



Screening at BMI 23 for Asian Americans: Impact on San Francisco Health Network



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October 9, 2016

for Asian Americans



❖ Be able to describe one model for estimating the impact of screening at 23 on a population level

❖ Gain insight into ways in which screening at 23 can be leveraged to improve population health



THE STAGGERING COST OF DIABETES

Today, **4,660**
AMERICANS WILL BE DIAGNOSED
WITH **DIABETES**

NEARLY **30**
MILLION AMERICANS
HAVE DIABETES



86 million
Americans have prediabetes

More than the population of the east coast
from Connecticut to Georgia



DIABETES AND
PREDIABETES COST AMERICA
\$322 BILLION
PER YEAR

\$ 1 in 5 health care dollars
is spent caring for
people with diabetes

\$ 1 in 3 Medicare dollars is spent
caring for people
with diabetes

\$ People with diagnosed
diabetes have health
care costs **2.3 times**
higher than if they
didn't have the disease

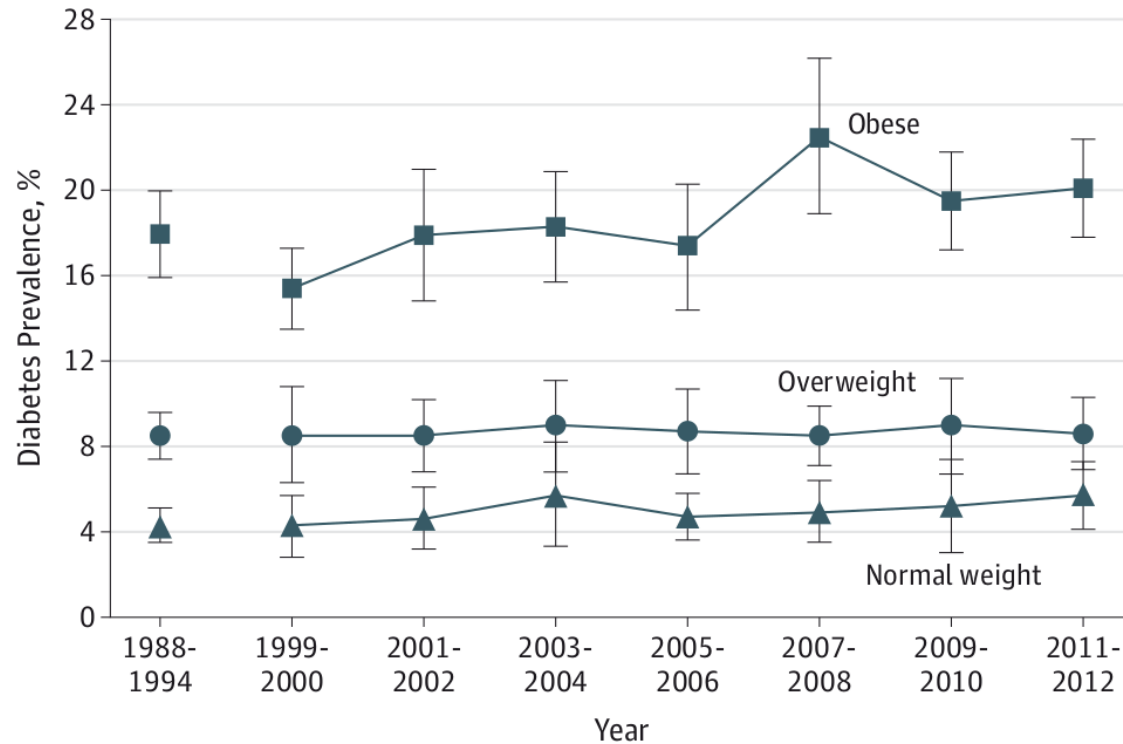


Learn how to combat this costly disease at
diabetes.org/congress





US Trends in Diabetes Prevalence by BMI Category

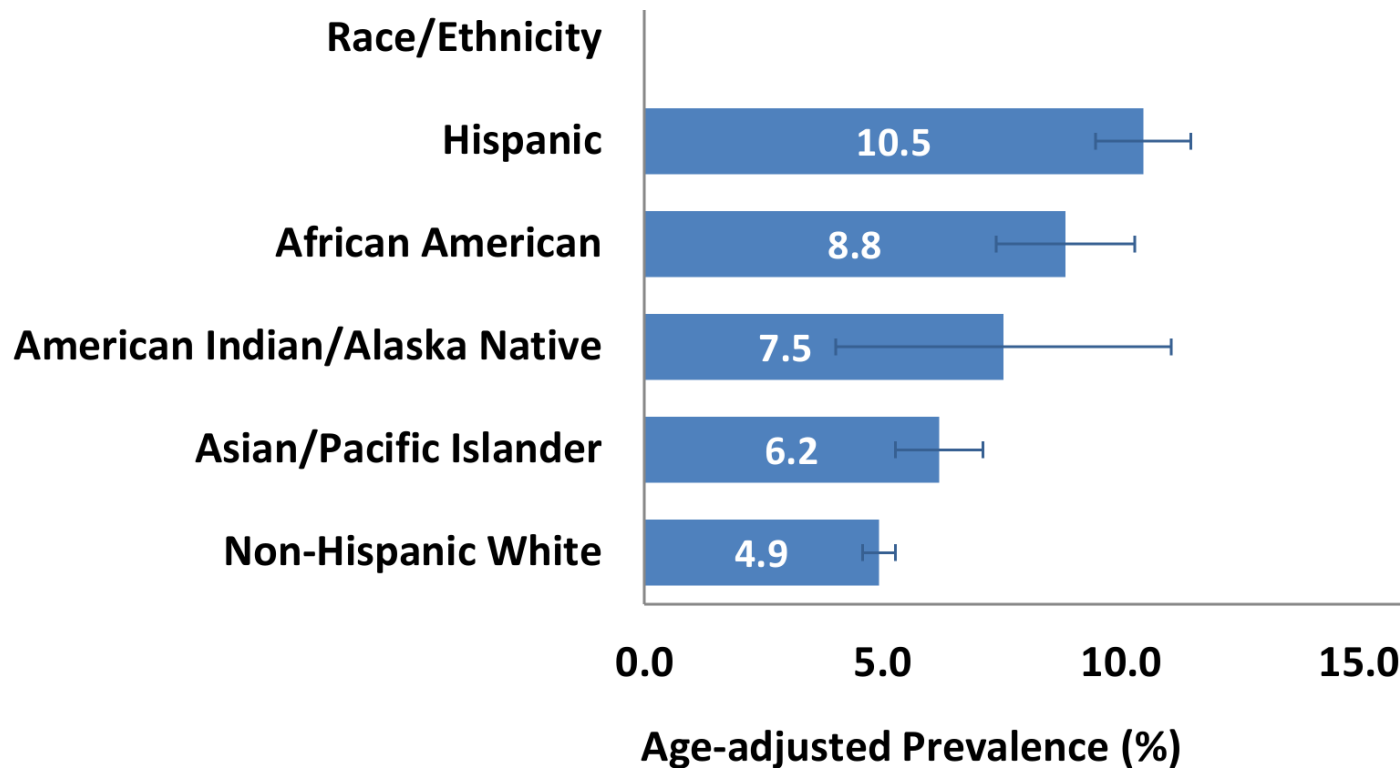


No. of participants	1988-1994	1999-2000	2001-2002	2003-2004	2005-2006	2007-2008	2009-2010	2011-2012
Obese	2324	727	732	815	820	1137	1302	1075
Overweight	2942	724	878	784	694	949	1009	852
Normal weight	3025	645	699	624	604	726	762	785

Menke A, et al. Prevalence of and Trends in Diabetes Among Adults in the United States, 1988–2012. JAMA. 2015; 314: 1021–1029

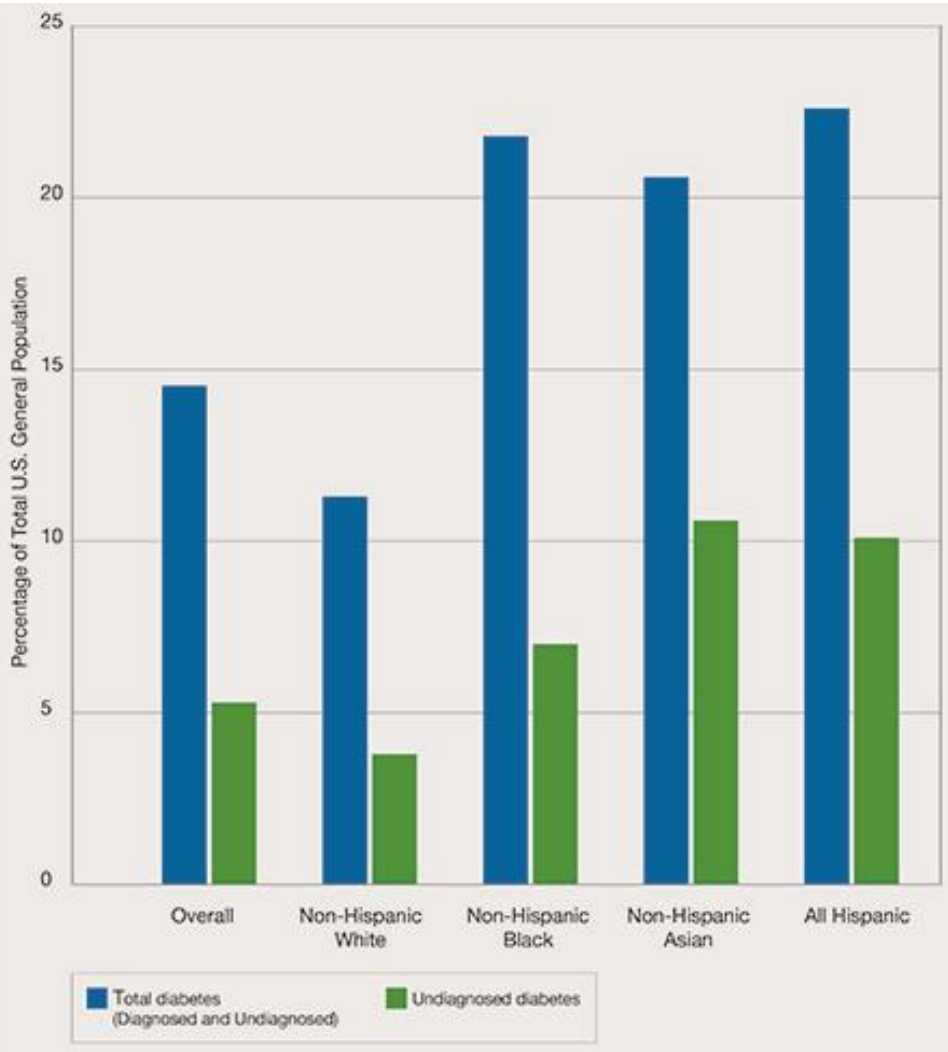


California Type 2 Diabetes by Race/Ethnicity, 2011–2012





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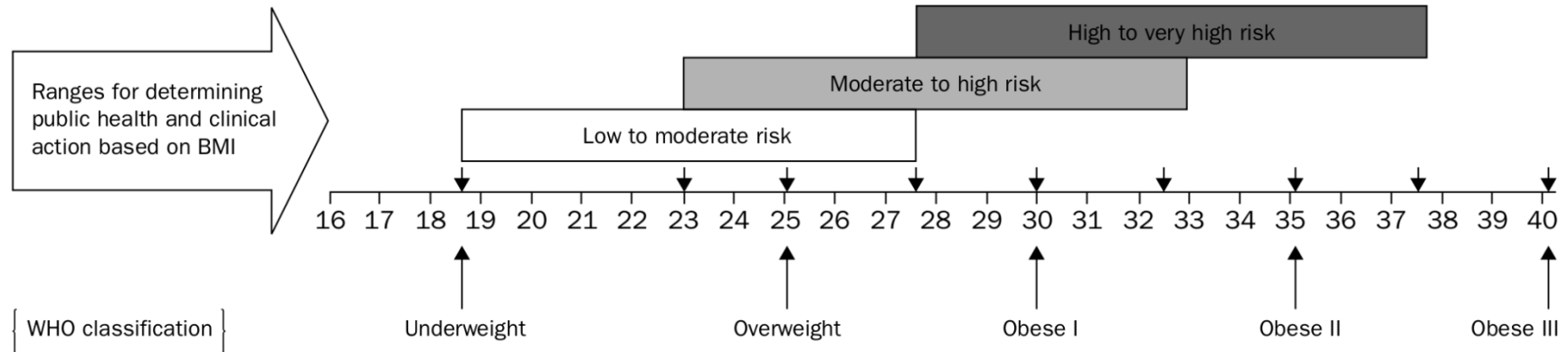


Percentage of the U.S. adult Population with diabetes (blue bars) and the percentage who have diabetes that has not been diagnosed (green bars).

Menke A, et al. Prevalence of and Trends in Diabetes Among Adults in the United States, 1988–2012. JAMA. 2015; 314: 1021–1029



Body-mass index cut-off points for public health action



Source: WHO. Appropriate body-mass index for Asian populations. Lancet 2004; 363: 157–63



Recognition and Consensus Recommendations

- ❖ World Health Organization (2004)
- ❖ Countries in Asia (China, Japan, India, etc)
- ❖ American Diabetes Association (2015)
- ❖ National Council of Asian Pacific Islander Physicians
- ❖ San Francisco Health Commission Resolution (2015)

Resource: Hsu WC, et al. BMI Cut Points to Identify At-Risk Asian Americans for Type 2 Diabetes. *Diabetes Care*. 2015; 38: 150–158



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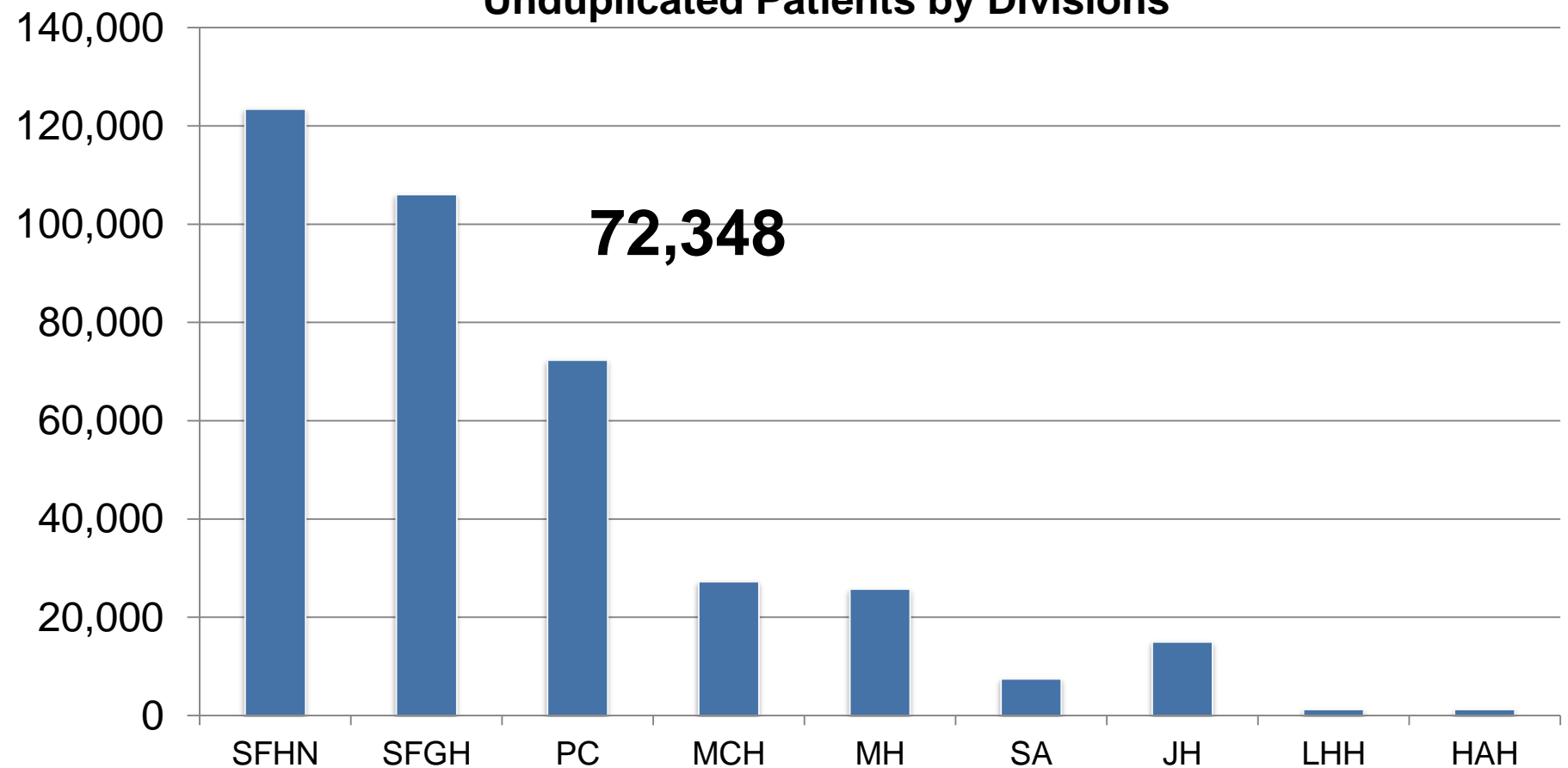
PRIMARY CARE SITES





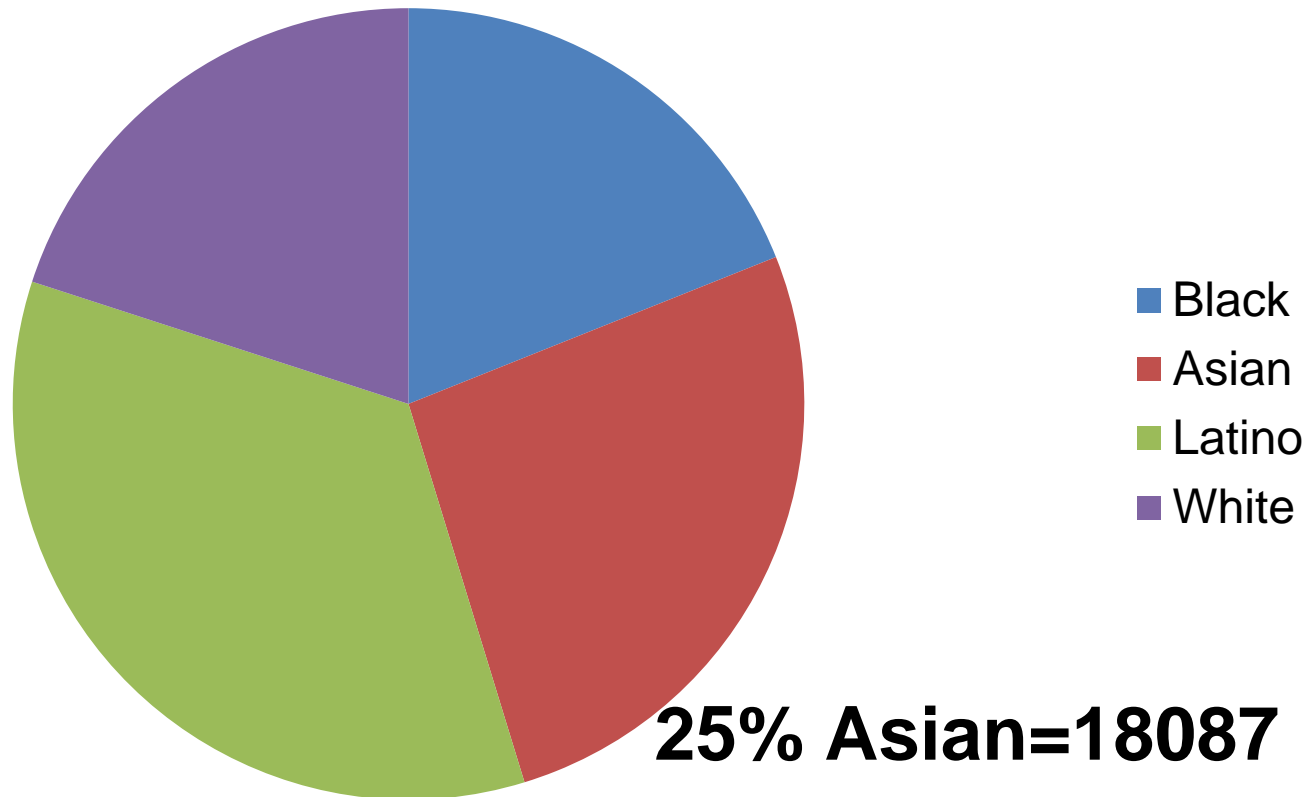
SFHN by the Numbers

Unduplicated Patients by Divisions





SFHN PC: Numbers by Race Primary Care



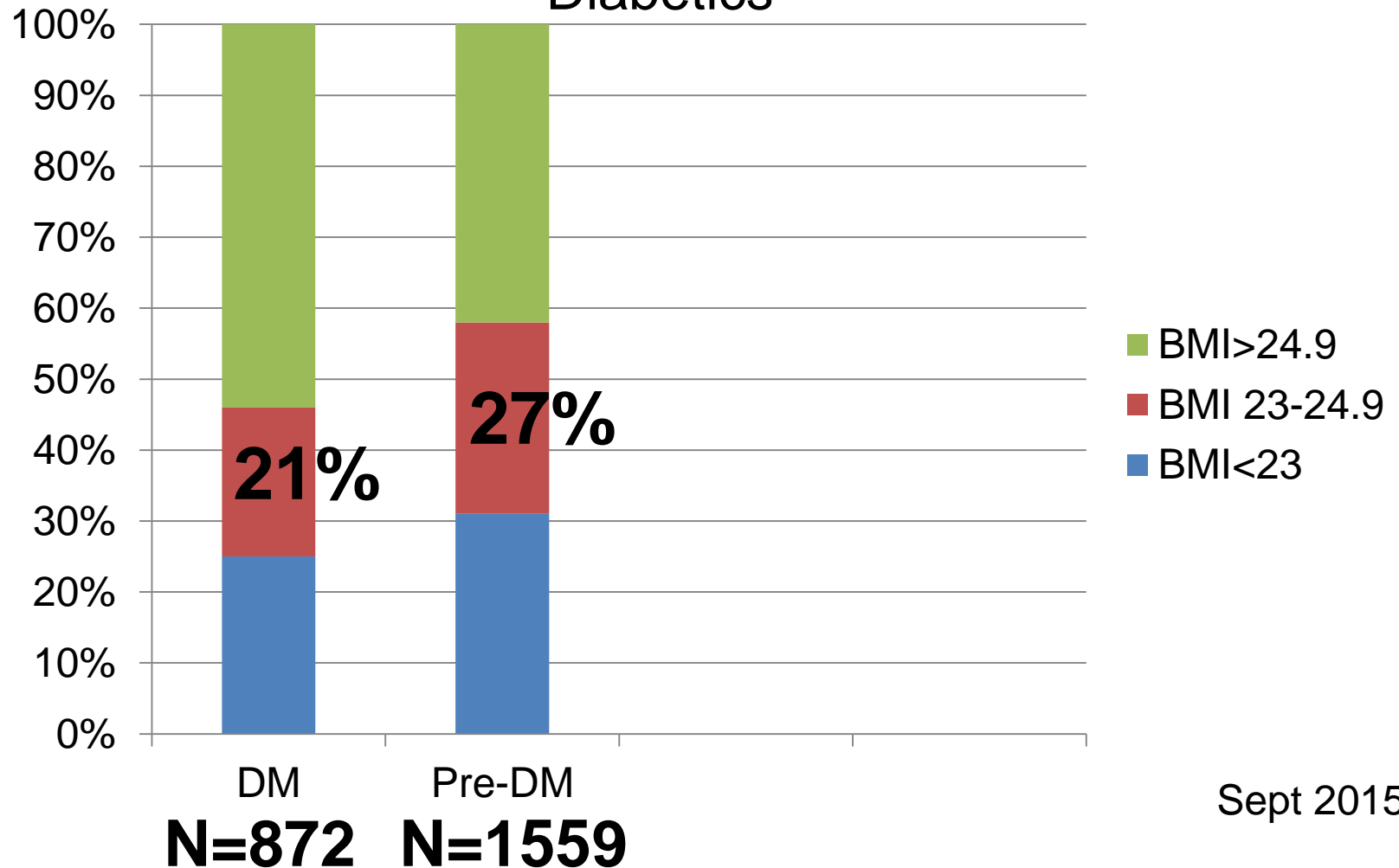


Chinatown Public Health Center

- ❖ Community Primary Care
- ❖ 5446 active unduplicated patients
- ❖ 90% Asian Americans (27% of SFHN PC)
- ❖ 872 CPHC patients have diabetes = 16%
- ❖ 1559 CPHC patients have pre-diabetes = 29%
- ❖ BMI ≥ 23 = 3243 (59% CPHC patients)
- ❖ BMI ≥ 25 = 2033 (37% CPHC patients)
- ❖ BMI 23-24.9 = 1210 (22% CPHC patients)



BMI Breakdown of Current CPHC Diabetics and Pre-Diabetics





Impact on SFHN

- ❖ Additional Patients Screened = 4015 (#Asian Americans at BMI 23-24.9 = $18087 \times 22\%$)
- ❖ Additional Pre-Diabetics = 1148 ($4015 \times 29\%$ pre-Diabetics)
- ❖ Additional Diabetics = 642 ($4015 \times 16\%$ Diabetics)



Cost Benefit Analysis

Benefits

- ❖ Earlier detection and intervention
- ❖ Preventing costly complications (e.g. stroke, heart attack, kidney disease, loss of vision, loss of limb) and hospitalizations
- ❖ Lower loss of productivity

Costs

- ❖ Simple screening blood test (HgbA1c)
- ❖ Low cost treatment (e.g. generic metformin) and interventions (diet modification, exercise)



On The Ground

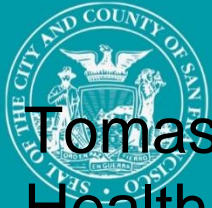
- ❖ CPHC began screening at 23 for Asian Americans in April 2015
- ❖ Minimal impact on operation
- ❖ Diabetes Prevention Program pilot with local YMCA: pre-diabetic patient referral
- ❖ Revamped diabetes class with emphasis on self-management
- ❖ Pre-DM/DM panel management



Population Health

- ❖ Tremendous opportunities exist to effect positive health gains on a population level.
- ❖ Population health strategy
 - Leveraging EMR
 - Panel management
 - Team-based care
 - Collaboration with CBOs
- ❖ Building the infrastructure to execute this strategy

Acknowledgment:



San Francisco Department of Public Health
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