### Depression Care for Adolescents and Adults 2014 Testing Report

### **Executive Summary**

This report summarizes findings from quantitative testing conducted in 2014 to evaluate the feasibility and variation in performance at the health plan level for three depression care measures. The three measures were adapted for use in HEDIS from existing provider-level measures (see Appendix 1 for details of the existing measures). All three are NQF-endorsed, specified for provider reporting using EHR data and used in the CMS Meaningful Use EHR incentive program as well as other national programs.

Given the diversity in data sources available, we conducted two studies involving data from eight health plans, including plans with integrated delivery systems and non-integrated plans. The testing included data from Medicare, Medicaid and Commercial product lines for health plan members 12 years of age and older.

The results demonstrate that the measures can be calculated using different data sources and reporting approaches. Performance rates were low to moderate across all plans and measures, demonstrating much room for improvement.

### A. FIELD TESTING METHODS

Table A1 contains the description for each of the three measures that were tested. See Appendix 2 for full measure specifications that were tested.

Table AT. Weasures rested			
Measure Title	Description		
Depression Screening and Follow-up for Adolescents and Adults	The percentage of members 12 years and older who were screened for clinical depression using a standardized tool and if screened positive received appropriate follow-up care.		
Utilization of the PHQ-9 to Monitor Depression Symptoms for Adolescents and Adults	The percentage of members 12 years and older with a diagnosis of depression whose symptoms were monitored using a standardized assessment tool during the measurement year.		
Depression Remission, Response or Treatment Adjustment for Adolescents and Adults	The percentage of members 12 years and older with a diagnosis of depression and an initial PHQ-9 score greater than nine who achieved remission (PHQ-9 score <5), showed response (>50% reduction in PHQ-9 score) or had treatment adjustment within five to seven months after the initial elevated PHQ-9.		

#### Table A1. Measures Tested

### **Testing Questions**

The goal of quantitative testing was to evaluate the feasibility of reporting the measures by health plans using data from various sources, including administrative claims, medical records, electronic health records (EHRs), case management records and a quality reporting database. Specifically, our research questions were as follows:

- 1. What is the eligible population for each measure?
- 2. Do the performance rates suggest gaps in care and room for improvement?
- 3. What is the level of effort required to report the measures?
- 4. As specified, can the data elements capture the intended information?
- 5. Are the measures appropriate for assessing quality of care?

This testing report includes answers to the first two questions. The last three questions were addressed through debriefing meetings with testing sites and reviewing the results with several Measurement Advisory Panels (MAPs). Testing sites with electronic data sources for these measures reported that it was relatively easy to calculate the measures and that the data elements capture the intended

information. Participants from the testing sites and MAPs supported the measures and considered they were appropriate and important for assessing quality of care.

### **Data Sources and Testing Population**

Table A2 shows the testing efforts for each measure in the appropriate data sources.

- Study 1 included two health plans with integrated delivery systems that had established clinical workflows for using the PHQ-9 or PHQ-A for depression screening, assessment and management. These plans had searchable coded fields for documenting PHQ results in their EHRs. For this study we received aggregate data reports from EHR data supplemented with other data.
- Study 2 included data from a regional quality reporting database that reports clinic-level depression care quality measures. These measures are in use and reported by nearly all eligible professionals in that state. For this study we received aggregate data from the quality reporting database on depression remission and response for 6 health plans.

			M	Measures Tested				
Data Source	Number of Plans	Product Lines	Screening and Follow- up	Utilization of PHQ-9	Remission/ Response & Treatment Adjustment			
Study 1. Electronic data extract primarily from EHR	Two plans with integrated delivery systems	Medicare (both) Commercial (Both) Medicaid (1)	X	Х	Х			
Study 2. Regional data base for quality	Six plans	Medicare (4) Medicaid (5) Commercial (4)			X (no treatment			

### Table A2: Testing of Measures by Site and Data Source

### B. RESULTS FOR STUDY 1: Electronic data extract primarily from EHRs

### Depression Screening and Follow-up for Adults and Adolescents

### Eligible Population Size

The tables below show the eligible population for the screening and follow-up measure by site and the eligible population after removing exclusions (i.e., denominators).

adjustment)

Key Findings:

reporting

- All product lines for both plans had sufficient eligible populations.
- There were higher rates of exclusions in both plans for the Medicare population under 65 years of age.

### Table B1. Eligible Population: Depression Screening and Follow-up

			Eligible Population					
	Product Line	Age	All Members	Denominator After Exclusions	% with Exclusions			
		18-44	749	407	45.7			
Plan 1	Medicare	45-64	13,010	10,145	22.0			
		65+	55,555	47,590	14.3			

		12-17	15,554	14,586	6.2
	Commercial	18-44	74,266	65,978	11.2
	Commercial	45-64	87,486	77,126	11.8
		65+	577	525	9.0
		18-44	655	455	30.5
	Medicare	45-64	4,445	3,395	23.6
		65+	64,177	60,507	5.7
		12-17	25,338	24,263	4.2
	Commercial	18-44	106,649	101,543	4.8
Plan 2	Commercial	45-64	110,264	105,177	4.6
		65+	1,586	1,520	4.2
	Medicaid	12-17	950	923	2.8
		18-44	1,741	1,600	8.1
		45-64	498	459	7.8
		65+	68	66	2.9

### Performance Rates

Key Finding: Performance rates were low across all product lines in both plans.

Table B2. Performance Rate: Depression Screening and Follow-up

	Product Line	Age	Denominator	Numerator	Performance Rate %
		18-44	407	63	15.5
	Medicare	45-64	10,145	1,036	10.2
		65+	47,590	3,829	8.0
Plan 1		12-17	14,586	1,052	7.2
	Commercial	18-44	65,978	6,126	9.3
	Commercial	45-64	77,126	6,183	8.0
		65+	525	20	3.8
		18-44	455	97	21.3
	Medicare	45-64	3,395	398	11.7
		65+	60,507	3,051	5.0
		12-17	24,263	3,025	12.5
	Commercial	18-44	101,543	8,683	8.6
Plan 2	Commercial	45-64	105,177	3,960	3.8
		65+	1,520	48	3.2
		12-17	923	121	13.1
	Madiaaid	18-44	1,600	166	10.4
	Medicaid	45-64	459	36	7.8
		65+	66	1	1.5

### Numerator Events

Key Findings:

- Across all product lines for both plans there were low rates of screening. The highest rates were for those under 65 years of age in the Medicare product lines. The lowest rates were for those 65 and older in all product lines.
- Of those who screened positive, the majority received some follow-up care within 30 days.
- Most of the follow-up that occurred was dispensing of antidepressants.
- The commercial product line had higher rates of follow-up behavioral health encounters than other product lines.

	Product Line	Age	Denominator	Screened N (%)	Screened Negative N (%)	Screened Positive N (%)	Had Follow- up N
		18-44	407	72 (17.7)	43 (10.6)	29 (7.1)	20
	Medicare	45-64	10,145	1152 (11.4)	809 (8.0)	343 (3.4)	227
		65+	47,590	4206 (8.8)	3,162 (6.6)	1,044 (2.2)	667
Plan 1		12-17	14,586	1182 (8.1)	667 (4.6)	515 (3.5)	385
	Commercial	18-44	65,978	6698 (10.2)	4,165 (6.3)	2,533 (3.8)	1,961
	Commercial	45-64	77,126	6800 (8.8)	4,507 (5.8)	2,293 (3.0)	1,676
		65+	525	28 (5.3)	14 (2.7)	14 (2.7)	6
		18-44	455	110 (24.2)	63 (13.8)	47 (10.3)	34
	Medicare	45-64	3,395	454 (13.4)	239 (7.0)	215 (6.3)	159
		65+	60,507	3340 (5.5)	2,121 (3.5)	1,186 (2.0)	930
		12-17	24,263	3289 (13.6)	2,567 (10.6)	722 (3.0)	458
	Commercial	18-44	101,543	9472 (9.3)	6,540 (6.4)	2,931 (2.9)	2,143
Plan 2	Commercial	45-64	105,177	4473 (4.3)	2,276 (2.2)	2,196 (2.1)	1,684
		65+	1,520	51 (3.4)	28 (1.8)	23 (1.5)	20
		12-17	923	135 (14.6)	113 (12.2)	22 (2.4)	8
	Madiaaid	18-44	1,600	180 (11.3)	105 (6.6)	76 (4.8)	61
	Medicaid	45-64	459	40 (8.7)	21 (4.6)	19 (4.1)	15
		65+	66	2 (3.0)	1 (1.5)	1 (1.5)	0

 Table B3. Numerator Events: Depression Screening and Follow-up

### Table B4. Types of Follow-up: Depression Screening and Follow-up

	Product Line	Age	Positive Screen, Any Follow-up	Anti- depressant N (%)	Behavioral Health Encounter <sup>1</sup> N (%)	Primary Care/Specialty Encounter N (%)	Case Management, Depression Assessment N (%)
		18-44	20	10 (50.0)	12 (60.0)	1 (5.0)	-
	Medicare	45-64	227	165 (72.7)	84 (37.0)	51 (22.5)	-
		65+	667	524 (78.6)	198 (29.7)	182 (27.3)	-
Plan 1		12-17	385	146 (37.9)	316 (82.1)	85 (22.1)	-
	Commercial	18-44	1,961	1,347 (68.7)	1,030 (52.5)	355 (18.1)	-
	Commercial	45-64	1,676	1,270 (75.8)	660 (39.4)	332 (19.8)	-
		65+	6	5 (83.3)	2 (33.3)	3 (50.0)	-
Plan 2	Medicare	18-44	34	23 (67.6)	16 (47.1)	15 (44.1)	1 (2.9)
FIdTI Z	weutale	45-64	159	113 (71.1)	39 (24.5)	61 (38.4)	5 (3.1)

		65+	930	677 (72.8)	252 (27.1)	480 (51.6)	42 (4.5)
		12-17	458	286 (62.4)	293 (64.0)	79 (17.2)	-
	Commoraial	18-44	2,143	1,511 (70.5)	965 (45.0)	728 (34.0)	3 (0.1)
		45-64	1,684	1,255 (74.5)	637 (37.8)	626 (37.2)	9 (0.5)
		65+	20	15 (75.0)	8 (40.0)	8 (40.0)	-
		12-17	8	3 (37.5)	4 (50.0)	3 (37.5)	-
	Medicaid	18-44	61	45 (73.8)	7 (11.5)	34 (55.7)	-
N	Medicald	45-64	15	12 (80.0)	1 (6.7)	9 (60.0)	1 (6.7)
		65+	0	-	-	-	-

<sup>1</sup>The behavioral health benefit was carved out for Medicaid members at site 2 which likely contributed to the smaller number of behavioral health encounters observed.

### Utilization of the PHQ-9 to Monitor Depression Symptoms

### Eligible Population Size

The tables below show the eligible population for the utilization of the PHQ-9 measure by site and the eligible population after removing exclusions.

Key Findings:

- All product lines at all sites had sufficient eligible populations. Two age groups in the Medicaid product line for Plan 2 had a denominator of less than 30.
- There were higher rates of exclusions in both plans for the Medicare population under 65 years of age.

## Table B5. Eligible Population and Denominator: Utilization of the PHQ-9 to Monitor Depression Symptoms

			Eligi	ble Population	(EP)	With	
	Product Line	Age	All Members	After Exclusions	% with Exclusions	Depression Encounter During Year	% of EP
		18-44	911	513	43.7	156	30.4
	Medicare	45-64	14,702	13,115	10.8	2,510	19.1
		65+	57,623	52,527	8.8	7,197	13.7
Plan 1		12-17	17,279	16,623	3.8	998	6.0
	Commercial	18-44	90,070	86,345	4.1	8,805	10.2
	Commercial	45-64	96,324	92,538	3.9	11,142	12.0
		65+	608	554	8.9	42	7.6
		18-44	716	460	35.8	38	8.3
	Medicare	45-64	4,911	3,800	22.6	384	10.1
		65+	72,856	66,476	8.8	3,268	4.9
		12-17	28,180	27,484	2.5	683	2.5
	Commercial	18-44	126,744	123,574	2.5	2,892	2.3
Plan 2	Commercial	45-64	119,613	116,418	2.8	3,653	3.1
		65+	1,900	1,811	4.7	56	3.1
		12-17	2,075	2,018	2.7	10	0.5
	Medicaid	18-44	3,823	3,563	6.8	85	2.4
	weucald	45-64	1,070	978	8.6	40	4.1
		65+	120	116	3.3	2	1.7

### Performance Rate

Key Findings:

- Performance rates for Plan 1 varied from a low of 54.9 for those 65 and older in Medicare to a high of 72.6 for adolescents in the commercial product line.
- Performance rates for Plan 2 were lower and more variable than Plan 1. There were higher rates across all three product lines for the younger age ranges, with the highest rate (60.7), observed again for adolescents in the commercial product line.
- In both plans there was variation in PHQ utilization across the three time periods (January 1 April 30, May 1 August 31, September 1 December 31). Plan 1 had consistently lower rates of PHQ utilization during Time 3.

	Product Line	Age	Denominator	Numerator	Performance Rate %
		18-44	277	165	59.6
	Medicare	45-64	3,922	2,393	61.0
		65+	10,763	5,911	54.9
Plan 1		12-17	1,644	1,193	72.6
	Commorgial	18-44	13,274	9,318	70.2
	Commercial	45-64	16,457	10,581	64.3
		65+	68	42	61.8
	Medicare	18-44	58	23	39.7
		45-64	553	149	26.9
		65+	4,507	694	15.4
		12-17	1,033	627	60.7
	Commercial	18-44	3,890	1,813	46.6
Plan 2	Commercial	45-64	4,917	1,552	31.6
		65+	72	15	20.8
		12-17	11	6	54.5
	Medicaid	18-44	117	22	18.8
	IVIEUICAIU	45-64	53	5	9.4
		65+	5	-	0.0

Table B6. Performance Rates: Utilization of the PHQ-9 to Monitor Depression Symptoms

### Table B7. Performance Rate by Time Period: Utilization of the PHQ-9 to Monitor Depression Symptoms

	Product Line	Age	Time 1 Had PHQ N (%)	Time 2 Had PHQ N (%)	Time 3 Had PHQ N (%)	All Time Periods Had PHQ N (%)
		18-44	67 (61.5)	46 (59.0)	52 (57.8)	165 (59.6)
	Medicare	45-64	927 (63.4)	822 (61.5)	644 (57.2)	2,393 (61.0)
		65+	2,297 (56.5)	2,128 (57.4)	1,486 (49.7)	5,911 (54.9)
Plan 1		12-17	421 (77.2)	399 (72.9)	373 (67.6)	1,193 (72.6)
	Commercial	18-44	3,359 (71.8)	3,135 (70.8)	2,824 (67.7)	9,318 (70.2)
	Commercial	45-64	4,034 (67.4)	4,972 (64.3)	3,012 (60.6)	10,581 (64.3)
		65+	21 (75.0)	15 (62.5)	6 (37.5)	42 (61.8)
Dian 2	Madiaara	18-44	6 (33.3)	10 (47.6)	7 (36.8)	23 (39.7)
Fian 2	Plan 2 Medicare	45-64	55 (27.6)	51 (26.6)	43 (26.5)	149 (26.9)

	65+	194 (11.2)	264 (18.0)	236 (18.1)	694 (15.4)
	12-17	197 (59.7)	208 (61.4)	222 (61.0)	627 (60.7)
Commerci	18-44	575 (42.8)	605 (47.2)	633 (50.1)	1,813 (46.6)
Commerci	45-64	459 (27.3)	555 (33.3)	538 (34.4)	1,552 (31.6)
	65+	4 (14.3)	4 (18.2)	7 (31.8)	15 (20.8)
	12-17	1 (33.3)	2 (66.7)	3 (60.0)	6 (54.5)
Medicaid	18-44	5 (10.4)	11 (28.9)	6 (19.4)	22 (18.8)
wedicald	45-64	0 (0.0)	3 (14.3)	2 (11.1)	5 (9.4)
	65+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

### **Depression Remission, Response and Treatment Adjustment**

### Eligible Population Size

The tables below show the eligible population for the depression remission, response and treatment adjustment measure by site and the eligible population after removing exclusions (i.e., denominators). Key Findings:

- All product lines at both plans had sufficient eligible populations. Some age groups within product lines had denominators of less than 30.
- There were higher rates of exclusions in both plans for the Medicare population under 65 years of age.

			Eligible Population				
	Product Line	Age	Visit with Diagnosis of Depression	PHQ-9 Score >9 within 30 days of visit	After Exclusions	% with Exclusions	
		18-44	224	128	61	52.3	
	Medicare	45-64	3,035	1,295	968	25.3	
		65+	7,134	2,136	1,610	24.6	
Plan 1		12-17	955	570	495	13.2	
	Commonial	18-44	7,308	3,732	3,188	14.6	
	Commercial	45-64	9,561	3,906	3,364	13.9	
		65+	40	14	11	21.4	
		18-44	118	40	27	32.5	
	Medicare	45-64	1,102	248	144	41.9	
		65+	8,143	884	666	24.7	
		12-17	895	472	428	9.3	
	Commercial	18-44	5,744	2,043	1,808	Exclusions           52.3           25.3           24.6           13.2           14.6           13.9           21.4           32.5           41.9           24.7	
Plan 2	Commercial	45-64	8,167	1,732	1,475	14.8	
		65+	172	20	17	15.0	
		12-17	14	3	3	0.0	
	Madiaaid	18-44	224	50	45	10.0	
	Medicaid	45-64	105	11	10	9.1	
		65+	8	1	1	Exclusions 52.3 25.3 24.6 13.2 14.6 13.9 21.4 32.5 41.9 24.7 9.3 11.5 14.8 15.0 0.0 10.0 9.1	

### Table B8. Eligible Population: Depression Remission, Response and Treatment Adjustment

Performance Rates Key Finding: • Across both plans and all product lines there were low performance rates.

	Product Line	Age	Denominator	Numerator	Performance Rate %
		18-44	61	5	8.2
	Medicare	45-64	968	103	10.6
		65+	1,610	186	11.6
Plan 1		12-17	495	69	13.9
	Commercial	18-44	3,188	399	12.5
	Commerciar	45-64	3,364	398	11.8
		65+	11	2	18.2
		18-44	27	1	3.7
	Medicare	45-64	144	14	9.7
		65+	666	43	6.5
		12-17	428	48	11.2
	Commercial	18-44	1,808	131	7.2
Plan 2	Commerciar	45-64	1,475	110	7.5
		65+	17	0	0.0
		12-17	3	0	0.0
	Medicaid <sup>1</sup>	18-44	45	1	2.2
	weatcald	45-64	10	0	0.0
		65+	1	0	0.0

Table B9. Performance Rate: Depression Remission, Response and Treatment Adjustment

<sup>1</sup>The behavioral health benefit was carved out for Medicaid members at site 2 which may have contributed to the lower observed performance rate if the follow-up PHQs were being conducted in behavioral health settings.

### Numerator Events

Key Findings:

- Across both plans and all product lines, the majority of individuals do not get a follow-up PHQ during the 5 to 7 month period after the initial elevated PHQ-9 score.
- Rates of remission and response are very low across both plans and all product lines.
- For those with no demonstrated response or remission, only some received treatment adjustment, the majority of which was medication based.

	Product Line	Age	Denominator	Follow-up PHQ 5-7mo N (%)	Remission 5-7mo N (%)	Response 5-7mo¹ N (%)
Plan 1		18-44	61	17 (27.9)	1 (1.6)	3 (4.9)
	Medicare	45-64	968	263 (27.2)	47 (4.9)	26 (2.7)
		65+	1,610	377 (23.4)	83 (5.2)	48 (3.0)
		12-17	495	149 (30.1)	18 (3.6)	28 (5.7)
	Commercial	18-44	3,188	772 (24.2)	138 (4.3)	119 (3.7)
	Commercial	45-64	3,364	786 (23.4)	149 (4.4)	120 (3.6)
		65+	11	3 (27.3)	0	1 (9.1)
Plan 2		18-44	27	5 (18.5)	1 (3.7)	-
	Medicare	45-64	144	37 (25.7)	4 (2.8)	3 (2.1)
		65+	666	94 (14.1)	25 (3.8)	8 (1.2)

Table B10. Numerator Events: Depression Remission and Response

		12-17	428	95 (22.2)	20 (4.7)	17 (4.0)
	Commercial	18-44	1,808	274 (15.2)	62 (3.4)	46 (2.5)
	Commercial	45-64	1,475	241 (16.3)	51 (3.5)	33 (2.2)
		65+	17	2 (11.8)	-	-
	Medicaid	12-17	3	0	-	-
		18-44	45	1 (2.2)	1 (2.2)	-
		45-64	10	0	-	-
		65+	1	0	-	-

<sup>1</sup>Those who showed response but not remission

	Product Line	Age	No Response	Any Treatment Adjustment N (%)	New Anti- depressant N (%)	New Non- Anti- depressant N (%)	New Therapy N (%)
		18-44	13	1 (7.7)	1 (7.7)	-	-
	Medicare	45-64	181	30 (16.6)	17 (9.4)	12 (6.6)	5 (2.8)
		65+	219	55 (25.1)	37 (16.9)	13 (5.9)	10 (4.6)
Plan 1		12-17	96	23 (24.0)	15 (15.6)	6 (6.3)	7 (7.3)
	Commercial	18-44	466	142 (30.5)	82 (17.6)	49 (10.5)	31 (6.7)
	Commerciar	45-64	472	129 (27.3)	74 (15.7)	40 (8.5)	29 (6.1)
		65+	2	1 (50.0)	1 (50.0)	-	-
		18-44	4	0	-	-	-
	Medicare	45-64	29	7 (24.1)	4 (13.8)	3 (10.3)	2 (6.9)
		65+	57	10 (17.5)	8 (14.0)	3 (5.3)	0
		12-17	51	11 (21.6)	7 (13.7)	3 (5.9)	2 (3.9)
	Commercial	18-44	160	23 (14.4)	14 (8.8)	10 (6.3)	3 (1.9)
Plan 2	Commerciar	45-64	145	26 (17.9)	15 (10.3)	8 (5.5)	4 (2.8)
		65+	1	0	-	-	-
		12-17	0	-	-	-	-
	Medicaid	18-44	0	-	-	-	-
	wealcald	45-64	0	-	-	-	-
		65+	0	-	-	-	-

#### Table B11. Types of Treatment Adjustment

### C. RESULTS FOR STUDY 2: Regional database for quality reporting

### **Depression Remission and Response**

For Site 3 we received results reported out of a regional quality reporting database for six health plans. Three of the plans had Medicare, Medicaid and Commercial product lines, while one plan had Medicare and Medicaid product lines, one plan had only commercial and one plan had only Medicaid.

### Performance Rates

Key Findings:

• On average, less than one third had a follow-up PHQ documented at 5 to 7 months, with higher rates of follow-up among those in Medicare under 65 years of age and those in Medicaid over 65 years of age.

- Rates of remission at 5 to 7 months were low across all plans and product lines, with the lowest rates in Medicaid product lines.
- Rates of response at 5 to 7 months were slightly higher than rates of remission, with the highest rates in commercial plans.

Product Line	Age	Denominator	Numerator	Performance Rate %	Range Across Plans %
Madiaara (4 plana)	18-64	1005	460	45.8	40.2 - 50.2
Medicare (4 plans)	65+	2617	851	32.5	29.3 - 37.2
Commercial (4 plane)	18-64	25823	7876	30.5	25.3 - 33.3
Commercial (4 plans)	65+	243	72	29.6	18.8 – 34.5
Madiaaid (E plana)	18-64	13333	3914	29.7	24.5 – 31.5
Medicaid (5 plans)	65+	159	67	42.1	0.0 - 44.4

Table C1. Performance Rate: Follow-up PHQ-9 at 5-7 Months

Table C2. Performance Rate: Remission at 5-7 Months

Product Line	Age	Denominator	Numerator	Performance Rate %	Range Across Plans %
Madiaara (4 plana)	18-64	1005	71	7.1	3.7 – 9.0
Medicare (4 plans)	65+	2617	288	11.0	7.7 – 13.0
Commercial (4 plane)	18-64	25823	2371	9.2	7.6 – 9.9
Commercial (4 plans)	65+	243	31	12.8	5.0 – 15.5
Madiaaid (E plana)	18-64	13333	617	4.6	3.7 – 5.2
Medicaid (5 plans)	65+	159	16	10.1	0.0 – 11.3

### Table C3. Performance Rate: Response at 5-7 Months<sup>1</sup>

Product Line	Age	Denominator	Numerator	Performance Rate %	Range Across Plans %
Medicare (4 plans)	18-64	1005	126	12.5	7.3 – 17.0
Medicale (4 plans)	65+	2617	432	16.5	13.7 – 18.4
Commercial (4 plans)	18-64	25823	3771	14.6	12.1 – 15.6
Commercial (4 plans)	65+	243	40	16.5	10.0 – 20.5
Madiaaid (E plana)	18-64	13333	1167	8.8	6.7 – 9.5
Medicaid (5 plans)	65+	159	28	17.6	0.0 – 18.1

<sup>1</sup>Also includes those who showed remission.

# Appendix 1: Existing Measures of Depression Care and Potential Adaptions for Health Plan Level Reporting

Reporting			
Continuum of Depression Care	Screen for depression Follow up to confin diagnosis and prov treatment		Remission of depressive symptoms
Measure Name (Steward/NQF) Description	Screening for Clinical Depression and Follow-up Plan (CMS/PQRS #134/NQF #0418) Percentage of patients aged 12 years and older screened for clinical depression using a standardized tool AND follow-up plan documented for those with a positive screen (i.e., additional evaluation, suicide risk assessment, referral to a practitioner who is qualified to diagnose and treat depression, pharmacological interventions, or other interventions or follow-up for the diagnosis or treatment of depression).	Depression Utilization of the PHQ-9 Tool (MN Community Measurement/NQF #0712) Adult patients age 18 and older with a diagnosis of major depression or dysthymia who have a PHQ-9 tool administered at least once during the four month measurement period.	Depression Remission at Six Months (MN Community Measurement/NQF #0711) Adult patients age 18 and older with major depression of dysthymia and an initial PHQ-9 score >9 who demonstrate remission at six months defined as a PHQ-9 score less than 5. This measure applies to patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment.
Data Source for Existing Measure	E-measure, non-reimbursed G- codes	E-measure; regional quality reporting database	E-measure; regional quality reporting database
Level of Accountability	Provider	Provider/Group	Provider/Group
Potential adaptations for use in HEDIS	<ul> <li>Create health plan-level specification for data collection from electronic clinical data sources (e.g., EHRs).</li> <li>Add greater specificity to the allowable follow-up components (i.e. specify what counts as "additional evaluation").</li> <li>Allow health plan interventions (i.e. case management) to serve as follow-up.</li> <li>Specify that follow-up care must occur rather than just be ordered or referred.</li> </ul>	<ul> <li>Create health plan-level specification for data collection from electronic clinical data sources (e.g., EHRs).</li> <li>Expand age range to capture adolescents.</li> <li>Expand measurement period to one year (to match HEDIS data collection).</li> </ul>	<ul> <li>Create health plan-level specification for data collection from electronic clinical data sources (e.g., EHRs).</li> <li>Expand age range to capture adolescents.</li> <li>Expand numerator to capture either remission, response or treatment adjustment (e.g., change in medication, addition of medication, addition of therapy).</li> </ul>

### Appendix 2: Measure Specifications Tested

### Depression Screening and Follow-up (Based on NQF# 0418)

The percentage of members age ≥12 who were screened for clinical depression using a standardized tool and, if screened positive, who received appropriate follow-up care.

Denominator	All individuals age ≥12 with a visit during the measurement year.
Denominator Numerator	<ul> <li>Screened positive for depression using a standardized tool and appropriate follow-up care provided within 30 days OR Screened negative for depression using a standardized tool</li> <li>Adolescent Screening Tools (12-17 years): Patient Health Questionnaire for Adolescents (PHQ-A), Beck Depression Inventory-Fast Screen (BDI-FS), Mood Feeling Questionnaire (MFQ), Center for Epidemiologic Studies Depression Scale (CES-D), and PRIME MD-PHQ2.</li> <li>Adult Screening Tools (18 years and older): Patient Health Questionnaire (PHQ-9), Beck Depression Inventory (BDI-II or BDI-FS), Center for Epidemiologic Studies Depression Scale (CES-D), Depression Scale (DEPS), Duke Anxiety-Depression Scale (DADS), Geriatric Depression Scale (DEPS), Duke Anxiety-Depression Scale (DADS), Geriatric Depression Scale (GDS), Cornell Scale Screening, and PRIME MD-PHQ2, Edinburgh Postnatal Depression Scale (EPDS).</li> <li>Follow-up Care: One or more of the following: <ul> <li>Assessment on the same day as the positive screen, which includes documentation of additional depression assessment indicating no depression,</li> <li>Follow-up encounter in behavioral health (same day as positive screen counts)</li> <li>Follow-up encounter with depression diagnosis (same day as positive screen does not count unless encounter occurred in BH)</li> </ul> </li> </ul>
	<ul> <li>Follow-up with a case manager with documented assessment of depression symptoms</li> </ul>
L <u> </u>	Antidepressant medication dispensed
Exclusions	Major Depression or Dysthymia, Bipolar Disorder

### Utilization of the PHQ-9 (Based on NQF# 0712)

The percentage of members age ≥12 with a diagnosis of major depressive disorder or dysthymia who had a PHQ-9 or PHQ-A tool administered at least once during a four-month period.

Denominator	All individuals age ≥12 who had an encounter during a 4 month period with an active
	diagnosis of MDD or dysthymia.
	The following 4 month periods are used:
	Time period 1: January 1 through April 30 of the measurement year
	Time period 2: May 1 through August 31 of the measurement year
	Time period 3: September 1 through December 31 of the measurement year
Numerator	Documented results of a PHQ-9 or PHQ-A at least once during the 4 month period
	The following 4 month periods are used:
	Time period 1: January 1 through April 30 of the measurement year
	Time period 2: May 1 through August 31 of the measurement year
	Time period 3: September 1 through December 31 of the measurement year
Exclusions	Bipolar Disorder, Personality Disorder, Psychotic Disorder, Autism

### Depression Remission or Response (Based on NQF# 0711 and 1884)

The percentage of members age  $\geq$ 12 with a diagnosis of major depressive disorder or dysthymia and an initial PHQ-9 score >9 who show remission, response within 5–7 months of the elevated PHQ-9 score, or have evidence of treatment adjustment.

Denominator	All individuals age ≥12 with an active diagnosis of MDD or dysthymia and an initial PHQ-9 score >9
Numerator	PHQ-9 score <5 documented at 5-7 months following the initial elevated PHQ-9 OR a 50% reduction in the PHQ-9 score documented at 5-7 months following the initial elevated PHQ-9
	<ul> <li>OR evidence of treatment adjustment in the 30 days following the PHQ-9 score that does not demonstrate response. Any of the following count as treatment adjustment: <ul> <li>Addition of new psychotherapy to existing antidepressant medication,</li> <li>Addition of new antidepressant to existing psychotherapy,</li> <li>Addition of new antidepressant to existing antidepressant,</li> <li>Addition of new non-antidepressant psychotropic to existing antidepressant</li> <li>Switch from one type of psychotherapy to another (e.g., group to individual)</li> </ul> </li> </ul>
Exclusions	Bipolar Disorder, Personality Disorder, Psychotic Disorder, Autism