

# A Profile of Undiagnosed Diabetics in the Community

## Results from the Boston Area Community Health (BACH) Survey

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## Background

- Research suggests almost 30% of the United States population has undiagnosed diabetes.
- There is a 4- to 7-year time lag between the onset of type 2 diabetes and eventual diagnosis.
- Delay in initial diagnosis results in greater diabetes-related complications, poorer patient outcomes, reduced quality of life, and has major implications for health care costs.

## Major Questions

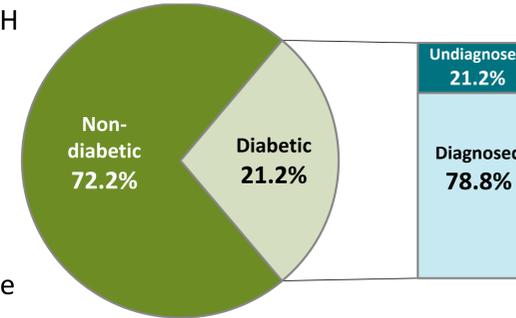
- What is the prevalence of undiagnosed diabetes in the Boston Area Community Health (BACH) III Survey?
- What are the risk factors for remaining undiagnosed?

## Methods

- The Boston Area Community Health (BACH) III Survey is a population-based random-sample of community dwelling adults that has enrolled 2,974 participants to date.
- Participants were asked to fast for 8 hours prior to their interview and blood draw.
- Fasting glucose and HbA1c levels were collected as an objective measure of diabetes status.
- Risk factors, such as co-morbidities, health insurance and access factors, and socio-demographic factors, were collected through an interviewer administered questionnaire.
- Risk factors were grouped by etiology to measure relative contributions.
- Analyses are limited to n=827 diagnosed and undiagnosed diabetics.

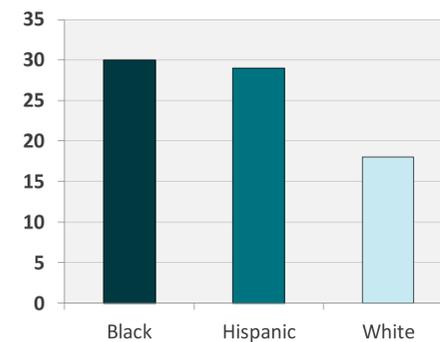
## Findings

- The prevalence of diabetes in the BACH survey was 27.8% (n=827), 21.2% of diabetes cases were undiagnosed (n=175)
- The **percent of diabetes that is undiagnosed** was similar among racial/ethnic minorities but was significantly higher among younger age groups

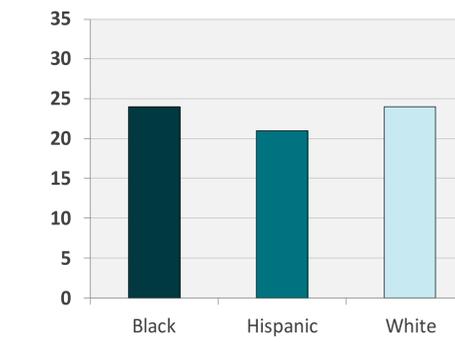


### Diagnosed and Undiagnosed Diabetes by Social Characteristics

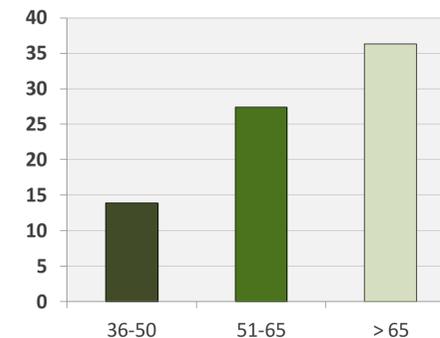
Total Diabetes by Race/Ethnicity



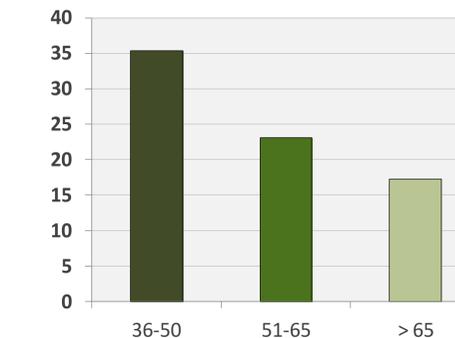
% of Undiagnosed Diabetes by Race/Ethnicity



Total Diabetes by Age



% of Undiagnosed Diabetes by Age



## Findings continued

### What are the risk factors for remaining undiagnosed?

#### Sociodemographics

Age  
Gender  
Race/Ethnicity  
Primary language  
Socioeconomic status

#### Access/Utilization

Insurance (private, public, none)  
Visits to a health care provider  
Having a usual provider  
Trouble paying for care

#### Risk profiles/lifestyle

Physical activity  
Family history of diabetes  
BMI

#### Co-morbidity

High blood pressure  
Cardiovascular disease  
High cholesterol

↑ English-speakers were more likely to be diagnosed (OR = 2.9, p = 0.01)

↑ Participants who visited a health care provider 5 or more times in the past year were 90% more likely to be diagnosed (OR = 1.9, p < 0.001)

↑ Participants with a documented family history of diabetes were more likely to be diagnosed (OR = 2.9, p < 0.001)

↑ Participants with a history of high cholesterol were more than twice as likely to be diagnosed (OR = 2.7, p < 0.001)

## Conclusions

- Factors like **access to care, health care utilization**, and the presence of **co-morbid conditions** had the greatest impact on diabetes diagnosis.
- Individuals without traditional risk factors for diabetes (i.e. **family history**) have a greater risk of remaining undiagnosed.

**Improving access to care may greatly increase the likelihood of diagnosing previously undiagnosed cases, with important implications for health costs and outcomes.**