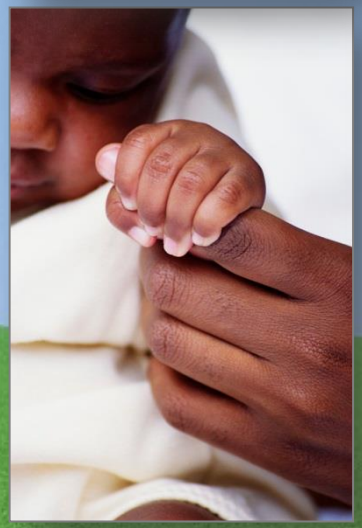
Rushern L. Baker, III
County Executive

HEALTH DEPARTMENT
Prince George's County

"On the Road" Diabetes Education:
The Benefits of a Community Partnership Model



Be a part of the
HEALTHY
REVOLUTION

June 12, 2014

Trina Frazier
Program Manager
Chronic Disease Program

PRINCE GEORGE'S COUNTY HEALTH DEPARTMENT

Public health agency with the overall mission to protect and improve the health of the community.

There are over 40 programs within 4 divisions:

- Behavioral Health
- Environmental Health & Disease Control
- Family Health Services
- Health & Wellness

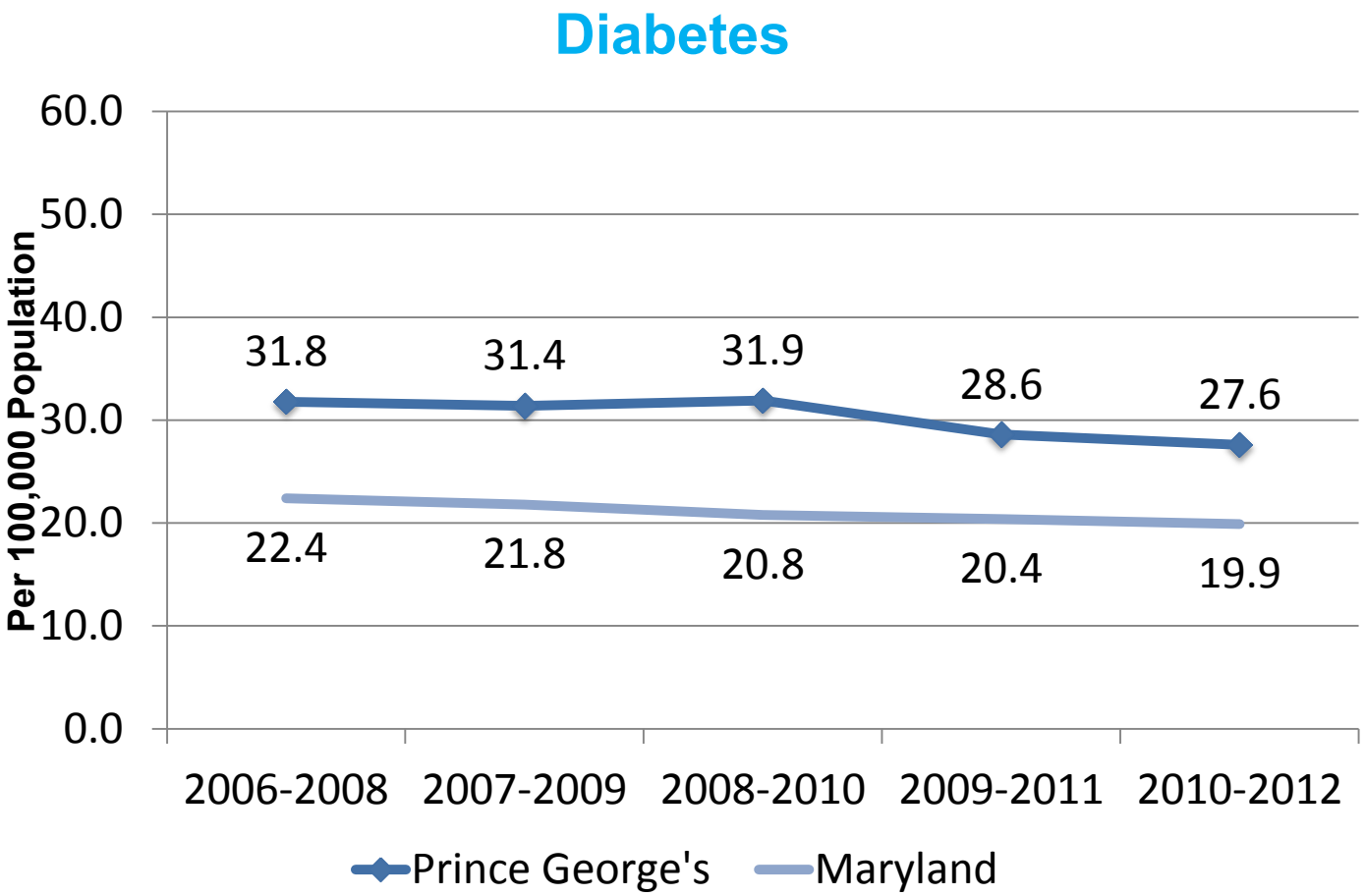
ADDRESSING CHRONIC DISEASE

PGCHD supports public health efforts to reduce chronic diseases and promotes healthier lifestyles by improving:

- Health Education
- Health Outreach
- Access to Quality Health Care Systems in the County

THE BURDEN OF DIABETES

Age-adjusted Mortality Rate, 2006-2012



Source: Maryland Annual Vital Statistics Reports

THE BURDEN OF DIABETES

- Diabetes is one of the **five most prevalent chronic conditions** in Prince George's County (University of Maryland School of Public Health; A Public Health Impact Study, 2012).

- **Eleven percent (11%) of the 863,420** residents of Prince Georges County is diabetic. An additional 1.5% were told by a doctor they had pre-diabetes or borderline diabetes (2011 (Maryland BRFSS; URL of Source- http://www.marylandbrfss.org).

- The 2011 Maryland Vital Statistics Report indicates that Prince George's County had the **highest number of diabetes deaths** in the state of Maryland (192).

- Diabetes was the **sixth leading cause of death** in 2011 with an age-adjusted mortality rate of 20.8 per 100,000 people. This was a 5% increase from 19.8 per 100,000 people in 2010 (Maryland Annual Vital Statistics Report, 2011).

DISPARITIES ACROSS HEALTH CARE

The 2012 National Healthcare Quality Report (NHQR) and National Healthcare Disparities Report (NHDR) emphasized the need to accelerate progress of higher quality and more equitable health care with three themes:

1. Health care quality and access are suboptimal, especially for minority and low-income groups

2. Overall quality is improving, access is getting worse, and disparities are not changing

3. Urgent attention is warranted to ensure continued improvements in quality of diabetes care.

DISPARITIES ACROSS HEALTH CARE

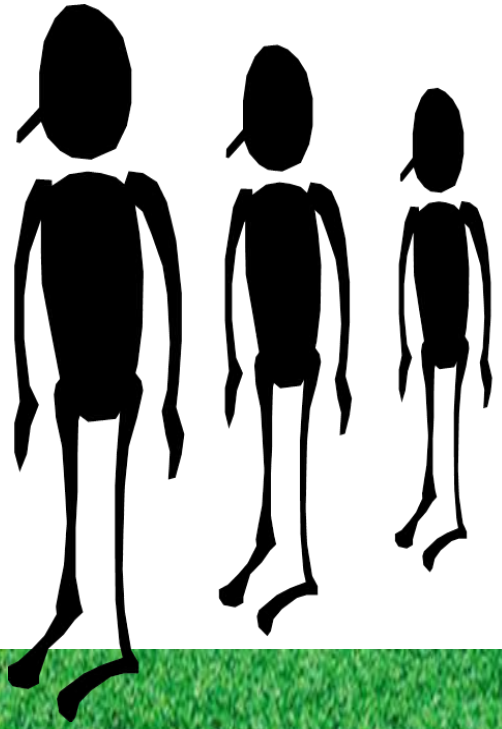
Prince George's County Health Enterprise Zone

- The 20743 zip code, leads the County in negative health statistics such as, heart disease, diabetes, asthma, hypertension, and low birth weight.
- A joint commitment between the Maryland Community Health Resources Commission (MCHRC), the Maryland Department of Health and Mental Hygiene (DHMH), and the Prince George's County Health Department will address these issues through the establishment of the Health Enterprise Zone.
- The Health Enterprise Zone will expand and establish five new practices that will serve more than 10,000 residents within the 20743 zip code.
- The HEZ model is a pilot that hopes to over time increase health literacy and access to affordable quality care while establishing prevention measures that will save lives and lower costs for medical care.

Building, Developing and Maintaining Successful Partnerships

"None of us is as smart as all of us…… cooperation and collaboration grow more important every day. A shrinking world in which technological and political complexity increase at an accelerating rate offers fewer and fewer arenas in which individual action suffices."

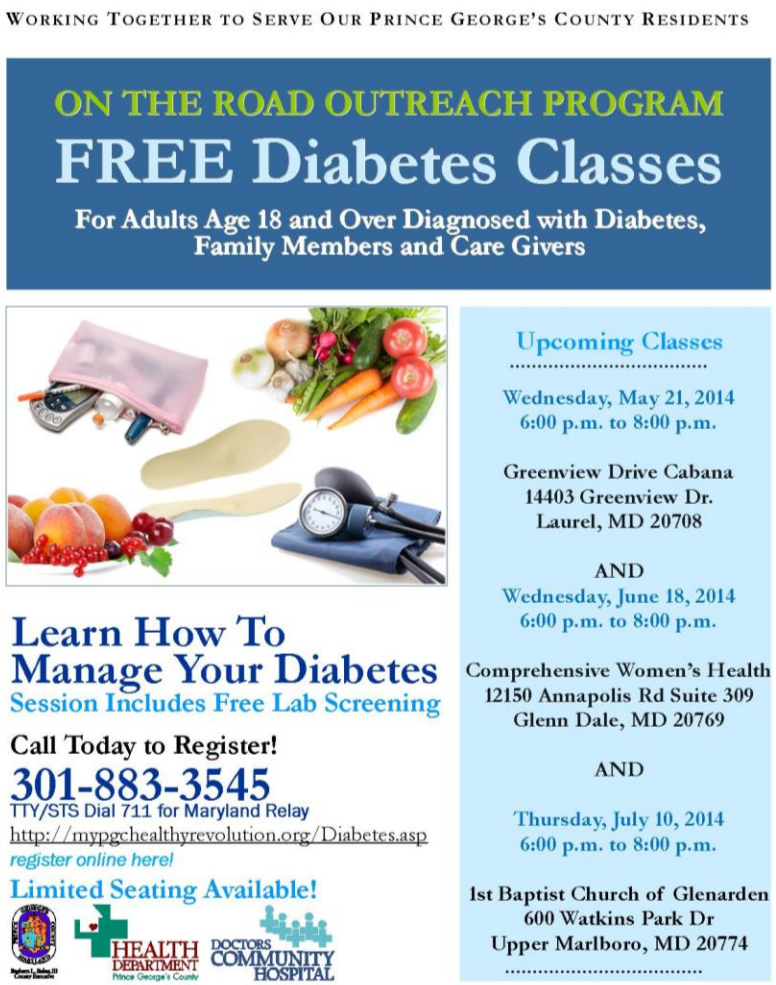
-Warren Bennis



"ON THE ROAD" PARTNERSHIP

"ON THE ROAD" PARTNERSHIP

- Partnership between PGCHD and Doctors Community Hospital's (DCH's) Joslin Diabetes Center in Maryland
- Joslin is the **only multi-discipline diabetes program** offering both medical and education services at one location
- Pilot project "On the Road" **launched in April 2013**
- Collaboration with the intent to **lower the risk of diabetes** related complications and **prevent diabetes for pre-diabetics**



"ON THE ROAD" FUNDING MODEL

- **Partners use existing staff resources** (CDE, CHW, Community Developer) to implement program
- Hospital covers **lab testing** and processing costs
- Community partners provide class venues at **no cost**
- Incentives (grocery store vouchers/cookbooks, etc.) **donated** by grocery chains/pharmaceutical companies

"ON THE ROAD" STRATEGY

- Travels to **diverse communities** throughout the county
- Delivers basic diabetes **self-care knowledge** in easy-to-understand discussion format
- **Targets participants** who are diagnosed diabetics, including caregivers and pre-diabetics
- Classes conducted by **certified diabetes educators** from the DCH Joslin Affiliate
- **Community Health Workers** (CHWs) from the PGCHD provide follow-up care coordination
- Elements of the class are provided at **health fairs and conferences to expand reach of program**

"ON THE ROAD" FORMAT

The two hour initial classes cover a number of topics including:

- ❑ What is Diabetes?
- ❑ Healthy Eating
- ❑ Importance of Physical Activity
- ❑ Understanding Your Numbers

A brief physical exercise demonstration is also included with free exercise bands and pedometers to promote exercise activities outside of class.

"ON THE ROAD" FORMAT

The two hour follow-up class consists of the following:

- Participant discussion of skills learned, changes made and/or challenges
- Curriculum review using interactive Diabetes Jeopardy game
- Incentives such as healthy food gift cards and cookbooks for active participation
- Certificate of Completion

"ON THE ROAD" RESOURCES

Take home information packets are distributed to participants at the initial class including:

- Information on Federally Qualified Health Centers (FQHC's) in case a participant does not have a primary care provider
- Services of Joslin Center (free support group meetings, medical and diabetes education services)
- Related services and resources provided by PGCHD
- A copy of the class power point presentation
- Fact sheets and educational materials about diabetes.

What are the risk factors for pre-diabetes and type 2 diabetes?

a) overweight/obesity
b) physical inactivity
c) high blood pressure (hypertension)
d) abnormal cholesterol (lipid) levels
e) all of the above

The **A1c test** is a common blood test used to diagnose only type 2 diabetes and then to gauge how well you're managing your diabetes.

- ❑ True
- ❑ False

The **A1c test** gives you a picture of your average blood glucose (blood sugar) control for the past 2 to 3 months.

- ❑ True
- ❑ False

Current **scientific evidence suggests** that good diabetes self-management of blood glucose levels with food, medication , exercise, and stress management can effectively prevent or significantly reduce the complications of diabetes.

- ❑ True
- ❑ False

EARLY LESSONS LEARNED

- "On the Road" was **successful in moving the program to 5 different zip code communities** in the county
- Pre/post tests and surveys showed a **positive change in knowledge and feedback** for the educators/curriculum
- Although **clinical screenings** were offered in a convenient community setting, there was not full participation in the A1c lab test activity

EARLY LESSONS LEARNED

- More classes are needed to **reach expanded areas of county**
- Need to plan **targeted outreach** to increase retention rate for follow-up class participants
- The team will explore opportunities to **increase levels of engagement** with participants in between class sessions
- Need to increase **utilization of social media**

EARLY LESSONS LEARNED

- Plan to **rotate class schedules** for morning, afternoon and evening sessions to accommodate more residents
- Plan to **pilot a set of classes on Saturday** to appeal to residents unavailable during the week
- The current model will not allow us to reach a maximum number of residents in **a cost efficient way**

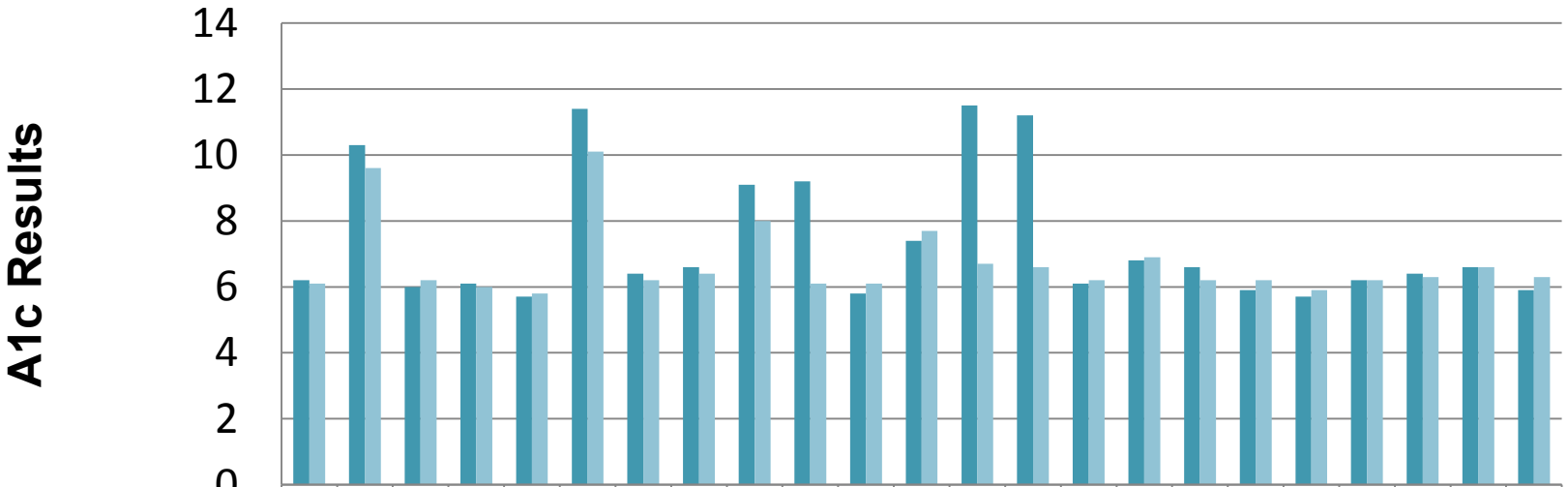
PROGRAM RESULTS

Status update for April 2013-April 2014

- Conducted eight (8) initial classes with follow-up sessions
- A total of **162** initial class attendees (~20 per class)
- A total of **99** follow-up class attendees (~12 per class)
- A1c screenings were offered to **all class attendees**
  - A1c participation at initial classes was 93/162=57%
  - A1c participation at follow-up classes was 31/99=31%
- There were **23 participants** that attended both the initial and follow-up class sessions, with both pre and post A1c tests
- The average A1c of this group was **7.3** at the initial class and **6.7** at the follow-up class held up to 3 months later
- Some participants experienced a dramatic reduction in A1c test results, by as much as a **4.8** point decrease.

Comparative A1c Results

Class 1 & 2



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Class 1 A1C	6	10	6	6	6	11	6	7	9	9	6	7	12	11	6	7	7	6	6	6	6	7	6
Class 2 A1C	6	10	6	6	6	10	6	6	8	6	6	8	7	7	6	7	6	6	6	6	6	7	6

*A1c results are rounded to nearest whole number

PROGRAM RESULTS

Status update for April 2013-April 2014

- Most participants were African American women, with a total of **29** males
- The ages of participants ranged from **27 to 84 years**, with an average age of 60 years old
- A total **14/162** (9%) of participants were uninsured
- Pre and post surveys showed a 10% **increase in knowledge (74%➔84%)**
- Participant feedback **indicated behavior changes** including making healthier food choices and/or increasing physical activities is learned information that is helping them to manage their diabetes.

PERFORMANCE METRICS AND DATA COLLECTION

- Outreach/marketing strategy
- Community Partners/venue locations
- Attendance results(**15-20 per class**)/class schedules
- Completion rate of in-depth health questionnaires
- Participant feedback on diabetes curriculum/educators
- Pre/post education surveys (**change in knowledge**)
- Pre/post A1c lab test results (**health outcomes**)
- Participation rate at both initial and follow-up class

Return on Investment (ROI) Analysis

- # of participants **(15-20)** per class
- # of participants with **pre/post education** and lab data
- % of **change in knowledge**
- Paired **t-test** for statistical health outcomes analysis

REPLICABLE TOOLS/TEMPLATES

- Evidence based **educational materials** and curriculum
- Dual training of CHW's to serve as **peer leaders and resource navigators** for linkage to clinical care coordination team
- Trainer of Trainer **(TOT)** model for program expansion
- Curriculum **(4 hours)** adapted for target population
- Program designed for transportability to diverse community settings
- Pre/post **education survey** tools
- A1c **pre/post lab tests**
- Collaborative **partnerships with clinical practices** to improve diabetic management of A1c

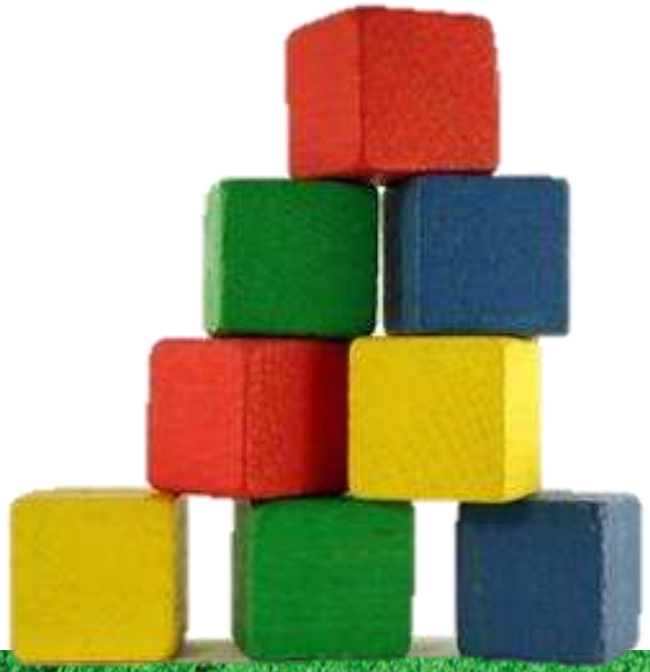
Funding opportunities are being pursued to address the following goals:

- Expand “On the Road” to include **bilingual program** delivery model
- Develop **model curriculum** for training of health or para professionals
- Train CHW’s to facilitate **community based self-management** of care
- Increase **number of classes** offered to residents
- Develop and implement **on-line curriculum** to provide alternative or enhancement to traditional class delivery model and expand reach

CAPACITY BUILDING

Key capacity building components for diabetes outreach include:

- organizational support
- staffing
- partnerships
- funding/resources
- outreach and marketing strategy
- assessments
- evaluation



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