Diabetes Burden in Asian Americans

Commissioned by Eli Lilly

Diabetes is a significant health issue in the United States. Milliman aggregated publicly available data and research in an effort to determine the burden of diabetes on various sub-populations versus the total population. To see our research methodology, along with data on the burden of diabetes for additional sub-populations, refer to the preceding research summary: *Diabetes Burden on Population Groups*.
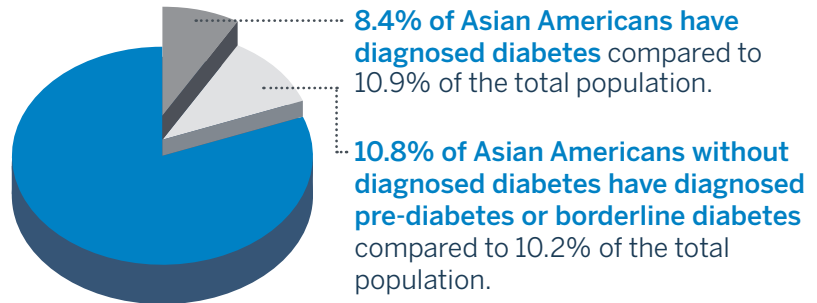
Prevalence[1]

Roughly **1 in 12** Asian Americans has diagnosed diabetes.

Diabetes is **23% less prevalent** in Asian Americans than the total US population.

Diabetes Prevalence

8.4% of Asian Americans have diagnosed diabetes compared to 10.9% of the total population.

10.8% of Asian Americans without diagnosed diabetes have diagnosed pre-diabetes or borderline diabetes compared to 10.2% of the total population.

Mortality Rates[2]

Diabetes is the **5th leading cause of death** for Asian Americans, accounting for **1 in 24** Asian American deaths.

Mortality rates with diabetes as the underlying cause of death are **24% lower** for Asian Americans than for the total population.

Complications[3]

Diabetes can lead to many complications with the potential to decrease quality of life, create large healthcare costs, and even result in death. Asian Americans have lower than average complication rates, including:
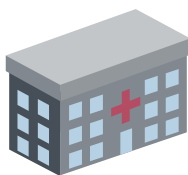
0.4 x Number of hospital admissions related to diabetes, relative to the total population

0.4 x Number of lower extremity amputations, relative to the total population

Cost Burden[4]

The total estimated cost of diabetes in 2017 is $327 billion, including $237 billion in direct medical costs and $90 billion in reduced productivity. Diabetes prevalence, complications, and many other factors impact the cost burden of diabetes for population groups.

$1 in $7 Healthcare dollars are spent treating diabetes and its complications across all populations
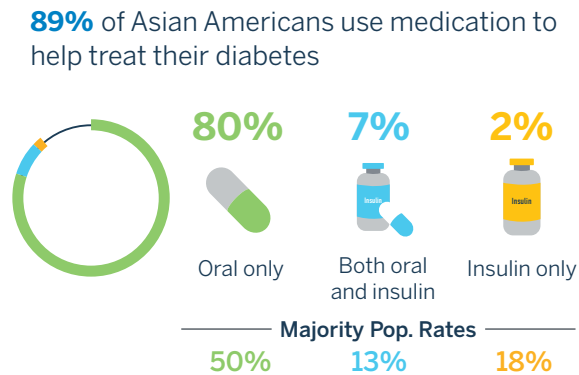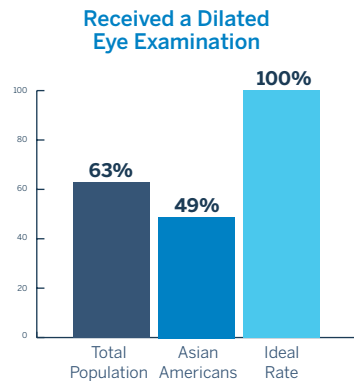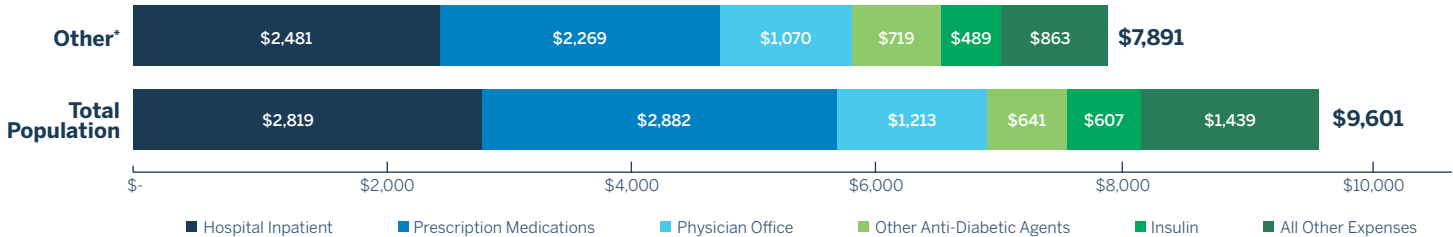
2.3x Higher medical expenditures in people with diabetes, regardless of population group

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Treatment and Utilization[3,4,5]

Effective management of diabetes can require frequent interactions with healthcare professionals, the use of specific diagnostic tests, and adherence to pharmaceutical therapies.
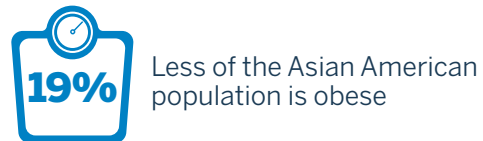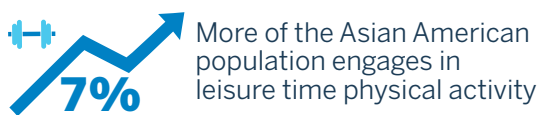
Received a Dilated Eye Examination

Total Population	63%
Asian Americans	49%
Ideal Rate	100%

89% of Asian Americans use medication to help treat their diabetes

80%	7%	2%
Oral only	Both oral and insulin	Insulin only

Majority Pop. Rates

50%	13%	18%

Per Patient Healthcare Expenses Related to Diabetes Among People with Diabetes

	Hospital Inpatient	Prescription Medications	Physician Office	Other Anti-Diabetic Agents	Insulin	All Other Expenses	Total
Other*	$2,481	$2,269	$1,070	$719	$489	$863	**$7,891**
Total Population	$2,819	$2,882	$1,213	$641	$607	$1,439	**$9,601**

■ Hospital Inpatient ■ Prescription Medications ■ Physician Office ■ Other Anti-Diabetic Agents ■ Insulin ■ All Other Expenses

*Other excludes the African American, Hispanic, and White populations.

Risk Factors[1]

Diabetes risk factors, such as physical inactivity and obesity, increase the odds of getting diabetes and the chance of diabetes-related complications. These risk factors are less common in Asian Americans. Other risk factors, such as access to healthy food, affordability of healthcare, and diabetes awareness, are hard to quantify and vary by region but are also significant factors in the risk of diabetes. Relative to the total population:

7% More of the Asian American population engages in leisure time physical activity

19% Less of the Asian American population is obese

References

1 Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2017. Retrieved January 16, 2019, from https://www.cdc.gov/brfss/annual_data/annual_2017.html

2 CDC. Underlying Cause of Death, 1999-2017. Retrieved January 16, 2019, from https://wonder.cdc.gov/ucd-icd10.html

3 Agency for Healthcare Research and Quality. National Healthcare Quality and Disparities Reports. Retrieved January 16, 2019, from https://nhqrnet.ahrq.gov/inhqrdr/data/

4 American Diabetes Association (May 2018). Economic Costs of Diabetes in the U.S. in 2017. Retrieved January 16, 2019, from http://care.diabetesjournals.org/content/41/5/917

5 CDC. US Diabetes Surveillance System National Diabetic Medication Use. Retrieved January 16, 2019, from https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html

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