Because over half of Asian Americans with diabetes or prediabetes are undiagnosed.

- Asian Americans are at risk for type 2 diabetes at a lower body mass index of 23.
- With over 50% of Asian Americans with diabetes unaware of their status and risk, screening at 23 will reveal 100,000s of untreated patients.
- Use this package and Screenat23.org to learn more and help.
Dear Colleagues

We are writing to ask your organization to publicly endorse the Campaign: “Screen at 23.” The premise is simple - Asian Americans should be screened for type 2 diabetes at a baseline Body Mass Index (BMI) of 23. You might ask, why 23? or why Asian Americans?

The answer is that at a BMI of 23, Asian Americans, the fastest growing minority population in the U.S., are at real risk for developing diabetes. And, according to the National Institutes of Health and Centers for Disease Control, over half of all Asian Americans with diabetes are undiagnosed.

Research on Asian Americans supports screening at BMI 23 as a means of detecting an additional 215,000 undiagnosed cases of diabetes and many more cases of prediabetes compared to the standard screening cutpoint of BMI 25. Making the diagnosis earlier is critical for early treatment, preventing prediabetes progressing to diabetes, reducing associated damaging and sometimes fatal conditions, and lowering the cost of care.

The American Diabetes Association’s (ADA) 2015 screening guideline includes a BMI of 23 in Asian Americans as a risk factor for diabetes, and recommends testing for the disease when at least one other risk factor is present. BMI 23 has been included as a risk factor for the National Institutes of Health and Centers for Disease Control’s National Diabetes Education Program.

We need your organization’s help to join us and move from guidance to awareness and action.

The “Screen at 23” campaign will increase awareness of this screening guideline and work for its adoption within our Asian American communities. It organized by the National Council of Asian Pacific Islander Physicians (NCAPIP), and Joslin Diabetes Center, and supported by ADA
and the AANHPI Diabetes Coalition (a coalition of over fifteen diabetes research and advocacy organizations). We seek the support of your organization to join this campaign and move from guidance to increased awareness and action among providers, health authorities, and the general public.

By addressing the risks of type 2 diabetes specific to the Asian American population, together we can take a preventative step in conquering this epidemic.

Sincerely,

Edward Chow, M.D.
Co-Chair,
AANHPI Diabetes Coalition

George King, M.D.
Co-Chair,
AANHPI Diabetes Coalition

Ho Luong Tran, M.D., M. P. H.
President & CEO - NCAPIP
Screen at 23.
Campaign Endorsement Agreement and Instructions

(Name will be included in public list of campaign supporters at the San Francisco “Screen at 23.” Campaign Press Conference Kickoff.)

(Contact information will never be shared publicly and is used to provide followup information about the campaign only.)

Name of Organization:

Address of Organization:

Email:

Phone:

We pledge to support the “Screen at 23.” campaign and agree to be publicly listed as an official supporter on the campaign website (www.Screenat23.org) and materials.

Authorized Signee: ________________________________

Print Name: ________________________________

Date: ________________________________

Please email scanned copy OR email digitally signed copy to: htran@ncapip.org
You can also sign your organization onto the campaign by going to www.Screenat23.org
The “Asian BMI” is 23
Screening for Diabetes in Asian Americans

[This article appears in San Francisco Medicine, the journal of the San Francisco Medical Society, vol. 88 no. 4, May 2015]

Edward A. Chow, MD, David Hawks

Keep the number twenty-three in mind. Rather, keep the body mass index (BMI) 23 kg/m² in mind when deciding whether to screen an Asian American for Type 2 diabetes. The normal BMI cutpoint to screen a Caucasian patient is 25 kg/m², but according to research there is a new baseline for recommended screening guidelines for Asian Americans, adopted at the very end of last year by the American Diabetes Association (ADA).¹ We say baseline, because there are always other factors to consider when screening a patient for diabetes (blood pressure, family history, diet, exercise habits). And when talking about BMI both as a cutpoint for screening for diabetes and other obesity related disorders and as an indicator of what “healthy weight” is, we also have to acknowledge both its imperfection and the need to know more.

Fortunately for screening and diagnosing Asian Americans, there is plenty that we do know about the value of using BMI 23, or as we sometimes call it, “Asian BMI.”

The number isn’t new. In 2004, the World Health Organization (WHO) recognized that Asians showed higher risk for developing diabetes at a lower BMI, and chose 23 kg/m² or greater as the cutpoint for screening.² Contrary to common belief, Asian Americans have a higher incidence of diabetes than the Caucasian population, most of which is Type 2.

Background on BMI 23

In 1995, Dr. Wilfred Fujimoto of University of Washington found that rates of Type 2 diabetes among second-generation Japanese Americans were significantly higher than both the general white American population in the US, and Japanese in Tokyo. There was evidence that genes and a unique pathophysiological response to diabetes existed for Asian Americans.³

Some of the leading and ongoing research on diabetes in Asian American populations occurs at Joslin Diabetes Center’s Asian American Diabetes Initiative headed by George King, M.D. and William Hsu, M.D. Much data has also been gathered via community based participatory research conducted by researchers specializing in certain segments of the Asian American aggregate population (e.g. Dr. Alka Kanaya with South Asian Indians\(^4\) and Dr. Happy Araneta with Filipino Americans\(^5\)).

In late 2011, these researchers and many others came together in Honolulu for a State of the Sciences Conference on Asian Americans, Native Hawaiians, and Pacific Islanders. Existing and new research on this Asian BMI issue was shared, and the resulting collaborations led to two papers published in *Diabetes Care* in May 2012\(^6,7\) along with an op-ed titled *Type 2 Diabetes: An Epidemic Requiring Global Attention and Urgent Action*.\(^6\) The op-ed highlighted the fact that in addressing this grave and widespread problem of diabetes within and without the US, interventions needed to be tailored to specific populations with pathophysiology and culture in mind.

The researchers came together with community organizations, the American Diabetes Association (ADA), and public health advocates in 2012 to form the AANHPI Diabetes Coalition. One of the first priorities was to work with ADA to adopt a screening guideline that would more effectively diagnose diabetes among Asian Americans populations.

**Not the Start, Nor the End**

When the ADA announced the lowering of their recommended screening BMI for Asians, it validated many years of work on the part of researchers and health professionals that worked with Asian American populations. Two major challenges, or factors, remain.

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The first is the challenge of building awareness in order to increase screenings for Asian Americans at the lower cutpoint. The ADA announcement was important, but there are still guideline authorities that have not adopted the lower screening point. Currently, the U.S. Preventive Services Task Force (USPSTF) recommends screening for type 2 diabetes in asymptomatic adults with BMI 25. Both the CDC and CMS continue to use this guideline to consider individuals at risk - and provide services accordingly - for diabetes and obesity related disorders at the "standard" BMI range. Those in the Asian community are disadvantaged in being provided needed services.

The second challenge is one of data, or, information itself. BMI is by no means an ideal, “end all and be all”, quant for screening and diagnosing Asian Americans. As Dr. Hsu et al clearly state in their position statement that formed the basis for ADA’s change, more research is needed to “identify better risk markers than BMI.” BMI does not take into account the relative proportions of fat and lean tissue and cannot distinguish the location of fat distribution. To compound this challenge is the complexity and heterogeneity of the Asian American designation itself.

South Asians and Filipino Americans develop diabetes at a significantly higher rate than other Asian Americans, in addition to the general population. These two Asian American subgroups are closer, and sometimes exceed (depending on geographic region) the rates experienced by Hispanic and Black communities. But Japanese and Chinese Americans, while seeming to fit the “model minority” stereotype of thin and therefore healthy, also experience greater risks of developing Type 2 diabetes.

More research is needed on each Asian sub-population in a broad (disaggregated data on Asians and Pacific Islanders is always in short supply across most medical conditions) and acute sense. In the near future, 1 in 3 diabetics in the world will be Chinese or Indian. Thus far, there have not been large scale clinical trials done on Asian American subgroups.

**Asian BMI is 23 for Screening for Diabetes**

There is enough existing research, data, and provider knowledge, however, to make the case that BMI 23 is the number to use as an initial screening point for Asian Americans. A study published early in 2015 by Happy Araneta, Ph.D., shows that BMI 23 provides an 80% sensitivity with regard to Japanese, South Asian, and Filipino Americans, and that “identifying and implementing BMI cut points for each Asian subgroup is impractical. A single BMI cut point from a public health standpoint that is simple to use is critical as we continue to face a high rate of diabetes.

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of undiagnosed diabetes in the U.S., while appreciating the need for an individualized approach on the patient level.\textsuperscript{10} Continuing to use the traditional standard of BMI 25 for Asian Americans will miss diagnoses of diabetes. Instead BMI 23 should be used as the point to screen them.

\textit{Edward A. Chow, MD is Co Chair of the AANHPI Diabetes Coalition and Chair of the American Pacific American Diabetes Association Action Council (APADAC), ADA}

\textit{David Lee Hawks is Director of Communications, National Council of Asian Pacific Islander Physicians}

According to the National Institutes of Health, *over half* (51%) of all diabetes cases among Asian Americans are *undiagnosed*.

By Screening at 23, over **215,000** Asian Americans with diabetes would be revealed.

By Screening at 23, over **430,000** Asian Americans with prediabetes would be revealed.

The American Diabetes Association, World Health Organization, and Centers for Disease Control all assert that Asian Americans are at risk for developing diabetes at a lower body mass index.

By Screening at 23, treatment of diabetes can begin earlier, so that the disease can be managed and severe and deadly complications avoided.

By Screening at 23, diabetes can be prevented through early intervention among those with prediabetes.
### Standards of Medical Care in Diabetes—2015

**Abridged for Primary Care Providers**

American Diabetes Association

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The American Diabetes Association's (ADA's) *Standards of Medical Care in Diabetes* is updated and published annually in a supplement to the January issue of *Diabetes Care* (1). Formerly called *Clinical Practice Recommendations*, the “Standards” includes the most current evidence-based recommendations for diagnosing and treating adults and children with all forms of diabetes. ADA's grading system uses A, B, C, or E to show the evidence level that supports each recommendation (Table 1).

This is an abridged version of the current Standards containing only the evidence-based recommendations most pertinent to primary care. The tables, figures, and references have been renumbered from the original document. The complete 2015 Standards supplement is available at professional.diabetes.org/standards.

**STRATEGIES FOR IMPROVING CARE**

**Recommendations**

- Patient-centered communication that incorporates patient preferences, assesses literacy and numeracy, and addresses cultural barriers to care should be used. **B**
- Care should be aligned with components of the Chronic Care Model (CCM) to ensure productive interactions between a prepared proactive practice team and an informed activated patient. **A**

**Diabetes Care Concepts**

1. Patient centeredness. Because patients with diabetes are also at greatly increased risk of cardiovascular disease (CVD), a patient-centered approach should include a comprehensive plan to reduce CVD risk.

2. Diabetes across the life span. As people with diabetes live well into older age and incidence of type 2 diabetes is on the rise in children and young adults, the demographics of diabetes are changing. There is therefore a need to improve coordination between clinical teams as patients pass through different stages of life, including pregnancy.

3. Advocacy for patients with diabetes. Given the tremendous toll that lifestyle factors such as obesity, physical inactivity, and smoking have on the health of patients with diabetes, ongoing and energetic efforts are needed to address and change the societal determinants at the root of these problems.

**Care Delivery Systems**

The mean A1C nationally has declined. This has been accompanied by improvements in lipids and blood pressure control. Nevertheless, 33–49% of patients do not meet targets for glycemic, blood pressure, or cholesterol control, and only 14% meet targets for all three measures and nonsmoking status (2).

**Chronic Care Model**

The CCM has been shown to be effective for improving the quality of
collaborative, multidisciplinary teams are best suited to provide care for people with diabetes and to facilitate patients’ self-management (4–7).

Key Objectives
1. Optimize provider and team behavior. The care team should prioritize intensification of lifestyle and/or pharmaceutical therapy for patients with inadequate levels of blood pressure, lipid, or glucose control (8).

2. Support patient behavior change. Successful diabetes care requires a systematic approach to supporting patients’ behavior change efforts. High-quality diabetes self-management education (DSME) and support (DSMS) have been shown to improve patient self-management, satisfaction, and glucose control (9,10).

3. Change the care system. Optimal diabetes management requires an organized, systematic approach and the involvement of a coordinated team of dedicated health care professionals working in an environment where patient-centered high-quality care is a priority (11).

When Treatment Goals Are Not Met
When patients are not meeting treatment goals, reassessing the treatment regimen may require evaluation of barriers such as income, health literacy, diabetes-related distress, depression, poverty, and competing demands, including those related to family responsibilities and dynamics.

CLASSIFICATION AND DIAGNOSIS OF DIABETES
Diabetes can be classified into the following general categories:
1. Type 1 diabetes (due to β-cell destruction, usually leading to absolute insulin deficiency)
2. Type 2 diabetes (due to a progressive insulin secretory defect on the background of insulin resistance)
3. Gestational diabetes mellitus (GDM) (diabetes diagnosed in the second or third trimester of pregnancy that is not clearly overt diabetes)
4. Specific types of diabetes due to other causes, e.g., monogenic diabetes syndromes (such as neonatal diabetes and maturity-onset diabetes of the young [MODY]), diseases of the exocrine pancreas (such as cystic fibrosis), and drug- or chemical-induced diabetes (such as in the treatment of HIV/AIDS or after organ transplantation)

Diagnostic Tests for Diabetes
Diabetes may be diagnosed based on A1C criteria or plasma glucose criteria, either the fasting plasma glucose (FPG) or the 2-h plasma glucose value after a 75-g oral glucose tolerance test (OGTT) (12,13) (Table 2). The same tests are used to screen for and diagnose diabetes and to detect individuals with prediabetes (Table 3).

Type 2 Diabetes and Prediabetes

Recommendations
- Testing to detect type 2 diabetes in asymptomatic people should be considered in adults of any age who are overweight or obese (BMI ≥25 kg/m² or ≥23 kg/m² in Asian Americans) and who have one or more additional risk factors for diabetes. For all patients, particularly those who are overweight or obese, testing should begin at age 45 years.
Medical Evaluation
A complete medical evaluation should be performed at the initial visit to:
1. Classify diabetes
2. Detect diabetes complications
3. Review previous treatment and risk factor control in patients with diabetes
4. Assist in formulating a management plan
5. Provide a basis for continuing care

Laboratory tests appropriate to the evaluation of each patient’s medical condition should be completed. A focus on the components of comprehensive care (Table 5) will enable the health care team to optimally manage the patient with diabetes.

Management Plan
People with diabetes should receive medical care from a collaborative, integrated team with expertise in diabe-

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TABLE 3. Criteria for Testing for Diabetes or Prediabetes in Asymptomatic Adults

Testing should be considered in adults who are overweight (BMI ≥25 kg/m² or ≥23 kg/m² in Asian Americans) and have additional risk factors:
- Physical inactivity
- First-degree relative with diabetes
- High-risk race/ethnicity (e.g., African American, Latino, Native American, Asian American, Pacific Islander)
- Women who delivered a baby weighing >9 lb or were diagnosed with GDM
- Hypertension (≥140/90 mmHg or on therapy for hypertension)
- HDL cholesterol level <35 mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L)
- Women with polycystic ovary syndrome
- A1C ≥5.7%, IGT, or IFG on previous testing
- Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans)
- History of CVD

Frequency: Every 3 years

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TABLE 4. Testing for Type 2 Diabetes or Prediabetes in Asymptomatic Children (≤18 Years of Age)

Criteria
- Overweight (BMI >85th percentile for age and sex, weight for height >85th percentile, or weight >120% of ideal for height)

Plus any two of the following risk factors:
- Family history of type 2 diabetes in first- or second-degree relative
- Race/ethnicity (Native American, African American, Latino, Asian American, Pacific Islander)
- Signs of insulin resistance or conditions associated with insulin resistance (acanthosis nigricans, hypertension, dyslipidemia, polycystic ovary syndrome, or small-for-gestational-age birth weight)
- Maternal history of diabetes or GDM during the child’s gestation

Age of initiation: Age 10 years or at onset of puberty, if puberty occurs at a younger age

Frequency: Every 3 years

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INITIAL EVALUATION AND DIABETES MANAGEMENT PLANNING

Recommendations
- Test for undiagnosed type 2 diabetes at the first prenatal visit in those with risk factors, using standard diagnostic criteria. B
- Test for GDM at 24–28 weeks of gestation in pregnant women not previously known to have diabetes. A
- Screen women with GDM for persistent diabetes at 6–12 weeks postpartum, using the OGTT and clinically appropriate nonpregnancy diagnostic criteria. E
- Women with a history of GDM found to have prediabetes should receive lifestyle interventions or metformin to prevent diabetes. A

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### TABLE 5. Components of the Comprehensive Diabetes Evaluation

#### Medical history
- Age and characteristics of onset of diabetes (e.g., diabetic ketoacidosis, asymptomatic laboratory finding)
- Eating patterns, physical activity habits, nutritional status, and weight history; growth and development in children and adolescents
- Presence of common comorbidities, psychosocial problems, and dental disease
- Diabetes education history
- Review of previous treatment regimens and response to therapy (A1C records)
- Current treatment of diabetes, including medications, medication adherence and barriers thereto, meal plan, physical activity patterns, and readiness for behavior change
- Results of glucose monitoring and patient’s use of data
- Diabetic ketoacidosis frequency, severity, and cause
- Hypoglycemic episodes
  - Hypoglycemia awareness
  - Any severe hypoglycemia: frequency and cause
- History of diabetes-related complications
  - Microvascular: retinopathy, nephropathy, neuropathy (sensory, including history of foot lesions; autonomic, including sexual dysfunction and gastroparesis)
  - Macrovascular: coronary heart disease, cerebrovascular disease, and peripheral arterial disease

#### Physical examination
- Height, weight, BMI
- Blood pressure determination, including orthostatic measurements when indicated
- Fundoscopic examination
- Thyroid palpation
- Skin examination (for acanthosis nigricans and insulin injection sites)
- Comprehensive foot examination
  - Inspection
  - Palpation of dorsalis pedis and posterior tibial pulses
  - Presence/absence of patellar and Achilles reflexes
  - Determination of proprioception, vibration, and monofilament sensation

#### Laboratory evaluation
- A1C, if results not available within past 3 months
- If not performed/available within past year
  - Fasting lipid profile, including total, LDL, and HDL cholesterol and triglycerides, as needed
  - Liver function tests
  - Test for urine albumin excretion with spot urine albumin-to-creatinine ratio
  - Serum creatinine and calculated glomerular filtration rate
  - TSH in type 1 diabetes, dyslipidemia, or women over age 50 years

#### Referrals
- Eye care professional for annual dilated eye exam
- Family planning for women of reproductive age
- Registered dietitian for medical nutrition therapy
- DSME/DSMS
- Dentist for comprehensive periodontal examination
- Mental health professional, if needed
Thank you for joining the Screen at 23 campaign and helping to push this central message:

More than half of Asian Americans with type 2 diabetes, and even more Asian Americans with prediabetes, are undiagnosed. To make treatment, intervention, and even prevention of diabetes possible, we need to first ensure that it is revealed. We need to call for appropriate screening practices for Asian Americans. We need to screen at 23.

What we want physicians and health providers will do: consider testing an Asian American patient who has a BMI of 23 and one or more of the prevalent risk factors for diabetes (i.e., implement the new ADA screening guideline for Asian Americans).

What we want for Asian American patients: be aware that a BMI of 23 (easy to calculate) is a risk factor and to talk to your doctor about it. Patients can calculate their BMI here.

Points to Keep in Mind and/or Post Online:
Over half of all Asian Americans with diabetes remain undiagnosed. The number of undiagnosed Asian Americans with prediabetes is even higher. Of these, a significant portion of Asian Americans at risk for diabetes or prediabetes appear to be at a “healthy weight”, and aren’t being tested.

The general rule for some time has been that if you have a body mass index below 25, you aren’t at risk for diabetes. Research on Asian Americans, however, proves different. The American Diabetes Association, National Institutes of Health, and the Centers for Disease Control have all recently acknowledged that Asian Americans should be screened for diabetes at a lower body mass index, and 23 is that number.

23 isn’t a redefinition of overweight or obesity, it’s a number to keep in mind to get checked by our doctors and live healthier.

BMI can be calculated HERE: http://aadi.joslin.org/bmi-calculator (Courtesy of the Asian American Diabetes Initiative at Joslin Diabetes Center)

We need to push the Screen at 23 campaign forward among doctors, patients, and the public at large to help ensure that Asian Americans are Screened at 23. Together we can help uncover thousands of patients with diabetes so they can start getting the treatment they need before complications arise, and help thousands more prevent diabetes outright.

Points to Further Emphasize (target: Health Professionals):

➔ The “Screen at 23” campaign seeks to reveal the undiagnosed cases of diabetes (more than half, according to the NIH) among Asian Americans. By screening Asian American patients using a body mass index of 23 as per the 2015 ADA recommended guideline, thousands of cases of diabetes [approx 215,000] and even more of pre-diabetes [approx 430,000] will be unmasked.

➔ An Asian American patient who appears to be at a healthy weight, and is relatively thin, could actually be at risk for developing diabetes. Previously, having a body mass index below 25 would often preclude a patient from being screened - and that’s an assumption this campaign seeks to debunk.

➔ Testing for diabetes at a body mass index (BMI) of 23 is a recommendation of the American Diabetes Association and has been supported by a growing body of research done at the community level. Institutions in government and non-government sectors have begun to take notice, but we need to continue to engage the providers and patients on the importance of screening at 23 so that guidelines are put into practice and policies change.

➔ Having a body mass index of 23 doesn’t mean that an Asian American is "fat", "overweight", or any kind of new definition for obesity. It is a marker to be aware of for both doctors and patients however; one to consider being tested for diabetes and to think about lifestyle changes like nutrition and exercise.

➔ Since 2011, the AANHPI Diabetes Coalition, a coalition of twenty local and national organizations including the American Diabetes Association, Harvard’s Joslin Diabetes Center, and the National Council...
The American Diabetes Association, of Asian Pacific Islander Physicians, has advocated on the need to have a diabetes screening guideline appropriate for Asian Americans, and to have that guideline implemented widely and at the policy level.

The ADA’s guidance change (going from BMI 25 to 23) for Asian Americans marked a significant milestone in the progress of this issue. But there is still work to be done:

◆ The Centers for Medicare and Medicaid Services (CMS) still uses BMI 30 as the cutpoint to receive reimbursement for obesity counseling services. While it is important to keep in mind that the lower BMI cutpoints for Asian Americans are markers for risk of developing certain chronic conditions like diabetes and not redefinitions of overweight and obese, it does raise the issue of there being more lower and more appropriate cutpoints for Asian American patients to receive free counseling that will help to lead healthier lives.

◆ The United States Preventive Services Task Force (USPSTF) is an independent organization of health experts that extensively reviews scientific evidence to make a recommendation for preventives services such as screenings. Unless the USPSTF gives a procedure an “A” or “B” grade

Sample Tweets:

1. If you’re Asian American and your body mass index is 23 or higher, talk to your doctor about screening for diabetes. #Screenat23
2. 51% of Asian Americans w/ diabetes are UNDIAGNOSED. What to do? #Screenat23
3. #Screenat23 is supported by evidence from @AmDiabetesAssn, @NIH, @CDCgov, and @WHO. Learn more here: www.screenat23.org
4. If you’re Asian, calculate your BMI here: http://www.asianarch.org/bmi/calc/BMICalculator.html, if 23 or higher, talk to your doc about diabetes screening. #Screenat23

Sample FaceBook posts:

1. The “Screen at 23” campaign seeks to reveal the undiagnosed cases of diabetes (more than half, according to the NIH) among Asian Americans. By screening Asian American patients using a body mass
index of 23 as per the 2015 ADA recommended guideline, thousands of cases of diabetes [approx 215,000] and even more of pre-diabetes [approx 430,000] will be unmasked. (www.screenat23.org)

2. “Screen at 23” seeks to do what it says: get every Asian American patient with a body mass index of 23 or higher screened for diabetes. This requires educating providers who previously might rule out diabetes as a risk factor for an Asian who is “skinny” or “average” in build. It requires educating the public that having a BMI of 23 is not a new definition of “overweight” or “obesity” for Asian Americans, but rather a number to look out for, one that should have individuals thinking about making healthy changes to their diet and incorporating healthy changes to their lifestyle, such as exercising. Above all, the campaign seeks to unmask diabetes and prediabetes in Asian Americans, more than half of whom are undiagnosed, according to the National Institutes of Health. Go to www.Screenat23.org

Sample Long Email:

(to active partners and networks, this provides some background context around the guideline and work around diabetes among Asian Americans)

Dear Colleague:

According to the World Health Organization, American Diabetes Association, National Institutes of Health and the Centers for Disease Control, Asian Americans are at risk of developing diabetes at a lower body mass index (BMI) than Whites, Blacks, Hispanics, and Native Americans. The community based participatory research and academic studies done on this small but rapidly growing population have provided the literature that has caused these large institutions to change their recommends for screening diabetes in Asian Americans. The American Diabetes Association’s (ADA) latest 2015 Standards of Care in Diabetes included a body mass index of 23 kg/m2 as a risk factor to consider for testing diabetes in Asian Americans. The former cutpoint for risk being a BMI of 25, one that the researchers have been saying will leave approximately a third of a million Asian American diabetics (and even more prediabetics) undiagnosed.

A small pocket of knowledge has reached a larger stage, but there remains a gap in awareness that, unless filled, will equate to a very slow implementation of these guidelines.
among providers. The Asian American, Native Hawaiian, and Pacific Islander Diabetes Coalition was formed in 2011 by a combination of these same researchers along with community and public health leaders, endocrinologists, diabetes educators, dieticians, and providers. Its objective has been to move the scientific knowledge of diabetes among Asian Americans, moving the science into guidelines for diagnosis. Now, the goal is to take this guideline and make sure it is implemented.

**Goal**

*Screen at 23.* seeks to do what it says: get every Asian American patient with a body mass index of 23 or higher screened for diabetes. This requires educating providers who previously might rule out diabetes as a risk factor for an Asian who is “skinny” or “average” in build. It requires educating the public that having a BMI of 23 is not a new definition of “overweight” or “obesity” for Asian Americans, but rather a number to look out for, one that should have individuals thinking about making healthy changes to their diet and incorporating healthy changes to their lifestyle, such as exercising. Above all, the campaign seeks to unmask diabetes and prediabetes in Asian Americans, *more than half of whom are undiagnosed*, according to the National Institutes of Health. Go to **[www.Screenat23.org](http://www.Screenat23.org)**

Sincerely,

(Your Name)

For More Information on the campaign, spreading the message, writing an op-ed, or hosting a live event in your city, email David Hawks at dhawks@ncapip.org or call 202-441-1192. Thank you!
More than half of Asian Americans with diabetes are undiagnosed

New statistics also show rising prevalence of diabetes among all groups

More than half of Asian Americans and nearly half of Hispanic Americans with diabetes are undiagnosed, according to researchers from the National Institutes of Health and the Centers for Disease Control and Prevention. Their results were published Sept. 8 in JAMA, the Journal of the American Medical Association.

Additionally, prevalence of diabetes for all American adults went up, from nearly 10 percent to over 12 percent between 1988 and 2012. Diabetes prevalence - how common the condition is - also went up in every age, sex, level of education, income and racial/ethnic subgroup. One bright spot: The proportion of people with diabetes that was undiagnosed decreased 23 percent between 1988-1994 and 2011-2012. The statistics account for age differences across the surveys.

Using newly available 2011-2012 data from the CDC's National Health and Nutrition Examination Survey (NHANES), researchers were able to quantify diabetes prevalence for Asian Americans for the first time and found that they have the highest proportion of diabetes that was undiagnosed among all ethnic and racial subgroups studied, at 51 percent. Diabetes was also common in Asian Americans, at 21 percent.

Hispanic Americans had the highest prevalence of diabetes at nearly 23 percent, with 49 percent of that undiagnosed.

One difference between Asian Americans and the other groups studied, however, is that Asian Americans often develop type 2 diabetes at a lower body mass index (BMI). The NHANES data showed the average BMI for all Asian Americans surveyed was under 25. For the U.S. population overall, the average BMI was just below 29. A BMI of 25 to under 30 is considered overweight, and a BMI of 30 or greater is considered obese. The American Diabetes Association recommends Asian Americans get tested for diabetes at a BMI of 23 or higher, a lower BMI threshold than the general population.

“The large proportion of people with undiagnosed diabetes points to both a greater need to test for type 2 diabetes and a need for more education on when to test for type 2 diabetes, especially since populations such as Asian Americans may develop type 2 at a lower body mass than other groups,” said the study’s senior author, Catherine Cowie, Ph.D., director of diabetes epidemiology programs at the NIH’s National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).

Researchers used NHANES results from 26,415 adults between 1988 and 2012. For the 2011-2012 survey, NHANES surveyed a disproportionate number of Asian Americans.

“We are pleased to have more specific data on Asian Americans. We will be able to provide education and diagnosis efforts more effectively. The government should support more research studies on diabetes among Asian Americans,” said first author Andy Menke, Ph.D., an NIDDK contractor.

Researchers used NHANES results from 26,415 adults between 1988 and 2012. For the 2011-2012 survey, NHANES surveyed a disproportionate number of Asian Americans.

By NHANES surveying a much larger group of Asian Americans to provide more precise statistics, we’re able to identify with hard data a problem that had not been well-studied in the past,” said first author Andy Menke, Ph.D., an NIDDK contractor. “However, the Asian population is diverse, and we do not yet have data on differences within that population. Getting more specific data on Asian and other subgroups may help better pinpoint education and diagnosis efforts.”

About 1 in 5 non-Hispanic black adults had diabetes, higher than the overall population. However, they had a lower proportion of diabetes that was undiagnosed.

The graph shows the percentage of the U.S. adult population - both as a whole and by ethnic/racial subgroup - with diabetes (blue bars) and the percentage who have diabetes that has not been diagnosed (green bars), according to findings from researchers supported by the NIH and the CDC and published in the Sept. 8 issue of JAMA.
More than half of Asian Americans with diabetes are undiagnosed

undiagnosed than the Asian or Hispanic subgroups, with about 37 percent being undiagnosed. Non-Hispanic whites had the lowest prevalence of diabetes at 11 percent, and they had the lowest proportion of undiagnosed, at just over 32 percent.

In type 1 diabetes, the body does not make insulin. In type 2 diabetes — the most common type, which has increased along with the obesity epidemic — the body does not make or use insulin well. Both types of diabetes have potential complications including heart, kidney, nerve and eye diseases.

“By learning more about who has diabetes - and who has the disease but does not know it - we can better target research and prevention efforts,” said NIDDK Director Griffin P. Rodgers, M.D. “We have treatments to help people with diabetes, but treatments can only help those who have been diagnosed. I hope our research can serve as a reminder for people at risk for diabetes to get screened for this potentially devastating disease.”


This study was conducted by the NIDDK, with contractors from Social and Scientific Systems, Inc., supported under NIDDK contract GS10F0381L and by the CDC. This study supports the Healthy People 2020 goal of increasing the diagnosis of diabetes among those with the disease.

The NIDDK, a component of the NIH, conducts and supports research on diabetes and other endocrine and metabolic diseases; digestive diseases, nutrition and obesity; and kidney, urologic and hematologic diseases. Spanning the full spectrum of medicine and afflicting people of all ages and ethnic groups, these diseases encompass some of the most common, severe and disabling conditions affecting Americans. For more information about the NIDDK and its programs, see http://www.niddk.nih.gov.

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This page last reviewed on September 8, 2015

National Institutes of Health (NIH), 9000 Rockville Pike, Bethesda, Maryland 20892

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Diagnosing Type 2 Diabetes in Your Asian American Patients

Do You Know:

- Asian Americans have a high risk of type 2 diabetes similar to that of other racial or ethnic minority groups, even though they have a lower Body Mass Index (BMI)?
- The World Health Organization (WHO) recognized that a BMI greater than 22 kg/m² may signify overweight in Asians, versus 25 kg/m² in other racial groups?
- Asian Americans are a heterogeneous group and some, such as South Asians and Filipinos, are at even higher risk?
- Standard tests, such as HbA1c and fasting blood glucose (FBG) may not be sensitive enough to identify diabetes in Asian Americans?

Recommended Steps When Seeing Your Asian American Patients:

1. Determine whether any other major risk factors are present, including -- first degree relative with diabetes, country of origin, hypertension, dyslipidemia, cardiovascular disease, past history of elevated blood glucose, and, in women, a history of GDM, baby with birth weight more than 9 pounds, or polycystic ovarian disease.
2. Test for diabetes if they have one or more of the risk factors at BMI 23.
3. Think of doing a 2-hour oral glucose tolerance test, as in Asian Americans, HbA1c and or FBG do not satisfactorily exclude diabetes.

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AANHPI Diabetes Coalition http://www.ncapip.org/takeaction/diabetes/
Diabetes in the U.S. Population

At a Glance

- An analysis of data from 2011-2012 found that 12% to 14% of U.S. adults had diabetes.
- More than half of Asian Americans and nearly half of Hispanic Americans with diabetes didn’t know they had the disease.
- Learning more about who has diabetes—and who is unaware they have it—can help guide future research and prevention efforts.

Diabetes is a disorder in which the body uses glucose, a sugar that serves as the body’s fuel. In type 1 diabetes, the body doesn’t make insulin, a hormone that triggers cells throughout the body to take up glucose from blood. In type 2 diabetes—the most common type—the body doesn’t make or use insulin well. Both types can lead to heart, kidney, nerve, and eye diseases over time.

To assess how common diabetes is, researchers at NIH’s National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) analyzed data collected in CDC’s National Health and Nutrition Examination Survey (NHANES). NHANES is a periodic survey of a representative sample of the U.S. population. Recent surveys included blood tests and other measurements. The researchers, led by Drs. Andy Menke and Catherine Cowie, examined data gathered from almost 2,800 people during the 2011-2012 survey cycle. The study was published on September 8, 2015, in the Journal of the American Medical Association.

The scientists found that the overall prevalence of diabetes in the U.S. population was 12-14%, depending on the definition of diabetes used. Of those with diabetes, 25-36% may be undiagnosed. In addition, 36-38% had prediabetes, in which blood glucose levels are higher than normal but not high enough for a diagnosis of diabetes.

When the researchers compared the new data to previous NHANES results, they found that the prevalence of diabetes in the overall population climbed steeply between 1988-1994 and 2007-2008 but leveled off after that. The percentage of undiagnosed diabetes decreased from the first survey period, except for in the youngest age group and in Mexican Americans. This general drop may be due to better screening.

Hispanic Americans had the highest prevalence of diabetes in the 2011-2012 survey at 19-23%, with up to 49% of that undiagnosed. About 21-22% of non-Hispanic black adults had diabetes, with up to 37% undiagnosed. Non-Hispanic whites had the lowest prevalence of diabetes at 10-11%. They also had the lowest proportion of undiagnosed cases, at 25-32%.

The 2011-2012 NHANES gathered enough data for the researchers to quantify diabetes prevalence for Asian Americans for the first time. Diabetes was found to be common in this group, at 17-21%. Asian Americans had the highest proportion of undiagnosed diabetes among all ethnic and racial subgroups studied, at 40-51%.

“The large proportion of people with undiagnosed diabetes points to both a greater need to test for type 2 diabetes and a greater need for information about risk factors for diabetes so that people can learn to take steps to prevent it. This study is a step in the right direction.”

http://www.nih.gov/researchmatters/september2015/09212015diabetes.htm#VgDWgnjKwgU
diabetes and a need for more education on when to test for type 2 diabetes, especially since populations such as Asian Americans may develop type 2 at a lower body mass than other groups,” Cowie says.

Menke points out that the Asian population is diverse, and NHANES doesn’t yet have data on differences within that population. “Getting more specific data on Asian and other subgroups may help better pinpoint education and diagnosis efforts,” he says.

RELATED LINKS:

- Structure of a Potential Diabetes Drug Target:

- Diabetes Prevention A Good Investment:

- Preventing Type 2 Diabetes: Steps Toward a Healthier Life:
  https://newsinhealth.nih.gov/issue/Nov2014/Feature1

- Diabetes:
  http://www.niddk.nih.gov/health-information/health-topics/diabetes

- National Diabetes Education Program:
  http://www.ndep.nih.gov

- Diabetes Risk Factors:

- Calculate Your Body Mass Index:
  http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm


Funding: NIH’s National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).