The Carolinas Center *for* Medical Excellence

2022 Annual Quality of Care Report for Performance Measures April 21, 2023

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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).

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.

Step	Description	Important Question	
		Documentation	
1	1DocumentationAre there appropriate and complete measurement plans and specific programming specifications that include data sources, programming logic, and source code?		
		Denominator	
2	Denominator	Are the data sources used to calculate the denominator complete and accurate?	

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

Step	Description	Important Question			
	Denominator				
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 2022 review year, CCME validated the following ten 1915 (b) Waiver measures presented in Table 2.

	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					
	Acces	ss/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					

Table 2: 1	1915 (b) Waiver	Performance	Measures
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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 2022 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 FY2021 data are reported as FY2022 were not yet available for submission. Alliance and Partners performance measure rates are based on FY2022.

30-day Readmission Rates for Mental Health	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya	Statewide Average
Inpatient (Community Hospital Only)	14.9%	14.1%	13.4%	9.4%	15.0%	11.9%	13.1%
Inpatient (State Hospital Only)	6.9%	3.7%	0.0%	16.7%	17.6%	33.3%↓	13.0%
Inpatient (Community and State Hospital Combined)	14.8%	14.2%	13.6%	9.4%	15.0%	12.2%	13.2%
Facility Based Crisis	14.5%	2.5%	11.5%	11.1%	13.8%	3.3%	9.5%
Psychiatric Residential Treatment Facility (PRTF)	18.3%	11.3%↓	16.9%	8.2%	3.7%	16.7%	12.5%
Combined (includes cross-overs between services)	15.0%	14.6%	15.0%	9.3%	14.5%	13.1%	13.6%

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

30-day Readmission Rates for Substance Abuse	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya	Statewide Average
Inpatient (Community Hospital Only)	14.3%	10.1%	12.2%	5.6%	16.2%	14.6%	12.17%
Inpatient (State Hospital Only)	2.2%	0.0%	2.6%	2.7%	66.7%	5.7%	13.32%
Inpatient (Community and State Hospital Combined)	12.2%	10.0%	12.7%	5.0%	17.6%	13.3%	11.80%
Facility Based Crisis	15.6%	9.2%	12.3%	6.5%	10.1%	7.0%	10.12%
Combined (includes cross-overs between services)	14.1%	12.6%	16.3%	5.4%	11.3%	14.9%	12.43%

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

РІНР	Percent Received Outpatient Visit Within 7 Days	Percent Received Outpatient Visit Within 30 Days
	Inpatient	(Hospital)
Alliance	37.9%	55.3%
Eastpointe	32.1%	48.2%
Partners	36.5%	52.8%
Sandhills	37.9%	54.3%
Trillium	36.8%	56.2%
Vaya	46.9%	60.7%
Statewide Average	38.02%	54.58%
	Facility Ba	ased Crisis
Alliance	37.5%*	62.5%*
Eastpointe	16.1% <mark>↓</mark>	35.5%↓
Partners	65.8%	71.1%↓
Sandhills	50.0%↓	66.7%↓
Trillium	40.4%	59.6%
Vaya	58.9%↓	78.0%
Statewide Average	46.2%	62.2%

Table 5: Follow-Up After Hospitalization for Mental Illness

	PRTF				
Alliance	21.4%*	35.7%*			
Eastpointe	24.4%	44.4%			
Partners	30.3%	55.3%↓			
Sandhills	26.8%	53.6%			
Trillium	17.5%	41.7%			
Vaya	26.2%	46.2%			
Statewide Average	25.0%	48.2%			
	Combined (includes cross-overs between services)				
Alliance	37.8%	55.2%			
Eastpointe	31.5%	47.8%			
Partners	36.8%	53.3%			
Sandhills	37.6%	54.3%			
Trillium	36.1%	55.7%			
Vaya	47.0%	61.4%			
Statewide Average	37.8%	54.6%			

*Small denominator, rate unreliable

РІНР	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	25.9%	42.9%
Eastpointe	NR	12.3%	19.1%
Partners	NR	24.8%	34.3%
Sandhills	NR	24.1%	33.7%
Trillium	NR	13.7%	25.3%
Vaya	NR	24.2%	37.7%
Statewide Average	NA	20.8%	32.2%
	Detox ar	nd Facility Based Crisis	
Alliance	56.7%	56.7%	56.7% <mark>↓</mark>
Eastpointe	12.7%	21.2%	30.2%
Partners	55.9%↓	58.6%	62.9%
Sandhills	0.0%	20.8%	43.4%↑
Trillium	46.6%	52.2%	59.7%
Vaya	64.7%	69.1%	72.1%
Statewide Average	39.43%	46.43%	54.17%

Table 6: Follow-up After Hospitalization for Substance Abuse

	Combined (includes cross-overs between services)						
Alliance	NR	29.5%	44.5%				
Eastpointe	NR	17.1%	25.1%				
Partners	NR	39.9%↑	47.1%				
Sandhills	NR	23.6%	35.1%				
Trillium	NR	46.1%	54.3%				
Vaya	NR	30.7%	43.0%				
Statewide Average	NA	31.2%	41.5%				

*Small denominator, rate unreliable

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

РІНР	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	33.1%	13.8%
Eastpointe	13.5%	49.6%↑
Partners	43.0%	23.7%
Sandhills	37.9%	20.7%
Trillium	38.5%	10.7%
Vaya	37.7%	13.2%
Statewide Average	33.9%	21.9%

	Ages 18-20	
Alliance	37.0%	13.3%
Eastpointe	13.0%	52.2%↑
Partners	43.9%	22.8%
Sandhills	40.1%	17.4%
Trillium	34.0%	15.8%
Vaya	48.3%	18.5%↓
Statewide Average	36.1%	23.3%
	Ages 21-34	
Alliance	40.0%	25.4%
Eastpointe	18.2%	57.0%
Partners	46.0%	34.2%
Sandhills	44.5%	32.9%
Trillium	47.4%	31.7%
Vaya	50.5%	40.3%
Statewide Average	41.1%	36.9%

	Ages 35-64	
Alliance	41.8%	30.5%
Eastpointe	17.3%	60.6%
Partners	44.5%	30.1%
Sandhills	48.0%	37.5%
Trillium	46.9%	31.5%
Vaya	50.0%	30.6%
Statewide Average	41.4%	36.8%
	Ages 65+	
Alliance	40.8%	26.6%
Eastpointe	3.8%	78.2%↑
Partners	46.8%↑	36.7%↑
Sandhills	55.7%	46.8%
Trillium	44.1%↓	37.8%
Vaya	36.7%↑	14.2%
Statewide Average	38.0%	40.1%

	Total (13+)	
Alliance	40.5%	27.0%
Eastpointe	16.4%	59.4%
Partners	44.9%	31.0%
Sandhills	46.4%	34.7%
Trillium	45.5%	29.4%
Vaya	48.8%	31.7%
Statewide Average	40.4%	35.5%

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	0.2	1.0	1.4	2.4	2.7	0.4	0.0	1.3			
Eastpointe	0.1	1.0	1.3	1.6	1.7	0.3	0.0	0.9			
Partners	1.8	5.7	5.3	4.5	3.0	0.3	0.0	2.7			
Sandhills	0.1	1.1	1.3	1.7	1.7	0.2	0.0	0.9			
Trillium	0.1	1.1	1.3	1.7	1.7	0.2	0.0	0.9			
Vaya	0.4	1.9	1.6	2.5	2.6	0.5	0.0	1.5			
Statewide Average	0.2	1.0	1.4	2.4	2.7	0.4	0.0	1.3			

PIHP	Average LOS											
	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total				
Alliance	36.5	53,3	28.2	12.7	10.7	23.6	0.0	19.5				
Eastpointe	30.6	47.2	9.0	7.4	8.1	16.3	0.0	16.4				
Partners	30.0	36.7	10.5	9.1	9.2	21.1	0.0	15.9				
Sandhills	42.2	41.0	13.0	7.2	8.1	17.5	0.0	17.4				
Trillium	15.4	12.6	7.9	8.8	8.8	14.2	0.0	9.9				
Vaya	39.2	34.6	9.2	8.1	7.8	16.8	0.0	16.2				
Statewide Average	32.3	34.4	13.0	8.9	8.8	18.3	0.0	15.9				

Table 9: Mental Health Utilization- Average Length of Stay

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	5.20%	10.5%	7.67%	14.37%	19.93%	7.22%	0.00%	11.0%
	Inpatient Mental Health Service	0.02%	0.18%	0.12%	0.11%	0.14%	0.01%	0.00%	0.07%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	0.24%	019%	0.07%	0.10%	0.17%	0.00%	0.00%	0.18%
	Outpatient/ED Mental Health Service	5.13%	10.44%	7.65%	14.35%	19.91%	7.22%	0.00%	10.96%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Eastpointe	Any Mental Health Service	7.90%	12.51%	8.30%	15.94%	18.18%	4.28%	6.31%	11.42%
	Inpatient Mental Health Service	0.01%	0.20%	0.02%	0.03%	0.05%	0.01%	0.00%	0.05%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	0.29%	0.26%	0.01%	0.00%	0.00%	0.00%	0.00%	0.14%
	Outpatient/ED Mental Health Service	7.80%	12.41%	8.29%	15.94%	18.18%	4.28%	6.31%	11.36%
	Any Mental Health Service	36.94%	47.73%	27.57%	34.54%	30.09%	8.61%	0.00%	26.99%
	Inpatient Mental Health Service	0.43%	1.81%	0.28%	0.25%	0.15%	0.01%	0.00%	0.30%
Partners	Intensive Outpatient/ Partial Hospitalization Mental Health Service	2.49%	2.43%	0.33%	0.29%	0.52%	0.06%	0.00%	0.72%
	Outpatient/ED Mental Health Service	36.22%	47.15%	27.44%	34.50%	30.02%	8.57%	0.00%	26.82%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Sandhills	Any Mental Health Service	7.62%	13.06%	9.03%	16.08%	19.47%	4.27%	0.0 %	11.71%
	Inpatient Mental Health Service	0.02%	0.16%	0.01%	0.01%	0.01%	0.00%	0.00%	0.04%
	Intensive Outpatient/ Partial Hospitalization Mental Health Service	0.06%	0.14%	0.01%	0.00%	0.00%	0.00%	0.00%	0.04%
	Outpatient/ED Mental Health Service	7.60%	13.01%	9.02%	16.08%	19.47%	4.27%	0.00%	11.70%
	Any Mental Health Service	10.06%	16.30%	11.31%	16.72%	18.20%	5.74%	0.00%	13.32%
	Inpatient Mental Health Service	0.16%	1.13%	1.14%	1.40%	1.49%	0.22%	0.00%	0.83%
Trillium	Intensive Outpatient/ Partial Hospitalization Mental Health Service	0.14%	0.21%	0.10%	0.28%	0.24%	0.01%	0.00%	0.18%
	Outpatient/ED Mental Health Service	10.03%	16.22%	11.21%	16.64%	18.07%	5.68%	0.00%	13.25%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
	Any Mental Health Service	11.20%	17.00%	10.30%	19.60%	20.20%	7.02%	0.00%	14.58%
	Inpatient Mental Health Service	0.13%	0.73%	0.08%	0.14%	0.07%	0.00%	0.00%	0.19%
Vaya	Intensive Outpatient/ Partial Hospitalization Mental Health Service	0.21%	0.47%	0.06%	0.05%	0.04%	0.01%	0.00%	0.16%
	Outpatient/ED Mental Health Service	11.18%	16.92%	10.30%	19.60%	20.20%	7.02%	0.00%	14.56%

Table 11: Identification of Alcohol and Other Drug Services

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
	Any Substance Abuse Service	0.02%	0.52%	1.07%	4.30%	5.74%	0.81%	0.00%	2.14%
Alliance	Inpatient Substance Abuse Service	0.00%	0.01%	0.02%	0.15%	0.34%	0.05%	0.00%	0.10%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.00%	0.08%	0.07%	0.51%	0.86%	0.08%	0.00%	0/29%
	Outpatient/ED Substance Abuse Service	0.02%	0.46%	1.04%	4.14%	5.47%	0.77%	0.00%	2.04%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Eastpointe	Any Substance Abuse Service	0.01%	0.76%	2.00%	7.11%	7.16%	1.20%	2.43%	2.76%
	Inpatient Substance Abuse Service	0.00%	0.01%	0.06%	0.25%	0.14%	0.03%	0.00%	0.07%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.00%	0.24%	0.76%	1.75%	2.49%	0.69%	0.00%	0.89%
	Outpatient/ED Substance Abuse Service	0.01%	0.53%	1.46%	6.42%	6.48%	1.02%	2.43%	2.44%
	Any Substance Abuse Service	0.08%	2.95%	4.62%	14.76%	9.22%	0.59%	0.00%	6.00%
	Inpatient Substance Abuse Service	0.00%	0.06%	0.33%	1.21%	0.61%	0.03%	0.00%	0.42%
Partners	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.00%	0.41%	0.33%	1.64%	0.91%	0.09%	0.00%	0.63%
	Outpatient/ED Substance Abuse Service	0.08%	2.61%	4.47%	14.32%	8.99%	0.52%	0.00%	6.21%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
Sandhills	Any Substance Abuse Service	0.01%	0.53%	1.25%	5.24%	6.29%	1.09%	0.00%	2.15%
	Inpatient Substance Abuse Service	0.00%	0.00%	0.02%	0.19%	0.13%	0.02%	0.00%	0.05%
	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.00%	0.09%	0.08%	0.43%	0.58%	0.13%	0.00%	0.20%
	Outpatient/ED Substance Abuse Service	0.01%	0.47%	1.19%	5.11%	5.94%	0.99%	0.00%	2.05%
	Any Substance Abuse Service	0.01%	.090%	2.60%	7.20%	7.44%	1.03%	0.00%	2.95%
	Inpatient Substance Abuse Service	0.00%	0.14%	0.31%	0.49%	0.58%	0.04%	0.00%	0.23%
Trillium	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.00%	0.06%	0.18%	1.19%	1.16%	0.19%	0.00%	0.44%
	Outpatient/ED Substance Abuse Service	0.01%	0.84%	2.50%	7.04%	7.20%	0.94%	0.00%	2.85%

PIHP	Category	3-12	13-17	18-20	21-34	35-64	65+	Unknown	Total
	Any Substance Abuse Service	0.01%	0.64%	1.54%	7.57%	6.62%	0.73%	0.00%	2.68%
	Inpatient Substance Abuse Service	0.00%	0.04%	0.11%	0.46%	0.20%	0.01%	0.00%	0.12%
Vaya	Intensive Outpatient/ Partial Hospitalization Substance Abuse Service	0.00%	0.03%	0.12%	0.79%	0.43%	0.03%	0.00%	0.21%
	Outpatient/ED Substance Abuse Service	0.01%	0.61%	1.50%	7.49%	6.50%	0.73%	0.00%	2.63%

Table 12: *Substance Abuse (SA) Penetration Rate

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Alamance+						
Alexander						2.63%
Alleghany						1.50%
Anson				2.34%		
Ashe						2.30%
Avery						1.70%
Beaufort					3.31%	
Bertie					2.35%	
Bladen		2.64%				
Brunswick					3.36%	

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Buncombe						3.80%
Burke			6.62%			
Cabarrus			5.03%			
Caldwell						2.33%
Camden					1.84%	
Carteret					3.48%	
Caswell+						
Catawba			5.03%			
Chatham+						
Cherokee						2.17%
Chowan					2.55%	
Clay						2.20%
Cleveland			6.36%			
Columbus					2.77%	
Craven					2.51%	
Cumberland	4.50%					
Currituck					2.24%	
Dare					2.32%	
Davidson+						
Davie			5.28%			
Duplin		1.31%				
Durham	5.44%					
Edgecombe		2.59%				
Forsyth			4.58%			
Franklin+						
Gaston			6.34%			

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Gates					1.00%	
Graham						2.90%
Granville+						
Greene		1.90%				
Guilford				1.82%		
Halifax+						
Harnett				2.03%		
Haywood						3.00%
Henderson						2.24%
Hertford					1.96%	
Hoke				1.93%		
Hyde					1.79%	
Iredell			5.41%			
Jackson						2.03%
Johnston	4.39%					
Jones					2.28%	
Lee				2.83%		
Lenoir		4.13%				
Lincoln			6.93%			
Macon						2.47%
Madison						3.56%
Martin					2.66%	
McDowell						3.41%
Mecklenburg	3.34%					
Mitchell						2.84%
Montgomery				3.46%		

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Moore				3.67%		
Nash					2.15%	
New Hanover					4.12%	
Northampton					2.30%	
Onslow					2.32%	
Orange	6.32%					
Pamlico					3.06%	
Pasquotank					2.04%	
Pender					2.81%	
Perquimans					1.97%	
Person+						
Pitt					2.85%	
Polk						1.52%
Randolph				2.11%		
Richmond				5.27%		
Robeson		4.34%				
Rockingham+						
Rowan+						
Rutherford			5.84%			
Sampson		1.26%				
Scotland		2.55%				
Stanly			4.35%			
Stokes+						
Surry			4.22%			
Swain						1.95%
Transylvania						2.28%

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Tyrrell					1.74%	
Union			3.81%			
Vance+						
Wake	4.16%					
Warren		0.00%				
Washington					1.77%	
Watauga						2.55%
Wayne		2.10%				
Wilkes						3.86%
Wilson		3.63%				
Yadkin			4.70%			
Yancey						3.65%

* Percent receiving at least one SA Service;

+ These counties were part of Cardinal Innovations Healthcare's catchment area in 2021, so data for 2021 was not reported by PIHPs who acquired these counties into their catchment areas.

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Alamance+						
Alexander						11.50%
Alleghany						13.16%
Anson				9.00%		
Ashe						13.57%
Avery						10.44%
Beaufort					16.01%	
Bertie					9.43%	
Bladen		9.98%				
Brunswick					13.77%	
Buncombe						17.42%
Burke			22.98%			
Cabarrus			20.10%			
Caldwell						10.83%
Camden					10.29%	
Carteret					20.10%	
Caswell+						
Catawba			23.70%			
Chatham+						
Cherokee						12.25%
Chowan					10.36%	
Clay						11.38%
Cleveland			25.07%			
Columbus					9.22%	
Craven					15.14%	

Table 13: *Mental Health (MH) Penetration Rate

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Cumberland	23.11%					
Currituck					12.39%	
Dare					9.78%	
Davidson+						
Davie			17.06%			
Duplin		10.89%				
Durham	23.19%					
Edgecombe		7.31%				
Forsyth			20.13%			
Franklin+						
Gaston			25.58%			
Gates					8.16%	
Graham						12.54%
Granville+						
Greene		9.79%				
Guilford				10.29%		
Halifax+						
Harnett				10.37%		
Haywood						13.50%
Henderson						13.36%
Hertford					8.56%	
Hoke				11.00%		
Hyde					11.54%	
Iredell			20.52%			
Jackson						11.46%
Johnston	19.94%					

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Jones					14.90%	
Lee				9.49%		
Lenoir		11.90%				
Lincoln			24.17%			
Macon						13.00%
Madison						14.62%
Martin					13.31%	
McDowell						14.19%
Mecklenburg	16.16%					
Mitchell						11.11%
Montgomery				10.44%		
Moore				13.06%		
Nash					8.80%	
New Hanover					16.16%	
Northampton					9.50%	
Onslow					16.34%	
Orange	25.57%					
Pamlico					17.45%	
Pasquotank					12.37%	
Pender					12.99%	
Perquimans					12.87%	
Person+						
Pitt					13.48%	
Polk						11.29%
Randolph				10.67%		
Richmond				14.57%		

County	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
Robeson		10.51%				
Rockingham+						
Rowan+						
Rutherford			21.94%			
Sampson		8.48%				
Scotland		11.22%				
Stanly			22.63%			
Stokes+						
Surry			18.33%			
Swain						9.39%
Transylvania						14.40%
Tyrrell					10.84%	
Union			17.81%			
Vance+						
Wake	19.87%					
Warren		0.00%				
Washington					12.27%	
Watauga						13.90%
Wayne		12.33%				
Wilkes						14.14%
Wilson		12.98%				
Yadkin			19.53%			
Yancey						11.20%

* Percent receiving at least one MH Service;

+ These counties were part of Cardinal Innovations Healthcare's catchment area in 2021, so data for 2021 was not reported by PIHPs who acquired these counties into their catchment areas.

D. Performance Measure Improvement and Overall Report

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

For Alliance, there were no clinically based rates (e.g., readmission, follow-up) with substantial increases from FY 2021. Mental health penetration rates increased substantially (>10%) for several counties including, Cumberland, Durham, Wake, and Johnston County, for 3-12 year-olds and 13-17 year-olds. 18-20 year-olds had a substantial increase in Cumberland and Durham counties, individuals 65+ had a substantial increase in Durham County.

For Eastpointe, the 30-day Readmission Rates for PRTF increased 11.3%. Follow-up Rates After Hospitalization for Mental Illness in the Facility Based Crisis (FBC) population declined 30.1% for 7- day Follow-up and declined 33.7% for the 30-day Follow-up. Follow up After Hospitalization for Substance Abuse in the Detox and FBC population decline 10% for the 3-day Follow-up rate. The average Length of Stay (LOS) for 13-17 Year Old Males increased by 27.7 days in the Mental Health Utilization Measure. Rates that improved include Engagement of Alcohol and Other Drug Dependence Treatment (AODDT) for 13-17 year olds by 20.5%, Engagement of AODDT for 18-20 year olds by 14.9%, and Engagement of AODDT for 65+ by 10.8%.

For Partners, Follow-Up after Hospitalization for Mental Illness showed a substantial decline of greater than 10% for the FBC population for 7-day follow-up (declined 26.8%) and 30-day follow-up (25.2%). For the PRTF population, the 30-day follow up rate declined 10.7%. For the Follow-Up After Hospitalization for Substance Abuse, the Detox and FBC population 3-day follow up declined 10.8%, whereas the combined population showed a substantial improvement of 11.3% in the 7-day follow-up. Another measure with substantial improvement was Initiation and Engagement of Alcohol & Other Drug Dependence Treatment for 65+ year old with initiation improving 15.9% and engagement improving 23.1%. Additionally, Mental health penetration rates increased substantially (>10%) for several counties across several age groups.

For Sandhills, in comparing FY2020 and FY2021 rates, there was one rate with substantial improvement (>10%). Follow-up After Hospitalization for Substance Abuse for the Detox and FBC 30-Day rate improved from 22.2% to 43.34%, a 21.2% improvement. Follow-up After Hospitalization for mental illness declined for FBC population by 33.3% for the 7- and 30-Day rate, although there were only 6 members included in the denominator.

For Trillium, there was one measure that improved substantially: 30-Day readmissions rates for FBC improved 13% down to 12.8% from 26.8%. One measure had a substantial decline: Initiation and Engagement of Alcohol & Other Drug Dependence Treatment Ages 65+ (Initiation) declined from 58.7% to 44.1%, a -14.60% change. For Vaya, there were substantial declines for the 30-day Readmission Rates for Mental Health with Inpatient (State Hospital) from 12.5% to 33.3%, which is 20.8% increase. Follow Up After Hospitalization For Mental Illness also declined for the Facility Based Crisis (FBC) 7-day Visit by 16.1% and Psychiatric Residential Treatment Facility (PRTF) 30-day visit by 16.3%. Initiation and Engagement of Alcohol and Other Drug Dependent Treatment Engagement rate declined for 13-17-year-olds by 17.6% and 18-20-year-olds for 15.1%. The Initiation rate improved substantially for 65+ individuals by 10.7%.

E. Validation Results

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

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%

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

Measures	Alliance	Eastpointe	Partners	Sandhills	Trillium	Vaya
B.1. Initiation and Engagement of Alcohol & Other Drug Dependence Treatment	100%	100%	100%	100%	100%	100%
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.

Step	Description	Important Question				
	General Measure Elements					
1	Documentation Are there appropriate and complete measurement plans and 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	DenominatorDoes 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?				

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

B. List of Validated Measures

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

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

Table 16: 1915 (c) Waiver Performance Measures

C. Comparative Table

Table 17 displays the reported annual rate for each PIHP.

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	100%	98.66%	100%	100%	Not Reported- Not Validated	100%	
Proportion of beneficiaries reporting they have a choice between providers. IW D10	100%	98.66%	100%	100%	Not Reported- Not Validated	100%	
Percentage of level 2 and 3 incidents reported within required timeframes. IW G2	96.6%	93.02%	96.6%	85.71%	88%	90%	
Percentage of beneficiaries who received appropriate medication. IW G5	100%	99.5%	100%	100%	100%	99.8%	
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 reported 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.

Manager	Validation Findings Percentage					
Measure	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%	Not Reported- Not Validated+	100%
Proportion of beneficiaries reporting they have a choice between providers. IW D10	100%	100%	100%	100%	Not Reported- Not Validated+	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%

Table 18: Validation Findings Percentage

+ For Trillium, two annual (c) Waiver measures had no rate reported due to COVID flexibilities.

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.

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

Table 19:	Overall Validation Score for Each PIHP
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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
- Follow-up After Hospitalization for Substance Abuse 30-rate improved for one PIHP and Crossover 7-day rate improved for one PIHP
- Engagement of Alcohol & Other Drug Dependence Treatment improved for one PIHP for 13-17 year olds and one PIHP in the 18-20 year olds, and two PIHPs for the 65+ age group.
- Initiation of Alcohol & Other Drug Dependence Treatment improved for the 65+ age group 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:

- 30-day Readmission Rates for Mental Health increased over 10% for Inpatient State Hospital population for one PIHP and one PIHP had an increase over 10% for the PRTF population
- Follow-Up After Hospitalization for Mental Illness at 7-days declined for the FBC population for four out of the six PIHPs; the 30-day follow up rate declined > 10% for three of the six PIHPs; and the PRTF population had 30-day rates decline for 2 out of 6 PIHPs.
- Follow-up After Hospitalization for Substance Abuse at 3-days for the Detox and FBC showed a declined for two PIHPs; 30-day rates declined for one PIHP
- Engagement of Alcohol & Other Drug Dependence Treatment for the 13-17 year olds, 18-20 year olds, and 65+ age group declined for one PIHP

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 2022 review. 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 2023 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 offer a directive for a different set of *1915 (c) Waiver* performance measures for the upcoming 2023 EQR.