

Online Appendix:

**Table 1:** agreement in diagnoses between ehr coded (rows) and manual review of provider narrative (columns) in random 25% sample (n=200)

EHR	Schizophrenia		Bipolar disorder		Depression	
	+	—	+	—	+	—
+	42	0	56	0	39	0
—	11	147	16	128	45	116
<b>kappa</b>	.85		.82		.50	

**Table 2:** diagnostic accuracy of 25% random sample (n=200) without additional information provided by manual review

Administrative Data	Schizophrenia		Bipolar disorder		Depression				
	No	Yes	No	Yes	No	Yes			
No	141	11	117	8	123	17			
Yes	17	31	27	48	38	22			
Total Cases	158	42	144	56	161	39			
	estimate	95% CI		estimate	95% CI		estimate	95% CI	
Sensitivity	89%	83%	94%	81%	74%	87%	76%	69%	83%
Specificity	74%	58%	86%	86%	74%	94%	56%	40%	72%
PPV	93%	87%	96%	94%	88%	97%	88%	81%	93%
NPV	65%	50%	78%	64%	52%	75%	37%	25%	50%

**Table 3:** diagnostic accuracy of 25% random sample (n=200) with additional information provided by manual review

Administrative Data	Schizophrenia		Bipolar disorder		Depression				
	No	Yes	No	Yes	No	Yes			
No	138	14	110	15	95	45			
Yes	9	39	15	57	21	39			
Total Cases	147	53	128	72	116	84			
	estimate	95% CI		estimate	95% CI		estimate	95% CI	
Sensitivity	94%	89%	97%	86%	79%	91%	82%	74%	88%
Specificity	74%	60%	85%	79%	68%	88%	46%	36%	58%
PPV	91%	85%	95%	88%	81%	93%	68%	59%	76%
NPV	81%	67%	91%	76%	65%	85%	65%	52%	77%

**Table 4:** concordance of administrative claims for determining absence of long-standing fda indications in those less than 19 years of age (n=244)

Administrative Data	Medical Record								
	Schizophrenia		Bipolar disorder		Schizophrenia or bipolar disorder				
No	No	Yes	No	Yes	No	Yes			
No	234	2	193	3	185	5			
Yes	8	0	28	20	34	20			
Total	242	2	221	23	219	25			
	Estimate	95% CI		Estimate	95% CI		estimate	95% CI	
Prevalence	99%	97%	100%	91%	86%	94%	65%	61%	70%
Sensitivity	97%	94%	99%	87%	82%	91%	85%	79%	89%
Specificity	0%	0%	84%	87%	66%	97%	80%	59%	93%
PPV	99%	97%	100%	99%	96%	100%	97%	94%	99%
NPV	0%	0%	37%	42%	28%	57%	37%	24%	51%

**Table 5: concordance of administrative claims for determining absence of long-standing fda indications in those greater than 18 years of age (n=544)**

	Medical Record								
	Schizophrenia			Bipolar disorder			Schizophrenia or bipolar disorder		
Administrative Data	No	Yes		No	Yes		No	Yes	
<b>No</b>	426	12		370	9		282	16	
<b>Yes</b>	59	47		116	49		150	96	
<b>Total</b>	485	59		486	58		432	112	
	Estimate	95% CI		Estimate	95% CI		estimate	95% CI	
<b>Prevalence</b>	89%	86%	92%	89%	86%	92%	79%	76%	83%
<b>Sensitivity</b>	88%	85%	91%	76%	72%	80%	95%	91%	70%
<b>Specificity</b>	80%	67%	89%	85%	73%	93%	86%	78%	92%
<b>PPV</b>	97%	95%	99%	98%	96%	99%	95%	91%	97%
<b>NPV</b>	44%	35%	54%	30%	23%	37%	39%	33%	45%