DATAVANT, INC. Use Case Add-On: DaVINCI Brain Injury Data Sharing (BIDS) Linkage with Greater Plains Collaborative

| Customer: | The Curators of the University of Missouri on behalf of MU | Subscription Start Date: | November 10, 2022 |
|------------------------|---|--------------------------|---|
| Address: | 601 Turner Avenue Turner Avenue – Garage 201 Columbia, MO 65211 | Payment Terms: | Datavant will remit all fees within 30 days of the invoice date |
| Customer Contact Name: | Xing Song, PhD Assistant Professor Health Management & Informatics | Currency: | USD |
| Email: | xsm7f@health.missouri.edu | Customer PO Number: | N/A |
| Billing Contact Name: | Brooklyn Winkel | Subscription End Date: | Project Completion |
| Email: | umhsfis@health.missouri.edu | Offer Expiration Date: | N/A |

This Order Form is made between Datavant, Inc. ("Datavant") and the Customer set forth above in connection with the Use Case (described below). This Order Form incorporates by reference and is governed by the following documents in effect as of the Subscription Start Date, in the following order of precedence: (i) this Order Form; and (ii) the terms of the Master Agreement ("Agreement") executed by Customer and Datavant, Inc. in effect as of September 23, 2021. All undefined capitalized terms herein shall have the meanings assigned to those terms in the Agreement.

DATAVANT SOLUTION AND USE CASE

Datavant will provide the Datavant Solution (as described below) for the approved business objective(s) set forth below (the "Use Case"):

Datavant Solution

Datavant licenses to customer the Datavant application to enable Customer to (a) process datasets in connection with the Use Case, converting selected patient identifiers into Datavant tokens that are appended to the datasets so that the data can, if desired, be linked with other datasets containing Datavant tokens, and (b) transform tokenized data for Data Recipients prior to sending or to transform tokenized data upon receipt from Data Providers, for use in connection with the Use Case.

Use Case

Greater Plains Collaborative (GPC) sites (defined in Exhibit A) may use the Datavant Solution solely to tokenize and link data in support of the U.S. Department of Veteran Affairs Brain Injury Data Sharing (BIDS) initiative with Datavant under the terms and conditions of the National Aeronautics and Space Administration (NASA) Solutions for Enterprise Wide Procurement (SEWP) V Contract NNG15SD22B with Four Points Technology LLC. See Exhibit A for scope of work.

A project-specific key for this initiative will be established to facilitate the linkage and will be deactivated at the end of the linkage phase following verification from the project principal investigators and the VINCI team.

- 1. GPC sites may use the Datavant Solution to tokenize its EHR datasets.
- VA Informatics and Computing Infrastructure (VINCI) Team 1 which serves as the de-identification honest broker may use the Datavant Solution to tokenize the Department of Defense (DoD) and VA Infrastructure for Clinical Intelligence (DaVINCI).
- 3. GPC sites and VINCI Team 1 may use the Datavant Solution to send tokenized data to the VINCI Team 2 which serves as the Linkage Honest Broker.
- 4. VINCI Team 2 may use the Datavant Solution to receive tokenized data from GPC sites and VINCI Team 1.
- 5. VINCI Team 2 will generate a cross-walk of linkages between DaVINCI and GPC tokens. VINCI Team 2 will share the DaVINCI-GPC cross-walk with the GPC Hub at the University of Missouri.
- 6. The GPC Hub will perform analysis on the DaVINCI-GPC cohort.

GPC Site PHI **GPC Sites** Transform Tokenize tokens in Tokens Each site creates Each site creates ite<>gpc_va tokens in its own transit tokens for site-specific key site identifier gpc_va key Send HASH-TOKEN and row-level at University of Missouri GPC Hub at University of Missouri HASH-TABLE tokens from each site in Compile files in one column to each site's HASH-TOKEN tab**l**e directory for combined SFTP tab**l**es to VA Team 2 VA Team 1: Tokenization VA Cohort PHI Transform Tokens Tokenize VA Team 1 creates tokens gov_va key Tokens in transit tokens for gpc_va key (exact
 key name TBD) Send token Transform Tokens VA Team 2 transforms tokens from gov_va into gpc_va key (exact key name TBD) Transform Tokens VA Team 2 transforms tokens from each site into gpc_va key Match &

Customer may use the Datavant Solution solely in connection with the data flow illustrated in the following diagram (the "Data Flow Diagram").

For the sake of clarity, any use of the Datavant Solution not expressly detailed in the above paragraphs of this Use Case section shall require execution of separate order forms (including use in connection with additional Data Providers and Data Recipients or with the same data partners for different purposes). No VA data will be sent to GPC.

FEES

- 1. No fees will be paid by the Customer for use of the Datavant Solution.
- 2. Datavant will pay Customer the amount defined in the fee schedule in Exhibit A.

INVOICING AND PAYMENTS

Customer shall invoice Datavant based upon the fee schedule defined in Exhibit A. Upon confirmation by the U.S. Department of Veteran Affairs, Datavant will issue payment. Customer is responsible for payments to individual GPC sites.

RENEWAL

Not applicable. This Order Form is active until such time the project is deemed completed by the U.S. Department of Veteran Affairs.

| The Curators of the University of Missouri | | DATAVANT, INC. | | |
|--|---|----------------|-------------------------------|--|
| | | | DocuSigned by: | |
| Signed: | Digitally signed by Brenda Brenda Leuenberger Date: 2022.11.16 16:11:51 -06'00' | Signed: | Mark karch | |
| Name: | Brenda Leuenberger | Name: | 98FFFECCF77B4E6 Mark Karch | |
| Title: | Associate Director, Pre-Award | Title: | Chief Commercial Officer | |
| Date: | 11/16/2022 | Date: | 11/16/2022 | |

Exhibit A

Brain Injury Data Sharing (BIDS) SEWP V Contract NNG15SD22B Department of Veterans Affairs

A. Project Requirements

The U.S. Department of Veterans Affairs (VA), VA National Physical Medicine and Rehabilitation Program Office/VA Central Office has a requirement to leverage the joint Department of Defense (DoD) and VA Infrastructure for Clinical Intelligence (DaVINCI) and Greater Plains Collaborative (GPC) to link DoD, Veterans Heath Administration (VHA), and private sector data streams to establish a patient-centric, longitudinal federated data source across the complete care horizon for service members with Traumatic Brain Injury (TBI).

A federated data source like the one created by the Brain Injury Data Sharing (BIDS) project allows DoD/VA an uncommon perspective: a look into the civilian sector care practices for Servicemembers and Veterans, which is not a general description, but a view of the care at the level of the individual. This project is funded by the Joint Incentive Fund Program.

B. Scope of Services

Provide the following services:

- GPC sites will use Datavant software to generate de-identified tokens to facilitate cohort discovery with VA and DoD service members and veterans.
- Perform a cohort search within the GPC population based on clinical data encoded in the PCORnet Common Data Model (CDM) formulating the TBI population as specified by the BIDS project team.
- The VA will link the overall GPC population with the VHA and DoD population, stratifying for the TBI cohort coded in DaVINCI, and if desired, the TBI cohort coded by GPC in the CDM.

The Leading Site (University of Utah) and work closely with the Coordinating Site (University of Missouri) to formulate the GPC DROC request and navigate relevant IRB or non-human subject determinations. Performing Sites are all data contributing sites that will perform the following activities:

- Generate de-identified tokens
- Submit tokens from the hash token table to GROUSE using the established GROUSE data submission process

C. Greater Plans Collaborative (GPC) Data Contributing Sites for Cohort Discovery

The following clinical sites are potential cohort discovery sites within GPC:

- 1. Allina Health
- 2. Indiana University
- 3. Intermountain Healthcare
- 4. Marshfield Clinic Research Institute
- 5. Medical College of Wisconsin
- 6. University of Iowa Healthcare
- 7. University of Kansas
- 8. University of Missouri
- 9. University of Nebraska Medical Center
- 10. University of Texas Health Science Center at San Antonio
- 11. University of Texas Southwestern Medical Center
- 12. University of Utah
- 13. Washington University of St. Louis

D. Fee Schedule

Payment will be made based on the following fee schedule.

| Payment Schedule | Amount |
|-----------------------|----------|
| At project initiation | \$23,966 |
| At linkage completion | \$23,966 |
| Total | \$47,932 |

University of Missouri as the GPC Hub will disburse payments to GPC Data Contributing Sites in accordance with the following costs approved by the VA.

| GPC Site | Amount |
|--|----------|
| Allina Health | \$2,963 |
| Indiana University | \$2,963 |
| Intermountain Healthcare | \$2,963 |
| Marshfield Clinic Research Institute | \$2,963 |
| Medical College of Wisconsin | \$2,963 |
| University of Iowa Healthcare | \$2,963 |
| University of Kansas | \$2,963 |
| University of Missouri – Coordination Site | \$8,029 |
| University of Nebraska Medical Center | \$2,963 |
| University of Texas Health Science Center at San Antonio | \$2,963 |
| University of Texas Southwestern Medical Center | \$2,963 |
| University of Utah – Leading Site | \$7,310 |
| Washington University of St. Louis | \$2,963 |
| Total | \$47,932 |

Invoices shall reference the Contract/Order NNG15SD22B 36C10B19F0382 and should be sent to the following:

ap@datavant.com claire@datavant.com jas@datavant.com