CONTRACT AMENDMENT NO. 8

Original Contract Number 201500002126

1. PARTIES

This Amendment to the above-referenced Original Contract (hereinafter called the "Contract") is entered into by and between International Business Machines Corp., 1 North Castle Drive, Armonk, New York, 10504 (hereinafter called "Contractor"), and the STATE OF COLORADO, acting by and through the Department of Health Care Policy and Financing, 1570 Grant Street, Denver, Colorado 80203 (hereinafter called "Department" or "State.")

2. EFFECTIVE DATE AND ENFORCEABILITY

This Amendment shall not be effective or enforceable until it is approved and signed by the Colorado State Controller or designee (hereinafter called the "Effective Date.") The Department shall not be liable to pay or reimburse Contractor for any performance hereunder, including, but not limited to, costs or expenses incurred, or be bound by any provision hereof prior to the Effective Date.

3. FACTUAL RECITALS

The Parties entered into the Contract to develop and install the Business Intelligence and Data Management System (BIDM). The purpose of this Amendment is to add new projects and staffing to the Contract pursuant to the Contractor's remdiation plan.

4. CONSIDERATION

The Parties acknowledge that the mutual promises and covenants contained herein and other good and valuable consideration are sufficient and adequate to support this Amendment.

5. LIMITS OF EFFECT

This Amendment is incorporated by reference into the Contract, and the Contract and all prior amendments thereto, if any, remain in full force and effect except as specifically modified herein.

6. MODIFICATIONS

The Contract and all prior amendments thereto, if any, are modified as follows:

- Section 7, Payments to Contractor, Subsection A, Maximum Amount, is deleted and replaced for State Fiscal Year reconciliation purposes only and does not indicate any additional Contractor compensation for the additional FTEs, goods, and services in this contract amendment.
- Exhibit A, STATEMENT OF WORK, is updated to reflect additional Non-Key Personnel hours equivalent to two (2) full-time FTE for the remainder of the contract at no additional cost to the Department.
- Exhibit C, REQUIREMENTS, is updated to reflect additional Contractor personnel requirements and additional goods and services provided to the Department for the remainder of the contract at no additional cost to the Department, unless otherwise noted in the requirement(s).

A. Section 7, Payments to Contractor, Subsection A, Maximum Amount, is hereby deleted in its entirety and replaced with the following:

A. Maximum Amount

The maximum amount payable under this Contract to Contractor by the State is shown in the following table, as determined by the State from available funds. Payments to Contractor are limited to the unpaid obligated balance of the Contract at the rates set forth in **Exhibit E**, Compensation and Quality Maintenance Payments. The maximum amount payable by the State to Contractor is:

| Total for All State Fiscal Years | \$86,597,429.96 |
|----------------------------------|-----------------|
| State Fiscal Year 2021-22 | \$11,782,750.20 |
| State Fiscal Year 2020-21 | \$11,782,750.20 |
| State Fiscal Year 2019-20 | \$11,791,920.57 |
| State Fiscal Year 2018-19 | \$13,591,483.89 |
| State Fiscal Year 2017-18 | \$20,856,823.67 |
| State Fiscal Year 2016-17 | \$4,768,951.23 |
| State Fiscal Year 2015-16 | \$9,860,250.20 |
| State Fiscal Year 2014-15 | \$2,162,500.00 |

Funding Changes in Contract Amendment 8

State Fiscal Year 2017-18 Funds moved to State Fiscal Year 2018-19

- \$1,000,000.00 Enhanced PPA Promotion to Production moved to account for new due date of September 30, 2018
- \$500,000.00 T-MSIS Promotion to Production moved to account for new due date of State Fiscal Year 2018 -2019

The maximum amount payable by the State to Contractor for Exhibit C, Section 46 is:

| Total for All State Fiscal Years of Project | \$931,360.60 |
|---|--------------|
| State Fiscal Year 2018-19 | \$144,246.00 |
| State Fiscal Year 2017-18 | \$321,032.60 |
| State Fiscal Year 2016-17 | \$306,082.00 |
| State Fiscal Year 2015-16 | \$160,000.00 |

- B. Exhibit A, STATEMENT OF WORK, Section 4.2 4.2.1 is hereby deleted in its entirety and replaced with the following:
- 4.2 Reference Amendment 8-2020: The Contractor shall provide at least twenty (20) Non-Key Personnel FTEs, assigned exclusively to this Contract, to provide forty-one thousand, six hundred (41,600)

hours of Business Analyst staff, Analytics staff, Operations staff and System/Interface staff under this Contract on an SFY basis during the Ongoing Operations and Enhancement Contract Stage. The hours of work associated with the FTEs that the Contractor shall provide are shown in the following table, but the Contractor may adjust the hours between types of FTEs as approved by the Department.

4.2.1 Reference Amendment 8-2020: Non-Key Personnel FTE Hours Table

| Position | Included Hours each year |
|---------------------------------------|--------------------------|
| Business Analysts and Analytics Staff | 20,800 |
| Operations Staff | 10,400 |
| System/Interface Staff | 10,400 |
| Total Annual Hours | 41,600 |

- C. Exhibit C, REQUIREMENTS, Section 6.2.2.9 and Section 6.2.2.10 are hereby added to include the following Key Personnel:
- 6.2.2.9. Reference Amendment 8-2020: Data Warehouse Manager, as of the execution of Contract Amendment 8
- 6.2.2.10. Reference Amendment 8-2020: Quality Assurance/Test Manager, as of the execution of Contract Amendment 8
 - **D.** Exhibit C, REQUIREMENTS, Section 6.2.6 is hereby deleted in its entirety and replaced with the following:
- 6.2.6. Key Personnel shall be dedicated to the Contract and COMMIT project full-time during the term of the Contract unless noted otherwise in this Contract.
- 6.2.6.1. Reference Amendment 8-2020: Contractor Approach: Contractor shall identify and provide resumes for proposed Key Personnel which include Account Manager, Analytics Manager, DDI Manager, Operational Transition and Readiness Project Manager, Operations Manager, Compliance and Security Manager, Systems Manager, Data Warehouse Manager, and Quality Assurance/Test Manager. Key Personnel shall be accessible to Department personnel at all times (as described in Section 6.2.4) and shall be subject to both initial and ongoing approval of the Department. Any individuals substituted to serve in any of the Key Personnel positions shall not be assigned to perform Work under the Contract without that individual having received prior approval by the Department to serve in a Key Personnel role. Key Personnel shall be dedicated to the Contract and COMMIT project full-time during the term of the Contract unless noted otherwise in this Contract or amendments thereto.
 - E. Exhibit C, REQUIREMENTS, Sections 6.3 6.3.3 is hereby deleted in its entirety and replaced with the following:
- 6.3. Reference #3125: During BIDM Implementation Contract Stages, the Contractor shall ensure that specified Key Personnel are located on-site at the Contractor's local facility (as described in Section 5) in Colorado and readily available to the Department.
- 6.3.1. These specified Key Personnel shall include all of the following:

| 0.3.1.1. | Analytics Manager |
|----------|--|
| 6.3.1.2. | DDI Manager, if the Contractor's staff performing DDI activities are located at the Contractor's local facility and readily available to the Department |
| 6.3.1.3. | Operational Transition and Readiness Project Manager. This position is excluded from this requirement in BIDM Implementation Contract Stage III. |
| 6.3.1.4. | Operations Manager |
| 6.3.1.5. | Systems Manager |
| 6.3.1.6. | Reference Amendment 8-2020: Data Warehouse Manager, as of the execution of Contract Amendment 8 |
| 6.3.1.7. | Reference Amendment 8-2020: Quality Assurance/Test Manager, as of the execution of Contract Amendment 8 |
| 6.3.2. | Contractor Approach: Contractor shall ensure the following Key Personnel are readily available to the Department and are located as on-site employees at Contractor's local facility in Colorado: |
| 6.3.2.1. | Account Manager. |
| 6.3.2.2. | Analytics Manager. |
| 6.3.2.3. | DDI Manager. |
| 6.3.2.4. | Operational Transition and Readiness Project Manager. |
| 6.3.2.5. | Operations Manager. |
| 6.3.2.6. | Systems Manager. |
| 6.3.2.7. | Reference Amendment 8-2020: Data Warehouse Manager, as of the execution of Contract Amendment 8 |
| 6.3.2.8. | Reference Amendment 9-2019: Quality Assurance/Test Manager, as of the execution of Contract Amendment 8 |
| 6.3.3. | Requirement Stage: BIDM Implementation Contract Stage II |
| F. | Exhibit C, REQUIREMENTS, Sections $6.5 - 6.5.5$ is hereby deleted in its entirety and replaced with the following: |
| C | eference #3127: During BIDM Ongoing Operations and Enhancements Contract Stage, the ontractor shall ensure that the specified Key Personnel are located on-site at the Contractor's scal facility and readily available to the Department. |
| 6.5.1. | These specified Key Personnel shall include all of the following: |
| 6.5.1.1. | Analytics Manager |
| 6.5.1.2. | Operations Manager |
| 6.5.1.3. | Systems Manager |
| 6.5.1.4. | Reference Amendment 8-2020: PMO Manager, as of the execution of Contract Amendment 6 |

- 6.5.1.5. Reference Amendment 8-2020: Data Warehouse Manager, as of the execution of Contract Amendment 8
- 6.5.1.6. Reference Amendment 8-2020: Quality Assurance/Test Manager, as of the execution of Contract Amendment 8
- 6.5.2. These specified Key Personnel shall be committed to the Contract full-time.
- 6.5.3. Contractor Approach: During the BIDM ongoing Operations and Enhancements Contract Stage, Contractor shall ensure the following Key Personnel are located onsite at the local Contractor's facility and readily available to the Department:
- 6.5.3.1. Account Manager.
- 6.5.3.2. Analytics Manager.
- 6.5.3.3. Operations Manager.
- 6.5.3.4. Systems Manager.
- 6.5.3.5. Reference Amendment 8-2020: PMO Manager, as of the execution of Contract Amendment 6
- 6.5.3.6. Reference Amendment 8: Data Warehouse Manager, as of the execution of Contract Amendment 8
- 6.5.3.7. Reference Amendment 8: Quality Assurance/Test Manager, as of the execution of Contract Amendment 8
- 6.5.4. These specified Key Personnel shall be committed to the Contract full-time.
- 6.5.5. Requirement Stage: BIDM Ongoing Operations and Enhancement Contract Stage
 - G. Exhibit C, REQUIREMENTS, Section 6.16 6.17.2 is hereby added as follows:
- 6.16. Reference Amendment 8-2020: The Contractor shall provide a Data Warehouse Manager to be in place as of the execution of Amendment 8 and to continue through the BIDM Ongoing Operations and Enhancement Contract Stage.
- 6.16.1. The Data Warehouse Manager shall do all of the following:
- 6.16.1.1. Manage Extract, Transform, Load (ETL), Data architect Contractor or sub-contractor staff on the project to ensure timely and quality production within project deadlines.
- 6.16.1.2. Ensure data warehouse functional design adheres to data warehousing best practices and standards for data integrity, privacy and accessibility.
- 6.16.1.3. Manage all BIDM data model(s) according to data governance best practice and ensure associated data model documentation is updated in a timely manner and appropriately versioned.
- 6.16.1.4. Be dedicated to the Contract full-time.
- 6.16.2. Requirement Stage: BIDM Ongoing Operations and Enhancement Contract Stage
- 6.17. Reference Amendment 8-2020: The Contractor shall provide a Quality Assurance/Test Manager to be in place as of the execution of Amendment 8 and to continue through the BIDM Ongoing Operations and Enhancement Contract Stage.
- 6.17.1. The Quality Assurance/Test Manager shall do all of the following:

- 6.17.1.1. Manage UAT staffing levels and Contractor UAT project assignments to ensure timely UAT testing within project deadlines.
- 6.17.1.2. Coordinate testing efforts with Department subject matter experts.
- 6.17.1.3. Participate in project phase gate reviews and ensure Contractor fulfills project phase gate review checklist requirements (as described in Exhibit D and also incorporated in the Project Management Plan described in Section 2.66).
- 6.17.1.4. Be dedicated to the Contract full-time.
- 6.17.2. Requirement Stage: BIDM Ongoing Operations and Enhancement Contract Stage
 - H. Exhibit C, REQUIREMENTS, Section 7.3 7.3.5 is hereby deleted in its entirety and replaced with the following:
- 7.3. Reference #3139: The Contractor shall provide sufficient staff to meet all requirements of the Contract.
- 7.3.1. At minimum, the Contractor shall provide Non-Key Personnel as follows:
- 7.3.1.1. Reference Amendment 8-2020: Ten (10) Business Analysts and/or Analytics Staff
- 7.3.1.2. Five (5) Operations Staff
- 7.3.1.3. Five (5) Systems/Interface Staff
- 7.3.2. Non-Key Personnel staff shall be assigned to perform the Work described under the Contract or shall be authorized to perform duties through Change Management Process.
- 7.3.3. Contractor Approach: The Contractor shall provide sufficient staff to meet all requirements of the Contract and at a minimum will provide the following Non-Key Staff:
- 7.3.3.1. Reference Amendment 8-2020: Ten (10) Business Analysts and/or Analytics Staff.
- 7.3.3.2. Five (5) Operations Staff.
- 7.3.3.3. Five (5) Systems/Interface Staff.
- 7.3.4. The Contractor shall assign Contractor's staff to perform the Work described under the Contract or shall be authorized to perform duties through the Change Management Process.
- 7.3.5. Requirement Stage: BIDM Ongoing Operations and Enhancement Contract Stage
 - I. Exhibit C, REOUIREMENTS, Section 7.12 7.13 is hereby added as follows:
- 7.12 Reference Amendment 8-2020: The Contractor shall assign one dedicated FTE as an analytics champion for innovation, who will be available onsite, and on demand.
- 7.13 Reference Amendment 8-2020: Contractor will provide a specific plan for regular availability of staff with national Medicaid expertise to support the account.
- 7.13.1 DELIVERABLE: Plan for regular availability of staff with national Medicaid expertise
- 7.13.2 DUE: Twenty (20) business days from the Effective Date
- 7.13.3 Requirement Stage: BIDM Ongoing Operations and Enhancement Contract Stage

- J. Exhibit C, REQUIREMENTS, Sections 49 49.1.6.2.2 are hereby added as follows:
- 49. Reference Amendment 8-2020: Healthcare Effectiveness Data and Information Set (HEDIS) CERTIFIED MEASUREMENT
- 49.1. Reference Amendment 8-2020: The Contractor shall make it possible for authorized Department staff to download HEDIS-certified measures for Medicaid providers, including client-level detail, for the purpose of Department provider performance monitoring, to support Department initiatives such as the Alternative Payment Methodology (APM) project and reporting to CMS on the Core Measure Sets.
- 49.1.1. Reference Amendment 8-2020: Contractor Approach: The Contractor shall calculate, maintain, and provide per Department specifications all HEDIS-certified measurements available through the CareAnalyzer Reporting tool.
- 49.1.2. Reference Amendment 8-2020: CareAnalyzer is a hosted web application which is available to users via the Solution Center web portal.
- 49.1.3. Reference Amendment 8-2020: Contractor shall create a Project Schedule for the implementation of the CareAnalyzer Tool. This schedule shall provide an accurate, date and task driven account of project implementation.
- 49.1.3.1. DELIVERABLE: CareAnalyzer Project Schedule
- 49.1.3.2. DUE: Fifteen (15) days after Amendment 8 Effective date
- 49.1.4. Reference Amendment 8-2020: Roles and Responsibilities of the Contractor during CareAnalyzer implementation.
- 49.1.4.1. The Contractor shall be responsible for all of the following during CareAnalyzer implementation:
- 49.1.4.1.1. Provide project management oversight for the implementation of the CareAnalyzer software.
- 49.1.4.1.2. Provide Business Analyst and Data Management resources to support requirement elicitation meetings, data mapping discussions, and other implementation activities.
- 49.1.4.1.3. Migrate data from the BIDM to the Care Analyzer program using data mapping templates based on Advantage Suite data model.
- 49.1.4.1.4. Configure CareAnalyzer for use by Department staff to pull reports and conduct analyses of provider outcomes by county, by RAE region, or statewide.
- 49.1.4.1.5. Configure CareAnalyzer to support existing patient to provider relationships (i.e. Medicaid client to Medicaid billing provider attributions, also known as PCMP enrollments in MMIS).
- 49.1.4.1.6. Configure CareAnalyzer to support existing patient to health plan relationships (i.e. Medicaid client managed care plan (MCO) enrollments in MMIS).
- 49.1.5. Reference Amendment 8-2020: Roles and Responsibilities of the Department during CareAnalyzer implementation.
- 49.1.5.1. The Department shall be responsible for all of the following during CareAnalyzer implementation:

- 49.1.5.1.1. Provide subject matter experts to speak to requirements for Alternative Payment Model reporting against HEDIS measures. As well as provide other resources to inform the data mapping and business requirements for the system.
- 49.1.5.1.2. Provide users to test and validate the functionality of the system prior to go-live.
- 49.1.5.1.3. Participate in other project management activities, status meetings, gate review discussions, and Deliverable approval steps.
- 49.1.6. Reference Amendment 8-2020: Maintenance
- 49.1.6.1. The Contractor shall have the responsibility to update the CareAnalyzer dataset with new claims information each month on a regular schedule that shall coincide with Advantage Suite data loads.
- 49.1.6.2. The Contractor shall have the responsibility to maintain the most current version of the CareAnalyzer software, including any applicable annual HEDIS methodology updates.
- 49.1.6.2.1. DELIVERABLE: CareAnalyzer Implementation Fully functional HEDIS-certified CareAnalyzer Reporting Tool.
- 49.1.6.2.2. DUE: As listed in project schedule (see 49.1.3)
 - K. Exhibit C, REQUIREMENTS, Sections 50 50.12 are hereby added as follows:

50. Reference Amendment 8-2020: VULNERABILITY ASSESSMENT PROJECT

- 50.1. Reference Amendment 8-2020: The Contractor shall conduct a Vulnerability Assessment to identify claims which may be determined to be overpayments to providers and to identify potential provider fraud within the Colorado Medicaid program. The Contractor shall identify overpayments for recovery until at least one million dollars (\$1,000,000.00) (Overpayment Recovery Amount) has been recovered. The Contractor shall conduct all needed investigation and provide all needed documentation to support the recovery of this amount by the Department.
- 50.1.1. Reference Amendment 8-2020: The Contractor shall comply with and provide all services in accordance with all applicable Federal and State statues, regulations, and rules governing the notification and recovery of overpayments, informal reconsideration, and appeals by Providers, including but not limited to the requirements of 10 C.C.R 2505-10. The Contractor shall provide services in compliance with Department regulations, policies and rules, as they exist now or as hereafter amended.
- 50.1.2. Reference Amendment 8-2020: The Contractor shall, upon identifying cases of possible fraud, immediately make a verbal report regarding the possible provider, member, or contractor fraud to the Department's Audits and Compliance Division. The Contractor shall also submit written documentation to the Department of the possible fraud within two (2) business days. The Contractor shall cooperate with the Department and law enforcement in any resulting investigation of possible fraud.
- 50.1.2.1. Reference Amendment 8-2020: The verbal and written reports of possible fraud to the Department shall include all details of the findings and concerns, including a chronology of Contractor actions that resulted in the discovery of fraud. The reports shall identify any affected claims by claim control number (ICN) that have been discovered. The Contractor shall provide any claims data associated with its report. The written report shall be in a format that is specified and approved by the Department.
- 50.1.2.2. Reference Amendment 8-2020: The Contractor shall be available to respond to questions

- from the Attorney General's Office regarding the methodology and authenticity of their work and shall be available to testify regarding their work as necessary.
- 50.1.3. Reference Amendment 8-2020: The Contractor shall use separate personnel and resources for the Vulnerability Assessment from the personnel and resources used for the BIDM project. The Department reserves the right to approve and/or remove the Contractor personnel which will be working on the Vulnerability Assessment.
- 50.1.4. PROJECT TIMELINE
- 50.1.4.1. Reference Amendment 8-2020: The Vulnerability Assessment shall adhere to the following schedule:
- 50.1.4.2. Reference Amendment 8-2020: The work related to the Vulnerability Assessment outlined in the following sections shall commence on the effective date and shall be completed no later than six (6) months after the effective date:
- 50.1.4.2.1. Project Initiation (as described in Section 50.2) including a Kick-off meeting, Project Plan and Approach Document
- 50.1.4.2.2. Vulnerability Assessment Data Extract Validation (as described in Section 50.5)
- 50.1.4.2.3. Templates (as described in Section 50.4) including demand letter template, informal reconsideration (IR) response letter template, a case summary template, and a claims list template
- 50.1.4.2.4. Preliminary Vulnerability Assessment Analytic Findings Report (as described in Section 50.6) including a list of potential recoveries and the Dashboard
- 50.1.4.2.5. Case Investigation and Case Files (as described in Section 50.7)
- Reference Amendment 8-2020: The Contractor shall commence issuing Overpayment Determinations (as described in Section 50.8) on the first business day of the month following completion of the work outlined in Section 50.1.4.1 and be completed within 30 days.
- Reference Amendment 8-2020: The work related to the Vulnerability Assessment outlined in the following sections shall commence following the issuing of the first Overpayment Determination (as described in Section 50.8).
- 50.1.4.4.1. Requests for Informal Reconsideration (as described in Section 50.9) until thirty-five (35) days after the last determination letter is issued.
- 50.1.4.4.2. Appeals and Judicial Proceedings (as described in Section 50.10) until all appeals are completed.
- 50.1.5. Reference Amendment 8-2020: For the Vulnerability Assessment Project "Overpayment" is defined as it is in regulation at 10 CCR 2505-10, Section 8.076.1.9. The term "Overpayment" does not include amounts referred for fraud investigation or due to non-enforcement of State policy whether by the Department or an individual within the Department.
- 50.1.6. Reference Amendment 8-2020: For the Vulnerability Assessment Project, the term "Recovery" is defined as the dollar amounts recouped from providers as the result of an overpayment determination, whether those dollar amounts are paid to the Department directly or whether the amounts are received in the form of an administrative adjustment against outstanding amounts due to a provider.

50.2. PROJECT INITIATION

- 50.2.1. Reference Amendment 8-2020: The Contractor shall schedule a Vulnerability Assessment Project Kick-Off meeting with the Department within twenty (20) business days after the Effective Date to discuss the project, claims which will be reviewed, finalization of the Project schedule, areas already known by the Department to have problems, and other necessary topics.
- 50.2.1.1. DELIVERABLE: Project Kick-Off Meeting.
- 50.2.1.2. DUE: Twenty (20) business days after the Effective Date
- 50,2.2. Reference Amendment 8-2020: The Contractor shall provide the Department with a Vulnerability Assessment Project Plan within thirty (30) business days after the Effective Date of this Amendment and that Plan shall follow the Schedule set forth in Section 50.1.43.
- 50.2.3. Reference Amendment 8-2020: The Project Plan shall include, but is not limited to, the project plan for the assessment, schedule for the assessment, and proposed claims data to be reviewed for the assessment.
- 50.2.4. Reference Amendment 8-2020: The Contractor shall deliver a draft of the Project Plan for Department to review at the time of the Kick- Off meeting. The Department shall review the Project Plan and shall provide the Contractor feedback within five (5) business days.
- 50.2.5. Reference Amendment 8-2020: The Contractor shall incorporate the Department's feedback into a final Project Plan that shall be delivered to the Department for approval.
- 50.2.5.1. DELIVERABLE: Final Project Plan
- 50.2.5.2. DUE: Thirty (30) days after the Effective Date
- 50.2.6. Reference Amendment 8-2020: The Contractor shall understand and have a working knowledge of the following:
- 50.2.6.1. Reference Amendment 8-2020: Current Procedural Terminology (CPT), the Health Care Common Procedure Coding System (HCPCS), International Classification of Diseases (ICD-9), ICD-10, and any other medical coding references.
- 50.2.6.2. Reference Amendment 8-2020: State and Federal regulations governing the administration of Medicaid.
- 50.2.6.3. Reference Amendment 8-2020: The Department's Medicaid Provider Bulletins, the Department's benefit policies, covered benefits, billing manuals, Provider conditions of participation, the Department's rules, and any other resource that governs the administration of Medicaid in Colorado.
- 50.2.6.4. Reference Amendment 8-2020: Information on the Department's prior authorization process.
- 50.2.7. Reference Amendment 8-2020: The Contractor shall reach out to the Audits and Compliance Division at the Department with questions during the project. Clarification on the information listed in 50.2.6 shall go through an agreed upon, defined communication channel. The Department has five (5) business days to answer questions unrelated to policy. If it is anticipated that a question will take more than five (5) business days to answer, the Parties must agree on an extension of time.
- 50.2.8. Reference Amendment 8-2020: The Contractor shall prepare an Approach Document that

provides an overview of claims selection logic, rationale, and criteria. Rationale shall include all documentation referenced in Section 50.2.6. The Approach Document shall include citations of all relevant state and federal regulations. The Contractor shall not begin the Vulnerability Assessment until the Approach Document is approved by the Department.

- 50.2.8.1. DELIVERABLE: Approach Document
- 50.2.8.2. DUE: as determined in the Project Plan
- 50.2.9. Reference Amendment 8-2020: After project initiation Monthly Status Meetings shall be scheduled through the conclusion of the Vulnerability Assessment Project to discuss progress and issues regarding the performance of this work.
- 50.2.9.1. Reference Amendment 8-2020: The Contractor shall document and distribute meeting minutes.
- 50.2.9.2. DELIVERABLE: Monthly Status Meeting Minutes
- 50.2.9.3. DUE: in accordance with the approved Communication Plan.
- 50.3. OVERPAYMENT RECOVERY TOTAL
- 50.3.1. Reference Amendment 8-2020: The Contractor confirms that the Department will recover overpayments in an amount of one million dollars (\$1,000,000.00). The Contractor will continue to work until the warranted Overpayment Recovery Amount is achieved.
- 50.3.1.1. Reference Amendment 8-2020: In the event that a recovery case is referred for fraud investigation the overpayment amount shall not be considered toward the warranted Overpayment Recovery Amount.
- 50.3.1.2. Reference Amendment 8-2020: If an overpayment determination is overturned during the informal reconsideration or appeal process, that overpayment amount will not count towards the warranted Overpayment Recovery Amount.
- 50.3.1.3. Reference Amendment 8-2020: If the Department decides to deny approval of an overpayment determination for any reason, the amount of the overpayment will not be counted toward the warranted Overpayment Recovery Amount.

50.4. TEMPLATES

- 50.4.1. Reference Amendment 8-2020: The Contractor shall submit to the Department for approval a demand letter template, informal reconsideration (IR) response letter template, a case summary template, and a claims list template for use as documentation of overpayment and notice to providers of overpayment determinations.
- So.4.1.1. Reference Amendment 8-2020: The Contractor shall not communicate with providers before the templates are approved by the Department.
- Reference Amendment 8-2020: The Contractor shall incorporate the Department's standard template including Department letterhead and appeal rights for the demand letter and IR response letter.
- 50.4.2. Reference Amendment 8-2020: The Contractor shall ensure the Demand letter explains the rational for the determination and a written explanation for each adverse review finding.
- 50.4.3. Reference Amendment 8-2020: The Contractor shall ensure the case summary template explains the rationale for a finding that there was an overpayment, including the deficiency in the provider's claim(s) which is the basis for an overpayment determination.

- 50.4.4. Reference Amendment 8-2020: The Contractor shall ensure the claims list includes all data elements for each claim and line necessary for calculation of the federal share of each claim or portion of a claim which may be determined to be an overpayment.
- 50.4.4.1. DELIVERABLE: Final Demand Letter template, Case Summary template, Claims List template, IR Response Letter template, and IR Case Summary template.
- 50.4.4.2. DUE: As determined in the Project Plan approved by the Department
- 50.5. VULNERABILITY ASSESSMENT DATA EXTRACT VALIDATION
- 50.5.1. Reference Amendment 8-2020: The Contractor shall conduct the Vulnerability Assessment, consisting of, but not limited to, an analysis of provider Fee-For-Service claims data paid during the most recent twenty-four (24) months prior to March 1, 2017 using the Contractor's algorithms and edits for provider fraud, waste and abuse. If a different time period for claims data is deemed necessary by the Contractor to achieve the Overpayment Recovery Amount, Contractor shall seek Department approval of the new time period before conducting the analysis.
- 50.5.1.1. Reference Amendment 8-2020: The Contractor shall use Medicaid eligibility files and provider data files in its analysis.
- 50.5.2. Reference Amendment 8-2020: The Contractor shall verify the integrity of the data extracts and provide a validation of the verified data extracts in writing.
- 50.5.3. Reference Amendment 8-2020: If the Department in conjunction with the Contractor is unable to verify the accuracy of the data extracts upon review, the Contractor shall conduct the Vulnerability Assessment again, at no cost to the Department.
- 50.5.4. Reference Amendment 8-2020: The Contractor shall ensure all claims information needed for recovery of overpayments, investigation of fraud and FFP calculation is provided with any reports of claims which may be determined overpayments or possible fraud.
- 50.5.5. Reference Amendment 8-2020: The Contactor shall upload claims data on a HIPAA-compliant platform.
- 50.5.5.1. DELIVERABLE: Vulnerability Assessment Data Extract Validation
- 50.5.5.2. DUE: As determined in the Project Plan approved by the Department
- 50.6. PRELIMINARY VULNERABILITY ASSESSMENT ANALYTIC FINDINGS REPORT AND DASHBOARD
- 50.6.1. Reference Amendment 8-2020: The Contractor shall review the findings of the Vulnerability Assessment to determine areas of opportunity for recovery of overpayments, identifying areas for the greatest improvement, or cases of possible fraud. The results and recommendations shall be compiled in a Preliminary Vulnerability Assessment Analytic Findings Report.
- 50.6.2. Reference Amendment 8-2020: The Contractor shall integrate, as applicable, Colorado-specific benefit plans, rules, policy, and guidance into its review.
- 50.6.3. Reference Amendment 8-2020: Recommendations and results will be prioritized to identify the areas for greatest improvement and return on investment. Recommendations and results shall include, but are not limited to:
- 50.6.3.1. Reference Amendment 8-2020: Revisions to Colorado specific benefit plans, rules, policy, and guidance.

- 50.6.3.2. Reference Amendment 8-2020: Providers who should be considered for prepayment review.
- Reference Amendment 8-2020: Edits that should be modified or placed into the payment system to stop inappropriate payments in the future.
- Reference Amendment 8-2020: Policies that should be strengthened so that payments can be stopped in the future for vulnerable areas.
- 50.6.3.5. Reference Amendment 8-2020: Provider and member education opportunities.
- 50.6.3.6. Reference Amendment 8-2020: Future savings and cost avoidance opportunities.
- 50.6.4. Reference Amendment 8-2020: Vulnerability Assessment algorithm results will be placed into one of the following categories:
- 50.6.4.1. Reference Amendment 8-2020: Billing errors.
- 50.6.4.2. Reference Amendment 8-2020: Long-term savings opportunities
- 50.6.4.3. Reference Amendment 8-2020: Interesting observations.
- 50.6.5. Reference Amendment 8-2020: The Contractor shall compile a list of claims where there is supportable evidence of overpayment. For potential recoveries, the Contractor shall include the following information:
- 50.6.5.1. Reference Amendment 8-2020: A description of each non-compliance issue identified.
- 50.6.5.2. Reference Amendment 8-2020: Statute, rule, or policy which may have been violated with citation and full text.
- 50.6.5.3. Reference Amendment 8-2020: A list of ICN's and associated TCN's.
- 50.6.5.4. Reference Amendment 8-2020: Any recommendations to prevent future overpayment.
- 50.6.5.5. Reference Amendment 8-2020: Estimated potential recovery.
- 50.6.6. Reference Amendment 8-2020: The Department shall vet the ICNs and associated TCNs against the TCN database and settlements to ensure the claims have not been previously audited or recovered. If a claim or line has previously been audited or is currently being audited by another entity, then no further review of the claim is allowed in accordance with Section 25.5-4-301, C.R.S. and the claim shall not be included in any overpayment determination made by the Contractor.
- 50.6.7. Reference Amendment 8-2020: The Contractor shall send its consultants and program integrity subject matter experts to present to the Department the results of the Preliminary Vulnerability Assessment and discuss potential recoveries from the findings that have the greatest chance of being recoverable without medical records reviews or provider appeals.
- 50.6.7.1. DELIVERABLE: Preliminary Vulnerability Assessment Analytic Findings Report.
- 50.6.7.2. DUE: As determined in the Project Plan
- 50.6.8. Reference Amendment 8-2020: The Contractor shall make available to the Department the detailed claim level results of the Vulnerability Assessment in a format approved by the Department on a Vulnerability Assessment Dashboard.
- 50.6.8.1. DELIVERABLE: Vulnerability Assessment Dashboard.
- 50.6.8.2. DUE: As determined in the Project Plan

50.7. CASE INVESTIGATION AND CASE FILES

- 50.7.1. Reference Amendment 8-2020: The Contractor shall investigate and perform complete analysis on the claims found questionable in the Preliminary Vulnerability Assessment Analytic Findings Report, based on topics agreed upon by the Department and the Contractor. The Contractor shall not commence investigation of a claim until that claim has been vetted against the TCN database and other projects and cleared for investigation by the Department.
- Reference Amendment 8-2020: The Contractor shall use its experience and Colorado State rules, policy, and guidance to identify claims that can be recovered and withstand appeal.
- 50.7.2. Reference Amendment 8-2020: The Contractor shall create an electronic case file for each provider for which there are non-compliance findings and shall provide each case file to the Department. Each case file shall include, but shall not be limited to:
- 50.7.2.1. Reference Amendment 8-2020: All documentation, methods, and analysis used for claims identification.
- Reference Amendment 8-2020: The case summary documenting each non-compliance finding on the claims list, the statute, rule, policy or guidance which was not complied with, what the provider did or failed to do which resulted in the non-compliance, and the recommended total recovery amount.
- So.7.2.2.1. Reference Amendment 8-2020: The case summary must be sufficiently detailed to support the overpayment determination and withstand appeal.
- Reference Amendment 8-2020: The claim list showing each claim and line within a claim, all data elements necessary to calculate the federal financial participation, the amount paid by line within a claim, the recommended recovery amount by line within a claim, and notes showing the non-compliance issue.
- 50.7.2.3.1. Reference Amendment 8-2020: Any calculations made by the Contractor shall be consistent for all providers with the same non-compliance issue.
- 50.7.3. Reference Amendment 8-2020: Prior to finalizing an investigation regarding a provider, the Contractor shall coordinate with the policy staff regarding the Contractor's proposed findings to identify whether there are issues regarding the rules, policy, or guidance, and whether there may have been communications to providers regarding any issues which might affect recovery. The coordination with policy staff and their substantive responses shall be documented in the case file.
- 50.7.3.1. Reference Amendment 8-2020: The Contractor shall meet with the Department to discuss findings, case summaries and claims lists. The Department shall approve all overpayment recoveries prior to the issuance of an overpayment determination notice by the Contractor.
- Reference Amendment 8-2020: The Contractor shall provide all information requested by the Department to explain its findings, identify the sources of policy, rule or guidance which were relied on to recommend that payments be recovered, and all claims data, including ICN/TCN which were reviewed.
- Reference Amendment 8-2020: The Contractor shall create and maintain files containing information on activities, findings, correspondence and recommendations for each case against a provider in a format that can be uploaded to OnBase, the investigative case management system, by the Department.

- 50.7.4.1. DELIVERABLE: Case Summaries, Claims Spreadsheets, and Lists of Claims by Provider.
- 50.7.4.2. DUE: As Determined in the Project Plan
- 50.8. ISSUE OVERPAYMENT DETERMINATION
- 50.8.1. Reference Amendment 8-2020: Upon approval of the Department, the Contractor shall issue the overpayment determination notice to each provider. The overpayment determination will include the letter, notice of adverse action, the case summary and the claims list.
- 50.8.1.1. Reference Amendment 8-2020: The overpayment determination notice shall comply with all Colorado statutes and rules and shall include notice to the provider of its right to an informal reconsideration or to appeal the determination.
- 50.8.1.2. Reference Amendment 8-2020: The Contractor is responsible for ensuring that all claims adjustments have been considered in their findings and that dollar amounts are consistent and accurate in each overpayment determination notice letter, case summary and claims list.
- 50.8.2. Reference Amendment 8-2020: The Contractor shall send the overpayment determination notice and its attachments via the FedEx company, signature required, two-day service.
- 50.8.3. Reference Amendment 8-2020: The Department will instruct the Contractor of the applicable payment address.
- 50.8.3.1. Reference Amendment 8-2020: If the Contractor receives a Provider check directly, the Contractor shall forward the check to the Department along with all accompanying documentation.
- 50.9. REQUEST FOR INFORMAL RECONSIDERATION (IR)
- 50.9.1. Reference Amendment 8-2020: The Contractor shall, upon request for informal reconsideration (IR) by a provider, review all information and positions included in the request for informal reconsideration and perform any analysis or re-analysis necessary to address all concerns raised by the provider at no additional cost to the Department.
- Reference Amendment 8-2020: The Contractor shall notify the Department that an IR has been requested by delivering a copy of the request to the Department with in three (3) business days. If the Department receives a request for IR directly from a Provider, the Department will inform Contractor and deliver a copy of the request to Contractor.
- So.9.3. Reference Amendment 8-2020: At the Department's request, the Contractor shall make available subject matter experts to participate in a conference call between the Department and any provider making an IR request. The purpose of the conference call is to establish a detailed understanding for all parties of the relevance of the IR to the initial findings and overpayment determination.
- 50.9.4. Reference Amendment 8-2020: The Contractor shall create a case summary and claims list which documents the results of the IR. The Contractor shall update their records and provided an updated electronic file to the Department so that the Department can update the investigative case management tool file to include all documentation and analysis regarding each provider concern in the IR and the result of the review and updated claims list.
- 50.9.5. Reference Amendment 8-2020: The Contractor shall complete the analysis of the issues raised in a request for IR and provide the IR response to the Department for review within forty (40) business days of receipt of the written IR request and new documentation.

- 50.9.5.1. The Department shall review the IR response and shall provide feedback within five (5) business days of receipt of the IR response.
- 50.9.6. Reference Amendment 8-2020: The Contractor shall coordinate with Department policy staff if issues in a request for IR include interpretation of rule, policy, or guidance or raise issues of other communications by the Department.
- So.9.6.1. Reference Amendment 8-2020: The Contractor shall meet with the Department to discuss proposed recommendations as the result of the analysis of the request for IR.
- 50.9.7. Reference Amendment 8-2020: IR may result in the confirmation of initial findings and overpayment determination, an increase in recommended overpayment recovery if additional issues or claims are found not to be in compliance, or a decrease in the recommended overpayment recovery if some claims are found to be in compliance.
- 50.9.7.1. Reference Amendment 8-2020: The Contractor is responsible for ensuring that all claims adjustments have been considered in their findings and that dollar amounts are consistent and accurate in each overpayment determination notice letter, case summary and claims lists.
- 50.9.8. Reference Amendment 8-2020: Upon approval of the Department, the Contractor shall issue the IR overpayment determination notice of adverse action to each provider which submitted a request. The IR overpayment determination will include the IR letter notice of adverse action, the IR case summary and claims list.
- 50.9.9. Reference Amendment 8-2020: The Contractor shall send the IR overpayment determination notice and its attachments via the FedEx company, signature required, 2-day service.
- 50.9.10. Reference Amendment 8-2020: The Department will instruct the Contractor of the applicable payment address.
- 50.9.10.1. Reference Amendment 8-2020: If the Contractor receives a Provider check directly, the Contractor shall forward the check to the Department along with all accompanying documentation.

50.10. APPEALS AND JUDICIAL PROCEEDINGS

Reference Amendment 8-2020: The Contractor shall support the Department and the Office of the Attorney General regarding any judicial proceeding which results from the Vulnerability Assessment, findings, recommendations, overpayment determinations, IR overpayment determinations or appeals. Support includes, but is not limited to:

- 50.10.1.1. Reference Amendment 8-2020: Providing all information and supporting documentation as requested by the Department.
- 50.10.1.2. Reference Amendment 8-2020: Providing explanations of the analysis performed by the Contractor for recommended recoveries.
- 50.10.1.3. Reference Amendment 8-2020: Answering all questions regarding the appeal from the Department or the Attorney General's Office.
- 50.10.1.4. Reference Amendment 8-2020: Making coding experts available and other subject matter experts available as required for case review, hearing preparation and/or to testify in administrative hearings.

- 50.10.2. Reference Amendment 8-2020: When a Provider formally appeals an overpayment determination, the Department will notify the Contractor of the appeal within two (2) business days.
- 50.10.3. Reference Amendment 8-2020: If the Contractor receives a verbal request for appeal from a Provider, the Contractor shall notify the Department in writing of a Provider's intent to file an appeal within twenty-four (24) hours of the Providers verbal request.
- 50.10.4. Reference Amendment 8-2020: Within ten (10) business days of receiving the notice of appeal the Contractor shall provide all relevant investigative documents, case files, and data reports to the Department.
- 50.10.5. Reference Amendment 8-2020: Within ten (10) calendar days of receiving the notice of appeal or earlier as requested by the Department or the Attorney General's Office, the Contractor shall provide the Department with an executive summary of the appealed case. It shall contain, but is not limited to, all of the following:
- 50.10.5.1. Reference Amendment 8-2020: A chronological narrative of Contractor's activities.
- 50.10.5.2. Reference Amendment 8-2020: A statement of the nature of the dispute.
- 50.10.5.3. Reference Amendment 8-2020: The amount in controversy.
- 50.10.5.4. Reference Amendment 8-2020: A summary of the Provider's basis and rationale for appeal.
- 50.10.5.5. Reference Amendment 8-2020: A point-by-point refutation of, or agreement with, the Provider's basis and rationale for appeal with specific citation to supporting evidence in the record.
- 50.10.5.6. Reference Amendment 8-2020: If the issues involve recoding, copies of the pages of the applicable coding manual and other learned resources that support the Contractor's recoding methodology and rationale.
- 50.10.5.7. Reference Amendment 8-2020: If the issues involve rules, regulations, policies or statutes, copies of the rules, regulations, policies and/or statutes upon which the Contractor relied.
- 50.10.5.8. Reference Amendment 8-2020: If the issues involve calculations, the relevant fee schedules and explanations for how the Contractor made its calculations.
- 50.10.5.9. Reference Amendment 8-2020: Recommended resolutions, if any.

50.11. PROJECT CONCLUSION

- 50.11.1. Reference Amendment 8-2020: The Contractor shall continue performing all necessary steps of the Vulnerability Assessment outlined in Sections 50.1 through 50.10, above, until the Department recovers the Overpayment Recovery Amount (\$1,000,000.00), completes the informal reconsideration process, and supports administrative appeals and judicial reviews related to the Vulnerability Assessment.
- 50.11.2. Reference Amendment 8-2020: The Contractor shall deliver a Final Vulnerability Assessment Findings Report with the total project findings fifteen (15) business days after fulfilling the Overpayment Recovery Amount (\$1,000,000.00) or on June 30, 2020, whichever comes first. The Final Vulnerability Assessment Findings Report shall include total project findings and recommendations, including findings and recommendations that could result in future overpayment recoveries or cost savings to the Department that may exceed the initial Overpayment Recovery Amount (\$1,000,000.00).

- 50.11.2.1. DELIVERABLE: Final Vulnerability Assessment Findings Report.
- 50.11.2.2. DUE: June 30, 2020 or fifteen (15) business days after fulfilling the Overpayment Recovery Amount (\$1,000,000.00), whichever is first.

50.12. TABLE OF DELIVERABLES

| Vulnerability Assessment Deliverables | Fiscal Year |
|--|-------------|
| Project Plan | SFY 19-20 |
| Project Kick-off and Scope | SFY 19-20 |
| Approach Document | SFY 19-20 |
| Vulnerability Assessment Data Extract Validation | SFY 19-20 |
| Vulnerability Assessment Preliminary Analytic Findings Report | SFY 19-20 |
| Vulnerability Assessment Dashboard | SFY 19-20 |
| Overpayment Determination Issuance | SFY 19-20 |
| Demand Letter template, Case Summary template, Claims List template, IR Demand Letter template | SFY 19-20 |
| Case Summaries and Claims Spreadsheets | SFY 19-20 |
| Final Vulnerability Assessment Findings Report | SFY 19-20 |

L. Exhibit C, REQUIREMENTS, Section 51 – 51.8 are hereby added as follows:

51. Reference Amendment 8-2020: POPULATION STRATIFICATION TOOL

- 51.1. Reference Amendment 8-2020: Contractor shall implement or otherwise provide a Population Stratification Tool that enables population stratifications for care management intervention. The Population Stratification Tool may incorporate all available sources of information including pharmacy and medical claims, clinical lab results, and evidence-based gaps in care.
- 51.2. Reference Amendment 8-2020: The Population Stratification Tool shall be an industry-proven commercial off-the-shelf (COTS) offering, such as IBM Phytel. In choosing a COTS product, the Department and the Contractor agree that both Parties must work within the parameters of that Population Stratification Tool, rather than a customized tool, that stratifies the population using standard protocols that result in clinically actionable categories that inform care management interventions, based on specific criteria that will be provided by the Department.
- 51.2.1. The Contractor shall be responsible for configuring the Population Stratification Tool for use with BIDM data. The Department will make staff available to advise if necessary, but source-to-target mapping configuration for the Population Stratification Tool shall be the sole responsibility of the Contractor.

- 51.2.2. Prior to the Department's user acceptance of the Population Stratification Tool, Contractor shall provide a walkthrough to the Department demonstrating the efficacy and accuracy of Contractor's system integration testing (SIT) using actual BIDM data.
- 51.2.2.1. DELIVERABLE: Population Stratification Tool walkthrough using actual BIDM data
- 51.2.2.2. DUE: Per Population Stratification Tool Project Schedule (see 51.2)
- 51.3. Reference Amendment 8-2020: The Contractor shall make the Population Stratification Tool available to the Department via unlimited access to the standard Phytel interface, non-Phytel based reporting via Tableau, and extracts into the BIDM ODS Environment no later than sixty (60) business days following the Amendment 8 Effective Date.
- 51.3.1. Secure data submission to Regional Accountable Entities (RAEs) via MoveIT Extracts will be made available no later than thirty (30) business days following approved requirements sign-off regarding the contents.
- 51.3.2. Secure, unlimited access for RAEs and Primary Care Medical Providers (PCMPs) shall occur via the Colorado Data Analytics Portal (CDAP). Data and reporting available via the CDAP will leverage all of the clinically-actionable protocols and gaps in care content available in Phytel. Specific additions to the CDAP portal (including reports, dashboards, and additions to the existing "My Members" and "Action" lists) will be documented and designed in conjunction with the Department.
- 51.3.3. Population stratification data shall be updated monthly, at a minimum, for the entire Medicaid population.
- 51.3.4. For the Department the individual-level population stratification tool data shall be available in the BIDM data warehouse ODS layer.
- 51.3.5. The Contractor shall provide non-proprietary documentation on the methodology and logic for the population stratifications in a format that can be shared with Department stakeholders.
- 51.3.5.1. DELIVERABLE: Individual-level population stratifications for the entire Medicaid population, including methodology documentation.
- 51.3.5.2. DUE: Monthly, beginning no later than sixty (60) business days following the Amendment 8 Effective Date.
- 51.4. Reference Amendment 8-2020: The Contractor shall make population stratification data visualizations accessible to all Department users in a user-friendly and drillable dashboard format approved by the Department for the remainder of the contract. These visualizations will be provided in addition to standard Phytel functionality.
- 51.4.1. All currently available data visualizations within the Phytel product will be made available to the Department. Five (5) additional data visualization will be provided. Any, additional visualizations beyond five (5) will be made available using modification and enhancement pool hours.
- 51.4.1.1. DELIVERABLE: Population Stratification Tool Visualizations for the Department.
- 51.4.1.2. DUE: No later than sixty (60) business days following the Amendment 8 Effective Date.
- 51.5. The Contractor shall utilize Analytic Consultant(s) FTE listed in Exhibit A §4.2.1 to directly assist the Department in developing and interpreting population stratifications that inform care management interventions, as directed by the Department.

- 51.5.1. Analytic Consultant(s) shall be available to answer questions from the Department during regular business hours and shall be available on site upon Department request.
- 51.5.2. Analytic Consultant(s) shall have experience using healthcare data for population stratification preferably using R and/or Python.
- 51.5.3. Analytic Consultant(s) shall be available to support Department utilization and adoption of risk score methodologies, including: development of methods for leveraging other data elements for risk stratification, developing expanded risk models for specific populations or efforts to enhance the correlative value of risk score configuration and utilization guidance with respect to Medicaid (sub)populations such as: children/adolescents, those with behavioral health needs, and long term care/disabled.
- 51.6. The Contractor shall make the off-site product team for the Population Stratification Tool available to the Department upon request to provide implementation support and training for Department staff and stakeholders.
- 51.6.1. The Contract shall provide trainings by webinar or in-person for the first six (6) months of the Population Stratification Tool implementation.
- 51.6.2. The Contractor shall provide training materials for Department approval fourteen (14) business days before the implementation date.
- 51.6.2.1. DELIVERABLE: Population Stratification Tool Training Materials
- 51.6.2.2. DUE: Fourteen (14) business days before the Population Stratification Tool implementation date.
- 51.7. Reference Amendment 8-2020: The Contractor shall incorporate new data from behavioral health encounters and lab values (LOINC) for Medicaid enrollees as they become available.
- 51.8. Reference Amendment 8-2020: The Contractor shall provide the Department with any future updates or enhancements to the Phytel software as they become available, at no additional cost to the Department.
 - M. Exhibit E, COMPENSATION AND QUALITY MAINTENANCE PAYMENTS, Section 1.1.1.3.1, License Table is hereby deleted in its entirety and replaced with the following:

1.1.1.3.1. Reference Amendment 8-2020; License Table:

| Item # | License Description | License Basis | Number of Licenses |
|--------|---|---------------|--------------------|
| 1 | IBM Cognos BI Advanced Business Author | Per User | 150 |
| 2 | IBM Cognos BI Enhanced Consumer | Per User | 150 |
| 3 | IBM Cognos BI Professional | Per User | 80 |
| 4 | Informatica B2B | Per Core | 8 |
| 5 | Informatica Data Quality | Per Core | 8 |
| 6 | Informatica MDM | Per Entity | 1 |
| 7 | Informatica Lab License | Per Core | 8 |

| Item # | License Description | License Basis | Number of Licenses |
|--------|---|---------------|---|
| 8 | Informatica PowerCenter For Rules Engine Functionality, up to 80 authorized users will have the ability to view rules-based data transformation logic, and up to 5 users will have the ability to develop rules. The Informatica PowerCenter Data Masking Option for data suppression shall be available to up to 80 | Per Core | 8 |
| 9 | authorized users. MOVEit DMZ Enterprise for encrypting outgoing data | Per Core | 4 |
| 10 | Esri ArcGIS for Desktop | Per Core | 10 |
| 11 | Splunk for Central Audit Logging | Per Server | 2 |
| 12 | Oracle Audit Vault & Database Firewall | Per Core | 1982 19 |
| 13a | SAS Visual Analytics SAS Fraud Framework for Healthcare SAS Enterprise Case Management for Healthcare The SAS licenses purchased in this bundle provide access to specific software components by a maximum number of authorized users as follows: SAS Visual Analytics – 150 users SAS Advanced Analytics – 80 users SAS Enterprise Miner – 80 users SAS Text Miner – 80 users SAS Forecast Server – 80 users SAS Model Manager – 80 users SAS Bridge to ESRI – 80 users SAS/STAT – 80 users SAS/ETS – 80 users SAS/ETS – 80 users | Per Core | 48 (Three 16-core non-distributed environments) |
| 13b | SAS Grid Metric bundle, for efficient management of the SAS environments: - SAS Grid Manager - Base SAS for Grid - SAS/CONNECT for Grid | Per Core | 48 Cores |
| 14 | IBM i2 Information Exchange Visualizer IBM i2 Analyst's Notebook | Per Seat | 10 |
| 15 | IBM InfoSphere DataStage Orchestrate | Per Server | 1 |
| 16 | Microsoft SQL Server | Per Server | 2 |

| Item# | License Description | License Basis | Number of Licenses |
|-------|---|--|----------------------------|
| 17a | Truven Health Advantage Suite Advantage Suite Ad Hoc Report Writer shall be accessible by up to 150 authorized users. | By Size of Entity, as measured by Total | Up to 1,316,083 Members |
| 17b | Truven Health Medical Episodes Grouper (MEG), as delivered in Advantage Suite | Members By Size of Entity, as measured by Total Members | Up to 1,316,083 Members |
| 17c | Verisk Health DxCGs All-Encounter Model, as delivered in Advantage Suite | By Size of Entity, as measured by Total Members | Up to 1,316,083 Members |
| 17d ' | Verisk Health DxCGs RxGroups Model, as delivered in Advantage Suite | By Size of Entity, as measured by Total Members | Up to 1,316,083 Members |
| 17e | Verisk Health DxCGs Likelihood of Hospitalization Model, as delivered in Advantage Suite | By Size of Entity, as measured by Total Members | Up to 1,316,083 Members |
| 18 | Truven Health Physician Performance Assessment (PPA), a module of Advantage Suite | By Number of Physician Users | Up to 1,000 |
| 19 | Truven Data Warehouse Core Model | Per Entity | 1 |
| 20 | Truven Data Warehouse Core Transformation | Per Entity | 1 |
| 21 | Truven Data Warehouse Core Quality Reports | Per Entity | 1 |
| 22 | Truven Data Warehouse Core Reconciliation | Per Entity | 1 |
| 23a | Dell/Quest TOAD Data Point Professional Edition | Per User | 100 |
| 23b | Dell/Quest TOAD for Oracle Professional Edition | Per User | 5 |
| 24 | DRUGDEX, beginning November 15, 2015 Up to 5 authorized users will have access to DRUGDEX | Per Core | 1 |
| 25 | Micromedex Clinical Knowledge Suite Free Trial, until June 30, 2016 | Per Entity | 1 |

| Item # | License Description | License Basis | Number of Licenses |
|--------|--|---|-------------------------|
| 26 | Tableau Desktop – Professional User – License (the Department owned 23 licenses as of June 2016) | Per User | 60 |
| 27 | Tableau Desktop – Professional User – Maintenance (Maintenance through BIDM contract started May 2017) | Per User | 83 |
| 28 | Tableau Server – Core Enterprise License Server – Core Enterprise Maintenance | Per User | 8 |
| 29 | THIS REQUIREMENT IS INTENTIONALLY DELETED | | 71 0000 |
| 30 | CareAnalyzer® HEDIS Reporting Tool | By size of entity as measured by total covered lives | Up to 1,316,083 members |
| 31 | Phytel Population Stratification Tool | Per Entity | 1 |

7. START DATE

This Amendment shall take effect on its Effective Date.

8. ORDER OF PRECEDENCE

Except for the Special Provisions and the HIPAA Business Associates Addendum, in the event of any conflict, inconsistency, variance, or contradiction between the provisions of this Amendment and any of the provisions of the Contract, the provisions of this Amendment shall in all respects supersede, govern, and control. The most recent version of the Special Provisions incorporated into the Contract or any amendment shall always control other provisions in the Contract or any amendments.

9. AVAILABLE FUNDS

Financial obligations of the state payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, or otherwise made available to the Department by the federal government, state government and/or grantor.

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THE PARTIES HERETO HAVE EXECUTED THIS AMENDMENT

Persons signing for Contractor hereby swear and affirm that they are authorized to act on Contractor's behalf and acknowledge that the State is relying on their representations to that effect.

| CONTRACTOR: | STATE OF COLORADO: |
|--|--|
| By: Signature of Authorized Officer | : Kim Bimesteler Executive Director |
| ate: 8-27-19 Joan Bressler Printed Name of Authorized Officer | Department of Health Care Policy and Financing |
| GHHS Finance Lead Printed Title of Authorized Officer Date | |
| ALL CONTRACTS REQUIRE APPROVA | L BY THE STATE CONTROLLER |
| S §24-30-202 requires the State Controller to approve and dated below by the State Controller or d | |

C S performance until such time. If Contractor begins performing prior thereto, the State of Colorado is not obligated to pay Contractor for such performance or for any goods and/or services provided hereunder.

| | STATE CONTROLLER: |
|-------|--|
| | Roley Jaros, CPA, MBA, JD |
| Ву: | I Come |
| | Department of Health Care Policy and Financing |
| Date: | 10/10/19 |