

Table 2: Estimates of agreement, sensitivity, specificity, and predictive values for coronary heart disease algorithms

# Years	Algorithm	<i>k</i>	Sens (%)	Spec (%)	Youden	PPV (%)	NPV (%)
1	1 1+ P	0.44	40.2	97.9	0.38	57.1	95.8
	2 2+ P	0.37	28.6	98.8	0.27	62.4	95.1
	3 1+ H or 1+ P	0.46	42.9	97.7	0.41	57.0	96.0
	4 1+ H or 2+ P	0.40	32.3	98.6	0.31	61.5	95.3
	5 1+ H or 2+ P or (1 P & 2+ Rx)	0.46	41.0	98.1	0.31	60.3	95.9
2	6 1+ P	0.51	52.8	96.9	0.50	55.1	96.7
	7 2+ P	0.47	41.8	98.1	0.40	60.5	95.9
	8 1+ H or 1+ P	0.52	55.5	96.7	0.52	54.8	96.8
	9 1+ H or 2+ P	0.49	45.6	97.8	0.43	59.7	96.2
	10 1+ H or 2+ P or (1 P & 2+ Rx)	0.52	53.1	97.3	0.50	57.9	96.7
3	11 1+ P	0.52	58.5	96.2	0.55	52.4	97.0
	12 2+ P	0.50	48.2	97.7	0.46	59.5	96.4
	13 1+ H or 1+ P	0.53	61.5	96.0	0.57	52.4	97.2
	14 1+ H or 2+ P	0.53	53.4	97.4	0.51	59.1	96.7
	15 1+ H or 2+ P or (1 P & 2+ Rx)	0.55	60.1	96.6	0.57	55.9	97.1
5	16 1+ P	0.52	65.2	95.2	0.60	49.2	97.5
	17 2+ P	0.54	56.6	96.9	0.54	56.8	96.9
	18 1+ H or 1+ P	0.53	67.9	95.0	0.63	49.0	97.6
	19 1+ H or 2+ P	0.55	60.4	96.6	0.57	55.9	97.2
	20 1+ H or 2+ P or (1 P & 2+ Rx)	0.55	66.6	95.7	0.62	52.6	97.6

Notes:

- * # Years = number of years of administrative data to which the case ascertainment algorithm was applied. For example, 1+P in one year identifies individuals as disease cases if they had one or more physician billing claims with the relevant diagnosis code(s) in a one-year period. The algorithm 1+H or 2+P in one year identifies individuals as disease cases if they had one or more hospitalization or two or more physician claims with the relevant diagnosis code(s) in a one-year period.
- * H = Hospital separation; P = Physician billing claim; Rx = Prescription drug record; PPV = Positive Predictive Value; NPV = Negative Predictive Value

Source: Lix L, Yogendran M, Burchill C, Metge C, McKeen N, Moore D, Bond R. *Defining and Validating Chronic Diseases: An Administrative Data Approach*. Winnipeg, MB: Manitoba Centre for Health Policy, 2006.