

HEALTH

High Quality Diabetes and Mental Health Care at Scale Regardless of Location

Educating, empowering and supporting people living with T1D and their families wherever they are, whatever stage of diabetes journey they're at, and at the times they need it the most

# **Executive Summary**

Diabetes is a job no one wants. From the moment a person is diagnosed with Type 1 diabetes (T1D), the road is challenging, the learning curve is steep, and the stakes are literally life or death. Most people are overwhelmed, experiencing feelings of denial, anger, fear, hopelessness, loneliness and grief. Their families become caregivers, especially with T1D diagnosis at a young age, with varied success.

Today, approximately 1.25 million Americans have T1D and this number is expected to increase to 5 million by 2050. Nearly a quarter of those living with diabetes are under the age of 20 and are forced to navigate their childhood with this burdensome condition. Family lives are impacted emotionally, physically and financially and forever changed regardless of the age of the person with diabetes (PWD).

"The health care industry today is failing when it comes to supporting people who use insulin to manage their glucose levels. People need access to the best technology available, and hands- down that is Continuous Glucose Monitoring (CGM)"

David Panzirer, Trustee of Helmsley Charitable Trust, and parent of two children with T1D

Cecelia Health's mission is to transform the lives and health outcomes of people living with diabetes and related chronic conditions. We do this at scale via an optimized mix of real-time personalized one-on-one virtual interactions with expert Certified Diabetes Educators (CDEs) that are augmented and reinforced through interactive digital health engagement. Our goal is to empower PWDs to successfully self-manage their condition by educating and coaching them to: 1) set fitness, nutrition and behavioral change goals, 2) overcome barriers to medication adherence, and 3) use diabetes devices to inform their use of insulin. We want anyone living with T1D to receive access to the care they need regardless of geography.

Cecelia Health, as an industry leading digital health company, has continually innovated for over a decade to improve T1D (and T2D) health and scale nationwide with marquis clients that span pharmaceutical, medical device and health plan market segments. By optimizing the mix of human and digital touchpoints in clinically tested pathways, we have delivered millions of life changing moments.



# The Problem

As evidenced by data from the T1D registry (22,697 participants 2016-2018), clinical outcomes are suboptimal for most people living with T1D. The population that most struggles with achieving control targets remains adolescents and young adults, with mean HbA1c being 9.2% in 13-17-year-old adolescents and 8.9% in 18-25-year adults (Figure 1).

Alarmingly, only 17% of youth (<18 years old) and 21% of adults were achieving hemoglobin A1c (HbA1c) targets set by the American Diabetes Association. Importantly, use of technology, specifically continuous glucose monitors (CGMs), was associated with lower HbA1c levels regardless of insulin delivery modality (insulin pumps or multiple daily injections) (MDI).

PWDs face a tremendous financial burden in addition to emotional and psychological stress. One of every four PWDs surveyed in 2016 responded that they need to ration their insulin supply based on the \$5,705 annual cost for insulin in that year.



Figure 1: Average HbA1c by year of age: 2010-2012 versus 2016-2018. Orange line represents 2010-2012 cohort, and blue line represents 2016-2018 cohort. Participants must be contained in both cohorts with at least a 3-year duration for the 2010-2013 collection. \*  $\geq$ 80 years old are pooled.



**Primary Care Provider by County** 



Counties WITH at least one provider
Counties WITHOUT at least one provider

\*Endocrinologist denotes both pediatric and adult providers

Figure 2: Geographic distribution of Endocrinologists and PCPs

Type 1 diabetes is ideally managed by an adult or pediatric endocrinologist. However, there are only about 3,000 endocrinologists in the U.S., concentrated in urban centers, to meet the needs of the 1.25 million PWDs throughout the U.S.

This dearth of specialists and their spotty geographic distribution (Figure 2) is inadequate for providing high quality care to a growing, geographically distributed T1D population. This imposes disruption and hardship on individuals and families who are forced to travel long distances for specialist care. Alternatively, most PWDs receive care from health care providers who do not specialize in diabetes management. A new solution is needed to provide better care and address this growing epidemic.



Further complicating these challenges for T1D and their families is the focus by health plans on the T2D population, given the size of this population is ~ 29 million in the U.S. alone and in a study published by the American Diabetes Association the emergence of type 2 diabetes is considered to be a global pandemic that is one of the major challenges to human health in the 21st century). There is a vacuum of T1 patient programs delivered by health plans with the clinical expertise and ability to scale to solve for T1 specific health challenges and related technologies (e.g. insulin pumps, insulin pens, continuous glucose monitors, etc.).

Cecelia Health – A Personalized Solution to Help People with T1D

# David's Story

The roots of Cecelia Health date back to when David Weingard, an athletic, fit and avid Ironman triathlon competitor and Microsoft executive, was diagnosed with T1D. He sought and connected with a Certified Diabetes Educator named Cecelia, who helped educate and empower him to understand that a T1D diagnosis is not a death sentence. She also gave him the support and compassion a newly diagnosed T1D needed. By providing him with the right knowledge and understanding of his disease, the medications and know how to integrate nutrition/exercise to minimize blood glucose highs/lows, Cecelia taught David how to control his diabetes instead of it controlling him.

Through personalized education, support and compassion, Cecelia taught David he could live an empowered life with diabetes. David became a JDRF National Hero, traveling around the country sharing his story of living with T1D children to help them understand they could live a fulfilling life. What started as one man's vision and passion led to the origin of Cecelia Health, which has already touched the lives of over a hundred thousand people living with diabetes. However, Cecelia Health has so much more it can accomplish in the U.S. and globally based on what we have learned so far.

#### The Cecelia Health Solution

Cecelia Health provides personalized, technology-enabled coaching from expert clinicians to improve medication adherence and health outcomes of people living with diabetes and related chronic conditions. Each PWD works with a CDE who has expertise in T1D and is skilled at building long-lasting, trust-based relationships. Since our inception, we have delivered 1:1 coaching by clinical experts and empowered over 100,000 Type 1 and 2 PWDs to manage their diabetes. We are on track to have over 800,000 unique personalized audio and video patient interactions in 2019 in addition to email and text interactions.



Our team of CDEs have successfully delivered personalized, hands-on support and training to PWDs in multiple languages (e.g., English, Spanish, Chinese, etc.) and have an average of seven years of experience training and supporting individuals with diabetes on pump therapy and CGM. We have a rigorous screening process to select highly qualified CDEs and use a structured and scalable approach for onboarding and training across the care management continuum. This includes a comprehensive quality assurance process that ensures coaches are effective at driving targeted outcomes (e.g., increasing Time-In-Range defined as 70-180mg/dL, lowering HbA1c levels, improving quality of life, etc.) and motivating behavioral change. Our CDEs provide care outside the hours of the standard care delivery model, with contact often occurring after hours or on weekends to ensure they meet the scheduling and lifestyle needs of the PWDs they work with.



Figure 3: CDE Engagement Strategy

We offer remote monitoring in addition to real-time personalized one-on-one virtual interactions to the members, patients and employees of our health plan, medical device and pharmaceutical company customers as another way to empower PWDs to successfully initiate and be persistent in their use of pumps and CGM devices. This enables PWDs to achieve the outcomes they desire in a way that is highly personalized.

Our technology-enabled real time interactive virtual coaching model has a proven track record for empowering PWDs with treatment plans that significantly improve initiation, adherence and persistence of prescribed medications and devices. Third party ROI and clinical studies of our interventions have shown significant A1c reductions and Time-in-Range improvements. In addition, customer analyses have documented the clinical outcomes and ROI for customers generated by our programs.



## Closing the Type 1 Care Gap

Cecelia Health works with the key stakeholders in the health community ecosystem (payer, pharmaceutical, medical device) and has the relationships to create programs that will revolutionize how the condition is managed. Cecelia Health's vision is to provide individuals with T1D the ability to self-manage their disease across their life journey.

This includes addressing obstacles for achieving control targets in the adolescent/emerging adult population. Most diabetes visits today are conducted at a clinic location with typical business hours between 8am – 5pm. This requires children to miss school or after school activities (including athletics) to attend an appointment. For college students who go away to school it is often very difficult to juggle class schedules, trips home and diabetes appointments. Even with forethought when a college student knows their schedule, appointments may not be available on the specified date due to the shortage of pediatric endocrinology providers. However, the biggest variable to consider is that quarterly visits in a provider's office that may last 15-45 minutes can never capture the rapid changes in growth, development, and schedules faced by T1D children.

Additionally, although diabetes devices may be prescribed at a visit, if barriers are encountered shortly after the visit, patients often wait 2-3 months until their next point of contact to interactively problem solve with their provider. Yet, this is a vast under-estimation of the problem at hand as it assumes a PWD can make quarterly visits. Indeed, data from the T1D registry shows the lowest penetration of CGM technologies in the group that could most benefit (only 24% of 13<18 y/o and 22% of 18<26 y/o use CGM) (FOSTER DTT 2019). Cecelia Health stands to revolutionize the care delivered to those most struggling with achievement of targets and who have the lowest rates of technology adoption. The services provided hold the promise of protecting these youngsters from complications that may occur secondary to sub-optimal control, while setting the stage for them being able to control their diabetes for the rest of their life.

#### Cecelia Health Business Model

Cecelia Health uses a Business to Business to Consumer (B2B2C) model to scale its reach and improve the health of PWD nationwide. Our customers include industry leading pharmaceutical companies, medical device companies and health plans. Our existing and prospective health plan customers want us to provide our virtual clinic to their members, which will accelerate market acceptance. Our medical device customers want us to implement solutions specific to their devices to their PWD customers. And, our pharmaceutical customers are excited to integrate their digital pens into this virtual ecosystem to accelerate Rx adoption and persistency.



# JCHR / HCT CGM Pilot Study

# Study Design

In August 2019, Cecelia Health completed the initial phase of multi-phase pilot study with The Jaeb Center for Health Research (JCHR) to demonstrate remote scaled initiation, persistency and datadriven guidance for people using a CGM device, such as the Dexcom G6 or the Abbott Freestyle Libre. The pilot study, funded by The Leona M. and Harry B. Helmsley Charitable Trust, included 34 total and 27 T1D individuals. Through the pilot study, a better understanding of how to help people choose the right CGM, interpret data, and apply this knowledge to their diabetes care was gained.

"Our objective is to determine whether CGM can be effectively initiated by adults using insulin with online and remote training instead of clinic- based training and the impact on glycemic control. This initiative has the potential to provide tremendous innovation through proven models within the diabetes landscape."

Dr. Roy Beck, Executive Director of the Jaeb Center for Health Research Foundation

# Pilot Study Insights

Change is hard. PWDs struggle to trust CGM readings and understand why they are different from blood glucose monitors (BGM). Throughout the study, CDEs provided participants with invaluable insights and understanding about their CGM patterns, helping individuals to build trust and make decisions based on the CGM data. Learnings include:

 Frequency of contact (low touch vs. high touch) highlighted unique characteristics of patient populations, with equal distribution of participants in the 2 groups. Low touch participant attributes included confident, motivated and comfortable with technology. High touch participant attributes include hesitant, unmotivated and uncomfortable with technology.



- For high touch participants, use of video is critical to CGM training and initiation.
- Touchpoint cadence was individualized and changed over time to flex with the needs of the PWD.
- Flexible scheduling was essential to accommodate times convenient for participants.
- Understanding a PWD's perception of CGM was essential for overcoming barriers to success.
- Regardless of diabetes duration, change is overwhelming.
- Usual care providers are not always knowledgeable, skilled or comfortable prescribing or providing training and support for the use of diabetes devices.
- An individual can be a self-starter (low touch), but also high touch when it comes to interpreting the data, addressing psychosocial issues and connecting the other dots.
- Each individual is on their own unique journey a good solution for one person may not be right for another.

## Study Outcomes

91% of participants joined in the final call with their CDE at the end of the12-week program, which reinforces that strong relationships were built with their CDEs over the course of the study.

Time in range increased from 48% pre-study (estimated from HbA1c) to 59% during the study, an improvement of 2.6 hours per day. Improvement was seen across the range of baseline HbA1c: 1.7 hours per day when baseline HbA1c was <7.5%, 3.1 hours per day when baseline HbA1c was 7.5% to 8.9%, and 3.1 hours per day when baseline HbA1c was >9.0%. Table 1 summarizes other quantifiable outcomes.

Study Attributes	Pre-Study Value	After 12 Weeks
Using CGM	-	100%
Average A1c	8.3 +/- 1.6	7.2 +/- 1.3
% Participants reporting Diabetes distress not an issue	9%	41%
How confident are you that you can stay safe from serious problems due to hypoglycemia	29% very confident	55% very confident
Benefits and Barriers of CGM - CGM makes taking care of my diabetes management easier	6% strongly agree	71% strongly agree
Diabetes Technology Attitude – diabetes management technology has made my life better	26% strongly agree	62% strongly agree

Table 1: Quantifiable CGM Pilot Study Outcomes



# Scaling the Service: Bringing CGM to PWDs

Living with T1D requires constant vigilance and the need to gather and interpret numerous data points throughout the day. It is estimated that living with diabetes demands approximately 300 diabetes-focused decisions each and every day.

Cecelia Health will launch a commercial Virtual Diabetes Clinic with the following capabilities:

- Virtual telemedicine for diabetes management that will include prescribing CGM devices and insulin dosage, training on how to use and interpret data from CGM devices in order to empower people to manage their condition and make fitness, nutrition and other lifestyle changes that will transform their live, and making dosage and titration changes. For some, this may just be adherence to bolus insulin administration for carbohydrate intake or hyperglycemia.
- Algorithm driven decision support capabilities that will help PWD make recommended changes in their dosage and titration under the guidance of expert clinicians on our team of Certified Diabetes Educators (CDEs), Endocrinologists, Nurse Practitioners (NPs) and Primary Care Providers (PCPs), all of whom have CGM experience.
- Mental health screening and counseling that will help PWDs identify and optimize their diabetes outcomes.

"Imagine the model evolving to include prescribing a CGM, onboarding, data interpretation, remote data monitoring, and eventually even adjusting insulin doses that can be titrated via a decision- support algorithm optimized for each individual by a Certified Diabetes Educator (CDE), under physician orders. This is how we all see the future and this pilot is the first step towards getting there."

> David Panzirer, Trustee of the Helmsley Charitable Trust, and a parent of two children with T1D.

The technology required to support our digital health strategy is now readily available and we're currently working on adding and integrating it into our technology-enabled coaching platform, including:

 Connected devices: CGMs; insulin pumps; exercise devices; clinical, fitness, nutrition and wellness apps; and connected insulin pens, which allow for precision dosing and titration and data that can be integrated into algorithms for informing multiple daily injection users on optimizing insulin use.



- Interactive technology: Smartphone and web-based applications, interactive email and textmessaging, and behavioral science-based text messaging in addition to personalized audio, video, email and text interactions with CDEs. Interactive options are especially important for children with T1 and their caregivers / families.
- Decision support for recommendation dosage and titration changes to T1D pump and MDI and T2D MDI PWDs.
- Video conferencing in addition to audio options for real-time personalized one-on-one interaction with patients.

Our virtual diabetes and mental health specialty clinic and digital health model is designed to scale to serve a broad population of PWDs at a low cost as an alternative and to supplement the extreme shortage of endocrinologists who are trained in diabetes and CGM devices.

Once patients can truly self-manage their diabetes, our CDEs and digital platform will be able to leverage data from connected devices and digital engagement (e.g., apps, email, text) to remotely monitor patients and reach out with the right personal and/or digital touch at the right time to any patient that needs guidance, advice and help.



# Figure 4: Virtual Clinic Model



# Conclusion: Magic of the Lightbulb Moment

When people with T1D realize the interaction and connection between fitness, insulin management and nutrition, they begin to trust their self-care abilities and reach their "lightbulb moment." Cecelia Health is dedicated to providing the education and knowledge that empowers people to take over their own care and maximize Time-In-Range. Teaching people how to more actively and effectively manage their diabetes holds the promise to reduce the risk of mild, moderate, or severe hypoglycemia, as well as high blood sugars which can lead to Diabetic Ketoacidosis. While this will reduce acute emergency room visits, embracing CGM and increasing Time-In-Range will keep PWDs "safer" in the long-run, minimizing their risk of diabetes related microvascular and macrovascular complications.

In the end, it means healthier and happier lives, not only for the PWD but for their family members, while driving down the cost of care.



Now is a unique time to leverage the tools available to create scalable, sustainable and positive change in diabetes and chronic disease management. Cecelia Health aims to restore hope, improve outcomes, and decrease costs associated with T1D at scale, regardless of language, socioeconomic standing, or geographic barriers.



The following quotes from patients highlight how we work with patients to achieve these goals.

The Cecelia Health program is a wonderful service. I have been managing my diabetes for the last 26 years and felt that I was not receiving good medical care from my doctor. I went through a period where my blood sugars would continuously spike and when I brought my concerns to my doctor, I was given no solution or any help in bringing it down. My CDE clinician Laura changed this and guided me on finding alternative medication that worked for me. Laura reinforced the importance of doing daily checks – something I had not been doing regularly, while helping me through the whole process of managing my diabetes. In 3 months, my A1C dropped from 11.5 to 7.2. It's so nice to talk to someone about my diabetes and be there for me to provide guidance and support.

# "

When I enrolled in Cecelia Health's diabetes coaching program, I had an A1C of 11. I would intermittently measure my blood sugar during morning time and was frequently over 220 - my doctor threatened to put me on injections if I did not bring this number down. With personalized monthly coaching calls from Angie, I learned to control and monitor my sugar intake, take my medicine accordingly, monitor my blood sugar and even exercise three days per week. As a result, my A1C dropped significantly to 5.6 in eight months! I no longer feel constant fatigue and my previously cold feet are closer to normal feeling. I certainly have more energy. It was clear that I needed more frequent reminders than quarterly doctor visits in order to adhere to a lifestyle to control my diabetes.





# APPENDIX

#### Type 1 Diabetes Case Studies

#### Medtronic Case Study

Background: A person with T1D chose a Medtronic device because of their desire for better blood sugar control. They were frustrated with their CGM and stopped using it because they were receiving too many alerts and alarms.

Action: A Cecelia Health CDE contacted them and listened to the person's frustrations and empathized with her. Our CDE built trust with the person stating they were not alone, and they were going to walk them through each step required to obtain a positive result.

The CDE provided education and information around the keys to success with CGM, learned why the person initially wanted the system and reviewed the clinical value of using a device system.

Value & Impact: The person appreciated the support and care from the CDE who understood their challenges and struggles and agreed to work with the CDE to try the system again and overcome barriers. The person was excited to have the opportunity to start again and use the device to improve their overall diabetes management and Time-In-Range.

The CDE alerted the field team about the person and their need for retraining to drive a good experience in managing their diabetes.

#### Jaeb Center for Health Research Case Study

Remote CGM Pilot Study Background: T1D individual not comfortable with technology, challenges with balancing many years of muscular disorder and frustrations with previous care.

- Starting A1c at study enrollment on 3/2/19 was 6.4% and initial CGM wear showed 59% Time-In-Range.
- Person was having lows around 60 every other night and was being woken up by CGM alarms. Long-acting insulin was decreased.
- After working with a Cecelia Health CDE to review CGM data and understand the connection between food and glucose levels, just 3-months later, Time-In-Range increased to 75%



Action: Changes made throughout the CDE coaching engagement included:

- Increased breakfast bolus by 1 unit of Humalog insulin to avoid post breakfast hyperglycemia
- Added avocado to breakfast egg and toast which also mitigated meal related excursions.
- Added 5-minute exercise post breakfast to combat hyperglycemia and encourage physical activity
- Changed pre-dinner bolus to 50%/50% dual wave bolus to avoid post dinner lows.
- Continued post dinner, doubling basal rate x 4 hours to avoid middle of night blood sugars of 300
- Use CGM alerts with a low alert of 70mg/dL and high alert of 180mg/dL allowed corrective action prior to more pronounced hypo or hyperglycemia (40 and 300, respectively).
- Changed basal rate from 8pm to 2am to 0.375 from 0.325 to avoid BS climbing overnight.

# Program Diary:

- Week 1 check-in (3/14/19): I was guessing and experimenting with insulin changes, prior to having this information. It has been very valuable and powerful to make better choices.
- Week 3 check-n (3/28/19): When having the spike after breakfast and lows after dinner, it was wonderfully helpful to know my blood sugars. I have now been able to correct both issues.
- Training session (4/4/19): My endo group has told me I must be doing something wrong. Please don't judge me, bad blood sugar does not make me a bad person. What is powerful about having the CGM is the immediate access to info you need to make adjustments.

Value and Impact: "Dexcom G6 is a life saver; excellent CGM. Remote instruction is perfect, much better than making expensive appointments and the difficulty follow-up questions."



#### Novo Nordisk Case Study

Background: T1D individual participated in an 11-week Diabetes Education program with CDE. Person struggled to take medication as prescribed and opened to her CDE on daily problems dealing with diabetes. Person shared that she forgets to take her rapid-acting insulin with each meal as prescribed, feels overwhelmed and burdened with diabetes.

Action: Cecelia Health CDE uncovered the individual's barrier of struggling to remember to take her rapid-acting insulin with each meal. CDE affirmed with them that establishing a routine can be hard to do, reviewed strategies for remembering to take injections with each meal along with dosing recommendations.

The person shared with Cecelia Health CDE her experience working through denial and the struggle with fear of being judged about her diabetes. The CDE empathized with her, praising her for how far she has come in her journey and encouraged her by highlighting her hard work and success.

Value and Impact: The person expressed her fear related to sharing her diabetes stating, "To this day I have a hard time telling people." Through the compassion and active listening demonstrated by the CDE, this person felt safe to share her emotional struggle dealing with diabetes.





David Weingard Chief Executive Officer

David was diagnosed with Type 1 diabetes, at the age of 36, while training for a survival race. A veteran of numerous running and triathlon races (including Ironman triathlons consisting of a 2.4M swim, 112M bike and 26.2M run), David committed to rebuild his life and provide positive energy to the diabetes community while coping with the condition on a 24×7 basis.

Beginning with shorter races, he gradually learned how to successfully race triathlons with diabetes and within a year completed the famous Escape from Alcatraz Triathlon in San Francisco Bay. He then began racing Ironman triathlons again – though this time working through the delicate balance between insulin, food, nutrition and exercise. Through these races, David has fundraised extensively on behalf of the Juvenile Diabetes Research Foundation's (JDRF) New York City Chapter.

David's personal experience receiving meaningful education and support from a Certified Diabetes Educator (CDE) sparked the idea for Cecelia Health to leverage technology to scale the reach of adherence and outcome improvement programs for pharmaceutical, payer and provider organizations. Building on his career as an executive in the technology sector, David left Microsoft in 2008 to become a founder of Cecelia Health. He is grateful to the incredible people that he has been fortunate to meet during the Cecelia Health journey who share his passion for enriching the lives of people with diabetes.

David has a BA in Computer Science and an MBA in Marketing.





Barry Kurland Chief Operating Officer

Prior to joining Cecelia Health, Barry started up and grew five new businesses in emerging markets while a General Manager at Microsoft, and he was an Operating Partner at a venture capital firm, a VP of Early Stage Product and Business Development at a NYSE listed corporate payment and business solutions company serving the fleet management, travel and healthcare industries, and Chief Operating Officer of several technology startups.

While he was an Operating Partner at a venture capital firm he served on the Board of Directors and provided strategy and M&A consulting services to a fitness and health monitoring device, software and data services company that was acquired by a company which integrates comprehensive health data and care support programs to enable more effective and cost-efficient diagnostic-led patient care.





Arnold Saperstein, MD, FACP Chief Medical Officer

Arnold Saperstein, MD, FACP was the Chief Medical Officer for Cecelia Health. Dr. Saperstein has extensive experience in population health and management of large networks in a managed care environment. He received his Medical Degree from the New York University School of Medicine and completed a residency in Internal Medicine and a fellowship in Endocrinology at the New York University Medical Center programs.

For over twenty-five years, he continued to practice on a weekly basis in the field of Endocrinology at Bellevue Hospital. Dr. Saperstein most recently served as the President and CEO of MetroPlus Health Plan in New York City. He began his career in managed care in 1992, and then joined MetroPlus Health Plan in 1995 initially as Chief Medical Officer and then as President and CEO from 2006 until 2019. MetroPlus Health Plan, a wholly owned subsidiary of the New York City Health + Hospitals is a managed care organization that grew during his tenure from 40,000 members to over half a million members with about 27,000 participating providers. MetroPlus Health Plan operated a dozen lines of business including Medicaid Managed Care, Child Health Plus, HIV/Medicaid Special Needs Plan, NY State of Health Marketplace and Marketplace Shop (small business) Plans, Essential Plan, Medicare, Fully Integrated Dual Advantage Plan (FIDA), Managed Long Term Care (MLTC), MetroPlus Enhanced (HARP) for Behavioral Health, MetroPlus Gold for NYC employees and Gold Care I and II for NYC Daycare workers.

Arnold has focused a major portion of his career on developing programs to ensure the highest quality of care delivery to the members of his plan. During his tenure, MetroPlus had been one of the highest scoring plans for quality of care as measured by the New York State Department of Health Medicaid Incentive Program and by the Medicaid Consumer Guide for New York City for over ten years.





Teresa McArthur, MS, RD, CDE, LDN VP of Clinical Services

Ms. McArthur is the VP of Clinical Services at Cecelia Health and is a Registered Dietitian and Certified Diabetes Educator with a Masters Degree in Clinical Nutrition. Teresa has experience working with diabetes, health and wellness, nutrition support, weight and chronic disease management.

She has worked in various capacities including higher education, long-term acute care, critical care, community nutrition, and in person and out person accredited diabetes management programs. Teresa has a wealth of experience working with children and adults with type 1 and type 2 diabetes and women with gestational diabetes while serving as a diabetes educator in the in-person, outperson and community settings. Ms. McArthur teaches persons how to understand their diabetes and provides them with the tools they need to manage their diabetes, empowering them with the skills they need to reach their goals and improve their health and quality of life.





Michael Balsam VP Data & Strategy

Before joining Cecelia Health, Michael served as Chief Product Officer for Govini, a commercial data and analytics firm providing National security leaders with decision-grade information to advance America's security and competitiveness. Prior to Govini, Michael was VP and Practice Leader for the Business of Data consulting practice at Outsell, where he advised information service providers and industry on data strategy and data-driven workflow solutions.

In 2011 Michael co-founded NextPHR, a healthcare technology company focused on participatory care management and at home monitoring to shorten the distance between patients and their care networks. Michael also served as Chief Strategy Officer and Head of Product of Onvia, a Nasdaq-listed firm that provides data and intelligence related to federal, state, and local government procurement.



# Cecelia Health Clinical Advisors



Korey Hood, PhD. Mental Health Director

Dr. Hood works in research, clinical, and advocacy settings to promote health and quality of life outcomes for people with diabetes. He is a Professor and Staff Psychologist at Stanford University School of Medicine. From a research perspective, there are two content threads to his work: 1) construct prevention and treatment programs to address modifiable psychological and family factors that create barriers to optimal diabetes management, and 2) optimize the use of devices and technologies to improve health outcomes. Regarding the first thread, Dr. Hood has successfully implemented depression screening programs and conducted large scale clinical trials on a distress prevention program.

From a device and technology standpoint, Dr. Hood is recognized as one of the experts in this area of psychological aspects of devices. In addition, he has implemented Human Factors assessments in national studies and registries to determine strategies to promote uptake and optimize their use. Dr. Hood and his research team have published over 115 scientific articles on these topics and are active presenters at diabetes, behavioral medicine, and advocacy conferences.

Dr. Hood also works in clinical and service settings. Dr. Hood is a licensed clinical psychologist and is part of the diabetes care team at Stanford. He is a past chair of the American Diabetes Association's Behavioral Medicine and Psychology Interest Group and is currently a member of the Research Policy Committee. He was also a member of the ADA's Call to Congress in March 2017. Dr. Hood is an Associate Editor for both Diabetes Care and Pediatric Diabetes.





Chuck Cutler, MD, MS Medical Advisor

Dr. Charles (Chuck) Cutler has more than 35 years of experience managing and leading multispecialty group practices, health plans, and national health insurers, as well as influencing local and national health care policy. He has broad experience in senior leadership roles in health plans, health care strategy, and organizational change management. Chuck has held senior roles responsible for quality measurement and improvement, utilization management, and health care operations. He has developed new products for national health plans that served commercial, Medicare and Medicaid members and his experience includes integrating clinical programs across different lines of business (medical, pharmacy, mental health, disability, etc.). Dr. Cutler has led the planning and implementation of innovative programs for Medicaid recipients with serious mental illness including health homes that integrated behavioral and physical health and the planning and implementation of a health plan specifically for people with serious mental illness.

For health plans, he has led a multi-specialty group practice and developed strategic plans for the growth of pre-paid group practices including the organization, management, and development of the delivery system. He has worked successfully with a variety of organizations to implement programs to more effectively manage the health of their person populations that resulted in improved outcomes and lower health care costs. His experience includes engaging providers to move from a fee for service system to one based on population health and bundled payment.

Dr. Cutler, a fellow of the American College of Physicians, has served as Chief Medical Officer of Magellan Complete Care, National Medical Director and interim Chief Medical Officer at Aetna, Chief Medical Director of America's Health Insurance Plans (AHIP – the trade association for health plans), and Deputy Medical Director of Harvard Pilgrim Healthcare of New England. He has served on the National Committee for Quality Assurance (NCQA) standards committee, the NCQA performance measurement committee, the advisory board for the National Guidelines Clearinghouse, and Institute of Medicine workgroups. He graduated with an MS in Management from M.I.T., a Doctor of Medicine from NYU and a B.A. from the University of Chicago.



# **Cecelia Health Certified Diabetes Educators**

- 2nd largest national team of CDEs in the U.S. (~200) ٠
- Experience in Type 1 & 2 Diabetes
- Average 7 years device experience across team
- 50% direct pediatric Type I experience ٠
- 15 CDEs who have Type 1 or care for children, spouse etc. with type 1 •
- Results-based (Rx persistency, Behavior Change) ٠
- Clinical credentials RD, RN, NP, PharmD, etc.
- Certified Diabetes, Obesity, CVD, Mental Health ٠
- **Technology fluent** •
- Multilingual (English, Spanish & Chinese)









Donna Webb, RD, LD, CDE



Emmie Olivas, RD, CDE



Yanjie Yu, RD, CDE



Jane Abbey, RN, CDE



Jennifer Leske, MS, RD, LD...





Nilda Simone, RN, CDE, AS Vidya Sharma, MA, RD, LD,...



#### Cecelia Health's Commitment to Giving Back

The Novo Nordisk Donnelly Award Scholarships are awarded to male and female athletes ages 14-21 and in good academic standing, who have Type 1 diabetes and play tennis competitively in tournaments or on their school team. The two 2019 national winners received one-time \$7,500 scholarships towards education, tennis development, and personalized diabetes coaching from Cecelia Health's team of Certified Diabetes Educators (CDEs).



Cecelia Health is supporting these athletes using CGM devices to cope with the complexities of balancing their diabetes management with nutrition and exercise at such an intense competitive level.

"Cecelia Health is proud to be able to provide the athletes with the education and support needed to live an empowered life with diabetes and achieve their potential as a high performing tennis athlete"

David Weingard, Cecelia Health CEO





















