

Options for Workers' Compensation Medical Data Collection in New Hampshire

A Report to the New Hampshire State Legislature

Prepared on behalf of the New Hampshire Insurance Department

by

Freedman HealthCare

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Executive Summary

Introduction

Medical costs account for seventy three percent of workers compensation benefits in New Hampshire. This is significantly higher than the national average of fifty nine percent.¹ One potential driver of these high costs is the lack of standardization of payment for workers' compensation (WC) medical services. There are currently no standards or guidelines to regulate the amount providers can bill for WC medical services,² nor are there limits to the duration of care or number of services that workers receive for WC injuries – often leading to much longer and more expensive treatments.³

In an effort to address WC medical cost drivers and encourage more transparency in WC pricing and utilization, New Hampshire policymakers have engaged key stakeholders in ongoing discussions regarding the reasonable amount to pay for WC medical services. Potential strategies for determining reasonability have included developing a standard fee schedule for New Hampshire based on Medicare rates or on comparative price data from the New Hampshire Comprehensive Health Information System (NH CHIS).

During its 2015 session, in continuation of this ongoing conversation, New Hampshire's state Legislature charged the New Hampshire Insurance Department (NHID) with engaging stakeholders in identifying options for comparing WC medical data to health care claims data from NH CHIS. The legislature tasked the NHID with presenting clear recommendations to guide the state's efforts to address high costs associated with workers' compensation medical payments, and drive decreased costs and increased transparency.²

Methodology

To fulfill the Legislature's charge, the NHID engaged Freedman HealthCare (FHC) to speak with stakeholders and identify a range of options for collecting WC medical data and comparing it to NH CHIS. FHC conducted stakeholder engagement activities with WC payers (including WC carriers, third party administrators, and self-insured associations), state agency staff, the state's statistical advisory organization, and others to understand the state's current WC landscape and stakeholder perceptions on future data collection strategies. FHC also researched WC medical data collection efforts in other states to identify potential options for New Hampshire.

This report summarizes the findings from FHC's research and stakeholder engagement activities, and presents an analysis of five options – ranging in complexity and feasibility – for collecting WC medical data and comparing it to the health insurance data currently collected in NH CHIS. The report concludes with FHC's recommendation to the state for moving forward.

¹ New Hampshire Insurance Department. *WC Medical Cost Analysis* (2014). Exhibit 2. Presentation to the Governor's Commission to Recommend Reforms to Reduce Workers' Compensation Medical Costs. Available at: <http://governor.nh.gov/commissions-task-forces/workers-comp/documents/wcc-09-26-2014-nhid-medical-cost.pdf>.

² Senate Bill 133-FN. Approved July 6, 2015. Available at: <http://gencourt.state.nh.us/legislation/2015/SB0133.html>.

³ *Final Report of the Commission to Recommend Reforms to Reduce Workers Compensation Costs*. December 1, 2014. Available at: <http://governor.nh.gov/media/news/2014/documents/2014-12-19-workers-compensation-report.pdf>.

In particular, this report includes:

- The context for discussing and comparing the WC and health insurance markets ([Section I](#))
- An overview of WC medical data collection in other states ([Section II](#))
- A description of the WC landscape in New Hampshire ([Section III](#))
- A summary of stakeholder perceptions of a future WC medical data collection effort ([Section IV](#))
- A discussion of key considerations when choosing a data collection strategy ([Section V](#))
- A presentation of five options for collecting WC medical data in New Hampshire ([Section VI](#))
- An analysis and discussion of the options ([Section VII](#))
- Freedman HealthCare's recommendation to the state ([Section VIII](#))

Findings

The following options have been identified for collecting WC medical data. Option 1 would collect WC medical data directly into CHIS. Options 2-5 would collect WC medical data separately, and compare it to a data extract from CHIS that includes similar data elements. New legislation would be required to implement any of these approaches.

Option 1: Collect WC Medical Data through NH CHIS - The state would collect medical data from WC payers using the same data submission process currently used to collect health insurance claims data in CHIS. New submitters would include, at minimum, large WC carriers. If the NHID collaborated with the New Hampshire Department of Labor (NHDOL), it could potentially include data from self-insured payers.

Other Options to Compare WC Medical Data to NH CHIS

Option 2: Collect WC Carrier Medical Data via the NCCI Medical Data Call - The state would collect a detailed data file from the National Council on Compensation Insurance (NCCI)'s Medical Data Call. This option would leverage the NCCI's existing medical data collection process and would require no additional reporting burden on carriers. This option would only capture data from WC carriers, but not from self-insured employers. The NHID could obtain this detailed medical data from NCCI in one of two ways: either NCCI could produce the data voluntarily, or the state could issue new legislation mandating WC carriers to submit detailed medical data to the state, and allowing them to designate NCCI or a similar entity as their data aggregator.

Option 3 – Issue Joint State Agency Data Call for WC Medical Data - The NHID and New Hampshire Department of Labor (NHDOL) would issue a joint data bulletin to collect summary-level medical data from both WC carriers and self-insured WC payers. While this option would allow the state to collect medical data from the overall WC market, it would require a new data submission effort for WC payers.

Option 4 – Collect Medical Bill Data using IAIABC EDI Standards - The NHID would create a central, electronic data collection process and adopt a set of nationally recognized standards for WC payers to submit medical billing data directly to the state. This option has the potential to include self-insured data if the NHID collaborated with NHDOL. This would most likely require an intensive technical build and implementation process upfront, but would allow for a wide range of data uses.

Option 5 – Combine Options 2 and 3 - The NHID would compare a dataset from NCCI containing medical payment data from WC carriers (Option 2) to a NHDOL data call for medical payments data from self-insured employers, associations, and TPAs (Option 3). This option would limit the reporting burden for

WC carriers by only requiring them to submit to the NCCI Medical Data Call, but would add data from self-insurers that would not otherwise be captured by Option 2 alone.

Similarities across these five options include a need for the state to:

- Establish new authority to collect the data
- determine whether a *de minimis* threshold is appropriate to exclude smaller payers with low market share
- determine how smaller self-insured employers and associations could provide data based on prevalent paper-based (non-electronic) medical billing processes
- create or revise a data collection process to accommodate additional submitters
- create transparency surrounding data quality and validation processes
- determine capacity to produce required analysis and reports

Differences across the options include:

- complexity of the data collection strategy
- burden on data submitters
- ability to understand the credibility and accuracy of the submitted data
- suitability of the data for different types of reports

Recommendations

Based on its analysis, FHC recommends that the state consider the following approach:

Recommendation 1: Collect WC Carrier Medical Data via the NCCI Medical Data Call (Option 2) and compare the detailed data set to a similar extract from NH CHIS.

FHC recommends that the NHID collect a detailed file from NCCI containing WC carrier data collected through its annual Medical Data Call. The NHID would subsequently compare this data to an extract from NH CHIS. Because it leverages an existing data collection effort, this is the simplest and most straightforward option and has the shortest implementation timeline. Furthermore, this approach largely addresses the issue of paper-based bills, as the Medical Data Call's current submitters currently have the capacity to collect procedure-level data off of electronic and paper bills, either through their internal system or that of a third party vendor. Finally, this option would most likely face the least resistance from carriers, based on the feedback FHC received during its stakeholder engagement process. FHC recommends that the state engage NCCI in further discussions to determine the feasibility of NCCI voluntarily providing a detailed data file. If NCCI is unable to provide more detailed data due to the contractual nature of its affiliation agreements with carriers, the state should consider new legislation requiring carriers to submit the medical data to the state with the option of using a designated data aggregator such as NCCI or a similar entity.

Recommendation 2: Over time, expand to Option 5 by adding a Department of Labor data call to self-insured employers, associations, and third party administrators (TPAs).

As the state implements Option 2 to collect WC carrier data, FHC recommends that it also begin pursuing self-insurer data collection through a partnership with the Department of Labor (NHDOL). The NHID would support NHDOL in issuing a data call to collect medical data from self-insured entities and third-party administrators (TPAs). The NHID would take the lead role in this data collection effort and would seek the necessary funding to support this option. Further legislative review is required to determine whether NHDOL will need additional data collection authority to implement this approach.

Section I: Introduction

Overview

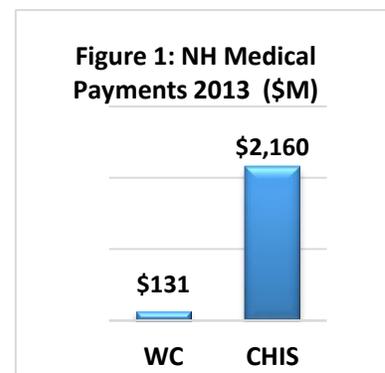
In an effort to address workers' compensation (WC) medical cost drivers and encourage more transparency in pricing and utilization, New Hampshire policymakers are interested in comparing the cost and utilization of WC medical services to those of standard medical services in the health insurance market. During its 2015 session, New Hampshire's state Legislature charged the New Hampshire Insurance Department (NHID) with identifying options for comparing workers' compensation medical data to health care claims data from the New Hampshire Comprehensive Health Information System (NH CHIS). The NHID engaged Freedman HealthCare (FHC) to identify and analyze these options and assist in preparing a written report to the Legislature.

The purpose of this report is to present an analysis of five options and subsequent recommendations to the Legislature for collecting workers' compensation medical data and comparing it to CHIS to support the state's WC cost containment and transparency efforts.

Comparing the Workers' Compensation and Health Insurance Markets

In 2013, estimated spending for WC medical payments in New Hampshire was \$131M, approximately 6% of the \$2.16B paid out for individuals covered by commercial fully-insured and self-insured health insurance carriers (see Figure 1).⁴ Nationally, WC spending is estimated at approximately 1.5% of total health care spending (including commercial, Medicare, and Medicaid).⁵

These payments reflect key differences in the scopes of coverage between the two markets. WC medical payments only reflect medical services to treat work-related injuries, while health insurance medical payments represent a much broader scope of coverage that includes, for example, labor and delivery; preventive care; and elective surgeries.



Definitions

To understand the context for comparing the workers' compensation and health insurance markets, it is important to first recognize the key differences that exist between the two. This section defines key terms and concepts that will be referenced throughout this report.

What is a Claim?

A common theme that recurred throughout this analysis is that the workers' compensation and health insurance markets are significantly different. For example, the WC and health insurance markets use different terms when referring to how providers record the medical services they provide, as well as request and receive payment for those services. This section attempts to clarify how these two markets use the term "claim" when referring to medical services.

⁴ NHID. *Supplemental Report of the 2013 Health Insurance Market in New Hampshire*. January 14, 2015. Page 3 (NH situs total payments). Available at: http://www.nh.gov/insurance/lah/documents/2013_nh_id_suprpt.pdf.

⁵ NCCI presentation of the *Annual Medical Data Report for the State of New Hampshire* to NHID, October 22, 2015.

In both health insurance and workers' compensation, medical providers submit their bills using a consistent format established by the Centers for Medicare and Medicaid Services (CMS). The format includes information about the patient, the type of service provided, the date and location of the service, the patient's diagnosis, and information about the provider. For hospitals, the standard format is called a "UB-04" form,⁶ while other medical professionals use the "CMS 1500" form.⁷ Each WC carrier or health insurance carrier has different requirements about how much information must be on the form in order to make payment. At a minimum, payers require patient information, procedure performed and medical provider information.

In the **health insurance** market, a "claim" refers to a hospital's or medical professional's request for payment and pertains to a specific incidence of health care service delivery. In health insurance, providers submit nearly all requests for payment electronically through office systems or clearing house services.

In the **workers' compensation** market, a "claim" refers to the report of a workplace-related injury and includes a request to a WC carrier or self-insurer for all workers' compensation benefits (including medical services and indemnity). A single claim can be open for decades, depending on how long the injured worker requires treatment for the work-related injury. When hospitals and medical professionals request payment for specific services during the duration of the claim, they bill using the same formats—CMS 1500 and UB-04 – as in the health insurance market. Most of the WC carriers can accept electronic payment requests but may also accept paper versions of the CMS formats. Conversely, self-insured associations indicated that providers submit most of their WC bills using the paper version of the CMS formats.

Because "claim" has a different meaning in the health insurance and workers' compensation markets, this report will use the term "**bills**" to refer to medical service providers' requests for payment and "**payments**" to refer to a paid bill in both markets.

What is CHIS?

The New Hampshire Comprehensive Health Information System (NH CHIS)⁸ is a state-authorized, state-funded program established in 2005 to collect medical and pharmacy data from comprehensive medical insurance carriers for the purpose of consumer transparency and health care cost and quality measurement. CHIS was created to make health care data "available as a resource for insurers, employers, providers, purchasers of health care, and State agencies to continuously review health care utilization, expenditures, and performance in New Hampshire and to enhance the ability of New Hampshire consumers and employers to make informed and cost-effective health care choices."⁹ The NHID and the Department of Health and Human Services (DHHS) jointly administer CHIS, and contract with an experienced external data vendor for data collection and management. Approximately seventy payers currently submit data to CHIS. Under state rule, carriers submit data in a standard format on a monthly or quarterly basis to the data management vendor; each data submission includes four separate data files with information about members, medical payments, pharmacy payments and dental

⁶ A sample UB-04 form is available on page 18 of *CMS Pub 100-04 Medicare Claims Processing*. Available at: <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/Downloads/R1104CP.pdf>.

⁷ A sample CMS-1500 form is available at: <https://www.cms.gov/Medicare/CMS-Forms/CMS-Forms/Downloads/CMS1500.pdf>.

⁸ More information on CHIS is available at <https://nhchis.com/>.

⁹ NHCHIS welcome page, <https://nhchis.com/>.

payments. Health insurance carriers have extensive information technology (IT) reporting and compliance teams in place to prepare and submit CHIS files according to the state's specifications. The data management vendor examines and checks all incoming data files before accepting them, and cross-checks them against other industry filings for validation. Further checking makes year-on-year comparisons to evaluate whether the data are consistent over time. Data submitters receive reports on their data quality and work with the data management vendor to ensure and improve data quality on an ongoing basis. The NHID has authority to impose penalties if carriers are noncompliant with CHIS submission requirements.

The CHIS database resulting from these data submissions is richly detailed and capable of supporting a broad range of analyses and reports. The CHIS database is the source for information that the state publishes on [NH HealthCost](#), a consumer-focused, free look-up tool that shows the estimated cost of a procedure at a particular provider site. The NHID is updating the website in January 2016 to include an expanded list of health care services (including dental, behavioral health, and prescription drug services), as well as provider quality information. In addition, the CHIS datasets (upon request and approval) support academic research projects that conduct detailed examinations of health care utilization, cost, and quality. Examples of specific reports to date are available on the NHID [website](#). Other states use this type of data to examine disease prevalence, readmissions rates, episodes of care, provider performance, and payment modeling.

What do we mean by inclusion in CHIS?

In Senate Bill 133, the New Hampshire Legislature asked the NHID to consult with workers' compensation stakeholders and subsequently recommend "options for including workers' compensation medical claims data in the New Hampshire comprehensive health information system."¹⁰ To identify these options, the NHID seeks to understand the different ways that useful information could be generated from CHIS and from WC medical payments data to inform policy around the containment and transparency of workers' compensation medical costs.

A number of options exist to include workers' compensation medical data in CHIS, ranging from full integration to comparison of similar datasets. To achieve a complete integration of workers' compensation medical data into CHIS, WC data submitters would use the same formats and file definitions as health insurance data submitters and comply with all relevant data collection requirements.

An alternative to full integration is to prepare information from two different data sources (in this case, CHIS and a WC medical data source) and compare the results. Working collaboratively, data analysts could prepare information from CHIS that support comparisons to a WC dataset.

Section VI discusses five options for integrating or comparing WC medical data and CHIS.

What is NCCI?

The National Council on Compensation Insurance (NCCI) is an industry-led membership organization that comprises workers' compensation carriers across the country. It exists primarily to provide services to its affiliated insurers to assist them in rate-making activities. In 34 states (including NH) and the District of Columbia, NCCI serves as an advisory organization on behalf of its member insurers; in this

¹⁰ Senate Bill 133. Available at: <http://gencourt.state.nh.us/legislation/2015/SB0133.html>.

role, insurers are permitted or required to use NCCI’s classification system and rating factors in their required rate filings to the state. In some states such as New Hampshire, NCCI is also retained by the workers’ compensation industry to administer the insurer-created and -operated residual market plan.

In 2010, NCCI launched an annual Medical Data Call, a data collection initiative developed in collaboration with its member insurers to collect and analyze WC medical payment data. As described by NCCI, the purpose of the Medical Data Call is “to support legislative pricing focused on medical benefits....Legislative pricing activities include: evaluation of changes to medical fee schedules and other medical-related legislative changes; and retrospective analysis of recently enacted medical fee schedule changes.”¹¹

Through the Medical Data Call, NCCI collects select data elements from WC medical bills. Workers’ compensation carriers with 1% or more of the market share in any one state with NCCI jurisdiction submit data to the Medical Data Call. (In New Hampshire, NCCI reports that these submitters represent 92% of the WC premium written in the state).¹² The Data Call does not include data from self-insurers or smaller full-risk carriers that do not meet the market share threshold. The data are de-identified so as not to identify providers or individuals. Carriers submit quarterly or monthly data (with one quarter lag time)¹³ directly to NCCI, or may authorize their third party administrator (TPA) or another vendor to submit on their behalf.¹⁴

NCCI includes 28 data elements in its Medical Data Call. Five of the 28 data elements are identifiers unique to the claim: carrier code, policy number, policy effective date, claim number and transaction code. Table 1 below lists these service-specific data elements.¹⁵ Under its affiliation agreement with its members, NCCI has the authority to fine data submitters for not meeting certain submission criteria.

Carrier Code	Policy Number Identifier	Policy Effective Date	Claim Number Identifier
Transaction Code	Jurisdiction State Code	Claimant Gender Code	Birth Year
Accident Date	Transaction Date	Bill ID Number	Line ID Number
Service Dates	Service From Date	Service To Date	Paid Procedure Code
Paid Procedure Code Modifier	Amount Charged by Provider	Paid Amount	Primary ICD-9 Diagnostic Code
Secondary ICD-9 Diagnostic Code	Provider Taxonomy Code	Provider ID Number	Provider Postal (ZIP) Code [3-digit]
Network Service Code	Quantity/Number of Units per Procedure	Place of Service Code	Secondary Procedure Code

Source: Adapted from NCCI’s 2012 Data Education Program: Medical Data Call Reporting Rules and Requirements, slide 23. Available at: <https://www.ncci.com/documents/Medical-Data-Call-Reporting-Rules-Requirements.pdf>

¹¹ NCCI. *Medical Data Call Tools and Resources*. 2015 edition. Available at: https://www.ncci.com/Articles/Pages/DR_Guide-Medical-ToolsSvc-2015.pdf.

¹² NCCI 2014 NH Medical Data Call Report, distributed at October 2014 meeting with NHID and DOL.

¹³ NCCI. 2012 Data Educational Program. Slide 20. Available at: <https://www.ncci.com/documents/Medical-Data-Call-Reporting-Rules-Requirements.pdf>.

¹⁴ NCCI. *Medical Data Report for the State of New Hampshire, September 2015*. Distributed at October 2015 meeting with NHID and NHDOL.

¹⁵ NCCI. 2012 Data Educational Program. Slide 42. Available at: <https://www.ncci.com/documents/Medical-Data-Call-Reporting-Rules-Requirements.pdf>.

Data collection and validation for the Medical Data Call are proprietary processes and governed by data use agreements between NCCI and its affiliated insurers. These processes are not publicly available, although NCCI did share its Medical Data Call submission guide with Freedman HealthCare for the purposes of this report. NCCI has a team of experts who are experienced in analyzing this type of data collected in the Medical Data Call and producing reports in New Hampshire and other states.

In 2015 and in previous years, NCCI has provided an annual *Medical Data Report for the State of New Hampshire*, showing aggregate cost and utilization data for WC medical services in the state. The report also compares New Hampshire to medical services data from other states participating in the Data Call. Furthermore, NCCI has provided the state with additional data at the procedure code level to show the average prices per procedure code across the state. NCCI has stated that it is “well positioned to provide additional detailed information (in addition to the Medical Data Report) that would provide a broad range of use to identify cost drivers in a state workers compensation medical benefit system. Information available from NCCI allows for the analysis of payments by provider type for a particular service. It also allows for analysis of patterns and trends in utilization, spending, and access.”¹⁶

While NCCI has provided meaningful information to the state of New Hampshire, it is important to note that they are under no obligation to do so. The state has no legislative authority to require that NCCI provide it with information from the Medical Data Call, in either summary or detail. All medical payment information that NCCI provides to the state is done voluntarily as a service to the state.

¹⁶ NCCI Personal communication, November 19, 2015.

Section II: WC Data Collection Efforts in Other States

Workers' Compensation Medical Cost Containment and Transparency Efforts in Other States

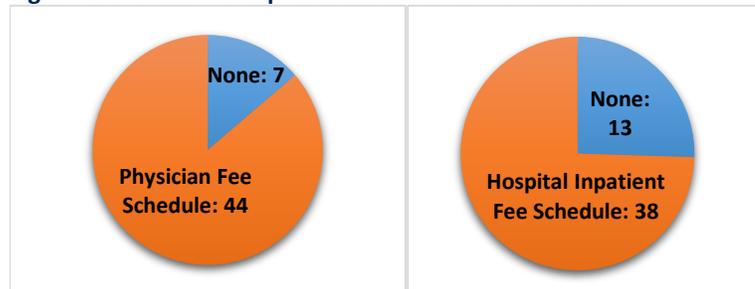
In response to high WC medical bills, many states have implemented strategies to contain costs, standardize care, and encourage transparency in WC medical price and utilization.

As shown in Figure 2, the majority of states have implemented fee schedules for WC medical services; in fact, New Hampshire is one of 13 states without a hospital inpatient fee schedule and one of seven states without a physician fee schedule.¹⁷ Montana offers a good example of comprehensive and detailed WC fee schedules for [professional services](#) and [facilities](#) (which includes inpatient services under a MS-DRG reimbursement methodology).

Some states also publish medical practice guidelines for providers that treat common types of WC injuries. The categories that states use to classify these injuries vary, but typically include treatment guidelines for common workplace injuries such as carpal tunnel syndrome, shoulder injuries, lower extremities injuries, and chronic pain.

Finally, several states require medical utilization review for WC-related services, both prospectively (i.e. requiring prior authorization for medical services) and/or concurrently (while the patient is being treated). This strategy aims to prevent the overutilization of medically unnecessary services.

Figure 2: Workers' Compensation Medical Fee Schedules



States with no physician fee schedule: **NH, IN, IA, MO, NJ, WA, WI**
 States with no hospital inpatient fee schedule: **NH, IN, IA, MO, NJ, WA, WI, AZ, CT, DC, HI, PA, UT**

Source: Adapted from Exhibit 13, [WC Medical Cost Analysis \(2014\)](#). NHID presentation to the Governor's Commission to Recommend Reforms to Reduce Workers' Compensation Medical Costs.

Table 2: State Efforts in WC Medical Cost Containment and Transparency	
Cost Containment and Transparency Strategy	State Examples
Fee schedules	Montana
Prospective and concurrent medical utilization review	California
	Texas
	Kentucky
Healthcare practice guidelines for common types of WC injuries	Delaware
	Montana
	Massachusetts
	New York

Table 2 provides examples of states that have implemented these various strategies to contain costs and increase transparency in workers' compensation price and utilization. Further analysis to compare and contrast the effectiveness of each state's strategies would require a more in-depth research study.

¹⁷ New Hampshire Insurance Department. *WC Medical Cost Analysis (2014)*. Exhibit 13. Presentation to the Governor's Commission to Recommend Reforms to Reduce Workers' Compensation Medical Costs. Available at: <http://governor.nh.gov/commissions-task-forces/workers-comp/documents/wcc-09-26-2014-nhid-medical-cost.pdf>

State Efforts to Integrate Workers' Compensation Medical Data into APCDs

Of the other 18 APCDs (the generic term for CHIS) with mandatory data collection statutes, none are collecting data files from WC carriers or self-insureds. However, some states are interested in exploring this opportunity and have made efforts to implement this. In 2015, Arkansas passed legislation mandating the state's Workers' Compensation Commission (WCC) to submit data to the Arkansas Center for Health Improvement (ACHI, the state's APCD) no later than January 1, 2016.¹⁸ The initial plan is for the WCC to submit a single medical payments data file to ACHI on an annual basis.

State Models for Workers' Compensation Medical Data Collection

The following section describes strategies that states use to collect WC medical payment data. Some states opt to collect data from just WC carriers while others include self-insured employers.

Model 1: WC Carrier Medical Payments Data via the NCCI Medical Data Call

Model 1.a: NCCI Collects the Medical Payments Data via its Medical Data Call

As previously discussed, the National Council on Compensation Insurance (NCCI) issues an annual Medical Data Call to collect select data elements from medical service transactions. The Data Call collects data from WC carriers with one percent or more of the market share in any state in which NCCI has jurisdiction,¹⁹ but does not include data from self-insurers or smaller full-risk carriers. NCCI uses the Medical Data Call to support legislative pricing activities, and may voluntarily produce summary information to states. Data collection and validation are proprietary processes.

Model 1.b: The independent bureau collects medical call data using WCIO guidelines

In eleven states, independent workers' compensation bureaus have the jurisdiction to collect WC data in the state. These bureaus belong to the Workers Compensation Insurance Organizations (WCIO), a consortium of data collection organizations of which NCCI is also a member. WCIO has published guidelines for collecting workers' compensation medical data using NCCI's Medical Data Call specifications.²⁰ Three of these participating bureaus – California, Pennsylvania, and Delaware – collect medical services data themselves using these WCIO guidelines. The Workers' Compensation Insurance Rating Bureau of California's [Medical Data Call Reporting Guide](#) provides an example of a bureau using the WCIO's adapted NCCI specifications to collect WC medical data.

Model 1.c: The independent bureau delegates data collection to NCCI

In other cases, the state's workers' compensation bureau delegates collection of the Medical Data Call to NCCI. Eight states – including Massachusetts, New York, and New Jersey – use this model.²¹

¹⁸ Senate Bill 956. State of Arkansas, 90th General Assembly. Regular Session, 2015. Available at:

<ftp://www.arkleg.state.ar.us/acts/2015/Public/ACT1233.pdf>

¹⁹ NCCI. Medical Data Report for the state of: New Hampshire. February 2013. Available at:

<http://www.nh.gov/labor/documents/nh-medical-data.pdf>

²⁰ WCIO Workers Compensation Data Specifications Manual: Workers Compensation Medical Data Reporting Specifications (WCMED) for Reporting Medical Data (2014). Available at:

<https://www.wcio.org/Document%20Library/DataSpecificationsManualPage.aspx>

²¹ While NCCI collects medical data on behalf of these independent bureaus, it does not include data from these states in its annual Medical Data Reports.

Model 2: Data Collected via Other Methods

Model 2.a: The state collects medical billing data using the IAIABC Medical Bill Payment EDI standards

Some state agencies collect WC medical billing data from payers via Electronic Data Interchange (EDI). The International Association of Injury and Accident Boards (IAIABC) has published EDI standards for WC medical billing data, which include an extensive list of mandatory, conditional, and optional data elements. To date, IAIABC has published four versions of its medical billing standards: a set of standards for paper submissions, and three releases of its EDI standards. Four states - [California](#), [Oregon](#), [Texas](#), and [North Carolina](#) – are currently using versions of IAIABC’s standards to collect medical billing data; in some cases, states have tailored the standards to meet their specific needs. For example, California collects Medical Bill Payment data into its Workers’ Compensation Information System using adapted EDI Medical Bill Payment guidelines from IAIABC. Texas is an example of a state insurance department that collects WC medical data. California, Oregon, and Texas collect and manage the medical billing data in-house, while North Carolina uses a vendor for data collection and analysis.

Model 2.b: The state collects medical billing data directly from payers

States may choose to collect WC medical services data directly from carriers. For example, the Florida Department of Financial Services’ Division of Workers’ Compensation collects detailed medical billing data from carriers via EDI transmission of the CMS 1500 claim forms and UB-04/CMS 1450 hospital billing claims forms.²² DFS has statutory authority to electronically collect WC medical billing claims from WC insurers^{23,24} within forty five days of the carrier processing a WC medical bill. The purpose of data collection is to monitor provider behavior in WC medical treatment, billing, and reporting.

Model 2.c: Providers bill the state directly for all WC medical services

Four states maintain full control for providing workers’ compensation coverage across the state, without a competitive WC insurance market. In this monopolistic model, providers bill the state directly for all WC-related medical services. Washington, Wyoming, North Dakota, and Ohio use this model. Providers use standard forms such as the CMS-1500 and the UB-04 to submit medical bills.

Table 3 below summarizes which states currently use one or more of these WC data collection models.

²² Florida Medical EDI Implementation Guide (MEIG) for Electronic Medical Report Submission (2010). Department of Financial Services, Division of Workers’ Compensation. Available at:

<http://www.myfloridacfo.com/wc/pdf/MedDataElecFilingManual2010-Revision-E-01-12-10.pdf>

²³ Rule: 69L-7.710: Florida Workers’ Compensation Medical Services Billing, Filing, and Reporting Rule. Effective November 6, 2013. Available at: <https://www.flrules.org/gateway/ruleno.asp?id=69L-7.710&Section=0>

²⁴ The 2015 Florida Statutes, Title XXXI, Chapter 440.593 “Electronic Reporting.” Available at: http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0400-0499/0440/Sections/0440.593.html

Table 3: State Models for Workers' Compensation Medical Data Collection

Model 1: NCCI Medical Data Call			Model 2: Other Methods		
1.a: NCCI Collects Medical Data	1.b: Independent Bureau Collects Using WCIO Guidelines**	1.c: NCCI Authorized to Collect for Independent Bureau	2.a: State Collects Using IAIABC Medical Bill Payment EDI Standards	2.b: State Requires EDI Medical Bill Reporting using CMS Formats	2.c: Providers Bill State Directly for all WC Services
OR* IA OK ID MO NH NV AR HI UT LA ME AZ IL RI MT MS CT CO KY MD NM TN VA SD AL DC NE WV SC KS VT GA FL* AK	CA* PA DE	WI MN MI IN NY MA NJ NC*	OR* CA* TX NC*	FL*	WA WY ND OH

*State WC medical services data available through more than one collection method.

** The Workers' Compensation Insurance Organization (WCIO) [Medical Data Reporting Specifications \(WCMED\)](#) use NCCI's Medical Data Call specifications.

Section III: Workers' Compensation in New Hampshire

Overview of New Hampshire's Workers' Compensation Medical Spending and Coverage

Total Spend

In 2013, estimated spending for NH WC medical payments was \$131M, approximately 6% of the \$2.16B paid out for all medical services for individuals covered by NH's commercial fully-insured carriers and self-insured health insurance carriers.²⁵ Of this \$131M in total WC medical payments, the NHID estimates that \$90.5M were paid by WC carriers and \$40.5M from self-insured employers.²⁶ Nationally, WC spending is estimated at approximately 1.5% of total health care spending (including commercial, Medicare, and Medicaid).²⁷

Sources of WC Coverage

Over 250 WC carriers wrote direct premiums in 2014 (see Table 4). The NH Department of Labor reported 868 self-insurers providing WC coverage in 2013.²⁸ In contrast, approximately 26 health insurance carriers and self-insured plans operate in NH.

Table 4: Workers Compensation Direct Premium Written in NH, 2014

Direct Premiums Written in 2014 (\$000)	Count of Companies	Market Share
>\$4M	20	54%
>\$1.9M	21	75%
All Reporting more than zero	216	100%

Note: Excludes 452 carriers reporting \$0 or less in direct premiums written
Source: NHID, October 2015.

State Regulators

The New Hampshire Insurance Department (NHID)

The NHID oversees WC rates and the review and approval of all WC loss cost, rate, and rate/rule filings. NH statute 412:23 authorizes advisory organizations to collect rate-making data, calculate rate indications, and perform annual rate filings on behalf of the workers' compensation insurers. The National Council on Compensation Insurance (NCCI) serves as an advisory organization to workers' compensation insurers. The NHID has authority to issue data calls to insurance carriers that it regulates, but does not currently collect WC medical data from WC carriers, relying instead on reports voluntarily prepared by NCCI utilizing data collected in its Medical Data Call.

The New Hampshire Department of Labor (NHDOL)

NHDOL's role is to oversee worker safety and resolve disputes between an employee, employer, provider, or WC carrier. NHDOL also regulates self-insurers that provide WC coverage. The department has authority to collect certain WC data, as is described in the next section.

²⁵ NHID. *Supplemental Report of the 2013 Health Insurance Market in New Hampshire*. January 14, 2015. Page 3 (NH situs total payments). Available at: http://www.nh.gov/insurance/lah/documents/2013_nh_id_suprpt.pdf, accessed on 11/11/15.

²⁶ The NHID estimates these amounts based on WC carrier market information from the National Council on Compensation Insurance and self-insured market information from the NH Department of Labor.

²⁷ NCCI presentation of the *Annual Medical Data Report for the State of New Hampshire* to NHID, October 22, 2015.

²⁸ State of New Hampshire, Department of Labor. *60th Biennial Report: July 1, 2011-June 30, 2013* (November 2013). Available at: <http://www.nh.gov/labor/documents/biennial-report-2012-2013.pdf>.

Current Workers' Compensation Medical Payments Reports in NH

The following reports are available to the state on a regular basis.

NCCI Medical Data Call Summary Report

As discussed in Section I, NCCI voluntarily produces a *Medical Data Report for the State of New Hampshire*, which provides an aggregated summary of WC medical services cost and utilization in the state during the previous year. The report also compares New Hampshire to medical services data from other states participating in NCCI's Medical Data Call. In addition, NCCI has produced ad-hoc reports for the state in the past, showing average prices per procedure code.

First Report of Injury Data Collection

RSA 281-A: 53 authorizes NHDOL to collect First Report of Injury (FROI) data from carriers or self-insured employers via electronic data interchange (EDI). This provides information about the worker, the nature of the injury, and the employer. NHDOL collects FROI data via payers' EDI submission of [NH Form 8WC](#), using the standard EDI reporting format for FROI data developed by the International Association of Industrial Accident Boards and Commissions (IAIABC).²⁹

Self-Insurer Financial Data Collection

NHDOL also collects an annual Questionnaire and Annual Financial Report from all self-insured employers. The Questionnaire includes the annual amount paid out for medical bills and the total losses (amount paid) including wage replacement.³⁰ The Annual Financial Report includes total payroll for that year.³¹

²⁹ State of New Hampshire, Division of Workers' Compensation. *EDI Implementation Guide for First Report of Injury* (September 2006, updated May 2015). Available at: <http://www.nh.gov/labor/documents/edi-implementation.pdf>.

³⁰ State of New Hampshire, Department of Labor. Workers' Compensation Self-Insurance Questionnaire. Available at: <http://www.nh.gov/labor/documents/self-insurance-questionnaire.pdf>.

³¹ Workers' Compensation Self-Insurance Annual Financial Statement. Available at: <http://www.nh.gov/labor/documents/annual-financial-statement.pdf>.

Section IV: Stakeholder Perceptions

To frame the options for this report, Freedman HealthCare (FHC) conducted a series of stakeholder interviews with WC payers, state agency staff, NCCI, and other WC subject matter experts to gather their insights about WC medical data collection. This report summarizes the key findings from these interviews, including stakeholders’ current data needs, reporting capabilities, perceived opportunities for WC medical data collection, and concerns about implementation.

Methodology

The table below lists all entities that participated in the stakeholder engagement process.

Stakeholder Type	Organizations Interviewed
Workers’ compensation carriers	<ul style="list-style-type: none"> • Liberty Mutual Insurance • A.I.M. Mutual Insurance Companies • Hanover Insurance Company
Property/Casualty Trade Association	<ul style="list-style-type: none"> • American Insurance Association • NH Association of Domestic Insurers
Third Party Administrators	<ul style="list-style-type: none"> • NH Public Risk Management Exchange (Primex) • Cove Risk Services
Self-insurer/association plan	<ul style="list-style-type: none"> • New Hampshire Automobile Dealers’ Association
Advisory Organization	<ul style="list-style-type: none"> • National Council on Compensation Insurance
State Agency Data Users	<ul style="list-style-type: none"> • New Hampshire Insurance Department • New Hampshire Department of Labor • New Hampshire Department of Health and Human Services
State data collection vendor	<ul style="list-style-type: none"> • Milliman
National workers’ compensation subject matter expert	<ul style="list-style-type: none"> • International Association of Industrial Accident Boards and Commissions

The majority of stakeholder engagement took place via phone-based interviews. FHC shared a list of discussion questions with each stakeholder prior to the call. Interviews lasted between thirty minutes and one hour. Each conversation began with an overview of the initiative, including the background and context for the Legislature commissioning this study, FHC’s role, and the purpose of the interview. FHC stressed to each stakeholder that, while its expertise is in health care claims data and All-Payer Claims Databases, FHC approached this study with an open mind and a willingness to explore any and all options for collecting WC data to meet the state’s needs – including, but not limited to, collecting the data through CHIS.

FHC conducted a total of eleven stakeholder interviews over the phone. One additional stakeholder provided comments in writing. Additional feedback from informal conversations with state agency stakeholders was also incorporated into the findings.

In general, this section will refer to all participants as “stakeholders” when discussing key findings. In some cases, WC carriers, TPAs, self-insurers, or NCCI will be referred to as “data submitters,” as these stakeholders would potentially provide the WC medical data to the state. Similarly, this section will use

the term “data users” to refer to NH state agencies that might benefit from additional information about WC medical data.

Key Findings

Stakeholders recognize the need for medical cost containment and transparency in the WC market, and see the value in collecting meaningful data. Most stakeholders cited the disproportionately high WC medical costs in New Hampshire as compared to the rest of the country, and stressed the importance of cost controls such as a fee schedule to determine standard and fair reimbursement rates for medical services. However, although recognizing the value that additional WC medical data would bring, many stakeholders – particularly companies that would potentially submit data to the state – were hesitant to support a new data collection effort.

Most stakeholders expected that the primary use of the data would be to support the creation of a fee schedule that would be comparable to information on NH Health Cost. Several stakeholders felt that NCCI’s Medical Data Call would support creating a fee schedule and supply procedure-level price and payment data for comparison to CHIS. Fewer expressed interest in reports such as utilization patterns and duration of care that would require more detailed data. Some stakeholders felt that collecting WC medical data through NH CHIS would be a costly and lengthy endeavor with little benefit to WC payers – and may in fact drive up costs in the overall WC system.

The challenges of collecting WC medical data include:

- The lack of procedure-level data collection in most payers’ internal systems
- The high proportion of paper-based bills received and processed by smaller WC payers
- Smaller payers’ minimal IT infrastructure and staff capabilities
- The high burden and significant costs that a new data collection endeavor would place on all payers.

The following section provides examples of key findings and themes that stakeholders shared.

The current state of WC medical costs in New Hampshire

- Stakeholders emphasized that NH has disproportionately high WC medical costs compared to the rest of the country. Many attributed this to the lack of a WC fee schedule in New Hampshire.
- There is a perceived lack of transparency about WC data; for example, several stakeholders noted that New Hampshire has no standard way to determine reasonability of provider charges for WC medical services.
- Some data submitters expressed frustration that little has been accomplished during the legislative process to directly address high WC medical costs. Stakeholders mentioned that recent efforts to pass a WC fee schedule were dismissed until further investigations could compare medical costs in the WC and health insurance markets.
- SB-133 changed the language of the rule to state that carriers must pay the “reasonable cost” of WC medical services, rather than the “full cost.” The change also placed the burden of proof on providers, rather than carriers – making the provider responsible for demonstrating that the charge is reasonable. The bill took effect very recently, and its impacts are still unknown. Stakeholders expect that this bill will produce some changes, such as fewer Department of Labor hearings to resolve payment disputes between providers and carriers (based on the assumption that providers will have determined a reasonable rate prior to billing); however, insufficient time has passed for stakeholders to clearly see the effects.

Attitudes towards the State's Efforts to Compare WC and Health Insurance Medical Data

- Data submitters were very interested in finding a way to determine reasonable provider prices, and to drive down the disproportionately high medical costs in the WC market.
- For the most part, data submitters saw the value in having cost and utilization data on WC medical services, but were hesitant to embrace a new data collection effort.
- Data submitters felt that this initiative to address WC medical cost containment and transparency is “long overdue” and would not get any pushback from carriers, except in regards to how the data are collected.
- More than one stakeholder felt that the Legislature's order that NHID look into collecting WC data through CHIS was a delay in taking real action to address WC medical costs. They felt that the Legislature's request for further investigation reflected pressures from the provider community and others who did not want to “change the status quo” in New Hampshire.
- Multiple data submitters noted that WC medical costs represent a small percentage of total medical costs in the state (various stakeholders cited percentages ranging from 1-4%), and felt that collecting WC data in CHIS would not significantly contribute to the state's efforts to measure and improve total medical costs.

Current WC Data Collection and Reporting Capabilities

- Carriers, TPAs, and self-insurers receive WC medical bills on standard CMS 1500 and UB forms, either electronically or through paper submissions. They create an electronic (scanned) copy of the bill and attach it to the claim file (that is, the initial injury claim and all subsequent materials related to that claim). Some larger companies with more sophisticated systems can pull relevant data fields from the billing form and store the data in the claims payment system. At minimum, the system extracts and stores the necessary information to pay the bill. Other, smaller companies merely store a scanned image of the bill, and manually enter the billing information into a separate payment system for payment.
- Carriers that report to NCCI have the system capability (either in-house or through a vendor) to collect and submit the required data elements for NCCI's Medical Data Call, but would need a detailed list of desired data elements from the state to determine their reporting capabilities beyond NCCI's data call. Companies that do not report to NCCI (e.g. self-insurers) typically do not collect procedure-level data.
- Paper-based billing is the predominant method among most data submitters interviewed.
- More than one larger company reported using CorVel as their claims management vendor. CorVel has the capability to collect and store data from paper-based bills, to allow the carrier to process payments and report aggregate data to NCCI's Medical Data Call.
- Smaller companies have very few IT resources.
- Data submitters can run queries on the information they keep in their claims/payment systems; for example, they can query by provider, by data on the First Report of Injury, and by gender of the claimant. However, many data submitters do not input procedure-level data into their system.
- Several data submitters reported that they do not benchmark or run standard internal analyses. Those who do benchmark typically only do so against their own performance (e.g. their business in other states).

NCCI Medical Data Call

- Carriers submit Medical Call data to NCCI for NH as well as all other jurisdictions in which the carriers do business.
- NCCI requires that carriers complete a certification process before submitting data to NCCI.

- Self-insurers do not report to NCCI.
- NCCI reports that their Medical Data Call captures data from companies representing 92% of insurance company premiums written in New Hampshire.
- NCCI's Medical Data Call includes 28 data elements; some are considered mandatory. NCCI runs quality checks upon intake and during validation to make sure that the data meet the required thresholds for completeness and are reasonable when compared to industry norms or other data the carriers submit to NCCI. NCCI reported that submitters are sending good quality data.
- Carriers or their vendors submit flat files to NCCI, either quarterly or monthly, and with one quarter lag time.
- Carriers that submit to NCCI receive report cards from NCCI, as well as notification if their submission contained errors. NCCI does not provide carriers with a summarized version of their data. Carriers' files that do not meet quality standards may incur penalties from NCCI.
- The primary purposes, or uses, of the Medical Data Call are to evaluate legislative changes such as fee schedules and to understand medical cost drivers in the WC market.
- Provider profiling and other provider level analyses are considered outside the purview of the Medical Data Call.
- More than one data submitter felt that the NCCI's current data collection activities would be sufficient for comparing WC payments to medical claims payments from CHIS.

Perceptions on the State Collecting WC Medical Data to Compare with CHIS

- In general, data submitters felt that a new data collection program would create a high and costly reporting burden for payers, especially for those that do not currently collect procedure-level data.
- Data submitters expressed a reluctance to begin a new data submission process to the state when the NCCI Medical Data Call is already in place, and felt that the state should get everything it needs from NCCI (and that the state is, in fact, already doing so).
- Data submitters expressed concern about potential duplication of efforts for carriers already submitting WC data to NCCI, and felt that collecting WC medical data in CHIS would be "unnecessary" and "duplicative."
- Data submitters felt that collecting WC data through CHIS was not the answer, as it would create undue costs for carriers, would take a long time to build up a meaningful body of WC data, may not produce any positive returns for payers, and may in fact drive up WC costs.
- Stakeholders expressed uncertainty over how to link data in order to make an "apples-to-apples" comparison between WC and medical insurance costs.
- One data submitter expressed concerns about the confidentiality of medical data in any new data collection effort.
- One data submitter that did not currently collect procedure-level data expressed a willingness to change their internal systems to begin collecting this data element if needed; however, the user noted that their system would be unable to collect this data retroactively, and there would be a significant time lag before the new database was robust enough to use.
- One data user noted that, if the state were to begin collecting WC medical data from carriers, it may need to set a cut-off/threshold so that the smaller carriers with less market share and limited system capabilities would not need to submit.
- Another data user recommended adding a "workers' comp element" to the CHIS data to provide more insights into workplace-related injuries. The data user's ideal would be to require WC carriers to submit data to CHIS in the same way as health insurers do, and then allow researchers and the general public to have access to this data through public use or limited data sets (similar to CHIS).

Perceived Alternatives for WC Medical Services Data Collection

- Several data submitters felt that the Medical Data Call was the “best bet” for the state to collect medical service data, because it created consistency across carriers and because the data submission process was already set up. One data submitter noted that the process for establishing the Medical Data Call had been time consuming and costly for participating carriers.
- One data submitter noted that an extract from NCCI would need to pull out the NH-only data, because carriers’ data submissions include data for all states in which they do business.
- Data submitters focused on fee schedules as a critical need in NH and a tool for reducing WC medical costs. One stakeholder suggested that a fair fee schedule could be developed by blending CHIS data with national and regional WC reimbursement rates that NCCI collects. Another stakeholder felt that fee schedules based on Medicare rates were more effective than those based on what’s currently being paid. The stakeholder did not feel comfortable with a fee scheduled based solely on the payment data that NCCI collects, but felt that NCCI was collecting the right data to inform what a NH fee schedule should be.
- Some stakeholders suggested that the state have self-insurers submit Medical Call Data to the state using the NCCI format, and felt that this approach would be easier than creating a new data collection process for all carriers.
- One data user felt that NCCI data provided to date did not offer the type of detail needed to monitor and explore WC injury incidence and trends.

Perceived Data Uses

- Data users noted that the primary objectives of the Legislature’s rule are transparency and cost containment to address workers’ comp costs and to compare WC data to health data.
- Overall, data submitters felt that a fee schedule was a critical solution to addressing high WC medical costs, and focused on this as the primary use, or outcome, of the Legislature’s initiative.
- Stakeholders felt it would be useful to have data that compared WC medical data to CHIS data.
- One data submitter thought it would be helpful to compare WC providers to other WC providers. For example, the stakeholder thought it would be helpful to assess charges by CPT code by provider, and then identify the low-cost and high-cost providers, understand trends, and conduct regional analyses.
- One data submitter noted that they had not yet considered the potential value that an expanded data collection effort could provide to their company, as their focus to date had been on the potential burden that such an effort would bring.
- A data user was interested in data to identify trends and rates in workplace-related injuries to help target interventions. For example, the stakeholder was interested in measuring the incidence and types of workplace-related injuries that do not result in a hospital visit (i.e. that would not be captured in hospital discharge data). This stakeholder noted that person-level WC data would be the “gold standard” for population health research. Data elements would need to include employer name, types of injuries, cost, and the date the claim was created.
- A data user was interested in using the data to measure outcomes of population health initiatives.

Perceived Challenges

- Expect pushback from providers about collecting detailed data and controlling WC charges.
- Carriers collect different data elements and use different systems, making it difficult for the state to consistently map the data across all payers.
- Pulling paper WC claims into NH CHIS would be difficult; submitters’ manual data entry could introduce a high risk of error.

- Because carriers link WC data within their internal systems using their own unique claim number, the state would need to find a way to link WC data to medical claims data in order to make an “apples to apples” comparison of procedure prices and payments.
- If WC carriers began submitting to CHIS, they would need to encrypt WC data in the same way that medical claims data are encrypted.
- Collecting and analyzing WC medical services data requires state-based staff who understand the medical billing aspect of WC claims; this expertise can be difficult to find. Furthermore, this requires skilled analysts and researchers who understand the data and are able to translate it into meaningful analyses.
- If comparing the workers’ compensation and health insurance markets, the state should be cognizant of the fact that medical cost drivers and medical treatment objectives may be different between these two groups.
- WC medical cost measurement and containment is completely new to NH; the state has never done this type of data collection or fee schedules before.
- States are not currently comparing APCD data to WC medical data; NH would be the frontrunner. It may be difficult for the state to use the information to draw meaningful comparisons between NH and other states.
- Data users were unclear on which state agency would have the authority to require WC medical data collection through CHIS. If the state were to choose this approach, it would probably require a legislative change.
- The data use agreements between carriers and NCCI for the Medical Data Call may limit what downstream users can do with the data; for example, provider profiling may be outside the scope.

Section V: Considerations for Collecting Workers' Compensation Medical Data

The following section discusses key factors and considerations for collecting WC medical data and comparing it to NH CHIS.

Use Cases

The most effective option for collecting workers' compensation medical data depends on how the state plans to use the data. There are a range of potential reports and outputs that the state could produce to meet its goal of WC medical cost containment and transparency. The simplest way that the state could use WC medical data would be to analyze the average costs of procedures in the state, to assist in the development of a medical fee schedule or a price benchmarking tool that the Department of Labor could use to resolve payment disputes between WC payers and providers. This level of data use would only require summary-level data. A more thorough study of price variation across different geographies, types of providers, or types of facilities would need a detailed dataset containing select data elements pulled from all medical bills. Finally, if the state wanted to conduct longitudinal studies and analyze patterns and trends in utilization, spending, and analysis, it would require a full data set with all elements of the medical bill. As such, these three levels of data use can be categorized based on their degree of complexity:

Levels of Data Use:	Low Complexity	Medium Complexity	High Complexity
Description of the incoming data:	A summary of the average amounts paid for a particular procedure, where data has been collected, processed and checked before it is provided to NHID	Selected bill-level details on the procedure, dates of service, site of service, service provider, and amounts charged and paid. NHID could examine the data quality, including comprehensiveness and distribution of values.	All bill-level details on the injured worker, zip code, diagnosis, procedure, dates and location of service, service provider, plan type, and amounts charged and paid. NHID could examine the data quality, including comprehensiveness and distribution of values.
What can be done with the data when it is analyzed:	Analyze the average cost of a procedure across all providers in the state.	Examine how the cost of a procedure varies across the state by geography, site of service, and provider specialty	Look at an individual's care utilization reliably over time, and examine it in the context of other health care utilization in the state
Potential outputs:	Assist in the development of a statewide fee schedule or price benchmarking tool	Assist in the development of a statewide fee schedule or price benchmarking tool AND Ability to show variation in procedure costs across the state by site of care, by provider specialty and by geography	Assist in the development of a statewide fee schedule or price benchmarking tool AND Ability to show variation in procedure costs across the state AND Data files for policy and academic research

Levels of Data Use:	Low Complexity	Medium Complexity	High Complexity
Advantages:	<ul style="list-style-type: none"> • Simplicity • Lower cost 	<ul style="list-style-type: none"> • Provides more granular information on procedure costs • Provides a better understanding of what is and is not included in the data 	<ul style="list-style-type: none"> • Supports a broader range of uses and products • Provides a better understanding of what is and is not included in the data

Identifying the range of desired uses, or outputs, is a critical first step when choosing a data collection option. Lower complexity data uses may be fully realized by a relatively simple data collection model. Meeting the analytic and reporting needs of a broad range of users may require more complex and detailed data collection strategies. Section VI frames each option in terms of the levels of use cases it would support.

Elements Affecting Collecting Workers' Compensation Medical Data

In addition to framing how the state will use the data, all data collection options should be considered in the context of the following characteristics of WC medical data and coverage. Note that the CHIS data collection start up experience may not be comparable due to differences in the health insurance marketplace, the use of electronic billing, and the overall interest in monitoring spending and value.

Determining the appropriate *de minimis* threshold

A major theme from stakeholder interviews is that many of the smaller WC payers, both carriers and self-insured employers, lack the technical systems or staff to collect and report detailed WC medical payments. A new data collection effort would create a significant reporting burden for these payers. If the state were to begin a new WC data collection effort, it may consider setting a *de minimis* threshold so that small carriers who fall below a certain threshold are exempt from submitting their data. NH CHIS³² and the NHID's Supplemental Reporting Bulletin³³ currently have *de minimis* exemptions in place that are based on the carrier's number of covered lives. The CHIS threshold exempts carriers with fewer than 10,000 covered lives.

New Hampshire's insured WC market is dispersed over a large number of carriers (40 companies make up 75% of the market share); however, the total medical spend across these companies varies. Among all WC payers (carriers and self-insured employers) interviewed for this analysis, the number of reported policies varied from 332 to 4000, annual premiums varied from \$3M to \$38M, and total medical payments varied from \$1.4M to \$32M annually. The state should consider a more in-depth review of the variation in the WC marketplace in order to determine an appropriate submission threshold for WC medical data collection.

Addressing payers' limited or nonexistent capacity to accept electronic billing feeds

Hospitals and health care professionals typically bill health insurance plans electronically, using either a direct feed to the health insurance plan or a billing service. The larger WC carriers in New Hampshire are typically able to accept electronic bills, and those that participate in the NCCI Medical Data Call have

³² NH CHIS Data Submission Manual, August 2015. Available at:

<https://nhchis.com/Documents/DataSubmission/2016%20NH%20Data%20Submission%20Manual.pdf>

³³ NHID Supplemental Reporting Bulletin, March 2015. Available at:

http://www.nh.gov/insurance/media/bulletins/2015/documents/ins_15-010-ab.pdf

systems in place (either internally or through a third-party vendor) to collect NCCI data elements off of paper-based bills. However, stakeholders reported that smaller WC payers (especially self-insurers and even larger non-profit association plans) do not have the capacity to accept electronic billing feeds; rather, health care professionals must submit a paper billing form when requesting payment. When this group of WC carriers receives paper bills, they scan and save an image of the bill, and manually enter a minimal amount of information into their payment system (usually only the information necessary to pay the bill). These payers do not collect procedure codes or most individual-level information. Paper copies of the bill are retained as images in a database but are not otherwise accessible. Additional technology would be needed if information from these bills were to be gathered. Options for addressing this challenge may include:

- Requiring all WC payers to collect procedure, diagnosis and provider information from all incoming bills and create the capacity to report this information to NHID. While this would provide the detailed information necessary for the state, it would require a significant cost for small WC payers to upgrade their technology to design a new intake model and meet new reporting requirements.
- Create a state repository for scanned paper bills and use optical character recognition (OCR) technology to obtain the necessary data elements. The state would only use this option with small WC carriers that do not have the current technical capacity to transform paper-based bills to electronic format themselves. This option would give the state access to paper billing data without requiring WC carriers to implement new technology, and would augment other strategies to collect electronic data from companies that currently have electronic capacity. However, this option would maintain an inefficient, multi-step process and would require the state to collect identifiable information.
- Require all medical providers to bill electronically for WC services **and** require that WC payers accept electronic payment requests. While this would bring more consistency to billing and payment methods across the WC market, it would most likely create a new technology burden for payers and providers.
- Establish a centralized point to file WC medical payment requests. For example, the Florida Department of Financial Services' Division of Workers' Compensation collects detailed medical billing data from carriers via EDI transmission of the CMS 1500 forms and UB-04/CMS 1450 hospital billing forms.³⁴ While this would allow the state to maintain a record of all WC medical bills, it would not capture actual payments made.

In short, some WC companies have the capacity to intake electronic bills, while others do not. Even among carriers with electronic capacity, the prevalence of paper-based billing is high. Unless the state addresses this challenge, it will have incomplete data regardless of which option it chooses for WC medical data collection. Before moving forward with selecting an option, the state might consider implementing a thorough survey of self-insured associations and small WC carriers that do not report to NCCI, to better understand the extent of their paper-based medical bills and payments.

Creating transparency in data quality and validation processes

In any data collection effort, it is critical to clearly document and publish the methodologies used to ensure data quality. This allows all stakeholders, including data submitters and data users, to

³⁴ Florida Medical EDI Implementation Guide (MEIG) for Electronic Medical Report Submission (2010). Department of Financial Services, Division of Workers' Compensation. Available at: <http://www.myfloridacfo.com/wc/pdf/MedDataElecFilingManual2010-Revision-E-01-12-10.pdf>

understand and trust the data. CHIS recently began publishing Data Status Reports that provide “information regarding the status of the claim and eligibility files that are collected for inclusion in the data warehouse”³⁵ as well as documentation for users in data dictionaries.³⁶ The dictionaries note that health care claims data are complex and directs users needing “assistance in understanding how to interpret and use your dataset” to inquire about training and consulting services.³⁷ Similarly, WC medical services data collection should address how the completeness and credibility of the data will be publicly disclosed.

Statutory Authority for Oversight and Regulation

NHID’s authority to collect and use health insurance data is clearly established in INS 4000. Research uses are established under DHHS authority at He-W 950. However, any strategy to collect workers’ compensation medical data from WC carriers would require new legislative authority.

Reporting requirements that may affect WC medical data collection are separated by market sector. The NHID regulates WC carriers only, and has no authority over employers that are self-insured. The NH Department of Labor (NHDOL) has statutory authority³⁸ to collect certain WC information from self-insured entities. Options 1, 3, 4, and 5 below propose collecting self-insurer medical data through collaboration with NHID and NHDOL to leverage NHDOL’s authority over self-insurers. Whether NHDOL’s existing authority would support this level of data collection effort requires further review.

³⁵ NH CHIS Data Status Report Overview. Available at: <https://nhchis.com/DataStatus/Report>

³⁶ NH CHIS Data Set Documentation. Available at: <https://nhchis.com/DataAndReport/DataSetDocumentation>

³⁷ NH CHIS Consolidated Data Dictionary, version 1. February 2015, p.5. Available at: https://nhchis.com/Documents/DataSetDocumentation/NH_CHIS_Consolidated_Data_Dictionary.pdf.

³⁸ NHDOL has statutory authority to collect information from self-insured employers under section 281-A:23 of the NH Labor Law. Available at: <http://www.gencourt.state.nh.us/rsa/html/XXIII/281-A/281-A-23.htm>.

Section VI: Options for Data Collection and Integration with CHIS

This section outlines five options for collecting WC medical data. Each option is discussed in terms of its strengths, weaknesses, and remaining gaps. The options range from using existing capacity and authority to establishing new data collection structures and options. With each option, the NHID would assume the lead role in any data collection and analysis effort, and will seek the necessary funding for the option(s) selected.

Similarities across the options include a need for the state to:

- establish new authority to collect the data
- determine whether a *de minimis* threshold is appropriate to exclude smaller payers with low market share
- determine how smaller self-insured employers and associations could provide data based on paper-based (non-electronic) medical billing processes
- create or revise a data collection process to accommodate additional submitters
- create transparency surrounding data quality and validation processes
- determine capacity to produce required analysis and reports

Differences across the options include:

- complexity of the data collection strategy
- burden on data submitters
- ability to understand the credibility and accuracy of the submitted data
- suitability of the data for different types of reports

Option 1: Collect WC Medical Data through NH CHIS

In this model, the state would collect WC medical data from WC payers using the same data submission process currently used to collect medical payment information from health insurance carriers through CHIS. New submitters would include, at minimum, large WC carriers. There is the potential to include data from self-insured employers through collaboration with NHDOL. This model would support Low, Medium, and High complexity data uses (as outlined in Section V).

Strengths:

Analysis and reporting

- Supports reports ranging from highly aggregated, summary data to detailed research data about service utilization and prevalence.
- Supports longitudinal analysis of utilization and cost (e.g., average duration of treatment for individuals with WC coverage compared to those with health-insurance over several years).
- Supports specific comparisons of procedure code prices with variation by providers, site of service, specialty and address.
- Allows side by side comparisons between WC and CHIS
- Supports comparison of pharmacy utilization and spending at very detailed levels, including medication name and dosage and dispensing pharmacy.
- Has potential for historical trend analysis of WC carrier data if the NHID requests historical data.

Data Collection

- Potential to include self-insurer data from third party administrators that can provide electronic files (contingent on collaboration with NHDOL)

- Uses existing CHIS structures to collect, store and analyze data
- CHIS Data Manager has extensive experience:
 - working with new data submitters
 - understanding how medical bill data are collected
 - managing data quality reviews
 - delivering data extracts and reports to meet analytic needs
- Accepts electronic file feeds, thus expediting data processing
- Data will be submitted monthly or quarterly so updates could be reasonably timely

Weaknesses:

- New data collection authority needed for a NHID/NHDOL collaborative effort – at minimum, a new rule or other authority designating CHIS as the WC data collector
- WC carriers assume the burden of complying with CHIS data submission requirements, including programming files and submitting data. [However, under the state data collection models discussed in Section II, larger WC carriers operating in at least five states (OR, FL, TX, CA, and NC) submit data of similar scope and detail and are likely to have the capacity to submit to CHIS.]
- The CHIS data submission model requires a member eligibility file to cross-check valid records in other files. However, WC carriers do not collect “member” information in a way that naturally flows into the CHIS file format. If WC data submitters could create a similar file, many of the data elements would be blank or not applicable. A second unknown is whether the person-level information would be sufficient to generate a hashed, de-identified member identifier that would match across the different data sources.
- The scope of some higher complexity reports will be limited until several years of data accumulate.

Gaps/Considerations:

- The NH Department of Health and Human Services (DHHS) is authorized to manage the health insurance database under the NHID’s authority for CHIS. Authority to collect and manage WC data – from both WC carriers and self-insured employers – should be reviewed.
- WC carriers with robust data infrastructures would need to install a revised version of the data manager’s pre-processor, which removes member identifiers. The additional cost to the CHIS contract is estimated at \$100,000 during the first year, with approximately \$10,000 per year for ongoing management.
- Under the NHID CHIS data collection rule, submitters must provide quarterly files. On an ongoing basis, the state might consider whether WC carriers could forgo quarterly submissions in favor of a single annual file. Also, first time submitters are required to provide three years of historical data, needed to assess data integrity and credibility. WC data submitters may vary in capacity to deliver this volume of information.

Option 2: Collect WC Carrier Medical Data via the NCCI Medical Data Call

Workers’ compensation carriers in New Hampshire currently submit select bill-level medical data to NCCI as part of the Medical Data Call. The level of detail in NCCI’s annual *Medical Data Report* to the state could be compared to summary data from CHIS; however, understanding variation by geography, site of service, provider specialty, and type of insurance plan would require a more detailed report from NCCI.

In Option 2, NHID could leverage NCCI’s existing Medical Data Call and obtain more detailed medical data from NCCI in one of two ways. First, NCCI could choose to produce a more detailed file voluntarily. If this is not possible, the state would issue new legislation that mandates WC carriers to submit detailed medical data to the state, and allows them to designate NCCI or a similar entity as their data aggregator.

With either approach, NHID would obtain a detailed data file from the NCCI Medical Data Call that would contain the same information that NCCI summarizes in its annual *Medical Data Report*. NCCI’s annual report provides an average amount paid for a specific medical service (“procedure code.”) However, actual payment amounts are affected by where the care is delivered, the medical provider’s specialty, and geographic location. A NCCI detail file allows analysts to understand medical bill variation by these factors and make better comparisons to CHIS and other medical data. This file would be analyzed and formatted to produce information that is reasonably comparable to CHIS-sourced information at a similar level of detail. The NCCI data would not be collected or merged into CHIS because the NCCI data has fewer data elements and does not conform to the CHIS data collection standards. Rather, summary tables from the NCCI detailed file and a similar data extract from CHIS could be compared side by side. This option would support Low and Moderate levels of data use since the results could be differentiated by geography, site of service and provider specialty.

Option 2 is advantageous to carriers because it leverages the existing NCCI data collection process and minimizes the additional reporting burden on carriers. NCCI has an established data collection model and, according to NCCI staff, runs rigorous data quality checks on incoming files. NCCI penalizes its data submitters for non-conforming files as a method for ensuring ongoing accuracy and completeness of incoming information.

Table 5 below lists the 28 data elements collected in the NCCI Medical Data Call. The data elements highlighted in blue are those that the state would need to collect to support comparisons to CHIS.

Carrier Code	Policy Number Identifier	Policy Effective Date	Claim Number Identifier
Transaction Code	Jurisdiction State Code	Claimant Gender Code	Birth Year
Accident Date	Transaction Date	Bill ID Number	Line ID Number
Service Dates	Service From Date	Service To Date	Paid Procedure Code
Paid Procedure Code Modifier	Amount Charged by Provider	Paid Amount	Primary ICD-9 Diagnostic Code*
Secondary ICD-9 Diagnostic Code*	Provider Taxonomy Code	Provider ID Number	Provider Postal (ZIP) Code [3-digit]
Network Service Code	Quantity/Number of Units per Procedure	Place of Service Code	Secondary Procedure Code

*Note: The 18 data elements highlighted above would support Low and Moderate levels of data use. A High level of data use would also require, at minimum, the addition of Primary and Secondary ICD-9 Diagnostic Codes to support academic research.

Strengths:

- The Medical Data Call captures approximately 92% of the WC premium written in New Hampshire and includes premiums written by out of state carriers.

- Because NCCI collects the Medical Data Call in many states, this allows NCCI to provide comparisons of NH to other states.
- Has the potential for historical trend analysis of WC carrier data if the NHID requests historical data.
- Is an established process that large WC carriers know and understand.
- WC carriers who were interviewed for this report were largely in favor of using NCCI's Medical Data Call to meet the state's needs.
- NCCI imposes penalties on data submitters for noncompliance.
- NCCI created its data collection manual in collaboration with WC carriers, so the data elements are well understood by the WC carriers.
- NCCI data collection documentation includes information about data quality processes.
- NCCI staff is experienced in analyzing medical data.
- Does not require a new data collection process for the NHID, WC carriers or medical providers.
- Is the simplest of the data collection options if the state selects a Low or Moderate complexity use case.
- NCCI indicates that it is willing and able to respond to additional requests for medical information. Furthermore, NCCI has stated that is "accountable to New Hampshire and NCCI's affiliate members to make sure the information it provides is complete and is of high quality."³⁹

Weaknesses:

- NCCI is a membership organization that primarily exists to support its affiliated WC carriers in rate setting and premium development; reporting to the state is a secondary function.
- The level of spending represented in the remaining 8% of the WC insurance market that are not members of NCCI is unclear.
- This option does not include a method to collect self-insured data.

Considerations:

- The success of this option and the characterization of imposing a low burden on carriers depends on NCCI assuming the data collector role and being willing to provide timely data extracts to the state.
- NCCI is willing to discuss New Hampshire's needs in order to determine whether it could provide the necessary level of information while still complying with the contractual nature of its affiliation agreements with its members. Moving forward, the state may want to identify use cases and review them with NCCI to determine whether NCCI is able to provide the data to support the analysis.
- If NCCI determines that it is not able to submit more detailed data, a new statute would be needed to direct WC carriers to submit medical payments data to the state. To minimize carriers' reporting burden, this statute could allow carriers to submit the data through a data aggregator such as NCCI or a similar organization.

Option 3: Issue Joint State Agency Data Call for WC Medical Data

Under Option 3, the NHID and the New Hampshire Department of Labor (NHDOL) would collaborate to issue a joint data bulletin to collect WC medical data from both WC carriers and self-insured WC payers. This option would require new statutory authority for the NHID to implement a periodic data call among WC carriers, similar to those it issues to health insurance carriers (e.g. the annual Line of Business,

³⁹ NCCI Personal communication, November 19, 2015.

Annual Hearing, and Supplemental Report surveys). Whether NHDOL's existing data collection authority⁴⁰ would extend to a more extensive data collection effort requires further review. Option 3 would require a new rule or bulletin for the data call, but would allow the state to collect medical data from the overall WC market. The NHID would assume the lead role in this data collection effort, and would seek the necessary funding to support this option.

A simple approach to Option 3 would be to develop summary forms that WC carriers and self-insured WC payers would submit annually to allow the NHID and NHDOL to calculate the average amount paid for similar procedure codes. Note that a summary request should include types of detail such as procedure code, date of service, provider info, and site of service. This data call may include pharmacy data, although the NHID may need to create capacity to organize the data in a meaningful way.

After compiling the data from the joint data call, the NHID would then compare the data to an extract from CHIS. Option 3 is best suited for Low complexity use cases because summary data creates limited opportunities for quality checks and validation.

Strengths:

- The NHID and NHDOL control the data collection timeline.
- Outputs could be compared to CHIS.
- The data source could be benchmarked against the currently-provided annual NCCI *Medical Data Report* containing summary data.
- Has the potential for historical trend analysis of WC carrier data if the NHID requests historical data.
- Additional resource burdens for the NHID and NHDOL will be analytic, not technical.

Weaknesses:

- Summary data provides limited visibility into data anomalies.
- Will need to collect data from 15-40 entities to capture the fully insured market.
- Publicly available data does not show the distribution of the self-insured market by size of employer (i.e., payroll) or whether the employer is part of an association or uses a third party administrator to manage WC medical payments.
- There is a high prevalence of paper-based billing among self-insurers.
- New data submitters need time to get up to speed with the NHID data call process.
- The NHID and NHDOL assume responsibility for data accuracy.
- Would require a significant effort for both the state and submitters, but would only yield summary data.

Gaps/Considerations:

- The NHID would require new legislative authority to issue the data call to WC carriers.
- Whether NHDOL's existing data collection authority⁴¹ would extend to a more extensive data collection effort requires further review.

⁴⁰ NHDOL has statutory authority to collect information from self-insured employers under section 281-A:23 of the NH Labor Law. Available at: <http://www.gencourt.state.nh.us/rsa/html/XXIII/281-A/281-A-23.htm>.

⁴¹ NHDOL has statutory authority to collect information from self-insured employers under section 281-A:23 of the NH Labor Law. Available at: <http://www.gencourt.state.nh.us/rsa/html/XXIII/281-A/281-A-23.htm>.

- NHID and NHDOL must develop a joint approach to the development and implementation of a data call bulletin as well as responsibilities for overseeing submissions and preparing an analysis. The NHID is prepared to assume the lead role.
- Paper-based medical payment submission hampers collection of data and compilation into a database.
- Accountability and validation of the data will be limited due to the summary nature of the data.
- Pharmacy data is voluminous; effective analysis requires analytic processing.

Option 4: Collect Medical Bill Data Using IAIABC EDI Standards

Under state mandate, four states (CA, TX, NC, and OR) currently use versions of standards developed by the International Association of Injury and Accident Boards (IAIABC) to collect medical billing data from WC payers (including insurers, self-insurers, TPAs, and/or their vendor) through a single, central processing point. CA, OR, and TX collect and manage the medical billing data in-house, while NC uses a vendor for data collection and analysis. These states use a data submission format created by the IAIABC, with required data elements that include direct identifier, date of birth, the amounts billed and paid, procedure code, diagnosis code, and full provider information.

Oregon's Workers' Compensation Division began collecting Medical Billing data in 2008 under a voluntary effort, and began mandating data submission in 2010. They rolled out their data collection process in three phases. Phase 1 collected data from the larger, national carriers that were already participating in a similar effort in California and Texas (this represented approximately one third of OR's WC market). Phase 2 incorporated the state WC fund, which represented the biggest market share. Phase 3 added self-insurers and the remaining smaller carriers. OR mandates data submission from insurers that have had an average of 100 accepted disabling claims over the past three years; however, OR also receives data from some voluntary submitters that fall below this threshold. Oregon built the data collection system in house, and currently uses an approximate total of 2 FTE to maintain it.

With Option 4, the NHID would create a central, electronic data collection process and adopt IAIABC standards for WC payers to submit medical billing data directly to the state. This option has the potential to include self-insured data if NHID collaborated with NHDOL. All data would be housed together in one place, and extracts could be compared to CHIS extracts. This option would require new legislation authorizing the NHID to collect this data from WC carriers. It would also most likely require an intensive technical build and implementation process upfront, but would allow for Low, Medium, and High complexity data uses.

Strengths:

- Potential reports range from highly aggregated, summary data to the ability to offer research information about service utilization.
- Includes data about the provider, the type of service, and service location.
- Potential to perform longitudinal analysis of utilization and cost.
- Potential for historical trend analysis of WC carrier data if the NHID requests historical data
- Accepts electronic file feeds; expedites data processing.
- Potential to include self-insurer data (under partnership with NHDOL).
- Allows side by side comparisons between WC and CHIS at the procedure and provider levels.
- Data submitted monthly or quarterly so updates could be reasonably timely.
- Produces pharmacy utilization analysis.

- NH Department of Labor already collects FROI data using IAIABC's EDI standards, creating the potential to link Medical Billing data to FROI data in the future.
- Mandatory EDI Medical Bill collection may incentivize providers to submit more complete bills (because payers would be accountable for more detailed reporting to the state, and would require providers to submit more detail in order to process and pay the bill).

Weaknesses:

- New data collection authority will be needed (voluntary effort may face resistance from payers and providers).
- Additional state cost to build new data collection and warehousing structure.
- Adds to the reporting burden for WC carriers already submitting data to NCCI.
- Both WC carriers and self-insured payers need to set up new data feed process.
- Is dependent on payers' and providers' electronic billing capabilities.
- WC medical data files may be less populated than health insurer data files depending on WC carrier requirements for accepting medical bills from service providers.

Gaps/Considerations:

- Does not support paper-based billing format (would exclude those carriers, or require transition to electronic billing).
- Inclusion of self-insurer data is dependent on the NHID collaborating with NHDOL. Whether NHDOL's existing data collection authority⁴² would extend to a more extensive data collection effort requires further review.
- Similar to, but not an exact match, to the CHIS data collection model.

Option 5: Combine Options 2 and 3

In this option, the NHID would compare detailed information derived from three sources to understand medical payment variation for specific services (procedure codes):

- NHID would collect detailed medical payments data from WC carriers via NCCI's Medical Data Call (Option 2)
- NHDOL would issue a Data Call for medical payments data from self-insured employers, associations and third party administrators (Option 3).
- CHIS would provide a file containing similar data elements as the NCCI and Data Call files, for purposes of comparison.

This option would limit the reporting burden for WC carriers by leveraging the NCCI Medical Data Call, but would add data from self-insurers that would not otherwise be captured by Option 2 alone. Ideally, the NHDOL data call for self-insurers would request the same detailed bill-level data as WC carriers provide to NCCI (see Table 4 in Option 2). If self-insured payers are unable to collect and report at that level of detail, an alternative would be to request summarized data from self-insurers and then compare that to summarized tables from the NCCI data extract and the CHIS extract. This option would support a Low complexity level of data use.

⁴² NHDOL has statutory authority to collect information from self-insured employers under section 281-A: 23 of the NH Labor Law. Available at: <http://www.gencourt.state.nh.us/rsa/html/XXIII/281-A/281-A-23.htm>.

Strengths:

- Captures data from both WC carriers and self-insured employers.
- Does not require additional reporting from WC carriers.
- NHDOL data call for self-insurers has the potential to build off of the existing data submission standards established by NCCI (although these standards are proprietary).
- Potential for historical trend analysis of WC carrier data if the NHID requests historical data.
- Outputs could be compared alongside a CHIS extract.

Weaknesses:

- The level of spending by WC carriers that are not members of NCCI (representing the remaining 8% of the market) is unclear.
- Reducing uncertainty about the causes for variation in pricing is limited when different data quality metrics are used in the analytic source files.
- NCCI is a membership organization that primarily exists to support its affiliated WC carriers in rate setting and premium development; reporting to the state is a secondary function.

Gaps/Considerations:

- Collecting WC carrier data from NCCI's Medical Data Call is dependent on NCCI assuming the data collector role and being willing to provide timely data extracts to the state. If NCCI is unable to provide the state with more detailed data voluntarily, this option requires new statutory authority to mandate WC carriers to submit detailed medical payment data to the state with the option of using NCCI or a similar entity as the designated data aggregator.
- Inclusion of self-insurer data is dependent on the NHID collaborating with NHDOL. Whether NHDOL's existing data collection authority⁴³ would extend to a more extensive data collection effort requires further review.
- As for every option, collecting data from organizations that process paper-based medical payments is cumbersome. There is a high prevalence of paper-based bills among self-insurers.
- Further information is needed on the size and distribution of self-insured entities to assess the potential threshold for submitters based on payroll and annual medical payments. Based on current reports provided, NHDOL may be able to report total, aggregated amounts paid by TPAs to assist in creating a *de minimus* threshold for self-insureds.
- Accountability and validation of the data will be limited due to the summary nature of the data.

Comparison of File Layouts

Several of the options described above depend on comparing a WC medical data file with a health insurance medical data extract from NH CHIS. The table below shows a preliminary comparison among the NCCI and NH CHIS data collection formats, to illustrate how data extracts from both sources could be reviewed side by side.

⁴³ NHDOL has statutory authority to collect information from self-insured employers under section 281-A:23 of the NH Labor Law. Available at: <http://www.gencourt.state.nh.us/rsa/html/XXIII/281-A/281-A-23.htm>.

Table 6: Example of how Selected CHIS Data Elements Compare to the NCCI Medical Data Call Record Layout⁴⁴

Type of Data Being Collected:	Data Elements Collected by NCCI		CHIS Comparable Field Based on 2016 Data Rules	
	Field No.	NCCI Field Title/Description	CHIS Number	CHIS Data Element Name
Record ID	4	Claim Identifier Number	MC004	Control Number
Claim Status	5	Transaction Code	MC219	Denied Claim indicator
Insurer's state	6	Jurisdiction State Code	MC001	Payer ID
Bill ID	11	Bill ID Number	MC004	Payer Claim Control Number
Line ID	12	Line ID Number	MC005	Line Counter
Dates of Service	13, 14, 15	Service Dates	MC059, MC060, MC 018, MC 069	Dates of service
Service provided (First and Second Procedure Codes)	16 & 28	Paid Procedure Code	MC055 & MC202	Procedure code
Modifiers (additional detail about service provided)	17	Paid Procedure Code Modifier	MC056 & MC057	Modifiers 1 & 2
Amount Paid	19	Paid Amount	MC212	Allowed amount
Provider Specialty	22	Provider Taxonomy Code	MC032	Service Provider Specialty
Provider zip code (first 3 digits only)	24	Provider Postal (ZIP) Code (only first 3 digits)	MC035	Service provider zip code
Type of insurance network	25	Network Service Code (HMO, PPO, etc.)	ME003	Insurance Type/Code/Product
Quantity/Units	26	Quantity/Number of Units per Procedure Code	MC061	Quantity
Place of Service	27	Place of Service Code (CMS code set)	MC037	Place of service (CMS code set)

⁴⁴ NCCI data elements available at: <http://www.mwcia.org/Downloads/Manuals/MedicalDataCallReportingManual.pdf>. CHIS data elements available at: <https://nhchis.com/Documents/DataSubmission/2016%20NH%20Data%20Submission%20Manual.pdf>

Section VII: Options Assessment

Criteria	Option 1: Collect WC Medical Data through NH CHIS	Option 2: Collect WC Carrier Medical Data via the NCCI Medical Data Call	Option 3: Issue Joint State Agency Data Call for WC Medical Data	Option 4: Collect Medical Bill Data using IAIABC EDI Standards	Option 5: Combine Options 2 and 3
DATA SYSTEM					
Authority to obtain data	New authority needed; WC is currently an excluded category	Unless NCCI can provide the data voluntarily, new authority is needed to collect bill-level medical data from WC carriers via NCCI or a similar entity, which could serve as data aggregator on carriers' behalf	New authority most likely needed for both NHID and NHDOL	New authority needed	New authority most likely needed for both NHID and NHDOL
Purpose	See CHIS language, note 1 below – Data collected to provide transparency, information for researchers	NCCI collects the data to support legislative pricing activities related to medical benefits, and provides a summary <i>Medical Data Report</i> as a service to the state	Data would be collected to explore variation in payments for common medical procedures between WC and health insurance	Detailed data would be collected to allow for research and analysis that will address the disproportionate cost of medical spending in the WC system	Data would be collected to create average rates for common medical procedures
Leveraging existing resources	Builds off existing effort	Would build off existing data collection and reporting process	New initiative	New initiative	New initiative drawing from existing data collection and new data call
Current Operational Funding Source	NHID, DHHS	Leverages NCCI member fees	To be determined (TBD)	TBD	Leverages NCCI member fees with other resources TBD
Incorporated into CHIS?	N/A	No. Build a similar extract from CHIS to compare to this data	No. Build a similar extract from CHIS to compare to this data	No. Build a similar extract from CHIS to compare to this data	No. Build a similar extract from CHIS to compare to this data
COMPLETENESS					

Criteria	Option 1: Collect WC Medical Data through NH CHIS	Option 2: Collect WC Carrier Medical Data via the NCCI Medical Data Call	Option 3: Issue Joint State Agency Data Call for WC Medical Data	Option 4: Collect Medical Bill Data using IAIABC EDI Standards	Option 5: Combine Options 2 and 3
WC Data submitters	TBD; WC carriers and third party administrators are best positioned to submit	Currently reports on WC carriers representing 92% of premiums written in NH; no self-insured	TBD; should assess effect of missing self-insured payments and paper-based payments	System would only include data from payers (carriers and self-insured) and providers that use electronic billing submission methods	WC carriers representing 92% of premiums written in NH; self-insured
Level of detail: currently or potentially	Currently: Detailed medical, dental, pharmacy payment and member eligibility records	Potentially: Subset of 28 data elements extracted by carriers from payment data	Potentially: Summary level information, e.g. total payments and number of procedures	Potentially: Using existing detailed medical, pharmacy payment formats	Potentially: <i>Ideally</i> : subset of 28 data elements extracted from payment data <i>If not</i> : summary level information (e.g. total payments and number of procedures)
What would be missing	Self-insured data (unless the NHID collaborates with NHDOL)	Self-insured data	None	Self-insured data (unless the NHID collaborates with NHDOL)	None
What might also be missing	Data from paper-based WC payers	Data from paper-based WC payers	Data from paper-based WC payers	Data from paper-based WC payers	Data from paper-based WC payers
DATA QUALITY					
Submission standards	Established in rule	Outlined in proprietary Medical Data Call Reporting Guidebook	TBD	Established by state (using or adapting IAIABC's EDI Medical Bill standards)	For WC carriers: Outlined in proprietary Medical Data Call Reporting Guidebook, For self-insured: TBD
Information about data quality processes	Yes	Yes	TBD	Yes	For WC carriers: Yes For self-insured: TBD

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TIMELINESS					
Frequency of data submission	Quarterly	Monthly or quarterly	Likely to be annually	Ongoing	Likely to be annually
Availability of data after submission	6-12 months	Annually (reported by service year)	3-4 months	TBD	Likely to be annually
USE CASES					
Condition or course of treatment analysis	Yes	No	No	Yes	No
Provider-specific analysis	Yes	Yes with limitations	No	Yes	No
Procedure focused analysis	Yes	Yes	Yes	Yes	Yes
Would assist in the development of a fee schedule	Yes	Yes	Yes	Yes	Yes
Would support population health surveillance and analysis	Yes	No	No	Maybe: compared to but not integrated with CHIS	No
Historical trend analysis	Maybe for WC carriers, if NHID requests historical data	Yes, if NHID requests historical data	Maybe for WC carriers, if NHID requests historical data	Maybe for WC carriers, if NHID requests historical data	Yes for WC carriers, if NHID requests historical data
Would align with other public health information (Vital Statistics, PDMP)	Partly	No	No	Yes	No
STAKEHOLDER PERCEPTIONS					
WC carriers	Considered difficult, expensive, and unnecessary/inefficient;	In favor of the state using the NCCI Medical Data Call to meet its needs	Recommended NHID use this approach to collect self-insured data	No feedback provided	Conceptual support

Criteria	Option 1: Collect WC Medical Data through NH CHIS	Option 2: Collect WC Carrier Medical Data via the NCCI Medical Data Call	Option 3: Issue Joint State Agency Data Call for WC Medical Data	Option 4: Collect Medical Bill Data using IAIABC EDI Standards	Option 5: Combine Options 2 and 3
	Smaller companies lack appropriate technology		and combine with existing NCCI data		
Self-insured carriers and TPAs	Considered very difficult and expensive; companies lack the technology; some willing to explore this, others opposed	Not currently submitting to NCCI	Challenges include manual data entry process and meeting required format/frequency for submissions to NHID	No feedback provided	Challenges include manual data entry process and meeting required format/frequency for submissions to NHID
ESTIMATED IMPLEMENTATION COSTS FOR THE STATE – First Year					
Developing Rules/Requirements	None; use specifications in CHIS rule	None; NCCI collects data	\$50,000 for data calls to WC carriers and self-insureds	None; use existing IAIABC standards	\$25,000 for self-insured data call
Technical System Infrastructure	\$30,000	None; NCCI collects data	None	\$265,000	None
Data collection	\$100,000 (see note 2)	None; NCCI collects data	\$100,000 for WC carriers and self-insured	\$370,000	\$50,000 for self-insurer data call
Potential database build (depending on size and scope of the data)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
QA Testing/Validation	\$60,000	\$60,000	\$90,000	\$60,000	\$90,000
Analysis	\$45,000	\$90,000 (see note 3)	\$135,000 (see note 3)	\$90,000	\$135,000
YEAR 1 TOTAL:	\$335,000	\$250,000	\$475,000	\$885,000	\$400,000
ESTIMATED IMPLEMENTATION COSTS FOR THE STATE – Second Year and Ongoing					
Developing Rules/Requirements	N/A	None; NCCI collects data	None	None; use existing IAIABC standards	None
Technical System Infrastructure	\$10,000	None; NCCI collects data	None	None	None
Data collection	\$100,000 (see note 4)	None; NCCI collects data	\$100,000 for WC carriers and self-insured	\$370,000	\$50,000 for self-insurer data call

Criteria	Option 1: Collect WC Medical Data through NH CHIS	Option 2: Collect WC Carrier Medical Data via the NCCI Medical Data Call	Option 3: Issue Joint State Agency Data Call for WC Medical Data	Option 4: Collect Medical Bill Data using IAIABC EDI Standards	Option 5: Combine Options 2 and 3
QA Testing/Validation	\$60,000	\$60,000	\$90,000	\$60,000	\$90,000
Analysis	\$45,000	\$90,000 (see note 3)	\$135,000 (see note 3)	\$90,000	\$135,000
YEAR 2 TOTAL:	\$215,000	\$150,000	\$325,000	\$520,000	\$275,000
OVERALL IMPLEMENTATION COSTS FOR PAYERS					
For WC carriers:	High	Under voluntary data sharing from NCCI: None, covered under NCCI member fees Under new legislative mandate: TBD	Moderate	Moderate for national payers; High for NH-only payers (see Note 4)	Under voluntary data sharing from NCCI: None, covered under NCCI member fees Under new legislative mandate: TBD
For self-insured w/TPA:	High	N/A	Moderate	Moderate for national payers; High for NH-only payers (see Note 4)	Moderate
For other self-insured:	Extremely high (see Note 5)	N/A	Extremely high (see Note 5)	Extremely high (see Note 5)	Extremely high (see Note 5)
IMPLEMENTATION TIMELINE (Assumes a start date of January 1, 2016)					
• Statute Enacted	6 months	6 months	6 months for NHID Whether NHDOL's current authority would extend to a more extensive self-insurer data collection effort requires further review	6 months	6 months
• Rule Making	6-9 months	0-9 months (0 months only if NCCI can voluntarily provide the data)	6 months (bulletin)	6-9 months	6-9 months
• Interagency Agreements	3 months	N/A	3 months	N/A	3 months

Criteria	Option 1: Collect WC Medical Data through NH CHIS	Option 2: Collect WC Carrier Medical Data via the NCCI Medical Data Call	Option 3: Issue Joint State Agency Data Call for WC Medical Data	Option 4: Collect Medical Bill Data using IAIABC EDI Standards	Option 5: Combine Options 2 and 3
• Carrier Compliance	6 months	N/A	6-12 months	6-12 months	6-12 months
• Analysis	6 months	6 months	6 months	6 months	6 months
Est Total Duration	27-30 months	12-21 months	27-33 months	24-33 months	27-36 months
Estimated Finish	Mar 2018-Jun 2018	Jan 2017-Oct 2017	April 2018 –Oct 2018	Jan 2018 – Oct 2018	Apr 2018-Jan 2019
Difficulty in analyzing the data	Low; data could be available through a single custom extract	Medium; requires working with two datasets	High; requires consolidating summary reports and comparing to comparable CHIS file	Medium; requires working with two datasets	High; requires consolidating summary reports and comparing to comparable CHIS file
Overall Feasibility	<p>Low</p> <ul style="list-style-type: none"> Requires additional capacity to collect data from paper based bills and payments from self-insured employers and small carriers Requires new legislative authority Technically complex for WC submitters Provides credible comparisons 	<p>High</p> <ul style="list-style-type: none"> Does not require new data collection effort (only increases the level of detail the state receives from NCCI) Will most likely require new legislative mandate requiring bill-level medical data from carriers and allowing them to appoint a designated data aggregator such as NCCI or similar entity Excludes self-insured 	<p>Moderate</p> <ul style="list-style-type: none"> Includes data from WC carriers and self-insured employers Requires collaboration between NHID and NHDOL Requires new legislative authority for NHID to collect data Whether NHDOL’s current authority would extend to a more extensive data collection effort requires further review Requires additional capacity to collect paper-based bills and payment data 	<p>Low</p> <ul style="list-style-type: none"> Requires new legislative authority to collect data Requires new data feeds and submission process from all payers Requires extensive technical build and ongoing maintenance from the state Requires additional capacity to collect paper-based bills and payment data 	<p>Moderate</p> <ul style="list-style-type: none"> Leverages existing NCCI data collection effort Whether NHDOL’s current authority would extend to a more extensive data collection effort requires further review Requires new legislative mandate requiring bill-level medical data from carriers Contingent on NCCI and state coming to agreement

Notes

1. CHIS goals and purpose: "The New Hampshire Comprehensive Health Care Information System (CHIS) was created by NH state statute to make health care data "available as a resource for insurers, employers, providers, purchasers of health care, and state agencies to continuously review health care utilization, expenditures, and performance in New Hampshire and to enhance the ability of New Hampshire consumers and employers to make informed and cost-effective health care choices."
2. The CHIS contract currently permits data feeds from all entities that are required to submit data. The additional cost noted here supports a part-time role for data submission support services such as installing the CHIS data submission software (the "preprocessor") and assisting data WC data submitters with meeting file intake requirements.
3. "Analysis" refers to developing appropriately structured tables and reports that provide reliable comparisons across the different data sources.
4. Four states currently use IAIABC standards to collect Medical Bill Data from payers. National companies that currently submit data to these states may have lower costs to implement a similar data submission effort in New Hampshire.
5. This option would present an extremely high cost to self-insurers due to the lack of an existing solution to collect data from paper-based bills.

Assumptions for Implementation Cost Estimate:

- Options 2-5 assume that the WC data would be compared to a health insurance medical data extract from NH CHIS. A CHIS data extract is available for Options 2-5 at no additional cost under the state's existing contract with its CHIS data management vendor. However, the CHIS extract will still require quality checking/validation and analysis alongside the WC data files; this is factored into the cost estimate above.
- Potential database build may or may not be needed in Year 1, depending on the size and scope of the actual data.
- QA Testing/Validation: \$30,000 per file
- Analysis: \$45,000 per file
- A "file" is defined as compiled data from one source dataset (e.g. the CHIS extract, the NCCI dataset, a data call, etc).
- Data Collection for data calls: \$50,000 per data call (Self-insured employers and WC carriers are considered separate data calls for purposes of this estimate)

Section VIII: Recommendations

Based on its analysis of the five options, Freedman HealthCare (FHC) recommends that the Legislature consider the following approach to collecting workers' compensation medical data:

[Recommendation 1: Collect WC Carrier Medical Data via the NCCI Medical Data Call \(Option 2\) and compare the detailed data set to a similar extract from NH CHIS.](#)

FHC recommends that the NHID collect a detailed file from NCCI containing WC carrier data collected through its annual Medical Data Call. Because it leverages an existing data collection effort, this is the simplest and most straightforward option and has the shortest implementation timeline. Furthermore, this approach largely addresses the issue of paper-based bills, as all the WC carriers that submit to NCCI's Medical Data Call currently have the capacity to collect procedure-level data off of electronic and paper bills, either through their internal system or that of a third party vendor. Finally, this option would most likely face the least resistance from carriers, based on the feedback FHC received during its stakeholder engagement process.

To help determine the feasibility of NCCI providing more detailed data than it currently includes in its annual *Medical Data Report*, FHC recommends that the state take the following preliminary steps:

1. The Legislature should clearly define how it expects to use the workers' compensation medical data, so that the NHID can confirm the data elements it needs from NCCI's Medical Data Call. FHC recommends that a NCCI data file include, at minimum, the data elements listed in Table 7.
2. Subsequently, the NHID should engage NCCI in discussing the feasibility of voluntarily producing this data file from their Medical Data Call, based on the uses and data elements that the state defines.
3. If NCCI is able to produce a more detailed data file for the state, the NHID should establish a formal agreement with NCCI and agree on a frequency and format for producing the data.
4. If NCCI is unable to produce more detailed data due to the contractual nature of its carrier affiliation agreements, FHC recommends that the state pursue legislative changes to mandate bill-level medical data submission directly from WC carriers and allow a data aggregator such as NCCI or a similar entity to submit the data on their behalf.
5. Upon receiving the NCCI data file, the NHID will produce, either in-house or through its vendor, a similar data extract from CHIS to compare medical payments across the WC and health insurance markets.

Claim Number Identifier	Transaction Code	Jurisdiction State Code
Bill ID Number	Line ID Number	Service Dates
Service From Date	Service To Date	Paid Procedure Code
Paid Procedure Code Modifier	Paid Amount	Provider Taxonomy Code
Provider Postal (ZIP) Code [3-digit]	Network Service Code	Quantity/ Number of Units per Procedure
Place of Service Code	Secondary Procedure Code	Accident Date

Option 2 will provide the state with a better understanding of workers' compensation medical payments than it currently has, and can support a range of uses that include:

- Analyzing average price lists that can be used to assist in the development of a fee schedule or benchmark prices for reasonableness
- Providing insights into the variation in the amounts paid by site of service, type of medical professional, type of plan, and geographic location

Option 2 is a feasible, easily attainable starting point from which the state can expand its WC data collection and analysis efforts in the future.

[Recommendation 2: Over time, expand to Option 5 by adding a Department of Labor data call to self-insured employers, associations, and third party administrators \(TPAs\).](#)

As the state implements Option 2 to collect WC carrier data, FHC recommends that it also begin pursuing self-insurer data collection through a partnership with the Department of Labor (NHDOL). The NHID would support NHDOL in issuing a data call to collect medical data from self-insured entities and third-party administrators (TPAs). The NHID would take the lead role in this data collection effort and would seek the necessary funding to support this option.

Adding self-insurer data may require a longer implementation process, as this would be an unprecedented data collection effort for both NHDOL and data submitters. Whether NHDOL's current data collection authority would extend to a more extensive data collection effort requires further review. A preliminary approach may be to only issue the data call to larger TPAs that manage WC benefits for small payers and also have fully-insured lines of business. These carriers already submit data to NCCI's Medical Data Call and have the technical infrastructure in place to collect procedure-level data from both electronic- and paper-based bills.

After collecting this data from self-insurers, the NHID can conduct side-by-side comparisons to the WC carrier data file from NCCI and a data extract from CHIS. This option would support the same range of uses described in Recommendation 1, but the addition of self-insured data would provide the state with a more comprehensive understanding of the workers' compensation market. FHC recommends that the state begin pursuing this approach concurrent to, or soon after, its implementation of Option 2.