

Special Report: Results for Measures Leveraging Electronic Clinical Data for HEDIS®

November 2024

This special report describes results for sixteen HEDIS® measures that use the **Electronic Clinical Data Systems reporting standard**.

Key Findings

- There was a large increase in reportable submissions for most measures across all product lines compared to previous years.
- There was an increase in the contributions of non-claims data sources (i.e., EHR, HIE/registry and case management data) for numerator reporting, particularly for the immunization measures.
- Generally, plans that used electronic non-claims data sources had better performance than plans that used claims data alone.

Background

About HEDIS

The Healthcare Effectiveness Data and Information Set® (HEDIS®¹) is a national measurement set that assesses how well Medicare, Medicaid, and commercial health insurance plans manage the quality of care for their enrolled populations. HEDIS assesses performance using a set of metrics that range from preventive services to behavioral health care and chronic disease management.

HEDIS ECDS Reporting Standard

In 2015, the National Committee for Quality Assurance (NCQA) introduced the HEDIS **Electronic Clinical Data Systems** (ECDS) reporting standard, which permits use of structured data for HEDIS reporting from a variety of sources, including but not limited to electronic health records (EHRs), health information exchanges (HIE) and clinical registries, case management systems and administrative files. The use and sharing of electronic clinical data have the potential to enrich the information available to health care providers for clinical care, and to decrease the burden associated with measures that require manual record abstraction.

NCQA first introduced ECDS reporting for three depression measures to assess improvements in patient-reported outcomes using information not found in claims. In the years since, NCQA added thirteen additional measures evaluating immunizations, behavioral health, cancer screening and health equity. This report summarizes reporting results for the sixteen measures specified using the ECDS reporting method.

Traditional HEDIS Reporting Methods

Most measures in HEDIS have been reported using a plan's administrative data, such as claims for health care services and enrollment files (referred to as the Administrative Method). Some measure concepts cannot be evaluated using administrative data alone; in these cases, plans pull a systematic sample of medical records and review information manually to ascertain whether health care services were provided (referred to as the

¹ HEDIS is a registered trademark of the National Committee for Quality Assurance.

Hybrid Method). For both the Administrative and Hybrid methods, results are often enhanced by “supplemental data,” or information coming from a variety of data sources plans collect and, in some cases, specifically created to help improve their quality scores. For MY 2023, ECDS reporting was available for six measures that were originally specified for traditional reporting methods: *Follow-Up Care for Children Prescribed ADHD Medication (ADD-E)*, *Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM-E)*, *Cervical Cancer Screening (CCS-E)*, *Childhood Immunization Status (CIS-E)*, *Colorectal Cancer Screening (COL-E)*, and *Immunizations for Adolescents (IMA-E)*. Allowing optional ECDS reporting for traditional HEDIS measures provides health plans an opportunity to gain experience with the reporting method using measures they are familiar with. NCQA has **announced** a timeline to transition these measures to ECDS-only reporting by MY 2025. This report summarizes and compares results reported using the ECDS and traditional reporting methods for these six measures.

As the quality of clinical data improves and becomes more accessible for quality measurement and care improvement, NCQA seeks to continue expanding the ECDS reporting standard across HEDIS, phasing out the hybrid reporting method to reduce the burden of manual medical record review and facilitate the transition to a fully digital quality measurement system.

Data Source and Methods

This report is based on data submitted to NCQA by health plans for the 16 measures that are reported using the HEDIS ECDS reporting standard (Box 1). Of the 16 measures, 6 of these are “dually reported”, meaning they are also reported using traditional HEDIS reporting methods. Reporting and performance rates are calculated for the 2021, 2022 and 2023 measurement years. Key data elements (e.g., numerator) are reported by the data source category in which they were found. When a data element is found in more than one source, a hierarchy is applied to assign the data source category that should be used for reporting. The hierarchy prioritizes data from EHRs first, followed by HIE/registries, then case management registries and lastly administrative claims.²

We assessed the number of plans with a reportable rate, defined as rates meeting the minimum denominator criterion of 30 members (or deliveries in the case of the perinatal measures). These results were validated by an NCQA-certified auditor. We also completed an analysis of the reporting results by type of data source used.

To understand variation in the use of data sources and its contribution to differences in performance, we assessed the proportion of each data source contributing to the measure numerator over time across reportable submissions, as well as the performance among submissions that used only claims data compared to those that used any non-claims data.

Box 1. HEDIS Measures for ECDS Reporting

- Follow-Up Care for Children Prescribed ADHD Medication (ADD-E)¹
- Adult Immunization Status (AIS-E)
- Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM-E)¹
- Unhealthy Alcohol Use Screening and Follow-Up (ASF-E)
- Breast Cancer Screening (BCS-E)
- Cervical Cancer Screening (CCS-E)¹
- Childhood Immunization Status (CIS-E)¹
- Colorectal Cancer Screening (COL-E)¹
- Utilization of the PHQ-9 to Monitor Depression Symptoms for Adolescents and Adults (DMS-E)
- Depression Remission or Response for Adolescents and Adults (DRR-E)
- Depression Screening and Follow-Up for Adolescents and Adults (DSF-E)
- Immunizations for Adolescents (IMA-E)¹
- Postpartum Depression Screening and Follow-Up (PDS-E)
- Prenatal Depression Screening and Follow-Up (PND-E)
- Prenatal Immunization Status (PRS-E)
- Social Need Screening and Intervention (SNS-E)

¹Reported using both traditional and ECDS methods for MY 2023.

² Refer to the ECDS reporting guidelines in the **HEDIS Volume 2** publication for more information.

Findings

Reporting trends over the last three years across all sixteen measures are shown below, followed by performance and data source use results for immunization, behavioral health and cancer screening measures. The measures highlighted in this report, unless otherwise indicated, illustrate the trends observed across measures. Additional measure-specific reporting results are provided in the Appendix.

Reporting Trends

- There was a significant increase in submissions for ECDS-reported measures for most measures across all product lines compared to previous years (Table 1).
- In MY 2023, 100 percent of commercial, 96.8 percent of Medicaid and 95.1 percent of Medicare plans submitted results based on the ECDS reporting method. This is a significant increase from MY 2021 where 93.6 percent of commercial, 75.2 percent of Medicaid and 50.0 percent of Medicare plans submitted ECDS-based results.
- In MY 2023, 94.0 percent of Commercial and 84.9 percent of Medicaid plans reported *Prenatal Immunization Status (PRS-E)*, which was the first ECDS-reported measure to be publicly reported (MY 2020) and incorporated into NCQA's Health Plan Ratings program (MY 2021). See Table 1 for more detail on submissions for measures originally specified for ECDS by product line and measurement year.
- In MY 2023, 100 percent of Commercial, 89.6 percent of Medicaid, and 78.4 percent of Medicare plans reported *Breast Cancer Screening (BCS-E)*, which was the first traditional measure specified for ECDS to have the traditional specification retired. See Table 2 for measures originally specified for traditional reporting by product line and measurement year.

Table 1. Reportable submissions for measures developed for ECDS Method, MY 2021-2023

Measure	Product Line	Number of Reportable Submissions ¹		
		MY 2021 (% ²)	MY 2022 (% ²)	MY 2023 (% ²)
Utilization of PHQ-9 (DMS-E)	Commercial	219 (52.3)	327 (78.4)	366 (87.1)
	Medicaid	98 (36.4)	133 (48.9)	164 (59.0)
	Medicare	224 (31.4)	367 (48.9)	498 (65.5)
	Total	541	827	1,028
Depression Remission or Response (DRR-E), Remission Indicator	Commercial	31 (7.4)	24 (5.6)	77 (18.3)
	Medicaid	22 (8.1)	27 (9.9)	71 (25.5)
	Medicare	24 (3.4)	32 (4.3)	113 (14.9)
	Total	77	83	261
Depression Screening and Follow-up (DSF-E), Screening Indicator	Commercial	236 (56.3)	338 (81.1)	386 (91.9)
	Medicaid	122 (45.2)	159 (58.5)	200 (71.9)
	Medicare	247 (34.6)	399 (53.2)	718 (94.5)
	Total	605	896	1,304
Alcohol Screening and Follow-up (ASF-E), Unhealthy Alcohol Use Screening Indicator	Commercial	213 (50.8)	319 (76.5)	364 (86.7)
	Medicaid	99 (36.7)	131 (48.2)	162 (58.3)
	Medicare	238 (33.3)	381 (50.8)	522 (68.7)
	Total	550	831	1,048
Adult Immunization Status (AIS-E), Td/Tdap, Age 19-65 Indicator	Commercial	312 (74.5)	388 (93.0)	414 (98.6)
	Medicaid	122 (45.2)	162 (59.6)	238 (85.6)
	Medicare	317 (44.4)	477 (63.6)	691 (90.9)
	Total	751	1,027	1,343
Prenatal Immunization Status (PRS-E), Tdap Indicator	Commercial	369 (88.0)	379 (90.1)	395 (94.0)
	Medicaid	188 (69.6)	222 (81.6)	236 (84.9)
	Total	557	601	631
Prenatal Depression Screening and Follow-Up (PND-E), Depression Screening Indicator	Commercial	212 (50.6)	341 (81.8)	358 (85.2)
	Medicaid	99 (36.7)	153 (56.3)	172 (61.9)
	Total	311	494	530
Postpartum Depression Screening and Follow-Up (PDS-E), Depression Screening Indicator	Commercial	225 (53.7)	343 (82.3)	360 (85.7)
	Medicaid	107 (39.6)	152 (55.9)	171 (61.5)
	Total	332	495	531
Social Needs Screening and Intervention (SNS-E), Food Screening Indicator	Commercial	N/A	N/A	317 (75.5)
	Medicaid	N/A	N/A	184 (66.2)
	Medicare	N/A	N/A	712 (93.7)
	Total	N/A	N/A	1,213

¹ Submissions that had a denominator ≥ 30 and were validated by an NCQA-certified auditor.

² Percentage calculated out of the total number of plans that submitted HEDIS (MY 2021: Com. = 419, Medicaid = 270, Medicare = 714; MY 2022: Com. = 417, Medicaid = 272, Medicare = 750; MY 2023: Com. = 420, Medicaid = 278, Medicare = 760).

*Prenatal Immunization Status (PRS-E), Prenatal Depression Screening (PND-E), and Postpartum Depression Screening (PDS-E) are reported by Commercial and Medicaid plans only.

Table 2. Reportable submissions for traditional measures specified for ECDS, MY 2021-2023

Measure	Product Line	Number of Reportable ECDS Submissions ¹		
		MY 2021 (% ²)	MY 2022 (% ²)	MY 2023 (% ²)
Follow-Up Care for Children Prescribed ADHD Medication (ADD-E), Initiation Phase Indicator	Commercial	228 (54.4)	278 (66.7)	289 (68.8)
	Medicaid	102 (37.8)	143 (52.6)	161 (57.9)
	Total	330	421	450
Breast Cancer Screening (BCS-E) ³	Commercial	328 (78.3)	375 (90.9)	420 (100)
	Medicaid	117 (43.3)	152 (55.9)	249 (89.6)
	Medicare	292 (40.9)	420 (56.0)	596 (78.4)
	Total	737	947	1,265
Colorectal Cancer Screening (COL-E), 51-75 Indicator	Commercial	329 (78.5)	371 (89.0)	404 (96.2)
	Medicaid	N/A	145 (53.3)	185 (66.5)
	Medicare	314 (44.0)	449 (59.9)	526 (69.2)
	Total	643	965	1,115
Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM-E), Blood Glucose and Cholesterol Testing Indicator	Commercial	N/A	230 (55.2)	243 (57.9)
	Medicaid	N/A	117 (43.0)	149 (53.6)
	Total	N/A	347	392
Childhood Immunization Status (CIS-E), Influenza Indicator	Commercial	N/A	343 (82.3)	362 (86.2)
	Medicaid	N/A	145 (53.3)	176 (63.3)
	Total	N/A	488	538
Immunizations for Adolescents (IMA-E), Tdap Indicator	Commercial	N/A	347 (83.2)	372 (88.6)
	Medicaid	N/A	147 (54.0)	177 (63.7)
	Total	N/A	494	549
Cervical Cancer Screening (CCS-E)	Commercial	N/A	N/A	388 (92.4)
	Medicaid	N/A	N/A	177 (63.7)
	Total	N/A	N/A	565

¹ Submissions that had a denominator ≥ 30 and were validated by an NCQA-certified auditor.

² Percentage calculated out of the total number of plans that submitted HEDIS (MY 2021: Com. = 419, Medicaid = 270, Medicare = 714; MY 2022: Com. = 417, Medicaid = 272, Medicare = 750; MY 2023: Com. = 420, Medicaid = 278, Medicare = 760).

³ Breast Cancer Screening (BCS-E) had optional ECDS reporting from MY 2020-MY 2022 and became ECDS-only in MY 2023.

*Follow-Up Care for Children Prescribed ADHD Medication (ADD-E), Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM-E), Childhood Immunization Status (CIS-E), Immunization for Adults (IMA-E), and Cervical Cancer Screening (CCS-E) are reported by Commercial and Medicaid plans only.

Immunization Measures

The *Adult Immunization Status (AIS-E)*, *Childhood Immunization Status (CIS-E)*, *Immunization for Adolescents (IMA-E)*, and *Prenatal Immunization Status (PRS-E)* measures assess whether adults, children, adolescents, and pregnant people, respectively, receive recommended vaccines (based on the Advisory Committee on Immunization Practices).

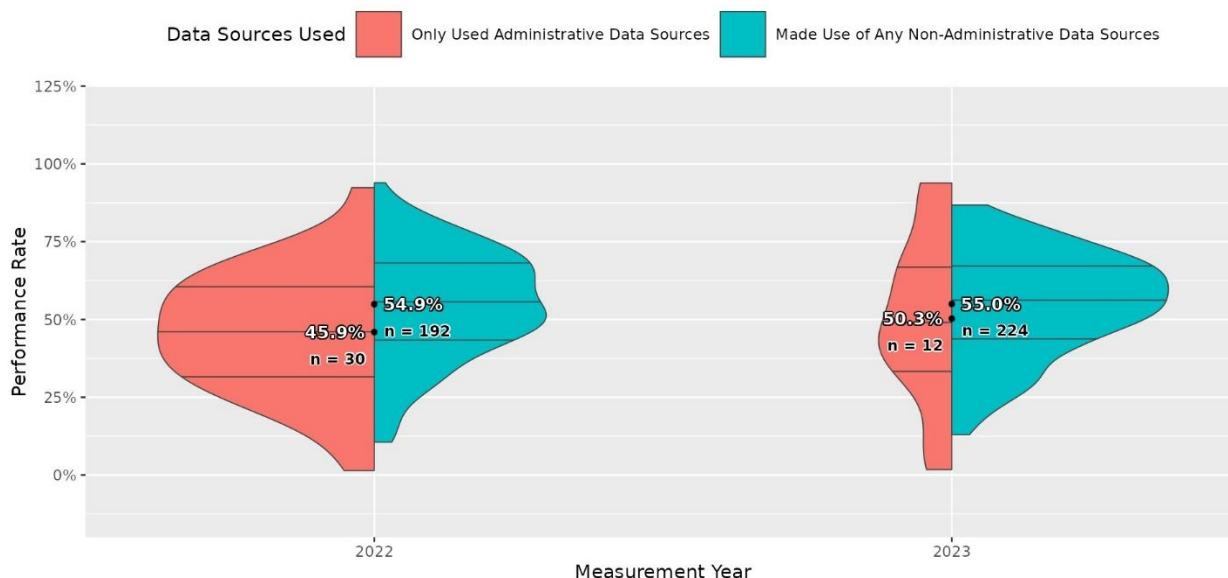
Overall Performance

- *PRS-E* performance decreased slightly across all indicators and product lines from MY 2022 to MY 2023, except for the Tdap indicator in the Medicaid product line. These performance rates are lower than national prenatal vaccination rates reported using other data sources.³
- *AIS-E* performance rates increased for all indicators and product lines in MY 2023.
- *CIS-E* and *IMA-E* had optional ECDS reporting for MY 2023. NCQA required that if health plans chose to use the ECDS method, they also had to report using the traditional methods (administrative or hybrid). Performance rates were similar or slightly lower for ECDS reporting compared to traditional reporting.

Performance Rates by Data Sources Used

- Performance rates for the immunization measures varied by the data sources used for reporting.
- Average performance rates across indicators and product lines were higher among plans that used any non-claims data for numerator calculations when compared with the average performance among plans that used only claims data (Table A1 in Appendix). For example, the average performance among Medicaid plans that used only claims data for the *PRS-E*, Tdap indicator, was 50.3 percent, compared to 55.0 percent among plans that used any non-claims data (**Figure 1**).

Figure 1. Average Tdap performance rates for PRS-E by data source used, Medicaid, MY 2022-2023



Contribution to the Numerator by Data Source

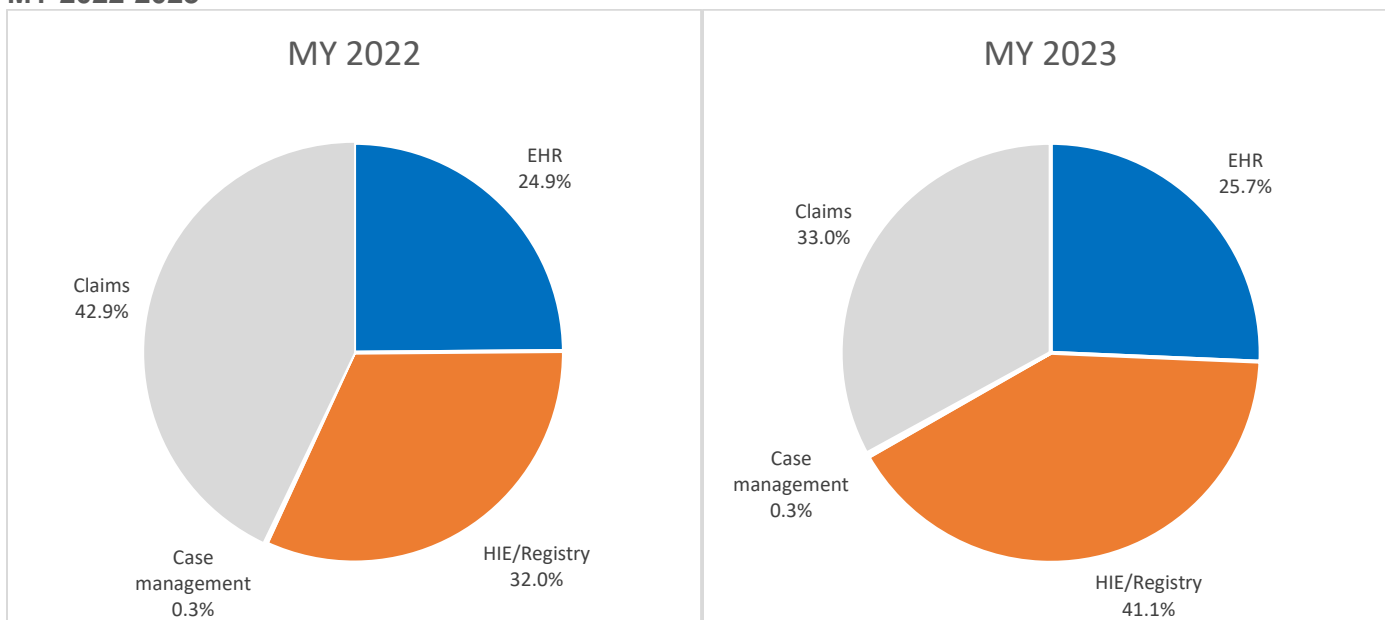
- Health plans' use of non-administrative data sources to report immunizations has generally increased over time across indicators and product lines for all four immunization measures. This trend is

³ <https://www.cdc.gov/mmwr/volumes/72/wr/mm7239a4.htm>.

particularly pronounced for the PRS-E measure where over 90% of Medicaid and Commercial plans made use of any non-administrative data sources for reporting in MY 2023.

- **Figure 2** shows the average data source contribution to the numerator of the Combination indicator for the PRS-E measure across Medicaid health plans in measurement years 2022 and 2023. An increase in EHR and HIE/Registry use can be observed between the two years, as well as a reduced dependence on claims data.

Figure 2. Average data source contribution to the PRS-E numerator, Combination Indicator, Medicaid, MY 2022-2023



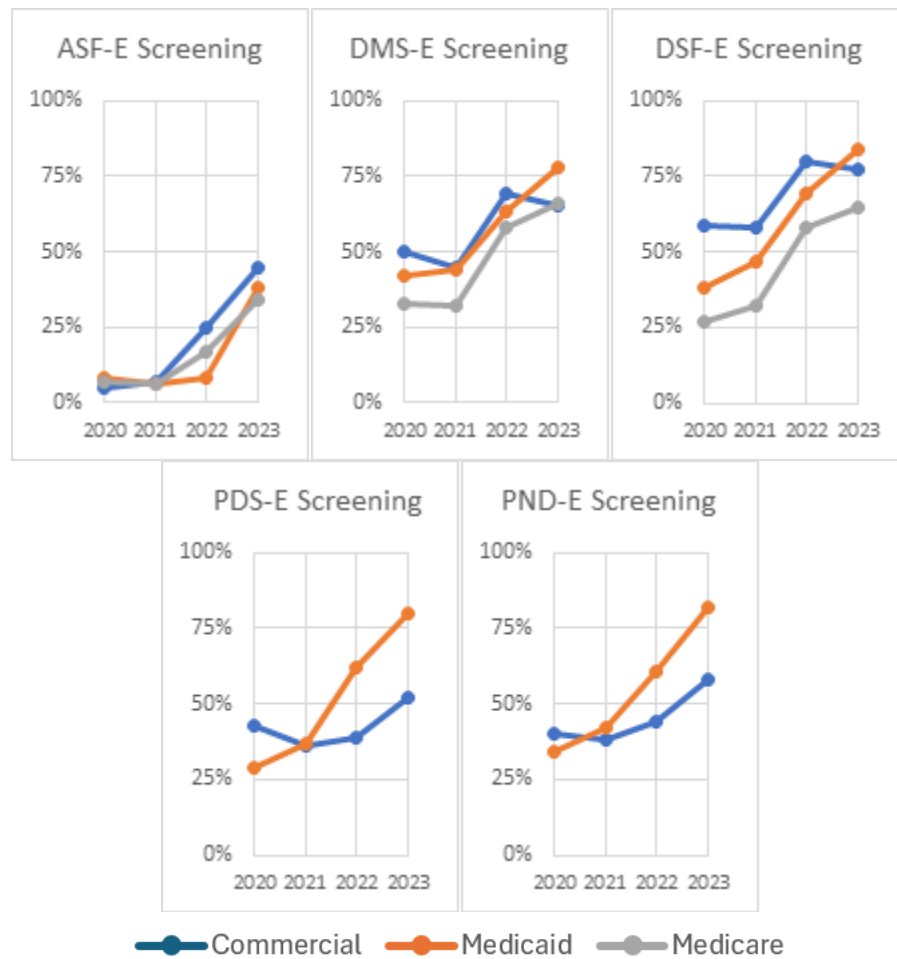
Behavioral Health Measures

There are eight behavioral health measures specified for ECDS reporting. Two of these (*ADHD Medication [ADD-E]* and *Metabolic Monitoring [APM-E]*) are available for optional ECDS reporting alongside administrative reporting. For *ADD-E* and *APM-E*, plans use primarily claims data so there is little difference in average performance when comparing ECDS performance to administrative performance. The other six behavioral health measures use patient-reported outcomes to link to clinical actions for follow-up care. These measures require clinical data that are not found in claims (e.g., results of a standardized tool to assess and monitor depression).

Overall Performance

- The number of plans who reported performance rates for the behavioral health measures that assess screening, follow-up, and routine symptom monitoring that were greater than zero percent has increased between MY 2021 and MY 2023 (**Figure 3**).
- In MY 2023, there was a slight drop in the proportion of non-zero rates among commercial plans on the *DMS-E* and *DSF-E* measures, which may be attributable to some plans being new reporters of the measures in MY 2023 (**Figure 3**).

Figure 3. Percentage of submissions with rates greater than zero, MY 2020-2023



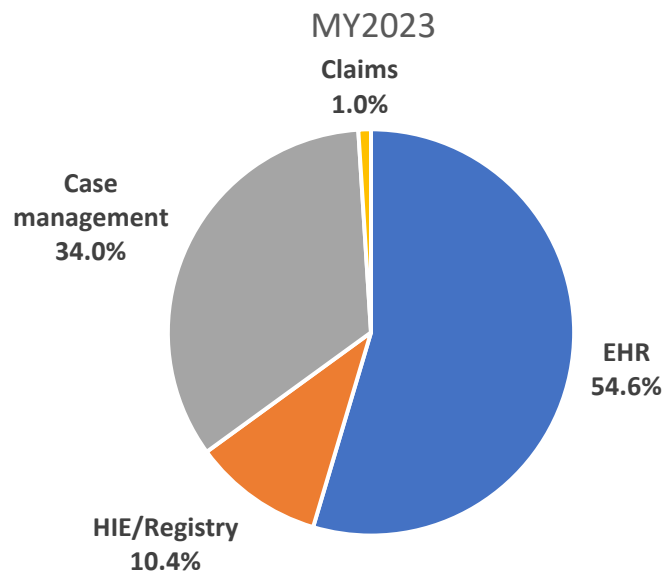
Performance Rates by Data Sources Used

- The average performance rate for the screening indicator for the *Prenatal Depression Screening and Follow-Up* measure was 0.7 and 5.2 percent, respectively, among Commercial and Medicaid plans that used any non-claims data source (Table A2 in Appendix). This difference in performance was consistent across the other behavioral health measures that rely on screening assessments which often are not documented in claims.

Contribution to the Numerator by Data Source

- Among plans with rates greater than zero, most screening information was reported using EHR or case management data (**Figure 4**). This was consistent with results from previous years.
- Across the behavioral health screening and follow-up measures, follow-up information was mostly reported using non-claims data.

Figure 4. Average data source contribution to the DSF-E numerator, Screening Indicator, Commercial, MY 2023



Cancer Screening Measures

There are three cancer screening measures available for ECDS reporting: *Breast Cancer Screening (BCS-E)*, *Colorectal Cancer Screening (COL-E)*, and *Cervical Cancer Screening (CCS-E)*. Prior to MY 2023, reporting using the ECDS method was optional for these three measures. To evaluate the impact of the reporting method on performance, NCQA required that health plans that chose to use the ECDS method also report using the traditional method. As of MY 2023, the *Breast Cancer Screening* specification required only the ECDS reporting method; *Colorectal Cancer Screening* and *Cervical Cancer Screening* still require Administrative or Hybrid reporting alongside ECDS reporting.

Overall Performance (ECDS vs. traditional reporting methods)

- For *Colorectal Cancer Screening*, performance rates are similar when comparing the ECDS method to the traditional method. In fact, the average performance rate was the same between ECDS and Traditional Reporting in the Medicaid product line. Examining the traditional reporting, the Administrative method had identical or nearly identical performance rates to the ECDS method across product lines. In contrast, a statistically significant difference was observed between the average performance rates of ECDS Reporting and the Hybrid method. Hybrid rates were higher than ECDS rates by an average of 5.2 percentage points for commercial plans and 6.3 percentage points for Medicare plans in MY 2023. A similar pattern can be observed in the *Cervical Cancer Screening* measure.

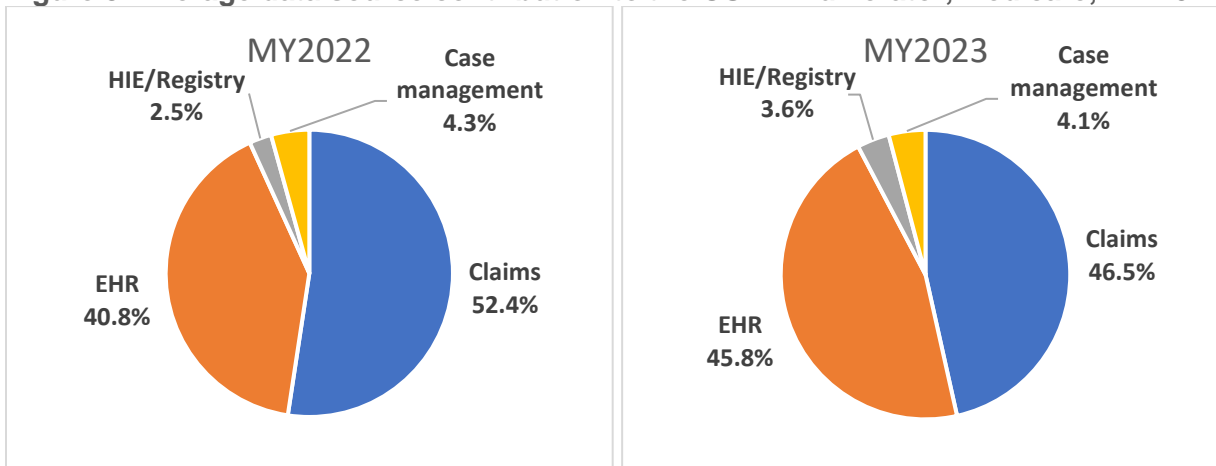
Performance Rates by Data Sources Used (ECDS reporting)

- For *BCS-E*, *COL-E*, and *CCS-E* average performance among all plans that used only claims data was comparable to the average performance among Medicare plans that used any non-claims data, if not slightly lower (Table A3 in Appendix).

Contribution to the Numerator by Data Source (ECDS reporting)

- In MY 2023, a majority of numerator contributions for *BCS-E* came from claims data (63 percent on average among Medicare plans). However, the percent of numerator contributions from EHR data has steadily increased in the past 4 years, suggesting that plans are investing resources into collecting electronic clinical data for reporting.
- In MY 2023, over one-half of numerator contributions for *COL-E*, on average, came from structured clinical data sources (**Figure 5**).

Figure 5. Average data source contribution to the COL-E numerator, Medicare, MY 2022-2023



Assessing the Impact of Transitioning from Hybrid to ECDS for HEDIS Reporting

In the interest of supporting fully digital quality measurement and reducing reliance on manual medical record reviews, NCQA is continuing to expand the ECDS reporting method across HEDIS measures. In MY 2025, 8 HEDIS measures (**Box 2**) will still allow the hybrid method. NCQA has proposed a multi-year timeline to remove the hybrid reporting option from these measures by MY 2029. Please see the [Digital Quality Hub](#) for more details about the hybrid transition.

ECDS reporting is not yet available for these 8 measures; however, analyses to date provide insight into the potential impact of transitioning from hybrid to ECDS reporting. Each measure poses distinct transition challenges depending on the availability and accuracy of electronic clinical data needed to calculate the measure. We analyzed the hybrid “lift” which is the influence of manual medical review on the performance rates of submissions using the hybrid reporting method. The hybrid method calculates the performance on a sample of 411 records. The “lift”, displayed as the “gap” in the figures below, expresses the

Box 2. Hybrid Measures as of HEDIS MY 2025

- Lead Screening in Children (LSC)
- Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents (WCC)
- Prenatal and Postpartum Care (PPC)
- Blood Pressure Control for Patients with Diabetes (BPD)
- Controlling High Blood Pressure (CBP)
- Glycemic Status Assessment for Patients With Diabetes (GSD)
- Transitions of Care (TRC)
- Care for Older Adults (COA)

difference in average performance rates with and without the inclusion of manual medical review (full hybrid rate versus rate without including the manual medical review). Below, we highlight results from two hybrid measures: *Lead Screening in Children* (**Figure 6**) and *Controlling High Blood Pressure* (**Figure 7**). *Lead Screening* has had a small “lift” throughout the years (averaging 3 percentage points) as plans are primarily using claims data to identify screenings. For *Controlling High Blood Pressure*, the “lift” is larger because plans rely more on clinical information found in medical charts to identify blood pressure readings. However, the “lift” has been decreasing over time. For example, between 2021 and 2023 in the Medicaid line, the “lift” decreased by 6.9 percentage points. Thus, the calculated hybrid reporting performance rate without the inclusion of manual medical review is gradually closing the gap to the performance rate with the inclusion of manual medical review. The size of the hybrid lift varies across measures, but the overall trend of decreasing “lift” and less reliance on medical record review data was observed across most hybrid measures.

Figure 6. Comparing Performance Rates When Including vs. Excluding Manual Medical Record Review – Lead Screening in Children, Medicaid, MY 2021-2023

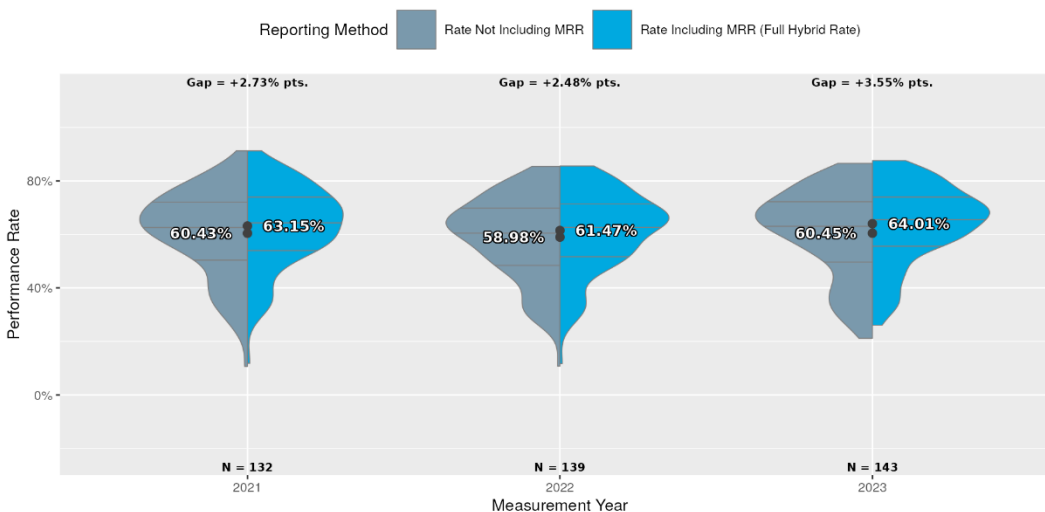
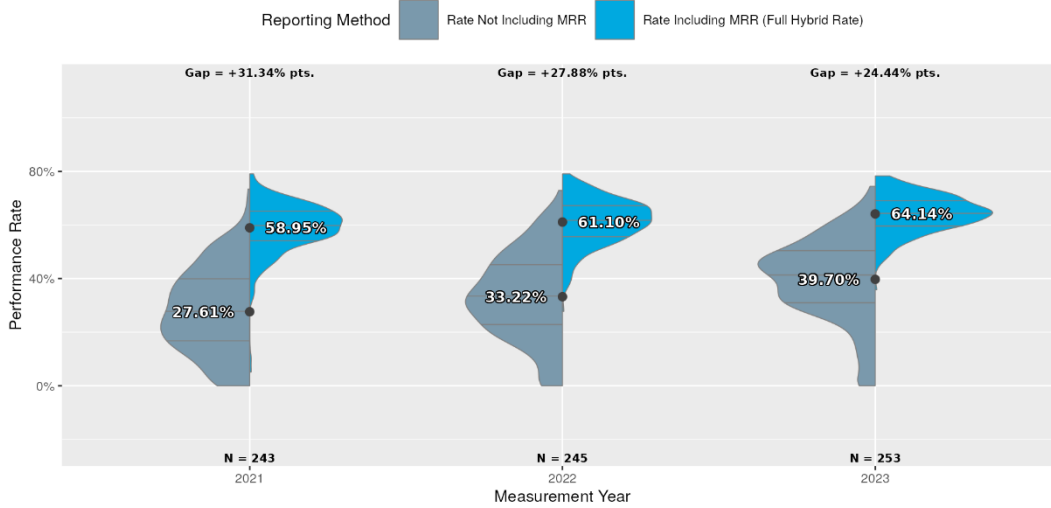


Figure 7. Comparing Performance Rates When Including vs. Excluding Manual Medical Record Review – Controlling High Blood Pressure, Medicaid, MY 2021-2023



ECDS Data Collection Considerations and Reporting Barriers

Performance on measures that use the ECDS reporting method is highest among measures that already rely primarily on administrative claims data. For those measures, there is little observed difference in performance between the administrative and ECDS reporting methods. The main source of variability between measures using ECDS reporting method and those using the hybrid method arises where health plans have difficulty accessing reliable and interoperable clinical health data. Lack of access to clinical data remains an obstacle for many health plans. Stakeholders have highlighted that regulatory requirements for data interoperability and data exchange between health plans and delivery organizations could enhance access to the clinical data needed for ECDS reporting. Health plans operating in regions with more robust health information exchange infrastructure tend to have improved access to the data required for effective measure reporting.

Once health plans secure access to the data that support the ECDS reporting method, there will be other barriers to address including varying capabilities of delivery organizations to record data in the structured, standardized digital format essential for ECDS reporting. If data are not in structured fields or linked to standardized coding terminology, they are difficult to use for digital quality measurement. Standardization of provider EHR system workflows could facilitate data quality and enhance the mapping to standard coding terminology thereby promoting the effective use of clinical data for HEDIS measure reporting.

Summary and Conclusions

Despite barriers, reporting results showed that there has been a steady increase in ECDS reporting. The contributions from EHR, HIE/registry and case management data sources continue to increase, demonstrating that more plans are seeking information beyond claims for quality measurement.⁴ However, challenges persist particularly regarding standardized data capture of behavioral health information at the point of care,⁵ and there may not be sharing of relevant information between health care systems.

Improved health plan reporting and measure performance are feasible with strategic multistakeholder approaches that drive better use and sharing of electronic clinical data.⁶ Public reporting of HEDIS measures using ECDS reporting is a critical step in the use of clinical data systems to measure quality. The *Prenatal Immunization Status (PRS-E)* measure was the first publicly reported measure using the ECDS reporting standard in MY 2020. Since then, 14 additional measures have been publicly reported, with additional measures being publicly reported every measurement year.

Acknowledgments

This report was written by Fern McCree, Kaila Boyd, Nikko Gutierrez, and Ryan Acton. The team would also like to thank NCQA staff for their review and input.

⁴ Byron SC, Roth L, Acton RM, Shen A. Harnessing electronic clinical data to report adult and prenatal immunization quality measures. *Journal of the American Medical Informatics Association*. 2021;28(10):2226-2232. doi:[10.1093/jamia/ocab125](https://doi.org/10.1093/jamia/ocab125)

⁵ Morden E, Byron S, Roth L, et al. Health Plans Struggle to Report on Depression Quality Measures that Require Clinical Data. *Academic Pediatrics*. Published online October 11, 2021. doi:[10.1016/j.acap.2021.09.022](https://doi.org/10.1016/j.acap.2021.09.022)

⁶ National Committee for Quality Assurance. "Leveraging Electronic Clinical Data for HEDIS: Insights and Opportunities." NCQA. May 2021. https://www.ncqa.org/wp-content/uploads/2021/05/20210526_Issue_Brief_Leveraging_Electronic_Clinical_Data_for_HEDIS.pdf

Appendix

Immunization Measures

Table A1. Immunization Measures Performance Rates by Data Sources Used, MY 2023

Measure	Indicator	Data Source Use	Commercial		Medicaid		Medicare	
			Submissions (%)	Mean %	Submissions (%)	Mean %	Submissions (%)	Mean %
AIS-E,	Influenza, 19-65	Claims Only	17 (4.1)	15.9	16 (7.1)	12.0	128 (18.9)	17.8
		Any Non-claims	397 (95.9)	23.8	222 (92.7)	15.6	550 (82.1)	34.3
	Td/Tdap, 19-65	Claims Only	17 (4.4)	26.3	16 (7.1)	31.0	134 (19.7)	10.0
		Any Non-claims	396 (95.7)	40.6	222 (93.3)	41.1	545 (80.3)	33.6
	Herpes Zoster, 50-65	Claims Only	24 (5.8)	110	16 (6.9)	7.4	106 (17.1)	3.9
		Any Non-claims	389 (94.2)	20.1	217 (93.1)	10.8	514 (82.9)	16.5
Pneumo-coccal	Claims Only	35 (8.7)	37.6	6 (3.3)	23.9	121 (17.2)	21.4	
	Any Non-claims	366 (91.3)	52.0	176 (96.7)	46.5	584 (82.8)	49.3	
PRS-E	Influenza	Claims Only	35 (8.9)	28.1	11 (4.7)	23.5	N/A	N/A
		Any Non-claims	360 (91.2)	38.8	225 (95.3)	25.3	N/A	N/A
	Tdap/Td	Claims Only	30 (7.6)	59.9	12 (5.1)	50.3	N/A	N/A
		Any Non-claims	365 (92.4)	70.3	224 (94.9)	55.0	N/A	N/A
IMA-E	Meningococcal	Claims Only	17 (4.6)	67.7	9 (5.1)	70.5	N/A	N/A
		Any Non-claims	355 (95.4)	80.2	168 (94.9)	77.6	N/A	N/A
	Tdap	Claims Only	16 (4.3)	69.9	8 (4.5)	77.9	N/A	N/A
		Any Non-claims	356 (95.7)	84.9	169 (95.5)	81.7	N/A	N/A
	HPV	Claims Only	24 (6.5)	24.0	8 (4.5)	35.7	N/A	N/A
		Any Non-claims	348 (93.5)	31.9	169 (95.5)	35.3	N/A	N/A
CIS-E	Influenza	Claims Only	19 (5.2)	48.0	8 (4.5)	38.2	N/A	N/A
		Any Non-claims	343 (94.8)	57.5	168 (95.5)	36.3	N/A	N/A
	DTAP/DT	Claims Only	18 (5.0)	56.7	8 (4.5)	57.2	N/A	N/A
		Any Non-claims	344 (95.0)	77.1	168 (95.5)	66.2	N/A	N/A
	Hep B	Claims Only	17 (4.7)	41.7	8 (4.5)	51.2	N/A	N/A
		Any Non-claims	345 (95.3)	72.9	168 (95.5)	77.2	N/A	N/A
	HiB	Claims Only	17 (4.7)	66.1	8 (4.5)	74.4	N/A	N/A
		Any Non-claims	345 (95.3)	84.4	168 (95.5)	79.7	N/A	N/A
	IPV	Claims Only	18 (5.0)	63.9	8 (4.5)	71.4	N/A	N/A
		Any Non-claims	344 (95.0)	83.7	168 (95.5)	80.4	N/A	N/A
	MMR	Claims Only	17 (4.7)	84.0	8 (4.5)	79.2	N/A	N/A
		Any Non-claims	345 (95.3)	89.1	168 (95.5)	82.4	N/A	N/A
	PCV	Claims Only	18 (5.0)	57.3	8 (4.5)	59.1	N/A	N/A
		Any Non-claims	344 (95.0)	78.1	168 (95.5)	66.7	N/A	N/A
	VZV	Claims Only	17 (4.7)	83.9	8 (4.5)	79.1	N/A	N/A
		Any Non-claims	345 (95.3)	88.9	168 (95.5)	82.1	N/A	N/A
Hep A	Claims Only	18 (5.0)	82.6	8 (4.5)	69.7	N/A	N/A	
	Any Non-claims	344 (95.0)	87.5	168 (95.5)	79.7	N/A	N/A	

	RV	Claims Only	20 (5.5)	58.5	8 (4.5)	57.4	N/A	N/A
		Any Non-claims	342 (94.5)	76.8	168 (95.5)	64.2	N/A	N/A

Behavioral Health Measures

Table A2. Performance rates by data sources used, MY 2023

Measure	Indicator	Data Source Use	Commercial		Medicaid		Medicare	
			Submissions (%)	Mean %	Submissions (%)	Mean %	Submissions (%)	Mean %
PND-E	Screening	Claims Only	1 (0.5)	0.7	1 (0.7)	5.2	N/A	N/A
		Any Non-claims	208 (99.5)	8.8	140 (99.3)	16.2	N/A	N/A
	Follow-Up	Claims Only	2 (9)	40.5	4 (8)	32.7	N/A	N/A
		Any Non-claims	20 (91)	60.2	47 (92)	51.9	N/A	N/A
PDS-E	Screening	Claims Only	1 (1)	0.8	1 (1)	7.4	N/A	N/A
		Any Non-claims	188 (99)	8.5	135 (99)	10.9	N/A	N/A
	Follow-Up	Claims Only	2 (10)	49.8	5 (11)	56.8	N/A	N/A
		Any Non-claims	19 (90)	68	40 (89)	62.7	N/A	N/A
DSF-E	Screening	Claims Only	1 (0.3)	6.7	2 (1)	0.5	10 (2)	16.1
		Any Non-claims	295 (99.7)	3.9	167 (99)	5.9	456 (98)	16.6
	Follow-Up	Claims Only	29 (23)	46.8	6 (5)	53.6	10 (5)	60.2
		Any Non-claims	98 (77)	76.4	110 (95)	69.8	180 (95)	67.3
DMS-E	Total	Claims Only	1 (0.4)	4.4	0 (0)	N/A	11 (3)	5.9
		Any Non-claims	236 (99.6)	4.6	128 (100)	6.9	318 (97)	14.0
DRR-E	Remission	Claims Only	0 (0)	N/A	0 (0)	N/A	0 (0)	N/A
		Any Non-claims	72 (100)	6.4	55 (100)	7.6	101 (100)	8.2
	Response	Claims Only	0 (0)	N/A	0 (0)	N/A	0 (0)	N/A
		Any Non-claims	74 (100)	10.7	61 (100)	10.7	105 (100)	11.8
	PHQ-9	Claims Only	0 (0)	N/A	0 (0)	N/A	0 (0)	N/A
		Any Non-claims	75 (100)	27.4	64 (100)	30.0	110 (100)	26.8
ASF-E	Screening	Claims Only	1 (1)	0.1	2 (3)	0.4	6 (3)	2.4
		Any Non-claims	162 (99)	1.1	60 (97)	2.2	172 (97)	14.1
	Follow-Up	Claims Only	12 (75)	0.2	16 (84)	1.4	24 (92)	0.7
		Any Non-claims	4 (25)	0.2	3 (16)	2.4	2 (8)	0.2
ADD-E	Initiation	Claims Only	164 (57)	42.2	36 (23)	43.5	N/A	N/A
		Any Non-claims	124 (43)	43.4	123 (77)	46.2	N/A	N/A
	Continuation	Claims Only	115 (55)	47.3	32 (23)	50.2	N/A	N/A
		Any Non-claims	93 (45)	49.5	109 (77)	53.1	N/A	N/A
APM-E	Blood Glucose & Cholesterol	Claims Only	16 (7)	36.4	10 (7)	33.4	N/A	N/A
		Any Non-claims	227 (93)	36.0	139 (93)	37.9	N/A	N/A
	Blood Glucose	Claims Only	14 (6)	58.3	7 (5)	51.3	N/A	N/A
		Any Non-claims	229 (94)	56.0	142 (95)	56.9	N/A	N/A
	Cholesterol	Claims Only	20 (8)	37.9	9 (6)	33.5	N/A	N/A
		Any Non-claims	223 (92)	37.9	140 (94)	39.4	N/A	N/A

Cancer Screening Measures

Table A3. Performance rates by data sources used, MY 2023

Measure	Data Source Use	Commercial		Medicaid		Medicare	
		Submissions (%)	Mean %	Submissions (%)	Mean %	Submissions (%)	Mean %
BCS-E	Claims Only	60 (14)	73.1	31 (12)	52.6	35 (6)	71.0
	Any Non-claims	360 (86)	74.2	218 (88)	53.4	561 (94)	71.5
COL-E, 51-75	Claims Only	13 (3)	58.3	8 (4)	31.1	24 (5)	54.2
	Any Non-claims	391 (97)	60.4	177 (96)	43.2	501 (95)	65.5
CCS-E	Claims Only	16 (4)	67.6	8 (5)	47.3	N/A	N/A
	Any Non-claims	372 (96)	70.9	169 (95)	51.0	N/A	N/A