

2021 Annual Quality of Care Report for Performance Measures

May 9, 2022



Our Mission

We help people by improving the quality of health care.

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I. Introduction

This Annual Quality of Care Program Report for Performance Measures fulfills the North Carolina Medicaid requirements outlined in *Task 5: Validation of Prepaid Inpatient Health Plan (PIHP) Performance Measures of the External Quality Review (EQR)* of the contract between The Carolinas Center for Medical Excellence (CCME) and North Carolina Medicaid. This report summarizes the validation of *1915 (b) Waiver* and *1915 (c) Waiver Performance Measures* for the six Prepaid Inpatient Health Plans (PIHPs); Alliance Health (Alliance), Eastpointe, Sandhills Center (Sandhills), Trillium Health Resources (Trillium), Partners Health Management (Partners), and Vaya Health (Vaya). Cardinal Innovations Healthcare's (Cardinal) catchment area was dispersed across other North Carolina PIHPs in 2021. This disbursement was completed and Cardinal closed in January of 2022. Therefore, no Cardinal data is presented in this report.

II. Overview

PIHPs provide a wide range of health services to North Carolinians. This report presents PIHP performance results organized to show comparisons between PIHPs for each measure. Measures are organized into general domains to make it easier to focus on results in a related area, and the rates for each measure and the validation scores for each PIHP are outlined. The report concludes with a summary of strengths and opportunities for improvement.

III. 1915 (b) Waiver Performance Measures

A. Validation Process

CCME's statistical, clinical, and behavioral health experts use a 12-step validation checklist that is consistent with the Centers for Medicare & Medicaid Services (CMS) protocol that incorporated regulatory changes contained in the May 2016 Medicaid and CHIP managed care final rule. This 12-step validation checklist, presented in Table 1. CCME 1915 (b) Performance Measure Validation Steps, is used to execute the NC Medicaid-required assessment and evaluation activities in the CMS protocol.

Table 1. CCME 1915 (b) Performance Measure Validation Steps

Step	Description	Important Question
Documentation		
1	Documentation	Are there appropriate and complete measurement plans and specific programming specifications that include data sources, programming logic, and source code?

Step	Description	Important Question
Denominator		
2	Denominator	Are the data sources used to calculate the denominator complete and accurate?
3	Denominator	Does the calculation of the performance measure adhere to the specifications for all components of the denominator of the performance measure?
Numerator		
4	Numerator	Are the data sources used to calculate the numerator complete and accurate?
5	Numerator	Does the calculation of the performance measure adhere to the specifications for all components of the numerator of the performance measure?
6	Numerator	If medical record abstraction was used, are documentation and tools adequate?
7	Numerator	If hybrid method was used, is the integration of administrative and medical record data adequate?
8	Numerator	If hybrid or medical record review was used, do the results of the medical record review validation substantiate the reported numerator?
Sampling		
9	Sampling	Did the sample treat all measures independently?
10	Sampling	Did the sample size and replacement methodologies met specifications?
Reporting		
11	Reporting	Were the State specifications for reporting performance measures followed?
12	Overall Assessment	Comments on the overall rate validation; no validation element included; For comment only

Each PIHP's measures are reviewed and validated. The EQR Team scores each PIHP's measures based on the validation checklist components. Validation worksheets used to document the findings of validation are based on required *CMS EQR Protocol 2: Validation of Performance Measures, October 2019*.

B. List of Validated Measures

For the 2020 review year, CCME validated the following ten *1915 (b) Waiver* measures presented in Table 2.

Table 2. 1915 (b) Waiver Performance Measures

Performance Measure	Population	Data Collection Frequency
Effectiveness of Care Measures		
A.1 Readmission Rates for Mental Health	Mental Health	Annual
A.2 Readmission Rates for Substance Abuse	Substance Abuse	Annual
A.3 Follow-up After Hospitalization for Mental Illness	Mental Health	Annual
A.4 Follow-up After Hospitalization for Substance Abuse	Substance Abuse	Annual
Access/Availability		
B.1 Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	Mental Health / Substance Abuse	Annual
Use of Services		
D.1 Mental Health Utilization-Inpatient Discharges and Average Length of Stay	Mental Health	Annual
D.2 Mental Health Utilization-Percentage of Members Receiving Inpatient, Day/Night Care, Ambulatory and Other Support Services	Mental Health	Annual
D.3 Identification of Alcohol and other Drug Services	Substance Abuse	Annual
D.4 Substance Abuse Penetration Rates	Substance Abuse	Annual
D.5 Mental Health Penetration Rates	Mental Health	Annual

C. Comparative Tables

The tables in this section display the reported annual rates by each PIHP for the ten 1915 (b) performance measures. The latest available rates as of each annual review are reported for PIHPs. Substantial improvement or decline ($\pm 10\%$ from previous year's rate) for each PIHP is notated using \uparrow or \downarrow symbols, wherein \uparrow indicates improvement and \downarrow indicates a rate decline. A designation of "NR" means that performance measure was not reported in the 2021 EQRs of the PIHPs. Performance measures are reported for FY2021 for all PIHPs except Sandhills. Due to the timing of the EQR, Sandhills and Vaya, Eastpointe, and Trillium PIHP FY2020 data are reported as FY2021 were not yet available for submission. Alliance and Partners performance measure rates are based on FY2021.

Table 3. PIHP Reported Rates for 30-day Readmission Rates for Mental Health

30-day Readmission Rates for Mental Health	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya	Statewide Average
Inpatient (Community Hospital Only)	13.3%	13.6%	10.9%	10.8%	16.6%	11.8%	12.8%
Inpatient (State Hospital Only)	2.4%	0.0%	0.0%	12.5% \downarrow	15.4%	12.5%	7.1%
Inpatient (Community and State Hospital Combined)	13.2%	13.7%	11.2%	10.8%	16.6%	12.2%	13.0%
Facility Based Crisis	11.6%	7.7%	6.1%	6.7%	26.8% \downarrow	4.4%	10.6%
Psychiatric Residential Treatment Facility (PRTF)	13.1%	0.0%	9.5%	14.3%	4.3%	6.8% \uparrow	8.0%
Combined (includes cross-overs between services)	13.0%	14.3%	12.0%	11.0%	16.5%	13.4%	13.4%

Table 4. PIHP Reported Rates for 30-day Readmission Rates for Substance Abuse

30-day Readmission Rates for Substance Abuse	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya	Statewide Average
Inpatient (Community Hospital Only)	9.9%	10.6%	13.5%	8.9%	15.1%	10.7%	11.5%
Inpatient (State Hospital Only)	5.0%	0.0%	4.3%	0.0%	0.0%	1.2%	1.8%
Inpatient (Community and State Hospital Combined)	9.1%	10.2%	14.1%	7.0%	15.1%	10.1%	10.9%
Facility Based Crisis	11.6%	9.9%	6.8%	7.9%	16.8%	5.1%	9.7%
Combined (includes cross-overs between services)	10.3%	13.1%	14.0%	7.2%	16.4%	13.1%	12.4%

Table 5. Follow-Up After Hospitalization for Mental Illness

PIHP	Percent Received Outpatient Visit Within 7 Days	Percent Received Outpatient Visit Within 30 Days
	Inpatient (Hospital)	
Alliance	40.6%	58.0%
Eastpointe	38.6%	54.6%
Partners	42.2%	57.8%
Sandhills	40.4%	59.6%
Trillium	38.6%	57.9%
Vaya	46.5%	61.1%
Statewide Average	40.6%	58.0%
	Facility Based Crisis	
Alliance	100%*	100%*
Eastpointe	46.3%↑	69.2%↑
Partners	92.6%	96.3%
Sandhills	83.3%	100.0%↑
Trillium	47.7%↓	63.6%↓
Vaya	75.0%	81.9%
Statewide Average	74.2%	85.2%

	PRTF	
Alliance	17.7%↓	36.3%↓
Eastpointe	22.5%	47.5%
Partners	38.3%	66.0%
Sandhills	30.0%	61.7%↑
Trillium	25.6%	44.9%
Vaya	25.0%	62.5%
Statewide Average	26.5%	53.2%
	Combined (includes cross-overs between services)	
Alliance	39.6%	57.0%
Eastpointe	38.3%	54.5%
Partners	42.8%	58.6%
Sandhills	40.2%	59.8%
Trillium	38.4%	57.7%
Vaya	47.5%	62.3%
Statewide Average	41.1%	58.3%

**Small denominator, rate unreliable*

Table 6. Follow-up After Hospitalization for Substance Abuse

PIHP	Percent Received Outpatient Visit Within 3 Days	Percent Received Outpatient Visit Within 7 Days	Percent Received Outpatient Visit Within 30 Days
	Inpatient (Hospital)		
Alliance	NR	33.0%	45.3%
Eastpointe	NR	11.9%	23.1%
Partners	NR	19.8%	32.2%
Sandhills	NR	17.5%	30.2%
Trillium	NR	14.8%	20.9%
Vaya	NR	30.8%	41.2%
Statewide Average	NA	21.3%	32.2%
Detox and Facility Based Crisis			
Alliance	23.1%*	23.1%*	30.8%
Eastpointe	22.7%	28.4%	38.6%
Partners	66.7%↑	66.7%↑	68.8%
Sandhills	5.6%	11.1%↓	22.2%↓
Trillium	51.1%	54.8%	61.4%
Vaya	60.7%	63.9%	68.9%
Statewide Average	41.4%	45.0%	48.5%

	Combined (includes cross-overs between services)		
Alliance	NR	32.6%	44.7%
Eastpointe	NR	20.5%	31.3%
Partners	NR	28.6%	39.1%
Sandhills	NR	17.1%	29.7%
Trillium	NR	45.4%	51.9%
Vaya	NR	36.1%	45.6%
Statewide Average	NA	30.1%	40.4%

**Small denominator, rate unreliable*

Table 7. Initiation and Engagement of Alcohol & Other Drug Dependence Treatment

PIHP	Percent With 2nd Service Or Visit Within 14 Days (Initiation)	Percent With 2 Or More Services Or Visits Within 30 Days After Initiation (Engagement)
	Ages 13-17	
Alliance	29.8%↓	12.2%
Eastpointe	19.9%↓	29.1%
Partners	41.4%	26.5%
Sandhills	45.3%	30.2%↓
Trillium	44.7%	17.8%
Vaya	35.0%	30.8%
Statewide Average	29.8%	12.2%

	Ages 18-20	
Alliance	31.8%	17.7%
Eastpointe	14.5%↓	37.3%
Partners	38.7%	20.4%↓
Sandhills	43.8%↓	25.4%↓
Trillium	37.8%	24.0%
Vaya	38.9%	33.6%
Statewide Average	33.3%	25.0%
	Ages 21-34	
Alliance	46.0%	33.2%
Eastpointe	18.3%↓	50.8%
Partners	53.2%	39.0%
Sandhills	52.5%	40.9%
Trillium	48.4%	34.8%
Vaya	48.2%	46.2%
Statewide Average	43.7%	39.7%

	Ages 35-64	
Alliance	43.7%	32.2%
Eastpointe	14.8%↓	57.4%
Partners	45.9%	31.6%
Sandhills	50.4%	35.8%
Trillium	48.9%	37.0%
Vaya	46.2%	40.2%↑
Statewide Average	40.7%	38.8%
	Ages 65+	
Alliance	33.9%	19.1%
Eastpointe	7.0%↓	67.4%
Partners	30.9%	13.6%
Sandhills	50.0%↓	44.2%
Trillium	58.7%↑	46.7%
Vaya	26.0%	15.6%
Statewide Average	36.1%	38.2%

	Total (13+)	
Alliance	42.7%	30.2%
Eastpointe	15.6%↓	53.3%
Partners	47.3%	32.7%
Sandhills	50.3%	36.6%
Trillium	48.1%	34.5%
Vaya	45.0%	40.2%
Statewide Average	40.8%	37.5%

Table 8. Mental Health Utilization-Inpatient Discharges

PIHP	Discharges per 1,000 member months							
	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Alliance	.2	1.3	1.3	1.9	2.3	.4	0.0	1.1
Eastpointe	.1	1.3	1.6	2.1	2.2	.3	0.0	1.1
Partners	.2	1.8	1.4	1.9	2.4	.3	0.0	1.2
Sandhills	.2	1.3	1.3	1.9	2.1	.3	0.0	1.0
Trillium	0.1	1.2	2.1	2.5	2.4	0.3	0.0	1.2
Vaya	.4	2.2	2.1	3.5	3.6	0.5	0.0	1.8
Statewide Average	0.2	1.5	1.6	2.3	2.5	0.4	0.0	1.2

Table 9. Mental Health Utilization- Average Length of Stay

PIHP	Average LOS							
	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Alliance	36.3	41.8	12.2	13.4	12.2	16.0	0.0	19.6
Eastpointe	35.0	40.0	12.1	7.4	8.1	14.0	0.0	15.8
Partners	21.2	28.1	6.6	8.3	8.3	17.2	0.0	13.6
Sandhills	32.4	31.4	9.3	7.5	7.7	12.0	0.0	14.9
Trillium	15.4	11.0	7.2	7.6	8.6	21.9	0.0	9.1
Vaya	40.5	29.2	11.0	7.9	8.4	15.0	0.0	15.2
Statewide Average	30.1	30.3	9.7	8.7	8.9	16.0	0.0	14.7

Table 10. Mental Health Utilization by Category

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Alliance	Any Mental Health Service	8.76%	15.27%	10.46%	17.43%	22.50%	5.88%	0.0%	13.41%
	Inpatient Mental Health Service	.02%	.18%	.12%	.11%	.21%	.03%	0.0%	.10%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	.12%	.19%	.07%	.12%	.17%	.01%	0.0%	.13%
	Outpatient/ED Mental Health Service	8.73%	15.22%	10.43%	17.42%	22.47%	5.88%	0.0%	13.38%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Eastpointe	Any Mental Health Service	9.76%	13.29%	9.56%	18.74%	20.84%	5.10%	0.0%	13.09%
	Inpatient Mental Health Service	.02%	.14%	.02%	.03%	.03%	0.0%	0.0%	.04%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	.36%	.34%	0.0%	0.0%	0.0%	0.0%	0.0%	.18%
	Outpatient/ED Mental Health Service	9.67%	13.19%	9.56%	18.74%	20.84%	5.10%	0.0%	13.04%
Partners	Any Mental Health Service	11.13%	18.05%	11.06%	17.74%	22.29%	8.07%	0.0%	15.14%
	Inpatient Mental Health Service	.05%	.32%	.07%	.16%	.18%	0.0%	0.0%	.13%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	.24%	.45%	.04%	.11%	.12%	.01%	0.0%	.20%
	Outpatient/ED Mental Health Service	11.06%	17.96%	11.06%	17.73%	22.29%	8.07%	0.0%	15.10%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Sandhills	Any Mental Health Service	9.33%	14.62%	9.39%	19.16%	22.20%	8.0%	0.0%	13.62%
	Inpatient Mental Health Service	.03%	.21%	.03%	0.0%	.01%	0.0%	0.0%	.05%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	.13%	.23%	.01%	.03%	0.0%	0.0%	0.0%	.09%
	Outpatient/ED Mental Health Service	9.3%	14.53%	9.38%	19.15%	22.20%	4.81%	0.0%	13.33%
Trillium	Any Mental Health Service	11.63%	17.30%	12.47%	19.33%	19.88%	5.89%	0.00%	14.64%
	Inpatient Mental Health Service	0.20%	1.27%	1.65%	2.03%	1.86%	0.28%	0.00%	1.03%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	0.17%	0.27%	0.05%	0.25%	0.24%	0.02%	0.00%	0.19%
	Outpatient/ED Mental Health Service	11.60%	17.19%	12.36%	19.22%	19.76%	5.83%	0.00%	14.57%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Vaya	Any Mental Health Service	14.23%	19.36%	12.63%	24.27%	23.39%	7.63%	0.0%	17.24%
	Inpatient Mental Health Service	.20%	.84%	.16%	.28%	.22%	0.00%	0.00%	.29%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	.46%	.82%	.06%	.10%	.08%	0.0%	0.0%	.32%
	Outpatient/ED Mental Health Service	14.17%	19.22%	12.60%	24.27%	23.38%	7.63%	0.0%	17.20%

Table 11. Identification of Alcohol and Other Drug Services

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Alliance	Any Substance Abuse Service	.01%	.47%	1.17%	4.32%	5.73%	.71%	0.0%	1.86%
	Inpatient Substance Abuse Service	0.0%	0.0%	0.0%	.10%	.24%	.04%	0.0%	.06%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.0%	0.05%	.06%	.49%	.69%	.08%	0.0%	.21%
	Outpatient/ED Substance Abuse Service	.01%	.44%	1.15%	4.21%	5.54%	.66%	0.0%	1.8%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Eastpointe	Any Substance Abuse Service	.02%	.92%	2.93%	8.75%	8.08%	1.43%	0.0%	3.14%
	Inpatient Substance Abuse Service	0.0%	0.0%	.04%	.22%	.26%	.03%	0.0%	1.09%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	.01%	.38%	1.18%	2.17%	3.10%	.83%	0.00%	1.09%
	Outpatient/ED Substance Abuse Service	.01%	.61%	2.06%	8.01%	7.14%	1.09%	0.0%	2.72%
Partners	Any Substance Abuse Service	.03%	.80%	1.78%	6.58%	6.46%	.48%	0.0%	2.54%
	Inpatient Substance Abuse Service	0.0%	.01%	.12%	.48%	6.46%	.48%	0.0%	2.54%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.0%	.07%	.12%	.76%	.48%	.03%	0.0%	.23%
	Outpatient/ED Substance Abuse Service	.03%	.76%	1.76%	6.47%	6.38%	.45%	0.0%	2.50%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Sandhills	Any Substance Abuse Service	.01%	.73%	1.84%	6.99%	7.16%	.74%	0.0%	2.46%
	Inpatient Substance Abuse Service	0.0%	0.0%	.01%	.16%	.10%	.01%	0.0%	.04%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.0%	.13%	.24%	.81%	1.04%	.15%	0.0%	.34%
	Outpatient/ED Substance Abuse Service	.01%	.62%	1.73%	6.77%	6.82%	.68%	0.0%	2.34%
Trillium	Any Substance Abuse Service	0.01%	1.04%	2.86%	8.31%	7.87%	1.10%	0.00%	3.09%
	Inpatient Substance Abuse Service	0.00%	0.16%	0.32%	0.62%	0.67%	0.07%	0.00%	0.27%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.00%	0.05%	0.46%	1.74%	1.81%	0.37%	0.00%	0.66%
	Outpatient/ED Substance Abuse Service	0.01%	0.95%	2.74%	8.04%	7.52%	0.88%	0.00%	2.94%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Vaya	Any Substance Abuse Service	.01%	.82%	1.86%	9.63%	8.04%	.83%	0.0%	3.13%
	Inpatient Substance Abuse Service	0.0%	.03%	.17%	.49%	.33%	.02%	0.0%	.14%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.0%	.04%	.17%	.90%	.49%	.02%	0.00%	.22%
	Outpatient/ED Substance Abuse Service	.01%	.79%	1.83%	9.51%	7.93%	.83%	0.00%	3.09%

Table 12. *Substance Abuse (SA) Penetration Rate

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Alamance+						
Alexander						2.91%
Alleghany						1.93%
Anson				2.42%		
Ashe						2.64%
Avery						1.98%
Beaufort					3.62%	
Bertie					2.15%	
Bladen		2.2%				
Brunswick					2.67%	

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Buncombe						3.80%
Burke			3.04%			
Cabarrus+						
Caldwell						2.36%
Camden					1.83%	
Carteret					3.18%	
Caswell+						
Catawba			2.64%			
Chatham+						
Cherokee						2.97%
Chowan					2.40%	
Clay						2.96%
Cleveland			2.92%			
Columbus					2.21%	
Craven					2.53%	
Cumberland	2.11%					
Currituck					1.84%	
Dare					2.15%	
Davidson+						
Davie+						
Duplin		1.21%				
Durham	2.25%					
Edgecombe		2.79%				
Forsyth+						
Franklin+						
Gaston			2.91%			

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Gates					1.04%	
Graham						2.52%
Granville+						
Greene		1.79%				
Guilford				2.10%		
Halifax+						
Harnett				1.83%		
Haywood						3.80%
Henderson						2.38%
Hertford					1.95%	
Hoke				1.90%		
Hyde					1.63%	
Iredell			2.19%			
Jackson						2.99%
Johnston	1.89%					
Jones					2.10%	
Lee				2.53%		
Lenoir		3.71%				
Lincoln			3.47%			
Macon						3.09%
Madison						3.03%
Martin					3.05%	
McDowell						3.31%
Mecklenburg+						
Mitchell						2.65%
Montgomery				3.26%		

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Moore				3.74%		
Nash					2.03%	
New Hanover					3.65%	
Northampton					1.72%	
Onslow					2.30%	
Orange+						
Pamlico					2.41%	
Pasquotank					1.55%	
Pender					2.52%	
Perquimans					2.25%	
Person+						
Pitt					3.31%	
Polk						1.59%
Randolph				2.00%		
Richmond				4.81%		
Robeson		4.88%				
Rockingham+						
Rowan+						
Rutherford			2.82%			
Sampson		1.12%				
Scotland		2.89%				
Stanly+						
Stokes+						
Surry			2.25%			
Swain						2.44%
Transylvania						2.75%

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Tyrrell					1.03%	
Union+						
Vance+						
Wake	1.49%					
Warren+						
Washington					2.28%	
Watauga						2.31%
Wayne		2.36%				
Wilkes						3.72%
Wilson		3.33%				
Yadkin			2.55%			
Yancey						3.37%

*Percent receiving at least one SA Service;

+Cardinal Innovations Healthcare's catchment area was dispersed across other PIHPs in 2021. This disbursement was completed and Cardinal closed in January of 2022. Therefore, no data was reported for the 20 counties in Cardinal's catchment area.

Table 13. *Mental Health (MH) Penetration Rate

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Alamance+						
Alexander						12.02%
Alleghany						14.26%
Anson				10.17%		%
Ashe						13.53%
Avery						11.62%
Beaufort					15.96%	
Bertie					9.43%	
Bladen		9.62%				
Brunswick					12.96%	
Buncombe						18.37%
Burke			12.56%			
Cabarrus+						
Caldwell						10.69%
Camden					11.29%	
Carteret					19.05%	
Caswell+						
Catawba			13.04%			
Chatham+						
Cherokee						13.19%
Chowan					11.70%	
Clay						13.21%
Cleveland			16.27%			
Columbus					9.10%	
Craven					15.41%	

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Cumberland	13.97%					
Currituck					13.32%	
Dare					10.27%	
Davidson+						
Davie+						
Duplin		11.23%				
Durham	12.26%					
Edgecombe		8.74%				
Forsyth+						
Franklin+						
Gaston			15.25%			
Gates					9.34%	
Graham						13.78%
Granville+						
Greene		9.83%				
Guilford				10.99%		
Halifax+						
Harnett				10.88%		
Haywood						15.88%
Henderson						13.45%
Hertford					9.18%	
Hoke				11.07%		
Hyde					9.18%	
Iredell			13.58%			
Jackson						12.26%
Johnston	11.78%					

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Jones					15.02%	
Lee				9.77%		
Lenoir		13.00%				
Lincoln			15.82%			
Macon						14.21%
Madison						14.71%
Martin					13.20%	
McDowell						14.28%
Mecklenburg+						
Mitchell						11.45%
Montgomery				10.63%		
Moore				12.78%		
Nash					8.78%	
New Hanover					15.87%	
Northampton					10.03%	
Onslow					16.35%	
Orange+						
Pamlico					19.04%	
Pasquotank					12.51%	
Pender					12.34%	
Perquimans					10.70%	
Person+						
Pitt					13.60%	
Polk						13.44%
Randolph				10.03%		
Richmond				14.86%		

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Robeson		11.26%				
Rockingham+						
Rowan+						
Rutherford			16.91%			
Sampson		8.26%				
Scotland		12.25%				
Stanly+						
Stokes+						
Surry			13.59%			
Swain						9.91%
Transylvania						15.63%
Tyrrell					12.85%	
Union+						
Vance+						
Wake	10.98%					
Warren+						
Washington					11.79%	
Watauga						14.51%
Wayne		12.63%				
Wilkes						14.63%
Wilson		13.74%				
Yadkin			12.30%			
Yancey						10.24%

*Percent receiving at least one MH Service;

+Cardinal Innovations Healthcare's catchment area was dispersed across other PIHPs in 2021. This disbursement was completed and Cardinal closed in January of 2022. Therefore, no data was reported for the 20 counties in Cardinal's catchment area.

D. Performance Measure Improvement and Overall Report

While many of the performance measure rates remain similar to 2020 rates, some notable substantial (>10%) changes occurred and are noted as follows:

For Alliance, three measures showed a substantial decline from FY 2020, including Follow Up After Hospitalization for Mental Illness in the PRTF population. Rate declined 20.9% for 7-Day Follow Up and 25.1% for 30-Day Follow Up. The Initiation rate for AODD Treatment reduced 10.7% for 13-17-year-olds. There were no rates with substantial increases from FY 2020.

For Eastpointe, the rate for follow-up after hospitalization for mental illness showed a substantial improvement for Facility Based Crisis (FBC) population for 7 and 30-days follow-up. The rate improved 26.3% for 7-day and 29.2% for 30-day follow-up. Initiation rates showed very steep declines for 2020 when compared to 2018 (2019 was not submitted due to the lag in EQR). All age groups showed substantial (>10%) declines. For Ages 13-17, there was a 34% decline; ages 18-20, a 41.2% decline; ages 21-34, a 43.5% decline; ages 35-64, 49.2% decline; ages 65+, a 62.8% decline. The total for all ages over 13 was a 46.9% decrease in percent with a second service or visit within 14 days.

For Partners, Follow-up after Hospitalization for Substance Abuse showed substantial improvement in the Detox and Facility Based Crisis (FBC) for 3- and 7-day rates with a 17.6% improvement in the 3-day rate and a 12% improvement in the 7-day rate. For Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (AODDT), the engagement rate for 18-20 year olds declined 10.5%.

For Sandhills, there was one measure with substantial improvement, and a few measures with substantial decline. The 30-Day Readmission Rate for Mental Health, Inpatient State Hospital increased from 0% to 12.5%, indicating a substantial decline, since lower is better for readmissions. The 7- and 30-Day Follow Up After Hospitalization for Substance Abuse declined for Detox and FBC, at a rate of 57.9% for 7-Day and 46.8% for 30-Day. The Engagement of AODD Treatment for 13-17-year-olds declined 10.6% and for 18-20-year-olds, there was a 10.0% decline for Initiation and a 13.2% decline for Engagement. The 65+ age group had a decline for Initiation of 10%. The 30-Day Follow Up After Hospitalization for Mental Illness improved substantially for FBC (18.2% improvement) and PRTF (15.5% improvement).

For Trillium, 30-day Readmission rates for FBC increased by 11.6%, which is a substantial decline in the rate, since lower rates are better. The Follow Up After Hospitalization for Mental Illness for The Facility Based Crisis (FBC) Population declined almost 25% for the 7-Day Follow Up and declined 16.4% for the 30-Day Follow Up. Initiation for AODDT improved for 65+ year old members by 10.8% which is substantial improvement.

For Vaya, there were no measures with a substantial decline. Two measures showed substantial improvement. The first measure was the 30-Day Readmission Rate for the Psychiatric Residential Treatment Facilities (PRTF) population. The rate improved from 11.0% to 6.8%. The second measure with substantial improvement was the Initiation and Engagement of AODD Treatment. The Percent With 2 Or More Services or Visits Within 30 Days After Initiation (Engagement) went from 28.9% to 40.2%, an 11.30% improvement for 35- to 64-year-olds.

E. Validation Results

The validation percentage for each performance measure by PIHP is shown in Table 14.

Table 14. Validation Findings Percentage for each 1915 (b) Waiver Performance Measures

Measures	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
A.1. Readmission Rates for Mental Health	100%	100%	100%	100%	100%	100%
A.2. Readmission Rates for Substance Abuse	100%	100%	100%	100%	100%	100%
A.3. Follow-Up After Hospitalization for Mental Illness	100%	100%	100%	100%	100%	100%
A.4. Follow-Up After Hospitalization for Substance Abuse	100%	100%	100%	100%	100%	100%
B.1. Initiation and Engagement of Alcohol & Other Drug Dependence Treatment	100%	100%	100%	100%	100%	100%

Measures	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
D.1. Mental Health Utilization-Inpatient Discharges and Average Length of Stay	100%	100%	100%	100%	100%	100%
D.2. Mental Health Utilization	100%	100%	100%	100%	100%	100%
D.3. Identification of Alcohol and other Drug Services	100%	100%	100%	100%	100%	100%
D.4. Substance Abuse Penetration Rate	100%	100%	100%	100%	100%	100%
D.5. Mental Health Penetration Rate	100%	100%	100%	100%	100%	100%

IV.1915 (c) Waiver Measures

A. Validation Process

CCME's statistical, clinical, and behavioral health experts use an eight-step validation checklist that is consistent with the CMS protocol. This 8-step validation checklist, presented in *Table 15. CCME 1915 (c) Performance Measure Validation Steps*, is used to execute the NC Medicaid-required assessment and evaluation activities in the CMS protocol.

Table 15. CCME 1915 (c) Performance Measure Validation Steps

Step	Description	Important Question
General Measure Elements		
1	Documentation	Are there appropriate and complete measurement plans and specific programming specifications that include data sources, programming logic, and source code?
2	Data Reliability & Validity	Are the data reliability and validity methodology documented?
Denominator		
3	Denominator	Are the data sources used to calculate the denominator complete and accurate?
4	Denominator	Does the calculation of the performance measure adhere to the specifications for all components of the denominator of the performance measure?
Numerator		
5	Numerator	Are the data sources used to calculate the numerator complete and accurate?
6	Numerator	Does the calculation of the performance measure adhere to the specifications for all components of the numerator of the performance measure?
Reporting		
7	Reporting	Was the measure accurately reported?
8	Reporting	Was the measure reported according to state specifications?

B. List of Validated Measures

CCME validated the five 1915 (c) Waiver measures in Table 16.

Table 16. 1915 (c) Waiver Performance Measures

Measure	Population	Data Collection Frequency
Proportion of beneficiaries reporting their Care Coordinator helps them to know what waiver services are available. IW D9 CC	I/DD	Annually
Proportion of beneficiaries reporting they have a choice between providers. IW D10	I/DD	Annually
Percentage of level 2 and 3 incidents reported within required timeframes. IW G2	I/DD	Quarterly
Percentage of beneficiaries who received appropriate medication. IW G5	I/DD	Quarterly
Percentage of incidents referred to the Division of Social Services or the Division of Health Service Regulation, as required. IW G8	I/DD	Quarterly

C. Comparative Table

Table 17 displays the reported annual rate for each PIHP.

Table 17. Rates Reported by Each PIHP for 1915 (c) Waiver Performance Measures

Measure	Reported Rate					
	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Proportion of beneficiaries reporting their Care Coordinator helps them to know what waiver services are available. IW D9 CC	99.6%	99.75%	100%	100%	99.52%	100%
Proportion of beneficiaries reporting they have a choice between providers. IW D10	99.6%	99.75%	100%	100%	99.52%	100%
Percentage of level 2 and 3 incidents reported within required timeframes. IW G2	86.7%	96%	91.4%	96.79%	88.10%	92.86%
Percentage of beneficiaries who received appropriate medication. IW G5	100%	100%	97.9%	99.92%	100%	99.87%
Percentage of incidents referred to the Division of Social Services or the Division of Health Service Regulation, as required. IW G8	100%	100%	100%	100%	100%	100%

All six PIHPs reported a rate above the State benchmark for all 5 Innovations measures. The benchmark was set at 85%.

D. Validation Results

Table 18 displays the 1915 (c) Waiver Performance Measures validation findings for each measure and overall score for each PIHP.

Table 18. Validation Findings Percentage

Measure	Validation Findings Percentage					
	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Proportion of beneficiaries reporting their Care Coordinator helps them to know what waiver services are available. IW D9 CC	100%	100%	100%	100%	100%	100%
Proportion of beneficiaries reporting they have a choice between providers. IW D10	100%	100%	100%	100%	100%	100%
Percentage of level 2 and 3 incidents reported within required timeframes. IW G2	100%	100%	100%	100%	100%	100%
Percentage of beneficiaries who received appropriate medication. IW G5	100%	100%	100%	100%	100%	100%
Percentage of incidents referred to the Division of Social Services or the Division of Health Service Regulation, as required. IW G8	100%	100%	100%	100%	100%	100%
Average Validation Score & Audit Designation	100%	100%	100%	100%	100%	100%

V. Standard Scoring

A. Audit Designation and Scoring Category

Table 19 displays the overall audit designation and the standard scoring category for each PIHP regarding Quality Improvement (QI) for *PIHP Standard for External Quality Review: IV.C.1*. The overall audit designation and standard scoring category are based on both 1915 (b) and 1915 (c) Waiver validation.

Table 19. Overall Validation Score for Each PIHP

PIHP	Overall Audit Designation	Standard Scoring Category
Alliance	100%	Met
Eastpointe	100%	Met
Partners	100%	Met
Sandhills	100%	Met
Vaya	100%	Met
Trillium	100%	Met

For the Overall Audit Designation, the validation scores for all ten measures are averaged and categorized as:

- Fully Compliant - Average Validating Findings Percentage Falls Between 86%-100%
- Substantially Compliant - Average Validation Findings Percentage Falls Between 70%-85%
- Not Valid - Average Validation Findings Percentage Falls Below 70%

For the Standard Scoring Category, the assignments are:

- Met - Fully Compliant Audit Designation
- Partially Met - Substantially Compliant Audit Designation
- Not Met-- Not Valid (Audit Designation Falls below 70%)

VI. PIHP Strengths and Opportunities for Improvement

A. Strengths

Strengths indicate the PIHP demonstrated particular proficiency on a given activity and can be identified regardless of validation status. The lack of an identified strength is not to be interpreted as a shortcoming for the PIHP. The strengths identified across the PIHPs include:

- 1915 (b) and (c) measures are reported clearly
- Information on data sources and data validation methods are provided
- Programming logic, when necessary, is submitted
- Measures are “Fully Compliant” in accordance with *CMS Protocol*
- *Penetration Rates* remained steady for all PIHPs
- Follow-up after mental illness: FBC improved for two PIHPs; PRTF improved for one PIHP
- Follow-up after substance use, Detox and FBC improved for one PIHP
- Initiation and Engagement: Initiation for Ages 65+ improved for one PIHP and Engagement for ages 35-64 improved for one PIHP
- 30-Day Readmission rate improved for one PIHP

B. Opportunities for Improvement

Opportunities for improvement are generated for PIHPs when documentation for an evaluation element does not meet the requirements. More comprehensive documentation is needed to demonstrate a stronger understanding of CMS protocols. Opportunities for improvement identified based on the review are:

- Follow-up after mental illness: PRTF rate declined for one PIHP and FBC declined for one PIHP
- Follow-up after substance use: Detox and FBC rate declined for one PIHP
- Initiation and Engagement of Alcohol & Other Drug Dependence Treatment- Initiation of services declined for four PIHPs; Engagement declined for two PIHPs
- 30-Day Readmission rates declined for two PIHPs

VII. Performance Measures for the Upcoming Year

A. 1915 (b) Waiver Performance Measures

Several performance measure rates are similar to the rates reported in the 2020 review. There were no substantial rate changes for any of the PIHPs for mental health utilization, length of stay, penetration rates for substance use, or penetration rates for mental health services. There were, however, substantial declines for follow-up rates, Initiation and Engagement of AODD, and 30-Day readmissions. As a result of the lack of overall consistent improvement for several of the measures, CCME recommends reviewing the same ten *1915 (b) Waiver* measures for each of the PIHPs in 2022 to continue evaluation of measure gains and declines. Additional performance measures, as determined by the state, will allow a more comprehensive assessment of enrollee care.

B. 1915 (c) Waiver Performance Measures

For reviews of 2021 *(c) Waiver* performance measures, five measures were chosen- two Annual rates and three quarterly rates. The reported rates for the *Innovations Waiver* measures are strong across all seven PIHPs included in this report and met the State benchmarks for all rates. All PIHPs provided data reliability and validity methods. To determine if these strong rates are sustained, CCME recommends that the state retain the same set of *1915 (c) Waiver* performance measures for the upcoming 2022 EQR. If the rates are sustained for the subsequent review year, a new set of *(c) Waiver* measures will be recommended for the 2023 EQR.