

**Table 2. Estimates of agreement, sensitivity, specificity, and predictive values for hypertension algorithms**

# Years	Algorithm	$\kappa$	Sens. (%)	Spec. (%)	Youden	PPV (%)	NPV (%)
1	1 1+ P	0.65	68.4	94.7	0.63	74.6	93.0
	2 2+ P	0.54	48.4	97.5	0.46	81.4	89.3
	3 1+ H or 1+ P	0.66	70.1	94.4	0.65	73.9	93.3
	4 1+ H or 2+ P	0.56	51.1	97.1	0.48	79.9	89.7
	5 1+ H or 1+ P or 1+ Rx	0.68	89.9	88.7	0.79	64.4	97.5
	6 1+ H or 1+ P or 2+ Rx	0.70	89.0	89.9	0.79	66.6	97.3
2	7 1+ P	0.67	79.4	91.9	0.71	69.1	95.2
	8 2+ P	0.66	66.3	95.6	0.62	77.5	92.6
	9 1+ H or 1+ P	0.68	81.2	91.6	0.73	68.8	95.6
	10 1+ H or 2+ P	0.67	69.4	95.2	0.65	76.8	93.2
	11 1+ H or 1+ P or 1+ Rx	0.64	91.9	86.0	0.78	59.8	97.9
	12 1+H or 1+ P or 2+ Rx	0.66	91.2	87.3	0.78	62.0	97.8
3	13 1+ P	0.67	83.2	90.3	0.74	66.0	95.9
	14 2+ P	0.68	72.4	94.8	0.68	76.0	93.8
	15 1+ H or 1+ P	0.67	84.9	89.9	0.75	65.7	96.3
	16 1+ H or 2+ P	0.70	75.6	94.4	0.71	75.2	94.5
	17 1+ H or 1+ P or 1+ Rx	0.62	92.8	84.0	0.77	56.8	98.1
	18 1+ H or 1+ P or 2+ Rx	0.64	92.2	85.7	0.78	59.4	98.0

*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.