Appendix 4. Tables underlying Figures 2 and 3.

Table 1. The proportion of a young Kenyan HIV-uninfected population who meet criteria for cognitive impairment using various definitions of impairment and various criteria for an abnormal domain (n=84).

Criteria for an abnormal domain:	**Z-scores ≤-1 in ≥2 domains** **% [95%CI]**	**Z-scores ≤-1.5 in ≥2domains** **% [95%CI]**	**Z-scores ≤-2 in ≥2 domains** **% [95%CI]**
One test in domain abnormal	48% [37%, 59%]	20% [11%, 29%]	6% [1%, 11%]
Average score in domain abnormal	20% [11%, 29%]	6% [1%, 11%]	0%
At least two tests in domain abnormal	19% [10%, 28%]	4% [-0.5%, 8%]	0%
All tests in domain abnormal	8% [2%, 14%]	1% [-1%, 4%]	0%

Table 2. The percentage of a simulated normal population who meet criteria for cognitive impairment using various definitions of impairment and various criteria for an abnormal domain.

	Z-scores ≤-1 in ≥2 domains				**Z-scores ≤-1.5 in ≥2 domains**				**Z-scores ≤-2 in ≥2 domains**			
Criteria for an abnormal domain:	**Emp**	**Low**	**Mod**	**High**	**Emp**	**Low**	**Mod**	**High**	**Emp**	**Low**	**Mod**	**High**
One test in domain abnormal	56	74	45	27	24	29	22	13	7	5	8	5
Average score in domain abnormal	30	31	25	20	11	7	11	9	3	1	4	3
At least two tests in domain abnormal	11	4	15	17	2	0	5	7	0	0	1	2
All tests in domain abnormal	8	2	11	15	1	0	3	6	0	0	1	2

Table 3. The percentage of a simulated normal population who meet criteria for cognitive impairment using neuropsychological test batteries of various sizes.

	Empiric Correlation (Within 0.31, Between 0.17)				**Moderate Correlation (Within 0.5, Between 0.5)**			
Number of Domains	**2 tests**	**3 tests**	**4 tests**	**5 tests**	**2 tests**	**3 tests**	**4 tests**	**5 tests**
Z≤-1								
2	4	5	5	5	8	9	10	10
3	10	10	11	11	14	14	14	15
4	15	16	16	16	17	18	18	18
5	21	21	21	21	21	20	20	20
6	26	25	25	25	23	23	22	22
7	30	30	29	29	26	25	24	23
8	34	34	33	32	28	26	25	24
9	38	37	36	36	30	27	26	25
10	41	40	39	38	31	29	27	26
Z≤-1.5								
2	1	1	1	1	3	3	3	4
3	3	3	3	3	5	5	6	6
4	4	5	5	5	7	7	7	7
5	6	7	7	7	9	8	8	8
6	8	9	9	9	10	10	9	9
7	10	11	11	11	11	11	10	10
8	12	13	13	13	12	12	11	11
9	14	14	15	15	13	12	12	12
10	16	16	16	16	14	13	13	12
Z≤-2								
2	0	0	0	0	1	1	1	1
3	0	1	1	1	1	2	2	2
4	1	1	1	1	2	2	2	2
5	1	2	2	2	3	3	3	3
6	2	2	2	2	3	3	3	3
7	2	3	3	3	4	4	3	3
8	3	3	3	3	4	4	4	4
9	3	4	4	4	5	4	4	4
10	4	4	4	5	5	5	4	4