



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**  
Division of Health Benefits

# 2024–2025 Encounter Data Validation Information Systems Review Aggregate Report

*September 2025*



## Table of Contents

<b>1. Executive Summary.....</b>	<b>1-1</b>
Introduction .....	1-1
Methods .....	1-1
Information Systems Findings.....	1-2
Encounter Data Sources and Systems .....	1-2
Payment Structure of Encounter Data .....	1-2
Encounter Data Quality Monitoring.....	1-2
Recommendations .....	1-3
<b>2. Overview and Methodology.....</b>	<b>2-1</b>
Overview .....	2-1
Methodology.....	2-1
Stage 1—Document Review .....	2-1
Stage 2—Development and Fielding of Customized Encounter Data Assessment .....	2-2
Stage 3—Key Informant Interviews.....	2-2
<b>3. Information Systems Review Findings .....</b>	<b>3-1</b>
Background.....	3-1
Encounter Data Sources and Systems .....	3-1
Claim/Encounter Data Flow .....	3-1
Information System Infrastructure .....	3-3
Collection, Use, and Submission of Provider Data .....	3-7
Collection, Use, and Submission of Enrollment Data.....	3-7
Payment Structure of Encounter Data .....	3-8
Bundle Payment Structures .....	3-9
Third-Party Liability (TPL) Data .....	3-9
Zero-Paid Claims.....	3-10
Capitated Encounter Submissions .....	3-10
Encounter Data Quality Monitoring.....	3-10
Encounter Data Collected by Plans’ Subcontractors.....	3-11
Encounter Data Collected by Plans .....	3-15
Feedback From DHB.....	3-15
Challenges and Changes Noted by Plans .....	3-17
<b>4. Discussion .....</b>	<b>4-1</b>
Conclusions .....	4-1
Encounter Data Sources and Systems .....	4-1
Payment Structure of Encounter Data .....	4-1
Encounter Data Quality Monitoring.....	4-2
Recommendations .....	4-3
Study Limitations .....	4-3
<b>Appendix A. Blank Questionnaire for Plans .....</b>	<b>A-1</b>

<b>Appendix B. Blank Questionnaire for DHB.....</b>	<b>B-1</b>
<b>Appendix C. Results for Alliance Health.....</b>	<b>C-1</b>
<b>Appendix D. Results for Partners Health Management.....</b>	<b>D-1</b>
<b>Appendix E. Results for Trillium Health Resources .....</b>	<b>E-1</b>
<b>Appendix F. Results for Vaya Health .....</b>	<b>F-1</b>

## 1. Executive Summary

### Introduction

Accurate and complete encounter data are critical to the success of a managed care program. Therefore, the North Carolina Department of Health and Human Services, Division of Health Benefits (DHB) requires its Tailored Plans (TPs) and Prepaid Inpatient Health Plans (PIHPs) (collectively referred to as “plans”) to submit high-quality encounter data. During state fiscal year (SFY) 2024–2025, DHB contracted Health Services Advisory Group, Inc. (HSAG), to conduct an encounter data validation (EDV) study.

### Methods

In alignment with the Centers for Medicare & Medicaid Services (CMS) External Quality Review (EQR) *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP [Children’s Health Insurance Program] Managed Care Plan [MCP]: An Optional EQR-Related Activity*, February 2023 (CMS EQR Protocol 5),<sup>1</sup> HSAG conducted the following core evaluation activity for the EDV study:

- Information Systems (IS) review—assessment of DHB’s and the plans’ information systems and processes. The goal of this activity is to examine the extent to which DHB’s and the plans’ IS infrastructures are likely to collect and process complete and accurate encounter data. This activity corresponds to Activity 1: Review State Requirements and Activity 2: Review the MCP’s Capability in the CMS EQR Protocol 5.

HSAG conducted the EDV study for four plans:

- **Alliance Health (Alliance)**
- **Partners Health Management (Partners)**
- **Trillium Health Resources (Trillium)**
- **Vaya Health (Vaya)**

---

<sup>1</sup> Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan: An Optional EQR-Related Activity*, February 2023. Available at: <https://www.medicaid.gov/medicaid/quality-of-care/downloads/2023-eqr-protocols.pdf>. Accessed on: Aug 8, 2025.

## Information Systems Findings

Based on the questionnaire responses received from the plans, all plans had the capability to collect, process, and transmit encounter data to DHB, as well as respond to quality issues DHB identified, and then resubmit the corrections. Plans generally set up their policies and procedures based on DHB's expectations listed in the companion guides, encounter data submission guidelines (EDSG),<sup>2</sup> and service-level agreements (SLAs). While plans made an effort to meet all expectations, there were areas for plans to improve (refer to the Recommendations section of this report).

### Encounter Data Sources and Systems

All plans reported using a wide variety of systems to collect, store, and check their encounter data. Additionally, all plans demonstrated an ability to modify and enhance fields to align with DHB's EDSG; identify duplicate records; and submit paid, denied, and adjusted claims to DHB.

### Payment Structure of Encounter Data

All plans reported varied payment structures that differed between the TPs and PIHPs and claim type. For inpatient services, payment methodologies were consistent across plans (e.g., PIHPs largely used a per diem payment structure), while for outpatient services, payment methodologies were generally consistent within plans (e.g., **Trillium** paid both TP and PIHP services with a percent of billed payment methodology). Plans also reported following the NC Medicaid Fee Schedule for bundled services. For TPL data, plans used the DHB 834-eligibility file and other methods to collect and verify information, while zero-paid claims and capitated encounters were submitted in accordance with the EDSG.

### Encounter Data Quality Monitoring

DHB had the following SLAs to monitor encounter data accuracy, completeness, and timeliness:

- **Accuracy:** The number of paid encounters that passed all validation edits (Workgroup for Electronic Data Interchange Strategic National Implementation Process [WEDI SNIP] levels 1–7 and state-specific validations) and were accepted by DHB compared to the total number of paid encounters submitted.
- **Completeness:** The paid amounts on submitted individual encounter records compared to the paid amounts reported on financial reports the plans submitted to DHB.
- **Timeliness:**
  - **Medical:** The number of accepted encounters the plans submitted within 30 calendar days from the adjudication/payment date.

---

<sup>2</sup> NCDHHS NC Medicaid Division of Health Benefits. Medicaid Enterprise System's Module Encounter Processing System: Encounter Data Submission Guide. EPS-EDI-DSG-001, May 7, 2025, Document Version, 1.16.

- Pharmacy: The number of accepted encounters the plans submitted within seven calendar days from the adjudication/payment date.

The quality checks either the plans or their subcontractors perform range in scope and depth; however, the quality checks aligned with DHB's SLAs. Plans and subcontractors used a wide array of quality checks, including checking claim volume by submission month, electronic data interchange (EDI) compliance edits, field-level completeness and validity, reconciliation with financial reports, and timeliness checks. Across all data types, no plans or their subcontractors reported performing a medical record review (MRR) to evaluate the completeness and accuracy of their data. This was likely due to the resource-intensive nature of MRR.

All plans reported processes to reconcile transactions that were initially rejected due to either DHB's EDI translator or DHB-specific edits. Although the overall percentage of rejected encounters that had not yet been submitted was small compared to all submitted encounters, the percentage of rejected encounters that had not yet been accepted remained high across all plans and encounter types. Across plans and encounter types, the most common reason for rejections were related to the beneficiary not being enrolled in the benefit plan or managed care on the date of service.

## Recommendations

To improve the quality of the plans' encounter data submissions, HSAG offers the following recommendations to assist DHB and the plans in addressing opportunities for improvement.

- HSAG recommends that DHB continue its collaboration with the plans to address challenges highlighted in the plans' responses noted in Table 3-10, such as ensuring the encounter processing system (EPS) documentation agrees with EDI compliance standards.
- Although all plans reported processes to reconcile transactions that were initially rejected due to either DHB's EDI translator or DHB-specific edits, all plans reported a high percentage of encounters initially rejected that were not yet accepted. HSAG recommends that the plans strengthen their processes to ensure timely and complete resubmission of all rejected transactions.
- Although all plans expressed satisfaction with the data quality checks their subcontractors perform, plans reported not reviewing data submitted by at least one of their subcontractors prior to submission to DHB. Plans should explore the possibility of developing or enhancing monitoring reports to assess the accuracy, completeness, and/or timeliness of subcontractor-submitted claims and encounters.
- **Vaya** should consider performing additional routine quality assurance checks on data collected to confirm that the data are processed as expected and that data processing systems continue to function as intended.
- **Partners** reported not storing any data submitted by its subcontractors. HSAG recommends that **Partners** consider storing subcontractor data to support data quality assurance by ensuring accurate claims processing, facilitating data analysis, and supporting overall healthcare oversight and accountability.

- While all plans reported using methods to identify duplicate claims, **Alliance** and **Partners** did not report utilizing different fields across claim types. Both plans should consider enhancing their duplicate detection methodologies to account for claim type-specific data elements.
- **Trillium** indicated that it performs only two quality checks on claims and encounters stored in its data warehouse. HSAG recommends that **Trillium** explore developing or refining monitoring reports to more systematically assess data accuracy, completeness, and/or timeliness.

## 2. Overview and Methodology

### Overview

Accurate and complete encounter data are critical to the success of a managed care program. Therefore, DHB requires plans to submit high-quality encounter data. DHB relies on the quality of these encounter data submissions to accurately and effectively monitor and improve the program's quality of care, generate accurate and reliable reports, develop appropriate capitated rates, and obtain complete and accurate utilization information.

During SFY 2024–2025, DHB contracted HSAG to conduct an EDV study. In alignment with the CMS EQR Protocol 5, HSAG conducted the following core evaluation activity for the EDV study:

- IS review—assessment of DHB's and the plans' IS and processes. The goal of this activity is to examine the extent to which DHB's and the plans' IS infrastructures are likely to collect and process complete and accurate encounter data. This activity corresponds to Activity 1: Review State Requirements and Activity 2: Review the MCP's Capability in the CMS EQR Protocol 5.

HSAG conducted the EDV study for four plans:

- **Alliance**
- **Partners**
- **Trillium**
- **Vaya**

### Methodology

The IS review seeks to define how each participant in the encounter data process collects and processes encounter data such that the data flow from the plans to DHB is understood. The IS review is key to understanding whether the IS infrastructures are likely to produce complete and accurate encounter data. To ensure the collection of critical information, HSAG employed a three-stage review process that includes a document review, development and fielding of a customized encounter data assessment, and follow-up with key staff members.

#### *Stage 1—Document Review*

HSAG initiated the IS review with a thorough desk review of existing documents related to encounter data initiatives/validation activities DHB currently performs. Documents for review included data dictionaries, process flow charts, data system diagrams, encounter system edits, sample rejection reports, workgroup meeting minutes, and DHB's current encounter data submission requirements, among others.



The information obtained from this review was important for developing a targeted questionnaire to address important topics of interest to DHB.

## **Stage 2—Development and Fielding of Customized Encounter Data Assessment**

HSAG conducted a customized encounter data assessment for both DHB and the plans. HSAG first evaluated the plans' most recent Information Systems Capabilities Assessment (ISCA), if available, to assess whether the information was complete and up to date. Additionally, HSAG aligned the EDV activity to incorporate information collected through the CMS EQR *Protocol 2. Validation of Performance Measures: A Mandatory EQR-Related Activity*, February 2023.<sup>3</sup> This process allowed the IS review activity to be coordinated across projects, preventing duplication and minimizing the impact on the plans. HSAG then collaborated with DHB to create a questionnaire to gather information and specific procedures for data processing, personnel, and data acquisition capabilities. Where applicable, this assessment also included a review of supplemental documentation regarding other data systems, including beneficiary demographics, beneficiary enrollment, and provider data. Lastly, this review included specific topics of interest to DHB. Although the questionnaire differed for DHB and the plans, both questionnaires contained similar domains. While DHB's questionnaire focused on its data exchange with the plans, the plans' questionnaire focused on data collection, processing, and transmission to DHB.

## **Stage 3—Key Informant Interviews**

After reviewing responses to the questionnaire, HSAG followed up with key DHB and plan information technology personnel to clarify any questions from the questionnaire responses.

Overall, the IS reviews allowed HSAG to document current processes and develop a thematic process map identifying critical points that impact the submission of quality encounter data. From this analysis, HSAG was able to provide actionable recommendations to the existing encounter data systems on areas for improvement or enhancement.

---

<sup>3</sup> Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 2. Validation of Performance Measures: A Mandatory EQR-Related Activity*, February 2023. Available at: <https://www.medicaid.gov/medicaid/quality-of-care/downloads/2023-eqr-protocols.pdf>. Accessed on: Aug 6, 2025.

---

## 3. Information Systems Review Findings

### Background

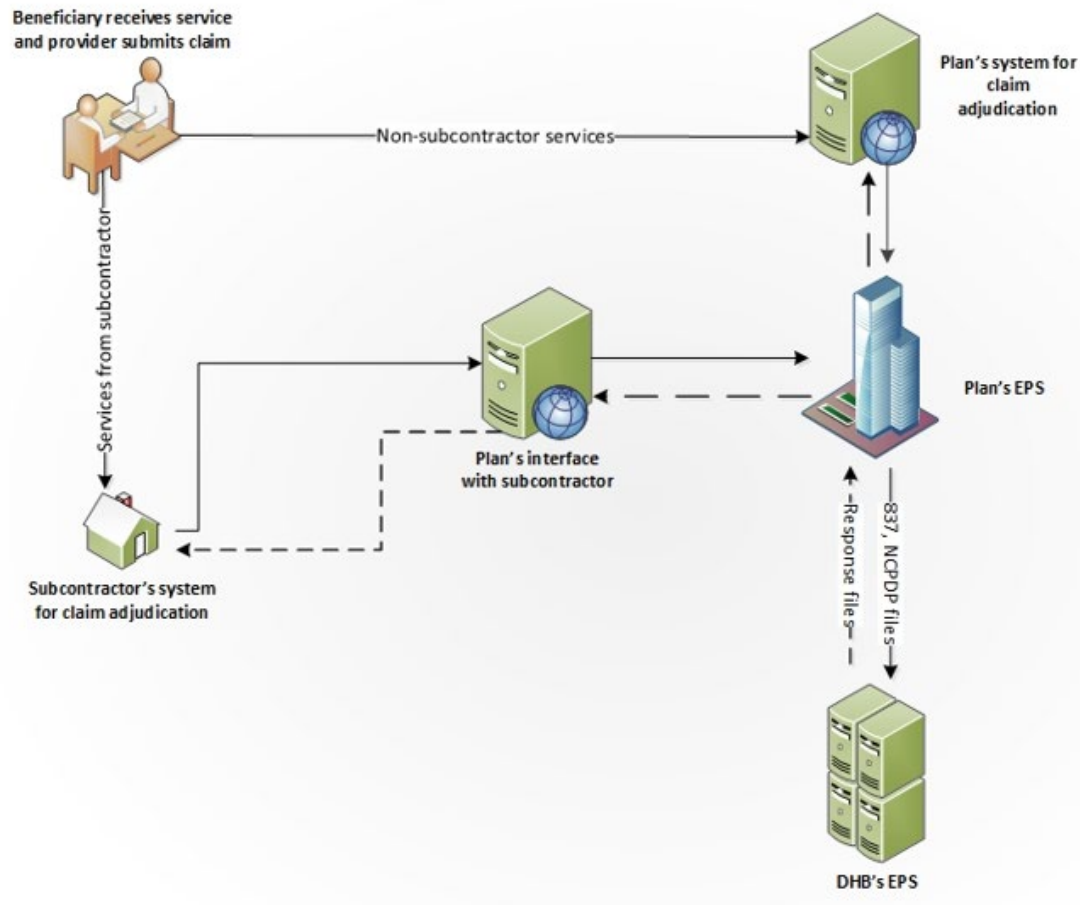
Representatives from all plans completed an HSAG-supplied, DHB-approved questionnaire. HSAG identified follow-up questions based on the plans' original questionnaire responses, and the plans responded to these plan-specific questions. To support their questionnaire responses, the plans submitted a wide range of documents with varying formats and levels of detail. DHB also completed its questionnaire. For more details regarding the questionnaires provided to the plans and DHB, please refer to Appendix A. Blank Questionnaire for Plans and Appendix B. Blank Questionnaire for DHB.

### Encounter Data Sources and Systems

This section of the report summarizes the data sources used in the claims data to encounter data cycle, the systems in place to process the data, the systematic formatting that occurred prior to submission (if completed by a third party), and how data are verified from provider and beneficiary information.

#### *Claim/Encounter Data Flow*

Figure 3-1 shows a high-level general process that outlines the path of a plan's encounter data from the point when a beneficiary receives a service (or services) until DHB processes the encounter. Solid lines represent the main transaction paths between each process agent, while dotted lines indicate data transfer feedback loops.

**Figure 3-1—Claims/Encounter Data Path From Origin Through Submission to DHB**

As shown in Figure 3-1, the claims/encounter process begins when a beneficiary receives a healthcare service from a provider. The provider then submits the claim electronically or via paper to a clearinghouse responsible for aggregating and formatting claims for submission to the claim processor, although it may also submit the claim directly to the plan for claims processing. Next, the claim is processed, and the data are submitted to the plan's EPS. If the claim was processed by a third party, that subcontractor submits the claim information to the plan through its EPS. The plans and their subcontractors are responsible for ensuring that encounter data are accurate, complete, and formatted correctly for timely submission to DHB using 837 Professional (837P), 837 Institutional (837I), or National Council for Prescription Drug Programs (NCPDP) D.0 files. After DHB processes the encounter data, it provides a variety of response files to the plans so that the plans can identify encounters that DHB does not successfully process or fail DHB's edits.

## Information System Infrastructure

DHB received 837P, 837I, and NCPDP files directly from the plans. These files may have been generated initially by the plan and/or its subcontractors in a different format. All plans submitted encounter data to DHB daily, a few times a week, weekly, or monthly. Upon receiving claims, the plans used various software to receive, process, validate, and prepare encounter data files, as shown in Table 3-1. The WEDI SNIP levels used in the EDI compliance checks included various levels of checks ranging from only level 1 and 2 to levels 1–7.

**Table 3-1—Primary Software for Encounter Processing**

Plan	Plan Type	Primary Software for Claim Adjudication	Primary Software for Encounter Preparation	WEDI SNIP Level for 837P and 837I Encounters
Alliance	TP	EDI compliance software (1 EDI Source, an Epicor solution), NCRx, MS SQL, Optum, OTVM, HIPAA Suite, Flexicapture	MS SQL server stored procedure in ACS, BridgeGate, Custom Program, EDIDev	<ul style="list-style-type: none"> <li>837P, 837I, BH: Levels 1–3</li> <li>Vision: Level 3</li> <li>NEMT: Levels 1–5</li> <li>DME: Levels 1–7</li> </ul>
	PIHP	EDI compliance software (1 EDI Source, an Epicor solution)	MS SQL server stored procedure in ACS	<ul style="list-style-type: none"> <li>BH: Levels: 1–3</li> </ul>
Partners	TP	Amisys, Edifecs, RxClaim, Risk Manager, OTVM, Facets	EDM—NextGen, Alpha+, Encounter Management System, Redix, Custom Program	<ul style="list-style-type: none"> <li>837P: Levels 1–2</li> <li>837I, Vision, NEMT, VBP, Paper Claims: Levels 1–5</li> <li>BH: Levels 1–4</li> </ul>
	PIHP	Edifecs	Alpha+	<ul style="list-style-type: none"> <li>BH: Levels 1–4</li> </ul>
Trillium	TP	Amisys, Edifecs, Provider Direct, Darwin adjudication engine, Risk Manager, OTVM, EDM—NextGen	EDM—NextGen, Encounter Engine, Darwin adjudication engine, Redix, Custom Program	<ul style="list-style-type: none"> <li>837P, 837I, Vision, NEMT, VBP, Paper Claims: Levels 1–5</li> <li>BH: Levels 1–7</li> </ul>
	PIHP	Edifecs, Provider Direct	Encounter Engine	<ul style="list-style-type: none"> <li>BH: Levels 1–7</li> </ul>
Vaya	TP	Edifecs, NCRx, MS SQL Optum, OTVM, Provider Portal	Conduent’s HSP System, BridgeGate, Custom Program	<ul style="list-style-type: none"> <li>837P, 837I, BH, NEMT, Paper Claims, Portal Claims: Levels 1–5</li> <li>Vision: Level 3</li> </ul>
	PIHP	Edifecs	Conduent’s HSP System	<ul style="list-style-type: none"> <li>837P, 837I, BH, Paper Claims, Portal Claims: Levels 1–5</li> </ul>

**Acronyms:** ACM—Alliance Claims System; BH—behavioral health; DME—durable medical equipment; EDI—encounter data interchange; EDM—Encounter Data Management; HIPAA—Health Insurance Portability and Accountability Act; HSP—Healthcare Solutions Platform; MS—Microsoft; NCRx—National CooperativeRx; NEMT—non-emergency medical transportation; OTVM—Optum Transaction Validation Manager; SQL—Structured Query Language; VBP—value-based payment

Table 3-2 outlines the claims/encounter data fields that the plans modify, reformat, or change to accommodate DHB's EDSG.

**Table 3-2—Field Modifications the Plans Make to Encounter Data to Accommodate DHB's EDSG**

Encounter Type	Plan Type	Fields	Modifications By
<b>Alliance</b>			
Medical and BH	Both	Billing Tax ID, Beneficiary DOB, Billing Address, SBR02, Adjudication Date, DRG	Plan
NEMT	TP	2300 K3 DREC, 2300 K3 DPYM, DMG*D8 (Multiple fields), 2300 K3 DADJ, 2400 CR109 APPTIME, 2400 CR109 DOTIME, 2400 CR109 TRIPTYPE, 2400 CR109 TRIPLEG, ZIP Code (multiple fields)	Subcontractor
Vision	TP	Claim ID	Subcontractor
Pharmacy	TP	Processor Control Number, Service Provider ID, Date of Service, Software Vendor/Certification ID, DOB, Place of Service, Pregnancy Indicator, Patient Residence, Cardholder ID, Group ID, Medigap ID, Prescription/Service Reference Number, Product/Service ID Qualifier, Product/Service ID, Quantity Prescribed, Quantity Dispensed, Days Supply, Date Prescription Written, Submission Clarification Code, Reason for Service Code, Professional Service Code, Result of Service Code, DUR/PPS Level of Effort, Compound Ingredient Basis of Cost, Ingredient Cost Submitted, Dispense Fee Submitted, Patient Pay Amount Submitted, Usual and Customary Charge, Gross Amount Due, Other Payer Coverage Type, Other Payer ID Qualifier, Other Payer Amount Paid, Other Payer—Patient Responsibility Amount Count, Other Payer—Patient Responsibility Amount, Question Alphanumeric Response	Subcontractor
<b>Partners</b>			
Vision	TP	Provider ID	Plan
NEMT	TP	2300 K3 DREC, 2300 K3 DPYM, DMG*D8 (Multiple fields), 2300 K3 DADJ, 2400 CR109 APPTIME, 2400 CR109 TRIPTYPE, 2400 CR109 TRIPLEG, ZIP Code (multiple fields)	Subcontractor
<b>Trillium</b>			
NEMT	TP	2300 K3 DREC, 2300 K3 DPYM, DMG*D8 (Multiple fields), 2300 K3 DADJ, 2400 CR109 APPTIME, 2400 CR109 DOTIME, 2400 CR109 TRIPTYPE, 2400 CR109 TRIPLEG, ZIP Code (multiple fields)	Subcontractor
BH	Both	Any dollar amount or unit field, NameLast or OrganizationName, NameFirst, NameMiddle, NameSuffix, IdentificationCode, AddressInformation, AddressInformation2, CityName, StateOrProvinceCode, PostalCode, BillingProviderTaxIdentificationNumber	Plan
Vision	TP	Claim Submitter's ID / Patient Account Number, 2300 K3 DREC, 2300 K3 DPYM, 2300 K3 DADJ	Subcontractor

Encounter Type	Plan Type	Fields	Modifications By
Pharmacy	TP	All	Processor
<b>Vaya</b>			
NEMT	TP	2300 K3 DREC, 2300 K3 DPYM, DMG*D8 (Multiple fields), 2300 K3 DADJ, 2400 CR109 APPTTIME, 2400 CR109 DOTIME, 2400 CR109 TRIPTYPE, 2400 CR109 TRIPLEG, ZIP Code (multiple fields), K3 & PWK segments	Subcontractor
Pharmacy	TP	Processor Control Number, Service Provider ID, Date of Service, Software Vendor/Certification ID, DOB, Place of Service, Pregnancy Indicator, Patient residence, Group ID, Medigap ID, Prescription/Service Reference Number, Product/Service ID Qualifier, Product/Service ID, Quantity Prescribed, Quantity Dispensed, Days Supply, Date Prescription Written, Submission Clarification Code, Reason for Service Code, Professional Service Code, Result of Service Code, DUR/PPS Level of Effort, Compound Ingredient Basis of Cost, Ingredient Cost Submitted, Dispense Fee Submitted, Patient Pay Amount Submitted, Usual and Customary Charge, Gross Amount Due, Other Payer Coverage Type, Other Payer ID Qualifier, Other Payer Amount Paid, Other Payer—Patient Responsibility Amount Count, Other Payer—Patient Responsibility Amount, Question Alphanumeric Response	Subcontractor
Vision	TP	Claim ID	Subcontractor
Electronic Medical and BH	Both	Sender ID (ISA06 and GS02), Transaction Type (BHT06), Billing Provider Taxonomy (2000A), Atypical Billing Provider Number (If used) (2010BB, REF*G2), Beneficiary Medicaid ID (2010B, NM1, NM109), Beneficiary Address (2010B, NM1, N3, N4), Medical Claim Number (2300, CLM, CLM01), NC Specific Data (General Info) (K3 and PWK segments in header/detail), Patient monthly liability amount paid, DME Claims, EVV Claims (Loop 2400, SV101-7), Home Health Services (Loop 2400, NTE, NTE02), CN101, CN104, SV101-7 Description	Plan
Electronic Medical and Behavioral Health Claims—Claims With Interest or Penalties	Both	Claim Adjustment Group (CAS segment)	Plan
Behavioral Health Claims—Wrap Payment Encounters	Both	Claim Adjustment Group (CAS segment)	Plan

**Acronyms:** CAS—claim adjustment segment; DOB—date of birth; DRG—Diagnosis-Related Group; DUR—drug utilization review; ID—identification; PPS—prospective payment system

## Duplicate, Denied, and Adjusted Claims

All plans shared their processes to detect and identify duplicate claims, including the key fields used, the point in the process the duplicates were identified, and how they were handled. Although the plans varied in how they identified duplicate records, some common fields the plans used included beneficiary identification (ID), service date, provider, and procedure code. Table 3-3 lists common fields examined for duplication across the plans by encounter type, if appropriate.

**Table 3-3—Some Common Fields Used by Plans to Examine Claims for Duplication**

Plan	Plan Type	Fields
Alliance	Both	Beneficiary information, billing provider information, procedure information (i.e., revenue and HCPCS/CPT codes combination), and date of service
Partners	Both	Procedure code, provider ID, patient ID, and date of service
Trillium	TP	<ul style="list-style-type: none"> <li>Medical: Beneficiary information, provider information, procedure code, diagnosis code, and procedure code modifier</li> <li>Vision: Beneficiary information, date of service, and service information</li> <li>NEMT: Authorization number</li> <li>Pharmacy: Beneficiary ID, product service ID/NDC, pharmacy NPI, date of service, prescription number, and fill number</li> <li>VBP: Beneficiary information, provider information, date of service, and paid amount</li> </ul>
	Both	<ul style="list-style-type: none"> <li>BH: Service information, beneficiary information, provider information, date of service, and place of service</li> </ul>
Vaya	TP	<ul style="list-style-type: none"> <li>Pharmacy: 14-digit GPI, prescription date of service, prescription number, beneficiary ID, and pharmacy NPI</li> <li>NEMT: Beneficiary ID, trip date, pick-up and drop-off locations, provider NPI/API, trip leg identifier, and billed amount</li> <li>Vision: Claim number</li> <li>Claims: Beneficiary information, subscriber information, provider TIN, date of service, procedure code, revenue code, drug code, and claim type</li> </ul>
	Both	<p>Medical and BH:</p> <ul style="list-style-type: none"> <li>UB-04: Beneficiary information, LOB, revenue code, provider information, corporation tax ID, product code (used to capture the NDC and UPN), modifier, form type, and procedure code</li> <li>CMS 1500: Beneficiary information, LOB, provider information, corporation tax ID, product code (used to capture the NDC and UPN), modifier, and procedure code</li> </ul>

**Acronyms:** API—application programming interface; CPT—Current Procedural Terminology; GPI—Generic Product Identifier; HCPCS—Healthcare Common Procedure Coding System; LOB—line of business; NDC—National Drug Code; NPI—National Provider Identifier; TIN—tax identifier number; UPN—Universal Product Number



All plans, except **Alliance**, reported submitting all claims/encounter types (i.e., paid, partially paid, denied, voided, or adjusted claims) to DHB. **Alliance** explained that it did not submit claims that were denied due to unknown service center; claims that did not have a clean claim date; claims that did not have diagnosis, revenue, or procedure code information; or pended claims.

All plans reported that they submitted all claims in the same fashion to DHB whether they were paid, denied, or partially denied/paid. Claims/encounters were marked as paid if all service lines were paid, while claims/encounters were marked as denied if all service lines were denied. Claims were marked as partially denied/paid if some lines were paid and some lines were denied. The partially denied/paid claims were marked as paid at the header level.

Additionally, plans followed a similar process to submit adjustments to DHB, which was in agreement with DHB's EDSG. The time required for this process depended on the specific claim adjustments needed.

### ***Collection, Use, and Submission of Provider Data***

Plans and their subcontractors were both responsible for the collection and maintenance of provider information. All plans and their subcontractors used or referred to the daily provider enrollment files (PEFs) for claims processing, which DHB updated regularly based on pre-specified rules. Plans used either the provider National Provider Identifier (NPI), provider tax ID, or both the provider NPI and provider tax ID to link to the claims data. If the claim could be linked to the provider data using either the provider NPI or provider tax ID, then the claim was marked as denied because the provider was not found.

### ***Collection, Use, and Submission of Enrollment Data***

DHB provided EDI 834 files to the plans daily. Plans loaded these data into their systems for claim adjudication. These beneficiary enrollment data were also transmitted to the subcontractors, and the subcontractors loaded them into their claims systems as they were received.



## Payment Structure of Encounter Data

Plans responded to questions on their collection of payment-related data and how they pay claims. Table 3-4 shows the plans' pricing methodologies for inpatient, outpatient, and pharmacy encounters.

**Table 3-4—Pricing Methodologies, by Plan and Claim Type**

Plan	Plan Type	Inpatient	Outpatient	Pharmacy
Alliance	TP	Per Diem (67.12%) DRG (31.28%) Variable Per Diem (1.19%) Line-by-Line (0.41%)	Line-by-Line (86.92%) Percent of Billed (6.56%) Negotiated (Flat) Rate (5.37%) Capitation (1.15%)	Ingredient Cost (100%)
	PIHP	Per Diem (99.99%) DRG (0.01%)	Line-by-Line (80.26%) Negotiated (Flat) Rate (16.15%) Capitation (1.88%) Percent of Billed (1.71%)	—
Partners	TP	DRG (85%) Per Diem (15%)	Percent of Billed (50%) Other <sup>1</sup> (50%)	Percent of Billed (100%)
	PIHP	Per Diem (100%)	Other <sup>1</sup> (100%)	—
Trillium	TP	DRG (100%)	Percent of Billed (100%)	Other <sup>2</sup> (100%)
	PIHP	Per Diem (100%)	Percent of Billed (100%)	—
Vaya	TP	Per Diem (53%) DRG (45.4%) Capitation (1.6%)	Line-by-Line (82.9%) Percent of Billed (11.8%) Negotiated Flat Rate (5.3%)	Ingredient Cost (100%)
	PIHP	Per Diem (100%)	Line-by-Line (80.4%) Negotiated Flat Rate (18.6 %) Percent of Billed (1%)	—

— Pharmacy claim type is not applicable to PIHPs.

<sup>1</sup> Ratio Cost-to-Charges (RCC) and NC Division of Medicaid Assistance (DMA) rates.

<sup>2</sup> State fee schedule rules.

### Key Findings: Table 3-4

- For inpatient encounters, all TPs reported using the DRG methodology, with three of four TPs (**Partners**, **Alliance**, and **Vaya**) also reporting the use of per diem as one of the main pricing methodologies. All PIHPs reported per diem as the predominant pricing methodology.

- For outpatient encounters, both TPs and PIHPs reported percent of billed charges and line-by-line pricing as the most employed payment strategies. **Partners'** TP and PIHP also primarily used additional methods, including RCC and DMA rates.
- For pharmacy encounters, TPs used percent of billed charges (**Partners**), ingredient cost (**Alliance** and **Vaya**), or state fee schedule rules (**Trillium**) as their main payment strategies.

### **Bundle Payment Structures**

All plans reported allowing bundled payment for either their TP, PIHP, or both plan types for the services listed below:

- **Alliance** stated for its TP that maternity services and global surgery are under bundled payment, while behavioral health stays have bundled payment arrangements for its PIHP.
- **Partners'** TP and PIHP and **Trillium's** TP reported that they allowed bundled payment only if mandated by the NC Medicaid Fee Schedule.
- **Vaya** noted that bundling applied to certain services for its TP and PIHP, such as outpatient opioid services, high fidelity wraparound services, transitional youth services, long-term community support services, and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF/IID) services.

### **Third-Party Liability (TPL) Data**

All TPs and PIHPs collected and verified TPL information for relevant data types using the DHB 834 eligibility file, third-party vendors (e.g., Gainwell, Change Healthcare, and Navitus), internal validation teams, claim files, and provider or beneficiary communications. Subcontractors generally relied on plan-supplied TPL data to process claims, where applicable. Claims were adjudicated using TPL methodologies, with Medicaid acting as the payer of last resort. Plans typically denied or pended claims missing required insurance information for additional details, while pharmacy claims underwent real-time checks to prevent incorrect primary billing. If other insurance was identified after initial adjudication, plans allowed claim adjustments or initiated vendor-driven recovery processes to recoup payments.

All plans verified TPL information using state files, third-party vendors, and additional tools such as NC Tracks or carrier portals. Payment and source data were stored within each plan's claims system or vendor platforms, and TPL details were included in encounters submitted to DHB in accordance with standard submission guidelines, including specific coordination of benefits segments for pharmacy claims. Plans maintained TPL payment accuracy through a combination of automated systems, vendor reports, and regular claim audits. TP and PIHP plans handled TPL data similarly when applicable, such as for medical and behavioral health claims. However, some data types were specific to only one plan type. For example, vision and pharmacy were only applicable to TPs.

## Zero-Paid Claims

All TPs and PIHPs submitted zero-paid claims to DHB for applicable data types in accordance with the EDSG, using required segment fields to reflect the reasons for zero payment.

The scenarios leading to zero-dollar payments, as reported by the plans, included:

- Claims where TPL payments equaled or exceeded the plan's allowed amount, leaving no Medicaid liability.
- Entire claims or specific denied claim lines, submitted with appropriate denial indicators.
- Claims submitted by providers with zero-dollar charge amounts.
- Services provided under a capitation payment arrangement.
  - **Alliance** reported capitated arrangements, while **Partners** and **Trillium** had no capitated arrangements. **Vaya** noted an incentive payment process for medical and behavioral health encounters but had not submitted any to date. For vision encounters, **Vaya** reported that all zero-paid claims followed the same process, with no distinction made for capitated providers.

## Capitated Encounter Submissions

**Alliance**, **Partners**, and **Trillium** described processes for submitting per member per month (PMPM) capitated encounters in accordance with the EDSG. Each plan used the CN104 segment to report the appropriate value-based payment (VBP) type (e.g., VBPBCM) as capitated encounters to DHB. Although **Partners** and **Trillium** did not have active capitation arrangements, both outlined procedures where finance teams submitted PMPM payment data at least monthly, which were then loaded into EDM tables to create encounters. **Alliance** similarly generated monthly VBP encounters for eligible providers through its claims system. **Vaya** noted that its medical and BH incentive payments were paid outside of the system by finance, with no encounters submitted to date.

## Encounter Data Quality Monitoring

This section evaluates how plans monitor their encounter data quality from the following four questions:

- How do plans monitor encounter data quality for data collected by their subcontractors?
- How do plans monitor encounter data quality for data they collect?
- How do plans address feedback from DHB?
- What are the challenges or requests from plans?

### Encounter Data Collected by Plans' Subcontractors

Table 3-5 displays the information regarding whether the plans stored, reviewed, or modified encounters before submitting them to DHB, and whether the plans reviewed encounters after submission to DHB. The green checks (✓) in the table indicate a “Yes” response, and the em dashes (—) indicate a “No” response.

**Table 3-5—Plan Processes for Encounters From Subcontractors for TP and PIHPs**

Plan	Type of Subcontractor	Subcontractor Name	Stored by Plan	Reviewed by Plan Before Submission	Modified by Plan Before Submission	Reviewed by Plan After Submission
Alliance	Pharmacy	Navitus	✓	—	—	✓
	Vision	Avesis	✓	—	—	✓
	NEMT	Modivcare	✓	✓	—	✓
	DME	Northwood	✓	—	—	✓
Partners	Pharmacy	CVS Caremark	—	—	—	✓
	Vision	Envolve Vision	—	—	—	—
	NEMT	Modivcare	—	—	—	—
Trillium	Pharmacy	PerformRx	✓	—	—	✓
	Vision	Centene	✓	—	—	✓
	NEMT	Modivcare	✓	—	—	✓
	Medical	Carolina Complete Health	✓	—	—	✓
Vaya	Pharmacy	Navitus	✓	—	—	—
	Vision	Avesis	✓	—	—	—
	NEMT	Modivcare	✓	✓	✓	✓

#### Key Findings: Table 3-5

- All four plans used subcontractors for pharmacy, vision, and NEMT encounter data. None of the plans used a subcontractor for BH services.
- **Alliance**, **Trillium**, and **Vaya** stored all subcontractor data types in their data warehouses, while **Partners** did not store any subcontractor data.

- **Alliance** and **Vaya** reviewed NEMT encounter data from their subcontractors before submitting the data to DHB. In contrast, **Partners** and **Trillium** relied on the subcontractors' quality assurance processes and did not perform additional validation.
- For pharmacy and vision, all plans indicated they were satisfied with the subcontractors' data quality checks and did not review the data prior to submission to DHB.
- **Vaya** modified only NEMT subcontractor data prior to submission to DHB. No other plan modified subcontractor data prior to submission.
- Post-submission quality checks varied by plan: **Alliance** reviewed all data types, **Partners** reviewed only pharmacy data, **Trillium** reviewed all data types, and **Vaya** reviewed only NEMT data.

HSAG gathered responses from the plans regarding the quality checks they and/or their subcontractors conduct. To organize the plans' responses, HSAG provided standard data quality checks for them to choose from in their questionnaire responses. Table 3-6 provides a brief description of these data quality checks.

**Table 3-6—Description for Data Quality Checks**

Data Quality Checks	Description
Claim Volume by Submission Month	Evaluates the number of unique claims based on the month when the claims were submitted to an entity.
Claim Volume PMPM	Evaluates the number of unique claims PMPM based on the month when the services occurred.
Field-Level Completeness	Evaluates whether there are any missing and/or extra values for a specific data element.
Field-Level Validity	Evaluates whether the values for a specific data element are valid.
Timeliness	Evaluates whether the source entity submits claims in a timely manner.
Reconciliation With Financial Reports	Evaluates whether the payment fields in the claims align with the financial reports from an entity.
EDI Compliance Edits	Evaluates whether 837P and 837I files pass the EDI compliance edits.
MRR	Evaluates whether some of the data elements in the claims are complete and accurate when comparing to the medical records.

Table 3-7 presents the data quality checks conducted by either the plans or their subcontractors on the encounter data collected by the subcontractors. Plans reported no differences in processes between TPs and PIHPs. The green checks (✓) in the table indicated that the plan and/or its subcontractor perform quality checks, and the em dashes (—) indicate that they do not perform quality checks.

**Table 3-7—Data Quality Checks by Plans and/or Their Subcontractors**

Plan	Quality Check Type	Pharmacy	Vision	NEMT	Other <sup>1</sup>
Alliance	EDI Compliance Edits	—	—	✓	—
	Field-Level Completeness	✓	✓	✓	✓
	Field-Level Validity	✓	—	✓	—
	Timeliness	✓	✓	✓	✓
	Other <sup>2</sup>	—	✓	—	✓
Partners	Claim Volume by Submission Month	—	✓	—	—
	Field-Level Validity	—	✓	✓	—
	Reconciliation With Financial Reports	✓	—	—	—
	Timeliness	—	✓	—	—
	Other <sup>2</sup>	—	—	✓	—
Trillium	Claim Volume by Submission Month	✓	✓	—	✓
	EDI Compliance Edits	—	✓	✓	✓
	Field-Level Validity	—	—	✓	—
	Timeliness	✓	—	✓	✓
	Other <sup>2</sup>	✓	✓	✓	—
Vaya	Claim Volume by Submission Month	—	—	—	—
	Claim Volume by PMPM	✓	—	—	—
	EDI Compliance Edits	—	—	—	—
	Field-Level Completeness	✓	—	—	—
	Field-Level Validity	✓	✓	✓	—
	Reconciliation With Financial Reports	—	✓	—	—
	Timeliness	—	—	—	—
	Other <sup>2</sup>	✓	✓	—	—

<sup>1</sup> Other Encounter Type: Alliance—DME; Trillium—Medical.

<sup>2</sup> Other Quality Check Type: Details provided in the key findings.

**Key Findings: Table 3-7**

- For pharmacy encounters, **Alliance**'s and **Vaya**'s subcontractors performed weekly field-level completeness checks using Navitus Automated Encounter Data Submission Quality Control. **Partners**' subcontractor performed a daily reconciliation against financial reports. **Trillium**'s subcontractor conducted a format quality check prior to each submission, with quality assurance incorporated during the building and production phase of each file. Additionally, all plans, excluding **Partners**, performed their own quality checks including claim volume by submission month (**Trillium**), field-level validity (**Alliance** and **Vaya**), timeliness (**Alliance** and **Trillium**), and claim volume by PMPM (**Vaya**). **Vaya** included an additional quality check, which aggregated year-to-date summary encounter information that its pharmacy benefit manager (PBM) Governance Committee reviewed.
- For vision encounters, **Alliance**'s and **Vaya**'s subcontractor, Avesis, conducted MS SQL-based data validation checks and used Optum to confirm Health Insurance Portability and Accountability Act (HIPAA)-compliant file formatting. **Partners**' subcontractor performed weekly checks on claim volume by submission, field-level validity, and timeliness. **Trillium**'s subcontractor used an X-Engine compliance checker to ensure encounter file compliance. Additionally, all plans, excluding **Partners**, performed their own quality checks, including claim volume by submission month (**Trillium**), EDI compliance edits (**Trillium**), field-level completeness (**Alliance**), field-level validity (**Vaya**), reconciliation with financial reports (**Vaya**), and timeliness (**Alliance**). Further, **Trillium** and **Vaya** used a weekly review of EPS response files as the mechanism to identify issues requiring resubmission. Additionally, **Vaya** conducted a referential integrity check between the eligibility file and encounters to ensure the beneficiary's eligibility at the time of service.
- For NEMT services, all plans' subcontractors performed field-level validity checks weekly using the OTVM. In addition to OTVM, **Partners** and **Trillium** also ran propriety system data checks, HIPAA compliance checks, and submitted report quality reviews to identify missing or invalid data elements (e.g., addresses, NPIs, and dates). Additionally, all plans, excluding **Partners**, performed their own quality checks, including EDI compliance checks (**Alliance** and **Trillium**), field-level completeness (**Alliance**), field-level validity (**Vaya**), and timeliness (**Alliance** and **Trillium**).
- **Alliance**'s durable medical equipment (DME) subcontractor performed a field-level completeness quality check and a WEDI SNIP level 5 EDI compliance check via HIPAA Suite prior to claim acceptance. These checks assessed data integrity, code sets, requirements, balancing, and situational testing. Additionally, **Alliance** performed timeliness and field-level completeness checks.
- **Trillium**'s medical subcontractor, Carolina Complete Health, submitted daily claim reports that are housed in **Trillium**'s data warehouse. **Trillium** used the reports for claim volume by submission month and timeliness checks. **Trillium** also monitored EDI compliance errors weekly.

### Encounter Data Collected by Plans

For encounters collected by the plans (i.e., not collected by the plans' subcontractors), Table 3-8 shows the quality checks the plans reported. Plans reported no differences in processes between TPs and PIHPs. The green checks (✓) in the table indicate that the plan performs quality checks, and the em dashes (—) indicate that they do not perform quality checks.

**Table 3-8—Data Quality Checks for Encounters Collected by Plans**

Quality Check Type	Alliance	Partners	Trillium	Vaya
Claim Volume by Submission Month	—	✓	—	—
EDI Compliance Edits	✓	✓	—	—
Field-Level Completeness	—	✓	✓	—
Field-Level Validity	✓	✓	✓	—
Timeliness	✓	—	—	—
Other <sup>1</sup>	—	✓	—	—

<sup>1</sup>Other Quality Check Type: Details provided in the key findings.

#### Key Findings: Table 3-8

- **Alliance**, **Partners**, and **Trillium** all reported performing quality checks on the data they collected and stored in each of their data warehouses. **Vaya** reported not performing quality checks on data stored in its data warehouse once the initial development and testing were complete.
- For plans that performed quality checks, all conducted field-level validity checks, while two conducted EDI compliance edits (**Alliance** and **Partners**) and field-level completeness checks (**Partners** and **Trillium**). Field-level validity checks included using the PEF and 834 files, and performing HIPAA validations.
- Only **Alliance** performed timeliness checks to track the adjudication/payment cycle, while **Partners** was the only plan to perform claim volume by submission month checks. Additionally, **Partners** maintained a claims monitoring and review process to ensure compliance with regulatory agencies and general statutory requirements for appropriate payment of claims.

### Feedback From DHB

Upon receiving encounters from plans, DHB generated a series of response files (e.g., 999 and business rules error [BRE] files) based on the EDI compliance edits and additional edits the EPS applied. All plans stored the response files in their data systems to track the status for each encounter. In general, the number of records rejected by the EPS edits was higher than the number of records rejected by the EDI translator. After receiving and reviewing DHB's response files, plans made corrections for the rejected encounters and then resubmitted them to DHB, although plans still had a high percentage of initially rejected records that were not yet accepted. Table 3-9 displays the percentage of encounters that DHB



had not accepted that were initially rejected and the percentage of all encounters that were not yet accepted by DHB.

**Table 3-9—Percentage of Encounters Not Yet Accepted by DHB**

Encounter Type	Plan Type	Percentage of Initially Rejected Encounters	Percentage of All Submitted Encounters
<b>Alliance</b>			
837I	TP	5.5%	0.1%
	PIHP	18.0%	0.9%
837P	TP	30.9%	0.2%
	PIHP	16.2%	0.2%
Pharmacy	TP	41.7%	0.7%
<b>Partners</b>			
837I	TP	95.2%	1.3%
	PIHP	75.0%	5.7%
837P	TP	62.3%	0.3%
	PIHP	56.4%	1.0%
Pharmacy	TP	24.3%	0.9%
NEMT	TP	99.3%	1.4%
<b>Trillium</b>			
837I	TP	57.4%	1.9%
	PIHP	75.4%	6.4%
837P	TP	78.1%	0.9%
	PIHP	26.0%	1.7%
Pharmacy	TP	90.7%	1.1%
<b>Vaya</b>			
837I	TP	32.9%	0.5%
	PIHP	18.5%	0.6%
837P	TP	61.1%	0.6%
	PIHP	58.9%	0.7%
Pharmacy	TP	10.1%	0.2%
Vision	TP	12.8%	0.4%

### Key Findings: Table 3-9

- For 837I encounters, **Partners** reported the highest percentage of initially rejected encounters that had not yet been accepted for its TP at 95.2 percent, while **Trillium** reported the highest percentage for its PIHP at 75.4 percent. **Alliance** reported the lowest percentage of not yet accepted encounters for both its TP and PIHP at 5.5 percent and 18.0 percent, respectively. Across all plans, the most common reasons for rejections were due to the beneficiary not being enrolled in the benefit plan or managed care on the date of service.

- For 837P encounters, **Trillium** reported the highest percentage of initially rejected encounters that had not yet been accepted for its TP at 78.1 percent, while **Vaya** reported the highest percentage for its PIHP at 58.9 percent. Across all plans, the TPs reported a higher percentage of not yet accepted encounters compared to the PIHPs. Additionally, the most common reasons for rejections were due to the beneficiary not being enrolled in the benefit plan or managed care on the date of service, provider information not aligning with EPS provider records, and missing provider information.
- For pharmacy encounters, **Trillium** reported the highest percentage of initially rejected encounters that had not yet been accepted at 90.7 percent, while **Vaya** reported the lowest at 10.1 percent. Across all plans, the most common reasons for rejections were due to the beneficiary not being enrolled in the benefit plan or managed care on the date of service and missing beneficiary information (e.g., residential county and eligibility coverage code).
- For other reported encounter types, **Partners** indicated that its percentage of initially rejected NEMT encounters was 99.3 percent not yet accepted. **Vaya** reported 12.8 percent of initially rejected vision encounters were not yet accepted.
- Although plans had a high percentage of encounters that were initially rejected and not yet accepted, the percentage of encounters not yet accepted was relatively low compared to all encounters the plans submitted.

### Challenges and Changes Noted by Plans

Table 3-10 below shows the internal/external challenges and upcoming changes noted by the plans in their responses (if any).

**Table 3-10—Internal and External Challenges and Upcoming Changes**

Plan	Challenges and/or Upcoming Changes	Description
<b>Alliance</b>	Internal Challenges	Delay in initial submission acceptance for a small number of encounters due to updating existing EDI validation to address noncompliant provider submissions.
	External Challenges	The DHB provided EPS documentation that disagrees with the standard EDI guidelines.
	Upcoming Changes	None noted.
<b>Partners</b>	Internal Challenges	Analyzing and incorporating the EPS BRE files into its compliance checks before submission to EPS.
	External Challenges	None noted.
	Upcoming Changes	None noted.
<b>Trillium</b>	Internal Challenges	None noted.
	External Challenges	DHB checks for referring providers on encounters where it is not required, causing provider abrasion.
	Upcoming Changes	None noted.

Plan	Challenges and/or Upcoming Changes	Description
Vaya	Internal Challenges	None noted.
	External Challenges	The EPS denial of replaced and voided encounters if a claim has different eligibility benefit plans in the EPS system. For example, the EPS will deny an encounter if it is initially submitted with Medicaid Direct eligibility but that beneficiary has moved retroactively to the TP. <b>Vaya</b> must submit separate encounters; one to void the Medicaid Direct encounter, and a second to submit the new TP encounter. This increases the administrative burden.
	Upcoming Changes	None noted.

### Key Findings: Table 3-10

- **Alliance** and **Partners** both identified internal challenges with EDI compliance checks. **Alliance** stated it had challenges with EDI validation for noncompliant providers, and **Partners** stated it had challenges with incorporation of business rules into its EDI checks. These procedural issues affected their submissions to DHB; however, each plan was actively working to address these issues.
- Plans that identified external challenges noted issues with DHB's provided documentation and processes, which required increased granularity beyond what was currently operational. **Trillium** identified that DHB checked for referring providers when not required, which led to provider abrasion. **Vaya** experienced denials stemming from retroactive eligibility, which led to administrative burden.
- The plans reported no upcoming changes at the time of this review.

### Conclusions

This IS review provides self-reported qualitative information from all plans regarding the encounter data process. Based on the TP and PIHP contracts and DHB's requirements (e.g., companion guides, EDSG), plans demonstrated their capability to collect, process, and transmit encounter data to DHB, as well as develop data review and correction processes that could promptly respond to quality issues identified by DHB.

#### *Encounter Data Sources and Systems*

All plans reported using a wide variety of systems to collect, store, and check their encounter data. Additionally, all plans reported making multiple modifications to the data to align with DHB's EDSG. For example, plans reformatted date fields received from subcontractors to align with DHB's data submission requirements and cleaned data fields to remove trailing or leading zeros or non-alphanumeric digits. Further, to align with DHB's EDSG, plans reported adding fields to the data to identify VBP or Healthy Opportunities services, or linking data to eligibility or provider files (e.g., PEF) to pull in required information.

Plans also reported robust methods to check for duplicate encounters, using a variety of fields across claim types to identify duplications. Furthermore, plans reported submitting paid and denied claims to DHB; however, one plan (**Alliance**), reported not submitting claims that did not pass internal requirements (e.g., pended claims or claims that did not have a clean claim date). All plans also reported how they submitted denied claims or partially denied claims to DHB and explained their process to submit adjustments.

#### *Payment Structure of Encounter Data*

All plans reported varied payment structures that differed between the TPs and PIHPs and claim type. TPs largely paid inpatient services through a combination of DRG and per diem payment structures, while PIHPs generally paid inpatient services through a per diem structure. For outpatient services, payment structures were generally consistent between TPs and PIHPs for each plan. For example, both **Alliance** and **Vaya** paid most outpatient services with a line-by-line payment structure for TP and PIHP services, whereas **Trillium** paid both TP and PIHP services with a percent of billed payment structure. Plans also reported following the NC Medicaid Fee Schedule for bundled services. For TPL data, plans used the DHB 834 eligibility file and other methods to collect and verify information, while zero-paid claims and capitated encounters were submitted in accordance with the EDSG.

## Encounter Data Quality Monitoring

DHB had the following SLAs to monitor encounter data accuracy, completeness, and timeliness:

- Accuracy: The number of paid encounters that passed all validation edits (WEDI SNIP levels 1–7 and state-specific validations) and were accepted by DHB compared to the total number of paid encounters submitted.
- Completeness: The paid amounts on submitted individual encounter records compared to the paid amounts reported on financial reports the plans submitted to DHB.
- Timeliness:
  - Medical: The number of accepted encounters the plans submitted within 30 calendar days from the adjudication/payment date.
  - Pharmacy: The number of accepted encounters the plans submitted within seven calendar days from the adjudication/payment date.

The quality checks either the plans or their subcontractors perform range in scope and depth; however, the quality checks aligned with DHB’s SLAs. For data collected by subcontractors, both the plans and subcontractors ensured data were submitted correctly and timely. Plans and their subcontractors used a wide range of data quality checks, including checking claim volume by submission month, EDI compliance edits, field-level completeness and validity, reconciliation with financial reports, and timeliness checks. For data collected directly by the plans, all plans except **Vaya** conducted quality checks. Like the checks performed on the subcontractor-collected data, the other three plans applied a wide array of data quality validations. **Vaya**, however, reported not performing quality checks on the data in its data warehouse once the initial development and testing were complete. Across all data types, no plans or their subcontractors reported performing MRR to evaluate the completeness and accuracy of their data. This was likely due to the resource-intensive nature of MRR.

All plans reported processes to reconcile transactions that were initially rejected due to either DHB’s EDI translator or DHB-specific edits. Although the overall percentage of rejected encounters that had not yet been submitted was small compared to all submitted encounters, the percentage of rejected encounters that had not yet been accepted remained high across all plans and encounter types. **Partners** had the highest percentage of initially rejected 837I TP encounters that were not yet accepted at 95.2 percent, while 99.3 percent of **Partners**’ rejected NEMT services were not yet accepted. Additionally, 90.7 percent of **Trillium**’s rejected pharmacy services were not yet accepted, while 78.1 percent of 837P TP rejected services and 75.4 percent of 837I PIHP rejected services were not yet accepted. Across plans and encounter types, the most common reason for rejections were related to the beneficiary not being enrolled in the benefit plan or managed care on the date of service.

## Recommendations

To improve the quality of the plans' encounter data submissions, HSAG offers the following recommendations to assist DHB and the plans in addressing opportunities for improvement.

- HSAG recommends that DHB continue its collaboration with the plans to address challenges highlighted in the plans' responses noted in Table 3-10, such as ensuring the EPS documentation agrees with EDI compliance standards.
- Although all plans reported processes to reconcile transactions that were initially rejected due to either DHB's EDI translator or DHB-specific edits, all plans reported a high percentage of encounters initially rejected that were not yet accepted. HSAG recommends that the plans strengthen their processes to ensure timely and complete resubmission of all rejected transactions.
- Although all plans expressed satisfaction with the data quality checks their subcontractors perform, plans reported not reviewing data submitted by at least one of their subcontractors prior to submission to DHB. Plans should explore the possibility of developing or enhancing monitoring reports to assess the accuracy, completeness, and/or timeliness of subcontractor-submitted claims and encounters.
- **Vaya** should consider performing additional routine quality assurance checks on data collected to confirm that the data are processed as expected and that data processing systems continue to function as intended.
- **Partners** reported not storing any data submitted by its subcontractors. HSAG recommends that **Partners** consider storing subcontractor data to support data quality assurance by ensuring accurate claims processing, facilitating data analysis, and supporting overall healthcare oversight and accountability.
- While all plans reported using methods to identify duplicate claims, **Alliance** and **Partners** did not report utilizing different fields across claim types. Both plans should consider enhancing their duplicate detection methodologies to account for claim type-specific data elements.
- **Trillium** indicated that it performs only two quality checks on claims and encounters stored in its data warehouse. HSAG recommends that **Trillium** explore developing or refining monitoring reports to more systematically assess data accuracy, completeness, and/or timeliness.

## Study Limitations

The list below displays study limitations for the reader to consider:

- Findings from the IS review were based on self-reported questionnaire responses the plans submitted to HSAG. HSAG did not validate the responses for accuracy.
- Findings from the IS review summarize responses at the time DHB and the plans completed the questionnaire. Responses may not reflect current processes DHB and the plans use to collect, process, and transmit encounter data.

## Appendix A. Blank Questionnaire for Plans

### Overview

Accurate and complete encounter data are critical to the success of a managed care program. Therefore, the North Carolina Department of Health and Human Services, Division of Health Benefits (DHB) requires its tailored plans (TPs) and prepaid inpatient health plans (PIHPs) (collectively referred to as “plans”) to submit high-quality encounter data. DHB relies on the quality of these encounter data submissions to accurately and effectively monitor and improve the program’s quality of care, generate accurate and reliable reports, develop appropriate capitated rates, and obtain complete and accurate utilization information.

During state fiscal year (SFY) 2024–2025, DHB contracted Health Services Advisory Group, Inc. (HSAG) to conduct an encounter data validation (EDV) study. In alignment with the Centers for Medicare & Medicaid Services (CMS) External Quality Review (EQR) *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP [Children’s Health Insurance Program] Managed Care Plan: An Optional EQR-Related Activity*, February 2023 (CMS EQR Protocol 5),<sup>4</sup> HSAG will conduct the following core evaluation activity for the EDV study:

- Information systems (IS) review—assessment of DHB’s and the plans’ information systems and processes. The goal of this activity is to examine the extent to which DHB’s and the plans’ IS infrastructures are likely to collect and process complete and accurate encounter data. This activity corresponds to Activity 1: Review State Requirements and Activity 2: Review the MCP’s Capability in the CMS EQR Protocol 5.

HSAG has developed the following EDV focused questionnaire to gather information regarding the plan’s information systems and data processing procedures. This IS review will enable HSAG to understand how various systems interact to determine whether such interactions have an impact on DHB’s ability to receive and maintain complete and accurate data.

HSAG will conduct the EDV study for four plans:

- **Alliance Health (Alliance)**
- **Partners Health Management (Partners)**
- **Trillium Health Resources (Trillium)**
- **Vaya Total Care (Vaya)**

---

<sup>4</sup> Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 5: Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan: An Optional EQR-Related Activity*, February 2023. Available at: <https://www.medicaid.gov/medicaid/quality-of-care/downloads/2023-eqr-protocols.pdf>. Accessed on: October 8, 2024.

## General Instructions

HSAG developed the following questionnaire customized in collaboration with DHB to gather both general information and specific procedures for data processing, personnel, and data acquisition capabilities. The questionnaire is divided into the following four domains:

**Section A:** *Encounter Data Sources and Systems*

**Section B:** *Payment Structures of Encounter Data*

**Section C:** *Encounter Data Quality Monitoring by Subcontractors*

**Section D:** *Encounter Data Quality Monitoring by Plans*

Please provide comprehensive answers to the questions in each section of the questionnaire and attach supporting documentation (e.g., policies and procedures, data layouts, data flow diagrams, sample reports, sample data, etc.), where applicable. Please note that the questionnaire responses and supporting documentation will be submitted via an online Universal Survey Tool (UST) based on questions listed in this document. HSAG will demonstrate the tool to the plans and DHB during a meeting on or before April 8, 2025.

Upon evaluating answers to the questionnaire and additional documentation, HSAG's EDV team may conduct additional follow-up with the plans via email or conference calls.

## Submission of Questionnaire and Documentation

- Plans should complete the questionnaire using the survey link that HSAG will provide on April 8, 2025.
- HSAG requests that the plans complete all questions in the questionnaire via the UST no later than **May 1, 2025**.
- Please contact Jenna Robinson via email at [JRobinson@hsag.com](mailto:JRobinson@hsag.com) for assistance regarding the questionnaire or UST.
- Please provide the descriptions for the acronyms used in your responses in the table below or spell them out when using the acronyms for the first time.

Acronym	Description
BH	Behavioral health
EDI	Electronic data interchange
NEMT	Non-emergency medical transportation



## 2024-2025 Encounter Data Validation Plan Questionnaire

### Section A: Encounter Data Sources and Systems

Plan Name	
Contact person for this section (Name and Title)	
Contact Information (Phone Number and Email)	

*Please note, if your plan uses the same data system for multiple clients or lines of business, please limit your responses to specific procedures related to the processing of DHB's claims and encounters for TP and PIHP operations. If supplemental files or supporting documents are provided, please note the filename(s) in your response.*

This section provides an overview regarding the data sources and systems for your plan's claims/encounter data.

- Using the table below and data flow diagrams (i.e., supporting documents listed in the last column), outline the path your plan's encounter data follow from the time a member receives a service(s) until the encounter is submitted to DHB and your plan processes DHB's feedback. For each item, please indicate whether the information pertains to TP only, PIHP only, or Both. If information differs based on plan type, please complete an entry from each plan type, if applicable. **Be sure to identify any subcontractors responsible for processing the data and the associated processes with the subcontractors.** *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Total number of subcontractors: Choose an item.

Plan Type	Data Source <sup>1</sup>	Data Flow	Supporting Document
TP	Paper Claims	All paper claims are received via mail. Paper claims are date stamped upon receipt and scanned with optical character recognition (OCR) software and converted to 837 files for electronic processing. The remaining process is the same as the claims in electronic format.	<insert file name>
Choose an item.	Medical		
Choose an item.	Behavioral Health (BH)		
Choose an item.	Pharmacy		

Plan Type	Data Source <sup>1</sup>	Data Flow	Supporting Document
Choose an item.	Vision		
Choose an item.	Non-Emergency Medical Transportation (NEMT)		
Choose an item.	<insert other data sources <sup>2</sup> >		
<sup>1</sup> These sources represent claims/encounter submissions from the rendering provider to your plan or subcontractor. <sup>2</sup> Examples include hearing, chiropractic, laboratory, etc.			

2. For each plan type and/or key data source (i.e., all data your plan receives that are included in the encounter data submissions to DHB), provide a description of the files received, the frequency of receipt, and the approximate percentage of claims submitted by capitated versus fee-for-service (FFS) providers. For each item, please indicate whether the information pertains to TP only, PIHP only, or Both. If information differs based on plan type, please complete an entry from each plan type, if applicable. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Plan Type	Data Source <sup>1</sup>	Description of Data Received (Including Format)	Frequency	Approximate Percentage of Claims from Capitated Providers
TP	Pharmacy	<i>We receive point of service claims submitted by retail pharmacies from our subcontractor, Express Scripts. Files are submitted using the NCPDP D.0 format.</i>	Weekly	30%
Choose an item.	Medical in 837 Professional Format		Choose an item.	
Choose an item.	Medical in 837 Institutional Format		Choose an item.	
Choose an item.	BH		Choose an item.	
Choose an item.	Pharmacy		Choose an item.	
Choose an item.	Vision		Choose an item.	
Choose an item.	NEMT		Choose an item.	

Plan Type	Data Source <sup>1</sup>	Description of Data Received (Including Format)	Frequency	Approximate Percentage of Claims from Capitated Providers
TP	Pharmacy	We receive point of service claims submitted by retail pharmacies from our subcontractor, Express Scripts. Files are submitted using the NCPDP D.0 format.	Weekly	30%
Choose an item.	<insert other data sources <sup>2</sup> >		Choose an item.	
<sup>1</sup> These sources represent claims/encounter submissions from the rendering provider to your plan or subcontractor.				
<sup>2</sup> Examples include hearing, chiropractic, laboratory, etc.				

3. For each plan type and/or key data source, provide a description of the software used to receive data, validate data, prepare outbound encounters for submission to DHB, and frequency for submission. For each item, please indicate whether the information pertains to TP only, PIHP only, or Both. If information differs based on plan type, please complete an entry from each plan type, if applicable. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Plan Type	Data Source <sup>1</sup>	Software Used to Receive Data	Software Used to Validate Data	Software Used to Generate Encounters for DHB	Frequency for Submission to DHB
TP	Paper claims	Convert to 837 format through an optical character recognition (OCR) software by <insert name>	Facets	Encounter Data Manager	Weekly
Choose an item.	Medical in 837 Professional Format				Choose an item.
Choose an item.	Medical in 837 Institutional Format				Choose an item.
Choose an item.	BH				Choose an item.
Choose an item.	Pharmacy				Choose an item.
Choose an item.	Vision				Choose an item.

Plan Type	Data Source <sup>1</sup>	Software Used to Receive Data	Software Used to Validate Data	Software Used to Generate Encounters for DHB	Frequency for Submission to DHB
TP	Paper claims	Convert to 837 format through an optical character recognition (OCR) software by <insert name>	Facets	Encounter Data Manager	Weekly
Choose an item.	NEMT				Choose an item.
Choose an item.	<insert other data sources <sup>2</sup> >				Choose an item.

<sup>1</sup> These sources represent claims/encounter submissions from the rendering provider to your plan or subcontractor.

<sup>2</sup> Examples include hearing, chiropractic, laboratory, etc.

4. For encounters submitted to DHB through 837 professional and institutional formats, please describe the software used for the Electronic Data Interchange (EDI) compliance checks and the Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) levels that are used in the EDI compliance checks. For each item, please indicate whether the information pertains to TP only, PIHP only, or Both. If information differs based on plan type, please complete an entry from each plan type, if applicable. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Plan Type	Data Source <sup>1</sup>	Software for EDI Compliance Check	WEDI SNIP Level
TP	Vision claims	EDIFECTS Product	Levels 1 and 2
Choose an item.	Medical in 837 Professional Format		
Choose an item.	Medical in 837 Institutional Format		
Choose an item.	BH		
Choose an item.	Vision		
Choose an item.	NEMT		
Choose an item.	<insert other data sources <sup>2</sup> >		

<sup>1</sup> These sources represent claims/encounter submissions from the rendering provider to your plan or subcontractor.

<sup>2</sup> Examples include hearing, chiropractic, laboratory, etc.

**End - Section A: Part 1**

5. Please specify the modifications, reformatting or changes made to the claims/encounter data to accommodate DHB's encounter data submission standards. Describe the modifications or reformatting using specific data field names and examples. For each item, please indicate whether the information pertains to TP only, PIHP only, or Both. If information differs based on plan type, please complete an entry from each plan type, if applicable. **If a subcontractor prepares the encounter data submission for your plan, please specify the modifications made by the subcontractor and additional modifications made by the plan separately.** *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Plan Type	Data Type	Field	Modification Details	Modification Made By
TP	Vision Claims	Provider ID	Zeros are added to the beginning of values in the Provider ID field to pad the results to a standard length of characters (e.g., 00003126).	Plan
Choose an item.				
Choose an item.				
Choose an item.				
Choose an item.				

6. Please specify how your plan prepares/enriches data elements that are not on the claims from providers but required by DHB. Describe the source of the data and process to create these data elements. If a subcontractor prepares the encounter data submission for your plan, please specify the modifications made by the subcontractor and additional modifications made by the plan separately. For each item, please indicate whether the information pertains to TP only, PIHP only, or Both. If information differs based on plan type, please complete an entry from each plan type, if applicable. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Plan Type	Data Type	Field	Source Data and Creation Process	Modification Made By
TP	Professional Claims	VBP Indicator	Check whether the encounter is for value-based payments (VBP) by linking with reference table via data fields variable 1, variable 2, and variable 3.	Plan
Choose an item.				
Choose an item.				
Choose an item.				

Plan Type	Data Type	Field	Source Data and Creation Process	Modification Made By
Choose an item.				

7. Describe the process to identify duplicate claims. Provide details on the fields used to identify duplicates, where in the process the duplicates are identified and how they are handled. If the process differs between TP and PIHP operations, then please provide details for both operations in separate paragraphs. *The table can be expanded if additional rows are required.*

Plan Type	Description
Choose an item.	
Choose an item.	

8. Describe the types of claims/encounters that are not submitted to DHB (e.g., paid, denied, voided, adjusted claims, or a specific service provided to members). If the type of claims/encounters not submitted to DHB differs between TP and PIHP operations, then please provide details for both operations in separate paragraphs.

Plan Type	Description
Choose an item.	
Choose an item.	

9. Describe the process to submit denied or partially denied claims/encounters to DHB. List measures taken to ensure that denied claims/encounters do not include paid service lines. If the process differs between TP and PIHP operations, then please provide details for both operations in separate paragraphs.

Plan Type	Description
Choose an item.	
Choose an item.	

10. Using the following table, describe the process to submit adjustments/replacement/void/corrections (collectively referred to as adjustments) to encounters that have previously been submitted to DHB.

If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Question	Plan Type	Response
10a. What is the process to identify encounters for which adjustments are required?	Choose an item.	
	Choose an item.	
10b. Describe the process to submit adjustments.	Choose an item.	
	Choose an item.	
10c. How long does it take from identification to re-submission for encounters needing adjustments?	Choose an item.	
	Choose an item.	
10d. If adjustments are not submitted, describe why these encounters were not submitted.	Choose an item.	
	Choose an item.	

11. The following questions address the collection, use, and submission of provider data and member enrollment data. If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Provider Data	Plan Type	
11a. Provider data collected and maintained by?	Choose an item.	<input type="checkbox"/> By the plan <input type="checkbox"/> By a subcontractor <input type="checkbox"/> Both
	Choose an item.	<input type="checkbox"/> By the plan <input type="checkbox"/> By a subcontractor <input type="checkbox"/> Both
11b. List name of subcontractor and type of provider data maintained (e.g., Subcontractor X maintains provider data for vision services)	Choose an item.	
	Choose an item.	
11c. List subcontractor's responsibilities in collecting and maintaining the data	Choose an item.	
	Choose an item.	
11d. Describe flow of provider data from collection to maintenance including processes associated with the subcontractor	Choose an item.	
	Choose an item.	
11e. Describe the process for linking provider data to claims/encounters including any	Choose an item.	

procedures for reconciling differences between data submitted on the claim/encounter and your provider data	Choose an item.	
<b>Member Enrollment data</b>	<b>Plan Type</b>	
11f. Data maintained by?	Choose an item.	<input type="checkbox"/> By the plan <input type="checkbox"/> By a subcontractor <input type="checkbox"/> Both
	Choose an item.	<input type="checkbox"/> By the plan <input type="checkbox"/> By a subcontractor <input type="checkbox"/> Both
11g. List subcontractor's responsibilities in maintaining the member enrollment data	Choose an item.	
	Choose an item.	
11h. Describe flow of member enrollment data from collection to maintenance including processes associated with the subcontractor	Choose an item.	
	Choose an item.	
11i. Describe the process for linking member enrollment data to claims/encounters including any procedures for reconciling differences between data submitted on the claim/encounter and your member enrollment data	Choose an item.	
	Choose an item.	



**Section B: Payment Structures of Encounter Data**

<b>Plan Name</b>	
<b>Contact person for this section (Name and Title)</b>	
<b>Contact Information (Phone Number and Email)</b>	

*Please note if supplemental files or supporting documents are provided, please note the filename in your response.*

- How are claims paid (e.g., percent of billed, line-by-line, case rate, etc.)? If different methods exist, please add to the table below and then list them by percentage of claim dollars for each payment type.

Payment Type	Inpatient		Outpatient		Pharmacy	
	TP	PIHP	TP	PIHP	TP	PIHP
Percent of Billed						
Line-by-line						
Per-diem						
Variable Per Diem						
Capitation						
DRG						
Negotiated (Flat) Rate						
Ingredient Cost (for Pharmacy)						
Other (Please describe)						
Other (Please describe)						
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

- Are any services submitted to the plan under a bundled-payment structures? If so, what services are submitted for a bundled-payment? For example, if delivery services are considered a bundled-payment, please specify whether encounters on both delivery and all prenatal/postpartum services are collected and submitted to DHB by your plan. If the payment structure differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

3. Describe the process for collecting coordination of benefits (COB)/third party liability (TPL) data and submitting encounters with TPL and TPL payments. Provide separate responses for different types of claims including pharmacy encounters. If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Question	Plan Type	Response
3a. How is other insurance data collected? Are your plan's subcontractors required to collect other insurance data?	Choose an item.	
	Choose an item.	
3b. How are claims processed with TPL, including the scenario when other insurance is submitted after the initial claim processing?	Choose an item.	
	Choose an item.	
3c. What source data is used to verify the accuracy of the TPL information? Where does your plan store payment information and the source data? How is TPL information populated onto encounters submitted to DHB?	Choose an item.	
	Choose an item.	
3d. What are the measures taken to ensure accuracy of the TPL payment amount?	Choose an item.	
	Choose an item.	

4. Describe the process to capture, monitor accuracy, and submit zero-pay claims to DHB. If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Question	Plan Type	Response
4a. Describe scenarios creating zero-pay amounts for your plan (e.g., full payment by TPL, denied claims/claim lines, services under capitated arrangement).	Choose an item.	
	Choose an item.	

Question	Plan Type	Response
4b. How are zero-pay claims reflected in the encounter data to DHB?	Choose an item.	
	Choose an item.	
4c. Are zero-pay claims for capitated providers processed and submitted to DHB? If so, describe how the completeness and accuracy of the claims are assessed.	Choose an item.	
	Choose an item.	

5. Describe the process for submitting payment information on capitated encounters (e.g., encounters for services paid to providers per member per month by your plan or subcontractor). If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

**Section C: Encounter Data Quality Monitoring by Subcontractors**

<b>Plan Name</b>	
<b>Contact person for this section (Name and Title)</b>	
<b>Contact Information (Phone Number and Email)</b>	

*Please note if supplemental files or supporting documents are provided, please note the filename in your response.*

This section focuses on the quality checks **performed by your plan's subcontractors** (not by your plan). Please answer the following questions for each subcontractor that submits claims/encounter data to your plan. If the quality checks differ between TP and PIHP operations, then please provide details for both operations separately. Currently, pharmacy, vision, NEMT, and BH are the potential subcontractors listed in this section. If your plan has a subcontractor that is not listed, please add a new question after Question 4 based on the questions for the subcontractor listed. To help organize the responses, this section includes some standard data quality checks in the drop-down list. The table below shows a brief description for these checks. If the checks from the drop-down list are not appropriate for your entity, please choose "Other" and then include the details in the "Description" column.

Data Quality Checks in Drop-Down List	Description
Claim Volume by Submission Month	Evaluates the number of unique claims based on the month when the claims were submitted to your entity. Please describe the specifications for the counts and any stratifications you may use.
Claim Volume per Member per Month (PMPM)	Evaluates the number of unique claims per member per month based on the month when the services occurred. Please describe the specifications for the counts and any stratifications you may use.
Field-Level Completeness	Evaluates whether there are any missing and/or extra values for a specific data element. Please provide a list of variables and specifications for the evaluation.
Field-Level Validity	Evaluates whether the values for a specific data element are valid. Please provide a list of variables and specifications for the evaluation.
Timeliness	Evaluates whether the source entity submits claims to your entity in a timely manner.
Reconciliation with Financial Reports	Evaluates whether the payment fields in the claims align with the financial reports from your entity.
EDI Compliance Edits	Evaluates whether 837 professional and 837 institutional files pass the EDI compliance edits. Please describe the Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) levels that are used in the EDI compliance checks.

Data Quality Checks in Drop-Down List	Description
Medical Record Review	Evaluates whether some of the data elements in the claims are complete and accurate when comparing to the medical records.

***Do the quality checks differ between TP and PIHP?***

☐ Yes

☐ No

1. Does your **pharmacy** subcontractor perform data quality checks and validation on the claims/encounter data before it submits to your plan?
- ☐ Yes
- ☐ No (If No, please provide an explanation why the quality checks were not performed in the box below.)
- ☐ Don't know (If you don't know, please provide an explanation in the box below.)

Click or tap here to enter text.

If Yes, list the specific checks and validation the subcontractor performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Both</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

2. Does your **vision** subcontractor perform data quality checks and validation on the claims/encounter data before it submits to your plan?
- ☐ Yes
- ☐ No (If No, please provide an explanation why the quality checks are not performed in the box below.)
- ☐ Don't know (If you don't know, please provide an explanation in the box below.)
- ☐ Our plan does not have a vision subcontractor

Click or tap here to enter text.

If Yes, list the specific checks and validation the subcontractor performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Both</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

3. Does your **NEMT** subcontractor perform data quality checks and validation on the claims/encounter data before it submits to your plan?

☐ Yes

☐ No (If No, please provide an explanation why the quality checks are not performed in the box below.)

☐ Don't know (If you don't know, please provide an explanation in the box below.)

☐ Our plan does not have a NEMT subcontractor

Click or tap here to enter text.

If Yes, list the specific checks and validation the subcontractor performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Both</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

### End - Section C: Part 1

4. Does your **BH** subcontractor perform data quality checks and validation on the claims/encounter data before it submits to your plan?
- ☐ Yes
- ☐ No (If No, please provide an explanation why the quality checks are not performed in the box below.)
- ☐ Don't know (If you don't know, please provide an explanation in the box below.)
- ☐ Our plan does not have a BH subcontractor

Click or tap here to enter text.

If Yes, list the specific checks and validation the subcontractor performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>TP</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

**SECTION D: ENCOUNTER DATA QUALITY MONITORING BY PLANS**

<b>Plan Name</b>	
<b>Contact person for this section (Name and Title)</b>	
<b>Contact Information (Phone Number and Email)</b>	

*If supplemental files or supporting documents are provided, please note the filename(s) in your response.*

This section focuses on the quality checks **performed by your plan** regarding the claims/encounter data in your plan's data warehouse, as well as claims/encounter data submitted to DHB. If the quality checks differ between TP and PIHP operations, then please provide details for both operations separately. Currently, pharmacy, vision, NEMT, and BH are the potential subcontractors listed in this section. If your plan has a subcontractor that is not listed, please add as responses to Question 6 based on the questions for the data type listed. Lastly, to help organize the responses, this section includes some standard data quality checks in the drop-down list. The table below shows a brief description for these checks. If the checks from the drop-down list are not appropriate for your plan, please choose "Other" and then include the details in the "Description" column.

Data Quality Checks in Drop-Down List	Description
Claim Volume by Submission Month	Evaluates the number of unique claims based on the month when the claims were submitted to your entity. Please describe the specifications for the counts and any stratifications you may use.
Claim Volume PMPM	Evaluates the number of unique claims per member per month based on the month when the services occurred. Please describe the specifications for the counts and any stratifications you may use.
Field-Level Completeness	Evaluates whether there are any missing and/or extra values for a specific data element. Please provide a list of variables and specifications for the evaluation.
Field-Level Validity	Evaluates whether the values for a specific data element are valid. Please provide a list of variables and specifications for the evaluation.
Timeliness	Evaluates whether the source entity submits claims to your plan in a timely manner.
Reconciliation with Financial Reports	Evaluates whether the payment fields in the claims align with the financial reports from your plan.
EDI Compliance Edits	Evaluates whether 837 professional and 837 institutional files pass the EDI compliance edits. Please describe the WEDI SNIP levels that are used in the EDI compliance checks.



Data Quality Checks in Drop-Down List	Description
Medical Record Review	Evaluates whether some of the data elements in the claims are complete and accurate when comparing to the medical records.

***Do the quality checks differ between TP and PIHP?***

☐ Yes

☐ No

1. Upon receiving claims/encounter files from your subcontractors, please use the table below to indicate the following for each subcontractor:
- Column 2: Does subcontractor submit encounter files to DHB?
  - Column 3: Does your plan store the claims/encounter files from subcontractors in your data warehouse?
  - Column 4: Does your plan perform any quality checks on the claims/encounter files from subcontractors **before** submitting them to DHB? If not, please provide an explanation why the quality checks are not performed in the second box below.
  - Column 5: Does your plan modify the claims/encounter files from subcontractors **before** submitting them to DHB?
  - Column 6: Does your plan perform any quality checks on the claims/encounter data from subcontractors **after** submitting them to DHB?

Data Type	Submits to DHB by Subcontractor	Stored by Plan	Reviewed by Plan Before Submission	Modified by Plan	Reviewed by Plan After Submission
<i>Pharmacy</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>Yes</i>
BH	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
NEMT	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
Pharmacy	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
Vision	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
Other ( <i>list and describe</i> )	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Data Type	Explanation Why Claims/Encounter Data are Not Reviewed by Plan Before Submission to DHB
<i>Pharmacy</i>	<i>Plan is satisfied with the quality checks that the subcontractor has in place.</i>
BH	
NEMT	

Data Type	Explanation Why Claims/Encounter Data are Not Reviewed by Plan Before Submission to DHB
Pharmacy	
Vision	
Other ( <i>list and describe</i> )	

2. If your plan performs quality checks on the claims/encounter data from a **pharmacy** subcontractor, please list the specific checks and validation your plan performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Both</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

### End - Section D: Part 1

3. If your plan does not have a **vision** subcontractor, please mark the check box below. If your plan performs quality checks on the claims/encounter data from a **vision** subcontractor, please list the specific checks and validation your plan performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

☐ Our plan does not have a vision subcontractor

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>TP</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

4. If your plan does not have a **NEMT** subcontractor, please mark the check box below. If your plan performs quality checks on the claims/encounter data from a **NEMT** subcontractor, please list the specific checks and validation your plan performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

☐ Our plan does not have a NEMT subcontractor

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>Both</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

5. If your plan does not have a **BH** subcontractor, please mark the check box below. If your plan performs quality checks on the claims/encounter data from a **BH** subcontractor, please list the specific checks and validation your plan performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded rows in the table are provided as an example. The table can be expanded if additional rows are required.*

☐ Our plan does not have a BH subcontractor

Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>Claim Volume PMPM</i>	<i>PIHP</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
<i>Claim Volume PMPM</i>	<i>TP</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

6. Please list the specific checks and validation **your plan** performs on the data from **other** subcontractors, indicate the data type, describe the specific checks/validation briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded rows in the table are provided as an example. The table can be expanded if additional rows are required.*

Encounter Type	Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
<i>837I</i>	<i>Claim Volume PMPM</i>	<i>PIHP</i>	<i>Calculate number of claims PMPM</i>	<i>Quarterly</i>	<i>Monitoring_2020Q1.pdf</i>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

### End - Section D: Part 2

7. Does your plan perform any quality checks on the claims/encounter data that are stored in your data warehouse but **NOT** submitted by the subcontractors?
- ☐ Yes
- ☐ No (If No, please provide an explanation why the quality checks are not performed in the box below.)
- ☐ Don't know (If you don't know, please provide an explanation in the box below.)

Click or tap here to enter text.

If Yes, please list the specific checks and validation your plan performs on the data, describe them briefly, provide the frequency of the checks/validation, and provide example reports to support the listed quality checks. *Note: You can select from the drop-down list. The grey shaded row in the table is provided as an example. The table can be expanded if additional rows are required.*

Encounter Type	Data Quality Checks	Plan Type	Description	Frequency	Supporting Documents
837I	Claim Volume PMPM	Both	Calculate number of claims PMPM	Quarterly	Monitoring 2020 Q1.pdf
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>
	Choose an item.	Choose an item.	Click or tap here to enter text.	Choose an item.	<insert file name>

8. Please describe how your plan ensures that the National Correct Coding Initiative (NCCI) edits have been applied to the encounter data submitted to DHB. If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

9. Using the table below, please identify which transaction response files are used to support your encounter data submission activities and how the responses are tracked in your data system. If the transaction response files are used to support encounter data submission activities (“YES”), describe how the data are used in the last column and whether the transaction responses are stored in your plan’s data system. If the transaction responses are not used to support encounter data submission activities (“NO”), explain the reason why in the last column and whether the transaction responses are stored in your plan’s data system. *Note: The table can be expanded if additional rows are required.* If the response files differ between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Transaction Response	Used to Support Encounter Data Submission?	Explanation of Transaction Response Use and Storage in your plan's Data System
TP	277	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>All files are stored in &lt;database/system&gt;. Initial response file that finds technical errors in data submitted; &lt;System&gt; reviews and corrects any issues such as invalid NPIs</i>
Choose an item.		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Choose an item.		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Choose an item.		<input type="checkbox"/> Yes <input type="checkbox"/> No	

10. List the number of encounters submitted, initially denied, initially denied but later accepted on resubmission, and initially denied but not accepted yet as of the date when the responses are prepared. Please stratify the counts by claim/encounter type. If the numbers differ between TP and PIHP operations, then please provide details for both operations separately.

Claim/Encounter Type	Plan Type	Submitted	Initially Denied Due to DHB's EDI Translator	Initially Denied Due to Additional DHB-Specific Edits	Initially Denied, Accepted on Resubmission	Initially Denied, Not Yet Accepted
837 Institutional	TP					
	PIHP					
837 Professional	TP					
	PIHP					
Pharmacy	TP					
	PIHP					
<Insert other data source>	TP					
	PIHP					

11. What are the top five reasons for the initial denials by DHB for each claim/encounter type? If the reasons differ between TP and PIHP operations, then please provide details for both operations separately.

Claim/Encounter	Plan Type	Reason 1	Reason 2	Reason 3	Reason 4	Reason 5
837 Institutional	Choose an item.					
837 Professional	Choose an item.					
Pharmacy	Choose an item.					
<Insert other data source>	Choose an item.					

12. Describe your plan's process for reconciling files rejected by DHB's EDI translator, including key policies and procedures for the identification, correction, and subsequent resubmission of encounters to DHB. If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

13. Describe your plan's process for reconciling transactions that fail additional state-specific edits, including key policies and procedures for the identification, correction, and subsequent resubmission of these encounters to DHB. If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

14. Describe how data in your plan's encounter data system/data warehouse are used (e.g., rate-setting, HEDIS reporting, etc.). If the data use differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

15. What internal challenges do you face in submitting encounter data to DHB? If the challenges differ between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

16. What external challenges do you face in submitting encounter data to DHB? For example, are there challenges with DHB's EDI translator or the Medicaid Management Information System (MMIS). If the challenges differ between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

17. What changes in processes or additional resources and support from DHB would you find most helpful in overcoming your challenges with successfully submitting encounter data to DHB? If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	

18. Do you have any upcoming changes to your encounter submission process that may impact your answers to the questions above? If yes, what changes are expected and when are they likely to become effective? If upcoming changes differ between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Description
Choose an item.	
Choose an item.	



### **Attestation Statement**

I hereby certify that I have reviewed the information entered on this questionnaire and that, to the best of my knowledge, the information is complete and accurate as of the date below.

---

Signature of CEO or responsible individual

---

Date

---

Print name and title

## Appendix B. Blank Questionnaire for DHB

### Overview

Accurate and complete encounter data are critical to the success of a managed care program. Therefore, the North Carolina Department of Health and Human Services, Division of Health Benefits (DHB) requires its tailored plans (TPs) and prepaid inpatient health plans (PIHPs) (collectively referred to as “plans”) to submit high-quality encounter data. DHB relies on the quality of these encounter data submissions to accurately and effectively monitor and improve the program’s quality of care, generate accurate and reliable reports, develop appropriate capitated rates, and obtain complete and accurate utilization information.

During state fiscal year (SFY) 2024–2025, DHB contracted Health Services Advisory Group, Inc. (HSAG) to conduct an encounter data validation (EDV) study. In alignment with the Centers for Medicare & Medicaid Services (CMS) External Quality Review (EQR) *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP [Children’s Health Insurance Program] Managed Care Plan: An Optional EQR-Related Activity*, February 2023 (CMS EQR Protocol 5),<sup>5</sup> HSAG will conduct the following core evaluation activity for the EDV study:

- Information systems (IS) review—assessment of DHB’s and the plans’ information systems and processes. The goal of this activity is to examine the extent to which DHB’s and the plans’ IS infrastructures are likely to collect and process complete and accurate encounter data. This activity corresponds to Activity 1: Review State Requirements and Activity 2: Review the MCP’s Capability in the CMS EQR Protocol 5.

HSAG has developed the following EDV focused questionnaire to gather information regarding DHB’s information systems and data processing procedures. This IS review will enable HSAG to understand how various systems interact to determine whether such interactions have an impact on DHB’s ability to receive and maintain complete and accurate data.

HSAG will conduct the EDV study for four plans:

- **Alliance Health (Alliance)**
- **Partners Health Management (Partners)**
- **Trillium Health Resources (Trillium)**
- **Vaya Total Care (Vaya)**

---

<sup>5</sup> Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 5: Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan: An Optional EQR-Related Activity*, February 2023. Available at: <https://www.medicaid.gov/medicaid/quality-of-care/downloads/2023-eqr-protocols.pdf>. Accessed on: October 8, 2024.

## General Instructions

HSAG developed the following questionnaire customized in collaboration with DHB to gather both general information and specific procedures for data processing, personnel, and data acquisition capabilities. The questionnaire is divided into the following four domains:

**Section A:** *Encounter Data Sources and Systems*

**Section B:** *Data Exchange Policies and Procedures*

**Section C:** *Management of Encounter Data: Collection, Storage, and Processing*

**Section D:** *Encounter Data Quality Monitoring and Reporting*

Please provide comprehensive answers to the questions in each section of the questionnaire and attach supporting documentation (e.g., policies and procedures, data layouts, data flow diagrams, sample reports, sample data, etc.), where applicable. Please note that the questionnaire responses and supporting documentation will be submitted via an online Universal Survey Tool (UST) based on questions listed in this document. HSAG will demonstrate the tool to the plans and DHB during a meeting on or before April 8, 2025.

Upon evaluating answers to the questionnaire and additional documentation, HSAG's EDV team may conduct additional follow-up with DHB via email or conference calls.

## Submission of Questionnaire and Documentation

- DHB should complete the questionnaire using the survey link that HSAG will provide on April 8, 2025.
- HSAG requests that DHB complete all questions in the questionnaire via the UST no later than **May 1, 2025**.
- Please contact Jenna Robinson via e-mail at [JRobinson@hsag.com](mailto:JRobinson@hsag.com) for assistance regarding the questionnaire or UST.
- Please provide the descriptions for the acronyms used in your responses in the table below or spell them out when using the acronyms for the first time.

Acronym	Description
BH	Behavioral health
EDI	Electronic data interchange
NEMT	Non-emergency medical transportation

## 2024-2025 Encounter Data Validation DHB Questionnaire

### Section A: Encounter Data Sources and Systems

Contact person for this section (Name and Title)	
Contact Information (Phone Number and Email)	

***Please note if supplemental files or supporting documents are provided, please note the filename(s) in your response. In the case of file(s)/document(s) that have already been submitted to HSAG, please provide the filename(s) that are applicable to the question. It is not required to resubmit the file(s).***

- Describe the process flows and system architecture used to import, process, and store encounter data submitted by the plans. Please include any supporting documentation available including, but not limited to, information system schemas, processing diagrams, and file/table layouts. If the process differs by encounter type (e.g., medical, vision, pharmacy), provide separate updates for each plan type, encounter type and scenario. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Plan Type	Claim Type	Process Flow	Supporting Document
TP	837 Professional	After plans upload 837 professional files to the SFTP site, DHB downloads them daily and then passes them through the EDI translator for compliance checks and generates X12 999 response files to the plans. Encounters passing the EDI compliance checks are saved in the MMIS and then go through additional DHB edits. Any records failing the edits are flagged with a pending status in the data warehouse and also saved in the response files for the plans to submit corrections.	Encounter_Process.docx
Choose an item.	837 Professional		
Choose an item.	837 Institutional		
Choose an item.	Pharmacy		
Choose an item.	<insert claim type>		

- For each plan type and/or key data source, provide a description of the encounters received from each plan (including its subcontractors, if the subcontractors submit data files directly to DHB), and the frequency of receipt. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*

Does the description of data received, and frequency differ between TP and PIHP?

☐ Yes

☐ No

Plan Name (Acronym)	Data Source <sup>1</sup>	Description of Data Received	Frequency
<i>Plan A</i>	<i>Pharmacy</i>	<i>Files are submitted using the NCPDP D.0 format.</i>	<i>Weekly</i>
Alliance	Medical in 837 Professional Format		Choose an item.
	Medical in 837 Institutional Format		Choose an item.
	Behavioral Health (BH)		Choose an item.
	Non-Emergency Medical Transportation (NEMT)		Choose an item.
	Pharmacy		Choose an item.
	Vision		Choose an item.
	Other (list and describe <sup>2</sup> )		Choose an item.
Partners	Medical in 837 Professional Format		Choose an item.
	Medical in 837 Institutional Format		Choose an item.
	BH		Choose an item.
	NEMT		Choose an item.
	Pharmacy		Choose an item.
	Vision		Choose an item.
	Other (list and describe <sup>2</sup> )		Choose an item.
Trillium	Medical in 837 Professional Format		Choose an item.
	Medical in 837 Institutional Format		Choose an item.
	BH		Choose an item.
	NEMT		Choose an item.
	Pharmacy		Choose an item.
	Vision		Choose an item.

Plan Name (Acronym)	Data Source <sup>1</sup>	Description of Data Received	Frequency
	Other ( <i>list and describe</i> <sup>2</sup> )		Choose an item.
Vaya	Medical in 837 Professional Format		Choose an item.
	Medical in 837 Institutional Format		Choose an item.
	BH		Choose an item.
	NEMT		Choose an item.
	Pharmacy		Choose an item.
	Vision		Choose an item.
	Other ( <i>list and describe</i> <sup>2</sup> )		Choose an item.
<sup>1</sup> These sources represent encounter submissions from the plans including their subcontractors, if any. If the subcontractors submit data files directly to DHB, separate rows should be added for the subcontractors. <sup>2</sup> Examples include hearing, chiropractic, laboratory, etc.			

3. Using the table below, list and describe the function and role of any organizational units responsible for processing and monitoring encounters. *Note: The table can be expanded if additional rows are required.*

Department	Function/ Role	# of Staff
1		
2		
3		
4		
5		

4. Describe all system/processing edits conducted on incoming encounters prior to accepting/loading the data into DHB's final database for DHB's end-users. For example, please provide details on the encounter data interchange (EDI) compliance edits and the state-specific edits. If the process differs between TP and PIHP operations, then please provide details for both operations in separate paragraphs. *The table can be expanded if additional rows are required.*

Plan Type	Description
Choose an item.	
Choose an item.	

5. How does DHB process data exceptions? For example, when an encounter is not in a valid format, contains invalid values, or includes erroneous field logic, describe the processes (manual or automatic) used to process the submission. If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Plan Type	Description
Choose an item.	
Choose an item.	

6. Does DHB provide any type of response file or feedback to the plans submitting the encounters? If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

- ☐ Yes (If yes, please describe the process used to provide feedback to the plans including any process flows and report layouts.)
- ☐ No

Plan Type	Description
Choose an item.	
Choose an item.	

7. Please describe the process used by the plans to resubmit updated, modified, or corrected encounters. Provide any documentation or policies and procedures related to the resubmission of encounter files or records. If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required*

Question	Plan Type	Response
7a. How are updated records flagged in DHB's system?	Choose an item.	
	Choose an item.	
7b. Are the original encounters stored in the encounter data system or deleted?	Choose an item.	
	Choose an item.	
7c. Provide details on how replacement transactions are processed when target transaction is in active failed validation status.	Choose an item.	
	Choose an item.	

8. The following questions address the collection, use, and maintenance of provider data and member enrollment data. If the collection, use, and maintenance differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Provider Data	Plan Type	Response
8a. Outline the path DHB's Medicaid provider data follow from collection to maintenance.	Choose an item.	
	Choose an item.	
8b. Describe DHB's procedures for overseeing and ensuring the completeness of provider data.	Choose an item.	
	Choose an item.	
8c. Describe DHB's procedures for overseeing and ensuring the accuracy of provider data.	Choose an item.	
	Choose an item.	
8d. Describe the process for cross-checking encounters with provider data (e.g., list any procedures for reconciling differences between provider information submitted on the encounter and DHB's provider data).	Choose an item.	
	Choose an item.	
8e. Describe how DHB uses provider data submitted by the plans to conduct evaluations on the encounter data, if applicable.	Choose an item.	
	Choose an item.	
8f. Outline the path DHB's Medicaid enrollment data follow from collection to maintenance.	Choose an item.	
	Choose an item.	
8g. Describe DHB's procedures for overseeing and ensuring the completeness of enrollment data.	Choose an item.	
	Choose an item.	
8h. Describe DHB's procedures for overseeing and ensuring the accuracy of enrollment data.	Choose an item.	
	Choose an item.	
8i. How often is Medicaid enrollment information updated for DHB and the plans?	Choose an item.	
	Choose an item.	
8j. Describe the process for crosschecking encounters with enrollment data (e.g., list any procedures for reconciling differences between member information submitted on the encounter and DHB's member enrollment data).	Choose an item.	
	Choose an item.	



Section B: Data Exchange Policies and Procedures

Contact person for this section (Name and Title)	
Contact Information (Phone Number and Email)	

Please note if supplemental files or supporting documents are provided, please note the filename(s) in your response. In the case of file(s)/document(s) that have already been submitted to HSAG, please provide the filename(s) that are applicable to the question. It is not required to resubmit the file(s).

1. Please describe the data exchange process between the plans and DHB. Include details outlining the organizational and operational policies and procedures related to the plans’ encounter data submissions. Provide copies of all policies and procedures, manuals, file specifications, etc., that outline the procedures that govern the transmission of data between the plans and DHB. If the process differs between TP and PIHP operations, then please provide details for both operations separately. The table can be expanded if additional rows are required.

Plan Type	Description
Choose an item.	
Choose an item.	

2. Are Medicaid encounters audited regularly? If the process differs between TP and PIHP operations, then please provide details for both operations separately. The table can be expanded if additional rows are required.

- ☐ Yes (If yes, please provide DHB’s policy regarding Medicaid encounter audits and the audit frequency.)
- ☐ No

Plan Type	Description
Choose an item.	
Choose an item.	

3. Describe the process DHB has in place to ensure that updates to DHB’s requirements for data submission are implemented and communicated to each plan. Please provide any documentation, if available. If the process differs between TP and PIHP operations, then please provide details for both operations separately. The table can be expanded if additional rows are required.

Plan Type	Description
Choose an item.	
Choose an item.	

4. Describe the testing policies and processes DHB has in place when plans have any major changes affecting the encounter data (e.g., a new subcontractor or a new software). Please provide any documentation, if available, to describe the testing process from the time when the plan notifies DHB of the change to the time when DHB approves the plan to submit the encounter data to the production environment. If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Plan Type	Description
Choose an item.	
Choose an item.	

5. Describe how information systems failure affects encounters and the measures taken to prevent failure. If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Question	Plan Type	Response
5a. Describe how the loss of Medicaid encounters and other related data is prevented when systems fail.	Choose an item.	
	Choose an item.	
5b. How frequently are system back-ups performed?	Choose an item.	
	Choose an item.	
5c. How are the back-ups tested to make sure the back-ups are functional?	Choose an item.	
	Choose an item.	
5d. How often are back-ups tested for functionality?	Choose an item.	
	Choose an item.	
5e. How is Medicaid data corruption prevented when there is a system failure or program error?	Choose an item.	
	Choose an item.	
5f. Describe the controls used to ensure all data entered in the system are fully accounted for (e.g., batch control sheets)?	Choose an item.	
	Choose an item.	

**Section C: Management of Encounter Data: Collection, Storage, and Processing**

Contact person for this section (Name and Title)	
Contact Information (Phone Number and E-mail)	

*Please note if supplemental files or supporting documents are provided, please note the filename(s) in your response. In the case of file(s)/document(s) that have already been submitted to HSAG, please provide the filename(s) that are applicable to the question. It is not required to resubmit the file(s).*

6. Please attach a flowchart outlining the structure of your complete management information systems. Provide any documentation regarding data integration policies and procedures. If the structure differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Plan Type	Description
Choose an item.	
Choose an item.	

7. For each database described in Question 1, please highlight all internal and external data inputs and processes. Identify any processes in place that modify the data as it moves from one database to another. If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Input Data	Output Data	Processes that Modify Data

8. Describe the procedure for consolidating Medicaid claims/encounter, member, and provider data for reporting (whether it is a relational database or file extracts). If the procedure differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Question	Plan Type	Response
3a. How many different data sources are merged to create reports?	Choose an item.	
	Choose an item.	

Question	Plan Type	Response
3b. What control processes are in place to ensure data merges are accurate and complete?	Choose an item.	
	Choose an item.	
3c. What control processes are in place to ensure that no extraneous data are captured (e.g., lack of specificity in patient identifiers may lead to inclusion of non-eligible members or double counting)?	Choose an item.	
	Choose an item.	

9. Describe the algorithms used to check the reasonableness of data integrated for purposes of reporting or creating data marts. If the algorithm differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Plan Type	Description
Choose an item.	
Choose an item.	

10. Do your current system documentation and file layouts clearly delineate derived and non-derived data fields? If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

- ☐ Yes (If yes, please describe the fields that are derived and the point in the encounter data process at which they are created. *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.*)
- ☐ No

Plan Type	Derived Field	Point in Process When Field is Calculated	Algorithm for Calculating the Field
<i>Both</i>	<i>Final_Ind indicating final adjudicated encounters</i>	<i>Created when applying DHB-specific edits</i>	<i>The most recently submitted records based on the unique claim identifier from plans</i>
Choose an item.			
Choose an item.			
Choose an item.			

11. Describe the policies and procedures used to identify duplicate or missing records in the plans' regular encounter submissions. If the policies and procedures used differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Question	Plan Type	Response
6a. List policies and procedures used to identify duplicates.	Choose an item.	
	Choose an item.	
6b. When duplicates are identified, how are the affected records processed and what information is returned to the plans?	Choose an item.	
	Choose an item.	
6c. List policies and procedures used to identify missing records.	Choose an item.	
	Choose an item.	
6d. When missing records are identified, what information is returned to the plans?	Choose an item.	
	Choose an item.	

12. During the processing of the plans' encounter data submissions, describe the modifications or reformatting using specific data field names and specific examples (e.g., zeros are added to the beginning of values in any specific field to pad the results to a length of a specific number of characters). *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.* If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Field Name	Modifications/ Reformatting (include examples)	Encounter Types Affected (e.g., All, Pharmacy, Medical)
PIHP	Rendering Provider NPI	When the rendering provider NPI is missing, fill in with billing provider NPI.	837P
Choose an item.			
Choose an item.			
Choose an item.			

13. Explain the code and/or field mapping processes performed during data processing and provide reference table(s) and/or source of the reference table(s), as appropriate. How often are each of the reference table(s) updated? Monthly, quarterly, annually, never, etc.? *Note: The first row of the table is provided as an example. The table can be expanded if additional rows are required.* If the process differs between TP and PIHP operations, then please provide details for both operations separately.

Plan Type	Field	Description of Mapping	Source of Reference Table	Frequency of Updating Reference Table
<i>Both</i>	<i>Rendering Provider NPI</i>	<i>Map to reference table</i>	<i>Provider enrollment file</i>	<i>Quarterly</i>
Choose an item.				
Choose an item.				
Choose an item.				

14. Describe the documentation used to train staff within DHB regarding DHB's information systems and encounter data processing protocols. If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Plan Type	Description
Choose an item.	
Choose an item.	

**Section D: Encounter Data Quality Monitoring and Reporting**

Contact person for this section (Name and Title)	
Contact Information (Phone Number and Email)	

*Please note if supplemental files or supporting documents are provided, please note the filename(s) in your response. In the case of file(s)/document(s) that have already been submitted to HSAG, please provide the filename(s) that are applicable to the question. It is not required to resubmit the file(s).*

- Describe how DHB monitors encounter data submitted by the plans for completeness, accuracy, and timeliness. Please include metrics in place including defined error thresholds and standards. If regular reports are used, submit a recent report example. If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Measure	Plan Type	Description	Metrics
Accuracy	Choose an item.		
	Choose an item.		
Completeness	Choose an item.		
	Choose an item.		
Timeliness	Choose an item.		
	Choose an item.		

- Does DHB have performance standards, beyond what is described in the plan contract requirements, in place regarding the submission, accuracy, and timeliness of encounter data? If the performance standards differ between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*
  - ☐ Yes (If yes, provide documentation of the performance standards and describe how the performance standards are communicated to the plans.)
  - ☐ No

Plan Type	Description
Choose an item.	
Choose an item.	

3. Are the plans required to submit reports on encounter data submission activities (e.g., submission statistics) to DHB? If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*
- ☐ Yes (If yes, please describe the reporting process and submit a recent example of these reports for each plan and other applicable documents.)
- ☐ No

Plan Type	Description
Choose an item.	
Choose an item.	

4. Does DHB use a specific format to provide feedback to the plans on their submissions? If the format differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*
- ☐ Yes (If yes, please describe the files used to provide feedback to the plans.)
- ☐ No

Plan Type	Description
Choose an item.	
Choose an item.	

5. What is the average percentage of encounters (by plan) submitted to DHB that get rejected by DHB? *Note: The table can be expanded if additional columns are required.* If the average percentage differs between TP and PIHP operations, then please provide details for both operations separately.

Plan	Plan Type	Professional	Institutional	Pharmacy
Alliance	Choose an item.			
	Choose an item.			
Partners	Choose an item.			
	Choose an item.			
Trillium	Choose an item.			
	Choose an item.			
Vaya	Choose an item.			
	Choose an item.			



6. Describe how data in DHB's encounter data system/data warehouse are used (e.g., rate-setting, HEDIS reporting, etc.). If the way data are used differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Plan Type	Description
Choose an item.	
Choose an item.	

7. Does DHB collect capitated encounters (e.g., encounters submitted by the plans' capitated providers/provider groups) from its plans? If the process differs between TP and PIHP operations, then please provide details for both operations separately. *The table can be expanded if additional rows are required.*

Question	Plan Type	Response
7a. What are DHB's requirements for submitting pricing information on capitated encounters?	Choose an item.	
	Choose an item.	
7b. Does DHB monitor capitated encounters for unallowable services? If YES, describe the type of reporting that is available.	Choose an item.	
	Choose an item.	
7c. If NO, does DHB maintain a list of allowable/unallowable services? If DHB maintains a list of allowable/unallowable services, please provide supporting document(s).	Choose an item.	
	Choose an item.	

## Appendix C. Results for Alliance Health

This section provides the information systems (IS) review results for **Alliance Health** (**Alliance**) for the state fiscal year (SFY) SFY 2024–2025 encounter data validation (EDV) activity.

### Methodology

The IS review sought to define how each participant in the encounter data process collects and processes encounter data such that the data flow from the plans to North Carolina Department of Health and Human Services, Division of Health Benefits (DHB) is understood. The IS review is key to understanding whether the IS infrastructures are likely to produce complete and accurate encounter data. To ensure the collection of critical information, Health Services Advisory Group, Inc. (HSAG) employed a three-stage review process that includes a document review, development and fielding of a customized encounter data assessment, and follow-up with key staff members.

### Information Systems Review Results

Based on the questionnaire responses received from **Alliance**, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

### Conclusions

Table C-1 summarizes findings from the IS review.

**Table C-1—Information Systems Review Key Findings**

Analysis	Key Findings
<b>Encounter Data Sources and Systems</b>	<ul style="list-style-type: none"><li>• <b>Alliance</b> reported using a wide range of checks for the Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) levels for the electronic data interchange (EDI) compliance checks. For its Tailored Plan (TP), <b>Alliance</b> ranged from levels 1–3 for 837 Professional (837P), 837 Institutional (837I), and behavioral health (BH) encounters, to levels 1–7 for durable medical equipment (DME) encounters. For its Prepaid Inpatient Health Plan (PIHP), <b>Alliance</b> used levels 1–3 for its BH encounters.</li><li>• <b>Alliance</b> and its subcontractors reported making modifications to the data to align with DHB’s encounter data submission guidelines (EDSG).</li><li>• <b>Alliance</b> reported methods to identify duplicate claims; however, it did not report on utilizing different fields across claim types.</li></ul>

Analysis	Key Findings
<b>Payment Structure of Encounter Data</b>	<ul style="list-style-type: none"> <li><b>Alliance</b> reported a wide range of pricing methodologies that varied by encounter type. For inpatient services, the predominant pricing methodology was per diem for both TP and PIHP services, while for outpatient services, the predominant pricing methodology was line-by-line for both TP and PIHP services. For pharmacy services, ingredient cost was the predominant pricing methodology.</li> </ul>
<b>Encounter Data Quality Monitoring</b>	<ul style="list-style-type: none"> <li><b>Alliance</b> and/or its subcontractors performed a wide array of quality checks on the data its subcontractors collect, including field-level completeness and timeliness checks.</li> <li><b>Alliance</b> performed a wide array of quality checks on the data it collects, including field-level validity and timeliness checks.</li> </ul>

Based on the IS review results for **Alliance**, HSAG identified the following areas of strength and opportunities for improvement.

### Strengths

**Strength #1:** **Alliance** demonstrated its capability to collect, process, and transmit encounter data to DHB, as well as develop data review and correction processes that can promptly respond to quality issues DHB identified.

### Opportunities for Improvement

**Weakness #1:** **Alliance** reported that it was satisfied with the data quality checks its subcontractors performed and did not conduct additional reviews prior to submission to DHB for its pharmacy, vision, and DME subcontractors. **Alliance** should explore the possibility of constructing or improving monitoring reports to assess the accuracy, completeness, and/or timeliness of encounter data submitted by these subcontractors.

**Weakness #2:** Although **Alliance** had processes in place to reconcile transactions that were initially rejected due to either DHB's EDI translator or DHB-specific edits, **Alliance** reported a high percentage of encounters remained unaccepted after initial rejection. **Alliance** should strengthen its efforts to ensure that all rejected transactions are accurately corrected and resubmitted in a timely manner.

**Weakness #3:** **Alliance** did not demonstrate the use of claim type-specific processes to detect duplicated encounters prior to submitting data to DHB. **Alliance** should consider enhancing its duplicate detection approach by incorporating data fields tailored to each encounter type.

## Appendix D. Results for Partners Health Management

This section provides the information systems (IS) review results for **Partners Health Management (Partners)** for the state fiscal year (SFY) SFY 2024–2025 encounter data validation (EDV) activity.

### Methodology

The IS review sought to define how each participant in the encounter data process collects and processes encounter data such that the data flow from the plans to North Carolina Department of Health and Human Services, Division of Health Benefits (DHB) is understood. The IS review is key to understanding whether the IS infrastructures are likely to produce complete and accurate encounter data. To ensure the collection of critical information, Health Services Advisory Group, Inc. (HSAG) employed a three-stage review process that includes a document review, development and fielding of a customized encounter data assessment, and follow-up with key staff members.

### Information Systems Review Results

Based on the questionnaire responses received from **Partners**, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

### Conclusions

Table D-1 summarizes findings from the IS review.

**Table D-1—Information Systems Review Key Findings**

Analysis	Key Findings
<b>Encounter Data Sources and Systems</b>	<ul style="list-style-type: none"><li><b>Partners</b> reported using a wide range of checks for the Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) levels for the electronic data interchange (EDI) compliance checks. For its Tailored Plan (TP), <b>Partners</b> ranged from levels 1–2 for 837 Professional (837P) encounters, to levels 1–5 for 837 Institutional (837I), vision, non-emergency medical transportation (NEMT), value-based payments (VBPs), and paper claims. For its Prepaid Inpatient Health Plan (PIHP), <b>Partners</b> used levels 1–4 for its behavioral health (BH) encounters.</li><li><b>Partners</b> and its subcontractors reported making modifications to the data to align with DHB’s encounter data submission guidelines (EDSG).</li><li><b>Partners</b> reported methods to identify duplicate claims; however, it did not report on utilizing different fields across claim types.</li></ul>

Analysis	Key Findings
<b>Payment Structure of Encounter Data</b>	<ul style="list-style-type: none"> <li><b>Partners</b> reported a wide range of pricing methodologies that varied by encounter type and plan type. For inpatient services, the predominant pricing methodologies were DRG for TP services and per diem for PIHP services, while for outpatient services, the predominant pricing methodologies were percent of billed and ratio-to-cost charges for TP services and ratio-to-cost charges for PIHP services. For pharmacy services, percent of billed was the predominant pricing methodology.</li> </ul>
<b>Encounter Data Quality Monitoring</b>	<ul style="list-style-type: none"> <li><b>Partners</b> and/or its subcontractors performed a wide array of quality checks on the data its subcontractors collect, including field-level validity and timeliness checks.</li> <li><b>Partners</b> performed a wide array of quality checks on the data it collects, including field-level completeness and validity checks.</li> </ul>

Based on the IS review results for **Partners**, HSAG identified the following areas of strength and opportunities for improvement.

### Strengths

**Strength #1: Partners** demonstrated its capability to collect, process, and transmit encounter data to DHB, as well as develop data review and correction processes that can promptly respond to quality issues DHB identified.

### Opportunities for Improvement

**Weakness #1: Partners** indicated that it did not store any of its subcontractor data. To enhance oversight and ensure accessibility for quality review and operational purposes, **Partners** should consider storing its subcontractor encounter data within its claims systems.

**Weakness #2: Partners** reported that it was satisfied with the data quality checks its subcontractors performed and did not conduct additional reviews prior to submission to DHB for its pharmacy, vision, and NEMT subcontractors. **Partners** should explore the possibility of constructing or improving monitoring reports to assess the accuracy, completeness, and/or timeliness of encounter data submitted by these subcontractors.

**Weakness #3:** Although **Partners** had processes in place to reconcile transactions that were initially rejected due to either DHB's EDI translator or DHB-specific edits, **Partners** reported a high percentage of encounters remained unaccepted after initial rejection. **Partners** should strengthen its efforts to ensure that all rejected transactions are accurately corrected and resubmitted in a timely manner.

**Weakness #4: Partners** did not demonstrate the use of claim type-specific processes to detect duplicated encounters prior to submitting data to DHB. **Partners** should consider enhancing its duplicate detection approach by incorporating data fields tailored to each encounter type.

## Appendix E. Results for Trillium Health Resources

This section provides the information systems (IS) review results for **Trillium Health Resources (Trillium)** for the state fiscal year (SFY) SFY 2024–2025 encounter data validation (EDV) activity.

### Methodology

The IS review sought to define how each participant in the encounter data process collects and processes encounter data such that the data flow from the plans to North Carolina Department of Health and Human Services, Division of Health Benefits (DHB) is understood. The IS review is key to understanding whether the IS infrastructures are likely to produce complete and accurate encounter data. To ensure the collection of critical information, Health Services Advisory Group, Inc. (HSAG) employed a three-stage review process that includes a document review, development and fielding of a customized encounter data assessment, and follow-up with key staff members.

### Information Systems Review Results

Based on the questionnaire responses received from **Trillium**, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

### Conclusions

Table E-1 summarizes findings from the IS review.

**Table E-1—Information Systems Review Key Findings**

Analysis	Key Findings
<b>Encounter Data Sources and Systems</b>	<ul style="list-style-type: none"><li>• <b>Trillium</b> reported using a wide range of checks for the Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) levels for the electronic data interchange (EDI) compliance checks. For its Tailored Plan (TP), <b>Trillium</b> ranged from levels 1–5 for 837 Professional (837P), 837 Institutional (837I), vision, non-emergency medical transportation (NEMT), value-based payments (VBPs), and paper claims, to levels 1–7 for its behavioral health (BH) encounters. For its Prepaid Inpatient Health Plan (PIHP), <b>Trillium</b> used levels 1–7 for its BH encounters.</li><li>• <b>Trillium</b> and its subcontractors reported making modifications to the data to align with DHB’s encounter data submission guidelines (EDSG).</li><li>• <b>Trillium</b> reported methods to identify duplicate claims, utilizing different fields across claim types.</li></ul>

Analysis	Key Findings
<b>Payment Structure of Encounter Data</b>	<ul style="list-style-type: none"> <li><b>Trillium</b> reported a single pricing methodology that varied by encounter type: DRG for inpatient TP services, per diem for inpatient PIHP services, percent of billed for outpatient TP and PIHP services, and state fee schedule rules for pharmacy services.</li> </ul>
<b>Encounter Data Quality Monitoring</b>	<ul style="list-style-type: none"> <li><b>Trillium</b> and/or its subcontractors performed a wide array of quality checks on the data its subcontractors collect, including claim volume by submission month and EDI compliance edits checks.</li> <li><b>Trillium</b> performed two quality checks on the data it collects, including field-level completeness and validity checks.</li> </ul>

Based on the IS review results for **Trillium**, HSAG identified the following areas of strength and opportunities for improvement.

### Strengths

**Strength #1: Trillium** demonstrated its capability to collect, process, and transmit encounter data to DHB, as well as develop data review and correction processes that can promptly respond to quality issues DHB identified.

### Opportunities for Improvement

**Weakness #1: Trillium** reported that it was satisfied with the data quality checks its subcontractors performed and did not conduct additional reviews prior to submission to DHB for its pharmacy, vision, and NEMT subcontractors. **Trillium** should explore the possibility of constructing or improving monitoring reports to assess the accuracy, completeness, and/or timeliness of encounter data submitted by these subcontractors.

**Weakness #2:** Although **Trillium** had processes in place to reconcile transactions that were initially rejected due to either DHB's EDI translator or DHB-specific edits, **Trillium** reported a high percentage of encounters remained unaccepted after initial rejection. **Trillium** should strengthen its efforts to ensure that all rejected transactions are accurately corrected and resubmitted in a timely manner.

**Weakness #3: Trillium** reported conducting only two quality checks for claims and encounters stored in its data warehouses. To improve internal oversight, **Trillium** should consider expanding its quality monitoring efforts through the development of additional reports assessing data accuracy, completeness, and/or timeliness of these claims/encounters.

## Appendix F. Results for Vaya Health

This section provides the information systems (IS) review results for **Vaya Health (Vaya)** for the state fiscal year (SFY) SFY 2024–2025 encounter data validation (EDV) activity.

### Methodology

The IS review sought to define how each participant in the encounter data process collects and processes encounter data such that the data flow from the plans to North Carolina Department of Health and Human Services, Division of Health Benefits (DHB) is understood. The IS review is key to understanding whether the IS infrastructures are likely to produce complete and accurate encounter data. To ensure the collection of critical information, Health Services Advisory Group, Inc. (HSAG) employed a three-stage review process that includes a document review, development and fielding of a customized encounter data assessment, and follow-up with key staff members.

### Information Systems Review Results

Based on the questionnaire responses received from **Vaya**, HSAG identified the following areas of strength and opportunities for improvement. Along with each opportunity for improvement, HSAG has also provided a recommendation to help target improvement efforts.

### Conclusions

Table F-1 summarizes findings from the IS review.

**Table F-1—Information Systems Review Key Findings**

Analysis	Key Findings
<b>Encounter Data Sources and Systems</b>	<ul style="list-style-type: none"><li><b>Vaya</b> reported using a wide range of checks for the Workgroup for Electronic Data Interchange Strategic National Implementation Process (WEDI SNIP) levels for the electronic encounter interchange (EDI) compliance checks. For its Tailored Plan (TP), <b>Vaya</b> ranged from level 3 for vision encounters to levels 1–5 for 837 Professional (837P), 837 Institutional (837I), behavioral health (BH), non-emergency medical transportation (NEMT), paper claims, and portal claims. For its Prepaid Inpatient Health Plan (PIHP), <b>Vaya</b> used levels 1–5 for its 837P, 837I, BH, paper claims, and portal claims.</li><li><b>Vaya</b> and its subcontractors reported making modifications to the data to align with DHB’s encounter data submission guidelines (EDSG).</li><li><b>Vaya</b> reported methods to identify duplicate claims, utilizing different fields across claim types.</li></ul>



Analysis	Key Findings
<b>Payment Structure of Encounter Data</b>	<ul style="list-style-type: none"> <li><b>Vaya</b> reported a wide range of pricing methodologies that varied by encounter type. For inpatient services, the predominant pricing methodology was per diem for both TP and PIHP services, while for outpatient services, the predominant pricing methodology was line-by-line for both TP and PIHP services. For pharmacy services, ingredient cost was the predominant pricing methodology.</li> </ul>
<b>Encounter Data Quality Monitoring</b>	<ul style="list-style-type: none"> <li><b>Vaya</b> and/or its subcontractors performed a wide array of quality checks on the data its subcontractors collect, including field-level completeness and validity checks.</li> <li><b>Vaya</b> reported not performing quality checks on data stored in the data warehouse once the initial development and testing are complete.</li> </ul>

Based on the IS review results for **Vaya**, HSAG identified the following areas of strength and opportunities for improvement.

### Strengths

**Strength #1:** **Vaya** demonstrated its capability to collect, process, and transmit encounter data to DHB, as well as develop data review and correction processes that can promptly respond to quality issues DHB identified.

### Opportunities for Improvement

**Weakness #1:** **Vaya** modified NEMT encounters received from its subcontractor before submitting them to DHB. **Vaya** should collaborate with DHB to confirm whether these modifications require communication back to the subcontractor to ensure alignment with contractual and data integrity expectations.

**Weakness #2:** **Vaya** reported that it was satisfied with the data quality checks its subcontractors performed and did not conduct additional reviews prior to submission to DHB for its pharmacy and vision subcontractors. **Vaya** should explore the possibility of constructing or improving monitoring reports to assess the accuracy, completeness, and/or timeliness of encounter data submitted by these subcontractors.

**Weakness #3:** Although **Vaya** had processes in place to reconcile transactions that were initially rejected due to either DHB's EDI translator or DHB-specific edits, **Vaya** reported a high percentage of encounters remained unaccepted after initial rejection. **Vaya** should strengthen its efforts to ensure that all rejected transactions are accurately corrected and resubmitted in a timely manner.