



2015 US Federal Report

PATHS

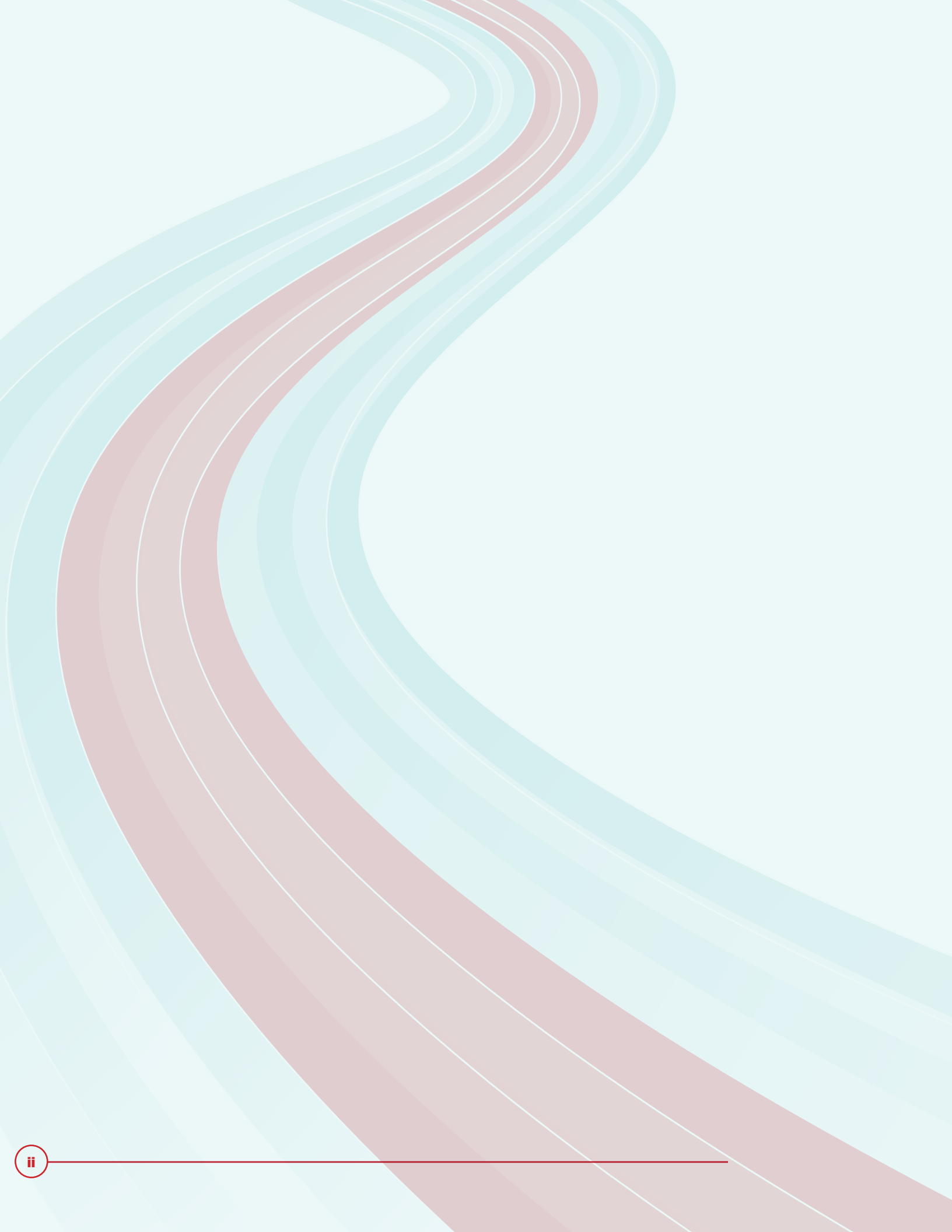
Providing Access to Healthy Solutions

Beating Type 2 Diabetes: Recommendations for Federal Policy Reform

WRITTEN BY

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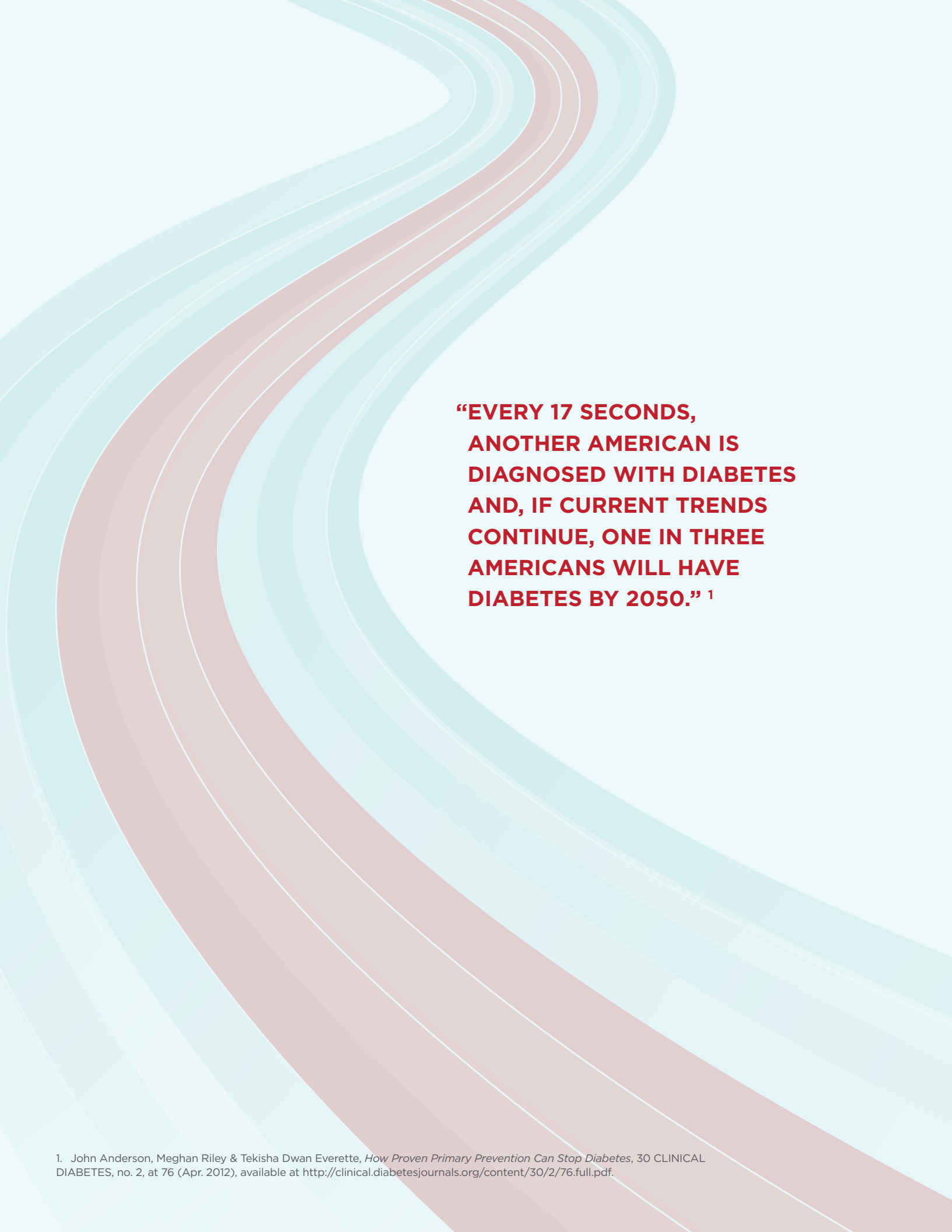
PREPARED BY THE CENTER FOR HEALTH
LAW AND POLICY INNOVATION OF
HARVARD LAW SCHOOL



BEATING TYPE 2 DIABETES: RECOMMENDATIONS FOR FEDERAL POLICY REFORM

TABLE OF CONTENTS

| | |
|--|-----|
| About the Authors | v |
| Table of Acronyms | vi |
| Executive Summary | ES1 |
| Introduction..... | 1 |
| Recommendations for Federal Policy Reform..... | 3 |
| 1. Include evidence-based diabetes and prediabetes services in Essential Health Benefits to improve health and reduce costs..... | 3 |
| 2. Include the National Diabetes Prevention Program in standard Medicare coverage with no cost-sharing and provide guidance to state Medicaid programs on covering this service through State Plan Amendments..... | 5 |
| 3. Include coverage in Medicare of medically-appropriate food as a cost-effective diabetes intervention and provide guidance to state Medicaid programs on covering this service through State Plan Amendments..... | 7 |
| 4. Increase federal funding for diabetes prevention and research..... | 9 |
| 5. Encourage states to develop holistic and coordinated diabetes care models through diabetes-specific Centers for Medicare & Medicaid Services (CMS) Innovation Awards..... | 10 |
| 6. Increase federal investments to support healthy food access..... | 12 |
| 7. Maintain strong federal nutrition standards for school lunch and increase school meal reimbursement rates..... | 14 |
| Conclusion..... | 17 |



**“EVERY 17 SECONDS,
ANOTHER AMERICAN IS
DIAGNOSED WITH DIABETES
AND, IF CURRENT TRENDS
CONTINUE, ONE IN THREE
AMERICANS WILL HAVE
DIABETES BY 2050.”¹**

1. John Anderson, Meghan Riley & Tekisha Dwan Everette, *How Proven Primary Prevention Can Stop Diabetes*, 30 CLINICAL DIABETES, no. 2, at 76 (Apr. 2012), available at <http://clinical.diabetesjournals.org/content/30/2/76.full.pdf>.

ABOUT THE AUTHORS

The Center for Health Law and Policy Innovation of Harvard Law School (CHLPI) advocates for legal, regulatory, and policy reforms to improve the health of underserved populations, with a focus on the needs of low-income people living with chronic illnesses and disabilities. CHLPI works with consumers, advocates, community-based organizations, health and social services professionals, food providers and producers, government officials, and others to expand access to high-quality healthcare and nutritious, affordable food; to reduce health disparities; to develop community advocacy capacity; and to promote more equitable and effective healthcare and food systems. CHLPI is a clinical teaching program of Harvard Law School and mentors students to become skilled, innovative, and thoughtful practitioners as well as leaders in health, public health, and food law and policy.

For the past two years, CHLPI has been deeply engaged in research and analysis on type 2 diabetes policy. This initiative is known as the PATHS Project (Providing Access to Healthy

Solutions). Intensive state-based research and coalition-building culminated in two comprehensive diabetes policy reports in New Jersey and North Carolina, released in 2014. In 2015, CHLPI is focused on advocating for policy reform at the federal level. In 2016, CHLPI plans to release a report on State Best Practices with respect to enhancing access to care and opportunities for healthy lifestyles for people living with type 2 diabetes.

This work has been generously supported by the Bristol-Myers Squibb Foundation's *Together on Diabetes* initiative.

Beating Type 2 Diabetes: Recommendations for Federal Policy Reform is primarily authored by Sarah Downer, Allison Condra, Krista L. White, Stephen Shaw, Anup Myneni, Marissa Leonce, and Kristen Gurley. CHLPI thanks numerous type 2 diabetes advocates for providing feedback and critique throughout the drafting process, and the CHLPI Director and Associate Director, Robert Greenwald and Emily Broad Leib, for their wisdom and guidance.

TABLE OF ACRONYMS

ACA = Affordable Care Act

ADA = American Diabetes Association

BMI = Body Mass Index

CDC = Centers for Disease Control & Prevention

CDFIs = Community Development Financial Institutions

CHLPI = Center for Health Law & Policy Innovation at Harvard Law School

CMMI = Center for Medicare & Medicaid Innovation

CMS = Centers for Medicare & Medicaid Services

DDT = Division of Diabetes Translation

DPP = Diabetes Prevention Program

DSME/T = Diabetes Self-Management Education/Training

EHBs = Essential Health Benefits

FINI = Food Insecurity Nutrition Incentive Program

F/RP Meals = Free/Reduced Price Meals

FY = Fiscal Year

HFFI = Healthy Food Financing Initiative

HIP = Healthy Incentives Pilot

HHS = Department of Health & Human Services

IOM = Institute of Medicine

National DPP = National Diabetes Prevention Program

NIDDK = National Institute of Diabetes and Digestive and Kidney Diseases

NIH = National Institute of Health

NSBP = National School Breakfast Program

NSLP = National School Lunch Program

S-FMNP = Senior Farmers Market Nutrition Program

SNAP = Supplemental Nutrition Assistance Program

SPA = State Plan Amendment

USDA = United States Department of Agriculture

WIC = Special Supplemental Nutrition Program for Women, Infants, & Children

WIC-FMNP = WIC Farmers Market Nutrition Program

YMCA = Young Men Christians Association

EXECUTIVE SUMMARY

Diabetes is the 7th leading cause of death in the United States,² and causes more deaths per year than breast cancer and AIDS combined.³ Twenty-nine million Americans have diabetes (9.3% of the population), while over one in three have prediabetes (blood glucose levels that are elevated above normal but have not reached the threshold for a diabetes diagnosis).⁴ The American Diabetes Association estimates that the total cost of the disease to the United States is \$245 billion per year, including \$176 billion in direct medical costs and \$69 billion in indirect costs, which takes into account reduced productivity, inability to work due to disability, and lost productive capacity due to early death.⁵ One in five overall healthcare dollars are spent caring for people with diabetes; in Medicare, one third of the program's expenses are "associated with treating diabetes and its complications."⁶

THE FEDERAL GOVERNMENT MUST ACT NOW TO STEM THE TYPE 2 DIABETES EPIDEMIC IN THE UNITED STATES.

The Center for Health Law & Policy Innovation at Harvard Law School, together with the Bristol-Myers Squibb Foundation's *Together on Diabetes* Initiative, recommends the following seven actions to reduce incidence of the disease and promote effective management of diabetes in those who have already been diagnosed:

1. Include evidence-based diabetes and prediabetes services in Essential Health Benefits to improve health and reduce costs.

We recommend that Essential Health Benefits (EHBs) include coverage of both the National Diabetes Prevention Program (National DPP) and diabetes self-management education (DSME). The Affordable Care Act (ACA) identified certain categories of healthcare services as EHBs, which must be covered by individual and small group health insurance plans as well as Medicaid for newly eligible individuals in states that expand their Medicaid

programs. The ACA does not specify what services fall within EHBs, and there is currently wide variation in coverage of key diabetes services among plans. However, the ACA provides that the services included in EHBs shall be periodically updated.⁷ We agree with the Institute of Medicine (IOM) that the EHB package should become "more fully evidence-based, specific, and value-promoting."⁸ By incorporating these crucial diabetes prevention and management services, EHBs will become a powerful tool that makes coverage of evidence-based prediabetes and diabetes services consistent across states and helps both public and private insurers to improve health outcomes and reduce costs.

2. Include the National Diabetes Prevention Program in standard Medicare coverage with no cost-sharing and provide guidance to state Medicaid programs on covering this service through State Plan Amendments.

We recommend coverage of the National DPP lifestyle intervention for Medicare beneficiaries diagnosed with prediabetes (elevated blood glucose levels). Diabetes can be prevented or postponed. The National DPP has been shown to reduce the risk of developing diabetes among those 60 or older by 71%.⁹ Projected savings from coverage of this diabetes prevention program for Medicare beneficiaries with prediabetes are approximately \$1.3 billion over nine years.¹⁰ To ensure that Medicaid beneficiaries also benefit from this program (which can reduce the risk of developing diabetes by 58% for all adults), we urge Centers for Medicare & Medicaid Services (CMS) to provide guidance to state Medicaid programs wishing to cover this service for their prediabetic beneficiaries through State Plan Amendments or other available waivers.

3. Include coverage in Medicare of medically-appropriate food as a cost-effective diabetes intervention and provide guidance to state Medicaid programs on covering this service through State Plan Amendments.

We recommend coverage of a transitional period of medically-appropriate meals for Medicare beneficiaries with diabetes who are either attempting to make a lifestyle change or have experienced an acute event related to diabetes, such as a hypoglycemic episode. People with diabetes who consume nutritionally appropriate prepared meals have been shown to have statistically significant reductions in blood glucose levels, which can translate to hundreds of dollars in healthcare savings per patient per year.¹¹ For individuals with serious diagnoses that impair daily function, including diabetes with complications, the provision of medically-appropriate meals has been found to reduce overall medical costs compared to a control group, as well as reduce hospitalizations, decrease the length of hospitalizations, and increase the likelihood that a patient will be discharged from a hospital to his home instead of to an acute care facility.¹² Medicare currently offers reimbursement for medically tailored meals in very limited circumstances. A transitional period of medically appropriate meals available to every Medicare beneficiary who qualifies based on established Medicare criteria will improve outcomes and reduce costs for Medicare beneficiaries with diabetes, especially for those whose disease is most poorly controlled and therefore most expensive to treat. To ensure that Medicaid beneficiaries also benefit from this program, we urge CMS to provide guidance to state Medicaid programs wishing to cover this service for their beneficiaries through State Plan Amendments or other available waivers.

4. Increase federal funding for diabetes prevention and research.

We recommend increasing funding to diabetes prevention and research programs, including the Centers for Disease Control & Prevention (CDC)-led National Diabetes Prevention Program (National DPP), the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), and the CDC's Division of Diabetes Translation (DDT). In recent years, appropriations to necessary programs have been reduced in the face of fiscal pressures. For example, the National DPP has not received sufficient funding to enable it to meet the goal of bringing nationwide access to CDC-certified Diabetes Prevention Programs to prediabetics individuals.¹³ The NIDDK, which is the leading supporter of research into diabetes treatment and potential cures, received \$75 million less in funding in 2014 than in 2010.¹⁴ With healthcare costs related to diabetes reaching \$245 billion in 2012, we cannot afford to reduce investment in crucial research and prevention efforts.¹⁵

5. Encourage states to develop holistic and coordinated diabetes care models through diabetes-specific CMS Innovation Awards.

We recommend that the Center for Medicare & Medicaid Innovation (CMMI) issue grants to states for diabetes-focused demonstration projects. The ACA established CMMI to promote "broad payment and practice reform in primary care."¹⁶ CMMI awards should be used to evaluate promising innovations on a broad scale for large segments of the population, with the ultimate goal of implementing the most effective interventions and models in Medicare and Medicaid nationwide. We assert that the complexity of diabetes from both prevention and management perspectives requires awards that focus exclusively on this disease, and that states with the highest diabetes burdens be actively encouraged to develop applications to participate in diabetes-related demonstration projects.

6. Increase federal investments to support healthy food access.

We recommend expanding investment in federal programs that increase individuals' access to healthy food, as consumption of healthy food not only helps prevent the incidence of type 2 diabetes and other chronic diseases, but also mitigates the consequences of type 2 diabetes once individuals are diagnosed with the disease. 14.3% of U.S. households were food insecure in 2013,¹⁷ and 23.5 million people nationwide live in "food deserts," or areas without ready access to fresh, healthy, affordable food.¹⁸ Food insecurity has a direct impact on an individual's ability to prevent and manage type 2 diabetes. Federal funding through the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Assistance Program for Women, Infants & Children (WIC), and special Farmers Market Nutrition Programs have been insufficient to adequately address the need for people living with or at risk for type 2 diabetes to have access to healthy food due to low benefit levels. The reach of a new Food Insecurity Nutrition Incentive grant program, while a promising start to providing more healthy-food dollars to low-income individuals, is limited in scope. Finally, more funding should be appropriated for the Healthy Food Financing Initiative (HFFI), which aims to increase the number of healthy food retailers in underserved areas through strategic distribution of grants and loans.

7. Maintain strong federal nutrition standards for school lunch and increase school meal reimbursement rates.

We recommend that all federal nutrition regulations for school meals and competitive foods issued in relation to the Healthy, Hunger-Free Kids Act of 2010 be fully implemented and enforced.¹⁹ Congress must maintain these rigorous federal nutrition standards during the Child Nutrition Reauthorization proceedings in 2015. Good nutrition at a young age is key to preventing development of type 2 diabetes in youth and in preventing obesity, which significantly increases the risk of developing type 2 diabetes as an adult. Type 2 diabetes is becoming increasingly prevalent in adolescents and today occurs in children as young as 10 years old.²⁰ Rigorous nutrition standards for school meal programs can have a significant impact on prevalence of obesity.²¹ Currently, schools that serve meals meeting federal standards only receive an additional six cents per meal in reimbursement. We urge that per-meal reimbursement increase above this level in order to enable schools to design new recipes and change procedures to accommodate serving new healthy foods.

CONCLUSION

The diabetes epidemic requires urgent attention from all government entities, from Congress to federal agencies. The implementation of these recommendations will provide the 29 million people with diabetes and the 86 million people with prediabetes with access to tools they can use to live healthier lives free of type 2 diabetes or its complications. As a nation, we cannot

afford to ignore the toll diabetes is taking on all segments of society, from our seniors to our youth. Ensuring access to vital prevention and treatment services while transforming our food environment through strategic funding choices will give our citizens an opportunity to take informed control of their health, and ultimately, to beat type 2 diabetes.

INTRODUCTION

Between 1980 and 2011, the number of diabetes cases in the United States more than tripled, imposing enormous costs on individuals living with the disease and straining public and private healthcare systems.²² Federal policymakers must take immediate action to reduce the growing burden of diabetes. In this report, the Center for Health Law and Policy Innovation (CHLPI) at Harvard Law School presents seven recommendations to the federal government to improve health outcomes for people with type 2 diabetes, decrease the incidence of the disease, and reduce the cost of diabetes care.²³ Although many in the federal government are engaged in policy reform work, both Congress and select federal agencies can do more to turn the tide on this disease. Now is the time to institute major changes in our nation's policies.

The Impact of Diabetes

Diabetes is the seventh-leading cause of death in the United States.²⁴ Over 29 million people in the United States have diabetes (9.3% of the population), 95% of whom have type 2 diabetes.²⁵ Over 8 million of these individuals do not even know they have the disease.²⁶ People with diabetes suffer at higher-than-average rates from heart disease, stroke, blindness, kidney failure, and lower-limb amputation.²⁷ Diabetes also increases the risk of depression, pregnancy complications, non-alcoholic fatty liver disease, erectile dysfunction, hearing loss, and certain types of cancer.²⁸ The severity of comorbid diseases and disability associated with the disease makes it imperative to address diabetes using every evidence-based tool at our disposal.

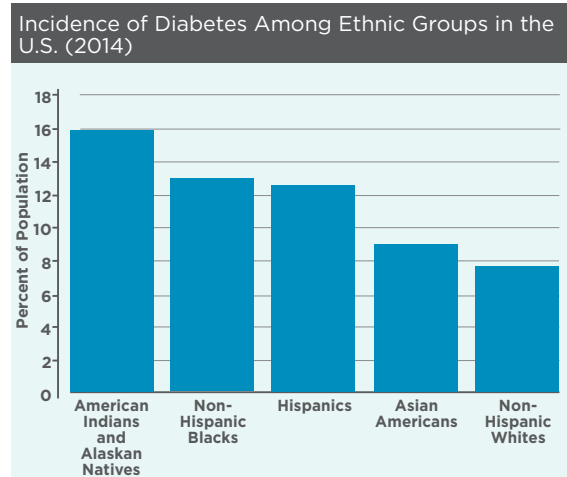
Prediabetes: A Precursor to the Disease

More than one-third of Americans meet the criteria for prediabetes.²⁹ Individuals with prediabetes have higher than normal blood glucose or hemoglobin A1C levels and have a 15% to 30% chance of developing type 2 diabetes within five years.³⁰ People with prediabetes can cut their risk of developing

diabetes by more than half through participation in evidence-based lifestyle interventions that aim to reduce body weight and increase physical activity.³¹

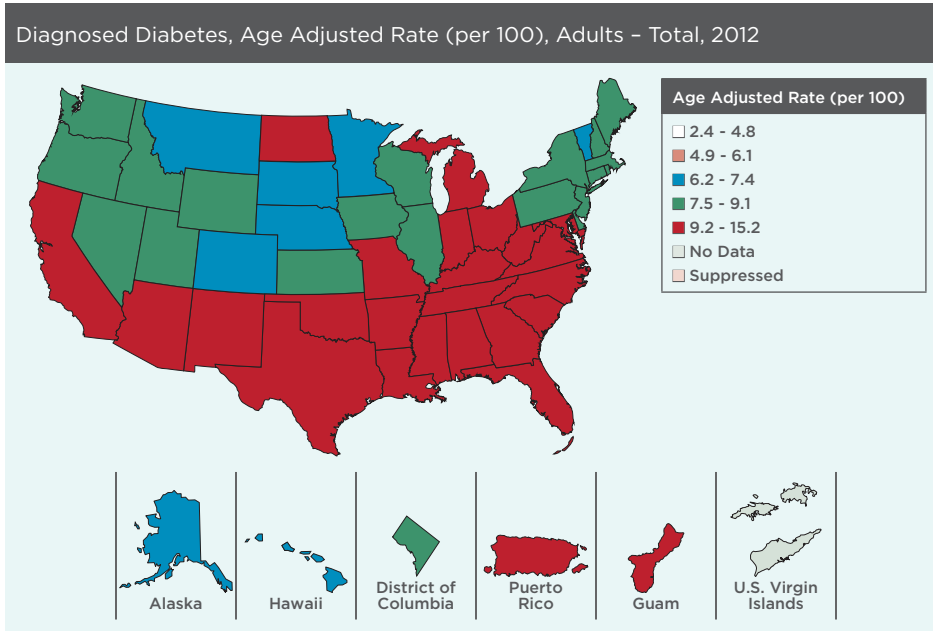
Disparities in Diabetes

Certain population groups in the United States have a higher-than-average diabetes burden. For example, diabetes disproportionately affects racial and ethnic minorities. In 2014, every minority group in the U.S. had a higher incidence of diabetes than non-Hispanic whites.³²



Source: National Diabetes Statistics Report, 2014, Ctrs. for Disease Control & Prevention, available at <http://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf>.

Additionally, older adults have a higher risk of developing type 2 diabetes.³³ Over one in four (25.9%) Americans aged 65 or older has diabetes, compared to 9.3% of the general population, and over half (51%) of the same age group has prediabetes.³⁴ Low-income populations are also more likely than the general population to develop diabetes.³⁵ Significant disparities in the rate of diabetes exist based on geographic location, ranging from a low of 6.5% of the adult population in Colorado to a high of 13.8% in Alabama.³⁶ States in the Southeast have the highest rates of diabetes,³⁷ forming a region researchers call the “diabetes belt.”³⁸



Source: CDC, *Diabetes Atlas: Diagnosed Diabetes, Age Adjusted Rate, 2012*.

The Cost of Diabetes

Caring for diabetes is extremely expensive on an individual level. In 2012, healthcare expenditures for a person with diabetes were on average 2.3 times higher than expenditures for individuals without diabetes (\$13,741 vs. \$5,853).³⁹

Costs on the national level are staggering as well, with taxpayers funding a large percentage of diabetes care through Medicare and Medicaid. The United States spends a significant portion of its healthcare dollars on diabetes: one in five overall healthcare dollars and one in three Medicare dollars are used to treat diabetes and its complications.⁴⁰ In 2012, the American Diabetes Association (ADA) estimated the total cost of the disease at \$245 billion.⁴¹ This figure includes direct medical costs of \$176 billion, which takes into account hospital inpatient care, prescription medications, antidiabetic agents and diabetes supplies, physician office visits, and nursing/residential facility stays.⁴² The other \$69 billion

represents indirect costs, which include increased absenteeism, reduced productivity for working and non-working populations, inability to work due to disability, and lost productive capacity due to early mortality.⁴³ In 2014, researchers put the annual cost of diabetes even higher at \$322 billion, based on analysis of claims data from commercially insured individuals and Medicare beneficiaries (\$244 billion in excess medical costs and \$78 billion in reduced productivity).⁴⁴

A Call to Action

The federal government must act now to turn the tide on diabetes. With the right care and interventions, diabetes can be effectively managed or entirely prevented. The seven recommendations below explore steps the federal government should take to ensure that people living with or at risk for type 2 diabetes receive effective, efficient, and cost-effective healthcare while gaining the resources and skill they need to manage their own health.

Table of Federal Policy Recommendations

| | |
|---|--|
| 1 | Include evidence-based diabetes and prediabetes services in essential health benefits to improve health and reduce costs. |
| 2 | Reimburse for the diabetes prevention program (DPP) in Medicare without cost-sharing and provide guidance to state Medicaid programs on covering the DPP through Medicaid. |
| 3 | Expand Medicare coverage of medically-tailored meals and provide guidance to state Medicaid programs regarding meal coverage. |
| 4 | Increase federal funding for diabetes prevention and research. |
| 5 | Award diabetes-specific CMS innovation grants. |
| 6 | Increase federal investments to support healthy food access. |
| 7 | Maintain school nutrition requirements and increase reimbursement rates to support healthy food at school. |

Recommendations for Federal Policy Reform

1. Include evidence-based diabetes and prediabetes services in Essential Health Benefits to improve health and reduce costs.

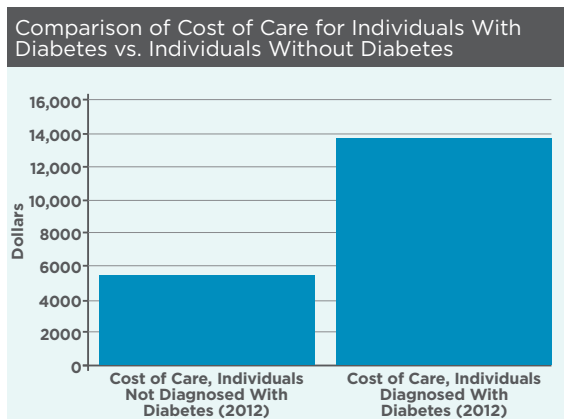
We recommend including the National Diabetes Prevention Program (National DPP) and diabetes self-management education (DSME) in the definition of Essential Health Benefits (EHBs) under the Affordable Care Act (ACA).

THE NATIONAL DIABETES PREVENTION PROGRAM AND DIABETES SELF-MANAGEMENT EDUCATION IMPROVE HEALTH OUTCOMES FOR INDIVIDUALS AND REDUCE COSTS FOR PAYERS.

EHBs should explicitly include the National DPP and DSME because they are impactful and cost-effective methods to prevent and manage type 2 diabetes.

An estimated 86 million Americans over age 20 have prediabetes.⁴⁵ Without lifestyle changes, 15–30% of these individuals (12.9–25.8 million) will develop diabetes by 2019.⁴⁶ The National DPP is a multi-week lifestyle intervention that significantly reduces the risk of developing the disease among those with prediabetes.⁴⁷ To ensure uniformity in the quality of the intervention wherever offered, it must meet National Standards set by the Centers for Disease Control & Prevention (CDC).⁴⁸ Nationally, average per-patient healthcare expenditures for people diagnosed with diabetes are estimated at \$13,741 annually, of which \$7,888 is attributed solely to diabetes-related care.⁴⁹ At a cost of approximately \$450 per person,⁵⁰ the National DPP can avoid tens of thousands of dollars in costs per patient over the patient’s lifetime. Over 550 sites nationwide currently offer the National DPP, and the CDC is working to significantly expand the number of sites.⁵¹

BEATING TYPE 2 DIABETES: RECOMMENDATIONS FOR FEDERAL POLICY REFORM



Source: *Economic Costs of Diabetes in the United States in 2012*, 36 DIABETES CARE 1033 (2013).

For individuals who have already been diagnosed with type 2 diabetes, DSME aims to prepare them to manage their own disease and prevent its progression. Using a variety of educational methods, including one-on-one instructional sessions and group meetings, DSME teaches patients skills to reduce the severity of their disease, including how to properly take medications, safely manage diet and increase exercise, and reduce the risk of acute and chronic complications through appropriate engagement with healthcare providers.⁵² The National Standards for Diabetes Self-Management Education and Support guide both providers and insurers in delivering and reimbursing DSME that is effective and utilizes evidence-based education and self-management support techniques.⁵³ DSME reduces incidence and severity of diabetes among individuals with diabetes by lowering blood glucose,⁵⁴ which in turn is associated with significant reduction in healthcare costs.⁵⁵

ESSENTIAL HEALTH BENEFITS, HEALTHCARE.GOV, 2014.

Essential Health Benefits: Ten Categories

1. Ambulatory Patient Services
2. Emergency Services
3. Hospitalization
4. Maternity and Newborn Care
5. Mental Health and Substance Use Disorder Services, Including Behavioral Health Treatment
6. Prescription Drugs
7. Rehabilitative and Habilitative Services and Devices
8. Laboratory Services
9. Preventive and Wellness Services and Chronic Disease Management
10. Pediatric Services, Including Oral and Vision Care

Source: *Essential Health Benefits*, www.healthcare.gov/glossary/essential-health-benefits/ (last visited Mar. 24, 2015).

KEY DIABETES SERVICES MAY NOT BE COVERED IN MANY STATES UNDER THE CURRENT FEDERAL DEFINITION OF ESSENTIAL HEALTH BENEFITS.

The best and most cost-effective way to control diabetes is to prevent it. Two key services, the National DPP and DSME, support primary and secondary prevention of diabetes. However, most public and private insurance plans do not cover preventive services like the National DPP. Although more insurance plans tend to cover DSME, important gaps in coverage remain.⁵⁶ Adding these cost-effective services to the definition of EHBs, which must be covered by both private health plans sold in state marketplaces and Medicaid expansion benefits packages, would significantly reduce new cases of type 2 diabetes, improve lives, and ultimately reduce healthcare costs.

The ACA currently identifies certain broad categories of healthcare services as EHBs, which must be covered by individual and small group health insurance plans as well as Medicaid (for newly eligible individuals in states that expand their Medicaid programs).⁵⁷ The specific services that fit into the ten categories of EHBs are defined according to the services covered by a state's chosen representative employer-provided plan, which serves as a "benchmark" plan.⁵⁸ However, services covered by plans sold in the state's marketplace do not have to be identical to those included in the benchmark plan; plans sold in the state's marketplace may substitute benefits within EHB categories so long as the substitution is of equal value to the consumer.⁵⁹ This means that there is no specific requirement for marketplace plans to cover the National DPP or DSME. For example, very few of the marketplace plans available in 2014-2015 Open Enrollment covered the National DPP, despite its demonstrated efficacy in preventing people with prediabetes from developing the disease.⁶⁰ Although more plans cover some amount of DSME, there are still private insurers and state Medicaid programs that choose not to cover this critical service for beneficiaries with diabetes.

THE SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) SHOULD INCLUDE THE NATIONAL DPP AND DSME IN THE DEFINITION OF EHBs, AS THEY PROMOTE POSITIVE HEALTH OUTCOMES AND GOOD VALUE IN HEALTHCARE.

The ACA provides that the Secretary of Health and Human Services (HHS) shall periodically update the services included in the EHBs.⁶¹ To prepare for the first update, HHS commissioned the Institute of Medicine (IOM) to recommend a process for defining and updating EHBs to respond to new research in medicine and healthcare.⁶²

The Essential Health Benefits package should become “more fully evidence-based, specific, and value-promoting.”

Source: INST. OF MED. OF THE NAT'L ACADS., ESSENTIAL HEALTH BENEFITS: BALANCING COVERAGE AND COST 137 (2012).

In its 2012 report, the IOM recommended that the Secretary should update the EHB package “with the goals that it becomes more fully evidence-based, specific, and value-promoting.”⁶³ In a list of criteria to guide EHB content attached to the report, the IOM advised that added services should be safe, be medically effective and supported by a sufficient evidence base, demonstrate meaningful improvement in outcomes, be a medical service not serving primarily a social or educational function, and be cost-effective.⁶⁴ These criteria clearly support inclusion of both the National DPP and DSME as specific services that should be included in the definition of EHBs, and we recommend that the Secretary of HHS explicitly add these services during the next EHB update. Including the National DPP and DSME in the definition of EHBs would ensure that these services are widely available through all plans offered on state marketplaces and in expanded Medicaid programs.

The National DPP is a clinically proven intervention program that can be delivered to a distinct subset of individuals with prediabetes, significantly reducing future healthcare costs. While the program has counseling and community-based engagement components, it is fundamentally a medical service. It is provided by trained individuals for the purpose of arresting disease progression in high-risk patients. Just as a hepatologist

educating a patient with early-stage hepatitis C that he should no longer drink alcohol is providing a medical service, so is a certified National DPP instructor educating people with prediabetes on how they can reduce the risk of developing diabetes or prevent it entirely. As with the National DPP, DSME has been shown to reduce diabetes severity and healthcare costs among an identifiable patient population. As with the National DPP, it is fundamentally a medical intervention that may be prescribed by healthcare providers.

As evidence-based interventions that are deliverable to distinct populations of at-risk individuals, these two medical services offer the chance to reduce expensive healthcare costs associated with diabetes for a low up-front investment. We recommend that greater access and uniformity in coverage of the National DPP and DSME be achieved through updating the definition of EHBs to explicitly include them.

2. Include the National Diabetes Prevention Program in standard Medicare coverage with no cost-sharing and provide guidance to state Medicaid programs on covering this service through State Plan Amendments.

We recommend that Congress add the National DPP to the list of preventive services covered for Medicare patients without cost-sharing by passing the Medicare Diabetes Prevention Act or similar legislation. We also recommend that the Centers for Medicare & Medicaid Services (CMS) provide guidance to state Medicaid programs wishing to cover this service.

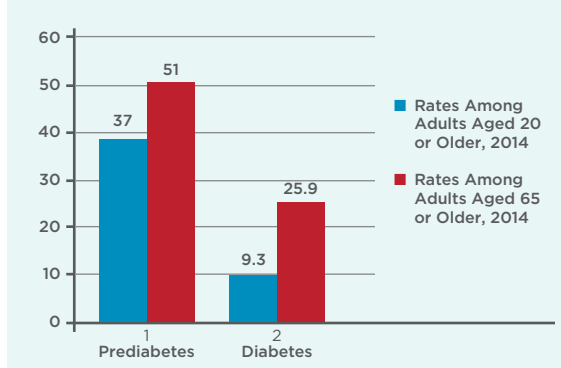
MEDICARE AND MOST MEDICAID PROGRAMS DO NOT COVER THE NATIONAL DPP, LEAVING MANY INDIVIDUALS WITH PREDIABETES UNABLE TO RECEIVE CRUCIAL PREVENTIVE CARE.

High rates of both prediabetes and diabetes among seniors make coverage of preventive services crucial for this population.⁶⁵ More than one quarter of individuals ages 65 and older are living with diabetes, and more than half

BEATING TYPE 2 DIABETES: RECOMMENDATIONS FOR FEDERAL POLICY REFORM

meet the criteria for prediabetes.⁶⁶ Prediabetes and diabetes also disproportionately affect low-income populations.⁶⁷ For these individuals, access to the National DPP offers the practical skills and knowledge that can help them change their lifestyle habits and avoid developing diabetes all together.

Prediabetes And Diabetes Among Adults And Seniors, 2014



Source: American Diabetes Association, *Statistics About Diabetes*, <http://www.diabetes.org/diabetes-basics/statistics/> (last viewed Mar. 2, 2015); *National Diabetes Statistics Report, 2014*, CTRS. FOR DISEASE CONTROL & PREVENTION, available at <http://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf>.

In 2002, researchers published a groundbreaking study on an intervention known as the Diabetes Prevention Program (DPP) in the *New England Journal of Medicine*.⁶⁸ For the study cohort that participated in the DPP, the risk of developing diabetes was reduced by 58%.⁶⁹ Notably, the DPP yielded even stronger results for individuals 60 years and older, with a reduction of 71% in the incidence of diabetes following participation in the program.⁷⁰ Subsequent studies that focused on low-income populations have found that the DPP led to a significant reduction in weight and hemoglobin A1C levels, thus lowering participants' likelihood of developing diabetes.⁷¹

Though Medicare covers some key diabetes services, including diabetes screening (covered without cost-sharing) and DSME (known as diabetes self-management training in Medicare or DSMT) (with cost-sharing),⁷² it does not currently cover the National DPP.⁷³ Lack of Medicare coverage for the National DPP means that a significant portion of Medicare recipients cannot access the service without paying the full cost of the program (approximately \$450 per person), which puts it out of reach for the majority of Medicare beneficiaries.⁷⁴ Additionally, most

state Medicaid programs do not cover the National DPP.⁷⁵ Lack of Medicaid coverage for the National DPP prevents many low-income patients from accessing this much-needed service.⁷⁶

COVERING THE NATIONAL DPP WITH NO COST-SHARING THROUGH MEDICARE AND MEDICAID WOULD IMPROVE PATIENT OUTCOMES AND REDUCE STATE AND FEDERAL SPENDING OVER THE LONG TERM.

The effectiveness of this intervention in the aging population, combined with the high incidence of prediabetes in the same age group, requires action to increase access to the National DPP in Medicare. People aged 65 and older have the highest rates of serious and expensive-to-treat complications related to diabetes, such as lower-extremity amputation, heart attacks, visual impairment, and end-stage renal disease.⁷⁷ Diabetes in this age group is also associated with “higher mortality, reduced functional status, and increased risk of institutionalization.”⁷⁸ Low-income populations with type 2 diabetes also suffer from increased morbidity due to diabetes and its complications at a higher rate than the general population with type 2 diabetes.⁷⁹ Investing in the National DPP is more than an investment in the prevention of diabetes alone; it could help to prevent multiple expensive medical conditions in large portions of the population.

Covering the National DPP without cost-sharing is projected to yield substantial cost savings in Medicare, and many key stakeholders at the federal level are already engaged in dialogue about the efficacy of the National DPP for Medicare beneficiaries. In February 2013, with funding from the Center for Medicare & Medicaid Innovation (CMMI), the YMCA began a demonstration project that offered the National DPP to 10,000 Medicare beneficiaries at no cost at 17 locations in Arizona, Delaware, Florida, Indiana, Minnesota, New York, Ohio, and Texas.⁸⁰ The intervention “is expected to save Medicare an estimated \$4.2 million over 3 years and \$53 million over 6 years.”⁸¹

States also stand to benefit significantly from including National DPP coverage in their Medicaid programs. Some states are beginning to offer coverage of the National

DPP for Medicaid beneficiaries, largely through demonstration grants from the CMMI.⁸²

CONGRESS SHOULD PASS THE MEDICARE DIABETES PREVENTION ACT OR SIMILAR LEGISLATION, WHICH WOULD ADD THE NATIONAL DPP TO THE DEFINITION OF “MEDICAL AND OTHER HEALTH SERVICES” AND REQUIRE MEDICARE TO COMPLETELY COVER THE COST OF THE NATIONAL DPP FOR ELIGIBLE INDIVIDUALS. CMS SHOULD OFFER GUIDANCE TO STATES WISHING TO COVER THE NATIONAL DPP IN THEIR MEDICAID PROGRAMS.

The Medicare Diabetes Prevention Act of 2013 (H.R. 962/S. 452) was introduced by Representative Susan Davis and Senator Al Franken on March 5, 2013.⁸³ The proposed legislation seeks to “amend title XVIII of the Social Security Act to reduce the incidence of diabetes among Medicare beneficiaries.”⁸⁴

The Medicare Diabetes Prevention Act would add the National DPP to the definition of “medical and other health services” in Medicare.⁸⁵ Specifically, the proposed legislation would have Medicare cover “items and services furnished under a diabetes prevention program...to an eligible diabetes prevention program individual.”⁸⁶ In order to be eligible for the National DPP, an individual must be at risk for diabetes.⁸⁷ Title XVIII of the Social Security Act currently provides a fairly generous definition of an “individual at risk for diabetes;” the individual need only meet one of many risk factors for diabetes, including, among others, elevated impaired fasting glucose, hypertension, and obesity.⁸⁸ The proposed legislation requires Medicare to pay 100% of the cost of the National DPP, which means that there would be no cost-sharing for Medicare beneficiaries.⁸⁹

The Medicare Diabetes Prevention Act would reduce federal spending by \$1.3 billion over 10 years.

Source: *Estimated Federal Impact of H.R. 962/ S. 452 “The Medicare Diabetes Prevention Act,”* AVALERE, AM. DIABETES ASS’N, YMCA, & AMER. MEDICAL ASS’N, Feb. 2014.

The Medicare Diabetes Prevention Act has profound implications for federal spending. Avalere Health, in collaboration with the American Diabetes Association and the National Council of the YMCA, analyzed the

projected costs and benefits of implementing the National DPP for Medicare beneficiaries.⁹⁰ The study found that the Medicare Diabetes Prevention Act “would reduce federal spending by \$1.3 billion over the 2015-2024 federal budget window.”⁹¹

Since the proposed legislation’s introduction in March 2013, neither the House nor the Senate has taken further action on the Medicare Diabetes Prevention Act.⁹² It is critical that Congress once again consider and pass the proposed legislation or similar legislation to add the National DPP to the list of Medicare services covered without cost-sharing.⁹³

To expand access to the National DPP for Medicaid beneficiaries, CMS should also provide guidance to state Medicaid programs wishing to cover this service. In contrast to Medicare, which is a federal program that is largely administered uniformly throughout the states, Medicaid is administered by state and local governments within federal guidelines. Decisions about coverage of additional services outside of the mandatory benefits required by the federal government fall to individual states, which must submit a State Plan to CMS detailing how their Medicaid programs work and what they will cover.⁹⁴ These plans must be amended in order for a state to make changes to its Medicaid program.⁹⁵ CMS can assist states that wish to cover the National DPP by issuing guidance which offers model language for a State Plan Amendment (SPA).

3. Include coverage in Medicare of medically-appropriate food as a cost-effective diabetes intervention and provide guidance to state Medicaid programs on covering this service through State Plan Amendments.

We recommend that Congress pass legislation to expand Medicare coverage of medically-tailored meals to all Medicare beneficiaries who meet established criteria. CMS should also provide state Medicaid programs wishing to cover this service with guidance and model language for SPAs or other waivers.

MEDICALLY-TAILORED MEALS CAN IMPROVE HEALTH OUTCOMES AND REDUCE COSTS BY HELPING PATIENTS MANAGE THEIR BLOOD GLUCOSE AND NAVIGATE LIFESTYLE TRANSITIONS.

Food can be used to manage and control diabetes and reduce associated healthcare costs. A key part of diabetes management is the adoption of a balanced diet that allows for control of blood glucose levels. Although nutrition interventions can take various forms, the provision of medically-tailored meals is a highly effective intervention that can help people with diabetes control their blood glucose levels and reduce their risk for complications associated with diabetes.⁹⁶ Medically-tailored meals also serve as an educational tool to demonstrate correct portion size and appropriate meal composition. A randomized study of 302 individuals focused on the effects of medically-tailored meals on weight loss and cardiovascular risk factors found that for participants with diabetes, provision of such meals led to a statistically significant reduction in blood glucose levels.⁹⁷ Lower blood glucose levels in patients with diabetes means lower healthcare costs and reduced risk of experiencing complications from the disease. A 1% reduction in hemoglobin A1C levels for someone with diabetes can lead to savings of between \$686 and \$950 per patient per year for insurers.⁹⁸ It also has a significant impact on health outcomes, translating to a “21% decrease in death, a 14% decrease in heart attack, and a 37% decrease in heart disease risk.”⁹⁹

For people with severe diabetes who cannot shop or cook for themselves, medically-tailored home-delivered meals have been shown to help patients stay in their homes, avoid hospitalization, and reduce utilization of high-cost services.¹⁰⁰ Even for those whose diabetes is not as severe, a period of medically-tailored meals can be a highly effective component of a successful lifestyle transition plan or program.

CURRENT MEDICARE COVERAGE OF MEDICALLY-TAILORED MEALS IS EXTREMELY LIMITED DESPITE EVIDENCE THAT SHOWS THEM TO BE A KEY COMPONENT OF COST-EFFECTIVE HEALTHCARE.

In 2010, 28% of Medicare beneficiaries had diabetes, and one in three Medicare dollars were spent on diabetes and its complications.¹⁰¹ Medicare must adopt innovative solutions to improving health outcomes among this population, such as broader access to medically-tailored meals.

While some Medicare programs do reimburse for medically-tailored meals, access to this benefit is extremely limited. In general, Medicare does not cover medically-tailored meals under Parts A and B, which means that most Medicare beneficiaries—approximately 44 million individuals—do not receive such coverage.¹⁰²

Under Medicare Part C (Medicare Advantage), private insurers who provide Medicare Advantage plans can *choose* to offer meals to beneficiaries who meet eligibility criteria. Beneficiaries of Medicare Advantage plans may receive meals if the service is 1) needed due to an illness; 2) consistent with established medical treatment of the illness; and 3) offered for a short duration¹⁰³ *and* if one of two circumstances apply: first, meals may be offered to individuals immediately following surgery or an inpatient hospital stay; and second, meals may be covered for individuals with chronic conditions like hypertension or diabetes if they are part of a program intended to “transition the enrollee to lifestyle modifications.”¹⁰⁴

Meals can also be covered for beneficiaries enrolled in Medicare Special Needs Plans, a specialized kind of Medicare Advantage plan, in which certain categories of beneficiaries can enroll, including 1) institutionalized beneficiaries, 2) dual eligible beneficiaries (patients eligible for both Medicare and Medicaid), and/or 3) beneficiaries who have one of a list of severe or disabling chronic conditions, including diabetes.¹⁰⁵ However, Medicare Special Needs Plans are not available in all areas.

Limiting meals as a possible covered benefit only to Medicare Special Needs Plans and Medicare Part C beneficiaries means that the majority of Medicare beneficiaries who have diabetes and meet the criteria for meal eligibility outlined in Medicare Part C do not have access to this service. Even among Medicare Advantage plans, administrators are not required to cover meals, meaning those who have access to Medicare Advantage plans may not have meals as a covered benefit.¹⁰⁶

Additionally, most state Medicaid programs do not cover medically-tailored meals, except through special waiver programs that focus on provision of meals for individuals who need a broad array of support services to avoid being institutionalized in an acute care facility. Lack of general Medicaid coverage for medically-tailored meals prevents many low-income patients who have diabetes and would meet the Medicare eligibility criteria from accessing a much-needed and cost-effective service.¹⁰⁷

EXPANSION OF MEDICALLY-TAILORED MEALS AS A BENEFIT TO ALL MEDICARE AND MEDICAID BENEFICIARIES WHO MEET ESTABLISHED CRITERIA CAN BE ACHIEVED THROUGH FEDERAL LEGISLATION (FOR MEDICARE) OR STATE PLAN AMENDMENTS OR WAIVERS (FOR MEDICAID).

Including coverage of medically-tailored meals as a medically necessary service for Medicare beneficiaries who meet the criteria and making them a covered service in Medicaid would extend the benefits of medically-tailored meals to individuals who sorely need them. There is significant potential for financial savings and improvement in health outcomes associated with prescribing medically-tailored meals in appropriate circumstances. Access to this benefit for all beneficiaries who meet the criteria is vital.

Congress should pass legislation to expand medically-tailored meals as a covered benefit to all Medicare beneficiaries. For coverage of meals to be expanded in Medicaid, states must draft SPAs or develop and/or amend other waivers to add meals as a covered benefit.¹⁰⁸ To facilitate development of SPAs or waivers, CMS should provide state Medicaid programs with guidance and model language.

4. Increase federal funding for diabetes prevention and research.

We recommend increasing funding to diabetes prevention and research programs, including the CDC-led National Diabetes Prevention Program (National DPP), the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), and the Division of Diabetes Translation (DDT), in order to develop and deliver better treatments and support the delivery of effective preventive services.

FEDERAL INVESTMENTS IN DIABETES PREVENTION AND RESEARCH ARE TOO LOW TO EFFECTIVELY COMBAT THE DISEASE.

By 2025, the number of those living with diabetes is projected to rise by 64% to 53.1 million, and the costs of diabetes will rise to \$514 billion, 72% higher than in 2010 and comparable to the entire present Medicare budget.¹⁰⁹ With such drastic increases on the horizon, it will be necessary not only to treat individuals with diabetes but also to sufficiently fund research and programs that help prevent its onset.

However, in recent years appropriations to research and prevention endeavors have been reduced in the face of fiscal pressures. For example, the National DPP, which was explicitly authorized in the Affordable Care Act,¹¹⁰ has never been fully funded. Despite the Senate Committee on Appropriations' recommendation that the National DPP receive \$20 million in Fiscal Year (FY) 2013, it received no funding.¹¹¹ The program received \$10 million in FY2014, but this falls far short of what would be necessary to make it a truly national program.¹¹²

The NIDDK, part of the National Institute of Health (NIH) and the leading supporter of research into diabetes treatment and potential cures, received \$75 million dollars less in funding in FY2014 than in FY2010.¹¹³

Even where funding has been stable, as with the Division of Diabetes Translation within the CDC, current funding levels are not sufficient. For instance, when the National DPP was not fully funded following the passage of the ACA, DDT nonetheless proceeded to partially initiate the program by funding program sites

at the YMCA.¹¹⁴ DDT was only able to support the program on a limited basis, reaching 178 sites in 23 states despite the nationwide need for diabetes preventive services.¹¹⁵

INCREASED FUNDING WOULD SUPPORT EFFECTIVE INTERVENTIONS AND PROVIDE THE KNOWLEDGE BASE TO DEVELOP NEW TREATMENTS.

Increasing allocations to the National DPP, the NIDDK, and the DDT would facilitate the development of a truly nationwide response to the rise of diabetes.

Fully funding the National DPP would enable the program to expand across the country to reach a greater number of individuals at risk of developing diabetes. Increased funding would allow the CDC to train more providers.¹¹⁶ It would also support education campaigns to inform individuals at risk of diabetes about the benefits of the program, and to inform healthcare providers about how to refer their patients.¹¹⁷

Increasing funding levels to the NIDDK would support the fight against diabetes from prevention to treatment. With additional funds, the NIDDK could launch a new study to locate genetic indicators of type 2 diabetes risk or support a new clinical trial to test the comparative effectiveness of different diabetes medications.¹¹⁸ Even beyond initiating new programs, the NIDDK could use greater funding to accelerate its existing research programs,¹¹⁹ such as a cure for diabetes.¹²⁰ Supporting the NIDDK would spur diabetes research broadly and help develop the knowledge necessary to effectively combat the disease.

Finally, by bringing together many stakeholders at every level across the country, from state and local governments to healthcare providers to patient organizations, DDT promotes clinically proven educational programs and develops best practice guidelines and research programs.¹²¹ DDT is already engaged in these activities, but increased funding would mean an enhanced capacity to lead a nationwide response to the diabetes epidemic.¹²² By ensuring that cutting-edge diabetes research is put into practice, DDT helps to reduce incidence of diabetes, saving lives and reducing costs.

CONGRESS SHOULD FULLY FUND THESE PROGRAMS THROUGH THE APPROPRIATIONS PROCESS.

Congress must increase federal funding for diabetes prevention and research for the National DPP, the NIDDK, and the DDT. Adequately funding these organizations now can lead to substantial reductions in cost of healthcare further down the road. Unless the federal government takes decisive steps in this moment and invests what is necessary to truly bend the curve of the disease, we will see a significantly increased diabetes burden, with all of the human and financial costs and heartache this disease entails.

5. Encourage states to develop holistic and coordinated diabetes care models through diabetes-specific CMS Innovation Awards.

We encourage CMMI to direct funding to demonstration projects that incorporate and aim to test the efficacy of interventions and models of care for prevention and treatment of type 2 diabetes, with the goal of implementing the most effective of these interventions and models in the broader Medicare and Medicaid programs.

CMMI-FUNDED DEMONSTRATION PROJECTS ARE AN IMPORTANT WAY TO EVALUATE COST-EFFECTIVENESS OF CUTTING-EDGE INTERVENTIONS ON A LARGE SCALE.

The ACA established CMMI to promote “broad payment and practice reform in primary care.”¹²³ Since then, CMMI has partnered with states and providers nationwide to create new programs designed to combat a wide array of diseases. Many CMMI awards have been partially used by states to address diabetes prevention, care, and treatment.¹²⁴ However, there is a continued strong need for CMMI support to test the efficacy of diabetes interventions and services, such as the impact of Community Health Workers, intensive case management, and provision of targeted food and nutrition education. To that end, we recommend that CMMI design and administer a round of funding awards focused exclusively on preventing and effectively managing type 2 diabetes.

Diabetes disproportionately affects individuals of lower socio-economic status who are more likely to receive Medicaid.¹²⁵ It is also responsible for one out of every three Medicare dollars spent.¹²⁶ Accordingly, the government has a strong incentive to encourage innovation in addressing diabetes among beneficiaries of public healthcare programs.¹²⁷ Given the scope and complexity of diabetes, CMMI should focus more attention and resources on this national epidemic. CMMI funding that is explicitly earmarked for diabetes would encourage states to test a wider array of services and innovative care models in order to reduce their diabetes burdens. A round of funding awards focused on diabetes should be coupled with the provision of technical assistance in proposal development to states, especially to those states with the highest diabetes burdens.

10 States with Highest Diabetes Rates



States With the Highest Type 2 Diabetes Rates, STATEOFOBESITY.ORG, <http://stateofobesity.org/lists/highest-rates-diabetes/> (last viewed Mar. 27, 2015).

ALTHOUGH CMMI FUNDING HAS BEEN USED BY STATES TO ADDRESS DIABETES AS WELL AS OTHER CHRONIC ILLNESSES, THE COMPLEXITY AND COST OF DIABETES WARRANTS A MORE FOCUSED FUNDING STREAM.

Diabetes is a complex disease that touches on every aspect of an individual's life. Prevention and management requires significant lifestyle change and active engagement with healthcare providers. Using a CMMI award as a tool to combat diabetes avoids a one-size-fits-all approach to diabetes prevention and treatment while leveraging innovative existing programs and relationships with community coalitions in each state. Pilot programs funded through

foundations and other private funds have yielded promising new interventions that can successfully target members of certain high-risk, high-needs populations. For example, programs have used *Compañeras de Salud* (also known as Community Health Workers) to engage a hard-to-reach urban Latino community in their healthcare.¹²⁸ They have used technology and intensive care coordination and support to identify and address the needs of individuals who frequently visit the emergency room or are hospitalized due to diabetes.¹²⁹ They use community-based organizations as sites for delivering diabetes self-management education to specific populations, such as seniors, and couple that education with follow-up support to ensure compliance with treatment regimens and lifestyle change for previously non-adherent individuals.¹³⁰ In order to demonstrate the benefits of covering these and other innovative interventions to private and public insurers, however, there is a need for broader evaluation of interventions across a wider segment of the population. A CMMI award can be used to test these promising new models of care statewide and with different populations. It can also help link together various stakeholders, including providers, insurers, healthcare centers, and community groups, in efforts against diabetes.¹³¹ The application process often encourages the formation of coalitions and extensive collaboration among potential subgrantees. With a diabetes-focused CMMI funding stream, states can serve as innovation labs while providing valuable data on diabetes best practices to the national healthcare community.

CMMI FUNDING FOCUSED ON DIABETES COULD LEAD TO A TRANSFORMATION IN CARE DELIVERY FOR THIS DIFFICULT DISEASE.

A diabetes-focused round of new CMMI grants should encourage projects that look at both prevention and treatment of the disease and encourage states with the highest diabetes burdens to participate.

In leveraging federal funding and expertise along with state- and community-level innovation, CMMI grants allows states to tap into their existing networks and develop prevention and care coordination initiatives in unique and innovative ways. Considering the significance of the diabetes epidemic nationwide and the state-to-state variations in

BEATING TYPE 2 DIABETES: RECOMMENDATIONS FOR FEDERAL POLICY REFORM

the populations most affected by the disease, the varied approaches that states take will help determine best practices in reducing incidence of diabetes and improving care. State initiatives will provide valuable insight into the interventions and services that are most effective in responding to the disease both locally and on a broader national level.

6. Increase federal investments to support healthy food access.

We recommend that the federal government expand investment in federal programs that increase access to healthy food, as consumption of healthy food not only helps prevent the incidence of type 2 diabetes and other chronic diseases, but also mitigates the consequences of type 2 diabetes once individuals are diagnosed with the disease.

MANY AMERICANS LACK ACCESS TO HEALTHY FOOD.

For many low-income individuals and families in the United States, reliable access to healthy food is not guaranteed, due to the inability to afford healthy food (economic access) and/or the lack of geographic access to retail food establishments that sell healthy foods.

In 2013, approximately 14.3% of United States households were food insecure,¹³² which means that individuals in these households faced “limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.”¹³³

| STATES WITH HIGHEST FOOD INSECURITY RATES | RATE OF FOOD INSECURITY |
|---|-------------------------|
| United States | 14.6% |
| 1. Arkansas | 21.2% |
| 2. Mississippi | 21.1% |
| 3. Texas | 18% |
| 4. Tennessee | 17.4% |
| 5. North Carolina | 17.3% |
| 6. Missouri | 16.9% |
| 7. Alabama | 16.7% |
| 8. Georgia | 16.6% |
| 9. Louisiana | 16.5% |
| 10. Nevada | 16.2% |

SOURCE: U.S. DEP'T OF AGRIC., ECON. RESEARCH SERV., HOUSEHOLD FOOD SECURITY IN THE UNITED STATES IN 2013 15 (Sept. 2014), available at <http://www.ers.usda.gov/media/1565415/err173.pdf>.

Individuals in the United States struggle to afford enough food to maintain a healthy lifestyle. In fiscal year 2014, over 46.5 million individuals relied on the federal government's primary nutrition assistance program (the Supplemental Nutrition Assistance Program, SNAP [formerly food stamps]).¹³⁴ This means that 14.7% of people in the United States relied on SNAP benefits at some point during fiscal year 2014.¹³⁵

Further, many individuals live in areas with limited healthy food retail, hampering their ability to purchase healthy foods even if they have the economic means.¹³⁶ The U.S. Department of Agriculture (USDA) has determined that 23.5 million individuals (13.5 million of whom come from low-income households) live in “food deserts,”¹³⁷ or “urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food.”¹³⁸

LACK OF ACCESS TO HEALTHY FOOD IMPACTS THE PREVENTION AND TREATMENT OF TYPE 2 DIABETES.

Food insecurity has a direct impact on an individual's ability to prevent and manage chronic diseases, such as type 2 diabetes. A 2010 article in the *New England Journal of Medicine* identified a direct correlation between food insecurity and chronic diseases, such as type 2 diabetes.¹³⁹ According to the article, “adults with the most severe levels of food insecurity have more than twice the risk of diabetes of adults who have ready access to healthful foods. Among adults who already have diabetes, food insecurity is associated with poorer glycemic control.”¹⁴⁰ Doctors often recommend that individuals with type 2 diabetes adopt a healthier diet; however, it is often very difficult for low-income individuals to shift away from a high-calorie, low-cost diet to a lower-calorie, nutrient dense—but sometimes more expensive—diet of fruits, vegetables, and other whole food products. “The inability to afford such foods is one likely mechanism between food insecurity and an increased incidence of diabetes and poor glycemic control.”¹⁴¹ Food insecure individuals report facing the decision to use the little money they have to purchase either food or medication.¹⁴²

FEDERAL INVESTMENTS ARE CURRENTLY INSUFFICIENT TO ENSURE INDIVIDUALS AND FAMILIES HAVE ACCESS TO HEALTHY FOOD.

While there are several federal programs that aim to address economic and geographic barriers to healthy food access, federal funding has been insufficient to adequately address consumers' needs and ensure access to healthy food for people who have or are at risk for type 2 diabetes.

As mentioned above, the federal government provides food purchasing assistance to Americans primarily through SNAP, which serves nearly 46.5 million low-income individuals at an annual cost of nearly \$75 billion.¹⁴³ SNAP benefits can be spent on any basic food item,¹⁴⁴ with the exclusion of prepared foods, tobacco, and alcohol.¹⁴⁵ While \$75 billion sounds like a significant amount of federal funds, in fiscal year 2014 the average monthly SNAP benefit was only \$125.35 per person and \$256.98 per household.¹⁴⁶ Under current funding levels, this breaks down to approximately \$31.33 per week for an individual and approximately \$64.25 per week for a household. Current benefit levels are inadequate to ensure individuals and families have the ability to purchase enough food to reduce their food insecurity and support a healthy life.¹⁴⁷

If SNAP participants struggle to meet basic food needs with current benefit levels, purchasing enough healthy foods—such as fruits and vegetables—can also be a significant struggle. Prior to 2014, the federal government had authorized several programs to provide additional financial assistance to low-income individuals in both SNAP and WIC (the Special Supplemental Nutrition Assistance Program for Women, Infants, & Children) to purchase more fruits and vegetables. The WIC Farmers' Market Nutrition Program (WIC-FMNP)¹⁴⁸ and the Senior Farmers' Market Nutrition Program (S-FMNP)¹⁴⁹ provide additional benefits between \$6 to \$50 per year to eligible participants to purchase fresh fruits and vegetables. Although these are important programs, their impact is limited due to their narrow participant scope and low benefit levels.

In order to incentivize the use SNAP benefits for the purchase of healthy food items such

as fruits and vegetables to a broader set of SNAP participants, Congress authorized the Food Insecurity and Nutrition Incentive (FINI) Grant Program in the 2014 Farm Bill.¹⁵⁰ This new federal program is based on innovative state- and local-level programs that provide incentives for SNAP participants to purchase more fruits and vegetables. For example, since 2009, a public-private partnership called Michigan's "Double Bucks" program has provided a dollar to dollar match for SNAP beneficiaries.¹⁵¹ Since its inception, it has benefitted over 200,000 families.¹⁵² For the first time, innovative programs such as Michigan's program will be eligible to receive federal funding to continue and expand their important work.¹⁵³ The first round of grant applications were due in December 2014.¹⁵⁴

FINI will distribute \$100 million over the course of 5 years to match funds for "projects that encourage SNAP recipients to purchase fruits and vegetables by reducing their cost."¹⁵⁵ Projects proposed for FINI funding can include new pilot programs, community-based incentive programs, and large-scale incentive programs.¹⁵⁶ Projects must provide a dollar-to-dollar match, where every \$1 provided by the federal grant must be matched by \$1 in money secured by the project.¹⁵⁷

Although this is a good start, the funding allocated for FINI projects is limited and FINI will only be able to fund a set number of projects in a set number of areas. Yet, the potential benefits to SNAP participants justify increased federal expenditures. According to the Final Report of the Healthy Incentives Pilot (a pilot program similar to FINI that preceded FINI's inclusion in the 2014 Farm Bill), which gave SNAP participants a 30-cent credit for every dollar spent on targeted fruits and vegetables, this type of incentive can be successful in increasing fruit and vegetable consumption among SNAP beneficiaries.¹⁵⁸

Even if individuals and families have the economic means to purchase healthy food, they may struggle with finding retail outlets that sell healthy food. In 2010, to encourage food retailers to move into food deserts (low-access areas), the Healthy Food Financing Initiative (HFFI) was launched as an inter-agency effort by First Lady Michelle Obama's *Let's Move* campaign and the Treasury Department (Treasury), the Department

of Health and Human Services (HHS), and USDA.¹⁵⁹ HFFI aims to increase access to healthy food in low- to moderate-income under-served communities by supporting the creation and expansion of healthy food retail outlets such as grocery stores and farmers markets and to support farmers and food business entrepreneurs.¹⁶⁰ The Treasury awarded \$22 million in 2014 to Community Development Financial Institutions (CDFIs) for healthy food financing projects,¹⁶¹ while HHS provided over \$9 million in grants to Community Development Corporations for 2015 community economic development-based healthy food financing projects.¹⁶² The USDA, however, has not yet provided any funding for HFFI projects. It was not until the 2014 Farm Bill that Congress, for the first time, created an HFFI program by statute within USDA and authorized federal funding for the USDA's HFFI program.¹⁶³ Although the 2014 Farm Bill authorizes \$125 million to USDA's HFFI program, no funds have been appropriated.¹⁶⁴ The President requests \$13 million in his FY2016 budget for HFFI.¹⁶⁵ Combined with the HFFI funding that the Treasury and HHS have routinely been allocated, the money requested for USDA represents a 40% increase in money available for HFFI projects. The Farm Bill's authorized funding level for USDA's HFFI represents a significant increase in potential funding and has the potential to support a wide range of projects aimed at increasing access to healthy food in low-access areas.

THE FEDERAL GOVERNMENT MUST INCREASE ITS INVESTMENTS TO IMPROVE ACCESS TO HEALTHY FOOD.

Federal dollars invested in SNAP, FINI, and HFFI (as well as the other fruit and vegetable benefit programs discussed above [WIC FMNP and S-FMNP]) work to increase access to healthy food for all consumers, particularly for those who are food insecure and therefore at increased risk of developing type 2 diabetes. By incentivizing the purchase of healthy food and expanding access to healthy food retail, the federal government plays a pivotal role through these programs in addressing the diabetes epidemic in the United States.

The government can and must do more. It should provide more funding for SNAP participants to purchase food. It should also increase funding for the WIC and SNAP fruit

and vegetable programs (WIC-FMNP and S-FMNP) that increase eligible participants' ability to purchase healthy fresh fruits and vegetables. The federal government should also increase mandatory and/or discretionary funding for FINI in the next Farm Bill to help the program expand to more communities across the United States. Further, Congress should appropriate funds to USDA authorized under the 2014 Farm Bill for their HFFI program, which has yet to be launched and which is key to establishing healthy food retailers and improving healthy food supply chains in areas with limited healthy food access. Congress should also allocate more money to Treasury and HHS to increase the number of grants they can award in their HFFI programs. Because risk for diabetes is tied to food insecurity and lack of access to healthy food, these federal-level interventions can serve as a lever for change in the diabetes epidemic across the United States.

7. Maintain strong federal nutrition standards for school lunch and increase school meal reimbursement rates.

We recommend that the federal government maintain and enforce its nutrition requirements for the National School Lunch and Breakfast Programs (NSLP and NSBP) and increase reimbursement rates for school meals in order to support the provision of healthy food at school and fight rising rates of type 2 diabetes in children.

TYPE 2 DIABETES IS A GROWING EPIDEMIC AMONG CHILDREN, AND SCHOOL NUTRITION PROGRAMS MUST MAINTAIN RIGOROUS NUTRITION STANDARDS TO ADDRESS IT.

Although type 2 diabetes used to occur mainly in adults, the disease has become increasingly prevalent in adolescents and today occurs in children as young as 10 years old.¹⁶⁶ The National Diabetes Education Program asserts that the rise in youth type 2 diabetes is "a first consequence of the obesity epidemic among young people, and [a] significant and growing public health problem."¹⁶⁷ Type 2 diabetes is more aggressive in children than adults, progressing to serious complications only a few years after diagnosis.¹⁶⁸

Consumption of healthy food is an important determinant of children's health and their likelihood of developing diabetes.¹⁶⁹ The American Diabetes Association notes that “[c]hildren and teens may be able to prevent diabetes or delay its onset for many years” through interventions such as improved diets and physical activity.¹⁷⁰ However, less than 25% of high school students consume enough fruits and vegetables each day, and nearly 30% of children do not exercise more than three times per week, falling far short of engaging in the recommended 60 minutes of daily physical activity.¹⁷¹

School nutrition programs can play a significant role in reducing children's lifetime risk of developing type 2 diabetes, as children consume half or more of their daily calories at school.¹⁷² More than 32 million children participate in the federally funded NSLP, and 12 million participate in the NSBP.¹⁷³ The Healthy, Hunger-Free Kids Act of 2010 strengthened nutrition standards for school meals. The federal government should maintain those strong nutritional standards for these programs and increase funding for school meals in order to reduce the rates of childhood obesity and diabetes across the United States.

MAINTAINING NUTRITION GUIDELINES AND INCREASING FUNDS FOR HEALTHY FOOD IN SCHOOL WOULD AID IN THE PREVENTION AND TREATMENT OF CHILDHOOD DIABETES.

Ensuring that food served in school complies with rigorous nutritional standards helps to develop lifelong healthy eating habits in children and creates a school environment that fosters wellness and fights diet-related chronic disease. Federal school meal programs like the NSLP and NSBP allow low-income children to receive either free or reduced-price meals (F/RP meals) at school. Reauthorized by Congress every 5 years as part of the Child Nutrition Act (and up for reauthorization again in 2015),¹⁷⁴ these programs are administered by the U.S. Department of Agriculture (USDA), which issues regulations that dictate the nutritional composition of school meals.¹⁷⁵ Pursuant to Congressional authority under the Healthy, Hunger-Free Kids Act of 2010,¹⁷⁶ in 2012 the USDA promulgated national nutritional standards that, among other

changes, required higher amounts of fresh fruits and vegetables in school lunches and breakfasts.¹⁷⁷ Schools that met the new requirements received a six-cent per meal increase in the federal reimbursement rate for serving meals that complied with the new standards.¹⁷⁸ This meant that instead of receiving \$2.93 for each free lunch, \$2.53 for each reduced-price lunch, and \$0.28 for each paid lunch provided to children, schools that met the new standards would receive, \$2.99, \$2.59, and \$0.35, respectively.¹⁷⁹

Research shows that rigorous nutrition standards for school meals have a statistically significant impact on Body Mass Index (BMI), a factor that influences risk for obesity and diabetes. One recent study measuring the correlation between childhood obesity and state nutrition requirements found that, “[i]n states that exceeded the [pre-2012, less rigorous] USDA standards, the difference in obesity prevalence between students who obtained free/reduced-price lunches and students who did not obtain school lunches was 12.3% points [in favor of school lunch recipients] . . . compared with states that did not exceed USDA standards.”¹⁸⁰ In spite of the health benefits of the new nutritional guidelines, critics have pushed to delay implementation of some requirements or permit “hardship waivers,” as some schools assert that the new requirements have adverse effects on both school budgets and student participation in meal programs.¹⁸¹ Several members of Congress have advocated for weakening the 2012 nutrition requirements.¹⁸² However, efforts to delay or weaken the new federal nutrition standards are short-sighted and undermine the long-term health of a generation of school children. Congress should maintain the strong nutritional requirements in the reauthorization of the Child Nutrition Act in 2015.

Congress should also provide additional support for the new nutritional requirements by increasing per-meal reimbursement rates for the NSLP and NSBP. In 2010, Congress increased its school lunch reimbursements by just six cents for a total of \$2.99 per meal for each free meal and \$2.59 for each reduced price meal (for meals that could be certified as meeting increased nutrition standards).¹⁸³ Thus, many school districts struggle to provide school meals at the federally-authorized

BEATING TYPE 2 DIABETES: RECOMMENDATIONS FOR FEDERAL POLICY REFORM

reimbursement rates, especially with heightened requirements for more fresh and healthy ingredients as well as recent training and certification requirements.¹⁸⁴ The National School Boards Association reports that, “[u]sing the USDA’s conservative estimate, the reimbursement increase per free and reduced lunch provides less than half the cost of implementing the standards over the next 5 years.”¹⁸⁵ In the upcoming reauthorization, Congress should authorize increased meal reimbursement rates in order to address this shortfall.

Finally, the ability to purchase food in schools outside of the federal meal programs (known as “competitive foods”) may undercut benefits from improved nutritional quality of school meals. Because these competitive foods tend to be less healthy than meals served as part of the NSLP, they may have an impact on the health of students who elect to purchase them instead of eating the school meal that meets the nutritional guidelines,¹⁸⁶ as well as students who consume snacks as part of their daily habits.¹⁸⁷ This impact can be significant: “half of secondary school students consume at least one snack food a day at school, an average of 273 to 336 calories per day, [when] an excess of [only] 110 to 165 calories per day may be responsible for rising rates of childhood obesity.”¹⁸⁸ Pursuant to authority under the Healthy, Hunger-Free Kids Act of 2010,¹⁸⁹ in 2013 the USDA set guidelines for competitive foods for the first time, including maximum allowances for sugar and saturated fat.¹⁹⁰ As with the nutritional guidelines, critics of the competitive food guidelines have urged reconsideration, claiming that the new guidelines reduce school budgets by limiting the additional revenue schools would

otherwise receive from offering competitive foods on campus.¹⁹¹ However, the cost of undermining children’s immediate and long-term health with sugary snacks and drinks far outweighs the loss of revenue from vending machines and a la carte pizza. Congress should maintain its support of competitive food regulations by protecting the new standards in its upcoming Child Nutrition Act reauthorization.

CONGRESS SHOULD MAINTAIN SCHOOL NUTRITION REQUIREMENTS AND PROVIDE INCREASED FUNDING FOR CHILD NUTRITION PROGRAMS.

The Healthy, Hunger-Free Kids Act of 2010 required the USDA to update nutrition guidelines for the NSLP and NSBP and granted authority to promulgate nutrition guidelines for competitive foods.¹⁹² For its 2015 reauthorization of school meal programs, Congress should not call for any scale back of the current nutrition standards. Additionally, Congress should increase reimbursement rates for both the NSLP and the NSBP to enable schools to adopt the new standards. Finally, the USDA should enforce its restrictions on competitive foods to ensure unhealthy foods are kept out of schools. These regulations ensure that the school food environment promotes optimal nutrition and wellness for all students, including those who participate in meal programs and those who supplement food from home with cafeteria, vending machine, or other snack purchases. Strong nutrition standards and the early adoption of healthy dietary practices help to prevent obesity and the onset of type 2 diabetes in youth or further down the road in adulthood.

CONCLUSION

The diabetes epidemic requires urgent attention from all government entities, from Congress to federal agencies. States also have an important role to play, and the Center for Health Law & Policy Innovation will address that role in an upcoming 2016 report on State Best Practices. These recommendations focus on key federal policy actions that would yield significant results for people living with or at risk for type 2 diabetes. The implementation of these recommendations will provide the 29 million people with diabetes and the 86 million

people with prediabetes with access to tools they can use to live healthier lives free of type 2 diabetes or its complications. As a nation, we cannot afford to ignore the toll diabetes is taking on all segments of society, from our seniors to our youth. Ensuring access to vital prevention and treatment services while transforming our food environment through strategic funding choices will give our citizens the opportunity to take informed control of their health, and ultimately, to beat type 2 diabetes.

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BEATING TYPE 2 DIABETES: RECOMMENDATIONS FOR FEDERAL POLICY REFORM

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BEATING TYPE 2 DIABETES: RECOMMENDATIONS FOR FEDERAL POLICY REFORM

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BEATING TYPE 2 DIABETES: RECOMMENDATIONS FOR FEDERAL POLICY REFORM

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