Key Takeaways

- Identify the key fields used in linking
- Consistent reporting of key fields
- Monitor results and address linking issues
- NCCI uses for your company's linked data
- Understand multiple data comparisons

Chapter 1: Overview

What Is Data Linking?

The use of common data elements to connect policies and claims across and within the various data types.

Data Linking Example

Simple example: Policy Data for Policy Number WC1234 can be linked to Unit Statistical Data with the same linking fields.
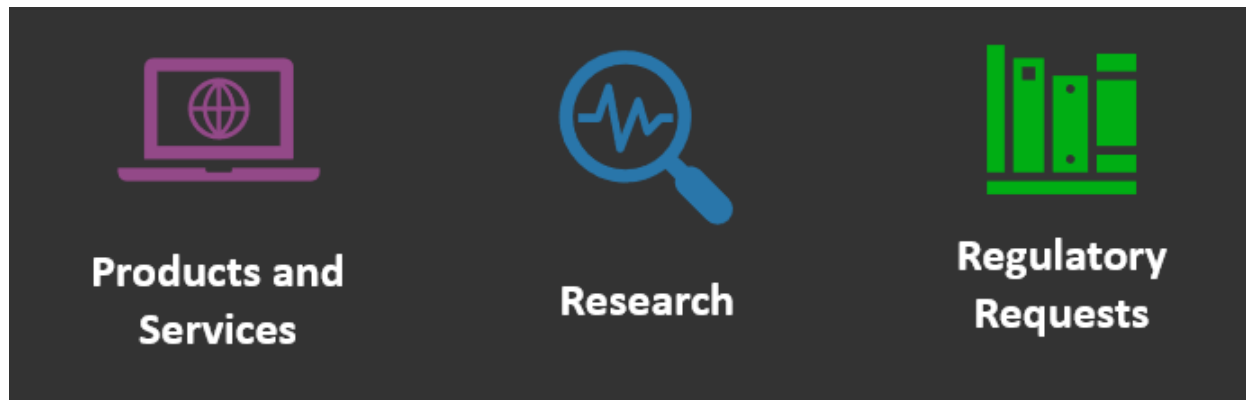

Data Types

Data linking applies to:

- Policy
- Medical
- Unit
- Indemnity
- Pool
- Financial

Uses of Linked Data

- Linked data provides NCCI with a broad array of claim data for in-depth analysis
- Producing and delivering highly accurate and timely products and services to workers compensation market stakeholders is a core service at NCCI
- Proper linking within and across data types can help to ensure that the data used in our core services is credible
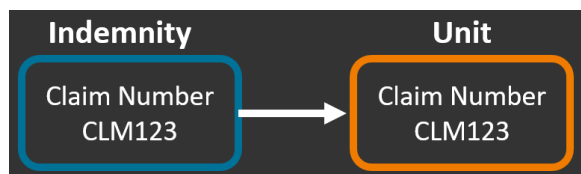
Chapter 2: Linked Data Usages

Expected Data

Policy Data tells us to expect one or more units depending on the states on the policy.
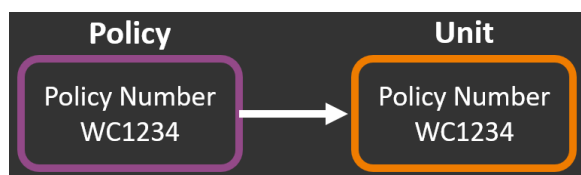
Here's another example of expected data: If a claim was submitted in medical or indemnity, we would expect Unit Data at the appropriate time.
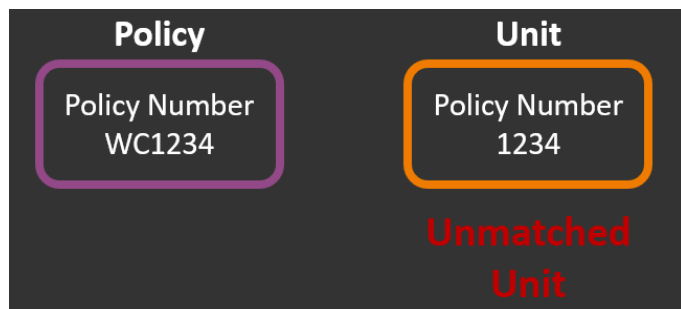
Impact of a Policy Mismatch

If the unit linking data does not match the policy, our systems will assume that the unit for the policy data is missing.

DMD—Unmatched Units

DMD, under Unit and then Quality, has a tab for Unmatched Units. Here you can find hyperlinks to the units by policy year.

Unmatched units may indicate the:

- Policy is missing
- Policy Exposure State is missing
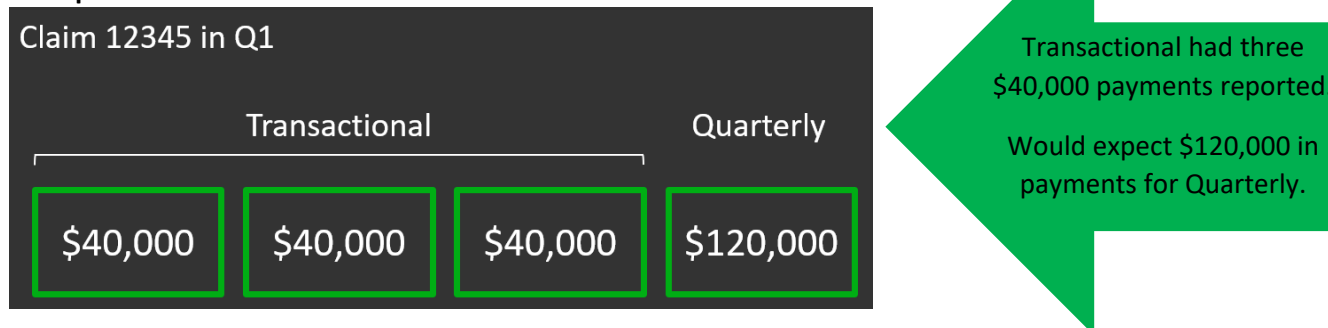- Policy is cancelled flat, but the unit has premium greater than $0, with or without claims

Indemnity Payments

Linked data is used within data types.

Example:

Claim 12345 in Q1

Transactional			Quarterly
$40,000	$40,000	$40,000	$120,000

Transactional had three $40,000 payments reported.

Would expect $120,000 in payments for Quarterly.

The Indemnity Data Call Transactional Record and Quarterly Record both include indemnity payments. Transactional Record payments should match the Quarterly Record payments.

Chapter 3: Financial impacts of poorly linked data

- *DQIP*
- *ADQIP*
- *Carrier Report Card*
- Time and resources to research and correct data
- Medical and Indemnity Certification

Chapter 4: Policy Linking

Policy Linking Fields

The first three are common to all data types.

| Field	Applicable Data Types
Carrier Code	All
Policy Number	All
Policy Effective Date	All
Exposure State Code	All Except Medical and Indemnity

Exposure State Code is used for Policy, Unit, Financial, and Pool Data. Medical and Indemnity do not include Exposure State Code because they are reported at the claim level.

Applicable Data Types

Policy linking originates when a carrier writes the policy.
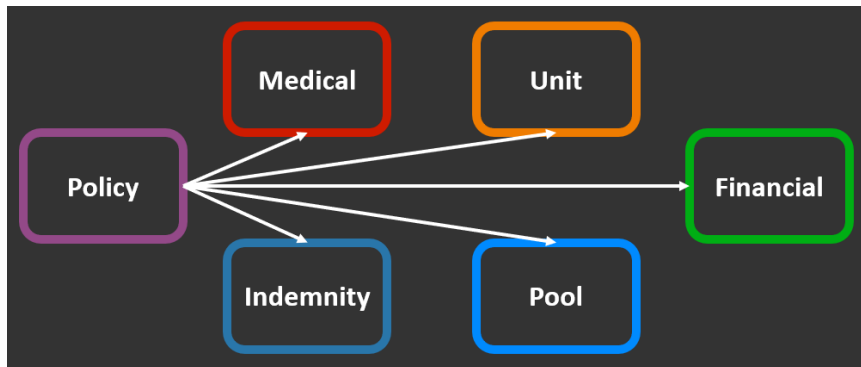
Carriers **MUST** use the same values, reported in the same format, for other data types.
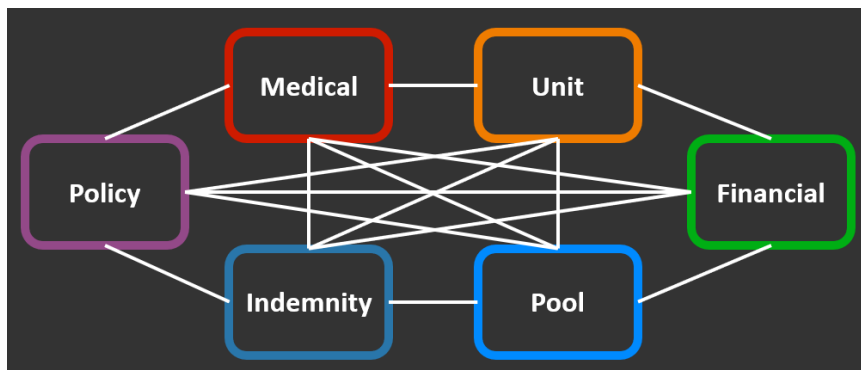
Data Should Be Reported Consistently

Linking and key field values within each data type and across all data types **must** be reported in accordance with reporting rules and be consistent across data types for the life of the policy.

Field	Policy Data	Unit Data
Carrier Code	12345	12345
Policy Number	WC123	WC123
Policy Effective Date	1/1/2023	1/1/2023
Exposure State Code	FL	FL

Exception: Carrier Code Differences

Policy Linking

Consistent reporting of Policy Keys across all data types allows NCCI to link Policy Keys between any two of the data types.
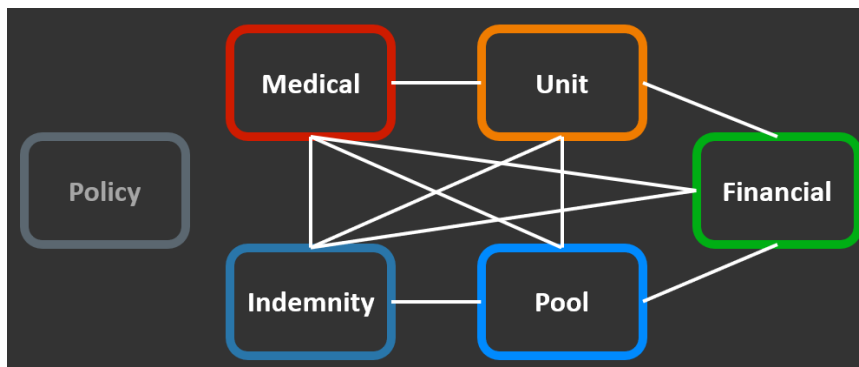
Chapter 4: Claim Linking

Claim linking applies to:

- Medical
- Unit
- Indemnity
- Pool
- Financial

The Policy Data type does not contain any claim information. Therefore, it is not included in claim linking.

Claim Linking Fields

In addition to the policy linking fields, claim linking includes:

Field	Applicable Data Types
Claim Number	All Except Policy
Accident Date	All Except Policy
Jurisdiction State	Unit, Medical, and Indemnity
Accident State	Indemnity Only

Be Consistent in Reporting Claim Linking Fields

Linking fields must be consistent across data types for the life of the claim and be consistent from one valuation to the next.

Field	Unit Data	Indemnity Data
Claim Number	1111	1111
Accident Date	9/9/2020	9/9/2020
Jurisdiction State	FL	FL

Carriers **MUST** use the same values, reported in the same format, for other data types.

Policy linking fields must match as well as claim linking fields.

Chapter 5: How to Monitor Your Data Linking Results

Data Manager Dashboard (DMD)

Review your linking metrics in **DMD**.

Linking/Verification

This provides a method to check claim data across multiple data types.

View only screen.

Unit Claim Linking

This section of the **DMD** Linking/Verification screen has information about Financial Calls #31 and #33, Detailed Claim Information (DCI), and Pool Data.

Data Type	Data Refreshed	Received	Linked (%)	Unlinked	Policy Effective Date Range	Linking Parameters
31 Large Loss and Catastrophe Call	06/21/2020	409	0	409	06/01/2016 - 09/30/2018	Carrier Group, Policy Nbr, Pol Eff Dt, Claim Nbr, State, Accident Dt
33 VA Coal Mine Large Loss				No Data Found		
DCI	04/19/2020	10,708	47.39	5,633	04/01/2016 - 07/31/2018	Carrier Group/Code, Policy Nbr, Pol Eff Dt, Claim Nbr, Jurisdiction State, Accident Dt, Loss Cond Cov Code
Pool	06/21/2020	394	0	394	06/01/2016 - 09/30/2018	Carrier Code, Policy Nbr, Pol Eff Dt, Claim Nbr, State, Accident Dt

This screen displays:

1. Data Refreshed—Displays the last time linking data was updated. Linking is updated on a scheduled basis depending on the data type.
2. Received—Displays the number of claims received and used to link.
3. Linked (%)—Displays the percentage of claims that linked.
4. Unlinked—Displays the number of claims that did not link and provides hyperlinks to view claim details.
   Note: If there are more than 1,000 claims, an option to download, view partial, or cancel will display.
5. Policy Effective Date Range—Displays the range of Policy Effective Dates used to link.
6. Linking Parameters—Displays the data elements that are used to link.
7. Unlinked Hyperlink—Access unlinked claim information by clicking the hyperlink.
8. If data is not available for a data type, a message "No Data Found" is shown.

Unlinked Claim Information

Financial-31 Large Loss - 33912 – NCCI TRAINING PROPERTY AND CASUALTY CO   Print Download

Financial-31 Large Loss Unlinked Claims as of 11/19/2023 06:14 AM

For Reporting Group 33912

Policy Effective Date Range: 11/1/2019 - 2/28/2022

Policy Nbr	Policy Eff Dt	Claim Nbr	State	Accident Dt
WC1112388	01/01/2022	CLAIM1	ID-11	10/03/2022
TESTWC2222	01/01/2022	CLAIM2	IL-12	07/19/2022
TEST12335	01/01/2022	TESTCLAIM45	RI-38	04/26/2022
WC11100	01/01/2022	CLAIMTEST123	TX-42	07/01/2022
WC1234567	12/31/2021	TESTINGCLAIM1	MO-24	01/03/2022
TESTPOL1	12/31/2021	TESTCLAIM567	NM-30	12/21/2022
TESTPOL2	11/14/2021	CLAIM5678	CT-06	12/06/2021
WC111222333	11/01/2021	CLAIM112233	IL-12	06/13/2022
TEST000WC111	10/26/2021	CLAIM10987	CT-06	12/20/2021

1. Carrier Group, Policy Nbr, Pol Eff Dt, Claim Nbr, State, Accident Dt fields are used for linking.
2. Bold red fields could not be used for linking.

The hyperlink displays the information for the records that are unmatched.

- Data elements that could not be used for linking are highlighted in red
- This information allows you to compare your source system and determine the **drivers of the inconsistency**
- This example shows inconsistencies between Financial Call #31 and the Unit Statistical Data
- Print or download the information

Unit Key Field Verification

This screen displays information for indemnity and medical records. The hyperlinks lead you to the Key Field Verification screens in the *Indemnity Data Collection* tool or *Medical Data Collection* tool.

	Unit Key Field Verification				
Data Type	Data Refreshed	Received	Matched (%)	Unmatched	Policy Effective Date Range	Verification Parameters
Indemnity	07/21/2020	5,398	98.65	73	07/01/2016 - 10/31/2018	Carrier Code, Policy Nbr, Pol Eff Dt, Claim Nbr
Medical	07/28/2020	262,331	98.7	3,493	07/01/2016 - 10/31/2018	Carrier Code, Policy Nbr, Pol Eff Dt, Claim Nbr

1. Unit Claim Linking - Generates claim linkages on a defined schedule between the source data and unit data.
2. Unit Key Field Verification - Verifies reported key fields between the source data and unit data on receipt.

Key Field Verification Screen for Policy and Unit Data

Selecting either the Indemnity or Medical hyperlinks displays the Key Field Verification screen. Here you can locate your policy linking results in addition to the claim linking results.

Data is refreshed with each file submission.					Last Refresh 01/01/2024
Data Type	**Verification Parameters**	**Key Fields Reviewed**	**Key Fields Found**	**Percentage Found**	**Key Fields Not Found**
Policy	Carrier Code, Policy Number	7,265	7,255	100%	☁ 10
Policy	Carrier Code, Policy Number, Policy Effective Date	7,265	7,246	100%	☁ 19
Unit	Carrier Code, Policy Number, Policy Effective Date	6,942	6,926	100%	☁ 16
Unit	Carrier Code, Policy Number, Policy Effective Date, Claim Number	6,942	6,805	98%	☁ 137

📌 As a reminder, the Unit Key Field Verification in *DMD* and the Indemnity and Medical Key Field Verification screens do not consider Jurisdiction State, but we want to reiterate the importance of Jurisdiction State as a claim linking field.

Wrap up Policies

FIELD	Unit Data	Medical Data
Carrier Code	12345	12345
Policy Number	WC123	WC222
Claim Number	12345	12345
Policy Effective Date	1/1/2023	1/1/2023
Accident Date	2/3/2023	2/3/2023
Exposure State	FL	FL

- This claim will not link properly across data types because the medical data was reported with the wrong policy number.
- Claims for Wrap-up policies need to be reported in the same manner across all data types.

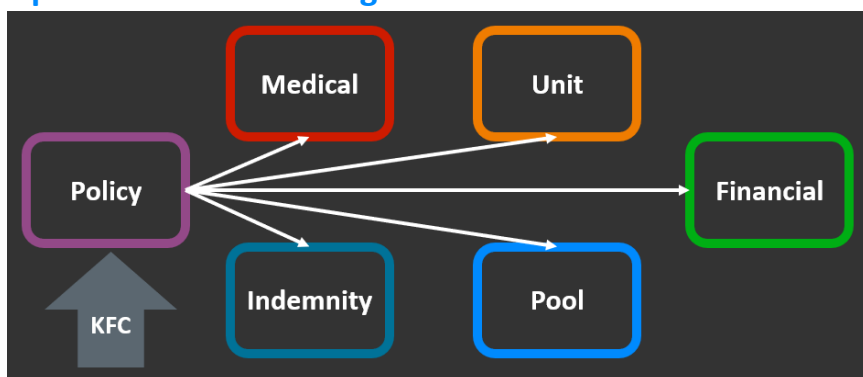## Chapter 6: How to Address Data Linking Issues

Addressing Linking Issues

! **Important!** If you have identified linking issues, contact your company's data validator to discuss and evaluate the actions needed.

Updates to Data Linking Fields

! To avoid any reporting issues, be sure to update the linking fields consistently across all data types.

Example
If a key field change (KFC) is made to update the Policy Number on Policy Data, then the Policy Number **must** be updated on all other data types.

Source System or Vendor Change

Considerations:

- What happens if your company converts to a new system?
  - o You will need to recertify depending on the affected data type.
- Who do you notify at NCCI?
  - o Contact your data validator.
- What happens if your company changes data reporting vendors?
  - o The vendor will need to certify based on the data type they will be submitting.
- What happens if your company plans to change the Policy/Claim Number format for future policies?
  - o The format MUST be consistent across all data types.

NCCI Certification Resources on NCCI.com

- Data Reporting Electronic Certification and Recertification Requirements
- Electronic Transmission User's Guide

Chapter 7: Data Comparisons

Financial vs. Unit Statistical Losses
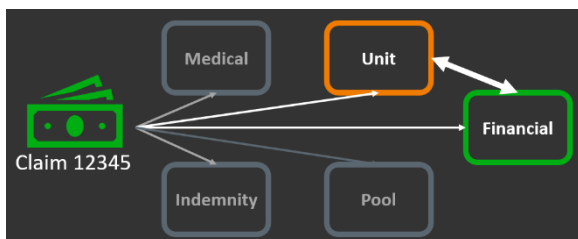
NCCI analysts perform comparisons between Unit Data and Financial data. Claim linking between Unit Data and Financial data assists in this effort.

Comparisons

NCCI compares:

- Unit Data by policy year and state to the Financial data Policy Year Call #3
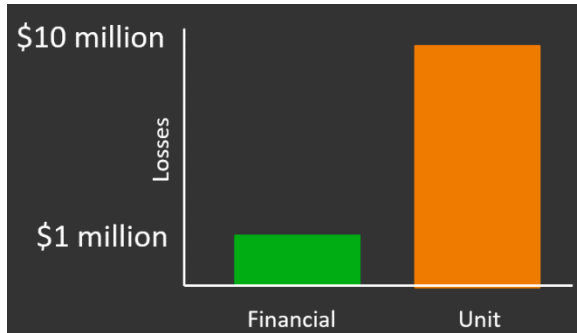- Unit Data individual claims to the Financial data Large Loss Call #31
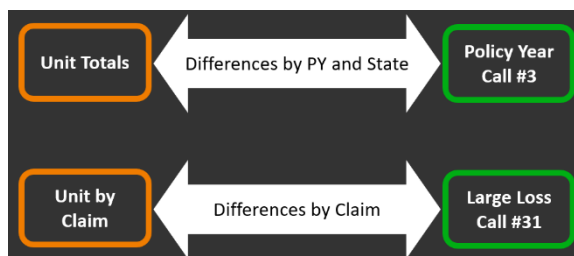
Inconsistency Could Mean Inaccurate Data

Example: Reported data shows $10 million in losses in the Unit Data compared to $1 million in the Financial data.

In this fictitious example, after NCCI alerted the carrier to the discrepancy, the carrier discovered that a policy with several large claims should have been submitted as a large deductible policy in the unit data.

This is important because large deductible losses are NOT included in Financial Call #3.

The carrier submits corrections to label the unit as a large deductible policy. The two sources now more closely align:
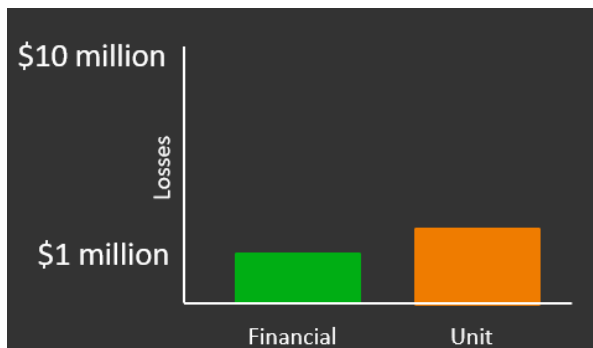
FinStat Analysis

This is an example of a FinStat analysis that NCCI sends to carriers. This is how discrepancies are communicated.

Example

State	PY	COMPANY STANDARD PREMIUM				TOTAL (INDEMNITY + MEDICAL) PAID+CASE LOSSES				INDEMNITY INCURRED CLAIM COUNTS			
		FIN	STAT	DIFF	% DIFF	FIN	STAT	DIFF	% DIFF	FIN	STAT	DIFF	% DIFF
AL	2019	11,361,911	8,651,155	2,710,756	31	4,659,663	4,532,444	127,219	3	120	118	2	2
MD	2020	46,563,333	37,340,889	9,222,444	25	36,992,556	32,766,572	4,225,984	13	876	676	200	30
SC	2021	10,325,232	10,320,999	4,233	0	2,215,465	8,621,626	(6,406,161)	(289)	133	131	2	2

In this example, NCCI would inquire about the premium for Alabama in Policy Year 2019. The Financial data is significantly higher than the Unit Data for premium. Explanations for these types of differences can vary:

- Missing Unit Data
- Incorrect Financial Data Reporting

NCCI would also question premium, losses, and claim counts in Maryland in policy year 2020.

- It is possible that Large Deductible policies are included incorrectly in the financial data.

The timing of a FinStat could also cause discrepancies. In this example, the total losses in South Carolina for Policy Year 2021 are higher in the Unit Statistical data than in the Financial data.

Additional Cross-Data Type Comparisons

DSR Review

The Designated Statistical Reporting (DSR) analysis provides a comparison between the Policy Year Call (Call #3 or #3A—Assigned Risk) and Unit Statistical premium data. This analysis uses extended exposures and is outlined in the ***Financial Call Reporting Guidebook.*** To determine the DSR Level Premium, extending exposures essentially rerates policies using the NCCI-approved loss costs or rates instead of company rates for individual class codes. The DSR analysis looks at the derived premium amounts between the two sources as well as the average deviation between Company Standard and DSR Level Premiums.

Pool Data to Financial Call Data Comparison

A Pool Financial analysis compares a complete year's worth of a data provider's national Pool Data to the Financial Call data reported and valued as of 12/31/XX. The report compares the NP-4—premiums and losses to the Assigned Risk Policy Year Call (Call #3A), and the NPX—Indemnity Claim Counts are compared to the Assigned Risk Accident Year Call (Call #5A).

The Pool Financial analysis is compiled and analyzed on every data provider that has NP-4 premium within the observed policy years. This analysis occurs in the second quarter of a given calendar year once the current Financial Call valuation is submitted.

Indemnity and Medical Data to Unit Data

When running a comparison of either Indemnity data to Unit Data or Medical data to Unit Data, NCCI reviews both data sources to ensure the claims are included in both data sources.

We also review both to make sure the claims link correctly in the key fields.

Indemnity-Statistical Comparison (Ind-Stat)

Field	Indemnity Data	Unit Data
Policy #	WC1234	WC1234
Claim #	2222	2222
Pol. Eff. Date	1/1/2020	1/1/2020
Accident Date	2/3/2020	2/3/2020
Part of Body Code	90	10
Nature of Injury Code	83	36

- Despite matching key fields, this claim has discrepancies in injury code reporting between data types
- NCCI would outreach to the carrier as we do not know if the code on the Indemnity side is correct, or if the Unit code is correct, or if there is an issue on both sides
- The outreach package includes a memo explaining the discrepancies, a claim list with all claims with discrepancies, and an exhibit with code descriptions and breakdowns per policy year

Ind-Stat exhibit summary page example:

INDEMNITY DATA VS. UNIT STAT DATA			
POLICY YEARS: 2017 - 2022			
INDEMNITY DATA : SUBMISSIONS THROUGH 06/05/2024			
UNIT STAT DATA : SUBMISSIONS THROUGH 06/05/2024			

Policy Year	Total Claim Count	Part of Body Claim Counts	
		Number of claims reported inconsistently	Percentage of claims reported inconsistently
2019	254	44	17.32%
2020	398	66	16.58%
2021	405	55	13.58%
2022	303	51	16.83%
Totals:	1,360	216	15.88%

- The exhibit shows part of body inconsistencies for a hypothetical carrier between policy years 2019 and 2022

Ind-Stat summary page of the claim list example:

NCCI TRAINING PROPERTY AND CASUALTY CO (33912)
INDEMNITY DATA VS. UNIT STAT DATA
POLICY YEARS: 2019 - 2022
INDEMNITY DATA : SUBMISSIONS THROUGH 06/05/2024
UNIT STAT DATA : SUBMISSIONS THROUGH 06/05/2024

Part of Body - Code Discrepancy Breakdown

Policy Year 2019

Part of Body Code	10	11	12	16	17	18	22	25	30	31	32	33	35	37	38	39	41	42	44	45	50	51	52	53	54	55	56	65
Indemnity Claim Counts	0	0	1	0	0	0	2	4	2	4	0	1	0	0	2	0	4	6	0	0	4	2	0	2	0	0	2	4
Unit Claim Counts	2	5	12	2	2	2	10	14	2	0	4	2	2	2	16	12	0	4	2	12	0	0	2	0	12	2	0	0

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Policy Year 2020

Part of Body Code	10	13	14	18	20	25	30	31	32	33	34	35	36	38	39	40	41	42	44	50	51	52	53	54	55	56	60	62	63
Indemnity Claim Counts	0	2	2	2	0	2	0	2	2	2	2	0	2	0	2	0	5	7	2	2	4	2	0	0	2	2	2	0	2
Unit Claim Counts	2	0	2	0	2	0	23	2	20	2	0	4	0	4	0	2	0	5	0	2	2	0	6	2	12	0	12	20	

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Policy Year 2021

Part of Body Code	10	11	12	13	14	18	20	25	30	31	32	33	34	36	37	38	39	41	42	44	45	50	51	52	53	54	55	56	57	61	62	63
Indemnity Claim Counts	2	2	2	0	0	2	0	0	0	2	2	4	2	0	2	7	2	2	8	2	0	0	2	2	5	2	0	7	2	2	2	2
Unit Claim Counts	20	3	0	2	2	32	2	2	4	4	4	2	2	2	4	0	2	4	0	2	2	0	2	4	4	5	5	2	0	0	0	

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- The document shows a breakdown of the code discrepancies for a hypothetical carrier, showing which codes are inconsistent in Indemnity vs Units