| **Study, Year** | **Cutoff** | **Proportion meeting****cutoff** | **Sensitivity** | **Specificity** | **AUROC** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- |
| Beymer, 2017129 | Ranged from ≥1 to ≥40 A: ≥3B: ≥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, 2015130SDET score | A: ≥3 B: ≥5 C: ≥6 D: ≥8 E: ≥10 | Derivation cohort NRValidation cohort A: 38%B: 24%C: 8.7%D: 4.6%E: 1.2% | Derivation cohort NRValidation cohort A: 70%B: 60%C: 37%D: 25%E: 10% | Derivation cohort NRValidation cohort A: 63%B: 77%C: 92%D: 96%E: 99% | Derivation cohort NRValidation cohort, 0.70 (95% CI, 0.62 to 0.78) | None |
| Jones, 2017135A: ARCH-MSMB: MenzaC: SDET | A: ≥10B: ≥1C: ≥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, 2018134A: ARCH-MSMB: CDC criteriaC: Gilead indications | A: ≥10B: Met criteriaC: One or more criteria | A: 72%B: 49%C: 86% | UnweightedA: 85%B: 52%C: 94%WeightedA: 76%B: 30%C: 93% | UnweightedA: 30%B: 52%C: 15%WeightedA: 36%B: 59%C: 22% | A: 0.57B: 0.51C: 0.54 | None |
| Menza, 2009131 | Ranged from ≥0 to ≥19 A: ≥1B: ≥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, 2012132HIRI-MSM(now ARCH-MSM) | Ranged from ≥1 to ≥48 A: ≥1B: ≥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, 0.738Validation cohort, 0.721 | None |
| Smith, 2015133 ARCH-IDUs | Range from 1 to 100 A: ≥30B: ≥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.