## Eye Care about My ABCs

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#### Introduction

- The diabetes epidemic continues to be a major concern in the United States.
- Identification of medically underserved people living with diabetes, and linkage to medical care continues to be a major challenge.
- Less published research has focused on the importance of eye health as a component of community health programs designed to detect diabetes and diabetes related eye disease.

#### **Introduction: Challenges**

- Lack of follow-up to ensure patients follow through with consistent appointment.
- Studies have shown that patients are not evaluated or treated in a timely fashion

#### **Diabetes Report: Indiana**

- B/w 15% and 27% of people with diabetes in Indiana have been diagnosed with diabetic retinopathy. (BRFSS, 2002)
- According to 2003 BRFSS, 60.2% of people with diabetes in Indiana, depending on age, have an annual dilated eye exam.
- Significantly below the Healthy People 2010 target of 75%.

#### **The ABCs of Diabetes**

- <u>A1C</u>-test measures average blood glucose levels over the last 3 months, high levels can lead to diabetes problems.
- Blood Pressure causes heart disease and damages your blood vessels, raising your chances for eye problems
- <u>Cholesterol</u>-bad cholesterol, or LDL, builds up and clogs your arteries

#### ABC Program (A1C, Blood Pressure, Cholesterol)

- A health promotion program designed to help reduce diabetes-related ocular morbidity among people who are medically underserved.
- One aim focuses on community based outreach and identifying individuals with diabetes.
- Other aim focuses on increasing referral opportunities to medical practitioners such as optometrists.
- Program implemented through the Eye Care Community Outreach (ECCO) Program.

#### **ABC Program at a glance**

- Statewide initiative for optometrist to intervene early in the onset of diabetes.
- Optometrists play significant role as the first medical professionals to detect many diseases and conditions
- Based on CDC's Healthy objectives: 28-1, 28-5, and 5-13 using the train the trainer concept to reduce diabetes related ocular morbidity

### **ABC program at a glance**

- Increasing health care professionals' awareness.
- Strengthen the vision care referral system for people with diabetes who are underserved
- Thus, helping patients control the ABCs of diabetes.
- ABC toolkits and diabetes presentation provided to healthcare professionals and educators.

#### **ABC Program at a glance**

- Not only does an eye exam detect diabetes or diabetic eye disease but can be the first step in detecting the following:
  - 1. Sickle Cell Anemia
  - 2. High Cholesterol
  - 3. Cardiovascular Disease
  - 4. Sexually Transmitted Infections
  - 5. Multiple Sclerosis

#### **ABC** program at a glance

- Individuals may visit optometrist more frequently than primary care physician to maintain vision for daily activities.
- Thus, eye doctors are often the first people to intervene, educate, and aid in the prevention of complications from diabetes.
- In both clinical practice and patient education, optometrist help patients understand and control ABC's of diabetes.

#### **ABC** program outcomes

- Effectiveness of the project is assessed by quantity and quality of education and training sessions with optometrist and community organizations.
- Potential health impact is assessed using number of referrals for dilated eye exams and outcomes associated with referral intervention

### **ABC** program outcomes

- Number of enrolled optometrist (47)-up from 23 the previous year.
- Number of enrolled ophthalmologist(16)-up from 5 the previous year.
- 2005-17 educational sessions
- 2006-48 educational sessions with an increase of 182% from previous year.
- Total of 1641 individuals living with diabetes identified.

#### **ABC Program Outcomes**

- 2005 fiscal year-860 referrals to the ECCO program.
- 2006 fiscal year-1902 referrals with a 121% increase.
- 773 ECCO patients with diabetes have had eye exams; of those, 19 were diagnosed with diabetes as a result of their eye exam. (patients uninsured or underinsured)
- Of the 773 ECCO patients with diabetes, 17% were diagnosed with Diabetic Retinopathy, (n=131).
- Over 51% (n=67) of retinopathy cases being new diagnoses.

### **ABC Program Outcomes**

- Central component of intervention is a donated comprehensive eye exam.
- Connection to medical services such as referral to primary care physicians/low cost clinics, insurance coverage, and/or consultation/ surgeries for further eye care services to optimize quality of health.
- Follow up for continuity of care b/w primary care and eye care.

# Affiliated parties to ensure program success

- American Optometric Association <u>www.aoa.org</u>
- Vision Service Plan (VSP) <u>www.vsp.com</u>
- Prevent Blindness Indiana-<u>www.pbeye.org</u>
- Eye Care Community Outreach (ECCO)—
  - Kelli Barker, MSW and Dewana Allen, MPH
  - Helping Hoosiers find and afford eye care.
- John F. Yannessa, Ph.D.
  - Assistant Professor, Department of HPER, Coastal Carolina University
- Edwin C. Marshall, OD, MS, MPH
  - Associate Dean for Academic Affairs and Student Administration, Professor of Optometry, and Adjunct Professor of Public Health, School of Medicine