

Taking a Collective Approach to Reducing Diabetes Disparities November 4, 2014 2:00 Eastern

Richard Crespo, Marshall University

Patricia Doykos, Bristol-Myers Squibb Foundation

David Gould and Fredda Vladeck, United Hospital Fund

Kim Prendergast, Feeding America

Together Diabetes

Communities Uniting to Meet America's Diabetes Challenge



Grantmakers in Health Webinar
November 4, 2014
Patricia M. Doykos
Director, Bristol-Myers Squibb Foundation



Bristol-Myers Squibb Foundation: Mission

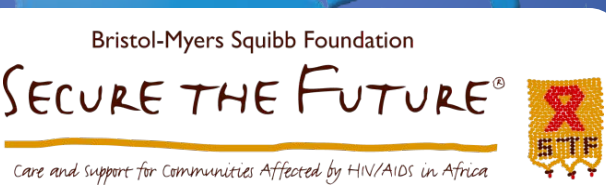
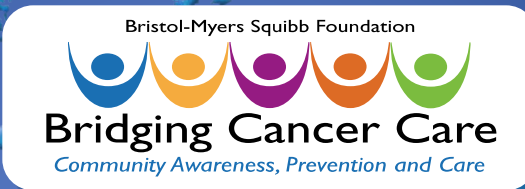
Promote health equity and improve the health outcomes of populations disproportionately affected by serious diseases and conditions

Bristol-Myers Squibb Foundation

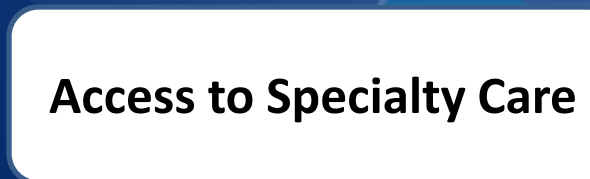
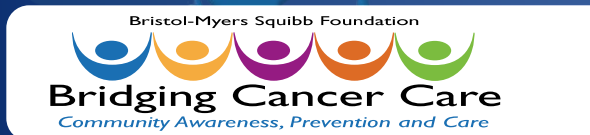
Type 2 Diabetes, Veteran
Mental Health & Wellbeing,
Lung Cancer and Specialty
Care Access in the U.S.

Cancer in Central &
Eastern Europe /COEs
only

Hepatitis C in
China/India



HIV/AIDS and cervical
cancer in Africa



BMS Foundation Health Equity Approach & Strategy

- Target funding and initiatives to improve health outcomes at the community level
 - Healthcare worker training (professional/lay)
 - Community mobilization and supportive services
- Foster innovative health equity strategies
- Evaluate for impact on health outcomes, capacity, standard of care/care models and policy
- Advocate with partners for system change and sustainability
- Share lessons learned

Type 2 Diabetes is a Major Public Health Challenge in the U.S.

- 29.1 million Americans living with diabetes today including 8.1 undiagnosed and may triple by 2050
- 86 million are pre-diabetic
- 26.9% over 60 are living with diabetes
- Prevalence higher among minority populations, seniors and the poor
- About half of diagnosed diabetes patients are not controlled (HbA1c > 7.0)
- Barriers to control go beyond access to medical care and treatment to challenges in daily self management and implementing lifestyle changes
- Diabetes care cost \$245 billion in 2012



Together *Diabetes*™

Communities Uniting to Meet the Challenge of Diabetes
in China, India and the United States

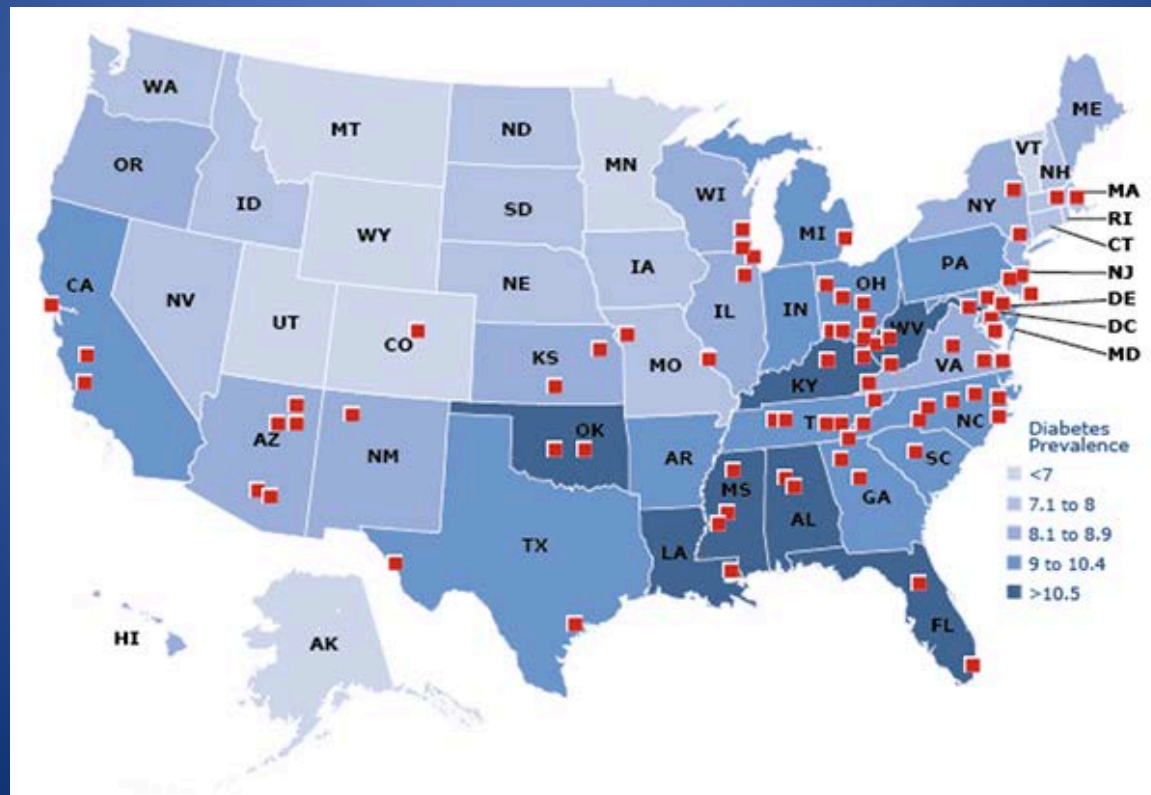
- Launched 2010
- \$58 million philanthropic initiative to promote health equity and improve outcomes of adults living with type 2 diabetes – both diagnosed and undiagnosed – who are disproportionately affected in China, India and the United States

Focal Points for Funding and Partnerships

- Strengthen and expand patient self management education and support and care navigation
- Strengthen and integrate community supportive services with clinical services and broadly mobilize communities to fight T2DM
- Foster a radical rethink and test new ideas about how diabetes prevention and control efforts are approached, designed, implemented and measured given the current and future scale of the epidemic and the long duration of the disease journey

Where things stand - US

26 grantees, 25 demonstration projects in 60 communities in 28 states and DC, 4 program support grantees, \$53 million in funding



Grantees



American Pharmacist Association Foundation

American Academy of Family Physicians

Foundation/Peers for Progress

American Association of Diabetes Educators

Black Women's Health Imperative

Camden Citywide Diabetes Coalition/Cooper
Foundation

Duke University/Durham County DOH

East Carolina University

Feeding America

Health Choice Network Florida

Marshall University

Mississippi Public Health Institute

National Council on Aging

Public Good Projects/IOM

United Hospital Fund

United Neighborhood Health Services

University of Colorado

University of Virginia

University of Michigan

Sixteenth Street Community Health Center

Whittier Street Health Center

Grantee Learning
Collaborative & Summits

National Network of
Public Health Institutes

Evaluation & Quality
Improvement

University of Kansas
Center for Community
Development

Policy & Advocacy

Harvard Law School

Dissemination & Scaling
of Successful Models &
Lessons Learned

Morehouse School of
Medicine

Achievements to Date

Against TOD Focus & Goals

- Disproportionately affected populations addressed through grant projects:
 - Medicare, Medicaid, uninsured, seniors, African American, Latino/Hispanic, American Indian, Appalachian people, rural and urban poor, homeless, food insecure
- 608 mobilized and collaborating partners from CBOs, FBOs, government, academia and business
- 83% of projects addressing access to healthy food
- 78% of projects addressing access to physical activity resources

Achievements to Date Against TOD Focus & Goals

- 303 lay health workers/ 216 professional health workers trained
- 89.4% of trained health workers mobilized to apply new and enhanced skills in the projects
- 47,692 people living with or at risk of diabetes reached with community engagement & community based self management education
- Up to 2.1% average reported change in Ha1c

Achievements to Date

Against TOD Focus & Goals

- BMSF and TOD grantee presentations at key health meetings such as National Minority Quality Forum, ADA Disparities Forum, AADE, ADA, Joslin Diabetes Innovation Conference, APHA, Clinton Global Initiative, National Rural Health Association, Global Business Coalition on Health, Social Impact Exchange
- 44 peer reviewed presentations and publications
- \$13.9 million in additional project funding from government and philanthropic sources



**Food Is
Medicine**

**Feeding
America
Diabetes
Initiative**

Kim Prendergast, RD, MPH

November 4, 2014





Feeding America is the nation's leading domestic hunger-relief charity.

VISION

A Hunger-Free
America

MISSION

To feed America's hungry through a nationwide network of member food banks and engage our country in the fight to end hunger.

The Feeding America Network

200

MEMBER
FOOD BANKS

+

1

NATIONAL
OFFICE

=

+

60K

FOOD
PANTRIES
AND MEAL
PROGRAMS

46M

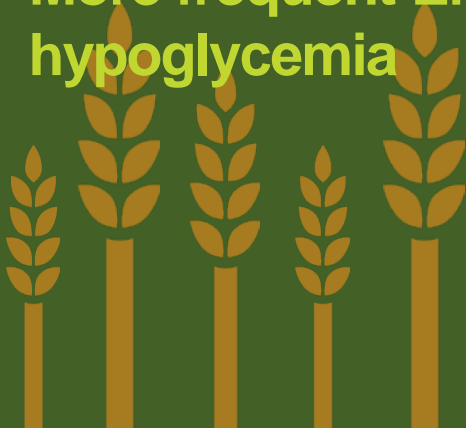
**AMERICANS
SERVED ANNUALLY**



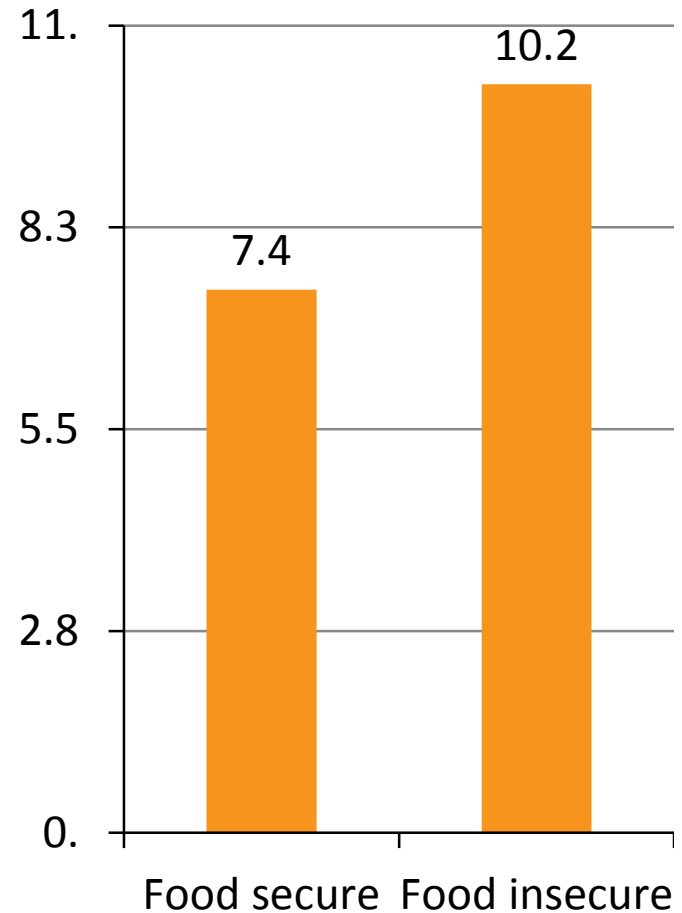
Food Insecurity & Diabetes

Individuals who are Food Insecure face:

- Increased Risk of Diabetes
- More challenges managing diabetes
- Lower diabetes self-efficacy
- Higher rates of diabetes distress
- More frequent ER visits for hypoglycemia



Diabetes Rates
US Low-Income Population
NHANES 1999-2004



Seligman, JI Nutr, 2010

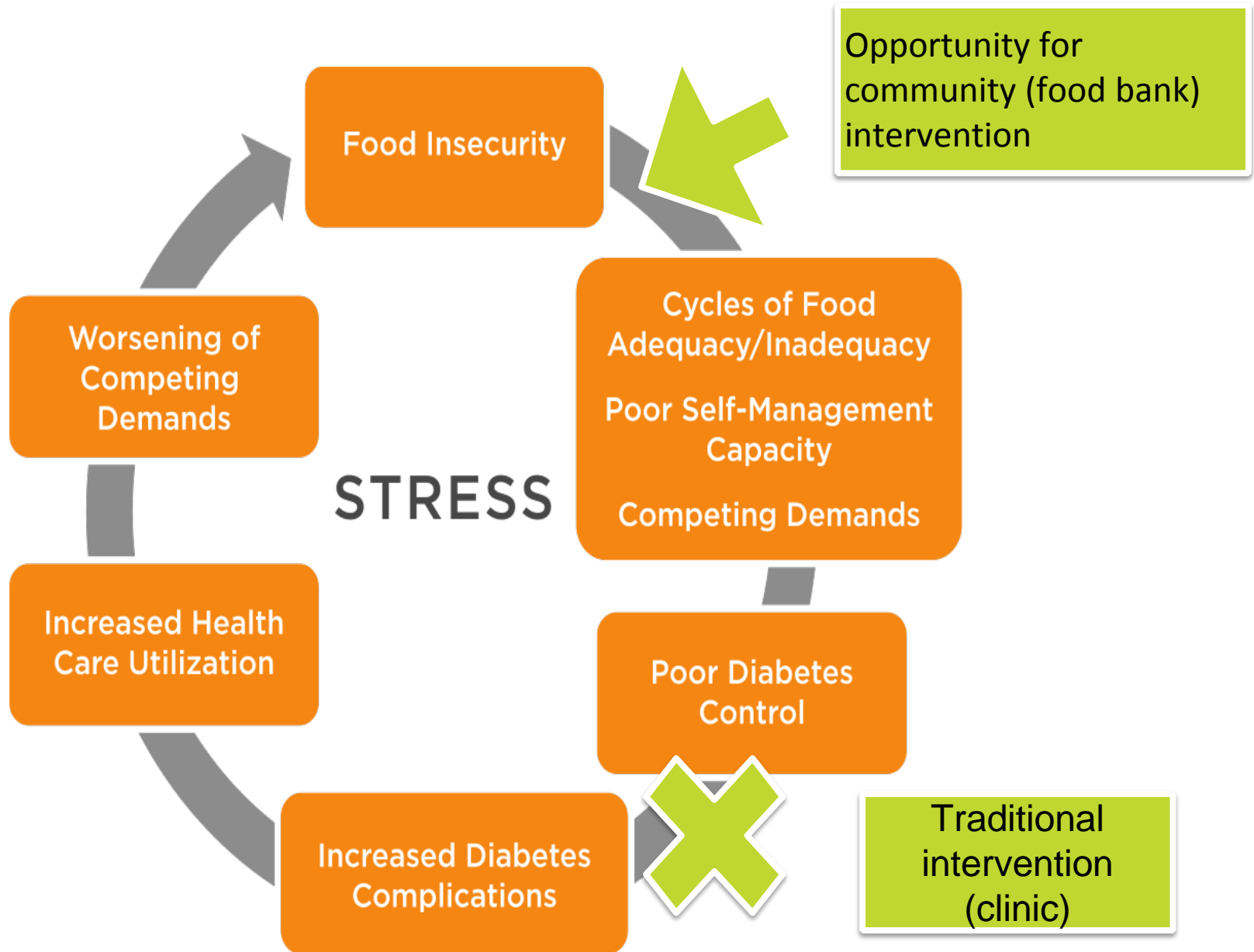
The Challenges of Managing Diabetes and Food Insecurity: What Clients Say

“In the beginning of the month I eat more meats, salads and fruits...At month’s end I have to eat whatever is in the cupboard....”

“The end of the month, I start getting out of food... but I have to eat something, ‘cause if I don’t eat behind my [insulin] shot, that shot will make you so sick. I just eat anything I can find during that time just to keep me from getting sick.”



Food Insecurity and Diabetes: A New Approach



Adapted from Seligman & Schillinger.

Feeding America Diabetes Initiative: 2011-2014



Food Banks & Healthcare
Partners created
**BI-DIRECTIONAL
REFERRALS**



Screened clients at FBs
and HC sites and enrolled
1,500 INDIVIDUALS
struggling with diabetes
& food insecurity



FOOD BOXES
improve food security
through provision of
diabetes-appropriate
foods



**NUTRITION & HEALTH
EDUCATION**
offered through written
materials, classes & 1-on-
1 discussion



Client and Program Evaluation led by Dr. Hilary Seligman
University of California, San Francisco,
Center for Vulnerable Populations



Food Bank-Healthcare Partnerships

Food Bank Screening:

- Diabetes testing at food distributions
- Enrolled in food box & education program
- Referred to healthcare partner if client didn't currently have primary care and/or diabetes care access



Healthcare Partner Screening:

- Used 2-item Food Insecurity Screener to identify patients in need of food assistance
- Patients referred to food bank for enrollment in program

Healthcare Partners included FQHCs, Community Hospitals, Private MD offices, Free Clinics



Monthly Food Packages & Diabetes Education

Food Distribution

- **Pre-packed boxes:** Non-perishable foods appropriate for diabetes
- **Fresh & frozen items:** Fresh produce and other perishables such as dairy and meat



Diabetes & Nutrition Education

- Written Information with food boxes
- Group Classes (1-time and multi-week series)
- Videos in waiting areas
- One-on-One education at food distribution sites



Feeding America's Diabetes Initiative

Key Lessons Learned



**Food is
medicine**



**Food Pantry
clients are
interested
in learning
about their
health**



**Clients
with
type 2
diabetes
want
healthy
foods**



**Food
Bank-
Health
clinic
partner-
ships
were
successful**



**Health
education
messages
require
creativity**

Evaluation led by UCSF Center for Vulnerable Populations Dr. Hilary Seligman

Pre-Post Client Survey and HbA1c entered in REDCap

Client Health Outcomes:

- Improved blood sugar control
- Reduced Diabetes Distress
- Improved Diabetes Self-Efficacy
- Improved Medication Adherence
- Reduced Food-Medication Tradeoffs
- Decreased Depressive Symptoms
- Fewer Hypoglycemic Episodes
($p < .01$ for all)



Next Steps: Diet-Related Disease Project Expansion

FOOD BOXES/RX FOR FOOD

Support for more Feeding America food banks to have diabetes-friendly foods available to clients with diabetes.

DISEASE-SPECIFIC CLIENT SELF-MANAGEMENT EDUCATION

Screening clients for diabetes and providing intensive nutrition and health education at food distributions to meet individuals **where they are** with services to support healthy lifestyles.

FOOD BANK-HEALTHCARE PARTNERSHIPS

Technical assistance to food banks to work with FQHC, hospitals, free clinics, and other healthcare partners to identify clients with diabetes and other chronic disease and engage partners for referrals.

RANDOMIZED CONTROL TRIAL

Waitlist control design research project to begin at two additional food banks in 2015



Cross-Sector Partnerships Are Challenging

Taking a Collective Approach to Reducing Diabetes
Disparities

GIH Webinar

November 4, 2014

Fredda Vladeck

David Gould

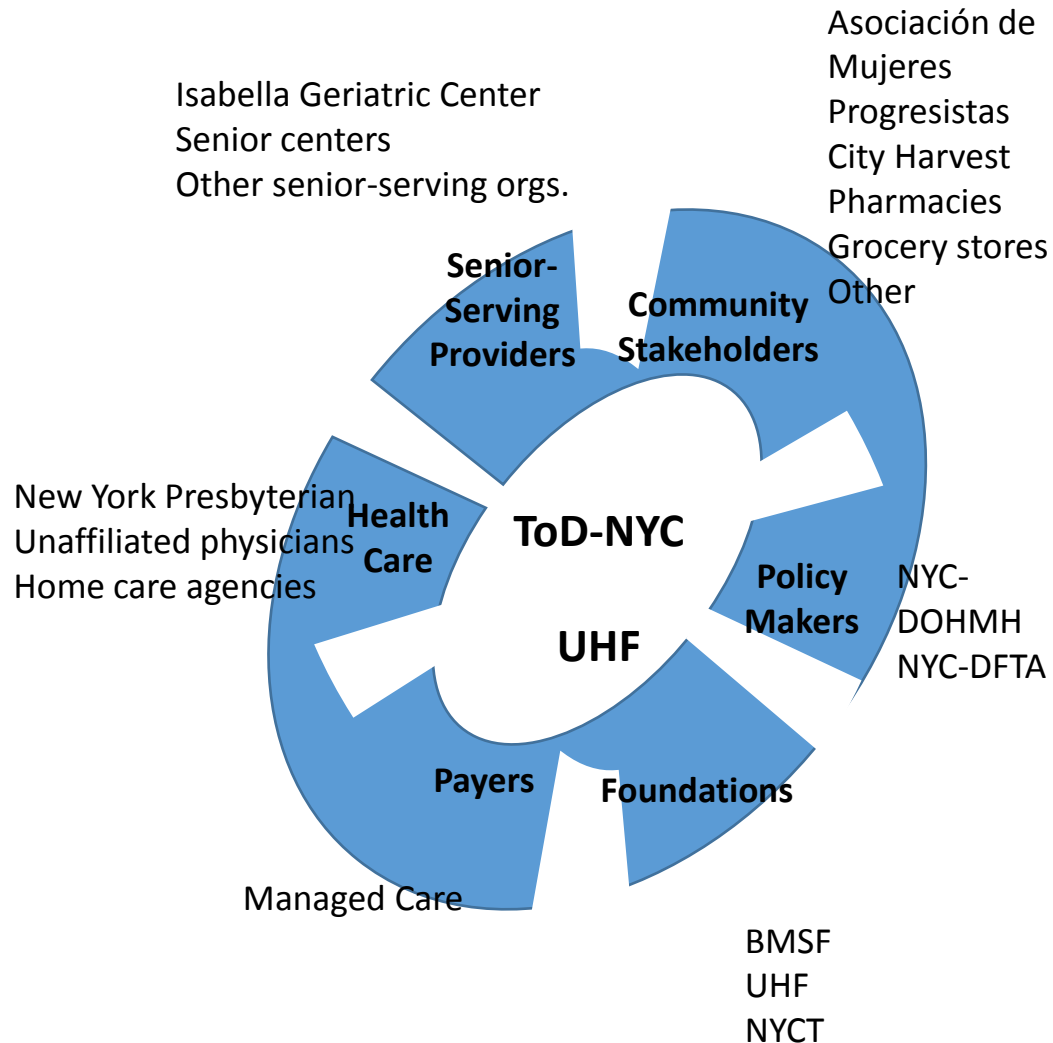
United Hospital Fund



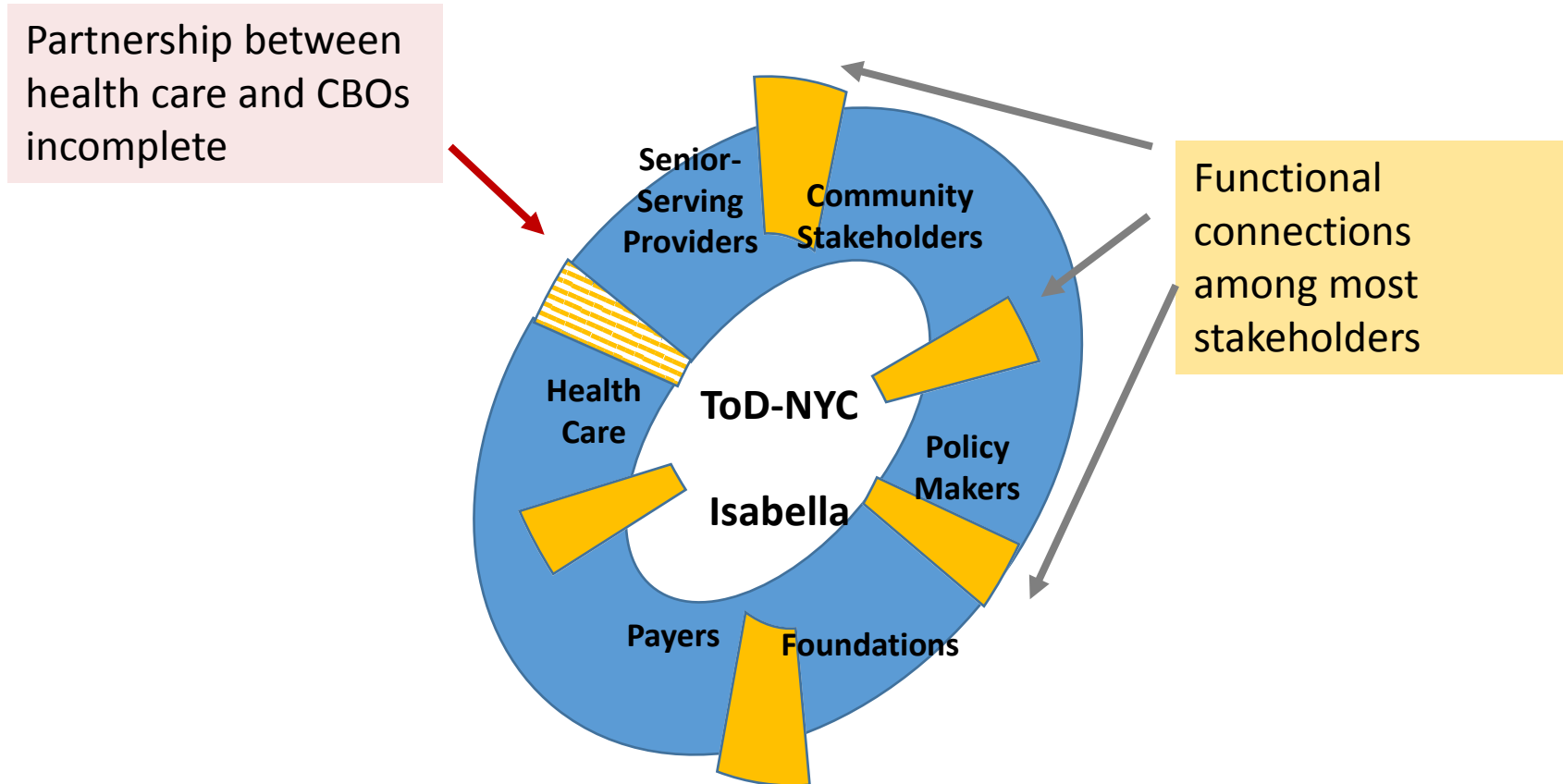
Cross-Sector Partnership

- What is it?
- Why is it important now?
- UHF's work on health and social service partnerships

ToD-NYC Partners



ToD-NYC Partnership



The Great Divide

- Organizational Differences
- Regulatory Environments
- Infrastructure
- Disparate Resources

Foundation Actions

- Time
- Resources
- Third Party Role
- Measure and Assess
- Sustain and Replicate

Contact Information

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- David Gould

Senior Advisor

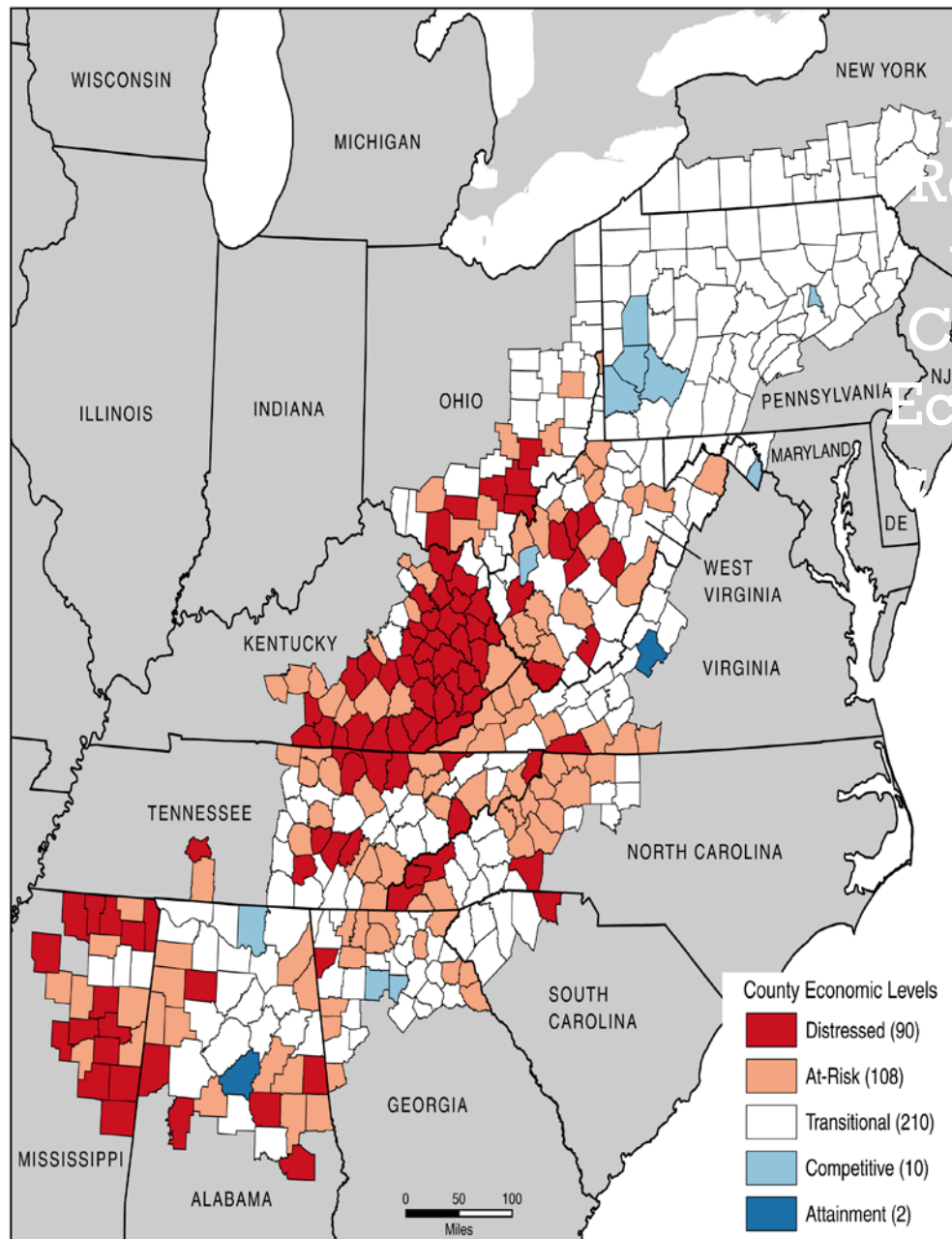
212 494-0740, dgould@uhfnyc.org

APPALACHIAN DIABETES COALITIONS

Richard Crespo, PhD

Marshall University School of Medicine





A REGION DEFINED BY ITS GEOGRAPHY

Characterized by
steep mountains and
narrow valleys



A REGION WITH A DISTINCT CULTURE



DISTRESSED COUNTY RESIDENTS' HEALTH INDICATORS

- Distressed county residents are more likely to:
 - Use tobacco
 - Be physically inactive
 - Be obese



DIABETES BURDEN IN DISTRESSED APPALACHIAN COUNTIES

Prevalence of diabetes

- 13.1% in Appalachian distressed counties
- 8.2% Non-Appalachian counties in ARC states
- 8.1% National rate

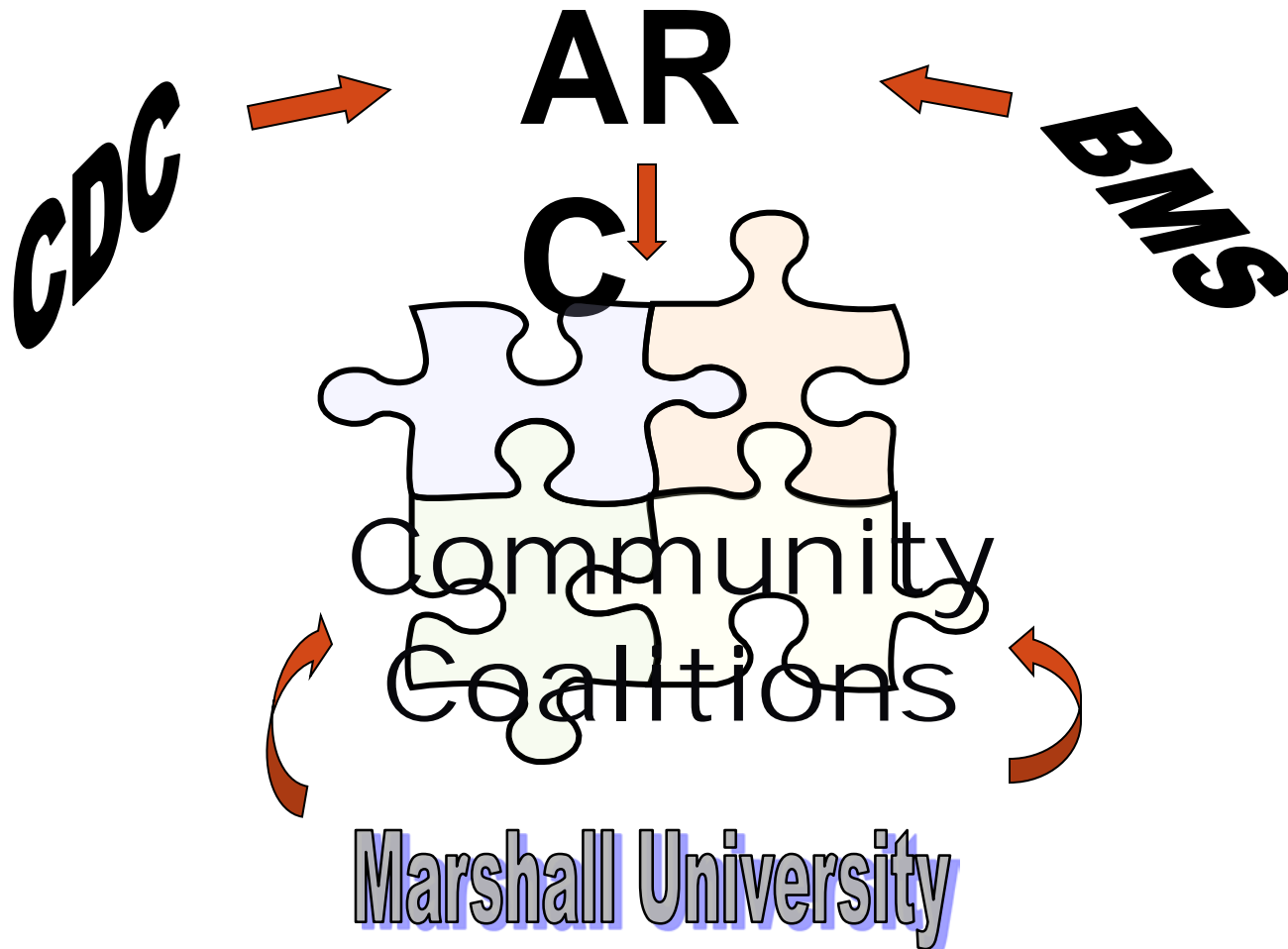
Prevalence of diabetes in people ages 45-64

- Distressed counties: 1 in 5
- All other counties in the ARC region: 1 in 8

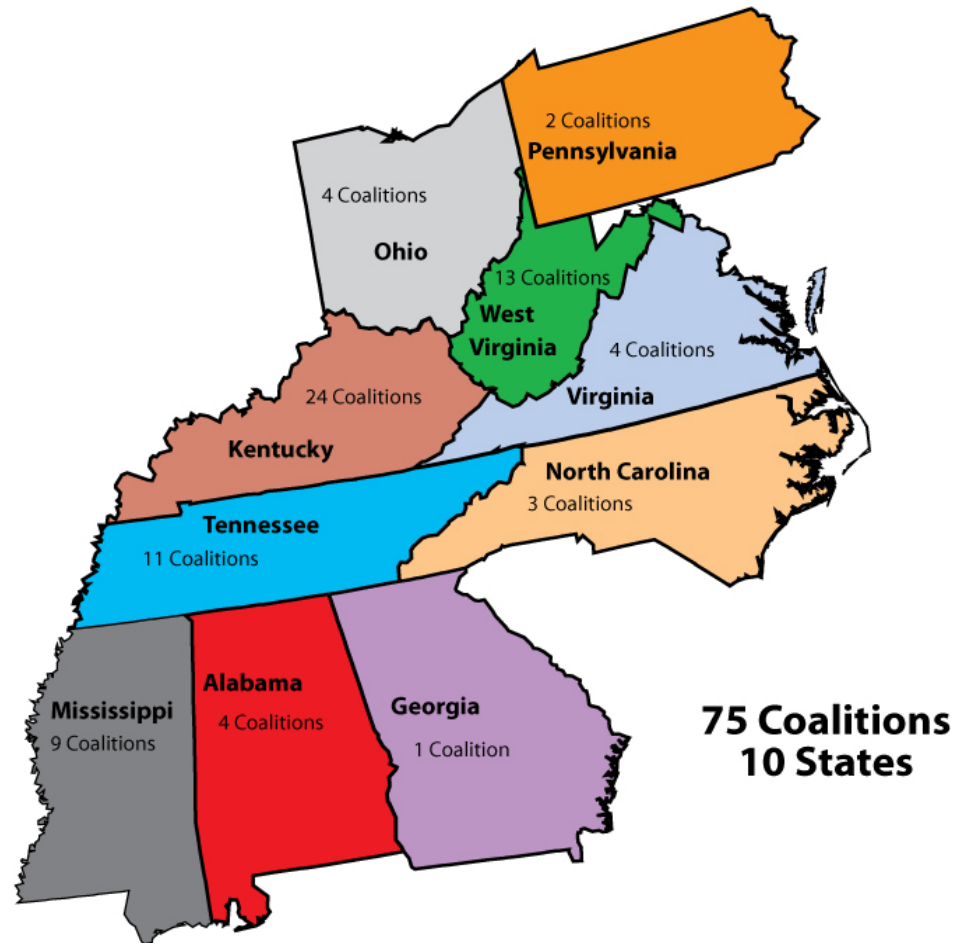
Residents in distressed Appalachian counties are at significantly greater risk for diabetes than in the non-Appalachian counties of ARC states (odds ratio 1.4; 95%CI)²



PARTNERSHIPS



Appalachian Region Diabetes Coalitions



EXAMPLES OF DIABETES COALITIONS MEMBERS

Examples of Community Group

- Churches
- Volunteer clubs
- PATCH groups
- County diabetes coalitions
- Active or retired health professionals
- Informal groups of citizens



Partnerships



Examples of Non-Profit Organizations

- Local health dept.
- Primary care centers
- County extension offices
- Schools
- Mayor or town councils
- Community colleges
- Local hospital



SELF-MANAGEMENT PROGRAMS

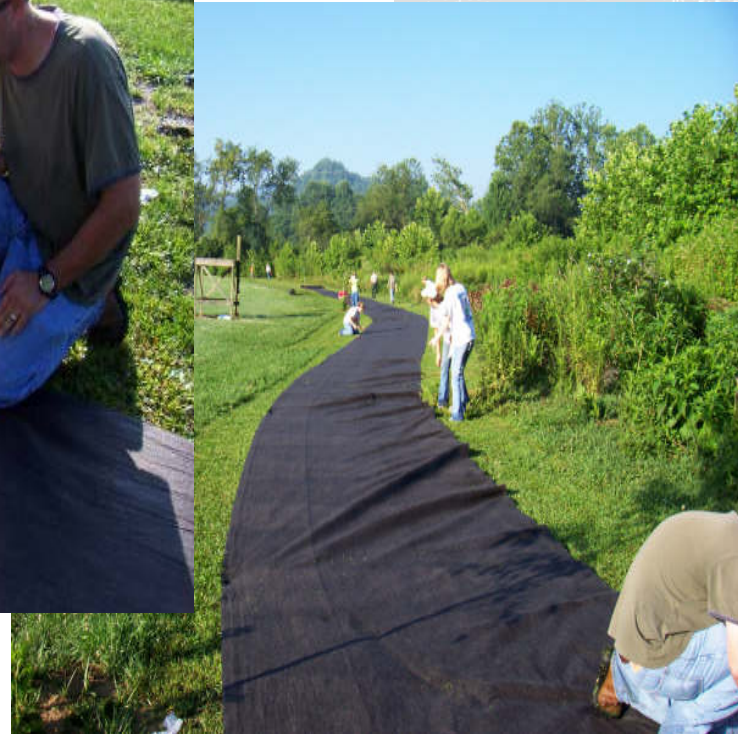
- Diabetes Prevention Program
- Chronic Disease Self-Management Program (CDSMP/DSMP)
- Walk with Ease
- Shopping Matters (shopping for healthy foods economically)
- Team-based walking competitions



WORKSITE WELLNESS

Adams-Brown
Diabetes Coalition
partnered with GE
to implement a
worksite wellness
program that is
now being used as
a model in other
worksites in Ohio





BUILT ENVIRONMENTS

Over 8,000 people
participated in sustained
walking programs in 2013



NETWORK OF DIABETES COALITIONS IN THE REGION OPENS THE DOOR FOR PARTNERSHIPS WITH NATIONAL ORGANIZATIONS

- Harvard Law School, Food Law and Policy Clinic
 - Faculty and students research and on-site technical assistance
- Feeding America – food security
- Share Our Strengths – healthy food shopping and cooking evidence-based programs
- American Heart Association – tools for monitoring and controlling blood pressure



ACCOMPLISHMENTS IN 2013

Programs	Results in 2013
Leaders trained in EBP (CDSMP, DSMP, Walk with Ease, Shopping Matters)	235
CDSMP and DSMP completers	447
Sustained physical activity program participants	8,059
Total physical activity encounters	25,378
Healthy eating EBP participants	865
Glucose screen with referrals to medical providers	2,222
Cash and in-kind contributions	\$435,955



ACCOMPLISHMENTS: COMMUNITY HEALTH WORKERS

- Mingo County WV
 - Of 73 patients, 77% experienced a decrease in their A1C of at least 1 percentage point (clinically significant)
 - those with a baseline A1C of 12% or greater had an average 4.4 percentage point decrease.
- Whitfield and Murray Counties GA
 - Serve 600 families
 - Case manage 84 people with diabetes – zero hospitalized in 2013
 - 152 women whose 1st language is not English obtained mammograms
- Adams and Brown Counties OH
 - Innovation – linked CHWs with a school-based health center



SUSTAINABILITY OVER TIME

Year	Cumulative Number of Coalitions	No. & % of Coalitions Reporting	Number That Did Not Report
2001	5	5 (100%)	0
2002	14	14 (100%)	0
2003	27	25 (93%)	2
2004	35	30 (86%)	4
2005	44	38 (86%)	6
2006	51	45 (88%)	6
2007	59	50 (85%)	9
2008	66	58 (88%)	8
2009	66	58 (88%)	8
2010	66	56 (85%)	10
2011	66	50(75%)	16
2012	66	47(71%)	19
2013	75	58(77%)	17



SYNTHESIS OF SUCCESS

- Commitment of coalition leaders to “make it happen”
 - Coalitions members accountable to each other
- Ownership – coalitions select and implement the programs
 - Marshall does NOT lead the coalitions
- Funding does not drive the coalitions – most coalitions currently functioning without funding from Marshall
- Mobilize the community – pull resources from multiple entities in the community
- Equip multiple leaders
- Strong identification with their community – cultural sense of “home”



INVITATION

Join the partnership with:

- Appalachian Regional Commission
- Division of Diabetes Translation, CDC
- Bristol-Myers Squibb Foundation

To scale-up in counties with diabetes coalitions and reach all distressed counties in the Appalachian Region



GOAL 1: EXPAND COALITIONS NETWORK TO UNDERSERVED POPULATIONS

1. **Diabetes coalition in all distressed counties in the Appalachian Region by 2019.**

- ✓ Diabetes coalitions in 42 counties that do not have diabetes coalitions
- ✓ Three year funding: \$5,000 per coalition for year 1, \$10,000 for the following 24 months
- ✓ Required to implement specific number of evidence-based self-management, built environment, and policy development programs
- ✓ Follow our model that includes up-front planning workshop using the Diabetes Today model



GOAL 2: SCALE-UP COALITIONS' INTERVENTIONS TO REACH THE UNREACHED

2. Scale-up evidence-based programs in current diabetes coalitions to penetrate the whole county, especially with diabetes prevention.

- Three levels of funding depending on the population size of the county and current strength of the coalition

Funding Model	Funding Amount per Year	Number of Years	Number of coalitions	# Required EBP
Basic	\$2,000	3	7	3
Enhanced	\$3,000	3	24	4
Expanded	\$5,000	3	44	6
TOTAL COALITIONS			75	



Funder Lessons

Evaluation:

- Prescribe a set of core indicators and request the measurement tool, frequency and person collecting the data in the **evaluation plan** in the RFP
- Ongoing, engaged evaluation is an opportunity for rapid cycle quality improvement

Grantee collaboration:

- Invest in and create **community** among grantees, others involved in the initiative and similarly focused government, health system and philanthropic initiatives
- **Learning Collaborative** and **Annual Grantee Summit amplified** program impact and created grantee-grantee TA and partnerships

Translating and sustaining innovations and effective models:

- **Solicit and fund sustainability** work like anything else. Make it a part of the RFP and a line item in the budget
- Engage a **policy translation** partner to provide project specific TA
- Connect grantees to **other funders and funding platforms**
- **Engage public and private payers** to incorporate their evaluation and translation processes into the projects and initiative at the start of the initiative

Sharing Evidence, Lessons and Resources

Program Overview/
Annual Reports

www.togetherondiabetes.com

Conference
Presentations
& Exhibits

2012 Annual Report



Employee Communications

Grantee Driven
Communication/Sharing



Annual Grantee Summit

Dissemination Partnership
with Morehouse

- Online center for best practices and tools
- Educational programs
- Replication and National Collaborative

Some Lessons & Insights from the Grants

DSME & care navigation:

- DSME can be delivered in a range of community based settings and needs to be available to the patient on an ongoing basis – the “diabetes club” concept vs. program (UHF)
- Patient self management knowledge assessment before education meets the patient where they are (APhAF, UNHS)
- Rural AA women taking insulin did not benefit as much from the small changes approach and community support as those not taking insulin (ECU)
- View patients with greater dimensionality to account for medical and social risk /strengths vs. just based on medical risk (Camden, Duke)
- Adopt a “multiple doors” approach to patient outreach and ongoing care navigation (Feeding America, Peers for Progress, 16th Street CHC)

Some Lessons & Insights from the Grants

Community mobilization and organizing:

- Social unit approach to diabetes prevention & management supports impact and scaling (Hopkins, BWHI)
- Anchor/backbone organizations can integrate and advance and “snowball” services but need time to communicate goals, make initial progress with partners and work with the community over time (Marshall)
- Clinics and CBOs serving the same vulnerable populations can accelerate effective service integration and delivery by adopting a quick fail & correct mini-pilot approach to create needed systems and processes (Feeding America, Camden)

Staying the Course

- Achieve, capture data and report optimal project outcomes and impact
 - Patient
 - Provider/Clinic
 - Community
 - Health system
- Sustain capacity built and service delivery
- Engage in advocacy and translational policy work
- Share intervention and operational lessons
 - Publication of journal supplement
 - What insights / new perspective can TOD contribute?
 - Whom to target?
 - What publications to target?

- More webinars on this topic?
- New topics you want to tackle or learn more about?
- Innovative work that you want to share?
- A question you want to pose to your colleagues?

Contact us at equity@gih.org