

**BEHAVIORAL
ECONOMICS
ROUNDTABLE
ON DIABETES**

SUMMARY REPORT



AMERICAN ACADEMY OF
FAMILY PHYSICIANS
FOUNDATION

The Behavioral Economics Roundtable was made possible by support from Sanofi US

On June 2, 2011, the American Academy of Family Physicians Foundation hosted the Behavioral Economics Roundtable on Diabetes in Washington, D.C.¹

The Roundtable, made possible with support from Sanofi US, gathered more than 30 primary care physicians, diabetologists, behavioral economists, public health and behavioral scientists, government officials and diabetes stakeholders to explore applications of behavioral economics to diabetes management and care.²



Roundtable participants discuss behavioral economics and diabetes management.

Why Diabetes?

Diabetes is a rising health concern, severely straining already reduced health care budgets and potentially leading to more limited access to care.

Despite many efforts to prevent, diagnose and treat diabetes, nearly 26 million people in the U.S. have the disease, including seven million who are undiagnosed.³ An additional 79 million people in the U.S. have elevated blood glucose levels and are at increased risk of developing type 2 diabetes.⁴

If current trends continue, the Centers for Disease Control and Prevention (CDC) estimates one in three people in the U.S. will have diabetes in 2050.⁵ Total costs associated with diabetes and diabetes risk reached \$218 billion in 2007.⁶ Diabetes' share of national health expenditures is expected to grow from 10 percent in 2011 (\$340 billion) to 15 percent in 2031 (\$1.6 trillion).⁷

Management of diabetes is similarly concerning. The American Diabetes Association has advocated a target of less than 7 percent for HbA1c (glycated hemoglobin), although it has been acknowledged recently that targets need to be individualized and that a higher target may be more appropriate for some.⁸

The proportion of people whose HbA1c level exceeds the ADA target is worrisome; nearly 51 percent of people with type 2 diabetes under the age of 65, and 38 percent of people with type 2 diabetes aged 65 years and older have an HbA1c level of more than 7 percent.⁹

In light of these trends, it is apparent that there is a need for new ways to approach the problem of diabetes.

TOTAL COSTS

Associated with Diabetes and Prediabetes

2007 **\$218 billion**

2011 **\$340 billion** **+10%**
Expected to grow

2031 **\$1.6 trillion** **+15%**
Expected to grow

26 million people
in the U.S. have diabetes

7 million are undiagnosed

1 in 3 adults
will have diabetes
in 2050



01

Why Behavioral Economics?

Diabetes care should take better account of the social and environmental components of the disease.

In approaching the problem of diabetes, it is important to engage and motivate communities to support diabetes management efforts. In addition, diabetes care should move beyond the confines of the clinical setting and take better account of the social and environmental components of the disease. The field of behavioral economics is increasingly being viewed as able to provide additional insight to this broader idea of the importance of the social and environmental context. Behavioral economics integrates economics, psychology and behavioral science to study and influence the ways people make choices.

Behavioral economics has two broad branches. One branch emerges in economics, incorporating concepts from cognitive psychology and other areas of psychology to add nuance to economic thinking. The other branch emerges in behavioral science, using aspects of economic theory to enhance the understanding of organisms' choices and use of resources. The two branches are synergistic, evolving toward an integrated model of human choice amidst multiple channels and arenas of influence.

Traditional economics unrealistically assumes people make choices in a rational manner based on self-interest.¹⁰ In actuality, an intricate web of social, psychological, economic and biological factors affects individuals' health decisions. Choices that appear irrational under the traditional assumptions about human behavior and economics – such as smoking, despite the delayed risks of cancer and heart disease – often have their own rules and logic, according

to behavioral economists. For example, people tend to discount delayed rewards, such as avoiding cancer and heart disease, relative to more immediate, smaller rewards, such as having a cigarette or an extra dessert now; or preferring \$10 today as opposed to \$20 a year from today.¹¹

Behavioral economics matters for health care because it can help explain why people make seemingly irrational decisions regarding their health. Importantly, behavioral economics sheds light on how behaviors can be changed to improve health outcomes by suggesting incentives and other strategies for promoting healthier choices.

This potential to change behavior is important because many of the risk factors for type 2 diabetes are lifestyle-related and because the management of diabetes – healthy diet, physical activity, regular care and adherence to a sensible treatment plan – centers on individuals' everyday behaviors.

02

Why **AAFP** Foundation?



Because primary care professionals provide most of the care for people with diabetes and most other chronic diseases, the AAFP Foundation convened the Roundtable to examine how behavioral economics can help encourage people with diabetes to avail themselves of high-quality primary care and to implement in their daily lives the management plans developed through that care. Primary care professionals, as the principal professionals administering clinical care to people with diabetes, also are impacted by behavioral economics. Thus proper incentives must be evaluated and implemented to overcome the challenge of adding yet another task to their already overcrowded schedules. Behavioral economics suggests health care payers' reimbursements to health care professionals also be reexamined to look at overall costs and outcomes as opposed to just the cost of care for individual patients. Similarly, payers should look to the incentives at the social and environmental level which impact community costs and diabetes outcomes.

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CHANGING HEALTH CARE WITH BEHAVIORAL ECONOMICS

04

➤ MINIMIZING COSTS:

Reducing financial and psychological costs can help shape patient behavior. Co-pays for medicines can prevent lower- or middle-income patients from taking their medications as prescribed, for example. Appointment delays, lengthy travel times and services spread over multiple locations are shown to decrease patients' utilization of available resources. On the other hand, by moving previously separated services into the same facility and integrating these services, we can reduce the time burden people experience and increase the frequency with which they visit their health care professionals.¹²

➤ MAXIMIZING REWARDS FOR BEHAVIOR CHANGE:

Immediate rewards or consequences are often more powerful than delayed – and therefore “discounted” – consequences such as a long and healthy life. Simply being aware that an action will have future benefits is not a powerful enough motivator to stop present-day unhealthy habits. Health behaviors can be encouraged through smaller, achievable goals and clearly defined, immediate rewards for reaching them. Rewarding people for achieving these goals, such as through physicians' praise and encouragement for even modest reductions in clinical indicators, such as improved blood pressure or blood sugar control (e.g., HbA1c), can help build long-term habits. Consistent, small rewards for key behaviors can keep people returning to appointments, meeting physical activity schedules, continuing medication regimens and meeting other important milestones. These steps can in turn lead to such notable improvements as a reduction in symptoms, increased vigor or a positive change in treatment plan, which can help individuals' sustain the patterns of disease management and healthy lifestyle.

In the primary care setting, timely and clearly delivered feedback about weight loss or blood tests, for instance, can also help motivate and keep people motivated. Social and community supports, such as Weight Watchers or many other available peer-support programs, can be powerful tools to reinforce continuation of healthy behaviors.

➤ USING THE POWER OF SUBSTITUTES:

Simply asking people to give up foods they eat or to change behaviors will not result in much success. Replacing these behaviors with healthier but still attractive alternatives can lead to incremental progress. To increase the chances of gradual lifestyle change, interventions for individuals with or at risk for diabetes would need to demonstrate how to replace current foods with good-tasting and low-cost healthier foods that are easy to prepare.

➤ AUGMENTING CHANGE WITH COMPLEMENTARY REINFORCERS:

“People are highly reinforced by the foods they eat. ...Food is a much stronger reinforcer even than opiates and cocaine,” Dr. Steven Hursh, president of the Institutes for Behavior Resources, points out. This poses substantial challenges for dietary change – simply advocating that someone “Cut out the...” is a losing argument. One way to encourage behavior that a person sees as undesirable (such as reducing reliance on alcohol) is to complement it with a second, highly desired activity (such as social interaction). Alcoholics Anonymous is a good example because it provides social interaction to accompany the change in behavior. Similarly, many people find that getting physical activity with others – through casual walking buddies or group exercise classes, for example – helps to link the healthy behavior with social interaction, which helps to sustain the physical activity. Another example is encouraging regular primary care appointments by pairing them with opportunities for social interaction, such as group medical visits.

The key to applying behavioral economics to chronic disease management is “how you bring consequences in the long term to bear right in the short term,” says Dr. Brian Elbel, Assistant Professor of Medicine and Health Policy at New York University’s School of Medicine.

Direct incentives, such as paying people to change behavior, is one way health plans, employers, clinicians and others use behavioral economics to promote quitting smoking, taking medicine or losing weight. Lottery systems, incentive structures and deposit contracts all have been employed to induce behavior change. Paying people has proven effective for a variety of key behaviors, including smoking cessation and completing a course of important treatment for a condition like tuberculosis. However, reinforcers tend to lose their effectiveness over time or when discontinued. Direct payment has been found to be most appropriate during specific periods where a behavior change is most critical, such as in quitting smoking during pregnancy.

An effective application of time-specific, direct payment for behavior change related to diabetes management may be associated with the so-called “legacy effect.” In this “legacy effect” or “metabolic memory,” delaying conversion to diabetes among those at high risk and achieving good metabolic control after diagnosis appear to have benefits years after these preventive or initial treatment successes. This suggests that a period of incentives for healthy behaviors for those at high risk or those newly diagnosed might yield long-term benefits, even if healthy behaviors were not sustained after the incentives were withdrawn.

At the larger community level, behavioral economic principles may also guide beneficial interventions. For example, clear, eye-catching labeling of the caloric “cost” of food products – like displaying the number in terms of an exercise equivalent – may encourage people not to eat certain foods. Taxes can also be influential. For example, tax increases on cigarettes are credited with a major portion of the decline in smoking in the United States that has been accompanied by reduced disease and death linked to smoking.¹³ Taxing foods with a high “caloric density” has been mentioned by public health advocates as a way to dissuade people from eating unhealthy foods.

A key feature of community-wide applications of behavioral economics is how they are framed. Framing tax increases on cigarettes as a way of discouraging youth from starting to smoke may gain public acceptance. In general, presenting options as leading to benefits –called “gain framing” – may be more acceptable than framing something as a loss. However, loss framing can be more effective in gaining attention for a problem. For example, the risk of cancer left undetected may be more persuasive than promoting the benefits of an appropriate screening.

THE DIABETES LANDSCAPE: PRESENT CHALLENGES

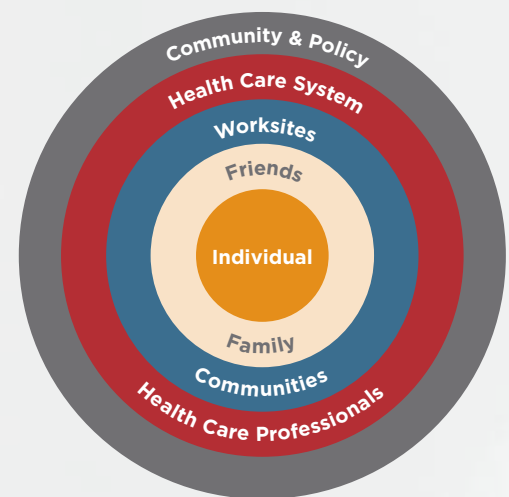
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Before we can consider how to apply behavioral economics to the diabetes problem, we must clearly identify the challenges we face.

The reasons for the diabetes problem are multi-faceted and include complex treatment regimens, a health care system ill-equipped to coordinate the multiple components of chronic disease management, payment and reimbursement policies that do not encourage the most effective and appropriate clinical services, a shortage of primary care professionals and a community environment that is marked by sedentary lifestyles and unhealthy food. Clearly, the current system is not doing enough to tackle diabetes. Challenges to optimal diabetes management and care include:

➤ **REFOCUSING A FRAGMENTED SYSTEM:**

The most fundamental challenge for diabetes care is shifting a system focused on caring for the sick to one focused on keeping people healthy. We must adopt a systems approach to incorporate health care and chronic disease management into policy decisions involving food, environment and other issues. Building a systems approach requires a broad view of science, evidence and important areas of inquiry. Basic science and applied clinical research have clear and central roles. But much of diabetes is determined by behavior, care systems, other organizational factors and communities. Research focused on these many areas needs to identify how systems can improve the settings and incentives for living healthy lives. Primary care is central to that and the best ways of integrating and accessing specialty care need further exploration. Research also needs to embrace the perspectives of those on the front lines – primary care physicians, people with diabetes and their friends and families. A socio-ecological model that puts the individual at the center and articulates the multiple and interacting layers of surrounding influence can help integrate all of these factors.



➤ **CHANGING BEHAVIOR ACROSS THE SYSTEM:**

Just as a socio-ecological approach to policy requires accounting for the interaction of multiple networks of relationships, a holistic approach to diabetes management requires changing the behavior of multiple players, including individuals with diabetes, their families, their primary care professionals, organizations like hospitals and employers, communities and policymakers.

➤ **IMPROVING MEASURES OF DIABETES INTERVENTIONS:**

Although scientific studies have shown that diabetes management programs work, it is challenging to adapt these evidence-based interventions into real-world settings because of the difficulties in measuring the contributions of self-management approaches, coaches, families or information technology. Dr. Judith Fradkin, Director of the Division of Diabetes, Endocrinology and Metabolic Diseases at the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), explains: “[W]hen we test...multi-factorial behavior change interventions, we can’t distinguish the extent to which components of the intervention are having the effect.”

“...a holistic approach to diabetes management requires changing the behavior of multiple players, including individuals with diabetes, their families, their primary care professionals, organizations like hospitals and employers, communities and policymakers.”



➤ ACCOUNTING FOR DISPARITIES IN LOCATION:

Geography significantly affects the quality of outcomes in diabetes management. “Place really does matter,” notes Dr. Bob Kaplan, Director of the Office of Behavioral and Social Sciences Research at the National Institutes of Health (NIH). For example, the areas in southern California where diabetes care is the poorest are those with fewer health care professionals and hospitals, fewer parks and lower access to quality foods.

“Place really does matter”

Dr. Bob Kaplan

Director of the Office of Behavioral and Social Sciences Research at the National Institutes of Health (NIH)

➤ DEFINING SUCCESS IN DIABETES MANAGEMENT:

There are many ways to define success in diabetes management, making it a complicated task. Today, success is usually defined as meeting clinical measures of blood sugar control, blood pressure and LDL cholesterol levels. Yet, primary care professionals and organizations must be more actively involved and incented to play a central role in a host of factors—including behavioral, social, economic and clinical—that appear to be critical for defining success in diabetes management. Additionally, success needs to be defined in the context of other health problems that frequently occur with diabetes. If someone is both living with diabetes and depressed, for example, success clearly cannot be measured by only reducing blood sugar levels.

Dr. David Kendall, Chief Medical and Scientific Officer of the American Diabetes Association, points out, “HbA1c targets, while they are very useful and critically important when making clinical decisions, should always be individualized to take account of age, history of diabetes or other co-existing conditions... an HbA1c standard of less than seven percent is reasonable as a general goal for populations, but obviously this is a population standard, not a goal for each individual.” Meanwhile, Dr. Ron Aubert, Vice President of Advanced Analytics at Medco Health Solutions, similarly cautions against using only clinical measures. Speaking of his own research that showed appreciable benefits of individual case management and support provided by nurses, Aubert says, “The problem is, we didn’t plan the study to assess the contributions of the behavioral interventions and the behavior outcomes. It was powered very much...to show improvement in glycemic control.” There is general consensus, therefore, that measures of metabolic control are important but, should be combined with other clinical measures as well as behavioral measures of self-management and measures of well-being.

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Vice President of Advanced Analytics at Medco Health Solutions

NEW THINKING TO OVERCOME DIABETES OBSTACLES

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The fragmented health care system is increasingly ill suited to treat and manage diabetes.

Dr. Peter Senge, an expert on system dynamics and Senior Lecturer at the Massachusetts Institute of Technology, challenges the diabetes community to bring a systems perspective to addressing the growing burden of diabetes in our society. The health care system operates like any other system: as a network of formal and informal relationships deeply embedded in habits. The challenge lies in changing these entrenched habits, which is a difficult task in systems just as it is in people. To treat diabetes holistically, the system must address how we live, what we eat, how we work, the quality of our social well-being, and the interactions with our families and our communities.

To think about health and health care as an integrated picture, imagine people in one of three modes: those who are healthy, those who are in need of treatment and those who are in treatment. People with diabetes are often just cycled between the second and third modes without ever actually meeting an operational, useful, clinically valid definition of health.

To effect change in such a system, we must understand the conditions in which people live, that make them predisposed to make the journey from healthiness to being in need of treatment. We also must focus on collective institutional strategies, as well as individual ones; norms and peer context cannot be ignored to focus only on the individual.

Dr. Ann Albright, director of the Division of Diabetes Translation at the CDC, echoes Senge's systems approach and urges people to look at diabetes care through the socio-ecological model. The model accounts for the fact that individuals are nested within a concentric circle of family and friends and small groups, which is nested within another

concentric circle of system, group and culture, which is nested within another concentric circle of community and policy. "The health of individuals is inseparable from the health of their communities. Individuals don't live by themselves. We don't manage our diabetes by ourselves. We didn't develop diabetes by ourselves. It is impacted by all the surrounding concentric circles," Albright emphasizes.

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AREAS OF OPPORTUNITY

07

Behavioral economics is a promising tool for health care. Integrating behavioral science and cognitive psychology with health care and health policy can increase our understanding of health behaviors and improve patient care and quality of life, particularly concerning chronic diseases.

There has already been demonstrated success in applying principles of behavioral economics to the management of diabetes. For example:

➤ **COORDINATED, COMPREHENSIVE DIABETES MANAGEMENT WORKS:**

Several NIH studies with strong behavioral science components have demonstrated the success of diabetes management. The Diabetes Control and Complications Trial (DCCT) showed that a coordinated, comprehensive approach to intensive diabetes management, including extensive patient education and support could improve patient adherence to complicated treatments and achieve substantial improvements in clinical status.¹⁴ The Diabetes Prevention Program (DPP) illustrated that a modest amount of weight loss through dietary changes and increased physical activity sharply reduced the chances of people at increased risk of diabetes actually developing diabetes.¹⁵ To translate these findings into practice, the NIDDK, part of the NIH, and the CDC jointly created the National Diabetes Education Program, which includes participation by more than 200 health professionals, community organizations, consumer groups and private-sector organizations that want to help address the problem of diabetes.¹⁶ Additionally, in 2010, the Affordable Care Act authorized the CDC to implement the National Diabetes Prevention Program and establish a network of evidence-based lifestyle intervention programs for those at high risk for developing type 2 diabetes.¹⁷ Critical to all the areas in which these programs have shown success are behavior and motivation. Behavioral economics provides approaches to developing incentives and systems to support key behaviors across the management of diabetes and chronic diseases in general.

➤ **SETTING SMALL GOALS ACROSS MULTIPLE RISK FACTORS IS EFFECTIVE:**

Small changes across several behavioral measures add up to make a big difference over time, both at the individual and population levels. The Steno 2 study in Denmark, for instance, combined intensive behavior modification with clinical components and medication regimens for people with type 2 diabetes.¹⁸ Over time, the study showed that “addressing several risk factors reasonably well actually pays greater dividends than doing one thing perfectly,” as Kendall puts it. This reflects the behavioral principle of shaping: encouraging small, achievable goals that can lead to progress, which can then encourage additional improvements.

“addressing several risk factors reasonably well actually pays greater dividends than doing one thing perfectly”

Dr. David Kendall

Chief Medical and Scientific Officer of the American Diabetes Association

The sooner one starts changing behavior, even making small steps – to eat healthier, to exercise, to stop smoking, to take medicines as prescribed or to do other activities – the better the chance one has for keeping diabetes under control. Set reasonable goals, and once a goal is met, set another small goal. “Most of the interventions that we utilize in diabetes are akin to any long term investment, much like saving for retirement. They’re going to have benefits 20 years in the future. So when we talk about behavior change, it’s actually small changes in many things that may be the most appropriate goal in diabetes care,” says Kendall.

DRIVING IMPROVED COMMUNITY HEALTH THROUGH BEHAVIORAL ECONOMICS

08



At the community level, primary care must be the cornerstone of care for chronic disease. Some 90 percent of the clinical management of diabetes occurs in the primary care setting.¹⁹

Behavioral economics holds the potential to influence many aspects of the relationship between primary care and community health.

To improve diabetes care, the health care system must use a socio-ecological model to better address the needs of individuals and leverage individuals' social networks and peer influences. Albright summarizes:

"We have responsibilities as people who live with diabetes or prediabetes to manage our condition. But we don't do it in isolation. Our family and our friends not only form a support group and help us manage, but they're also impacted by this disease. And then you move to the next group, which is really the schools, the workplaces, places where people spend most of their day... And then, finally, that outer circle captures the larger societal impact. And that is where a lot of policies come into play, whether they're agricultural policies, policies about the foods that are available [or] environmental issues that many of us in public health are dedicated to working on."

➤ CHANGING PRIMARY CARE PRACTICES:

Behavioral economics comes to bear on the very nature of most primary care practices. Physicians in primary care practices must at the same time be physicians and small business owners. In order for these physicians to implement new approaches to care, however promising, these innovations will often need to be incented. Just like any small business owner, primary care professionals have to consider their return on investment and will not make changes to their business models without incentives to sustain them.

➤ IMPLEMENTATION OF DIABETES MANAGEMENT:

After working out a plan with a physician or other professional, the **implementation** of diabetes management takes place in the daily lives of those with the disease – their meals, their physical activity, their management of stresses and daily challenges and their follow through on the treatment plans they have developed with the primary care professionals who most often provide their care. For example, if a person with diabetes spends, say, six hours a year in a physician's, or other professional's office or consulting room, that leaves 8,760 hours a year (including leap years) they are "on their own." The community needs to provide resources like attractive places for physical activity, convenient and affordable healthy food, and emotional and social support to create an environment that maximizes the success of a patient. These resources are often not aligned in the environments of populations suffering the greatest burden of diabetes. Community-based education and support programs need to encourage the daily behaviors central to diabetes management for people living with diabetes, their families and for the larger community in which the person living with diabetes lives and works.

➤ LINKING PEOPLE FROM PRIMARY CARE TO COMMUNITY SUPPORT:

Primary care has a central role in linking people with diabetes to community and family social supports to help them better manage their disease. The combination of small primary care practice sizes and limited or rapidly changing resources available to community supports makes this linkage difficult. Dr. Michael Parchman, the Director of the Primary Care Practice-Based Research Network (PBRN) Initiative at the Agency for Healthcare Research and Quality (AHRQ), highlights this problem in his research. Parchman notes that surveys have found that slightly more than half of primary care practices do not have partnerships with community organizations, which could benefit people with diabetes and other chronic conditions.²⁰ The research also reveals that about half of patients are not encouraged by their physicians to attend community-based programs, groups or classes to help them cope with their chronic conditions. "There's not a lot of incentive there for improving self-management support or linkages to community resources," he points out.

➤ PEER SUPPORT AS AN APPROACH TO COMMUNITY OUTREACH:

Peer support is a promising approach to community outreach emanating from primary care or the Patient-Centered Medical Home (PCMH). Peer supporters provide social ties to their own communities and can be effective in reaching and engaging those not receiving appropriate care or managing their diseases well.²¹



Linking to the community

National Diabetes Prevention Program (NDPP)

- As part of the Affordable Care Act (ACA), the CDC, along with UnitedHealth Group, the YMCA and Walgreens, has rolled out the NDPP, which is a group-based lifestyle intervention aimed especially at people at high risk for developing diabetes.
- In a group setting over a 16-session program, a trained lifestyle coach helps participants change their lifestyles through healthier eating, increased physical activity and other behavior modifications. After completing the program, participants meet monthly for additional support to help them maintain their progress.
- The program also connects patients already diagnosed with diabetes to local pharmacists to assist with medication adherence.

➤ **INCENTIVIZING CHANGE IN SERVICES REIMBURSEMENT:**

Health care payers' reimbursements to physicians also need to be reexamined to better account for the social and environmental contexts of diabetes management. For instance, the person who buys the groceries and prepares the meals is usually not the person with diabetes, but a family member. In this case, education of both the person with diabetes and their family members would be beneficial to the individual's health, but systems only reimburse health care professionals for treating the person with diabetes.

➤ **INCENTIVES AND UNINTENDED CONSEQUENCES:**

Some payer systems provide incentive payments to physicians when their patients meet across-the-board clinical standards, like HbA1c of less than 7 percent. Such a model would reward a physician for reducing a patient's blood sugar from 7.1 to 6.9, for instance, but not for reducing it from 9 to 7.1, despite the large difference in incremental health benefits. Such systems need to start "measuring what matters," Kendall says. One attempt at this is UnitedHealth Group's Diabetes Health Plan, which uses health care professional incentive payments based on patients' percentage of reduction in HbA1c and LDL levels, rather than universal targets for these measures. However, some reimbursement systems may unintentionally encourage changing average clinical values by promoting trivial changes in large numbers of patients who are doing relatively well, while ignoring those who are struggling. For example, the average HbA1c of a practice may be more influenced by moving a large number of patients from values of 7.1 to 6.9 than a few patients from 10.0 to 8.0.

➤ **BALANCING BETWEEN HIGH-RISK TARGETING AND POPULATION-BASED STRATEGIES:**

Community intervention policy that employs behavioral economics must strike the appropriate balance between targeting a general population and the high-risk individuals within that population. This balance is important to minimize or avoid the "prevention paradox," in which measures applied to a whole population, such as mandatory seat belts or bicycle helmets, may achieve appreciable impact, but leave most to whom they are applied without any benefit. Conversely, measures that are too focused on benefits to a high-risk population may not fully impact the overall health of the community. "We need to find a way of balancing our increased efficacy with also an increased reach," urges Dr. Glorian Sorensen, a Professor of Society, Human Development and Health at Harvard School of Public Health.

➤ **MOVING RESEARCH FINDINGS TO PRACTICE, POLICY SETTINGS:**

Taking basic science discoveries, testing such discoveries in efficacy trials and ultimately incorporating successful interventions into health policy is a lengthy and arduous process. Research proving the effectiveness of any intervention whether behavioral or clinical that sets out to prevent, diagnose or manage diabetes needs to be better translated into real-world settings.

PUTTING BEHAVIORAL ECONOMICS CONCEPTS TO THE TEST

09

In order to create change in how we manage diabetes, we must focus on what determines the choices people living with diabetes make: their families, their health care team and social and environmental factors.

Behavioral economics provides a new way of thinking about these choices and about the entire continuum of diabetes – medically, socially and culturally. Stakeholders must create a day-to-day environment for people that supports and constantly reaffirms healthy, correct choices. The primary care physician is a critical connector between the complexity of health care and social determinants of health. Behavioral economics can act as an organizing mechanism to understand the important triad of doctor, patient and community.

➤ **INDIVIDUALS:**

It is essential that individuals living with diabetes and their family members have the ability to understand the risk factors and solutions for managing diabetes. The first point of entry in this continuum practically speaking is the primary care professional. Individuals living with diabetes need to receive robust primary care and the right support from people in their environment to enable them to respond and comply with physician recommendations and then make the right daily decisions over a lifetime. Individuals must be incented to make healthy choices. Part of this incentive is positive nurturing reinforcement from primary care physicians, other health care professionals, families and communities.

➤ **PRIMARY CARE PROFESSIONALS, SPECIALISTS AND THE ENTIRE HEALTH CARE SYSTEM:**

Primary care professionals must provide ongoing care and help people manage their diabetes by encouraging them to make the right decisions for their health on a daily basis. All health care professionals must work together to ensure that people are receiving the support that is needed. Ongoing support and continuity of quality care from physicians should be central to transforming the U.S. health care system that is not yet effectively focused on prevention and healthy lifestyle encouragement. Current reimbursement policies and guidelines need to change in ways to more fully support the primary care professional role as the connector of the individual, to the health care system and the community, as well for the primary care professional to provide the continuity of care and support in the clinical system.

In addition to primary care physicians, the full range of healthcare professionals – specialty physicians, nurses, dietitians, Certified Diabetes Educators (CDEs), psychologists and other behavioral scientists, social workers, public health professionals and others, including trained peer supporters – must be engaged to help provide appropriate and effective education and continuing support of healthy behaviors that can help people lead healthy lives. As good clinical care is essential for good diabetes management, applying the treatment plan 365 days a year requires an effective means for patients and families to achieve daily success over a life time.

➤ **COMMUNITIES:**

Communities must be given a role in defining what they would like to achieve in improving rates and outcomes in diabetes. How communities engage in partnership with primary care physicians and public health professionals and incorporate concepts of behavioral economics will help define models that can be proven and replicated. In addition, individuals living with diabetes must get support and reassurance from their family and community that the healthy choices they are making are the right choices and are worth it. The community must be incented in ways that the success of the individual can be seen as a benefit to the entire community. Providing the right feedback to individuals and communities can help reduce the burden of disease and complications.

➤ **POLICYMAKERS:**

Policymakers must move beyond the status quo to support and develop new innovative approaches that can break down silos, focus on the critical role the primary care professional plays and define new strategies to motivate whole communities to become involved in prevention and better management of diabetes.

We must create a system in which the community benefit of larger hospitals and a more complex health delivery system that favors higher cost, more technologically advanced approaches to care gives way to better prevention and a reliance on the effective role that primary care professionals can play in getting better outcomes for less outlay of resources. The system must move toward shared benefits among all of these stakeholders by moving the treatment paradigm toward sustainable approaches to better prevention, earlier diagnosis and more effective management of diabetes.

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“...we must focus on what determines the choices people living with diabetes make...”





Dr. Peter Senge of MIT speaks at the Behavioral Economic Roundtable.

NEXT STEPS

With all of this in mind, the AAFP Foundation is seeking to engage a community to develop a community-based and community-wide pilot program focused on how broad cooperation among the primary care physician providing robust primary care, appropriate referral to specialists and other health educators or professionals, community organizations and the leadership of a community can improve prevention, enable earlier diagnosis and more effectively manage diabetes and outcomes.

We know that successful models of collaborative health care exist and successful models of delivering such care are emerging around the Patient-Centered Medical Home. This model allows care coordination and takes into account the context within which a person lives, makes choices and achieves best outcomes. It is clear that effective health outcomes depend upon relationships. When a patient feels connected to their doctor, family and community, they are more likely to achieve better outcomes. As such, the primary care professional is more aware of the patient and their context. The AAFP Foundation's project will incorporate the successful elements of the Patient-Centered Medical Home to create a new model of best practices for earlier diagnosis and comprehensive diabetes management that is anchored in primary care. The model will include broad community activities, resources and peer groups to promote and support achieving the best overall community health outcomes.

Elements of behavioral economics will be incorporated into this new model and insights from the expert voices at the Roundtable will be used to implement a systems approach to a community-level intervention that encompasses the patient, family and the medical home into the management of diabetes. The project will identify levers in the community that can be moved by shifting incentives based on ideas from the science of behavioral economics.

The project's goal ultimately will be to define elements of and demonstrate a model that can be replicated in other communities for better diabetes outcomes, including ways to encourage healthier lifestyles for everyone. The model will engage local and state policy makers and then be promoted at the policy level nationally for broad implementation in order to address the geographically dispersed problem of diabetes.

Finding new innovations related to diabetes can serve as a model for the broader problem of chronic disease care. If progress can be made on diabetes and the key role for primary care as well as appropriate incentives to drive more cost effective outcomes can be more clearly defined, there is great potential to use this model to improve health outcomes for a range of chronic conditions that reduce people's quality of life and drive up health care costs.

The Behavioral Economics Roundtable on Diabetes and the community-based pilot project that will follow are an important opportunity to highlight the effectiveness of family medicine and primary care. The outcomes from these programs can be critical for turning the tide on the nation's struggle with diabetes as well as chronic disease. As patients become more aware of the behaviors that must be changed related to their own disease, there is hope that families and communities can achieve more healthy lives as well.

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