| **Study, Year** | **Cutoff** | **Proportion meeting**  **cutoff** | **Sensitivity** | **Specificity** | **AUROC** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- |
| Beymer, 2017129 | Ranged from ≥1 to ≥40  A: ≥3  B: ≥5  C: ≥7  D: ≥10  E: ≥15 | Derivation cohort  A: 83.4%  B: 50.8%  C: 30.9%  D: 15.4%  E: 6.2% | Derivation cohort  A: 96.4%  B: 74.6%  C: 58.6%  D: 39.5%  E: 17.7% | Derivation cohort  A: 11.9%  B: 50.2%  C: 70.2%  D: 85.6%  E: 94.3% | NR | Akaike Information Criterion score 6,094 vs. 6,162 for CDC 2014 criteria; 6,150 for ARCH-MSM; 6,072 for Menza (lower score indicates better goodness-of-fit) |
| Hoenigl, 2015130  SDET score | A: ≥3  B: ≥5  C: ≥6  D: ≥8  E: ≥10 | Derivation cohort NR  Validation cohort  A: 38%  B: 24%  C: 8.7%  D: 4.6%  E: 1.2% | Derivation cohort NR  Validation cohort  A: 70%  B: 60%  C: 37%  D: 25%  E: 10% | Derivation cohort NR  Validation cohort  A: 63%  B: 77%  C: 92%  D: 96%  E: 99% | Derivation cohort NR  Validation cohort, 0.70 (95% CI, 0.62 to 0.78) | None |
| Jones, 2017135 A: ARCH-MSM B: Menza C: SDET | A: ≥10 B: ≥1 C: ≥5 | A: 47.1% B: 62.6% C: 17.5% | A: 62.5% Black: 58.3% White: 75.0% B: 62.5% Black: 54.2% White: 87.5% C: 25.0% Black: 16.7% White: 50.0% | A: 56.7% Black: 66.4% White: 49.0% B: 41.1% Black: 41.5% White: 40.8% C: 83.9% Black: 88.5% White: 80.3% | A: 0.62 (95% CI, 0.52 to 0.72) Black: 0.63 (95% CI, 0.51 to 0.75) White: 0.67 (95% CI, 0.47 to 0.88) B: 0.51 (95% CI, 0.41 to 0.60) Black: 0.49 (95% CI, 0.36 to 0.62) White: 0.60 (95% CI, 0.44 to 0.75) C: 0.55 (95% CI, 0.44 to 0.66) Black: 0.52 (95% CI, 0.39 to 0.65) White: 0.66 (95% CI, 0.46 to 0.87) | None |
| Lancki, 2018134 A: ARCH-MSM B: CDC criteria C: Gilead indications | A: ≥10  B: Met criteria  C: One or more criteria | A: 72% B: 49% C: 86% | Unweighted A: 85% B: 52% C: 94%  Weighted A: 76% B: 30% C: 93% | Unweighted A: 30% B: 52% C: 15%  Weighted A: 36% B: 59% C: 22% | A: 0.57 B: 0.51 C: 0.54 | None |
| Menza, 2009131 | Ranged from ≥0 to ≥19  A: ≥1  B: ≥3  C: ≥5  D: ≥8  E: ≥12 | Derivation cohort  A: 71.3%  B: 64.1%  C: 31.3%  D: 18.5%  E: 11.8%  Validation cohort  A: 71.9%  B: 58.6%  C: 36.1%  D: 34.7%  E: 25.0% | Derivation cohort  A: 83%  B: 79%  C: 48%  D: 33%  E: 26%  Validation cohort  A: 86%  B: 76%  C: 53%  D: 51%  E: 44% | Derivation cohort  A: 30%  B: 38%  C: 71%  D: 84%  E: 91%  Validation cohort  A: 29%  B: 43%  C: 65%  D: 67%  E: 77% | Derivation cohort, 0.69 (95% CI, 0.60 to 0.74)  Validation cohort, 0.66 (95% CI, 0.61 to 0.71) | Results based on 4-year estimates |
| Smith, 2012132  HIRI-MSM  (now ARCH-MSM) | Ranged from ≥1 to ≥48  A: ≥1  B: ≥3  C: ≥5  D: ≥10  E: ≥15 | Derivation cohort  A: 97.2%  B: 91.8%  C: 89.6%  D: 56.8%  E: 41.5%  Validation cohort  A: 91.7%  B: 91.7%  C: 86.0%  D: 62.4%  E: 45.0% | Derivation cohort  A: 100%  B: 99.0%  C: 98.4%  D: 84.4%  E: 73.9%  Validation cohort  A: 97.9%  B: 97.9%  C: 95.1%  D: 81.2%  E: 73.6% | Derivation cohort  A: 3.1%  B: 9.1%  C: 11.4%  D: 84.4%  E: 60.7%  Validation cohort  A: 8.4%  B: 8.4%  C: 14.0%  D: 37.7%  E: 55.3% | Derivation cohort, 0.738  Validation cohort, 0.721 | None |
| Smith, 2015133  ARCH-IDUs | Range from 1 to 100  A: ≥30  B: ≥40  C: ≥46  D: ≥50  E: ≥60 | Derivation cohort  A: 89.9%  B: 61.5%  C: 57.8%  D: 56.6%  E: 35.9% | Derivation cohort  A: 98.5%  B: 87.7%  C: 86.2%  D: 85.2%  E: 70.4% | Derivation cohort  A: 10.1%  B: 38.8%  C: 42.5%  D: 43.7%  E: 64.5% | Derivation cohort, 0.72 | None |

**Abbreviations:** ARCH-IDUs=Assessing the Risk of Contracting HIV in Injection Drug Users; ARCH-MSM=Assessing the Risk of Contracting HIV in Men Who Have Sex With Men; AUROC=area under the receiver operating characteristic curve; CDC=Centers for Disease Control and Prevention; CI=confidence interval; HIRI-MSM=HIV Incidence Risk Index for Men Who Have Sex With Men; NR=not reported; SDET=San Diego Early Test.