

# Nemours Children's Health System researcher secures \$900k grant to study behavioral health interventions on teens with Type 1 Diabetes



Jacksonville, FL (April 8, 2021) – Susana R. Patton, Ph.D., ABPP, CDCES Center Director of the Nemours Center for Healthcare Delivery Science in Florida, has secured a three-year, \$900,000 NIH R01 grant entitled, "Coin2Dose: Behavioral economics to promote insulin bolus activity and improve HbA1c in teens." Dr. Patton is the recipient of three concurrent R01 grants.

Together with her Nemours co-investigator, Larry A. Fox, M.D., and co-investigators Mark A. Clements, M.D. Ph.D. from Children's Mercy-Kansas City and Christopher C. Cushing, Ph.D. from the University of Kansas, Dr. Patton will examine the feasibility and acceptability of a semi-automated behavioral economics incentive (BEI) mobile health intervention called Coin2Dose to improve self-management behaviors in adolescents with Type 1 diabetes, and then conduct a pilot randomized controlled trial to test the preliminary efficacy of the intervention.

Coin2Dose will deliver automated text messages to cue adolescents to bolus for insulin at mealtimes, plus behavioral economics incentives, in the form of money or digital credits for daily mealtime bolus activity. This study is relevant to public health because most adolescents with Type 1 diabetes struggle to achieve optimal diabetes self-management and their target glycated hemoglobin level (HbA1c) –increasing their risk for serious acute and long-term complications. In addition, behavioral economics incentives can be effective in promoting adolescent self-management.

"We are very proud of the novel research that Dr. Patton and her talented team are undertaking as this work will have a high impact on advancing the field of pediatric diabetes treatment by providing a scalable adherence-focused intervention for immediate clinic uptake as well as for use in future focused interventions," said Vicky Funanage, Ph.D., Executive Director of Research at Nemours.

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About Nemours Children's Health System

Nemours is an internationally recognized children's health system that owns and operates the two free-standing children's hospitals: the Nemours/Alfred I. duPont Hospital for Children in Wilmington, Del., and Nemours Children's Hospital in Orlando, Fla., along with outpatient facilities in five states, delivering pediatric primary, specialty and urgent care. Nemours also powers the world's most-visited website for information on the health of children and teens, KidsHealth.org, and offers on-demand, online video patient visits through Nemours CareConnect. Nemours ReadingBrightstart.org is a program dedicated to preventing reading failure in young children, grounded in Nemours' understanding that child health and learning are inextricably linked, and that reading level is a strong predictor of adult health.

Established as The Nemours Foundation through the legacy and philanthropy of Alfred I. duPont, Nemours provides pediatric clinical care, research, education, advocacy and prevention programs to families in the communities it serves.

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