Together ON Diabetes

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

Strategies and Policy Recommendations for an Equitable Response to the Type 2 Diabetes Epidemic

Moderator:
Patricia M. Doykos, PhD
Director, Bristol-Myers Squibb Foundation
Bristol-Myers Squibb Foundation Mission: Promote health equity and improve health outcomes of populations disproportionately affected by serious diseases and conditions.

Together on Diabetes: $115 M initiative to reduce disparities and improve outcomes for adults living with type 2 diabetes in China, India and the US.

Focal points for funding and partnership:

- Patient self management and navigation
- Integrated community supportive services and broad based mobilization
- Innovation fund to develop and test new ideas about the approach, implementation and measurement of diabetes control efforts given the current and future scale of the epidemic.
DIABETES DISPARITIES: PREVALENCE

8.3 percent of the US population is living with diabetes

27 percent of people over 65 years old are living with diabetes

18.7 percent of all African Americans aged 20 years or older, have diagnosed or undiagnosed diabetes

16.1 percent of American Indians and Alaska Natives have been diagnosed with diabetes

13.1 percent of adults living in economically distressed counties in Appalachia have been diagnosed with diabetes

11.8 percent of Hispanic/Latino Americans aged 20 years or older have been diagnosed with diabetes

9.1 percent of Asians aged 18 years or older have been diagnosed with diabetes

Source: US Center for Disease Control and Prevention
“The proportion of people ages 40 to 46 diagnosed with diabetes who accessed four annual services recommended by the American Diabetes Association was significantly lower for poor to middle-income individuals, non-Hispanic blacks, and those without at least some college education compared to their respective comparison groups.”

National Healthcare Disparities Report 2010
DIABETES DISPARITIES: MORBIDITY AND MORTALITY

Kidney Disease
Hispanic and Latinos are **2 times as likely** to develop kidney disease as the general population

Amputations
African Americans are **2.7 times as likely** to suffer from lower-limb amputations

Death
American Indians and Alaska Natives are **1.9 times** as likely to die from diabetes

Source: US Centers for Disease Control and Prevention
Feeding America Diabetes Initiative:
Addressing Health Disparities By Improving Food Access
Food Insecurity and Health Disparities

• 1 in 6 people in the United States lives in a food insecure household
• Individuals who live with food insecurity are more likely to experience chronic disease, including diabetes
• For those with diabetes, food insecure individuals has worse glycemic control than those with ready access to healthy foods
• More than one-third of clients relying on the emergency food system report having to choose between food and other basic necessities, such as medical care.
Cycle of Food Insecurity & Diabetes

Worsening Competing Demands

Food Insecurity

Cycles of Food Adequacy & Inadequacy

Poor health, increased health care $$

Poor Diabetes Control
Diabetes Initiative: An Opportunity to Break the Cycle

- Three year project
- Goal to create bi-directional collaborations between food banks and community health care partners
  - Corpus Christi Food Bank, TX
  - Mid-Ohio Food Bank, Columbus, OH
  - Redwood Empire Food Bank, Santa Rosa, CA
- Connect food insecure clients living with type 2 diabetes with:
  - Appropriate food
  - Nutrition & health education
  - A medical home

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Clients’ Health Status Upon Enrollment in the Project

• Diabetes is common in the food bank setting: 1500 food bank clients screened, 767 had confirmed diabetes and/or HbA1c >6.5%
• Mean BMI is 34.5
• Diet quality is poor: 62.5% of clients consume 1 or fewer servings of fruits and vegetables per day
• Higher rates of food insecurity are associated with:
  – Poor glycemic control (Baseline 8.0%)
  – Higher rates of depression
  – Greater diabetes distress
  – Greater medication non-adherence
  – More food-medicine tradeoffs

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Preliminary Results:
6 Month Behavioral & Health Outcomes

Feedback from Client Focus Groups

• Feel their diabetes is in better control because of the food provided through the food bank.
• Are enthusiastic about receiving a diabetes-friendly food box and are eating the new “healthier” foods included in the boxes.

Pre-Post Project Health Status Changes

• Significant decreases in HbA1c (p<0.01)
• Significant decreases in depression (p=0.02)
• Marginal decreases in diabetes distress (p=0.09)
Key Lessons: Importance of Partnerships for Food Access

• Awareness of diabetes but poor glycemic control suggests that self-management support and/or access to food for a healthy diet are inadequate.

• Food banks are trusted community organizations that clients visit regularly and may play an important role in chronic disease self-management support outside the clinical setting.

• Developing food bank – health center partnerships and educating clinic staff about available resources is critical to support chronic disease self-management for low-income communities.
Expanding Access to Evidence-based Practices for Heavily Burdened Populations

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10th Annual Health Disparities Leadership Summit
Washington, DC
Objectives of Project IMPACT: Diabetes

- Scale successful efforts from the Asheville Project, Patient Self-Management Program for Diabetes, and Diabetes Ten City Challenge in communities across the United States
- Establish a nationwide program utilizing the APhA Foundation’s structure and process model in an effort to reach communities that are the most affected by diabetes
- Project IMPACT: Diabetes Principles:
  - Disproportionate share populations
  - Collaborative care with pharmacists
  - Continuous quality improvement
  - Patient self-management credentialing
  - Minimum dataset reporting

**IMProving America’s Communities Together**
Participating Communities

- 25 communities
- 17 states
- 2,000+ patients
- 80+ pharmacists

Getting quality diabetes care to patients who need it most…
About the APhA Foundation’s Process Model

Health Care Services that are:
- Patient-centered
- Pharmacist-supported
- Inter-disciplinary

Resources and support provided to patients and pharmacists throughout the care continuum.
Community Resources

- Knowledge Base (online database)
  - Rich, role-based source of sample forms and tools
  - Patient education resources

- Patient Self-Management Credential
  - Hard-copy forms available through knowledge base resources
  - Adobe Flash Application documentation

- IMPACT Care Database
  - Microsoft® Access Database > SQL Server Database
  - Collects/reports minimum and maximum IMPACT datasets

- IMPACT Technical Advisory Services
  - Community Coordinator providing mentorship
  - 800 number and e-mail address with 24/7 access
Patient Self-Management Credential for Diabetes

- Used in APhA Foundation’s Patients Self-Management Program for Diabetes and Diabetes Ten City Challenge
- Used in 25 Project IMPACT: Diabetes communities:
  - May not reach Skills or Performance with some patients in first year – keep trying to improve on areas of weakness during each visit
- Assessments point to resources in Knowledge Base to supplement the time spent with the patient
Implementation Across 25 Communities

**Pharmacist Collaboration**
- Physicians
- Nurse Practitioners
- Dietitians
- Students (medical/pharmacy)
- Diabetes Educators
- Medical Assistants
- Community Health Workers
- Promotoras
- Dentistry
- Podiatry
- Ophthalmology

**Practice Setting Variety**
- Community Pharmacies
- Employer Worksites
- FQHCs
- Free Clinics
- Homeless Clinics
- County Health Departments

**Consistent Measurement**
- Self-Management Assessments
- Minimum Data Set Reporting
- Qualitative Assessments
# Project IMPACT: Diabetes Interim National Results

## Selected Clinical Indicators (mid-point measures ± SD)

<table>
<thead>
<tr>
<th>Clinical Measure</th>
<th>N =</th>
<th>Starting</th>
<th>Most Recent</th>
<th>Change</th>
<th>P Value</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1C</strong></td>
<td>1064</td>
<td>9.5 ± 1.9</td>
<td>8.5 ± 1.79</td>
<td>-1.0 ± 2.0</td>
<td>&lt; 0.001</td>
<td>188 ± 90</td>
</tr>
<tr>
<td><strong>Systolic BP</strong></td>
<td>978</td>
<td>131.5 ± 17.6</td>
<td>129.9 ± 16.7</td>
<td>-1.6 ± 18.6</td>
<td>0.004</td>
<td>185 ± 90</td>
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<tr>
<td><strong>Diastolic BP</strong></td>
<td>978</td>
<td>78.8 ± 10.3</td>
<td>78.5 ± 9.6</td>
<td>-0.3 ± 10.3</td>
<td>0.192</td>
<td>185 ± 90</td>
</tr>
<tr>
<td><strong>LDL-Cholesterol</strong></td>
<td>579</td>
<td>102.1 ± 50.3</td>
<td>92.0 ± 35.1</td>
<td>-10.1 ± 47.8</td>
<td>&lt; 0.001</td>
<td>202 ± 94</td>
</tr>
<tr>
<td><strong>BMI</strong></td>
<td>974</td>
<td>34.9 ± 8.2</td>
<td>34.7 ± 8.2</td>
<td>-0.1 ± 2.1</td>
<td>0.021</td>
<td>186 ± 90</td>
</tr>
</tbody>
</table>

*Interim results include patients with 2 or more values reported as of October 1, 2012.*

## Patient Self-Management Knowledge Assessments

<table>
<thead>
<tr>
<th>Experience</th>
<th>N =</th>
<th>Baseline</th>
<th>Most Recent</th>
<th>Change to Date</th>
<th>P Value</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>A1C</td>
<td>462</td>
<td>9.71 (SD = 1.99)</td>
<td>8.61 (SD = 1.94)</td>
<td>-1.10 (SD = 2.14)</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Proficient</td>
<td>A1C</td>
<td>442</td>
<td>9.41 (SD = 1.84)</td>
<td>8.44 (SD = 1.67)</td>
<td>-0.97 (SD = 1.89)</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Advanced</td>
<td>A1C</td>
<td>160</td>
<td>9.16 (SD = 1.69)</td>
<td>8.31 (SD = 1.65)</td>
<td>-0.84 (SD = 1.76)</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>
Physician Perspective

“How am I going to do this for only one year? I want this forever!’ We’re thinking about sustainability… because the patients are excited, the staff members are excited. This is a dream team for diabetes. When I came up, a pharmacist was a pharmacist and a doctor was a doctor. You didn’t work together. Now we’re bringing up a new generation of [health care] providers so they can learn to co-manage patients together.”

– Dr. Price-Stevens, MD
Patient Perspective

“And sure enough, I’m cutting my weight. My blood sugar is in control, and I’m feeling more energized. It’s like I’m 18-19 years old again. When I walk out of the office, I come out of there with confidence. I get the confidence that I can do it, and it shows because I’m doing it now. [better diet, exercise, blood sugar monitoring, medication adherence]”

– Adrian J.
West Virginia ranks 4th in the nation, with an 11.7% incident rate of diabetes compared to 9.3% nationally.

Mingo County residents have a diabetes incidence rating of 10.9%.

Highest among those aged 65 and older, those with less than a high school education, and those within the lowest income bracket.

Mingo is the 2nd unhealthiest county in West Virginia.

1 out of 8 Mingo County adults have Type 2 Diabetes.
Target Populations:

- Patients with uncontrolled Diabetes
- Elderly and children
- Underserved community members
- Those living in poverty

Funding:

- CMS and BMS grants
Lunch Walk Program

- 30 Teams of 10
- Healthy competition between local organizations, business, and community members
- 9 week Duration
- Spring and Fall Programs
Sister City – Marin City, California
Program consists of:
- Nutrition Education
- Lifestyle Change Strategies
- Healthy Food Demonstrations
- Diabetic Recipe Cards
- Free A1c testing (before and after)

- 4 week Duration
- Spring and Fall Programs
Walk With Ease

- Held at 6 Senior Citizen Centers and Churches in Mingo County
- Encourages Physical Activity in Elderly populations
- 6 week Duration (3 meetings per week)
- Spring and Fall Programs

“We had sisters and brothers with sugar problems, knee problems, arthritis and heart problems, and we decided it was time for us to step up....We aren’t doing this so we can be good-looking, we’re doing it so we can feel better and see our grand kids grow up.”

-- Pastor Jimmy Maynard
Local Foods

- Williamson Farmers Market
- Mingo County Orchard
- Community Gardens
The Diabetes Management Clinic at Williamson Memorial Hospital offers classes in diabetes self-management training.

- Certified Nutritionists
- Certified Diabetes Educators

Participants average reduction of their Hemoglobin A1c decrease by 2.1%
Percent Decrease from Initial Level of Risk of Adverse Events Associated with Changes in HbA1C

Initial HbA1C: 10.6%
Final HbA1C: 8.5%

- Total Mortality: 29.4%
- Diabetes Related Mortality: 29.4%
- Myocardial Infarction: 44.1%
- Stroke: 25.2%
- Amputation: 90.3%
- Renal Failure: 50.4%
- Cataract Extraction: 30.5%
- Micro-vascular Disease: 77.7%
Contact Us

Mingo County Diabetes Coalition
- Mingodiabetes.com
- (304)-235-3400
- (304) 235-3403 FAX

Sustainable Williamson
- Sustainablewilliamson.org
- Contact Eric Mathis (304) 601-9091

WVU Extension
- Ext.wvu.edu
- Contact Dana Wright (304) 235-2692

A digital copy of this presentation is available
Aiming to bend the curve on the diabetes burden through an integrated population health approach

Nadia Ali, MPA
Program Manager
Camden Citywide Diabetes Collaborative

www.camdenhealth.org
Overview

• Rationale/Framework
• Program Goals
• Strategies
• Progress
• Challenges/Lessons Learned
The prevalence of type 2 diabetes among adults in Camden is 12.8 percent – nearly 50 percent higher than the state average.
Program Goal

Improve diabetes care at the patient, provider, and community/systems level

www.camdenhealth.org
Strategies

• Enhance the capacity of primary care provider practices to provide evidence-based chronic disease care

• Improve access to DM self-management strategies for Camden residents citywide

• Empower Camden residents with DM to reach optimal DM control through innovative behavioral health and community engagement strategies.
Progress

• A1c reduction seen in 67% of patients to date

• Seen decrease in hospital utilization and 30-day readmissions

• Improved linkages, greater collaboration between diabetes educators and primary care providers

• Standardization of practice protocols

• Establishment of strong community partnerships
Lessons Learned/ Challenges

• Targeting the most complex patients can lead to immediate and positive outcomes

• Foundational relationship building with healthcare providers and patients is key

• Current state of health systems make it increasingly difficult to coordinate care across various settings
Providing Access to Healthy Solutions (PATHS): Reforming Diabetes Law & Policy to Promote Access to Care and Reduce Health Disparities

Robert Greenwald
Center for Health Law and Policy
Innovation of Harvard Law School
April 2013
Providing Access to Healthy Solutions (PATHS)

4-Year Project to Improve Type 2 Diabetes Care & Prevention

1. Identify State-Specific Diabetes Law & Policy Successes and Challenges

2. Engage Diverse Stakeholders in PATHS Process & Support Coalition Development and Advocacy

3. Develop Set of Recommendations & Implementation Strategy

4. Engage Partners in Implementing Reforms and Best Practices
Where We Are Going:
ACA has Great Potential, But Successful Implementation Will Decide

Improves Medicaid:
- Expands eligibility (state option); provides essential health benefits (EHB) (federal and state regulations); improves reimbursement for primary care providers (only 2013-14);
- includes health home (state option); allows for free preventive services (state option for Medicaid)

Reforms Private Insurance:
- Provides subsidies up to 400% FPL (federal and state regulation); provides EHB (federal and state regulation); supports outreach, patient navigation and enrollment (federal and state regulation);
- mandates inclusion of community providers in new health networks (federal and state regulation).

Only with Successful Medicaid Expansion & Exchange Development will We Dramatically Reduce Disparities & Address Diabetes Care and Prevention Needs
PATHS Opportunities: How Can the ACA Help Our Community Partners?

1. Feeding America
   – Food as Medicine in a bundled payment system

2. Project IMPACT Diabetes
   – Pharmacists within chronic health homes

3. Mingo County Diabetes Coalition
   – Critical outreach/education in the Marketplaces

4. Camden Coalition of Healthcare Providers
   – Essential Community Provider Opportunities
Lessons Learned

• PATHS is not a linear process -- we can’t ignore immediate concerns/opportunities during research phase

• A looming PATHS report opens doors and can help to facilitate stronger community-government collaboration

• Objective PATHS research helps advocates challenge local practice “rules” and promote broader-based state advocacy efforts
For an electronic copy of this presentation and other information about PATHS, contact:
rgreenwa@law.harvard.edu

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THANK YOU!

www.togetherondiabetes.com

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