Table A1. Distribution of US adults without diagnosed diabetes mellitus by the cross-classification of A1C and fasting plasma glucose, using different A1C cut-points.

| | <a1c cı<="" th=""><th>ut-point</th><th colspan="3">≥A1C cut-point</th></a1c> | ut-point | ≥A1C cut-point | | |
|----------------|--|-----------------|-----------------|-----------------|--|
| A1C cut-points | FPG <126 mg/dl | FPG ≥126 mg/dl | FPG <126 mg/dl | FPG ≥126 mg/dl | |
| 6.0% | 93.0 (92.2 - 93.7) | 1.0 (0.8 – 1.3) | 3.4(2.9 - 4.0) | 2.6 (2.2 – 3.1) | |
| 6.1% | 94.2 (93.4 – 94.8) | 1.1 (0.9 – 1.5) | 2.3 (1.9 – 2.7) | 2.5 (2.1 – 2.9) | |
| 6.2% | 94.9 (94.2 – 95.5) | 1.3 (1.1 - 1.7) | 1.5 (1.2 – 1.9) | 2.2 (1.9 – 2.7) | |
| 6.3% | 95.5 (94.9 – 96.1) | 1.5 (1.2 – 1.9) | 0.9 (0.7 – 1.2) | 2.1 (1.7 – 2.5) | |
| 6.4% | 95.8 (95.2 – 96.4) | 1.7 (1.4 – 2.0) | 0.6(0.5-0.8) | 1.9 (1.6 – 2.3) | |
| 6.5% | 95.9 (95.3 – 96.5) | 1.8 (1.5 – 2.2) | 0.5(0.4-0.7) | 1.8 (1.5 – 2.2) | |
| 6.6% | 96.1 (95.5 – 96.6) | 2.0 (1.7 – 2.4) | 0.4(0.2-0.5) | 1.6 (1.3 – 1.9) | |
| 6.7% | 96.1 (95.5 – 96.6) | 2.1 (1.8 – 2.5) | 0.3(0.2-0.5) | 1.5 (1.2 – 1.8) | |

Abbreviation: FPG – fasting plasma glucose

Data are prevalence estimates (95% confidence interval).

Table A2. Sensitivity, specificity, positive predictive value, negative predictive value, and number misclassified according to different A1C cut-points.

| Test characteristics | | | Number (SE) misclassified, millions | | | | |
|----------------------|-------------|-------------|-------------------------------------|---------------------------------|------------------------------------|-----------------------------|------------------------|
| A1C cut-point | Sensitivity | Specificity | Positive predictive value | Negative predictive value | Undiagnosed diabetes (n=6.8) | No Diabetes (n=184.1) | Total misclassified |
| ≥ 6.7% | 40.9% | 99.7% | 82.2% | 97.8% | 4.0 (0.4) | 0.6 (0.1) | 4.6 (0.4) |
| ≥ 6.6% | 43.7% | 97.9% | 81.9% | 97.9% | 3.8 (0.4) | 0.7 (0.1) | 4.5 (0.4) |
| ≥ 6.5% | 49.9% | 99.5% | 78.2% | 98.2% | 3.4 (0.3) | 1.0 (0.1) | 4.4 (0.4) |
| ≥ 6.4% | 53.7% | 99.4% | 75.8% | 98.3% | 3.1 (0.3) | 1.2 (0.2) | 4.3 (0.4) |
| ≥ 6.3% | 57.8% | 99.1% | 69.6% | 98.4% | 2.9 (0.3) | 1.7 (0.2) | 4.6 (0.4) |
| ≥ 6.2% | 62.5% | 98.4% | 59.6% | 98.6% | 2.5 (0.3) | 2.9 (0.3) | 5.4 (0.4) |
| ≥ 6.1% | 68.5% | 97.7% | 52.6% | 97.7% | 2.1 (0.3) | 4.3 (0.4) | 6.4 (0.5) |
| ≥ 6.0% | 72.5% | 96.5% | 43.1% | 99.0% | 1.9 (0.3) | 6.5 (0.5) | 8.4 (0.6) |

Abbreviation: SE — standard error

For test characteristics, A1C cut-point is considered the test and fasting plasma glucose \geq 126 mg/dl is the gold standard for diabetes. In calculating the number misclassified, NHANES sampling weights were adjusted to account for missing values. Specifically, sampling weights were calibrated based on the proportion of NHANES 1999-2004 participants missing data by age group (<40, 40 - 59, 60 - 74, and \geq 75 years), sex, and race-ethnicity. Adjusting the sampling weights correct for differences in missing data across age, sex, and race-ethnicity strata, but assumes that data within strata are missing randomly (Coresh J, et. al. Am J Kidney Dis. 2003;41:1-12).