THE STATE OF NEW HAMPSHIRE
INSURANCE DEPARTMENT

21 South Fruit Street Suite 14
Concord, New Hampshire 03301

Roger A. Sevigny
Commissioner

Alexander K. Feldvebel
Deputy Commissioner

April 12, 2018

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the New Hampshire Insurance Department (NHID) to enter into a contract with Human Services Research Institute, Inc. (Vendor # 170337) of Cambridge, MA in the amount of $274,944, for consulting services to perform quality assurance testing of key fields in the (NHCHIS) and use the data to produce cost estimates that are used on the NH HealthCost website, effective upon Governor and Council approval through June 30, 2023. 100% Other Funds.

The funding is available in account Department of Insurance Administration – Other Funds, for Fiscal Years 2019, and contingent on continued appropriation of funds in the future operating budget, with the authority to adjust encumbrances in each of the State fiscal years through the Budget Office if needed and justified:

Department of Insurance Administration – Other Funds

	FY2019	FY2020	FY2021	FY2022	FY2023
02-24-24-240010-25200000-102-500731 Consultants	$51,788	$53,342	$54,942	$56,585	$58,287

EXPLANATION

The NHID maintains data collection rules, specified in the NHID administrative rules, requiring health insurance carriers and third party administrators (TPAs) to submit medical, dental, and prescription claims data, and enrollment files to the state. The data are collected in order to create the New Hampshire Comprehensive Health Information System (NHCHIS).

The consultant's primary responsibility is to perform quality assurance testing of key fields in the (NHCHIS) and use the data to produce cost estimates that are used on the NH HealthCost website.. The consultant will perform at least four data testing sessions, on a quarterly basis, and potentially two per quarter when data issues are identified and an extract needs to be recreated by the data consolidation vendor and produce updated rates on the NHHealthCost website quarterly.

The Request for Proposal was posted on the Department's website February 12, 2018 and sent to past bidders for Department contract work and companies doing work in this field. Two bids were received. The bids were evaluated by NHID staff familiar with the project goals using a scoring system included in the RFP. After reviewing the bid response, the Commissioner selected the Human Services Research Institute proposal as responsive and cost effective to the Request for Proposals (RFP).

The New Hampshire Insurance Department respectfully requests that the Governor and Council authorize funding for this consulting work. Your consideration of the request is appreciated.

Respectfully submitted,

Roger A. Sevigny

RFP- PROPOSALS EVALUATIONS

Evaluation Committee members: Alain Couture, Maureen Mustard, Tyler Brannen

Evaluation process: Every member reviewed and independently evaluated the bids.
On March 26, 2018 the Evaluation Committee members met, and as a group assigned points to each bid per the "Specific comparative scoring process" described in each RFP.
All members agreed with the points assigned to each category for each bid depicted in the table below.

	RFP/VENDOR	CONTRACTOR Specific Skills knowledge and expierence in NH Healthcare market (30% or points)	CONTRACTOR Qulifications & Related Experience (30% or points)	Proposed Timeline (30% or points)	Bid Price	Derivation of Cost for Contractor Time (10% or points)	TOTAL SCORE (100% or Points)	Score without $$$	NOTES
	RFP- 2018 NHCHIS Healthcost Analytics								
	Human Services Research Institute	28.00%	28.00%	25.00%	$274,944	9.89%	90.89%	81.00%	
	Freedman Healthcare	28.00%	25.00%	25.00%	$272,045	10.00%	88.00%	78.00%	

Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name New Hampshire Insurance Department		1.2 State Agency Address 21 S. Fruit Street, Suite 14, Concord, NH 03301	
1.3 Contractor Name Human Services Research Institute		1.4 Contractor Address 2336 Massachusetts Ave, Cambridge, MA 02140	
1.5 Contractor Phone Number 617-876-0426	1.6 Account Number 02-24-2400010-25200000-046-500464	1.7 Completion Date June 30, 2023	1.8 Price Limitation $274,944.00
1.9 Contracting Officer for State Agency Alexander Feldvebel, Deputy Commissioner		1.10 State Agency Telephone Number 603-271-2518	
1.11 Contractor Signature David Hughes		1.12 Name and Title of Contractor Signatory David Hughes,President	

1.13 Acknowledgement: State of MA, County of Middlesex

On April 3, 2018, before the undersigned officer, personally appeared the person identified in block 1.12, or satisfactorily proven to be the person whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity indicated in block 1.12.

1.13.1 Signature of Notary Public or Justice of the Peace

[Seal] Annamarie W. Edwards

ANNAMARIE W. EDWARDS
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
February 20, 2020

1.13.2 Name and Title of Notary or Justice of the Peace

Annamarie Edwards, Notary Public

1.14 State Agency Signature Alexander Feldvebel Date: 4/17/18	1.15 Name and Title of State Agency Signatory Alexander K Feldvebel, Deputy Commissioner

1.16 Approval by the N.H. Department of Administration, Division of Personnel *(if applicable)*

By: Director, On:

1.17 Approval by the Attorney General (Form, Substance and Execution) *(if applicable)*

By: J Christopher Marshall On: 4/17/18

1.18 Approval by the Governor and Executive Council *(if applicable)*

By: On:

2. EMPLOYMENT OF CONTRACTOR/SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT A which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.
3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.18, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.14 ("Effective Date").
3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.
Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.
5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT B which is incorporated herein by reference.
5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.
5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.
5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.
6.1 In connection with the performance of the Services, the Contractor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal opportunity laws. This may include the requirement to utilize auxiliary aids and services to ensure that persons with communication disabilities, including vision, hearing and speech, can communicate with, receive information from, and convey information to the Contractor. In addition, the Contractor shall comply with all applicable copyright laws.
6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.
6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.
7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.
7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this

Contractor Initials _____
Date 4/3/18

Agreement. This provision shall survive termination of this Agreement.
7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.
8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):
8.1.1 failure to perform the Services satisfactorily or on schedule;
8.1.2 failure to submit any report required hereunder; and/or
8.1.3 failure to perform any other covenant, term or condition of this Agreement.
8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:
8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;
8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;
8.2.3 set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or
8.2.4 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

9. DATA/ACCESS/CONFIDENTIALITY/ PRESERVATION.
9.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.
9.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.
9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

10. TERMINATION. In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.
The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice and consent of the State. None of the Services shall be subcontracted by the Contractor without the prior written notice and consent of the State.

13. INDEMNIFICATION. The Contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.
14.1 The Contractor shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:
14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than $1,000,000per occurrence and $2,000,000 aggregate ; and
14.1.2 special cause of loss coverage form covering all property subject to subparagraph 9.2 herein, in an amount not less than 80% of the whole replacement value of the property.
14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

Contractor Initials _____
Date 4/3/18

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than thirty (30) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than thirty (30) days prior written notice of cancellation or modification of the policy.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A *("Workers' Compensation").*

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

19. CONSTRUCTION OF AGREEMENT AND TERMS. This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire Agreement and understanding between the parties, and supersedes all prior Agreements and understandings relating hereto.

Contractor Initials _____

Date 4/3/18

Human Services Research Institute
2018 NHCHIS HealthCost Analytics
Exhibit A
Scope of Services

Quarterly quality assurance of NHCHIS data (at least four data testing sessions on a quarterly basis and potentially two per quarter when issues are identified and an extract needs to be recreated by the data consolidation vendor) that should not exceed four hours in duration and completed within a week of receipt of the data extract.

Perform reasonability checks of the data (quality assurance or QA testing), for the fields that are necessary to produce the information on NH HealthCost. The data testing should be considered high level reasonability testing, not a deep dive to identify every anomaly in the data.
Specifically, the contractor shall include a review of the items below to ensure the fields are populated and the values reasonable:

- Carrier identifier, insurance product (e.g. HMO, PPO, etc.), policy type (e.g. fully insured vs. self-funded), and market information (e.g. exchange products, small group, non-group, large group);
- Medicare, Medicaid, and commercial payer identifiers;
- Distribution of professional and institutional claims;
- Provider charges, plan paid, copayment, coinsurance, deductible, and calculated allowed amounts (e.g. most values are positive, allowed amounts are less than charges);
- CPT codes;
- Dates of service;
- Claims indicator as denied/paid, or marked as primary/secondary/etc.;
- Health care provider fields include or can be linked to a useable NPI;
- Member identifiers match among different data files (e.g. claims and membership files);
- Check for duplicate records or missing date ranges;
- Member demographics (DOB, Gender, zip code); and
- That the number of records, members, fields, and date ranges within the data received by the NHID are consistent with what is described by the data consolidator.

The Contractor should efficiently document new issues that should be addressed or recognized by the data consolidation vendor until resolved, including providing examples of the finding.

NH Healthcost Analytics

- Ensure the output files are checked for reasonability and accuracy prior to each transfer of data to the website developer. This includes, but is not limited to:
    - spot checking that a provider listed for a service is a provider that offers the service

4/3/18

    - analyzing cost estimates to ensure that any costs that appear unusually high or low are investigated
    - revisions to the programming to address unusual situations that may result in misleading estimates
- Ensure rate estimates are valid by perform additional analyses using the claims data outside of the programs developed for HealthCost, perform internet research, or in limited circumstances, contact a health care provider directly to understand billing or service delivery practices as needed. Verify that the website developer loads the data files correctly.

- Maintaining the SAS code used to produce the HealthCost rates that may include routine debugging and changes, or investigating specific questions that may arise about the estimates associated with a particular health care provider or insurance carrier. Maintenance may include, changes to the underlying CPT codes or modifiers used to identify specific procedures, dates of service used with the input data, additions or modifications to the carriers/TPAs or providers included in the output, procedures included to calculate rates, modifications or enhancements to the rate calculation methodology, and general maintenance to the provider files.
- Rewriting as needed (or as requested by the NHID) current SAS code in order to add services, payers, or improve the accuracy, efficiency and timeliness of the rates.
- Updating the cost estimates on HealthCost on a quarterly basis.
- Updating the Quality Measures annually.
- Ensuring that all SAS programs include extensive documentation and that the code is easily understandable by an analyst with intermediate level SAS skills.
- Utilizing SAS programming so that all fields included on the consumer and employer sections of the website are produced with rates and related information, including "precision of the cost estimate" and "typical patient complexity." The "typical patient complexity" field is based on the chronic illness and disability payment system (CDPS), a diagnostic classification system that runs in SAS.
- Researching anomalies in the data as appropriate when calculations produce results that are not expected. The Contractor is expected to provide a breakdown of the payment components, such as the bundled professional and institutional payments, as appropriate. These anomalies may be identified by a patient, the Contractor, the NHID, a provider, an insurance carrier, or another interested
- Supporting the identification of new providers in the data that should be included on NH Healthcost by identifying high volume providers in the NHCHIS data based on specific services, providing guidance on the format and layout of the reference tables so that the information included can be used efficiently, and identifying high volume providers based on specific s

4/3/18

Proposal for NHCHIS HealthCost Analytics

Presented to the
New Hampshire Insurance Department

SUBMITTED BY THE
HUMAN SERVICES
RESEARCH INSTITUTE

March 19, 2018

Leanne Candura
Director, Population Health
Human Services Research Institute
2336 Massachusetts Avenue
Cambridge, MA 02140
Phone 617-876-0426 ext. 2310
lcandura@hsri.org

Table of Contents

Executive Summary

The Human Services Research Institute (HSRI) is pleased to submit this proposal to the New Hampshire Insurance Department (NHID) to perform consulting services in support of the NH HealthCost website (www.nhhealthcost.org). The NHID maintains the SAS programs used to calculate the rates and related information for the health care costs presented on NH HealthCost. The NHID is seeking support with the New Hampshire Comprehensive Health Care Information System (NHCHIS), with developing and maintaining updated SAS code for the rates produced on NH HealthCost, and with updating the quality measures.

For the past two years, as a contractor, we've had the privilege of working with the NHID to conduct Quality Assurance (QA) testing on NHCHIS data, maintain and enhance the SAS code used, improve the cost estimate methodology, and produce quarterly cost estimates for NH HealthCost. We would look forward to supporting the NHID in the continuation of this work. Additionally, we recently completed a project with the NHID to research and recommend quality measures for inclusion on the site. Based on our prior experiences with the NHID and our work on other similar projects, our team is well-equipped to support the NHID in making high-quality cost and quality data available to New Hampshire stakeholders.

Our proposed approach capitalizes on our:

- Thorough understanding of All-Payer Claims Databases (APCD), including NHCHIS
- Work on highly rated health care transparency websites[1] including NH HealthCost and CompareMaine
- Extensive experience using claims and quality data for our own research purposes as a consultant to federal and state agencies
- Highly successful track record of designing and executing systems to collect, clean, and consolidate data for large-scale state and national efforts

The proposed team includes core members from our current contracts with the NHID; the team also includes individuals who developed and maintain the CompareMaine site. We can continue to leverage this experience as a springboard for our work in New Hampshire. If HSRI were awarded this contract, NHID would be spared the training and transition expenses—resources that could be better directed toward continued improvements to NH HealthCost.

About Us

Headquartered in Cambridge, Massachusetts, HSRI is a 501(c) (3) nonprofit research institute with over 50 employees. Our team of nationally recognized experts provides high-quality research, evaluation, program implementation, and data and statistical services to government agencies to improve public health services and systems—and to improve the quality of the data for system management and policy reform. In over 40 years of operation, we have supported federal and state agencies and local communities in their quest to improve the health, well-being, and economic and housing stability of the

[1] De Brantes, F., Delbanco, S., Butto, E., Patino-Mazmanian, K., & Tessitore, L. (2017). Price Transparency & Physician Quality Report Card. Retrieved from https://altarum.org/publications/price-transparency-and-physician-quality-report-card-2017.

populations they serve. We conduct collaborative, inclusive research and work to identify sustainable, person-driven solutions to complex health and social challenges across all areas of the health and human services landscape, including population health, behavioral health, intellectual and developmental disabilities, aging and physical disabilities, child and family welfare, and housing and homelessness.

Since its inception, HSRI has applied multidisciplinary expertise to project work with clients at the federal, state, county, and program levels, performing research and consulting projects for 28 federal agencies, 50 states, and over 100 counties and cities.

We offer:

- Collaborative approaches to anticipate our clients' changing needs and adapt to shifting priorities, all while focusing on a project's long-term goals
- A distinguished 20-year track record of collecting, validating, standardizing, enhancing, analyzing, using, and supporting health claims data
- Proven expertise, experience, and capacity working with payers, hospitals, state officials, data users and other organizations to develop and maintain data collection tools, state-level health data warehouses, and health care transparency websites
- A notable 40-year track record of successful project management and delivering high-quality solutions on time and budget, using the newest technologies

Technical Approach

HSRI has proven experience in analyzing and reporting health data for consumer-focused health care transparency websites. We believe that vetting the data in a variety of ways gives us greater insight and produces higher-quality outputs. In our efforts to promote health care cost and quality transparency, we are transparent ourselves: We do not use proprietary software or black box technology. Any code developed for New Hampshire will be given in full to the NHID for release with complete documentation.

As the current contractor producing cost refreshes for NH HealthCost, we have direct experience performing QA testing on NHCHIS data, updating and maintaining SAS code, and producing the quarterly cost estimates for NH HealthCost. HSRI also just completed a project with the NHID to review and recommend quality measures and to provide data display recommendations for NH HealthCost.

The foundation for our approach comes from our previous experiences with the NHID and our work on other similar projects. For several years, our team has worked closely to streamline and improve complex data and reporting systems for state and federal clients. As part of that work, we are well versed in translating complex claims data into actionable information for consumers on health care transparency websites. We have developed efficient processes and procedures for performing the type of work outlined in the 2018 NHCHIS Healthcost Analytics RFP.

Our approach, workplan, and cost estimates will be organized into the following key areas, as outlined in the RFP:

- Project Management
- Routine Claims Data Testing
- Maintenance of SAS Code
- Quarterly Cost Updates
- Annual Quality Updates
- Research for Improvements
- Support for Data Questions

Project Management

HSRI has successfully managed many large and small-scale projects. Over its 40-year history, HSRI has developed and refined a comprehensive management system that integrates quality assurance and quality control (QA/QC) into its management practices. Our work plans, resource allocations, roles and agreed upon strategies will remain flexible and responsive to the knowledge and experience gained within the project and from other aspects of overall project execution.

The foundation of our approach is an efficient team structure led by an experienced and highly capable Project Director (Leanne Candura, MPH) and with the support of a well-organized Project Manager (Melissa Hillmyer). The analysis team, which will be responsible for producing the cost updates for NH HealthCost, will be led by the lead analyst, Research Associate Margaret Mulcahy and supported by Kevin Rogers as a Senior Business Systems Analyst. In addition, analysts Kristin Battis and Melissa Burnett will provide key support, including routine data testing, maintenance of the SAS code, quarterly

cost updates, and support for data questions. The annual quality updates will be supported by Ms. Candura, Ms. Hillmyer, Ms. Mulcahy, and Ms. Burnett. Every member of the project team, except for Ms. Burnett, has worked with the NHID on recent projects.

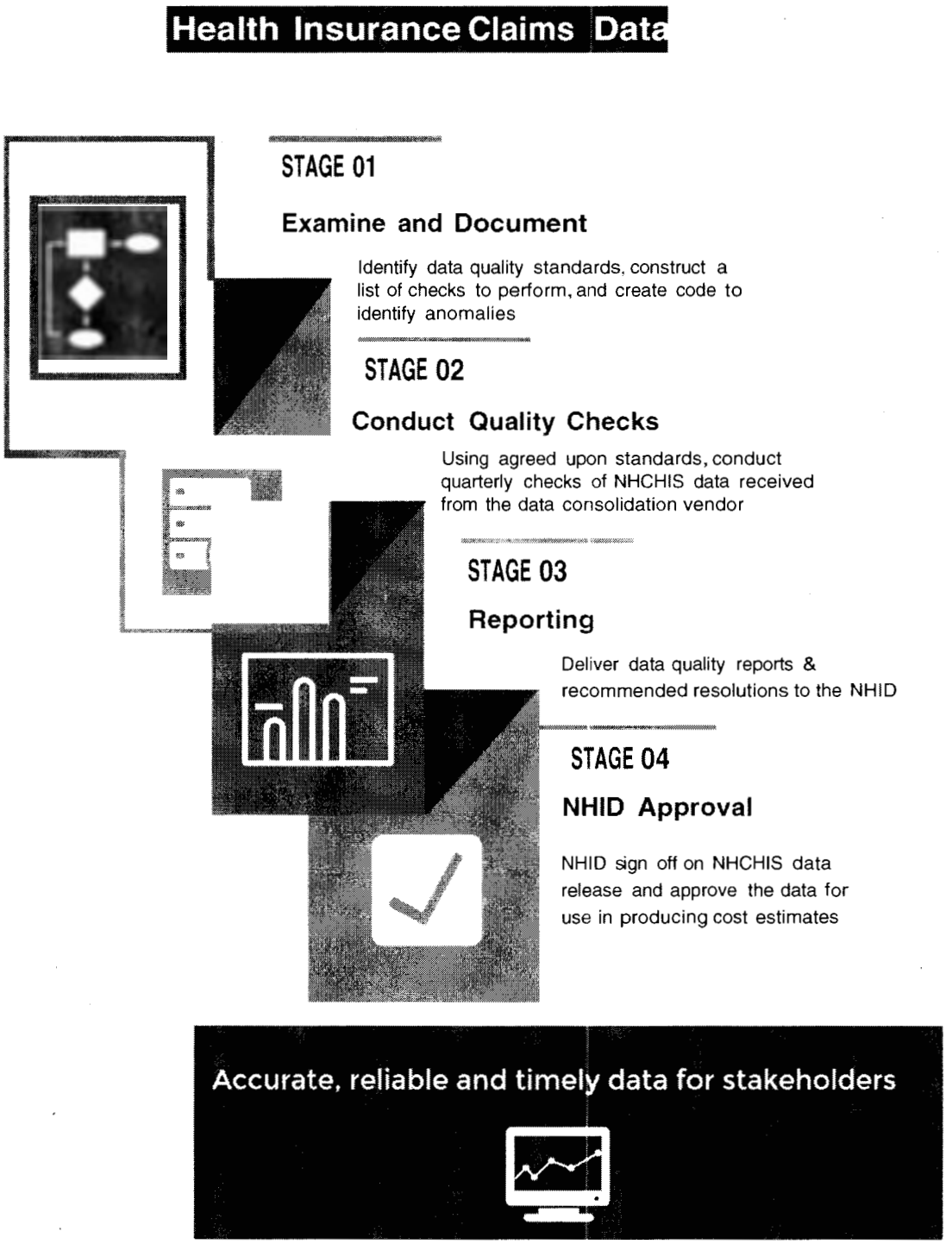
Our management systems emphasize communication within the HSRI team and with our clients. Ongoing communication provides the best opportunity for early identification, correction, and prevention of issues and project delays. Our team will develop a communication infrastructure to ensure consistent and timely communication between HSRI and the NHID. This infrastructure will include multiple communication channels and structures, including teleconference meetings, and a system for monitoring project deliverables. Regular administrative reports are another tool with which we communicate progress and challenges.

An important step in ensuring quality deliverables will be successful collaboration with the NHID and other stakeholders, including other vendors. We are prepared to work directly with the NHID but also to serve as a resource for the New Hampshire Department of Health and Human Services (NH DHHS) in working with the data consolidator. We also anticipate participating in routine conference calls with the state's data consolidation vendor as needed.

Cost Data Testing and Updates

HSRI currently conducts QA testing on the NHCHIS data to produce quarterly cost estimates with the data; we also lead the quality control process for the APCD data in Maine. We strive to mitigate risk by creating high-quality data for data users, reports, and consumer websites. Our approach is based on eight central tenets: accuracy, completeness, integrity, validity, consistency, reliability, relevance and timeliness. We work to ensure that each of these characteristics is present when conducting quality control, recognizing that there must be a give and take between all these. Exhibit 1 displays our proposed approach to ensuring high-quality data for the NHID.

Exhibit 1. Process *for Ensuring High-Quality Data*



While quality control is an important first step, true data quality goes beyond the integrity of the record or a submitted file. To maximize its value, data must be relatively complete, consistent and comparable across payers, and capable of being rolled up into meaningful semantic concepts, such as episodes of care.

Our team, composed of experienced researchers who greatly value the importance of data quality, is well positioned to support this work. We have current experience with identifying key variables in the NHCHIS dataset that are used in the production of cost estimates and developing checks for quality. Having established this QA process and written standardized code for the checks under the supervision of the NHID, we can ensure that the subsequent data reviews can occur routinely and succinctly. The QA process we use to detect such deficiencies are outlined in Appendix B.

Routine Data Testing and Quality Checks

HSRI will implement quarterly quality checks of the data as received from the NHCHIS database consolidation vendor. Since mid-2016, HSRI has received such quarterly NHCHIS data extracts from NHID/Milliman. HSRI imports the text-formatted data extracts into SAS and, due to the large volume of data, exports the extracts to Vertica for efficient QA testing. Next, we conduct high-level assessments on key variables needed to produce information on NH HealthCost. Because our QA procedures for testing the NHCHIS data are already in place, we anticipate that we can accomplish all QA testing in a maximum of 4 hours per quarterly update—provided the data are clean and no issues are detected. Additionally, we are confident that all QA testing of the NHCHIS data can be completed by HSRI within one week of data receipt.

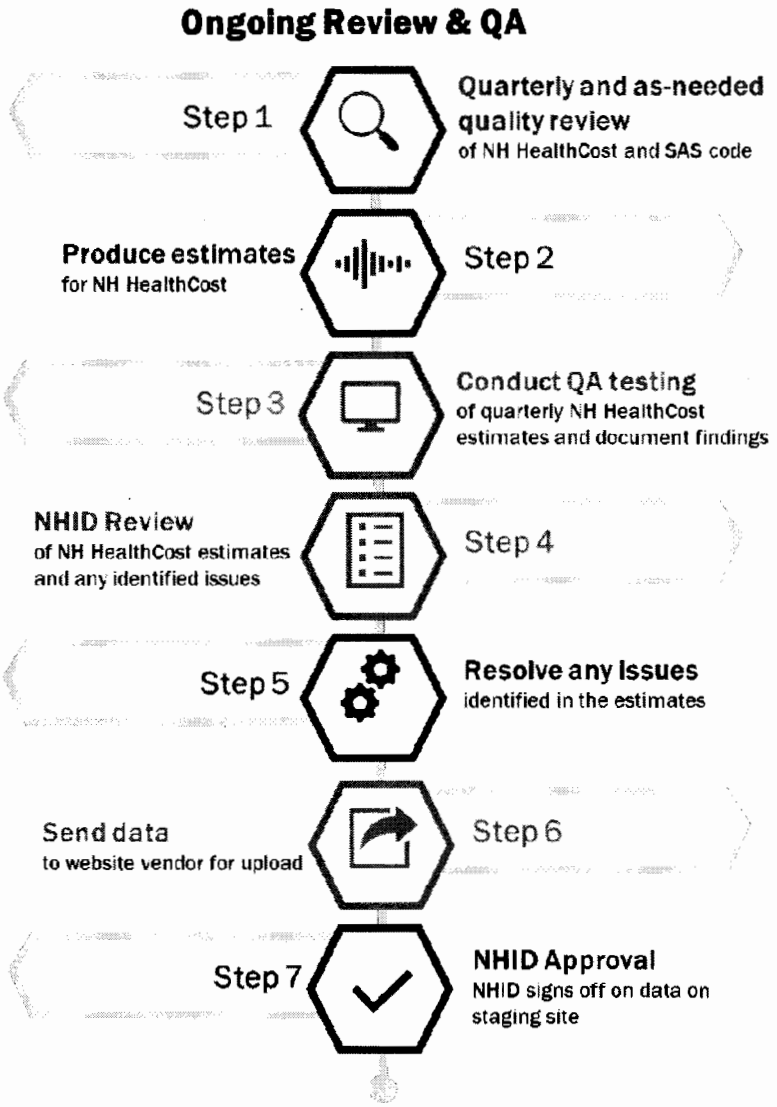
The quality checks will be delivered to the NHID in either Word or Excel with notes that clearly denote each validation. Appendix B contains currently used data quality checks for the raw claims data. Central to the process is the ability to modify quality checks as needed with each quarterly check to ensure the NHCHIS datasets have the highest quality of data. During the contract, we welcome the addition of more checks to the list of known issues and those newly discovered.

HSRI will document any issues identified in the NHCHIS claims data testing process and will share these findings with the NHID for resolution. We will also supply the NHID with data quality reports that identify which payers (e.g., health insurance carriers and third-party administrators) have passed the checks and which have data quality issues.

Quarterly Cost Updates

After the data quality assurance is complete and the NHID has signed off on the release of the file for use in producing quarterly cost estimates, HSRI will move on to the next phase of producing the information for NH HealthCost. See Exhibit 2 for our proposed process for reviewing and updating the NH HealthCost website.

Exhibit 2. Proposed Process for Reviewing and Updating NH HealthCost



Once the NHCHIS extract is reviewed and approved and the updated provider file is received from the outside vendor, HSRI will run the SAS code to produce the NH HealthCost estimates. We will complete the minimum data quality checks on the estimates for reasonability and accuracy listed on page 3 of the RFP. Appendix B contains currently used data quality checks for the HealthCost estimates, which we would continue to use.

Similar to the claims data testing approach, HSRI will document any issues identified during the QA process for cost estimates and will relay the findings to the NHID for resolution. We will also share the actual cost estimates with the NHID for final review and make recommendations for any estimates to suppress from the website, with accompanying justification. Once any issues identified with the estimates are resolved—either by updating the SAS and/or accompanying mapping files, suppressing estimates, or by other methods—and the cost estimates are approved by the NHID, HSRI will update and prepare the output files for transfer to the website vendor. We will be available to address any issues or concerns that arise during the data upload. Should any methodologies be updated, HSRI will

work with the NHID to update the text of the "Methodology for Health Costs for Consumers" section of the NH HealthCost website.

The provider file is critical to this process. HSRI has experience working with the current provider file vendor, Helms, to update new providers and affiliations, resolve issues from the cost estimates that may stem from the provider file, and enhance the overall usability and accuracy of the file.

Maintenance of SAS

When necessitated by the addition of new procedures or a change in methodology, HSRI will support the NHID in revising the current SAS code used to calculate the NH HealthCost rates in an efficient, accurate, and timely manner. As part of this task, we will perform periodic general maintenance to the SAS code used to produce the cost estimates. See Appendix C for an example of SAS code that we wrote to incorporate into the NH HealthCost SAS code to produce medical estimates by a plan filter of Individual Medical Plans and Group Medical Plans.

Quality Data Updates

In 2017, the NHID contracted with HSRI to research and recommend quality metrics to expand the quality information available on the NH HealthCost website, resulting in a final report submitted to the NHID on February 28, 2018: *NH HealthCost Quality Measures and Data Display Recommendations*. We recommended that the NHID retain 19 of the existing measures on the site (from a total of 32) and add in 5 new measures. We are intimately familiar with these recommended measures and their data sources, as the final report included quality measure specifications.

To facilitate the NHID's use of the recommended quality measures, we downloaded the most recent data and documented pertinent information for each measure, along with the official measure documentation. The data download included the quality data for each measure at the hospital level, New Hampshire level, and national level.

The documentation we provided for each measure included:

- Measure Name
- Consumer-Friendly Measure Name
- Consumer-Friendly Description
- Data Source
- Data Source Website (where the data can be downloaded)
- Documentation Link
- Numerator Description
- Denominator Description
- Number of New Hampshire Providers with Data in the Current Release
- Risk Adjusted (whether the data are risk adjusted or not)
- Facility Type
- Date of Most Recent Data
- Update Frequency
- Date of Next Update

- Display Format (how the data are displayed)
- Measure Coding (whether a higher or lower score is better)
- NH Score (the New Hampshire score for the current time period)
- National Score (the National score for the current time period)

When downloading, reviewing, and transforming the quality data we will perform the following checks:

- Ensure the data are for the most recent time period available.
- Document and proof the conversion from the raw score to the benchmarking (below average, average, above average).
- Compare the new data points to the previous data points for NHID's reference, specifically identifying:
    - Changes in the facilities with data available (i.e., a facility that previously reported but is no longer reporting, or a new facility reporting).
    - Significant changes in both raw score as well as national benchmarking (i.e., a facility changing from better-than-average to below-average).
- Perform QA after the data have been loaded to the website to ensure the scores are displayed properly.

HSRI is in the best position to provide the annual updates as requested in the RFP, since we prepared the documentation for each of the recommended measures.

Research for Improvements

On an annual basis, HSRI will propose cost and quality enhancements to the website, including proposing new quality measures, medical and dental services to be added; changing bundled services to the unbundled approach where appropriate; making changes to the rate calculation methodology for procedure categories like radiology services; and proposing other general revisions to the methodologies. With the NHID's guidance in prioritizing these enhancements, HSRI will research and explore the requirements needed to make the enhancements and then implement the agreed upon changes in the SAS code and/or the accompanying mapping file. Any changes to the SAS code or mapping file will include extensive documentation so that the changes may be easily understandable to an individual with intermediate SAS experience.

Below, we list some of the enhancements that HSRI has implemented in its current work with the NHID:

- Conducted a line-by-line review of the original SAS code to identify areas for improvement and created a document outlining instructions for using the code, including instructions for configuring the system, setting up a new run of the data, performing a full run of the data, and performing a partial run of the data.
- Conducted a review of the NH HealthCost methodology and proposed recommendations.
- Updated NH HealthCost to include 19 new medical procedures and 10 new dental procedures.
- Replaced the retired breast biopsy and breast ultrasound codes with new codes.
- Updated the SAS code to perform cell size suppression for both bundled insured and uninsured procedures.

- Updated the SAS code to incorporate Version 6.0 of the University of California San Diego's ICD-9 Chronic Illness and Disability Payment System (CDPS) SAS files, which takes into account ICD-10 codes.
- Updated NH HealthCost with new service category labels and ordering to enhance consumer usability.
- Removed retired payer codes.
- Updated the SAS code to produce medical estimates by a plan filter of Individual Medical Plans and Group Medical Plans rather than Health Maintenance Organization (HMO) and Other Medical Plans.
- Changed office visits and emergency visits from bundled to unbundled.

Support for Data Questions

As needed, HSRI will also investigate questions from the NHID or other stakeholders—such as patients, providers, or insurance carriers—about the cost estimate and quality data provided on NH HealthCost.

Experience and Expertise

Established in 1976, the Human Services Research Institute (HSRI) is a 501(c)(3) nonprofit corporation headquartered in Cambridge, Massachusetts. We are dedicated to helping people of all abilities and backgrounds live healthy, fulfilling, self-determined lives. To this end, our researchers, data scientists, and policy analysts work with government and private sector clients, and with self-advocates, to improve public health and social service systems—and to improve the data and data systems that inform these efforts.

In our 40-year history, we've performed research and consulting projects for 28 federal agencies, 50 states, over 100 counties and cities, and numerous academic institutions. A selection of these are shown on the following page, under "Client Summary." Our 55 employees—located at offices in Cambridge, Massachusetts; Bethel, Maine; and Portland, Oregon—have expertise in IT, statistics, evaluation research, technical assistance and training, health care policy and health care reform. They also have extensive experience in the use of Medicaid, Medicare, private insurance, and other state claims and assessment databases, and they have performed numerous health care cost analyses.

As shown in the "Past Projects" section of this proposal, we've worked closely with a variety of federal, state (including New Hampshire), county and private entities to design, implement, and evaluate health data systems with the goal of providing high-quality data for system management and research functions. This includes working with stakeholders to improve data quality, ensuring that systems make use of best practices and relevant data standards, creating and maintaining custom warehouses that properly secure sensitive health data, and producing analytic and data products that provide value to system/program managers, researchers, evaluators, policy makers, advocacy organizations, and the public.

We pride ourselves on creating systems and websites that are responsive to the needs of all stakeholders: funders, data submitters, data users, and the general public. Based on this principle, our health data systems have been designed to:

- Ensure that organizations and states can manage their information assets
- Facilitate retrieval of relevant information quickly and efficiently
- Insure the reliability of data submitted
- Meet the needs of multiple data users related to program oversight, cost monitoring, quality assurance and program evaluation
- Quickly provide those data back to stakeholders in a user-friendly fashion.

We can apply this experience to perform the quality assurance work needed for the New Hampshire Comprehensive Health Information System (NHCHIS) and NH HealthCost.

As we'll show throughout this proposal, the team we propose for this project has worked extensively with health claims data and developed warehouse and transparency website solutions and user interfaces, and the past projects we reference have given us a thorough understanding of the challenges and opportunities of providing the quality assurance, technical assistance, and technical reports needed for the NHCHIS and NH HealthCost.

HSRI Client Summary

Federal Clients

US Dept. of Education
US Dept. of Health & Human Services:
- Administration for Children and Families
- Administration on Intellectual & Developmental Disabilities
- Centers for Medicare & Medicaid Services
- Health Resources & Services Administration
- Public Health Service
- Substance Abuse and Mental Health Services Administration

Office of the Assistant Secretary for Planning and Evaluation
US Dept. of Housing and Urban Development

State Clients

District of Columbia Dept. of Behavioral Health
Alabama Division of Developmental Disabilities
California Dept. of Developmental Services
California Dept. of Health Care Services
Colorado Dept. of Human Services, Division of Child Welfare
Connecticut Dept. of Children and Families, Dept. of Public Health
Delaware Division of Developmental Disabilities Services
Illinois Council on Developmental Disabilities
Louisiana Dept. of Health and Hospitals
Maine Dept. of Health & Human Services, Maine Health Data Organization
Maine Dept. of Health & Human Services, Office of Aging & Disability Services
Massachusetts Dept. of Developmental Services
Minnesota Dept. of Human Services
Mississippi Dept. of Mental Health
Missouri Division of Developmental Disabilities
Montana Dept. of Health & Human Services
New Hampshire Dept. of Health and Human Services
New Jersey Council on Developmental Disabilities
New Jersey Division of Mental Health & Substance Abuse
New Mexico, Human Services Dept., Medical Assistance Division
North Carolina Dept. of Health & Human Services
North Dakota Dept. of Human Services
Ohio Dept. of Job & Family Services, Dept. of Mental Health
Oregon Board of Higher Education
Oregon Dept. of Human Services
Oregon Dept. of Justice
Pennsylvania Dept. of Public Welfare
Rhode Island
Virginia Dept. of Behavioral Health & Developmental Services
Wisconsin

County/City Clients

Job & Family Services of Clark County (Ohio)
Multnomah County Commissioner, Oregon
Oakland County Community Mental Health (Michigan)
Pierce County Council (Washington)
Summit County Children Services (Ohio)
Milwaukee County Dept. of Health & Human Services Disabilities Services Division (Wisconsin)

Academic Clients

Arizona State University
Association of University Centers on Disabilities
Boston College
Brandeis University
NORC at the University of Chicago
Temple University University of Delaware University of Massachusetts University of Minnesota University of Pittsburgh

Nonprofit Clients

Acumen
California HealthCare Foundation
Cambridge Health Alliance
Community Access Unlimited
Delmarva Foundation for Medical Care
Florida Agency for Persons with Disabilities
Florida Association for Rehabilitation Facilities
Florida Developmental Disabilities Facilities
Hogg Foundation for Mental Health
Maine Medical Center
National Alliance on Mental Illness
National Association of State Directors of Developmental Disabilities Services
National Association of State Mental Health Program Directors
National Association of States United for Aging and Disabilities
National Youth Leadership Network
Public Policy Forum
Robert Wood Johnson Foundation
RTI International
United Way

Private Sector Clients

CDM Group
Datacorp
Deloitte
Mission Analytics
New Editions Consulting
Technical Assistance Collaborative
Truven Health Analytics
Westat

Relevant Experience

HSRI has over 20 years' experience collecting, validating, standardizing, enhancing, analyzing, and reporting health claims data. The team we propose for this project currently works with the NHID on the NH HealthCost rate updates and recently provided quality measure and data display recommendations for NH HealthCost. This is the same team that initially updated and maintained Maine's HealthCost website—ultimately replacing the site with CompareMaine, a health care cost and transparency site. Maine's legacy HealthCost site was based on NH HealthCost; the team was responsible for porting it to a new database platform, identifying and implementing bug fixes, developing a new web interface, and performing a full data refresh for the site. To create CompareMaine, members of the team first performed a complete review of the methodology and code used for Maine's HealthCost and identified opportunities for improvement. This was followed by a development period where various methodology improvements were tested and refined, including the use of a diagnostic grouper for surgical procedures and refinement of the provider attribution logic. Currently, members of the team provide quality control, create (and when necessary, revise) the methodology, analyze and produce cost and quality estimates, conduct an extensive facility and payer review period, and perform updates for CompareMaine.

Members of our proposed team also built the current All Payer Claims Database (APCD) solution for the Maine Health Data Organization (MHDO). The APCD collects and houses health care claims and encounter data, eligibility data, hospital financial data, and other related information. We have employed a series of quality assurance steps to ensure that these data provide the most accurate and complete picture of claims in Maine.

In addition, in 2015 the same team conducted an extensive review of best practices and the state of the field for health care transparency websites for the Green Mountain Care Board (GMCB) in Vermont. HSRI is also currently working on a project with Honest Health for the New York State Health Foundation to document findings from an inventory of consumer health tools and provide stakeholders information on how to elevate the conversation about health care transparency tools to maximize the investment when New York develops an All Payer Database (APD) tool for State residents.

Our team has firsthand experience creating health care transparency methodologies and can provide expertise on best practices for presenting and analyzing claims and quality data for NH HealthCost. With the team's experience working closely with insurers on data collection activities and protocols and given its collective expertise with claims data analysis (and as providers of technical assistance and training on data quality), we can quickly begin quarterly quality assurance checks and begin reviewing and recommending potential changes to the NH HealthCost SAS code for the NHID. The analysis and quality assurance system we envision will be hosted within the NORC Data Enclave, a tool built specifically for protecting and sharing sensitive datasets. The Data Enclave undergoes annual security tests conducted by third party IT security auditors.

Past Projects & References

NH HealthCost Quality Data Enhancement (2017-Present)
Reference: Maureen Mustard, Health Care Statistician, NHID, phone: (603) 271-3786

HSRI is assisting the New Hampshire Insurance Department with researching and making recommendations to enhance the quality data and data display on the State's NH HealthCost website and enable consumers to evaluate the value (cost and quality) of health care services. This project involves evaluating data sources and measures; discussing quality measures with stakeholders in New Hampshire; documenting the update process; and making data display recommendations to enhance the user interface and user experience.

Quality Assurance Testing of the New Hampshire Comprehensive Health Care Information System (2016-Present)
Reference: Maureen Mustard, Health Care Statistician, NHID, phone: (603) 271-3786

HSRI is working with the New Hampshire Insurance Department to maintain and enhance the data used on New Hampshire's health transparency website, NH HealthCost. This project involves examining and documenting health insurance claims data; conducting data quality checks; and reviewing, maintaining, and updating the SAS code used to produce cost estimates for the NH HealthCost website.

Maine Health Data Organization Data (MHDO) Warehouse (2013-Present)
Reference: Karynlee Harrington, MHDO Acting Executive Director, phone: (207) 446-0890

The HSRI team was selected to build and operate a data warehouse that would allow the MHDO to collect and house health care claims data, encounter and eligibility data, hospital financial data, and information related to all physical health, dental, pharmacy, behavioral health, and disability-related services provided in the state of Maine. The data is being used in part to track quality measures, explore the cost and cost-effectiveness of services, monitor adherence to best practices, and identify disparities in access to care. HSRI leads the project, performing core project management and quality assurance functions in addition to developing web platforms and user interfaces for the system. HSRI is working closely with its project partner, NORC at the University of Chicago, which is responsible for the core engineering and maintenance of the warehouse infrastructure and the hosting of the system as a part of its secure Data Enclave.

The HSRI team built its state-of-the-art data system around the NORC Data Enclave. The system provides an ETL platform that helps reduce the burden on data submitters by providing timely data quality feedback and by automating the secure file transfer process. This system is fully configurable by MHDO via a convenient web portal, reducing the need for costly system updates to accommodate future changes (e.g., State legislative rule changes). Reporting and data download capabilities are made accessible to data submitters, MHDO staff, and other authorized users via a secure web portal, portions of which will also be accessible to the public. The system makes use of cloud technologies to provide a robust, scalable, and highly secure data platform capable of handling high volumes of data and achieving high levels of availability.

MHDO's State of Maine Data Center Enhancement to Improve Health Cost Transparency (2013-Present)
Reference: Karynlee Harrington, MHDO Acting Executive Director, phone: (207) 446-0890

Because of the successful collaboration on the data warehouse project, MHDO partnered with HSRI (and NORC and web design firm Wowza) and received a grant from CMS to expand its online health data resources and improve the usability of its health data website. The CMS grant is part of the Health Insurance Rate Review Program (Cycles III and IV), which provides grants to states to support health insurance rate review and increase transparency in health care pricing. Building on the existing functionality of MHDO's health data websites and taking advantage of the data warehouse infrastructure implemented by HSRI and NORC, HSRI first enhanced MHDO's existing HealthCost website by adding almost 200 additional procedures (mhdo.maine.gov/healthcost2014). HSRI then rolled out an enhanced website, CompareMaine, that further integrates cost and quality data on health services in Maine to provide more comprehensive and useful information to consumers, providers, employers, and other key stakeholders. HSRI worked with multiple stakeholders and advisory groups to ensure the utility of the new site across its range of users.

Vermont Consumer Information and Price Transparency Evaluation (2015)
Reference: Susan Barrett, Executive Director, VT Green Mountain Care Board, phone: (802) 828-2919

HSRI evaluated potential Internet-based models for providing consumers with information about the cost and quality of health care services in the geographical region in which Vermonters purchase health care. The final evaluation report included a review of existing sites and platforms currently in use, including NH HealthCost; a comparison of existing sites to best practices in public reporting; a feasibility study; and a comprehensive literature review. HSRI worked with NORC and with consultants from the University of Oregon and Policy Integrity.

Program Evaluation for Prevention Contract (PEP-C) (2013-Present)
Reference: Phillip Graham, Project Director, Drugs, Violence, and Delinquency Prevention Program, RTI International, phone: (919)-485-7752

HSRI, under subcontract from RTI International, is participating in evaluating the effectiveness of three programs funded by the federal Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Prevention (CSAP): The Partnerships for Success and the Strategic Prevention Framework State Incentive Grants fund states and jurisdictions to achieve quantifiable declines in state-wide substance abuse rates; and The Minority AIDS Initiative (MAI) funds community-based organizations and minority-serving colleges to reduce substance abuse and HIV transmission among high-risk groups. HSRI's role on the project is to lead the MAI cross-site evaluation in data collection, processing, cleaning, and archiving, data analysis, and report production. The project involves reviewing and running SAS code for data cleaning from a previous contractor and updating the code as needed for newly collected data.

Evaluation of New Hampshire's State Youth Treatment-Planning (2017)
Reference: Adele Gallant, SYT-P Coordinator, NH DHHS, phone: (603) 271-4371

HSRI conducted an evaluation of the Department of Health and Human Services (DHHS) strategic plan to improve access to evidence-based screening, assessment, treatment, and recovery services and supports for adolescents and transitional aged youth with substance use and/or co-occurring substance use and mental health disorders in New Hampshire. We attended monthly meetings of the project's Interagency Council, which is composed of advocates, state agency representatives, and other stakeholders from around the state working to improve SUD service access for youth.

Independent Evaluation of the Capacity of New Hampshire's Current Health System (2017)
Reference: Julianne Carbin, Director, Bureau of Mental Health Services, NH DHHS, phone: (603) 271-8378

HSRI conducted an evaluation of the current health system in New Hampshire to respond to the inpatient, acute care psychiatric needs of patients, including but not limited to those patients who require involuntary emergency admissions. The work included developing a comprehensive system map, reporting on hospital and emergency department admission data, conducting a system of care gap analysis, and developing a written report and presentation.

Individual Team Member Experience

Our team members have decades of experience in managing complex projects and analyzing data in several platforms and languages, including SAS, STATA, SPSS, Vertica, Tableau, and Microsoft SQL Server Management Studio, among others. Our approach to health data analysis involves extensive documentation of our methods. We maintain code and macro libraries that allow us to analyze data and produce output in a consistent manner. To aid understanding, we extensively annotate our work to document for ourselves, our clients, and our potential successors the purpose and sequence of the code and any modifications from previous versions.

We have direct experience:

- Writing SAS for other users, including making modifications to the current SAS code that generates quarterly cost estimates for NH HealthCost.
- Providing quality assurance for SAS code written by others, including the current SAS code.
- Using health insurance claims data (charge, paid, and cost sharing data fields), including NHCHIS data.
- Importing/exporting data files while protecting PHI and PII.
- Working with health care provider data files.
- Providing effective training and technical assistance.
- Analyzing and reviewing various health insurance data sources.
- Extracting, calculating and analyzing quality data.
- Working with data extensively and independently.
- Working collaboratively with government agencies and other vendors.
- Communicating directly with facilities and payers to resolve data issues.
- Managing complex project and analytic tasks.

HSRI has a team of highly experienced professionals who have the range of technical skills and management experience to meet or exceed New Hampshire's expectations for this project. This team has demonstrated its ability to ensure that all tasks will be accomplished effectively and efficiently. The proposed team has worked closely together on the current contract with the NHID to maintain and enhance the data used on NH HealthCost, as well as on other projects. Staff bios are included on the following pages, and full resumes are included in Appendix A.

All members of the analysis team have 10 or more years of experience coding and writing syntax to analyze data in a variety of languages, such as SAS, SPSS, SQL, STATA, R, C#, java, JavaScript, HTML, and ASP. For the previously mentioned PEP-C Project, we completed a review and debugging of legacy SAS code to meet the current analysis and methodological needs.

Bios of Proposed Staff

Leanne Candura – Project Director

Ms. Candura is the director of HSRI's population health team and has more than 15 years of experience in the field of public health research with a focus on health data. She currently serves as the project manager for the NHID HealthCost cost data updates and for MHDO's Data Warehouse, overseeing the development and implementation of a highly secure and robust data warehouse to collect and house Maine health care claims, encounter and eligibility data, hospital financial data and other related information—and for the ongoing related work on CompareMaine. She is also the Engagement Lead on a data warehouse and reporting project with the Colorado Center for Improving Value in Health Care. In these roles, she works with all stakeholders to develop strategies to achieve project objectives on schedule and on budget. A highly effective leader, problem solver and relationship builder, Leanne has proven success working effectively and collaboratively with all project staff through complex projects. Previously she served as the assistant project director of the Data Analysis Coordination and Consolidation Center project for SAMHSA's Center for Substance Abuse Prevention, a 5-year, $25 million project.

Melissa Hillmyer – Project Manager

Ms. Hillmyer is a project manager with HSRI's population health team. She has more than 10 years of experience in marketing and communications, with a focus on health care transparency. Ms. Hillmyer currently serves as the assistant project manager for the Maine Health Data Organization's health care transparency website, CompareMaine, working to create meaningful user experiences and engaging information on Maine's health care costs and quality for consumers, providers, employers, and other key stakeholders. In this role, she coordinates efforts among stakeholders to develop comprehensive strategies and execute project deliverables on schedule and budget. Action-oriented and client-focused, Ms. Hillmyer is a highly effective and resourceful strategist with a proven track record of successfully developing, managing, and executing multi-stakeholder marketing and web communications strategies and campaigns from initial conception to deployment. She previously served as the account strategist at Wowza, Inc., where she led health care transparency and user engagement efforts for CompareMaine, MONAHRQ, NH HealthCost, Utah HealthScape and several Robert Wood Johnson Foundation Aligning Forces for Quality communities.

Kevin Rogers – Senior Business Systems Analyst

Mr. Rogers has more than 20 years of experience in the IT field, working as a systems analyst and application developer and in datacenter operations. He currently serves as the senior programmer/analyst on the contract with the NHID to maintain and enhance the data used on NH HealthCost. He also currently serves as the product development team lead for the MHDO Data Warehouse. Kevin is also the product development lead for the State of Maine Data Center Enhancement to Improve Health Cost Transparency—a grant-funded project that resulted in the MHDO health care transparency website CompareMaine. Previously, Kevin was a senior member of the data analysis team for SAMHSA's Data Analysis Coordination and Consolidation Center. In this role, he developed applications to automate data analysis and reporting activities, assisted in the development of an SPSS- and SAS-based data cleaning pipeline, and oversaw the team's overall quality assurance processes, including Section 508 compliance. Before joining HSRI, he worked as an independent consultant, providing business and systems analysis, application development, and database design services to clients in the health care, substance abuse prevention, and pharmaceutical fields. Prior to this, he worked as a senior database and application developer at the Channing Bete Company where he developed application and database code for a high-volume survey scanning and reporting operation, which included the integration of SPSS code into an automated report production and proofing pipeline. Kevin began his IT career at the Phoenix Home Life Company where he worked as a team leader and senior systems analyst, maintaining and developing SAS and Cobol programs for the Agency and Actuarial departments. Before assuming this role, he worked in various roles within the company in data processing operations and technical services.

Margaret Mulcahy – Research Associate

Ms. Mulcahy is a research associate with HSRI's population health team. She currently serves as the lead health data analyst on the contract with the NHID to maintain and enhance the data used on NH HealthCost. She also currently leads the cost analysis work on the CMS grants for the State of Maine Data Center Enhancement to Improve Health Cost Transparency awarded to the Maine Health Data Organization. To support the development and maintenance of Maine's health care transparency website, her primary responsibilities are to oversee the research of health care cost and quality transparency, analyze medical claims data, develop the methodology for calculating the average cost of common medical procedures, lead quality control, and respond to payer and provider data concerns. Previously, Ms. Mulcahy worked on the data analysis team of SAMHSA's Data Analysis Coordination and Consolidation Center. In this role she cleaned, analyzed, and reported on data from several federally funded substance abuse prevention programs.

Kristin Battis – Health Data Analyst

Ms. Battis, a New Hampshire native, is a research analyst with HSRI's population health and behavioral health teams. She currently serves as a health data analyst on the contract with the NHID to maintain and enhance the data used on NH HealthCost; in this role, she analyzes health cost data from NHCHIS, produces quarterly cost estimates, identifies data issues, and proposes solutions to improve data quality. She was a research analyst for the evaluation contract that HSRI held with NH DHHS for NH's State Youth Treatment-Planning project, where she was responsible for collecting, managing, and analyzing quantitative and qualitative data and reporting on required performance measures. She was also a research analyst on the evaluation of the capacity of New Hampshire's behavioral health system, also funded by NH DHHS, in which she summarized stakeholder interviews, conducted qualitative data

analysis, and contributed to report writing. Kristin also currently has a key role in managing and analyzing performance data for the SAMHSA-funded Program Evaluation for Prevention project. She holds a master's degree in public health from the Boston University School of Public Health.

Melissa Burnett – Health Data Analyst

Melissa Burnett is a research analyst on HSRI's behavioral health team. Currently, she is lead analyst on a needs assessment of North Dakota's behavioral health system—managing, analyzing, and reporting on the utilization and cost trends of state Medicaid and regional Human Service Center data. Concurrently, Melissa is an analyst for the SAMHSA-funded Program Evaluation for Prevention project, where she is responsible for managing and analyzing process-level measures and providing technical assistance to grantees. Recently, Melissa was also an analyst on the evaluation of the capacity of New Hampshire's behavioral health system, funded by NH DHHS; in this role, she summarized key informant interviews, assisted with qualitative analysis, and contributed to drafting the report. She holds a bachelor's degree in psychology from Northeastern University.

Workplan

Sound project planning is essential to the success of project work. Our team is committed to working with the NHID to ensure the project plan meets the NHID's needs and has full approval before activity begins. Our team has proven itself in similar projects (described previously) to be adept in utilizing sound project management approaches to execute the same type of project deliverables outlined below on time and within budget.

Exhibit 3. Proposed Project Workplan

Deliverable	Start Date	End Date
Project Kickoff Meeting	July 9, 2018	July 13, 2018
Final Project Plan w/ Detailed Timeline	July 13, 2018	July 20, 2018
Cost Updates		
Development Tasks for Quarterly Cost Updates • Review claims data and provider file • Run data queries on the data extract and provider file • Run SAS code to produce estimates • Analyze the data, conduct QA, and document any identified issues • Resolve any identified issues • Re-run, review, and conduct QA on the data files • Prepare files for website vendor • Spot check data on staging site	July 13, 2018	June 30, 2023
Q2 2018 Cost Release	July 13, 2018	Sept. 28, 2018
Q3 2018 Cost Release	Oct. 1, 2018	Dec. 20, 2018
Q4 2018 Cost Release*	Jan. 7, 2019	March 29, 2019
Quality Updates		
Development Tasks for Annual Quality Updates • Download data for most recent time period available • Document and proof the conversion from the raw score to the benchmarking (above, near, and below average) • Compare new data points to previous data points • Identify changes in the facilities with data available • Identify significant changes in the raw score and national benchmarking • Resolve any identified issues • Re-run, review and conduct QA on the data files • Prepare files for website vendor • Spot check data on staging site	July 13, 2018	June 30, 2023
Year 1 Quality Data Update**	Oct. 1, 2018	Dec. 20, 2018
Operational Tasks	July 13, 2018	June 30, 2023
Regular conference calls with NHID and other stakeholders, as appropriate	Monthly and as needed	Monthly and as needed
Research for Improvements	Annually	Annually
Support for Data Questions	As needed	As needed
Investigate and document issues identified	July 13, 2018	June 30, 2023
Project Closeout	June 30, 2023	June 30, 2023

* Quarterly cost updates would follow this general schedule through June 2023.

**Quality data updates would follow an annual schedule and could be consistently paired with a quarterly cost release. In the plan above, the update would consistently be paired with the Q3 cost release.

Project Costs

In estimating our project costs, we adhered to the guidelines outlined by the NHID in the RFP by organizing the budget into each of the components listed below. We include the loaded hourly rates for each individual and the number of hours by each component. Exhibit 4 shows the hours and costs for each project component in Year 1. Exhibit 5 is the budget summary by year for each project component. We kept the hours consistent by year and inflated the cost by an annual rate of 3%.

Exhibit 4. Component Specific Costs

Year 1 Estimates			Project Management		Routine Data Testing		Maintenance of SAS		Quarterly Cost Updates		Annual Quality Updates		Research for Improvements		Support for Data Questions		Total		
Name	Title	Loaded Rate*	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	**Hours**	**% FTE**	**Cost**
Leanne Candura	Project Director	$131.93	12	$1,583		$0		$0		$0	12	$1,583		$0	4	$528	**28**	**1.3%**	**$3,694**
Melissa Hillmyer	Project Manager	$74.40	24	$1,786		$0		$0	12	$893	24	$1,786		$0	8	$595	**68**	**3.3%**	**$5,059**
Margaret Mulcahy	Research Associate	$77.73		$0	4	$311	4	$311	110	$8,550	24	$1,866	24	$1,866	16	$1,244	**182**	**8.8%**	**$14,147**
Kevin Rogers	Sr. Business Systems Analyst	$146.02		$0		$0		$0	16	$2,336		$0	6	$876	4	$584	**26**	**1.3%**	**$3,796**
Kristin Battis	Research Analyst II	$71.78		$0	4	$287	16	$1,148	60	$4,307		$0	12	$861	8	$574	**100**	**4.8%**	**$7,178**
Melissa Burnett	Research Analyst I	$53.47		$0	8	$428	12	$642	241	$12,886	44	$2,353	18	$962	12	$642	**335**	**16.1%**	**$17,912**
Total Personnel			**36**	**$3,369**	**16**	**$1,026**	**32**	**$2,101**	**439**	**$28,973**	**104**	**$7,587**	**60**	**$4,565**	**52**	**$4,167**	**739**	**35.5%**	**$51,787**

*Inclusive of Direct Labor, Fringe & Overhead.

Exhibit 5. Budget Summary by Year

	Year 1		Year 2		Year 3		Year 4		Year 5		Total		
	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	**Hours**	**% FTE**	**Cost**
Project Management	36	$3,369	36	$3,470	36	$3,574	36	$3,681	36	$3,792	**180**	**1.7%**	**$17,885**
Routine Data Testing	16	$1,026	16	$1,057	16	$1,088	16	$1,121	16	$1,155	**80**	**0.8%**	**$5,446**
Maintenance of SAS	32	$2,101	32	$2,164	32	$2,229	32	$2,296	32	$2,365	**160**	**1.5%**	**$11,155**
Quarterly Cost Updates	439	$28,973	439	$29,842	439	$30,737	439	$31,659	439	$32,609	**2195**	**21.1%**	**$153,819**
Annual Quality Updates	104	$7,587	104	$7,815	104	$8,049	104	$8,290	104	$8,539	**520**	**5.0%**	**$40,280**
Research for Improvements	60	$4,565	60	$4,702	60	$4,844	60	$4,989	60	$5,138	**300**	**2.9%**	**$24,239**
Support for Data Questions	52	$4,167	52	$4,292	52	$4,420	52	$4,553	52	$4,689	**260**	**2.5%**	**$22,121**
Total	**739**	**$51,787**	**739**	**$53,341**	**739**	**$54,941**	**739**	**$56,589**	**739**	**$58,287**	**3695**	**35.5%**	**$274,944**

Note: HSRI's budget does not include any travel-related costs. This budget also does not include any costs related to data storage or processing, currently being done in the NORC Data Enclave. This secure, high-speed computing environment allows HSRI to perform the cost estimate portion of the work more quickly than a typical set-up.

Other Considerations/Alternative Approaches

Given our experience and the desire to maximize contract resources, HSRI would like to recommend that the NHID move to a bi-annual cost data update schedule. Typically, negotiated rates between insurers and facilities are only updated once a year. Since the time of year may vary between insurers, a bi-annual update to the cost estimates should capture the rate changes and provide the most cost- effective schedule, given how resource-intensive the quarterly rate updates are for all parties involved in the update process. This resource savings could be used on related enhancements, including methodological updates, improvements to the website, or any in-person travel expenses.

Other Requirements

Conflict of Interest

There are no known actual or potential conflicts of interest.

Appendices

A. Resumes

Resumes for all proposed team members are included.

As director of HSRI's Population Health Team, Leanne oversees HSRI's services aimed at improving the quality, availability, and use of population health data for states, providers, policymakers, researchers, and consumers. In addition, she directs the organization's consulting and data system architecting activities for states' all-payer claims databases and decision-support tools for consumers, such as health care cost and quality reporting websites.

Project Director, NH *HealthCost Quality Data Enhancement*

Funder: **New Hampshire Insurance Department** | Dates: **2017 - Present**
Contribution: Responsible for overseeing all project activities and client relations. HSRI is assisting the New Hampshire Insurance Department with researching and making recommendations to enhance the State's provider quality section on the NH HealthCost Website.

CIVHC Engagement Lead, *Colorado Center for Improving Value in Health Care Data Warehouse Project*

Funder: **Center for Improving Value in Healthcare (CIVHC)** | Dates: **2016 - Present**
Contribution: Responsible for overseeing all project activities and client relations. HSRI and its partners are developing a highly secure and robust data warehouse and reporting platform for Colorado's APCD. This platform will be used to collect and house health care claims and eligibility data and enable full featured public reporting and analytics.

Project Manager, *QA Testing of the New Hampshire Comprehensive Health Information System*

Funder: **New Hampshire Insurance Department** | Dates: **2016 - Present**
Contribution: Responsible for overseeing all project activities and ensuring project objectives are achieved on schedule and on budget. HSRI is supporting the NHID in the quality assurance testing of the New Hampshire Comprehensive Health Information System (NHCHIS) by examining and documenting health insurance claims data used for HealthCost; conducting quality checks; delivering quality reports and recommended resolutions; and by reviewing and providing recommendations for an updated SAS code to produce rates on HealthCost.

Project Manager/ Product Owner, *Maine Health Data Organization Data Warehouse Project*

Funder: **Maine Health Data Organization (MHDO)** | Dates: **2013 - Present**
Contribution: Responsible for overseeing all project activities and ensuring project objectives are achieved on schedule and on budget. As a part of this ten-year contract with the State of Maine, HSRI and its partners are building a highly secure and robust data warehouse to collect and house health care claims, encounter and eligibility data, hospital financial data and other related information. The role of project manager/product owner involves overseeing all project tasks and subcontractors, and responsibility for assessing and tracking the quality of all data coming in and out of the Data Warehouse. Also included in this role is developing standard protocols for all processes involved in the oversight and management of the project, including developing data validation protocols.

Education

MPH University of Massachusetts at Amherst
Northampton, MA

BA
Stonehill College
Easton, MA
(Sociology)

Professional Experience

Director, Population Health Team
(2017-present)
Senior Project Manager/ Research Associate
(2007-2016)
Research Analyst
(2006-2007)
Human Services Research Institute
Cambridge, MA

Research Assistant
OMNI Research and Training
Denver, CO
(2003-2006)

Researcher
United Way of Larimer County/ Larimer County Dept. of Health and Human Services
Fort Collins, CO
(2001-2003)

[redacted]

Project Manager, *State of Maine Data Center Enhancement to Improve Health Cost Transparency – CMS Cycle IV Rate Review Grant*

Funder: **CMS** | Dates: **2014 - 2016**

Contribution: Responsible for overseeing all project activities ensuring project objectives are achieved on schedule and on budget. The Maine Health Data Organization (MHDO) received a grant from the Centers for Medicare and Medicaid Services to further integrate and enhance its cost and quality data to provide more comprehensive and useful information to consumers, providers, employers, and other key stakeholders. MHDO will develop ways to improve access to and dissemination of its wealth of data to further promote cost and quality transparency. MHDO has contracted with HSRI and its partner NORC to perform this work.

Project Manager, *State of Maine Data Center Enhancement to Improve Health Cost Transparency – CMS Cycle III Rate Review Grant*

Funder: **CMS** | Dates: **2013 - 2015**

Contribution: Responsible for overseeing all project activities ensuring project objectives are achieved on schedule and on budget. The Maine Health Data Organization (MHDO) received a grant from the Centers for Medicare and Medicaid Services (CMS) to expand its online health data resources and improve the usability of its health data website. MHDO has contracted with HSRI and its partner NORC to perform this work. Building upon the existing functionality of its current health data websites and taking advantage of the new data warehouse infrastructure already under development by HSRI and NORC, MHDO is using this grant funding to further integrate its cost and quality data to provide more comprehensive and useful information to consumers, providers, employers, and other key stakeholders online.

Project Director, *Evaluation of Models for Internet Consumer Health Care Cost and Quality Information*

Funder: **Vermont Green Mountain Care Board** | Dates: **2015**

Contribution: Responsible for overseeing all project activities ensuring project objectives are achieved on schedule and on budget. HSRI is evaluating potential models for providing consumers with information via the internet about the cost and quality of health care services available to Vermont Residents. As Project Director, contributed to authoring report for VT Legislature and for overseeing all project activities ensuring project objectives are achieved on schedule and on budget.

Assistant Project Director, *Data Analysis Coordination and Consolidation Center (DACCC)*

Funder: **SAMHSA-CSAP** | Dates: **2010 – 2012**

Project Manager, *Data Analysis Coordination and Consolidation Center (DACCC)*

Funder: **SAMHSA-CSAP** | Dates: **2007 – 2010**

Contribution: The DACCC was designed to provide a centralized, comprehensive and coordinated data and analytic resource (for process, capacity, outcome and trend data at all levels of analysis including individual, project, community, state and national) for accountability, program planning, and policy decisions for CSAP. The DACCC also supported CSAP program staff in their planning processes, implementation and oversight of sponsored programs, and in the provision of guidance to grantees and to the field. The role of assistant project director involved all aspects of DACCC activities to ensure that procedures and timelines were being developed and followed, deliverables were met and tailored to specified audience, subcontractor work was coordinated, stakeholders were being included in project work, and budgets were followed.

[redacted]

Co-Author: NH HealthCost Quality Measure and Data Display Recommendations. (2018). New Hampshire Insurance Department. Concord, NH.

Candura, L. & Harrington, K. (2016, October). *Consumer Facing Websites for APCDs*. Presentation at the annual meeting of the National Association of Health Data Organizations, Minneapolis, MN.

Co-Author: Consumer Information and Price Transparency Report. (2015). Green Mountain Care Board. Montpelier, VT.

Candura, L. (2014, October). *From Data to Database.* Presentation at the annual meeting of the National Association of Health Data Organizations, San Diego, CA.

Co-Author: Accountability Report, Volume V: FY 2006, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2007.

Co-Author: Trends and Directions in Substance Abuse Prevention, Volume V: 2002-2005, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2007.

Co-Author: National Outcome Measures: State-Level Trends, Volume I: 2002-2005. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2007.

Co-Author: Accountability Report, Volume IV: FY 2005, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2006.

Co-Author: Trends and Directions in Substance Abuse Prevention, Volume IV: 2002-2004, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2006.

Bobbitt, L., Green, S., Candura, L., & Morgan, G.A. (2005). The Development of a County Level Index of Well-Being. Social Indicators Research, 73(1), 19 – 42.

[redacted]

Melissa Hillmyer has more than 10 years of experience developing, managing and executing healthcare transparency marketing and web communications projects from initial conception to deployment. She plays an integral role in developing comprehensive project plans; coordinating efforts amongst stakeholders and projects teams; tracking project deliverables against schedule and budget; creating consumer engagement and user experience strategies; conducting quality assurance; and monitoring and reporting on progress to stakeholders.

[redacted]

Project Manager, *Maine Health Data Organization Data Warehouse Project*

Funder: **Maine Health Data Organization (MHDO) |** Dates: **2017 - Present**
Contribution: As a part of this ten-year contract with the State of Maine, HSRI and its partners are building a highly secure and robust data warehouse to collect and house healthcare claims, encounter and eligibility data, hospital financial data and other related information. Ms. Hillmyer is responsible for client relations and overseeing project activities for the State's healthcare transparency website, CompareMaine, which includes coordinating efforts amongst stakeholders and the Consumer Advisory Group to develop and disseminate comprehensive user engagement strategies.

Project Manager, NH *HealthCost Quality Data Enhancements*

Funder: **New Hampshire Insurance Department |** Dates: **2017 - Present**
Contribution: HSRI is assisting the New Hampshire Insurance Department with researching and making recommendations to enhance the quality measures and data displays on the State's NH HealthCost website. Ms. Hillmyer is responsible for client relations and leads daily operations and the execution of the final report and deliverables.

Project Manager, *QA Testing of the New Hampshire Comprehensive Health Information System*

Funder: **New Hampshire Insurance Department |** Dates: **2017 - Present**
Contribution: Responsible for overseeing daily project activities and ensuring project objectives are achieved on schedule. HSRI is supporting the NHID in the quality assurance testing of the New Hampshire Comprehensive Health Information System (NHCHIS) by examining and documenting health insurance claims data used for HealthCost; conducting quality checks; delivering quality reports and recommended resolutions; and by reviewing and providing recommendations for an updated SAS code to produce rates on HealthCost.

Education

BA
Concordia College
Moorhead, MN
(Marketing)
(Communications)

Professional Experience

Project Manager
Human Services Research Institute
Cambridge, MA
(2017-present)

Marketing Operations
Flair, LLC
Delano, MN
(2016-2017)

Account Strategist
(2008-2015)
Account Assistant
(2007-2008)
Wowza, Inc.
Minneapolis, MN

Account Strategist, *Wowza, Inc.*

Funders: **Agency for Healthcare Research and Quality (AHRQ), Maine Health Data Organization (MHDO), New Hampshire Health Insurance Department (NHID) and the Robert Wood Johnson Foundation (RWJF)** | Dates: **2007 - 2015**
Contribution: Led consumer engagement efforts for healthcare transparency websites, including but not limited to: CompareMaine, MONAHRQ, NH HealthCost, Utah HealthScape and several Robert Wood Johnson Foundation Aligning Forces for Quality communities, such as Common Table Health Alliance, MN Community Measurement and The Health Collaborative. Work consisted of managing website projects from initial discovery to deployment; interfacing with clients; ensuring that projects were on schedule and within budget; collaborating with partners and stakeholders; conducting qualitative and quantitative research, including focus groups and website usability studies; developing content strategies, including drafting and editing content to be web and user-friendly; designing user interfaces, data displays and user experiences; and conducting quality assurance testing.

[redacted]

Co-Author: NH HealthCost Quality Measure and Data Display Recommendations. (2018). New Hampshire Insurance Department. Concord, NH.

[redacted]

Mr. Rogers has more than 20 years of experience in the IT field working as both systems analyst, data analyst, application developer and ETL architect. He has extensive experience working healthcare claims data, substance abuse survey data, and population health indicators to support a variety of local, state, and federal organizations in improving population health outcomes.

[redacted]

ETL Developer/ Senior Systems Analyst, *Colorado Center for Improving Value in Health Care Data Warehouse Project*

Funder: **Center for Improving Value in Healthcare (CIVHC)** | Dates: **2016 - Present**
Contribution: HSRI and its partners are developing a highly secure and robust data warehouse and reporting platform for Colorado's APCD. This platform will be used to collect and house health care claims and eligibility data and enable full featured public reporting and analytics. Currently leading the Architecture team and responsible for the development of ETL development and data enhancement processing.

Product Development Lead/Senior Systems Analyst, *Maine Health Data Organization Data Warehouse Project*

Funder: **Maine Health Data Organization (MHDO)** | Dates: **2013 - Present**
Contribution: As a part of this ten-year contract with the State of Maine, HSRI and its partners are building a highly secure and robust data warehouse to collect and house health care claims, encounter and eligibility data, hospital financial data and other related information. Currently leading the Product Development team for the Maine Health Data Warehouse Project, which includes developing of the ETL for the APCD; creating the master provider, patient and person indices; and the data modeling of the Data Warehouse.

Research Analyst, *State of Maine Data Center Enhancement to Improve Health Cost Transparency – CMS Cycle IV Rate Review Grant*

Funder: **CMS** | Dates: **2014 - Present**
Contribution: The Maine Health Data Organization (MHDO) received a grant from the Centers for Medicare and Medicaid Services to further integrate and enhance its cost and quality data to provide more comprehensive and useful information to consumers, providers, employers, and other key stakeholders. MHDO will develop ways to improve access to and dissemination of its wealth of data to further promote cost and quality transparency. MHDO has contracted with HSRI and its partner NORC to perform this work. Mr. Rogers is responsible for the analysis of medical claims data and developing the methodology for calculating the average cost of common medical procedures and working with MHDO to improve and increase the dissemination of data.

[redacted]

Product Development Lead/ Senior Systems Analyst, *State of Maine Data Center Enhancement to Improve Health Cost Transparency – CMS Cycle III Rate Review Grant*

Funder: **CMS** | Dates: **2013 - 2015**
Contribution: The Maine Health Data Organization (MHDO) received a grant from the Centers for Medicare and Medicaid Services (CMS) to expand its online health data resources and improve the usability of its health data website. MHDO has contracted with HSRI and its partner

Education

AA
Regents College, State University of New York
Albany, NY
(Liberal Arts)

Professional Experience

Senior Systems Analyst/ Senior Research Associate
Human Services Research Institute
Cambridge, MA
(2007-present)

Consultant
Data Integration Group
Madison, MS
(2006-2011)

Consultant
Rothenbach Research and Consulting
Northampton, MA
(2005-2011)

Consultant
Analytica Group
New York, NY
(2006-2009)

Prevention Science Application Developer
Channing Bete Company
South Deerfield, MA
(2001-2005)

NORC to perform this work. Building upon the existing functionality of its current health data websites, and taking advantage of the new data warehouse infrastructure already under development by HSRI and NORC, MHDO is using this grant funding to further integrate its cost and quality data to provide more comprehensive and useful information to consumers, providers, employers, and other key stakeholders online. Mr. Rogers was responsible for the analysis of medical claims data and developing the methodology for calculating the average cost of common medical procedures.

Senior Research Associate/ Application Developer, *Data Analysis Coordination and Consolidation Center (DACCC)*

Funder: **SAMHSA–CSAP** | Dates: **2007 - 2012**

Contribution: Led the analytic workgroups that created the annual Trends and Directions in Substance Abuse Prevention and State Package reports. Developed report automation code and procedures for the annual State NOMs and Accountability Reports. Created tools to assist in the automated creation of maps, graphs, scattergrams, and tables for a variety of DACCC products. Developed, maintained, and provided training for a variety of applications to support the team's analytic and reporting needs. Acted as the technical liaison to CSAP's Data Information Technology Infrastructure Contract (DITIC) providing analyses of user requirements and creating detailed specifications for online data entry systems; worked to create and conduct joint trainings for end users. Worked with DITIC personnel to create specifications for revisions to the Web Analytic Tool (WAT). Led the effort to convert numerous table and graph heavy reports to 508-compliant formats, including the creation of HTML e- kits for all major deliverables.

[redacted]

Publications

Co-Author: National Outcome Measures: State-Level Trends, Volume V: 2002-2009. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2011.

Co-Author: Trends and Directions in Substance Abuse Prevention, Volume VIII: 2002-2009, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2011.

Co-Author: Accountability Report, Volume VIII: FY 2009, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2010.

Co-Author: Trends and Directions in Substance Abuse Prevention, Volume VII: 2002-2008, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2010.

Co-Author: Accountability Report, Volume VII: FY 2008, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2009.

Co-Author: National Outcome Measures: State-Level Trends, Volume III: 2002-2007. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2009.

Co-Author: Accountability Report, Volume VI: FY 2007, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2008.

Co-Author: National Outcome Measures: State-Level Trends, Volume II: 2002-2006. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2008.

Presentations

Rogers, K. HIV Cohort 6: Data Processing and Preliminary Analysis Results, presented at the Minority HIV/AIDS Initiative Grantee Technical Assistance (TA) Meeting (Cohort 6) , Ft. Lauderdale, FL, September 2009.

Rogers, K., Isvan, N. & Bailey, D. Predicting Participant Retention in Direct Service Prevention Programs: The Case of CSAP's Methamphetamine Prevention Grant Initiative, presented at the annual meeting of the Society for Prevention Research, Washington DC, May 2009.

Rogers, K. Methamphetamine Cohort 3: Data Processing and Preliminary Analysis Results, presented at the Methamphetamine Prevention Program Cohort 3 Grantee Meeting, Austin, TX, July 2008.

HSRI

[redacted]

Margaret Mulcahy serves as a Research Associate on the Population Health Team and brings over 10 years of research experience. She specializes in consumer-oriented healthcare transparency websites and is responsible for researching healthcare cost and quality transparency, analyzing medical claims data, developing methodologies for calculating the average cost of common medical procedures, and supporting the development and maintenance of healthcare transparency websites.

[redacted]

Research Associate, NH *HealthCost Quality Data Enhancement*

Funder: **New Hampshire Insurance Department** | Dates: **2017 - Present**
Contribution: Responsible for researching and evaluating quality measures, capturing data documentation and producing the report and final deliverables. HSRI is assisting the New Hampshire Insurance Department with researching and making recommendations to enhance the State's provider quality section on the NH HealthCost Website.

Research Associate, *QA Testing of the New Hampshire Comprehensive Health Information System*

Funder: **New Hampshire Health Insurance Department** | Dates: **2016 - Present** Contribution: HSRI is supporting the NHID in the quality assurance testing of the New Hampshire Comprehensive Health Information System (NHCHIS) by examining and documenting health insurance claims data used for HealthCost; conducting quality checks; delivering quality reports and recommended resolutions; and by reviewing and providing recommendations for an updated SAS code to produce rates on HealthCost. Ms. Mulcahy is responsible for leading the team, coordinating with NHID, overseeing the quality assurance testing of the claims data, the enhancement and modification of the SAS code used to produce health care service cost estimates, the development of the methodology for calculating the median cost of common medical and dental procedures, and the analysis and quality assurance testing of the rate estimates.

Research Associate, *State of Maine Data Center Enhancement to Improve Health Cost Transparency – CMS Cycle IV Rate Review*

Funder: **CMS** | Dates: **2014 - Present**
Contribution: The Maine Health Data Organization (MHDO) received a grant from the Centers for Medicare and Medicaid Services to further integrate and enhance its cost and quality data to provide more comprehensive and useful information to consumers, providers, employers, and other key stakeholders. MHDO will develop ways to improve access to and dissemination of its wealth of data to further promote cost and quality transparency. MHDO has contracted with HSRI and its partner NORC to perform this work. Ms. Mulcahy is responsible for leading the team and overseeing the research of healthcare cost and quality transparency, the analysis of medical claims data, development of the methodology for calculating the average cost of common medical procedures, and the support the development and maintenance of Maine's healthcare transparency website.

Education

MA
Brown University
Providence, RI
(Sociology)

BA
Harvard University
Cambridge, MA
(Sociology)

Professional Experience

Research Associate
(2015-present)
Research Analyst
(2013-2015)
Research Analyst
(2009-2011)
Human Services Research Institute
Cambridge, MA

Research Assistant
Goodman Research Group
Cambridge, MA
(2007-2009)

Intern
EcoLogic Development Fund
Cambridge, MA
(2007)

Policy Intern
Fundacion Banco de Alimentos
Buenos Aires, Argentina
(2006)

DWI Intern Onondoaga County District Attorney's Office
Syracuse, NY
(2005)

Research Associate, *State of Maine Data Center Enhancement to Improve Health Cost Transparency – CMS Cycle III Rate Review*

Funder: **CMS** | Dates: **2013 - 2015**

Contribution: The Maine Health Data Organization (MHDO) received a grant from the Centers for Medicare and Medicaid Services (CMS) to expand its online health data resources and improve the usability of its health data website. MHDO has contracted with HSRI and its partner NORC to perform this work. Building upon the existing functionality of its current health data websites, and taking advantage of the new data warehouse infrastructure already under development by HSRI and NORC, MHDO is using this grant funding to further integrate its cost and quality data to provide more comprehensive and useful information to consumers, providers, employers, and other key stakeholders online. Ms. Mulcahy is responsible for leading the team and overseeing the research of healthcare cost and quality transparency, and the analysis of medical claims data. She developed the methodology for calculating the average cost of common medical procedures, and supported the development and maintenance of Maine's healthcare transparency website.

Research Analyst, *Evaluation of Models for Internet Consumer Health Care Cost and Quality Information*

Funder: **Vermont Green Mountain Care Board** | Dates: **2015**

Contribution: HSRI evaluated potential models for providing consumers with information via the internet about the cost and quality of health care services available to Vermont Residents. Ms. Mulcahy was responsible for leading the review and assessment of state and private sector websites and writing up the findings.

Research Analyst, *Data Analysis Coordination and Consolidation Center (DACCC)*

Funder: **SAMHSA-CSAP** | Dates: **2009 - 2011**

Contribution: The DACCC was designed to provide a centralized, comprehensive and coordinated data and analytic resource (for process, capacity, outcome and trend data at all levels of analysis including individual, project, community, state and national) for accountability, program planning, and policy decisions for CSAP. The DACCC also supported CSAP program staff in their planning processes, implementation and oversight of sponsored programs, and in the provision of guidance to grantees and to the field. Ms. Mulcahy was responsible for cleaning, analyzing, and reporting on data from several federally funded substance abuse prevention programs including the Minority AIDS Initiative (MAI), National Outcome Measures, and Prevention of Methamphetamine Abuse. She performed data cleaning and analysis of data at the grantee-, intervention-, and participant-levels, wrote reports and guidance documents, led the team that wrote a special report projecting the need of substance abuse treatment services, led trainings and technical assistance to grantees and Project Officers, and presented research at professional conferences.

[redacted]

Publications

Cordner, Alissa, Phil Brown, and Margaret Mulcahy. (2015) "Playing with Fire: The World of Flame Retardant Activism and Policy." In Players and Arenas: The Interactive Dynamics of Protest. Jan Duyvendak and James Jasper, Eds. Amsterdam University Press.

Cordner, Alissa, Margaret Mulcahy, and Phil Brown. (2013) "Chemical Regulation on Fire: Rapid Policy Successes on Flame Retardants." Environmental Science & Technology.

Technical Reports

Co-Author: NH HealthCost Quality Measure and Data Display Recommendations. (2018). New Hampshire Insurance Department. Concord, NH.

Co-Author: Consumer Information and Price Transparency Report. (2015). Green Mountain Care Board. Montpelier, VT.

Co-Author: Accountability Report, Volume IX: FY 2010. (2011). Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Rockville, MD.

Co-Author: Accountability Report, Volume IX: FY 2009. (2010) Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Rockville, MD.

Co-Author: National Outcome Measures: State-Level Trends, Volume V: 2002-2009. (2011). Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Rockville, MD.

Co-Author: National Outcome Measures: State-Level Trends, Volume V: 2002-2009. (2009). Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Rockville, MD.

Co-Author: Prevention of Methamphetamine Abuse Cohort 3 Report. (2011). Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Rockville, MD.

Presentations

Mulcahy, Margaret, Will Garrison. 2016. Using Design to Facilitate Consumer Decision-Making on Maine's Healthcare Transparency Website. Poster Session at Academy Health. Boston, MA.

Mulcahy, Margaret, Alissa Cordner, and Phil Brown. 2012. Playing with Fire: The World of Flame Retardant Activism and Policy. Invited panelist at Eastern Sociological Society. New York, NY.

Manning, Colleen, Elizabeth Goodyear, and Margaret Tiedemann. (November 2008) Our Lives in Evaluation: AEA Members' Descriptions of Their Evaluation Work. Denver: American Evaluation Association Annual Conference.

Vaughan, Peggy and Margaret Tiedemann. (November 2008) The Use of Parent and Teacher Task Scenarios in the Evaluation of a Literacy Website. Denver: American Evaluation Association Annual Conference.

HSRI

Kristin has almost ten years of research experience, including two years of working with health insurance claims data. She has experience developing data collection materials; managing, processing, and analyzing quantitative and qualitative data; conducting quality assurance activities, and synthesizing results for dissemination.

[redacted]

Research Analyst, *North Carolina Olmstead Evaluation Project*

Funder: **North Carolina Department of Health and Human Services** | Dates: **2018 – Present**
Contribution: HSRI has been contracted to conduct an analysis of the services provided to the covered target population in the Olmstead Settlement Agreement. Kristin is responsible for analyzing medical claims data, including Medicaid data.

Research Analyst, *Independent Evaluation of the Capacity of the Current Health System*

Funder: **New Hampshire Department of Health and Human Services** | Date: **2017**
Contribution: HSRI conducted an evaluation of the current health system in New Hampshire to respond to the inpatient, acute care psychiatric needs of patients, including but not limited to, those patients who require involuntary emergency admissions. The work included developing a comprehensive system map, reporting on hospital and emergency department admission data, conducting a system of care gap analysis, and developing a written report and presentation. Kristin summarized stakeholder interviews, assisted with qualitative data analysis, and contributed to report writing.

Research Analyst, *Evaluation of State Youth Treatment-Planning (SYT-P)*

Funder: **New Hampshire Department of Health and Human Services** | Date: **2017**
Contribution: HSRI received a contract to evaluate the New Hampshire Department of Health and Human Services' plan to improve access to evidence-based screening, assessment, treatment, and recovery services and supports for adolescents and transitional aged youth with substance use and/or co-occurring substance use and mental health disorders in New Hampshire. Kristin was responsible for collecting, managing, and analyzing quantitative and qualitative data and reporting on required performance measures.

Research Analyst, *Self-Directed Care Service Utilization and Cost Analysis*

Funder: **Temple University** | Dates: **2016 - Present**
Contribution: HSRI received a subcontract from Live and Learn, Inc. to provide research services to understand the relationship between self-directed care (SDC) and changes in service utilization and cost based on data from Temple University. Kristin is responsible for cleaning, managing, and analyzing participant-level SDC program data and Medicaid claims data.

Education

MPH
Boston University School of Public Health
Boston, MA
(Social and Behavioral Sciences)

BA
Northeastern University
Boston, MA
(Sociology)

Professional Experience

Research Analyst
Human Services Research Institute (HSRI)
Cambridge, MA
(2016-Present)

Programmer/ Analyst
Brigham and Women's Hospital
Boston, MA
(2012-2016)

Research Analyst
HSRI
Cambridge, MA
(2009-2012)

Research Assistant
HSRI
Cambridge, MA
(2008-2009)

Health Data Analyst, QA Testing of the New Hampshire Comprehensive Health Information System

Funder: **New Hampshire Insurance Department** | Dates: **2016 - Present**
Contribution: HSRI received a contract to enhance the quality of health insurance claims data through the development and maintenance of SAS code used to produce rates on New Hampshire's HealthCost transparency website and to provide quality assurance testing of the health claims data. Kristin is responsible for revising and maintaining the NH HealthCost SAS code, performing quality assurance checks and identifying issues, producing the quarterly NH HealthCost rate estimates, and suggesting improvements.

Research Analyst, Program Evaluation for Prevention Contract (PEPC)

Funder: **SAMHSA-CSAP** | Dates: **2016 - Present**
Contribution: HSRI received a subcontract through RTI to collaborate on the PEPC project that includes a national cross-site evaluation of CSAP's Minority AIDS Initiative (MAI). MAI awards grants to community-based organizations and minority-serving academic institutions to prevent substance abuse and the spread of HIV, viral hepatitis, and other STDs among high-risk minority communities. Kristin is responsible for developing data collection protocols and tools, cleaning, managing, and analyzing substance abuse and HIV prevention program data, and compiling and interpreting analytic findings for use in technical reports, briefs, and presentations.

Research Analyst, *Data Analysis Coordination and Consolidation Center (DACCC)*

Funder: **SAMHSA – CSAP** | Dates: **2008 - 2012**
Contribution: CSAP funded the DACCC as a means to centralize and elevate its data collection and analysis efforts, producing data that would help it provide appropriate guidance to grantees and to the prevention field in general. Kristin was responsible for performing data quality assessments and cleaning, manipulating, and quantitatively analyzing national substance use data from multiple federally-funded substance abuse prevention programs; compiling and interpreting analytic findings for use in detailed, brief, and ad hoc reports and presentations for the purpose of program monitoring and evaluation; coordinating the development and production of reports; calculating and reviewing program performance statistics for Congress; and providing quality assurance for numerous federal data requests and reports. Prior to serving as a Research Analyst, Kristin served as a Research Assistant.

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Research Analyst, *Substance Abuse Disorder Providers and Insurance Reimbursement*

Funder: **ASPE** | Dates: **2017 – Present**
Contribution: HSRI has been contracted to document state licensing and credentialing requirements for substance use disorder (SUD) treatment providers in each state and the District of Columbia. The work includes reviewing state reimbursement policies for SUD services for Medicaid, Medicare, and a sample of private insurers; and to conduct case studies of states that have implemented innovative strategies to incentivize SUD providers to join provider networks and accept insurance reimbursement. Kristin is assisting with the environmental scan, reviewing state licensing and credentialing of SUD treatment providers and reviewing state billing eligibility for SUD services, and drafting reports.

Research Analyst, *Oregon IDA Evaluation*

Funder: **Neighborhood Partnerships, Inc.** | Date: **2017**
Contribution: The Oregon Individual Development Account (IDA) Initiative invests in the personal and financial growth of individuals to build strong communities throughout Oregon. Kristin developed a notated SPSS syntax that manipulated National Student Clearinghouse (NSC) data to prepare it for analysis, linked IDA participant data with the NSC dataset, and calculated indicators for evaluation purposes.

Research Analyst, *Developing the Framework for a Large-Scale National Demonstration of Self-Direction in Behavioral Health*

Funder: **Robert Wood Johnson Foundation** | Dates: **2016 - Present**
Contribution: HSRI received a grant from the Robert Wood Johnson Foundation to conduct an Environmental Scan of Self-Direction in Behavioral Health Services and Supports. This project involves further developing parameters for program design and plans for a large-scale demonstration and evaluation of self-direction in behavioral health. In addition to refining the

demonstration and evaluation parameters, the project involved convening the National Self-Direction Practice Advisory Coalition, a group composed of peers and other practitioners with firsthand experience implementing self-directed behavioral health programs. The project is a joint effort of researchers from the National Center for Participant-Directed Services, University of Maryland, and DMA Health Strategies. Kristin is responsible for cleaning, managing, and analyzing participant-level service utilization data and Government Performance and Results Act (GPRA) outcome data.

[redacted]

Reports

Co-Author: Evaluation of the Capacity of the New Hampshire Behavioral Health System. Cambridge, MA: Human Services Research Institute, 2017

Co-Author: The Minority AIDS Initiative (MAI) Cross-Site Evaluation Report, FY 2016, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2017

Co-Author: The Minority AIDS Initiative (MAI) Cross-Site Evaluation Report, FY 2015, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2016

Co-Author: Gender Differences in the Determinants of Alcohol Prevention Outcomes: An Exploration of Cross-Site Data from the Strategic Prevention Framework State Incentive Grants (SPF SIG) Cohort 3 Grantees, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2012

Co-Author: Accountability Report, Volume X: FY 2011, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2012

Co-Author: HIV Cross-Site Evaluation Report, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2012

Co-Author: National Outcome Measures: State-Level Trends, Volume VI: 2002-2010. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2012

Co-Author: Prevention of Methamphetamine Abuse Cohort 3 Report, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2011

Co-Author: Accountability Report, Volume IX: FY 2010, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2011

Co-Author: National Outcome Measures: State-Level Trends, Volume V: 2002-2009. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2011

Co-Author: Accountability Report, Volume VIII: FY 2009, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2010

Co-Author: Projecting the Nationwide Need for Substance Abuse Prevention Services, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2010

Co-Author: National Outcome Measures: State-Level Trends, Volume IV: 2002-2008. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2010

Co-Author: Trends and Directions in Substance Abuse Prevention, Volume VII: 2002-2008, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2010

Presentations

Isvan, N. A., Lundquist, L., Gerber, R., Battis, K., Burnett, M., Brown, D. C., Youngman, L. (2017, June). The Effects of Service Type and Dosage on HIV Risk Factors Among Participants of Minority AIDS Initiative Programs. Presented at the 25th Annual Conference of the Society for Prevention Research, Washington, DC.

Isvan, N. A., Gerber, R., Battis, K., Burnett, M., Lundquist, L., Brown, D. C., Graham, P. W., Youngman, L. (2016, November). HIV and Substance Abuse Prevention Needs of Transgender Individuals: An Analysis of Program Evaluation Data from SAMHSA's Minority AIDS Initiative. Presented at the 144th Annual Meeting & Expo of the American Public Health Association, Denver, CO.

Isvan, N. A., Brown, D. C., Gerber, R., Battis, K., Lundquist, L., Burnett, M., Graham, P. W., Blake, S., Clarke, T. (2016, October). The Success Case Method: Integrating Qualitative and Quantitative Data to Evaluate Behavioral Health Interventions. Presented at the 30th Annual Conference of the American Evaluation Association, Atlanta, GA.

Battis, K., Xuan, Z., Blanchette, J., Naimi, T.S. (2014, October). The Influence of Alcohol Policy Environment and Policy Subgroups on Alcohol-Related Driving Measures among U.S. Youth. Poster presented at the 2014 Boston University Evans Department of Medicine Research Days, Boston, MA.

[redacted]

HSRI

[redacted]

Ms. Burnett has five years of research experience, primarily in the areas of mental health treatment and prevention and substance use prevention. She has experience managing databases, analyzing qualitative and quantitative data, providing technical assistance to grant recipients, and contributing to report writing and conference presentations.

Research Analyst, *North Dakota Behavioral Health Needs Assessment*

Funder: **ND Department of Human Services Behavioral Health Division** | Dates: **2017 - Present**

Contribution: HSRI has been contracted to conduct an in-depth review of North Dakota's behavioral health system and to produce recommendations and strategies for implementing changes to address the needs of the community. Ms. Burnett leads the management and analysis of state Medicaid and Human Service Center data. She is also responsible for retrieving and reporting on state-level trends and prevalence of substance use and mental health.

Research Analyst, *Independent Evaluation of the Capacity of the Current Health System*

Funder: **New Hampshire Department of Health and Human Services** | Date: **2017**

Contribution: HSRI conducted an evaluation of the current health system in New Hampshire to respond to the inpatient, acute care psychiatric needs of patients, including but not limited to, those patients who require involuntary emergency admissions. The work included developing a comprehensive system map, reporting on hospital and emergency department admission data, conducting a system of care gap analysis, and developing a written report and presentation. Ms. Burnett was responsible for summarizing stakeholder interviews, assisting in qualitative analysis, and to contributing to drafting the report.

Research Analyst, *Comprehensive Behavioral Health System Analysis and Study for Pierce County*

Funder: **Pierce County, Washington** | Dates: **2016**

Contribution: HSRI conducted a comprehensive analysis to identify and understand gaps in service access. Ms. Burnett retrieved county-level surveillance and event data to report on the population's behavioral health service and prevention needs.

Research Analyst, *Program Evaluation for Prevention Contract (PEPC)*

Funder: SAMHSA-CSAP | Dates: 2014 - Present

Contribution: HSRI received a subcontract through RTI to collaborate on the PEPC project that includes a national cross-site evaluation of CSAP's Minority AIDS Initiative (MAI). MAI awards grants to community-based organizations and minority-serving academic institutions to prevent substance abuse and the spread of HIV, viral hepatitis, and other STDs among high-risk minority communities. Ms. Burnett performs data management, cleaning, and qualitative and quantitative analysis. She is the lead technical assistance liaison, supporting over a hundred grant recipients with data collection and submission. Ms. Burnett also assists with the production of reports, guidance documents, and presentations.

Education

BS
Northeastern University
Boston, MA
(Psychology)

Professional Experience

Research Analyst
Human Services Research Institute (HSRI)
Cambridge, MA
(2015 – Present)

Research Assistant
HSRI
Cambridge, MA
(2014 – 2015)

Program Assistant
Massachusetts General Hospital
Boston, MA
(2013 – 2014)

Research Assistant
Massachusetts General Hospital
Boston, MA
(2011)

Research Analyst, *Evaluation of Cooperative Agreements to Benefit Homeless Individuals for States and Communities (CABHI-States and Communities)*

Funder: **SAMHSA-CMHS-CSAT** | Dates: **2016 - Present**

Contribution: HSRI received a subcontract through RTI International to evaluate two programs: The Cooperative Agreements to Benefit Homeless Individuals (CABHI) and the Programs for Assistance in Transition from Homelessness (PATH). HSRI has the lead for the evaluation of the PATH program, which is an optional task under the cross-site CABHI evaluation. Ms. Burnett contributes to the development of the PATH Evaluation Plan and to data collection and analysis. Through the CABHI evaluation, she assists a grant recipient with data collection and evaluation and provides data collection.

Research Assistant, *Substance Abuse Disorder Providers and Insurance Reimbursement*

Funder: **ASPE** | Dates: **2017 – Present**

Contribution: HSRI has been contracted to document state licensing and credentialing requirements for substance use disorder (SUD) treatment providers in each state and the District of Columbia. The work includes reviewing state reimbursement policies for SUD services for Medicaid, Medicare, and a sample of private insurers; and to conduct case studies of states that have implemented innovative strategies to incentivize SUD providers to join provider networks and accept insurance reimbursement. Ms. Burnett will assist with the environmental scan.

Research Analyst, *Training Materials for Aging and Disability Resource Centers (ADRC) on Mental Health Promotion and Suicide Prevention*

Funder: **SAMHSA-ACL** | Dates: **2015 - 2016**

Contribution: HSRI received a subcontract through Mission Analytics to develop training materials on behavioral health promotion and suicide prevention for the eight states with Aging and Disability Resource Center (ADRC) Part A: Enhanced Options Counseling grants. Ms. Burnett was responsible for the development of a resource guide containing prevalent training materials in the area of behavioral health and suicide prevention among older adults for dissemination among national ADRC person-centered counselors.

Research Analyst, *Evaluation of Programs Provide Services to Persons who are Homeless with Mental and/or Substance Use Disorders*

Funder: **SAMHSA-CMHS-CSAT** | Dates: **2014 - 2016**

Contribution: HSRI received a subcontract through RTI International to evaluate four programs: CABHI, the Grants for the Benefit of Homeless Individuals (GBHI), Services in Supportive Housing (SSH), and PATH. HSRI had the lead for the evaluation of the PATH program. Ms. Burnett collected and cleaned data, and wrote several brief reports summarizing activities, services, and innovations among PATH grant recipients and subrecipients.

[redacted]

Reports

Co-Author: Evaluation of the Capacity of the New Hampshire Behavioral Health System. Cambridge, MA: Human Services Research Institute, 2017

Co-Author: The Minority AIDS Initiative (MAI) Cross-Site Evaluation Report, FY 2016, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2017

Croft, B. Hughes, D., Wieman, D., Gerber, R., Burnett, M. (2016). *Pierce County Behavioral Health System Study*. Cambridge, MA: Human Services Research Institute.

Co-Author: The Minority AIDS Initiative (MAI) Cross-Site Evaluation Report, FY 2015, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2016

Co-Author: The Minority AIDS Initiative (MAI) Cross-Site Evaluation Report, FY 2014, Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 2015

Presentations

Isvan, N.A., Gerber, R., Battis, K., Burnett, M., Lundquist, L., Brown, D.C., Graham, P.G., Youngman, L. (2016, November 2). HIV and Substance Abuse Prevention Needs of Transgender Individuals: An Analysis of Program Evaluation Data from SAMHSA's Minority AIDS Initiative. Poster presented at the Annual Meeting of the American Public Health Association. Denver, CO.

Isvan, N. A., Brown, D. C., Gerber, R., Battis, K., Lundquist, L., Burnett, M., Graham, P. W., Blake, S., Clarke, T. (2016, October). The Success Case Method: Integrating Qualitative and Quantitative Data to Evaluate Behavioral Health Interventions. Presented at the 30th Annual Conference of the American Evaluation Association, Atlanta, GA.

Isvan, N. A., Lundquist, L., Burnett, M., Gerber, R., Brown, D. C., Youngman, L., Pinnock, W. (2016, June). The Role of SAMHSA/CSAP's Minority AIDS Initiative in Addressing Health Disparities. Presented at the 24th Annual Conference of the Society for Prevention Research, San Francisco, CA.

B. Quality Assurance Procedures

To ensure high quality products are produced and delivered, HSRI performs the following quality control during the NHCHIS data update process:

Raw Claims Data

1. Create tables with all dental and medical data in Vertica, a SQL based database management and analysis system in our secure work environment. We use Vertica because it can handle much larger volumes of data than SAS and process queries more quickly.
2. Run SQL queries to create output data tables for the current quarter.
3. Run a variable check to ensure all the important variables can be used in analysis.
4. Assess any known issues identified by NHID during QC.
5. Create views to analyze payer-level data over time such as PMPM, number of claims, and number of members.
6. Analyze and visualize overall statistics and patterns by payer and highlight any anomalies.

HealthCost Estimates

1. Check output to ensure provider map is working correctly.
    a. Make sure there are no asterisks, blanks, or NPI numbers listed instead of a provider name.
    b. Spot check new providers and confirm estimates look reasonable.
    c. Confirm there are no duplicate providers.
    d. Confirm deleted providers are not showing up.
    e. Confirm uninsured discounts are appearing accurately.
    f. Identify any non-border town providers that may need to be removed.
2. Compare current quarterly estimates with previous quarterly estimates in Excel.
3. Perform internal extreme outlier analysis.
4. Review data for any new procedures or methodological changes. For example:
    a. Calculate data loss associated with implementing a cell size suppression rule.
    b. Review estimates for new medical or dental procedures over time.
5. Review provider issues or any open issues identified by NHID.

C. Sample SAS Code

Below is a sample of new SAS code that was written by HSRI and incorporated into the larger NH HealthCost SAS syntax. The purpose of the code is to pull in a new variable from the eligibility data in order to be able to produce medical estimates by a plan filter of Individual Medical Plans and Group Medical Plans.

```
\end make view_elig;

* !aero co creace view of medical claims daca.
  Beg yrmo and End yrmo paramecers indicace che monch range.
  Excra paramecer is used co run pares of che code only when required.;

\macro make view(beg_yrmo=,end_yrmo=,excra=0,cov_class=MED,view_name=) ;

%lee cov_class=%(&cov_class);

\local ;

daca &view name / view=&view_name;

lengch use markec_cac $4 produce_cype $4 hash rc 8 member_monch_key 8 market; cac $4;
     sec
\do =&beg_yrmo %co &end_yrmo;
         &in lib..&cov class. elms&&obs_wparen
\if %(&,5,2)=12
    \chen \lee =%(&+88) ;
\end;

     by person_key dos_beg dos_end;


     cov_class-"&cov_class";


        • Make use of che eligibilicy hash cable co assign a markec cac and a markec cac recode
          based on che member_monch_key found on che claim record;

        use market cat = •• ;

        • Creace a hash lookup cable for markec cac from che eligibilicy daca;

         if n = 1 Chen do;
                if cov class='DEN'
                  chen
                  declare hash elig_hash DEN(dacasec:"WORK.VIEW ELIG SORTED DEN", duplicace:"replace");
                else
                  declare hash elig_hash_MED(dacasec:"WORK.VIEW_ELIG_SORTED_MED", duplicace:"replace");

                elig_hash &cov class..defineKey('member_monch_key');
                elig_hash_&cov_class..defineDaca('markec_cac');
                elig_hash_&cov_class..defineDone();
         end;

        hash_rc=elig_hash &cov class..find();
        if hash rc = 0 chen
                do;
                        use markec cac %(markec_cac);
                end;
```

STATE OF NEW HAMPSHIRE
2018 NHCHIS Healthcost Analytics
REQUEST FOR PROPOSALS

INTRODUCTION

The New Hampshire Insurance Department (NHID) is requesting proposals for a Contractor to perform consulting services for the NHID in support of the NHID's HealthCost (www.nhhealthcost.org) website. The NHID maintains SAS programs that are used to calculate the rates and related information for the health care costs on the HealthCost website. The NHID seeks support with Comprehensive Health Information System (NHCHIS), and developing and maintaining updated SAS code for the rates produced on the website.

CONTRACT PERIOD

The Contractor will provide services between the date of Governor and Council approval of the contract through until June 30, 2023, subject to legislative approval of future biennial budgets.

GENERAL INFORMATION/INSTRUCTIONS

Electronic proposals will be received until 4 pm local time, on
March 19, 2018, at the New Hampshire Insurance Department, 21 South Fruit Street, Suite 14, Concord, New Hampshire, 03301. Emails should be sent to alain.couture@ins.nh.gov and include in the subject line: RFP for HealthCost Analytics Services.

Proposals should be prepared simply and economically, providing a straightforward, concise description of bidder capabilities to satisfy the requirements of the RFP. Emphasis should be on completeness and clarity of content.

Claims Data Testing

The NHID maintains data collection rules, specified in the NHID administrative rules: Ins 4000 UNIFORM REPORTING SYSTEM FOR HEALTH CARE CLAIMS DATA SETS http://www.gencourt.state.nh.us/rules/state_agencies/ins4000.html requiring health insurance carriers and third party administrators (TPAs) to submit medical, dental, and prescription claims data, and enrollment files to the state. The data are collected in order to create the NHCHIS (http://www.gencourt.state.nh.us/rsa/html/XXXVII/420-G/420-G-11-a.htm). The data include information on fewer than 600,000 currently insured members at any point in time, but may also include data on Medicare and Medicaid enrollees. For additional information on the NHCHIS, please view the website: http://nhchis.org.

Normally, data extracts of the NHCHIS are produced for the NHID/DHHS on a quarterly basis, in text format. Import code into SAS can be provided by the NHID to the Contractor. The data consolidator uses a system that includes basic data testing, but the data integrity may still be less than acceptable for analytic use by the NHID in the production of information on HealthCost.

The Contractor shall be responsible for performing reasonability checks of the data (quality assurance or QA testing), for the fields that are necessary to produce the information on NH HealthCost. The Contractor should anticipate performing at least four data testing sessions, on a quarterly basis, and potentially two per quarter when data issues are identified and an extract needs to be recreated by the data consolidation vendor. The data testing should be considered high level reasonability testing, not a deep dive to identify every anomaly in the data.

Specifically, the contractor shall include a review of the items below to ensure the fields are populated and the values reasonable:

- Carrier identifier, insurance product (e.g. HMO, PPO, etc.), policy type (e.g. fully insured vs. self-funded), and market information (e.g. exchange products, small group, non-group, large group);
- Medicare, Medicaid, and commercial payer identifiers;
- Distribution of professional and institutional claims;
- Provider charges, plan paid, copayment, coinsurance, deductible, and calculated allowed amounts (e.g. most values are positive, allowed amounts are less than charges);
- CPT codes;
- Dates of service;
- Claims indicator as denied/paid, or marked as primary/secondary/etc.;
- Health care provider fields include or can be linked to a useable NPI;
- Member identifiers match among different data files (e.g. claims and membership files);
- Check for duplicate records or missing date ranges;
- Member demographics (DOB, Gender, zip code); and
- That the number of records, members, fields, and date ranges within the data received by the NHID are consistent with what is described by the data consolidator.

The Contractor should efficiently document new issues that should be addressed or recognized by the data consolidation vendor until resolved, including providing examples of the finding. The Contractor is not expected to develop and provide the NHID with a comprehensive quarterly report of QA testing parameters and results. The purpose of the QA testing is to prevent new data issues from compromising the rates posted on the NH HealthCost website.

Once the QA testing programs are written, unless new anomalies are detected, **the maximum amount of time the Contractor should need for QA testing of a clean file is four hours per quarterly extract.** QA testing must be complete within one week of the Contractor receiving the data file from the data consolidator, unless the Contractor receives approval from the NHID for an extended period of time.

The proposal shall include all of the requirements in this RFP for testing of the data extracts.

HealthCost

The NHID is the owner of the NH HealthCost website (www.nhhealthcost.org) and the

Contractor shall be responsible assisting the NHID with revising and/or developing the SAS programming code used to calculate the cost estimates and quality information on the website. The NHID does not use any proprietary software programs, algorithms, black box technology, or other confidential information to produce the rates on the HealthCost website, and the Contractor cannot rely on any such technology or product when further developing rates, methodology, or supporting programs. The SAS programs used in the production HealthCost rates have a copyright with the NHID. NH HealthCost is under a trademark with the NHID. Any code or product produced by the Contractor in support of this project is the property of the NHID. Any reference by the vendor to the work performed on the HealthCost project shall describe HealthCost as a New Hampshire State initiative, and that any work performed by the vendor is as an independent contractor of the NHID. The SAS code developed for producing rates on HealthCost is available to anyone, and the Contractor cannot copyright or otherwise inhibit the NHID or any interested party from obtaining, sharing, and using the work product produced under this project. However, the Contractor is permitted, and even encouraged, to assist other states in developing websites based on the NH HealthCost methodology and design. The current SAS code can be obtained by sending a request to alain.couture@ins.nh.gov.

Proposals should include resources to test the algorithms for accuracy and to maintain the code during the term of the contract. The algorithms include different methodologies for showing rates on an unbundled, semi-bundled (e.g. radiology that includes only the professional and technical components, or global billing codes), and "bundled" services that include any service provided during the visit. While the Contractor is primarily responsible for maintaining the programs and updating the rates on HealthCost, the Contractor shall work with the NHID as needed to make changes so that new services can be added, and rates can be produced as efficiently, accurately, and timely as possible. These changes may include adjustments to the rate calculation methodology, changing "bundled" services to the unbundled approach, or general revisions to the methods of developing rate estimates.

Proposals that include potential changes to the existing methodology for providing rate estimates will be considered.

Periodic updates shall take place on a quarterly basis for cost estimates, and less frequently for all other measures. Currently, all non-cost measures are updated annually.

The SAS programs used to create cost estimates and provider quality information are used to create output files that will be loaded to the HealthCost website by the website vendor, currently the University of New Hampshire Web and Mobile Development team (WMD). The Contractor is responsible for ensuring the output files are checked for reasonability and accuracy prior to each transfer of data to the website developer. This includes, but is not limited to:

- spot checking that a provider listed for a service is a provider that offers the service
- analyzing cost estimates to ensure that any costs that appear unusually high or low are investigated
- revisions to the programming to address unusual situations that may result in misleading estimates.

To ensure rate estimates are valid, the Contractor may need to perform additional analyses using the claims data outside of the programs developed for HealthCost, perform internet research, or in limited circumstances, contact a health care provider directly to understand billing or service delivery practices. The Contractor is also responsible for verifying that the website developer loads the data files correctly.

The Contractor shall perform general maintenance to the SAS code used to produce the HealthCost rates, including routine debugging and changes, or investigating specific questions that may arise about the estimates associated with a particular health care provider or insurance carrier.

Maintenance may include, changes to the underlying CPT codes or modifiers used to identify specific procedures, dates of service used with the input data, additions or modifications to the carriers/TPAs or providers included in the output, procedures included to calculate rates, modifications or enhancements to the rate calculation methodology, and general maintenance to the provider files.

The NHID is supported by a vendor that is responsible for identifying provider associations, and the Contractor may be expected to work with this vendor to incorporate the recommended associations into the HealthCost programming. The Contractor shall provide guidance on the format and layout of the reference tables so that the Contractor and the NHID can efficiently make use of the information provided by the vendor. This may include using the NHCHIS to identifying high volume providers based on specific services. The contract with the vendor performing the provider affiliation work can be obtained by sending a request to alain.couture@ins.nh.gov.

Specific Contractor expectations include the following :

- Demonstrated expertise with the HealthCost rate estimate methodologies.
- Testing of a sample of the current HealthCost estimates for reasonability and accuracy.
- Rewriting as needed (or as requested by the NHID) current SAS code in order to add services, payers, or improve the accuracy, efficiency and timeliness of the rates.
- Updating the cost estimates on HealthCost on a quarterly basis.
- Updating the Quality Measures annually.
- Ensuring that all SAS programs include extensive documentation and that the code is easily understandable by an analyst with intermediate level SAS skills.
- Utilizing SAS programming so that all fields included on the consumer and employer sections of the website are produced with rates and related information, including "precision of the cost estimate" and "typical patient complexity." The "typical patient complexity" field is based on the chronic illness and disability payment system (CDPS), a diagnostic classification system that runs in SAS.
- Researching anomalies in the data as appropriate when calculations produce results that are not expected. The Contractor is expected to provide a breakdown of the payment components, such as the bundled professional and institutional payments, as appropriate. These anomalies may be identified by a patient, the Contractor, the NHID, a provider, an insurance carrier, or another interested party.

Since the rates will be loaded to the HealthCost website, the Contractor shall be responsible for working directly with WMD team to transfer files for loading and addressing any formatting issues that arise.

The proposal shall identify a specific person or persons assigned to the responsibilities outlined in the proposal, and any changes to the assignment of responsibilities to this person(s) during the course of the contract shall be preapproved by the NHID.

Project Costs

The maximum not to exceed amount of this contract is $275,000

Proposals should provide a budget breakdown for the following components, shown on annual basis:

- Routine data testing
- Maintenance of SAS programming code and updates to logic
- Quarterly updates of cost estimates
- Annual update of quality indicators
- Research for improvements
- Occassional response to inquiries on cost estimates.
- Resource distribution between the analyst/programmer and the project management.

Within the provided limitations, bidders are expected to develop a budget that allocates the number of hours associated with staff, identified by name and title, and the distribution of the projected number of hours associated with the tasks.

Proposals will be evaluated based on the experience, skills, and expertise of staff, as well as the per hour rate for the hours budgeted to complete those tasks. During the course of the project, the Contractor and the NHID will work closely to determine the actual Contractor resources necessary to complete the work, and the Contractor should not assume the entire budget will be expended. While proposals must include an estimate of the total number of hours, the NHID recognizes the actual number of hours needed is impossible to estimate, and in reviewing proposals, emphasis will be on the hourly rate, qualifications of the staff, and the reasonableness of budgeted expectations. The not-to-exceed amounts are intended to protect both the NHID and the Contractor from over exposure.

Evaluation of the submitted proposals will be accomplished as follows:

(A) General. An evaluation team will judge the merit of proposals according to the general criteria defined herein.

Officials responsible for the selection of a Contractor shall insure that the selection process accords equal opportunity and appropriate consideration to all who are capable of meeting the specifications.

Failure of the applicant to provide in its proposal all information requested in the Request for Proposal may result in disqualification of the proposal.

(B) Specific. A comparative scoring process will measure the degree to which each proposal meets the following criteria:

(1) Specific skills of the individual needed to perform the tasks outlined in the RFP and the proposal. The proposal must include a listing of references for recent engagements by the vendor that reflect the skills appropriate for work on this project, including telephone numbers and specific persons to contact.

i. Experience and expertise with
   1. writing code in SAS for other users,
   2. using health insurance claims data, including charge, paid and cost sharing data fields,
   3. importing and exporting data files, and
   4. working with health care provider data files.

ii. Proven ability to provide technical assistance and communicate effectively.

iii. Familiarity with various health insurance data sources.

iv. Ability to work with data extensively and independently.

v. Demonstrated ability to work collaboratively with government agencies and other vendors.

30 percent

(2) General qualifications and related experience of the individual identified in the proposal. Knowledge of health care administrative data, health insurance carrier/TPA claims processing systems, data consolidation services and health insurance generally, demonstrated through experience. Good communication skills and demonstrated ability to work in collaboration with other vendors, both industry and regulatory personnel in New Hampshire. Industry experience is preferred. The proposal must include a summary of experience, including a current resume for each individual expected to perform work under the proposal, and samples of SAS code.

30 percent

(3) Timeframe and deliverables. The proposal must include a Work Plan and specify a timeframe in which the Contractor commits to project deliverables as they are developed. The proposal should be specific about the steps that will be taken by the Contractor. The Contractor is welcome to identify periods of time that they will have reduced resources available, or other considerations that will allow resource planning during the term of the contract.

30 percent

(4) Derivation of cost for the staff time. The proposal should include the hourly rate for individuals, and an estimate of the amount of time each person(s) might be

expected to expend on the project. Proposals shall be evaluated with substantial emphasis on the per hour rate, project timeline estimates, and the hours associated with staff expertise. The response required pursuant to this part shall be sufficiently detailed to create a general expectation of ability for the contractor to complete the tasks within the not to exceed amounts provided.

10 percent

(C) Conflict of Interest. The applicant shall disclose any actual or potential conflicts of interest.

(D) Other Information. The New Hampshire Insurance Department will accept written questions related to this RFP from prospective bidders with the deadline being February 21, 2018. Questions should be directed to Al Couture via email: alain.couture@ins.nh.gov . A consolidated written response to all questions will be posted on the New Hampshire Insurance Department's website www.nh.gov/insurance, by February 23, 2018

The successful bidder or bidders will be required to execute a state of New Hampshire Contract. A form P-37 contains the general conditions as required by state of New Hampshire purchasing policies and the Department of Administrative Services. Although this standard contract can be modified slightly by mutual agreement between the successful bidder and the New Hampshire Insurance Department, all bidders are expected to accept the terms as presented in this RFP. If the bidder requires any changes to the P-37, those changes need to be identified in the proposal.

The selection of the winning proposal is anticipated by March 23, 2018, and the NHID will seek to obtain all state approvals in May 2018. Please be aware that the winning bidder will need to provide all signed paperwork to the NHID by April 13, 2018 in order for deadlines to be met.

Proposals received after the above date and time will not be considered. The state reserves the right to reject any or all proposals.

Bidders should be aware that New Hampshire's transparency law, RSA 9-F, requires that state contracts entered into as a result of requests for proposal such as this be accessible to the public online. Caution should be used when submitting a response that trade secrets, social security numbers, home addresses and other personal information are not included.

Human Services Research Institute

2018 NHCHIS Healthcost Analytics

Exhibit B

Contract Price, Price Limitations and Payment

Human Services Research Institute (HSRI) has estimated the total cost for this effort and the not-to-exceed limit of $274,944. Any costs associated with data storage or processing is included in the not-to-exceed limits. Hours are billed only for time worked, and to the extent hours worked are lower, the costs will be proportionately lower.

HSRI will submit invoices to the New Hampshire Insurance Department during the first week of each month. Invoices will contain the total number of hours and corresponding labor charges for each member for the preceding calendar month. Invoices will be submitted electronically. **Annual** billings cannot exceed the amounts listed in the Not-To-Exceed Annual Limits table below.

Not-To-Exceed Annual Limits	
Year 1: July 1, 2018 - June 20, 2019	$ 51,788
Year 2: July 1, 2019 - June 20, 2020	$ 53,342
Year 3: July 1, 2020 - June 20, 2021	$ 54,942
Year 4: July 1, 2021 - June 20, 2022	$ 56,585
Year 5: July 1, 2012 - June 20, 2023	$ 58,287

4/3/18

Human Services Research Institute

2018 NHCHIS Healthcost Analytics

Exhibit C

New Hampshire Insurance Department
Contractor Confidentiality Agreement

As a contractor for the New Hampshire Insurance Department (Department) you may be provided with information and/or documents that are expressly or impliedly confidential. All contractors are required to maintain such information and documents in strict confidence at all times. Disclosure, either written or verbal, of any confidential information and documents to any entity or person, who is not in a confidential relationship to the particular information or documents will result in termination of your firm's services

The undersigned acknowledges she or he understands the foregoing and agrees to maintain all confidential information in strict confidence at all times. The undersigned further acknowledges that if she or he is unsure of whether or not particular information or documents are confidential, it is the undersigned's responsibility to consult with the appropriate Department personnel prior to any disclosure of any information or document.

David Hughes, President, HSRI
Printed Name of Contractor

4/3/18
Date

David Hughes
Contractor Signature

State of New Hampshire
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that HUMAN SERVICES RESEARCH INSTITUTE is a District Of Columbia Nonprofit Corporation registered to transact business in New Hampshire on February 04, 2016. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: **738451**

IN TESTIMONY WHEREOF,
I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 26th day of January A.D. 2018.

William M. Gardner
Secretary of State

CERTIFICATE OF VOTE

I, Stephen Day, do hereby certify that:

1. I am a duly elected Officer of Human Services Research Institute.

2. The following is a true copy of the resolution duly adopted at a meeting of the Board of Directors of the Agency duly held on 11/3/2017:

RESOLVED: That the President

is hereby authorized on behalf of this Agency to enter into the said contract with the State and to execute any and all documents, agreements and other instruments, and any amendments, revisions, or modifications thereto, as he/she may deem necessary, desirable or appropriate.

3. The forgoing resolutions have not been amended or revoked, and remain in full force and effect as of the 3rd day of April, 2018.

4. David Hughes is the duly elected President of the Agency.

STATE OF ~~NEW HAMPSHIRE~~

County of Middlesex, MA

The forgoing instrument was acknowledged before me this 17th day of April, 2018,

By Stephen Day.

Commission Expires: 2/20/2020

CHERYL A. SARTORI
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
February 20, 2020

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 4/17/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Thomas O'Neill
Marsh & McLennan Agency LLC - New England 100 Front St, Ste 800 Worcester MA 01608	PHONE (A/C, No, Ext): 888-850-9400 FAX (A/C, No): 866-795-8016 E-MAIL ADDRESS: MMA.NewEngland.CLines@marshmc.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Philadelphia Indemnity Insurance Co.	18058
INSURER B : Travelers Insurance Company	25682
INSURER C : ACE American Insurance Company	22667
INSURER D :	
INSURER E :	
INSURER F :	

INSURED	HUMANSERVI
Human Services Research Institute 2336 Massachusetts Avenue Cambridge MA 02140	

COVERAGES **CERTIFICATE NUMBER:** 2121213975 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT X LOC OTHER:			PHPK1698741	9/30/2017	9/30/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$ 2,000,000 $ 100,000 $ 5,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $
A	**AUTOMOBILE LIABILITY** ANY AUTO OWNED AUTOS ONLY X HIRED AUTOS ONLY SCHEDULED AUTOS X NON-OWNED AUTOS ONLY			PHPK1698741	9/30/2017	9/30/2018	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$ 1,000,000 $ $ $ $
A	X **UMBRELLA LIAB** OCCUR **EXCESS LIAB** CLAIMS-MADE DED X RETENTION $ 10,000			PHUB597077	9/30/2017	9/30/2018	EACH OCCURRENCE AGGREGATE $	$ 2,000,000 $ 2,000,000 $
B	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UB6J9875771742	11/19/2017	11/19/2018	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
A A C	E&O Liability D&O Liability Cyber Liability			PHPK1698741 PHSD1271978 G28924562002	9/30/2017 9/30/2017 9/30/2017	9/30/2018 9/30/2018 9/30/2018	$2,000,000/$4,000,000 $1,000,000 $2,000,000	SIR: $1,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

New Hampshire Insurance Department
21 S. Fruit Street, Suite 14
Concord NH 03301

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

STANDARD EXHIBIT I

The Contractor identified as in Section 1.3 of the General Provisions of the Agreement agrees to comply with the Health Insurance Portability and Accountability Act, Public Law 104-191 and with the Standards for Privacy and Security of Individually Identifiable Health Information, 45 CFR Parts 160 and 164 and those parts of the HITECH Act applicable to business associates. As defined herein, "Business Associate" shall mean the Contractor and subcontractors and agents of the Contractor that receive, use or have access to protected health information under this Agreement and "Covered Entity" shall mean the New Hampshire Insurance Department.

BUSINESS ASSOCIATE AGREEMENT

(1) Definitions.

a. "Breach" shall have the same meaning as the term "Breach" in Title XXX, Subtitle D. Sec. 13400.

b. "Business Associate" has the meaning given such term in section 160.103 of Title 45, Code of Federal Regulations.

c. "Covered Entity" has the meaning given such term in section 160.103 of Title 45, Code of Federal Regulations.

d. "Designated Record Set" shall have the same meaning as the term "designated record set" in 45 CFR Section 164.501.

e. "Data Aggregation" shall have the same meaning as the term "data aggregation" in 45 CFR Section 164.501.

f. "Health Care Operations" shall have the same meaning as the term "health care operations" in 45 CFR Section 164.501.

g. "HITECH Act" means the Health Information Technology for Economic and Clinical Health Act, TitleXIII, Subtitle D, Part 1 & 2 of the American Recovery and Reinvestment Act of 2009.

h. "HIPAA" means the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191 and the Standards for Privacy and Security of Individually Identifiable Health Information, 45 CFR Parts 160, 162 and 164.

i. "Individual" shall have the same meaning as the term "individual" in 45 CFR Section 164.501 and shall include a person who qualifies as a personal representative in accordance with 45 CFR Section 164.501(g).

j. "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 CFR Parts 160 and 164, promulgated under HIPAA by the United States Department of Health and Human Services.

k. "Protected Health Information" shall have the same meaning as the term "protected health information" in 45 CFR Section 164.501, limited to the information created or received by Business Associate from or on behalf of Covered Entity.

l. "Required by Law" shall have the same meaning as the term "required by law" in 45 CFR Section 164.501.

m. "Secretary" shall mean the Secretary of the Department of Health and Human Services or his/her designee.

n. "Security Rule" shall mean the Security Standards for the Protection of Electronic Protected Health Information at 45 CFR Part 164, Subpart C, and amendments thereto.

o. "Unsecured Protected Health Information" means protected health information that is not secured by a technology standard that renders protected health information unusable, unreadable, or indecipherable to unauthorized individuals and is developed or endorsed by a standards developing organization that is accredited by the American National Standards Institute.

p. Other Definitions - All terms not otherwise defined herein shall have the meaning established under 45 C.F.R. Parts 160, 162 and 164, as amended from time to time, and the HITECH Act.

(2) Use and Disclosure of Protected Health Information.

a. Business Associate shall not use, disclose, maintain or transmit Protected Health Information (PHI) except as reasonably necessary to provide the services outlined under Exhibit A of the Agreement. Further, the Business Associate shall not, and shall ensure that its directors, officers, employees and agents, do not use, disclose, maintain or transmit PHI in any manner that would constitute a violation of the Privacy and Security Rule.

b. Business Associate may use or disclose PHI:
   I. For the proper management and administration of the Business Associate;
   II. As required by law, pursuant to the terms set forth in paragraph d. below; or
   III. For data aggregation purposes for the health care operations of Covered Entity.

c. To the extent Business Associate is permitted under the Agreement to disclose PHI to a third party, Business Associate must obtain, prior to making any such disclosure, (i) reasonable assurances from the third party that such PHI will be held confidentially and used or further disclosed only as required by law or for the purpose for which it was disclosed to the third party; and (ii) an agreement from such third party to notify Business Associate, in accordance with the HITECH Act, Subtitle D, Part 1, Sec. 13402 of any breaches of the confidentiality of the PHI, to the extent it has obtained knowledge of such breach.

d. The Business Associate shall not, unless such disclosure is reasonably necessary to provide services under Exhibit A of the Agreement, disclose any PHI in response to a request for disclosure on the basis that it is required by law, without first notifying Covered Entity so that Covered Entity has an opportunity to object to the disclosure and to seek appropriate relief. If Covered Entity objects to such disclosure, the Business Associate shall refrain from disclosing the PHI until Covered Entity has exhausted all remedies.

e. If the Covered Entity notifies the Business Associate that Covered Entity has agreed to be bound by additional restrictions over and above those uses or disclosures or security safeguards of PHI pursuant to the Privacy and Security Rule, the Business Associate shall be bound by such additional restrictions and shall not disclose PHI in violation of such additional restrictions and shall abide by any additional security safeguards.

(3) **Obligations and Activities of Business Associate.**

a. Business Associate shall report to the designated Privacy Officer of Covered Entity, in writing, any use or disclosure of PHI in violation of the Agreement, including any security incident involving Covered Entity data, in accordance with the HITECH Act, Subtitle D, Part 1, Sec. 13402.

b. The Business Associate shall comply with all sections of the Privacy and Security Rule as set forth in, the HITECH Act, Subtitle D, Part 1, Sec. 13401 and Sec.13404.

c. Business Associate shall make available all of its internal policies and procedures, books and records relating to the use and disclosure of PHI received from, or created or received by the Business Associate on behalf of Covered Entity to the Secretary for purposes of determining Covered Entity's compliance with HIPAA and the Privacy and Security Rule.

d. Business Associate shall require all of its business associates that receive, use or have access to PHI under the Agreement, to agree in writing to adhere to the same restrictions and conditions on the use and disclosure of PHI contained herein, including the duty to return or destroy the PHI as provided under Section (3)b and (3)k herein. The Covered Entity shall be considered a direct third party beneficiary of the Contractor's business associate agreements with Contractor's intended business associates, who will be receiving PHI pursuant to this Agreement, with rights of enforcement and indemnification from such business associates who shall be governed by standard provision #13 of this Agreement for the purpose of use and disclosure of protected health information.

e. Within five (5) business days of receipt of a written request from Covered Entity, Business Associate shall make available during normal business hours at its offices all records, books, agreements, policies and procedures relating to the use and disclosure of PHI to the Covered Entity, for purposes of enabling Covered Entity to determine Business Associate's compliance with the terms of the Agreement.

f. Within ten (10) business days of receiving a written request from Covered Entity, Business Associate shall provide access to PHI in a Designated Record Set to the Covered Entity, or as directed by Covered Entity, to an individual in order to meet the requirements under 45 CFR Section 164.524.

g. Within ten (10) business days of receiving a written request from Covered Entity for an amendment of PHI or a record about an individual contained in a Designated Record Set, the Business Associate shall make such PHI available to Covered Entity for amendment and incorporate any such amendment to enable Covered Entity to fulfill its obligations under 45 CFR Section 164.526.

h. Business Associate shall document such disclosures of PHI and information related to such disclosures as would be required for Covered Entity to respond to a request by an individual for an accounting of disclosures of PHI in accordance with 45 CFR Section 164.528.

i. Within ten (10) business days of receiving a written request from Covered Entity for a request for an accounting of disclosures of PHI, Business Associate shall make available to Covered Entity such information as Covered Entity may require to fulfill its obligations to provide an accounting of disclosures with respect to PHI in accordance with 45 CFR Section 164.528.

j. In the event any individual requests access to, amendment of, or accounting of PHI directly from the Business Associate, the Business Associate shall within two (2) business days forward such request to Covered Entity. Covered Entity shall have the responsibility of responding to forwarded requests. However, if forwarding the individual's request to Covered Entity would cause Covered Entity or the Business Associate to violate HIPAA and the Privacy and Security Rule, the Business Associate shall instead respond to the individual's request as required by such law and notify Covered Entity of such response as soon as practicable.

k. Within ten (10) business days of termination of the Agreement, for any reason, the Business Associate shall return or destroy, as specified by Covered Entity, all PHI received from, or created or received by the Business Associate in connection with the Agreement, and shall not retain any copies or back-up tapes of such PHI. If return or destruction is not feasible, or the disposition of the PHI has been otherwise agreed to in the Agreement, Business Associate shall continue to extend the protections of the Agreement, to such PHI and limit further uses and disclosures of such PHI to those purposes that make the return or destruction infeasible, for so long as Business Associate maintains such PHI. If Covered Entity, in its sole discretion, requires that the Business Associate destroy any or all PHI, the Business Associate shall certify to Covered Entity that the PHI has been destroyed.

(4) Obligations of Covered Entity

a. Covered Entity shall notify Business Associate of any changes or limitation(s) in its Notice of Privacy Practices provided to individuals in accordance with 45 CFR Section 164.520, to the extent that such change or limitation may affect Business Associate's use or disclosure of PHI.

b. Covered Entity shall promptly notify Business Associate of any changes in, or revocation of permission provided to Covered Entity by individuals whose PHI may be used or disclosed by Business Associate under this Agreement, pursuant to 45 CFR Section 164.506 or 45 CFR Section 164.508.

c. Covered entity shall promptly notify Business Associate of any restrictions on the use or disclosure of PHI that Covered Entity has agreed to in accordance with 45 CFR 164.522, to the extent that such restriction may affect Business Associate's use or disclosure of PHI.

(5) Termination for Cause

In addition to standard provision #10 of this Agreement the Covered Entity may immediately terminate the Agreement upon Covered Entity's knowledge of a breach by Business Associate of the Business Associate Agreement set forth herein as Exhibit I. The Covered Entity may either immediately terminate the Agreement or provide an opportunity for Business Associate to cure the alleged breach within a timeframe specified by Covered Entity. If Covered Entity determines that neither termination nor cure is feasible, Covered Entity shall report the violation to the Secretary.

(6) Miscellaneous

a. Definitions and Regulatory References. All terms used, but not otherwise defined herein, shall have the same meaning as those terms in the Privacy and Security Rule, and the HITECH Act as amended from time to time. A reference in the Agreement, as amended to include this Exhibit I, to a Section in the Privacy and Security Rule means the Section as in effect or as amended.

b. Amendment. Covered Entity and Business Associate agree to take such action as is necessary to amend the Agreement, from time to time as is necessary for Covered Entity to comply with the

changes in the requirements of HIPAA, the Privacy and Security Rule, and applicable federal and state law.

c. Data Ownership. The Business Associate acknowledges that it has no ownership rights with respect to the PHI provided by or created on behalf of Covered Entity.

d. Interpretation. The parties agree that any ambiguity in the Agreement shall be resolved to permit Covered Entity to comply with HIPAA, the Privacy and Security Rule and the HITECH Act.

e. Segregation. If any term or condition of this Exhibit I or the application thereof to any person(s) or circumstance is held invalid, such invalidity shall not affect other terms or conditions which can be given effect without the invalid term or condition; to this end the terms and conditions of this Exhibit I are declared severable.

f. Survival. Provisions in this Exhibit I regarding the use and disclosure of PHI, return or destruction of PHI, extensions of the protections of the Agreement in section 3 k, the defense and indemnification provisions of section 3 d and standard contract provision #13, shall survive the termination of the Agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed this Exhibit I.

The NH Insurance Dept.	Human Services Research Institute
The State	Name of the Contractor
Alexander K. Feldvebel	David Hughes
Signature of Authorized Representative	Signature of Authorized Representative
Alexander K. Feldvebel	David Hughes
Name of Authorized Representative	Name of Authorized Representative
Deputy Commissioner	President
Title of Authorized Representative	Title of Authorized Representative
4/13/18	4/3/18
Date	Date