of camp counselors at a diabetes camp, including their quality of life, hope, and wellbeing. Additionally, she currently serves as one of the Student Members at Large (MAL) within the Division 54 Diabetes Special Interest Group (SIG). Along with the other Student MALs, she has

developed a diabetes-specific training resource hub for Division 54 and has assisted with organizing and planning the Diabetes SIG case presentation panel for SPPAC 2015. Her research interests include health-related quality of life and transition to adult care in youth with type 1 diabetes. She looks forward to pursuing additional experiences in diabetes research and training, especially during internship and postdoctoral fellowship.



Diabetes Training Hub

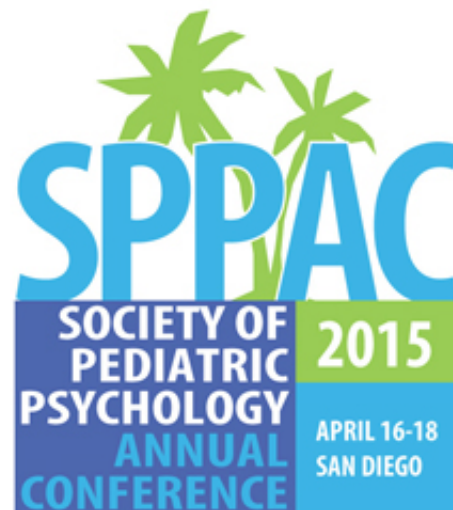
Students and trainees who are interested in diabetes may wonder which internship and fellowship sites offer diabetes specific experiences. To answer this question, the Diabetes SIG Student Members at Large distributed a survey to training directors and clinical supervisors at practice sites across the country. From the responses, we created a **Diabetes Training Hub** which summarizes diabetes training opportunities across sites. This is an evolving list that will be updated as new opportunities arise. Until a permanent web home is found, Students/Trainees can email **Alana Resmini** (akr0011@auburn.edu) to receive a link to the Hub. If you are a training director/supervisor please send information about your program to Alana. Thank you to everyone who shared information to help create this training hub and we hope it is a valuable resources for our SIG student members!

Diabetes SIG at SPPAC 2015

Be sure to check out all of the excellent research and programming by our Diabetes SIG members at the upcoming conference! See you in San Diego...

Posters

- Banks, G.G., Berlin K.S., Kamody, R.C., Rybak, T.M., Ali, J.S., Klages, K.L., Walker, B.S., Ferry, Jr. R.J., & Diaz-Thomas, A.M. *The relation of diabetes related peer conflict on glycemic control, adherence, and quality of life in youth with type 1 diabetes.*
- Berlin, K. S., Kamody, R. C., Rybak, T. M., Banks, G. G., Klages, K. L., Ali, J. S., Allen, D., Diaz-Thomas, A. M., & Ferry Jr., R. J. *The effect of diabetes specific*



psychological inflexibility on adherence, family conflict, impaired values, glycemic control and quality of life in low-income youth with Type 1 Diabetes.

- Dempster, N.R., Valdes, N., Repaske, D., & Wildman, B. *Benefits and barriers to treatment mediate the relationship between age/cognitive-developmental level and adherence.*
- Kamboj, M., Obrynba, K., Dempster, N.R., Coshway, L., King, B., Mount, L., Repaske, D., & Yardley, H. *Screening for depression in adolescents with type 1 diabetes: A quality improvement initiative.*
- Kamody, R. C., Berlin, K. S., Rybak, T. M., Banks, G. G., Klages, K., Ali, J. S., Diaz-Thomas, A. M., & Ferry Jr., R. J. *Diabetes-specific stress and adherence profiles and the relations to glycemic control and quality of life among adolescents with Type 1 Diabetes.*
- Mackey, E.R., Monaghan, M., Herbert, L., Cogen, F., & Streisand, R. *Piloting a telephone-based parent intervention for young children newly diagnosed with T1D: Examining the role of maternal depression.*
- Pierce, J., Carpenter, J., Shroff Pendley, J., Delamater, A., & Drotar, D. *Developmental Relations between Age, Metacognition, and Diabetes Responsibility among Children and Adolescents with Type 1 Diabetes.*
- Pierce, J. & Jordan, S. *Relations between Age, Diabetes-Specific Routines, and Adherence in Adolescents with Type 1 Diabetes.*
- Robinson, E. M., Weaver, P., Chen, R., Streisand, R., & Holmes, C.S. *Parent psychosocial functioning as an indicator of parental monitoring, youth adherence, and glycemic control.*

Papers

- Rybak, T.M., Ali, J.S., Berlin K.S., Kamody, R.C., Banks, G.G., Klages, K.L., Diaz-Thomas, A.M., Ferry, Jr. R.J. *Patterns of family functioning and conflict and relations to glycemic control and quality of life among primarily low-income adolescents with Type 1 Diabetes.*

SIG Programming

The **Diabetes SIG Clinical Showcase** will take place during the Diabetes SIG meeting time: Thursday April 16 at 5:30 pm. This will be an informative and interactive discussion highlighting 5 innovative clinical programs being conducted by SIG members in diabetes clinics around the country! Please come and learn about your fellow diabetes psychologists' work to support patients with type 1 diabetes, including the following presentations:

Wasserman, R., Axelrad, M., Anderson, B., & Schwartz, D – Texas Children's Hospital.

Psychosocial screening for children and youth newly diagnosed with type 1 diabetes: A view from the trenches.

Odar Stough, C., Gowey, M., Williams, J., Lee, J., & Kichler, J. – Cincinnati Children’s Hospital.

The implementation of group interventions targeting adjustment and self-management in pre-adolescent and adolescent youth with type 1 diabetes mellitus and their parents.

Carpenter, J., Price, J., Orchinik, L., Shroff-Pendley, J – A.I. duPont Hospital for Children.

Multifamily group problem-solving intervention for adherence challenges in pediatric insulin-dependent diabetes.

Dempster, N.R., Yardley, H., Seimer, B., Glick, B., Mount, L., Rohal, T., & Kamboj, M. – Nationwide Children’s Hospital.

Reduction in acute care visits for patients with type 1 diabetes through comprehensive management strategies.

Harris, M. & Heywood, M.

Avoiding the avoidable: Innovative interventions for youth repeatedly hospitalized for DKA – Oregon Health & Sciences University

The SIG Board

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Logo designed by Evan O'Neil (evanoneil.net)

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To join the SPP Diabetes SIG, you must be a member of the Society of Pediatric Psychology/APA Division 54. Please email marisa.hilliard@bcm.edu