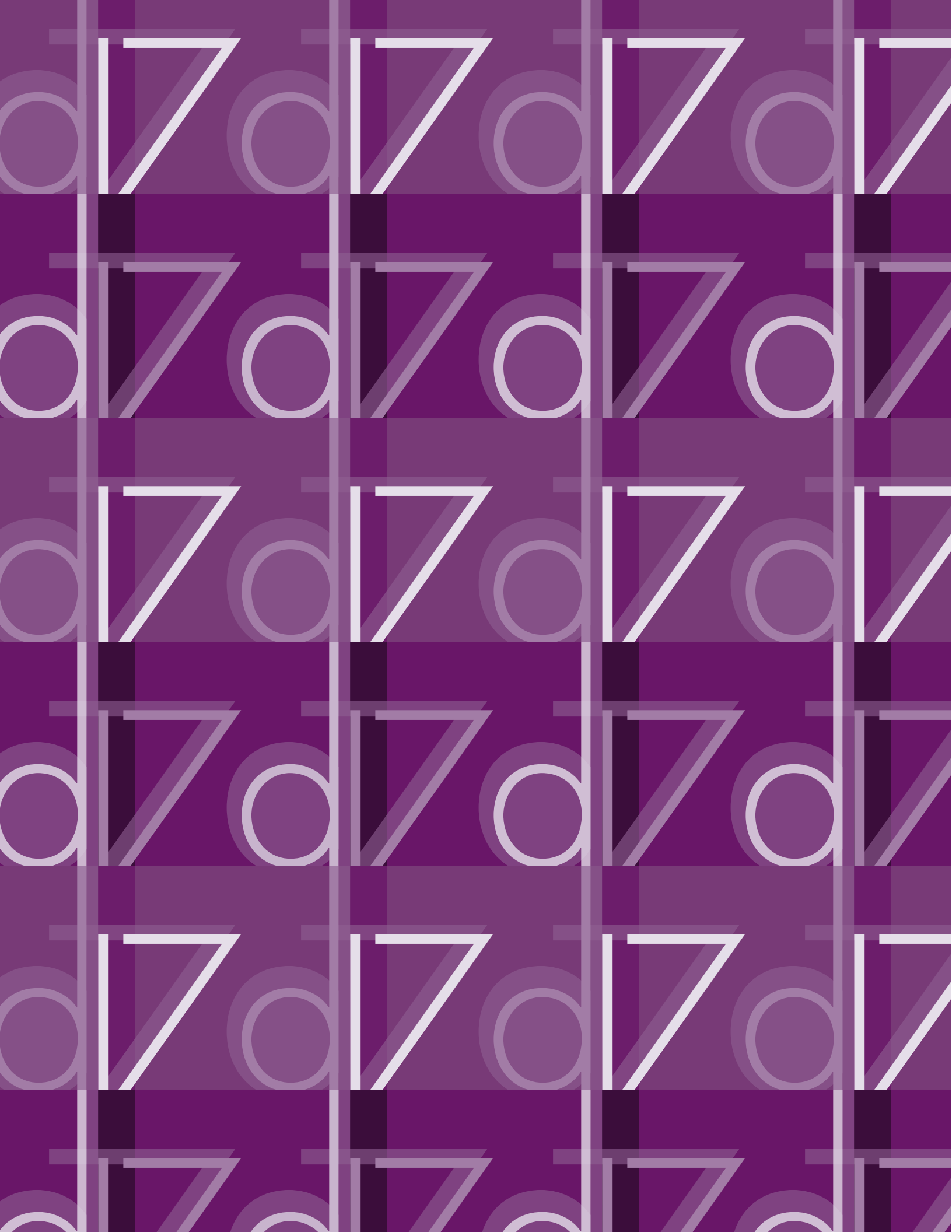




EXECUTIVE INNOVATION LAB
ON DIABETES AND PREDIABETES

**d17 CONSENSUS
OF IDEAS**





ABOUT d17 EXECUTIVE INNOVATION LAB

The diaTribe Foundation hosted d17, the second Executive Innovation Lab in Diabetes and Prediabetes, from September 27–29, 2017, in San Francisco. This three-day gathering brought together more than 70 medical, scientific, policy, and education leaders to change the conversation and make recommendations around type 2 diabetes and prediabetes. d17 was facilitated by Heather McLeod Grant and Alexa Cortes Culwell—Co-Founders/Managing Directors of **Open Impact**, a strategic advisory firm that partners with social change leaders to accelerate their impact. In addition, Dennis Boyle, Co-Founder of **IDEO**, and Dr. BJ Fogg, Director of the **Persuasive Technology Lab** at Stanford University, led workshops about two frameworks—design thinking and behavior design, respectively.



HEATHER MCLEOD GRANT
Co-Founder,
Open Impact



ALEXA CORTES CULWELL
Co-Founder,
Open Impact



DENNIS BOYLE
Founder, IDEO



BJ FOGG, PHD
Director,
Persuasive
Technology Lab

These facilitators guided participants to use design thinking and behavior design to find innovative solutions to the most pressing problems in diabetes, and to build off of **key ideas from d16**, the inaugural Executive Innovation Lab.

This document, the d17 Consensus of Ideas, showcases the new ideas and initiatives d17 participants envisioned. The diaTribe Foundation looks forward to working together with the d16, d17, and future dSeries participants to implement these ideas—by developing creative ways to reduce stigma, working to improve public attitudes and social norms, modifying behavior, pursuing policy change, or redesigning health systems.



To read more about the ideas that emerged from the inaugural dSeries Lab, d16, access the **d16 Consensus of Ideas here**.¹



PROGRAM OVERVIEW

IDEO

Design Thinking with IDEO

d17 kicked off with a design thinking workshop at IDEO, the renowned design firm, in San Francisco. Dennis Boyle, head of IDEO's healthcare practice, along with former IDEO Senior Designer Sarah Mummah and Stanford design student Ben Alpers, gave an overview of design thinking, discussing how to approach problems in a human-centered manner and how to catalyze design thinking projects with questions like "How might we...? What if...? What is the future of...?" The IDEO leaders then challenged d17 attendees with the question: "How might we design a healthier nation?" They pushed the group to consider how changing conditions at the community level could ultimately support the health of a nation. Participants then moved through two components of the design thinking process—inspiration and ideation—to brainstorm creative ideas to improve health at a community level. Some of the group's "wild" ideas included delaying one work day each week to make time for exercise and creating exercise areas in dorms and libraries to encourage physical activity at colleges.

Behavior Design Workshop with Dr. BJ Fogg

In addition to design thinking, d17 participants were introduced to another novel framework called "Behavior Design." Dr. BJ Fogg led a two-hour workshop on the underpinnings of human behavior. His work demonstrates that it is possible to model human behavior, and that there exists a clear way to think about designing for healthier behaviors. Dr. Fogg gave an overview of his well-known Behavior Model—a "formula" for behavior that demonstrates that a behavior happens when motivation, ability, and a trigger (cue or prompt) come together at the same moment in time. Dr. Fogg's top guidelines

for designing for behavior change can be summarized in three maxims:

FOGG MAXIM #1: Help people do what they already want to do. According to Dr. Fogg, behavior change only endures when it helps people do what they already aspire to do.

FOGG MAXIM #2: Help people feel successful. Behaviors that stick are ones that make people feel more successful about themselves, since habits are solidified by an association with positive emotion.

FOGG MAXIM #3: Simplicity changes behavior. A person's willingness to engage in behavior is influenced by both its ease and their own motivation. According to Dr. Fogg, the ease of a behavior is much more modifiable than the strength of the motivation underlying it, and he argued that making behaviors simple to do is the key to sparking engagement.

During the workshop, participants considered one overarching question—what are behaviors that could help a hypothetical woman named "Clara" lose 7% of her body weight and keep it off? After considering 40 different behaviors, d17 participants voted on the behaviors they believed to be most effective. View top behaviors that were ultimately used in the d17 participants' focus mapping session below. Three spaces were intentionally left blank so that participants could write in behaviors that were not listed.

"Let's not have people change behavior alone, but together. There's not one magical behavior that everyone will adopt. And remember: change doesn't happen through motivation alone. Yes, you have to match the person's motivation, then make the behavior easier. Let's not insist that people take big leaps but tiny steps, specifically tiny steps done quickly. These are the guiding principles in helping people change their lives."

—DR. BJ FOGG



Focus Area: Healthy Behaviors to Prevent Diabetes

Cut on dotted lines so each item is on a separate piece of paper.

Take a 10-minute walk every day

Increase your heart rate for 30 minutes per week

Cook three meals a week at home that include fiber, protein and vegetables

Replace evening screen time with walking outside

Get at least 7 hours of sleep

Use an 8-inch dinner plate instead of a bigger plate

Drink eight 8-ounce glasses of water a day

Replace soda with water at every meal from now on

Remove all unhealthy snacks from the kitchen

Eat berries instead of dessert from now on

Take home-made meals to work

Meal prep on Sundays for dinners that week

Download an app that helps you drink more water

Share healthy lifestyle aspirations with family and friends

Meditate for five minutes every morning

Don't snack or eat 2-3 hours before bedtime

Carry small, healthy snacks in your bag

Fill half your dinner plate with vegetables

Order vegetables instead of side dishes such as rice, pasta, or bread

For one week, check your blood glucose before eating and 90-minutes after

Always start grocery shopping in the produce section

Revisiting Work from d16: “Big Challenges, Big Solutions”

Participants began d17 eager to discuss the progress made in the months between the dSeries meetings, including key projects and outcomes that stemmed from the d16 Executive Innovation Lab. Notably, the imminent launch of The Anthology of Bright Spots in Type 2 Diabetes and Prediabetes represented tangible headway. This publication showcases inspiring successes that decrease the societal burden of type 2 diabetes, featuring programs in prevention, workplace wellness, and healthcare teams of the future. The idea for the Anthology of Bright Spots was conceived at the d16 Executive Innovation Lab, when Dr. James Gavin asked, “What’s working? Where can we find out about existing successes?” The diaTribe Foundation took the lead on this project and set out to compile an inventory of existing programs to draw insights about the common traits of successful interventions across different populations. We hope that the Anthology of Bright Spots will promote awareness, collaboration, further innovation, and investment in promising efforts.

“The most important thing to come out of d16 was the process of design thinking and thinking outside the box and big outside solutions. If we can take that process back to our respective organizations, we will magnify the rate of change and improvement.”

—DR. KELLY BROWNELL

“diaTribe is such an important catalyst whose impact will only grow and strengthen as we continue to populate the diabetes universe with the power of design thinking and the new tools and solutions that emanate from this process. I’m ecstatic over the introduction of the Anthology of Bright Spots[...]—what an impressive repository of information that focuses on actual strategies for diabetes prevention.”

—DR. JAMES GAVIN

Mini TED Talks

Ten d17 participants presented on the work they had done over the 18 months between d16 and d17, highlighting how their efforts related to the themes discussed at this gathering. Each presenter left the group with a sense of the momentum around topics like prevention, policy change regarding sugar-sweetened beverages (SSBs), and “food as medicine” initiatives. To read summaries and full transcripts of these talks, please see our [full d17 report](#).²

Talk Title: “How Might We Transform Diabetes Behavior?”

Presenter: Adam Brown, Head of Diabetes Technology and Digital Health at Close Concerns and author of *Bright Spots & Landmines: The Diabetes Guide I Wish Someone Had Handed Me*

Talk Title: “Building a Healthy City: Shaping Toronto’s Waterfront into a 21st Century Community”

Presenter: Will Fleissig, President & CEO of Waterfront Toronto

Talk Title: “The Private Sector Role in Collective Impact”

Presenter: Kim Fortunato, President of Campbell Soup Foundation

Key Message: Ms. Fortunato gave an overview of the Campbell Soup

Talk title: “Diabetes, Vulnerability, & Resilience: New Research Tools”

Presenter: Dr. David Napier & Dr. Anna-Maria Volkmann, Professors of Medical Anthropology at University of College London

Talk title: “Designing for Societal Change”

Presenter: Dr. Rita Nguyen, Assistant Health Officer and Chronic Disease Physician Specialist for the San Francisco Department of Public Health

Talk title: “Bright Spots in the Shadows”

Presenter: Benjamin Pallant & Amelia Dmowska, Senior Associates at The diaTribe Foundation

Talk title: “UCSF Healthy Beverage Initiative”

Presenter: Dr. Laura Schmidt, professor of Health Policy at the UCSF School of Medicine



MINI TEDTALKS

WILL FLEISSIG
 BUILDING HEALTHY COMMUNITIES
 BEYOND OPEN LANDS

INTEGRATED SYSTEMS
 - LINK TRANSIT TO OPEN LANDS
 - BE OUTSIDE DURING A SESSION
 - CONNECTIVITY

TRANSFORM LEFTOVER PLACES INTO COMMUNITIES

HEALTHY LIFESTYLE IS A NORMAL WAY OF LIFE.

DEVELOP ENV'T.

DAVID NAPIER, MARIA VOLKMANN
 DRIVING WITH CAPABILITY AND EQUITY

NEW EVIDENCE-BASED RESEARCH SOCIAL & CULTURAL DRIVERS

HUMAN BEHAVIOR DOESN'T HAPPEN IN A LAB

ALREADY SOME INTERESTING MESSAGES

ANALYSIS RESEARCH

KIM FORTUNATO
 LIQUID BREAK + HOPE

CAMPEN IS COMMITTED

FAIL FORWARD THERE WAS NO DEMAND

OUTCOMES
 - FRESH R. RESOURCES LEVERAGED
 - PUBLIC WILL TO CHANGE

COOPER STORES

100% REDEMPTION

\$10 YEARS MILLION

DAVID LEE STRASBERG
 CHANGING PERSPECTIVE + ATTITUDE IN A MINUTE

WE NEED MORE STORIES

START WITH THE INDIVIDUAL!

NEED MORE UNDERSTANDING

CREATE SPACE
 - GET UNCOMFORTABLE
 - HANG CONVERSATIONS

I GET TO CONNECT TO OTHERS

RITA NGUYEN
 DESIGNING FOR SOCIAL CHANGE
 THINK BEYOND THE INDIVIDUAL!

WHAT HAPPENS OUTSIDE MY OFFICE?

DIAGNOSES HAPPEN IN ALL ASPECTS OF OUR LIVES

FAMILY - SCHOOLS - HEALTHCARE - SOCIAL WORKPLACE

CHANGING SOCIETY and SOCIAL NORMS HAS THE BIGGEST IMPACT

I WANT TO BE A CHANGEMAKER WITH A PATIENT

O. OOTK YOU AS YOU ME

BEN PALLANT, AMELIA DMOVSKA

INVISIBLE

ANTHOLOGY - IMPACTFUL - SCALABLE - SUCCESSFUL

PREVENTION WORKS WHEN IT'S SO EASY YOU DON'T EVEN KNOW YOU'RE DOING IT...

CHINESE NOW REASONABLE IT'S OUR START!

"MY MOM WAS DIAGNOSED IN THE 1990s. DR. GAVIN YOU SAVED HER LIFE."

INTEGRATED INTO OUR LIVES

ADAM BROWN

100 TASTY HABITS

SHIFT MINDSETS

TEACH PEOPLE TO FORK + REPLICATE

TEST NEW THINGS OR BE MORE SPECIFIC

HOW TO? CO-CULTURAL HEALTHY THINKING

SHUT DOWN THE POLICE TRAINING CLASS OF MUSCLE MATTER TODAY!

LAURA SCHMIDT

WHAT MESSAGE DO WE SEND?

IT'S ABOUT PRIVATE SECTOR INNOVATION

SMALL CHANGES MAKE A BIG IMPACT IN PEOPLE'S LIVES

UCSF

SOFT BANK

11% DECREASE IN CONFIRMATION IN ONE YEAR

Talk title: “Changing Stigma & Attitudes in the Media”

Presenter: David Lee Strasberg, Creative Director & CEO of the Lee Strasberg Theatre & Film Institute

Keynote Speech by Dr. James Gavin

Presenter: Dr. James Gavin III, CEO & Chief Medical Officer, Healing Our Village, Inc.

KEY INSIGHTS, THEMES, AND “AHA” MOMENTS

The breakout group discussions produced several key insights and “Aha” moments about the diabetes ecosystem:

Listening & Mobilizing to Decrease Stigma

Messages around diabetes are in conflict when assigning blame—we identify diabetes and obesity both as “diseases” and as “personal choices.” The messaging of personal choice vilifies individuals rather than the disease or its societal drivers.

To raise awareness about diabetes and to change public attitudes, the diabetes community must learn from past movements, develop a clear picture of similarities and differences within the diabetes and prediabetes community, create urgency about the type 2 epidemic, humanize diabetes, spread diabetes literacy, and identify key players in the movement, including media representatives and policymakers.

“[T]he more we see that others are like us, the harder it is to stigmatize and distance ourselves.”

—DR. CYNTHIA GROSSMAN

“Medical folks are the ones who say this is a disease and then in the next sentence emphasize it is a personal choice, but those changes didn’t occur because human population suddenly got lazy. There’s only one way to interpret such a rapid rise—there must be other drivers beyond our control.”

—DR. LEE KAPLAN

Re-Designing the Healthcare System

A variety of potential reforms of the healthcare system include: using technology to automate systems

and processes; re-designing medical education to emphasize nutrition, wellness, and prevention; and creating incentives for employers to emphasize chronic disease management and prevention.

To promote behavior change, the healthcare system must create better experiences for patients. Appointments and prescription pickups should help patients feel encouraged about managing their disease, rather than exhausted and apathetic toward their health.

“We need to take a step back and examine our completely misaligned payment system that isn’t responsible for health of patient. Without creating responsibility for anything outside of episodic care and readmission, we won’t get the system to change, and we won’t be able to incentivize young med students to care. How do we create appropriate incentives?”

—KATHY REGAN

“The physician needs to touch base with the patient for 15 seconds every day versus 15 minutes every 3 months. We need technology and software to monitor patients, with data protocols based on standards of care.”

—SAMI INKINEN

Prioritizing Prevention

Prevention interventions—especially primary prevention—should be easier, requiring less effort and motivation. Environmental interventions should reinforce social norms of healthy behavior.

Demonstrating the economic value of healthy behaviors is essential to gain support for prevention,



INNOVATION *breakouts*

WHEN TO COMBINE TYPE 1 and 2

ASK EMOTION CONNECTION

PUBLIC AWARENESS SHOW UP DAY

DIABETES OBESITY vs TYPE 2

I CAN NOT ALONE

STIGMA OR A HABIT

METABOLIC DISEASE

REDUCE STIGMA IMPROVE ATTITUDES / SOCIAL NORMS

PRIMARY CARE

WHAT DO THEY DO?

HOW DO THEY GET PAID?

WHO GETS CREDIT?

INTEGRATED TEAM

TREATMENT OF ACUTE

HOW DO THEY GET THEM TO VALVE

WHAT DO THEY NEED?

REDESIGN HEALTHCARE SYSTEM

RULE TO FIND BEST PRACTICES

CONSOLE

BRIGHT SPOT

DIABETES REMISSION

PARADIGM SHIFTS

SMALL PILOT BINGING

HOW DO WE THINK MATTER STEPS?

PROGRAMS LOCAL

HOW TO MAKE POLICY A PRIORITY

FOCUS ON DATA (MOST IMPACTFUL POLICIES)

CAPITALIZE ON SOCIAL CAPITAL

MESSAGING

NOW IS AN OPPORTUNITY FOR HYPERLOCALS

REBUILD OVERLIES

FOCUS ON CHANGE

LONG-TERM = PURPOSE

CREATE/CHANGE POLICY

NO ONE SOLUTION

PROFESSIONAL

SMALL CHANGE

WORKPLACE TO AFFECT CHANGE

SOBER FREE

SOCIETY APPEALS TO HEALTHY LIFESTYLE

DIFFERENT FOOD BANK MODEL

BETTER NUTRITION

FOCUS ON PREVENTION

PREVENTION

PREVENTION SOCIAL

PREVENTION MEDICAL

FOCUS ON THE NEED

FOCUS ON THE NEED

OPTIMISM

NULLA BELIQUIS

SIMPLEST BEHAVIOR FOR BIGGEST IMPACT

CONSENSUS SUGAR = FIRST STEP

COCA

SMALL STEPS ... SMALL SUCCESSES

DIETORS

PROVIDER

CELEBRITY

POWER

BEHAVIOR CHANGE

especially in the private sector. In the public sector, increasing the sense of urgency around diabetes and prediabetes remains a major challenge.

“We need to go beyond information because information doesn’t necessarily motivate behavior change; we need to motivate in order to fully engage individuals in the process and the willingness to change.”

—DR. ALAN MOSES

“Frankly there is no urgency. Compare diabetes funding to cancer and AIDS. All are horrible diseases, but these have 300 times per patient more funding than diabetes.”

—DR. WILLIAM CEFALU

Designing Programs that Result in Behavior Change

Behavior design techniques could make health care professionals (HCPs) more successful in supporting patients. It is important to consider ways to make it easy (and incentivized) for clinicians to employ behavior design principles.

Shifting the standard patient-provider relationship to one centered around the patient would allow for emphasis on the patient’s priorities and concerns, assessment of ability and readiness for changes, and focus on the type of motivation that works for each specific person.

“Behavior change is a skill. The more you practice habit formation, the better you get. You don’t start with a concerto, you start with little things and build up.”

—DR. BJ FOGG

“Focusing on an individual’s own preference and what’s easy and comfortable and desirable for them to do, whatever that behavior that is—as long as it’s in the right direction of healthiness—is a small step in and of itself and will beget other positive changes. I think the problems and complexity of diabetes and obesity seem so overwhelming sometimes in terms of how care is delivered, but we can get going with small steps.”

—MARJORIE SENNETT

Changing Policy to Promote Health

Civic engagement and awareness around the public health crisis of diabetes are critical to change policy. Civic empowerment goes hand-in-hand with outrage and urgency—people must be highly motivated to speak up.

Dr. BJ Fogg’s behavior design methods can influence public health policies and initiatives that make healthy behavior change “feel good” and thus encourage people to continue healthy behaviors.

“The patient has to be front and center; the patient has to be acknowledged and empowered to speak for himself.”

—LORRAINE STIEHL

“The challenges that the community faces stems from a lack of political will and support. Over generations, this lack of support completely erodes your willpower over time. We need more urgency, more hope.”

—DR. SHREELA SHARMA

Strengthening Capital, Data, & Evidence

The evidence around lifestyle interventions for reducing type 2 diabetes risk remains fragmented; there is disagreement on what qualifies as robust and compelling research.

The meaning of “evidence” comes largely from its ability to have a tangible impact. Translating evidence for stakeholders—including policymakers and funders—is necessary for change to happen.

“Evidence doesn’t matter if it goes nowhere. It needs to go into the public mind; it needs to go into the hands of people in power. There’s a science around how to convey evidence to different people to get action. We need to package evidence in the right way.”

—DR. LAURA SCHMIDT



MOVING to ACTION



CONCEPTUAL INITIATIVES, PILOTS, AND OTHER BRAINSTORMS GENERATED AT D17

Summarized below are the 12 ideas that came out of d17 that the participants deemed the most impactful. They are not final proposals, and we welcome any feedback to further develop and improve upon them.

Idea #1

WORKING TITLE: Scaling & Spreading the “Healthy Beverage Initiative Toolkit” to Reduce Consumption of Sugar-Sweetened Beverages

SUMMARY: At d17, Dr. Laura Schmidt presented on her work spearheading the UCSF Healthy Beverage Initiative. As of November 2015, sugar-sweetened beverages (SSBs) were no longer sold on any of the UCSF campuses. Instead, onsite cafeterias, food vendors, vending machines, campus caterers, and retail locations only sell zero-calorie beverages or non-sweetened drinks. Dr. Schmidt described an evaluation of 2,500 UCSF employees since the Health Beverage Initiative began. Her data demonstrated that overall soda consumption declined by 11%, and lower-income employees—those at highest risk for diabetes—had the biggest reduction in soda. Dr. Schmidt noted that the equal protection clause of the US Constitution allows an employer to choose what it spends money on. As such, employers can decide whether to sell soda and other SSBs on their premises. This is promising, as it means that employers across the country could choose to end soda sales, potentially at a faster rate than governments could institute related policies like soda taxes. Creating a Healthy Beverage Initiative is no small feat, however. Dr. Schmidt and her colleagues worked for years to make this happen, and they spread extensive knowledge about the effects of SSBs among top officials, faculty, staff, students, and visitors at UCSF in order to gain traction. After learning about the UCSF Beverage Initiative, d17 participants saw potential in replicating Dr. Schmidt’s work at health centers, college campuses, and other institutions across the country. Luckily, Dr. Schmidt and her partners at the UCSF **SugarScience Initiative** have

created a “**Heathy Beverage Initiative Toolkit**” which outlines steps that any person or group could take to similarly end SSB sales in their organization or community. This kit includes sample language, promotional materials, and educational information to help garner support for the movement. By distributing this kit to advocates from a variety of organizations, the Healthy Beverage Initiative would become a model for other efforts to reduce soda consumption.

POTENTIAL SYSTEM IMPACT: Employers, hospitals, academic campuses, and other large organizations can have a tremendous impact on the health of people who occupy their spaces. UCSF Medical Center, for instance, is the second largest employer in San Francisco; not only does UCSF set an example in stopping soda sales, it also makes it easier for people to avoid the temptation of buying and drinking soda on the campus. Other large employers, hospitals, and college campuses could make a similar impact in their cities. By distributing this toolkit to advocates nationwide, this initiative would take a grassroots and relatively cost-effective approach to fighting Big Soda companies that have historically fought measures like soda taxes. As Dr. Schmidt’s data demonstrates, making soda and other SSBs less available decreases their consumption, particularly in those who are at highest risk for health problems. Because soda and other SSBs are linked to increased risk of diabetes, soda removal could improve the health of millions. Ultimately, these initiatives might inspire wider policy changes and help the soda tax movement gain even more momentum.



Idea #2

Working Title: Designing Interventions for Pregnant Women

SUMMARY: The number of women with gestational diabetes mellitus (GDM) has **skyrocketed in recent years**.⁴ According to the CDC, **up to 9.2% of pregnant women** in the US are affected by gestational diabetes—and probably far more who don't know it.⁵ Though all women have some degree of insulin resistance during pregnancy, gestational diabetes typically develops in women with risk factors like older age, higher BMI, and family history of type 2 diabetes and prediabetes. GDM can lead to complications during pregnancy, and though it often recedes after the baby is born, about 50% of women with gestational diabetes develop type 2 diabetes later in life. Children of women with GDM are also at higher risk of developing type 2 diabetes. During pregnancy, women may be especially motivated to take care of their own health so that their child is born without complications, and they typically have more frequent interactions with healthcare providers. d17 participants noted that, as a result, women with GDM—and pregnant women overall—are uniquely well-suited to establish positive lifestyle habits and to decrease their future risk of type 2 diabetes. This combination of motivation and exposure to health professionals could be leveraged by providing women comprehensive training related to healthy eating and activity during pregnancy. Among other things, programs for pregnant women could incorporate nutrition classes into birthing classes and provide fruit and vegetable prescriptions for pregnant mothers. Initiatives that improve access to care, provide guidance on physical activity and nutrition, and supply resources like healthy food during pregnancy could drastically reduce future incidence of type 2 diabetes.

POTENTIAL SYSTEM IMPACT: Comprehensive lifestyle interventions during pregnancy and postpartum can help women and their children stay healthy for years to come. Even women who aren't diagnosed with GDM could benefit tremendously from focused care during this time.

Affordable, comprehensive prenatal programs nationwide would not only promote the health of the mother but also of her child, and potentially her entire family. If the number of women who develop type 2 diabetes later in life after having gestational diabetes were reduced, the systems impact would be tremendous—an investment in this period could reap compounding long-term health benefits and massive cost savings. To produce a compelling case for these types of interventions, we also recommend conducting updated, national economic cost-benefit analyses, building from **previous studies that have examined cost effectiveness**, to demonstrate the exact savings.⁶

Idea #3

Working Title: Expanding Healthy Food Prescription Programs Nationwide

SUMMARY: The notion of “food as medicine” is gaining traction, with **studies clearly demonstrating** that healthy eating and access to nutritious foods help people prevent and manage diabetes more effectively than medications alone.⁷ Notable examples of prescription food programs include **Geisinger Health System's Fresh Food Pharmacy, Wholesome Wave's Fruit and Vegetable Prescription (FVRx) Program, and UCSF Food as Medicine Initiative**. Through these programs, physicians are able to give patients a prescription for fruits, vegetables, and other nutritious foods. The prescription is typically in the form of a redeemable voucher at participating stores or a discount coupon for healthy foods. These programs target lower-income populations for whom food insecurity is a major barrier to health. A healthy food prescription's impact is multifold; a tangible prescription may be more motivating than verbal instructions on healthy eating, and it directly improves access by reducing cost barriers to healthy eating. At d17, Dr. Rita Nguyen, Assistant Health Officer and Chronic Disease Physician Specialist for the San Francisco Department of Public Health, spoke about UCSF's Food as Medicine Initiative and food pharmacy prototype, in which people can fill prescriptions for healthy



foods, meet with nutritionists, and attend cooking demonstrations. Studies on the results of food prescription programs like this one have indicated tremendous success; for instance, 69% of Wholesome Wave program participants ate more produce at the end of the program, and **47% reported a decrease in their BMI.**⁸ If all physicians had the ability to prescribe food as medicine, and perhaps even refer patients to cooking classes, then they could directly improve food access, decrease food insecurity, and support healthy eating habits of millions of Americans. To make this a reality, physicians across the country would need to advocate for the ability to prescribe food as medicine within a variety of health and healthcare systems.

POTENTIAL SYSTEM IMPACT: By connecting programs and sharing resources, tools, and expertise, existing food as medicine initiatives could gain footing on a national level. Together, these initiatives could engage policymakers and taxpayers by showcasing their successes. Ultimately, acquiring funds to launch a nationwide fruit and veggie prescription program remains a significant obstacle; however, clear demonstration of the cost savings of existing programs could convince companies, health systems, and government officials that these programs are well worth the initial cost. For instance, Target partnered with Wholesome Wave in 2016 to expand their prescription model, and d17 participants saw much potential for partnerships with other grocers and retail chains. d17 participants suggested that physicians would be staunch—and effective—advocates for starting these types of programs in their own hospitals and practices; they just need the tools and expertise to advocate for food as medicine initiatives. d17 participants suggested bringing together representatives of various food as medicine initiatives to share these tools and resources, culminating in a report or toolkit to empower physicians to take action. Ultimately, a nationwide Healthy Food Prescription program or broader food as medicine initiative could tremendously benefit the healthy eating habits of millions and result in significant long-term savings related to diabetes and obesity.

Idea #4

Working Title: Continuous Glucose Monitoring as a Public Awareness Program for Healthcare Professionals

SUMMARY: Continuous Glucose Monitoring (CGM) systems are devices that track blood sugar levels in real-time.⁹ Unlike blood glucose meters, CGMs provide people with diabetes a constant stream of information about their blood sugar levels throughout the day without the need for frequent finger pricks. CGM devices also sound alerts if blood sugar levels venture below or above the safe range. Continuous Glucose Monitoring allows people to rapidly access their blood sugar levels and assess the factors that affect them on a real-time basis. **Research has shown** CGM can help people with type 2 diabetes manage their blood sugar and reduce their A1C level more effectively than finger prick-based monitoring alone.¹⁰ d17 participants identified significant need to improve access to this technology so that more people with diabetes are able to reap the benefits. Participants also saw tremendous potential in using CGM to help medical students and healthcare professionals understand the **many factors that can cause blood sugar to change**, including diet, exercise, and sleep.¹¹ For instance, 1,000 healthcare professionals, perhaps those who are themselves at risk for developing type 2 diabetes, could wear CGM for a few weeks. During this period, they could experiment with a variety of different diets—such as low- and high-carb—or varied daily routines—such as walking after meals or intermittent fasting—to see the direct impact of these changes on their blood sugar. d17 participants predicted that this type of experimentation would have a multitude of effects, including increasing healthcare professionals' awareness about: the variability of blood sugar, the variety of factors that impact blood sugar levels, the value of CGM, and the impact of certain types of diets. Partnerships with health systems or other organizations could potentially fund this project.

POTENTIAL SYSTEM IMPACT: This project could begin with medical students specifically, and then expand to a variety of healthcare professionals,



including diabetes educators, nurses, primary care physicians, and others. Wearing CGM would give medical students and healthcare professionals a direct look into living with diabetes and an intimate understanding of the complexity of managing one's blood sugar on a daily basis. This knowledge would allow healthcare professionals to be more empathetic and supportive when treating people with diabetes. They would have increased appreciation of the ups and downs of blood sugars, and thus would be better able to tailor recommendations for managing diabetes. Based on their own experiences using CGM, healthcare professionals could also suggest a variety of changes to eating and exercise habits. These suggestions would carry the weight of health professions' personal experiences, and therefore be more compelling to patients. Wearing CGM would also showcase the impact of access to technology. By using these devices to monitor their own blood sugar, health professionals would better understand the necessity of having the tools that allow people to change their food intake, activity, and medication dose based on thorough, real-time data. Firsthand experience wearing CGM, therefore, may push healthcare professionals to advocate for greater access to technology, especially for lower-income patients.

Idea #5

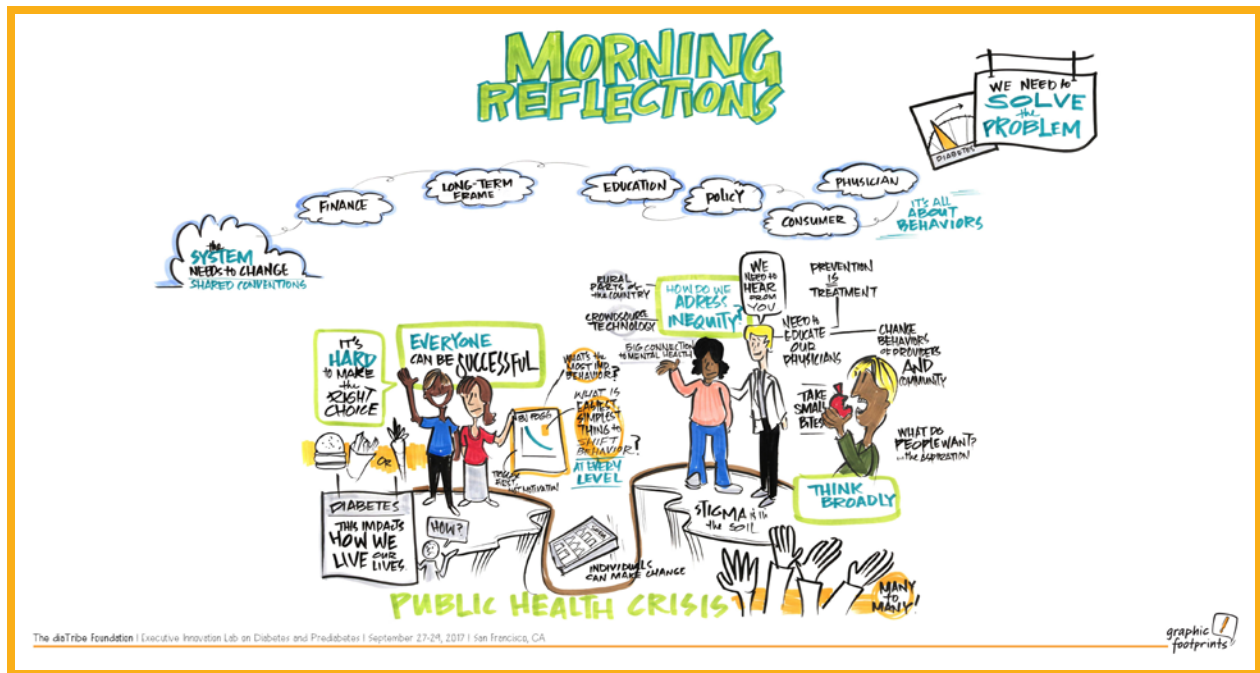
Working Title: Reaching Consensus on What “Healthy” Really Means

SUMMARY: Over the last few decades, the American definition of “healthy food” has shifted drastically. In 1992, the **government shared its “Food Pyramid,”** which pictorially demonstrated that the majority of an individual's food intake should come from breads, grains, and pastas. In the meantime, fats and oils were grouped with sweets in the “Use Sparingly” category, entirely disregarding the health benefits of plant oils. Nutritional guidance like this may have contributed to increased consumption of refined carbohydrates—a dietary shift which **correlates with the increased prevalence of type 2 diabetes.**¹² Contrary to these guidelines,

some studies have shown that diets low in carbohydrates and full of natural fats promote weight gain and may improve risk factors for coronary heart disease.¹³ As experts debate the quality of evidence and the accuracy of a variety of nutritional studies, the media offers a flurry of contradicting messages. One week we are told, **“Official advice on low-fat diet and cholesterol is wrong, says health charity,”**¹⁴ and the next we are asked, **“Does a Low-Carb Diet Really Beat Low-Fat?”**¹⁵ d17 participants considered these conflicting messages and asked, what is really the “healthiest” diet to prevent diabetes? What does it mean for food to be “diabetes friendly?” Though a variety of diets have demonstrated a reduction in type 2 diabetes risk—including **Mediterranean, Nordic, ketogenic,** and others—which diet is the most effective? Depending on culture, background, and taste, these different types of diets might indeed be better suited for different people; however, a lack of general standardization contributes to mass confusion and speculation about what “healthy” means among the general public. d17 participants emphasized a need for more clarity and true scientific consensus around what it means to eat “healthy” foods, particularly those that are “diabetes friendly.” To reach this consensus, extremely high-quality and robust randomized controlled trials on nutrition must be funded to examine the long-term impact of various diets on health outcomes. Only consensus on nutritional guidelines can help health professionals and governments provide cohesive, effective messages around healthy eating.

POTENTIAL SYSTEM IMPACT: With mixed messages from the media, health professionals, and the government around what counts as “healthy,” it is difficult for the public to understand which food choices are most appropriate. Healthy eating is critical to diabetes prevention and management, and though there are some universally acknowledged principles of healthy eating, there remains a scarcity of clear evidence regarding the most appropriate diets for people with diabetes. Definitive nutritional guidelines could help clear up ambiguities that remain from now-discredited suggestions and could help inform the creation of more valuable nutrition labels. These guidelines would help health





professionals, diabetes educators, government agencies, and others provide cohesive recommendations for all people with diabetes and prediabetes. Though personalization of diets and nutrition will remain a critical component of physician and nutritionist visits, definitive guidelines which are accepted by the government and scientific community are necessary to lay the groundwork for this type of personalization.

Idea #6

Working Title: A “Diabetes Friendly” Symbol for Food, Restaurants, and More

SUMMARY: Certain causes have highly-recognized symbols that are associated with their messages and missions; a pink ribbon, for instance, has become an international symbol for the breast cancer movement. Other symbols are standard on food packaging and menu items, like marks on gluten free, vegetarian, kosher, or organic foods. Some of these symbols are even now regulated by government officials; packaged foods sold in India must **include a mandatory mark** to indicate vegetarian or non-vegetarian content. The United States Department of Agriculture **released comprehensive organic food standards** back in 2000. The FDA **established gluten-free food labeling guidelines** in 2013.¹⁶ After considering food labeling successes like these, d17 participants

noted that a “diabetes friendly” symbol could help people with or at risk for diabetes easily choose healthy foods in grocery stores or at restaurants. A “diabetes friendly” symbol might even become associated with quality, in a similar way to foods labeled “fair trade” or “non-GMO.” An online database could list the foods and restaurants that meet the bar for being “diabetes friendly,” creating a convenient way to plan ahead and check which options are healthiest. To execute the “diabetes friendly” labeling, d17 participants emphasized the importance of i) reaching consensus on nutritional guidelines (see Idea # 5) and ii) learning from other labeling initiatives. The American Heart Association’s (AHA) **Heart Check Food Certification Program**, for instance, marks certain food packaging with a stamp of approval if the food meets AHA’s nutrition requirements and government regulatory requirements for making a coronary heart disease health claim. Food manufacturers pay administrative fees to the AHA to cover operating expenses for participation in the labeling program, making it sustainable. Similarly, a **“Smart Choices” nutrition labeling program** was developed years ago using a set of nutrition criteria, hoping to promote voluntary adoption of the “Smart Choice” symbol by manufacturers and retailers. However, the program halted its efforts after the **FDA announced its efforts to develop standardized criteria for future front-of-package nutrition labeling.**

d17 participants expressed a big need for a “Diabetes Friendly” symbol that would help guide healthy food choices for people with and without diabetes. This symbol could potentially leverage the success of existing symbols, like the AHA’s Heart Check, or even refine the AHA guidelines once consensus is reached on “Diabetes Friendly” nutritional guidelines (again, see Idea #5), if there may be power in combining the two symbols. Currently, the **international diabetes symbol** is a blue circle developed by the International Diabetes Federation in 2006, which is used as the official logo for World Diabetes Day. This existing symbol could be adapted or transformed for the “diabetes friendly” symbol for food packaging and restaurants.

POTENTIAL SYSTEM IMPACT: A visible, recognizable identifier for “diabetes friendly” products, meals, and restaurants could help guide healthy food choices across the US and beyond. Based on the success of other symbols like gluten free and organic symbols, this “diabetes friendly” symbol has the potential to spread quickly on food packaging and menus. Studies have reported that the American Heart Association’s Heart-Check symbol has **measurably helped consumers identify and eat healthier foods** that lower their risk of developing cardiometabolic syndrome.¹⁷ A “diabetes friendly” symbol can create a similar impact, helping people choose food that support their diabetes management and overall health. A symbol like this would not only promote identification of healthy food choices, but would also raise awareness about diabetes and prediabetes. Since this symbol would be located on packages and restaurant menus, it would bring diabetes to the attention of families, shoppers, and restaurant-goers on a daily basis. Ultimately, this symbol would also encourage food manufacturers to produce healthier products, as they would only be able to use the symbol if their food met the nutrition requirements.

Idea #7

Working Title: “300 Small Healthy Behaviors”—A Toolkit for HCPs

SUMMARY: A key challenge in supporting healthy behavior change is knowing which specific behaviors any one person should—and shouldn’t—focus on. At d17, Dr. BJ Fogg taught participants about “behavior matching,” a crucial concept in behavior design. As background, Dr. Fogg calls a person’s ultimate goal for performing a given behavior his or her “aspiration.” A variety of different behaviors might all point toward a single aspiration. For instance, one’s aspiration to lose a certain amount of weight could be achieved through a number of different behaviors or combinations of behaviors, such as using a smaller dinner plate, counting steps, walking to work, or drinking water in place of soda. To generate a collection of possible behaviors, Dr. Fogg uses his “Swarm of Behaviors” or “Swarm of Bees” method—read more on page 21 in **our full report**. Because of the variety of behaviors that could lead to a desired outcome, no single behavior will be the right one for everyone, at least to start with. Some people may not enjoy certain behaviors or may not be able to fit them into their lives. As a result, individuals must be “matched” with the behaviors that are best for them—the ones that are easiest for them and that they are most motivated to perform. With proper matching, people will be much more likely to reach their desired outcome or aspiration. d17 participants reflected on the “matching problem,” as Dr. Fogg calls it, noting that it serves as a barrier to successful care for people with diabetes and prediabetes. Healthcare professionals often lack the time to learn about each patient’s ability, willingness, and desire to perform behaviors. Blanket suggestions for behavior change (“walk more” or “eat fruits and vegetables”) are less likely to work than specific behavior matching. To help HCPs match behaviors to aspirations, d17 participants suggested creating a toolkit of “300 Small Healthy Behaviors.” This toolkit would include specific, concrete behaviors and link them directly to health-related aspirations and outcomes. HCPs could then use this toolkit



to help patients identify the best behaviors to perform to meet their personal goals. This toolkit would tie behavior change modeling directly into individualization of care, helping patients adopt more effective health behaviors that match their lives.

POTENTIAL SYSTEM IMPACT: Lack of personalization presents a major obstacle in many health interventions. While people hear about the behaviors they “should” do—eat healthier, exercise more—the lack of specificity makes it hard to actually take action. Breaking down larger changes into specific, small behaviors and then “matching” these behaviors to defined aspirations can be far more effective. If a patient’s aspiration is to lose a defined amount of body weight, for instance, the recommendation to “include one source of fiber in breakfast daily” is far more concrete than “eat healthier.” Other ideas for small behavior changes include replacing white grains with whole grains, taking a 10-minute walk every day, and drinking one glass of water before every meal. To view 40 other behavior ideas that could help someone lose 7% of body weight, see page 22 of our [full d17 report](#). Having an inventory of small, healthy behaviors on hand can help HCPs discuss which specific steps seem most feasible for each of their patients. Patients will then be able to try these behaviors in their daily lives; if they don’t work out, they can go back to their providers and discuss other items to attempt. Through trial and error, this toolkit will not only help HCPs feel more successful in personalizing care, but will also help patients feel more successful in their attempts to live healthier lives.

Idea #8

Working Title: Integrating Cues for Healthy Behavior Change into Existing Technology

SUMMARY: Digital technology is used by billions of people worldwide, [especially young people](#). Technology has a massive influence on people’s daily behaviors, particularly on how much time they spend in a sedentary position. In addition, social media and other platforms like Facebook,

Instagram, Twitter, Snapchat, and YouTube have unique influence over the attention and mindset of the billions of people who use them. In recent years, technology has made massive strides in new innovation and apps to promote wellness, including wearable tech like Apple Watches and Fitbits that track movement and nudge users to be active. A plethora of apps, like WaterMinder, Nike Run Club, HeadSpace, Lifesum, and MyFitness Pal—to name a few—also help people stay healthy by reminding them to drink water, track activity, facilitate meditation, or record meals and nutritional intake. Despite these health-centered apps, some of the most popular technology platforms still have little orientation toward wellness. d17 participants reflected on the tremendous impact platforms like Facebook, Instagram, Snapchat, YouTube, and calendar apps could have on the behaviors of countless people. By integrating simple cues to get up and move or eat healthy, health behavior change could be prompted through platforms that are already widely used. Facebook, for example, provides a notification each morning that tells you the weather; what if it also shared encouragements to eat a healthy breakfast, and even provided the recipe right there? After every 30 minutes spent watching YouTube videos, viewers could receive a reminder to get up and move for three minutes. Instagram could mix photos of friends with simple tips and encouragement for physical activity. Calendar apps could automatically block off 30 minutes a day for exercise, or five minutes every hour. By adding simple notifications into existing interfaces, these platforms could make a tremendous impact, nudging millions of people toward healthy behaviors on a daily basis. Artificial Intelligence (AI) could maximize this impact to an even greater degree, helping technology learn people’s behaviors and prompting them at appropriate times of day. Ala BJ Fogg, AI could even be programmed to learn about individuals’ goals and “match” them to behaviors that are right for them. This idea could build off of the “mindful technology” movement, including the “Time Well Spent” efforts associated with the [Center for Humane Technology](#).



POTENTIAL SYSTEM IMPACT: Since so many people spend enormous amounts of time interacting with digital technology and online platforms, the potential impact of changes like this would be vast. Since notifications and other pop-up messages are a standard feature of many of these platforms, it would be fairly simple to tailor these notifications toward health and wellness. To make this a reality, leaders of tech companies will need to embrace the movement toward health and push for adding these types of healthy cues into their platforms. Though many of these platforms make money off of keeping the attention of their users (and directing them to click on advertisements), this type of integration would showcase a company's dedication to health and its prioritization of the user's wellbeing. In demonstrating this, companies could gain more users, popularity, and investment. As smartphone ownership rates are rising, including in lower-income populations, this integration would be a way to promote health across a wide range of individuals who may not otherwise have access to tools that support healthy behaviors. Integrating AI systems that actively learn about which behaviors are best for specific individuals would also have high potential to create even larger impact, tailoring cues specific to certain behaviors. Finally, including these types of notifications in commonly-used social media platforms would increase public awareness about the importance of health and wellness, as people would regularly see messages reminding them to stay active, eat well, and take care of their health.

Idea #9

Working Title: Behavior Design x Public Health Training

SUMMARY: A central lesson of Dr. BJ Fogg's workshop on Behavior Design was that human behavior can, in fact, be modeled in an understandable framework. Dr. Fogg taught d17 participants his model for behavior, combining elements of motivation, ability, and a trigger (a cue or prompt) in the same moment of time. In Dr. Fogg's model, a behavior becomes more likely to happen if it is made easier to do or if the

subject is motivated more, given that a trigger or a cue is present. People who are *already* motivated to do a particular behavior are the easiest to reach and influence, and these are the first individuals who should be targeted with specific behavioral interventions. Typically, it is easier to change one's ability to do a behavior than to increase motivation, so even individuals with high motivation but low ability can be targeted. For those people who are *not* motivated to do a certain behavior, it is more effective to select a different behavior that they are better suited for than to try to increase motivation. (For these individuals, it may make sense to return to this behavior later on, once easier behaviors have succeeded and made motivation less of a barrier.) In addition to this behavior model, Dr. Fogg described the "info-action fallacy," an assumption that information causes a shift in attitude or motivation, resulting in behavior change. Information, in fact, is not a reliable source of behavior change. It is generally more effective to help people accomplish behaviors by addressing ability than by helping them understand why behaviors are beneficial. After learning about behavior design methods, d17 participants considered how understanding these elements of human behavior could help public health professionals design more effective interventions to instigate and promote behavior change. If all public health students, for instance, were taught Dr. Fogg's behavior design model, they could apply Dr. Fogg's frameworks in future work to create systems-level policies and grassroots interventions that encourage healthy behaviors. Notably, they would also be empowered to target specific populations with the interventions they are best suited for, leading to greater impact and less inefficiency in public health programming.

SYSTEM IMPACT: By incorporating Dr. Fogg's behavior design training into public health programs, our future health leaders can be equipped with the skills and knowledge to create highly effective programs and policies that help people live healthier lives. d17 participants raved at how Dr. Fogg's teachings were already applicable to their own work, and advocated that these lessons could help the system as a whole if they were included in standard education in



public health curriculum and Masters programs. A few of Dr. Fogg's key guidelines—including his maxims on helping people do what they already want to do, helping people feel successful, and making behaviors simple to do—could help modify existing programs, or could form the basis for designing new interventions. Dr. Fogg's models and methods, developed through over 20 years of research, demonstrate that behavior can be modeled and influenced in a predictable fashion. By giving public health leaders the tools to model behavior, they can be far more effective at helping people lead healthier lives. Masters programs in public health could be the first step; eventually, Dr. Fogg's training could be incorporated into education for a wide variety of health professionals (see more related to this concept in Idea #12).

Idea #10

Working Title: Creating Healthy Buildings by Adapting LEED Standards

SUMMARY: In 1993, the **US Green Building Council (USGBC)** was established to create comprehensive guidelines that promote sustainable building practices. The original council was made up of building firms and nonprofit organizations; together, they shared ideas and eventually created comprehensive standards for the design, construction, and operation of buildings, known as Leadership in Energy and Environmental Design (LEED). Twenty years later, **LEED standards have been applied** to almost 100,000 building projects across 167 countries and territories worldwide and have helped save energy and divert over 80 million tons of waste. What started as an idea to create a symbol of sustainability has become a successful, widely recognized standard for green design. d17 participants wondered: how might similar standards be created to make residential and commercial buildings into healthier environments for daily life? By learning from the successes of LEED, a similar coalition for healthy building standards could establish certification standards. For instance, buildings might require bike storage areas to encourage biking, rooftop gardens

accessible play areas for children, a walking track around one floor, free built-in physical activity equipment, and water filtration systems that encourage drinking water. Some existing LEED standards already focus on health, including certification credits for features like indoor air quality, access to natural light, and smoke free zones. These standards could be adapted and expanded with greater consideration for physical activity and healthy eating to help make healthy behaviors more accessible in the wide range of buildings—apartments, offices, schools, shopping centers, etc.—where people spend the majority of their time. Eventually, these building codes could influence the architecture and planning of cities themselves, helping pave the path for healthier streets, neighborhoods, and communities.

POTENTIAL SYSTEM IMPACT: In addition to saving energy and resources and reducing waste, LEED buildings are cost-efficient, boost employee productivity, and attract residents. Similarly, building certifications like LEED for health could also attract tenants, employees, and visitors. As with LEED, builders and architects would eventually strive to meet the standards for health and thus gain this well-respected mark. Moreover, mirroring LEED's flexible quality could allow existing buildings adapt to meet health requirements. Buildings are able to apply for a specific LEED certification through building improvement work—even with little to no construction. Similar guidelines for health would encourage adaptations of older buildings to transform them into healthier living and working environments. The LEED model is a proven framework, having already gained traction among developers and architects. Altering buildings to meet specific requirements that make healthier behaviors easier to perform has dramatic potential to improve health outcomes around the world.

Idea #11

Working Title: Building Momentum Around Show Up Day

SUMMARY: Participants first conceived of Show Up Day at the d16 Executive Lab. They



envisioned a day where people with type 2 diabetes and prediabetes could openly share their experiences with diabetes. Inspired by the LGBT movement's **"Coming Out" Day**, Show Up Day would strengthen the type 2 diabetes community by decreasing feelings of stigma and loneliness, help eliminate the shame associated with diabetes, and raise awareness of the causes of the diabetes epidemic, including food systems, inequitable access to healthcare, scarcity of safe areas for physical activity, and more. At d17, participants considered the steps needed to execute a successful Show Up Day campaign to raise awareness about diabetes and to change public attitudes about the disease. Participants advised learning from previous movements that have succeeded and failed, including public health campaigns around HIV, vehicle safety, breast cancer, and opioid addiction. Show Up Day should promote a positive narrative around diabetes while conveying the lived experiences of people with type 2. Ultimately, the blame for diabetes and obesity must be shifted away from individuals and toward systems and institutions. The act of "Showing Up" will encourage people to unite and advocate for policy change to create a healthier environment, helping reduce self-blame.

POTENTIAL SYSTEM IMPACT: At d17, participants considered the root causes of stigma and ultimately agreed that the onus to promote change should be on society as a whole—not just people with diabetes. Since diabetes is an epidemic that spans multiple systems, policy-makers, employers, communities, and others must unite to address root causes and encourage awareness. Show Up Day would provide strong visibility to the type 2 community and would involve a wide media push to spread accurate information about the causes of the epidemic. Ultimately, these efforts would help decrease feelings of isolation in individuals with type 2 and would shift general public attitudes around type 2 diabetes.

Idea #12

Working Title: Addressing Chronic Disease Management & Prevention by Creating High-Quality Resources for Healthcare Providers

SUMMARY: There is a profound need for high-quality resources that support physicians to effectively care for patients with diabetes or at risk for developing diabetes. The velocity of change in diabetes care—whether in new drugs, medical devices, and therapies or evolving knowledge exercise and nutrition—is too great for most healthcare providers to absorb. They are overwhelmed, understaffed, and they need reliable information sources for guidance. As a result, healthcare professionals may be underequipped to care for patients with these chronic diseases or individuals at high risk. A variety of resources currently exist for providers to access new knowledge and resources, including Continuing Medical Education (CME)—programming which helps medical professionals maintain and expand their knowledge about new and developing areas. Professionals can also claim CME credit for attending conferences, teaching medical student courses, or participating in trainings to improve performance in patient care. Existing CME courses related to chronic disease include the **Chronic Conditions Self-Study** packages and **Care of Chronic Conditions Live Course**. During d17, however, participants considered other ways that resources related to diabetes could be strengthened for healthcare professionals. First, participants noted that Dr. BJ Fogg's Behavior Design teachings would be invaluable to medical professionals, as they would equip them with the skills and resources to coach their patients in behavior change. d17 participants considered the potential of creating a specific toolkit tailoring Dr. Fogg's key teachings on motivation, ability, triggers, habit formation, and behavior matching towards patient care. Health professionals could potentially receive CME credits for attending Dr. Fogg's workshop, and the toolkit would be valuable in future work with patients. Building from this concept, d17 participants pinpointed the value in establishing





WHO WE ARE

The diaTribe Foundation was founded with a mission to improve the lives of people with diabetes, and prediabetes, and to advocate for action. We're committed to helping people with diabetes live happier, healthier, and more hopeful lives through our free *diaTribe Learn* publication, which now reaches over a million and a half people every year. Led by renowned diabetes advocate Kelly Close, our writing team has deep insights into the patient experience and covers closely the latest research, treatments, and initiatives in diabetes. We also aim to influence the national conversation, bringing the patient point of view to the FDA and to other policy makers, improving diabetes literacy in the media, and convening the world's brightest minds to develop innovative solutions. Our team is fiercely committed to improving the lives of people with diabetes. Our work is truly a labor of love, and so we invite you to [join the diaTribe](#).

For more information about d17, please visit <https://diatribe.org/foundation/dseries>.

A SPECIAL THANK YOU TO OUR SPONSORS

The diaTribe Foundation would like to thank d17 sponsors—Sanofi, Novo Nordisk, AstraZeneca, Intarcia, Abbott, and The Apple Pickers Foundation—for their support. We are grateful for their dedication to bringing new ideas and pioneering solutions to those living with diabetes. We are proud to have them as partners in spurring new ideas, new opportunities, and new programs in diabetes. Thank you!



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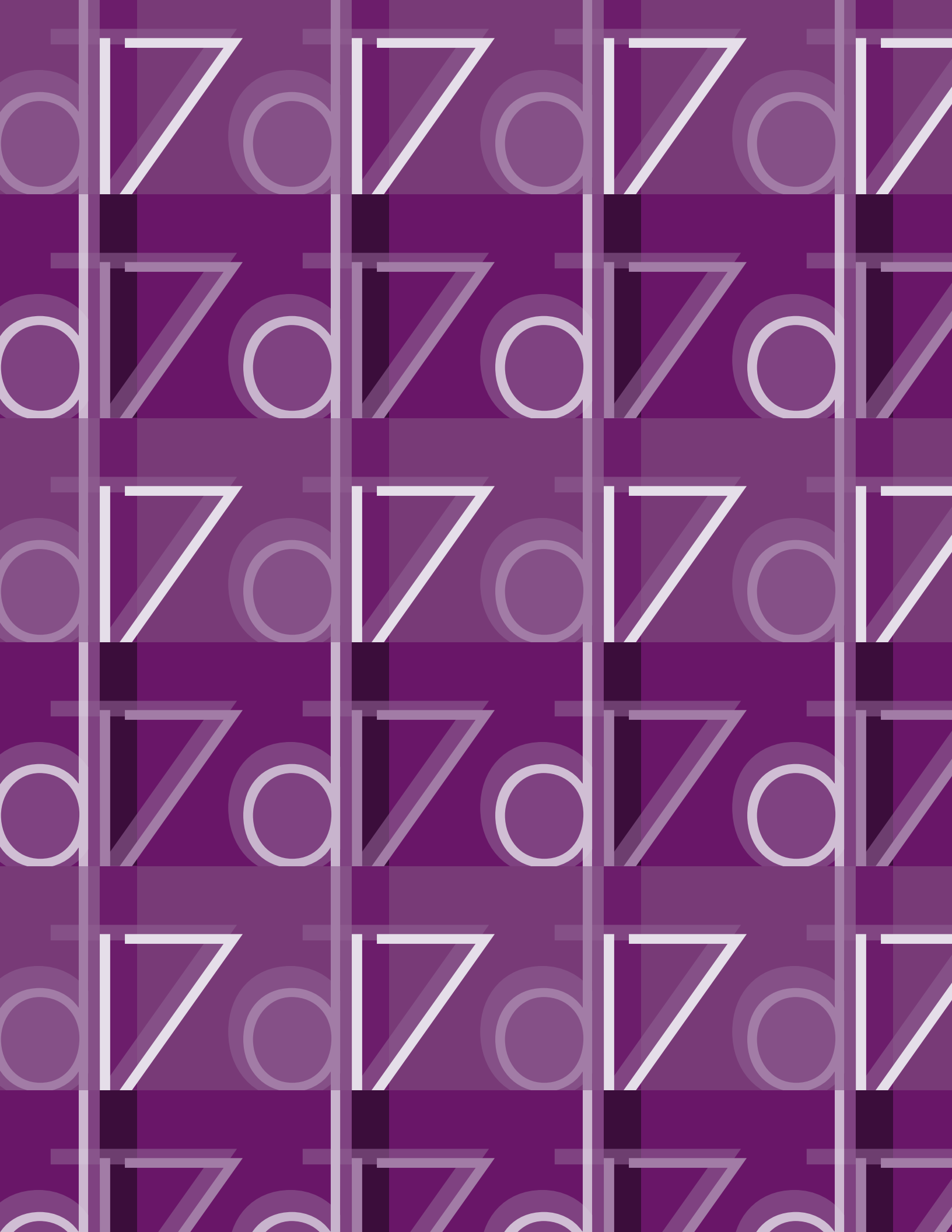
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EXECUTIVE INNOVATION LAB
ON DIABETES AND PREDIABETES

WRITTEN BY AMELIA DMOWSKA,
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