HQI Statement of Work (SOW)

This Statement of Work (SOW) is entered into pursuant to and under the Master Consulting Services and Subscription Agreement (MSA) between SpeedTrack and the HQI, dated as of December 9, 2020 (the "Master Agreement"), and amends and replaces the original Exhibit A, SOW referenced by the MSA.

# The HQIP Project Goals

To implement, maintain, support, and license a HIPAA-compliant software as a service (SaaS) quality analytics platform to replace or improve the functionality of the current HQIP, that:

- Provides a secure software platform to collect, quality check, manage, and reconcile data including PHI from member hospitals and HQI.
- Delivers a user-friendly interface for reviewing, reporting, downloading, and analyzing quality metrics in accordance with HQI's requirements and managing users.
- Subsequently is self-serviceable by HQI to the extent possible after training and with support for purposes of maintaining and expanding the available functionality, including adding/modifying HQIP user accounts and permissions, updating data, adding new data sources, adding/modifying data intake and quality parameters, adding/modifying filters, comparison groups, and other analytic functions, modifying/expanding existing reports and measures, creating/coding new reports and measures, exporting data and variables, and maintaining the data dictionary and training materials.

# Startup Data Sources, Collection, and Conditioning

The initial platform will include the following Data Sources – Up to 5 years of Data. The platform will be subsequently self-serviceable by HQI to the extent possible after training for purposes of expanding the available functionality, including updating data, adding new data sources, adding/modifying data intake and quality parameters.

#### 1. OSHPD/HCAI AB2876 Non-Public Limited Data Sets:

- DHI
- Annually updated 3 Files per year (ED, AS, PDD)
- Functionality to receive uploads from each hospital which may include zipped files
- Legal requirement for participating hospitals to share breach risk
- Each record is a patient encounter
- Data are for all hospitals statewide 3 historical years
- Intake formats for raw data
- Provide real-time feedback for Text and Excel File Uploads to user if based on predefined rules system detects incorrect selection of data type (e.g.: Inpatient, Emergency etc.). Intake data quality checks and feedback provided to the uploader and HQI
- Allow HQI to add or modify input formats, quality rules, and how data are processed, including adding subsequent versions of input formats
- Allow HQI to troubleshoot problems with data uploads by viewing raw data and remove uploaded data by user based on upload timestamp
- Standardize data into a common format across years
- Condition data as described below under Data Conditioning for AB2876 and SIERA Data

#### 2. MIRCal/SIERA Data:

- PHI
- ED/AS Updated quarterly for most hospitals, monthly for others

# **HQI Statement of Work (SOW)**

- PDD Updated twice a year for most hospitals, monthly for others
- Functionality to receive uploads from each hospital which may include zipped files,
- Automatic detection of duplicate records and reconciliation with only the latest cases retained for analysis/export
- Each record is a patient encounter
- Data are for each individual hospital up to 2 years
- Intake formats for raw data; both SIERA input and SIERA output formats accepted; formats are robust to variable location and formatting (e.g., hospitals with different electronic health records systems may export their files differently with columns rearranged in different format and order than what HCAI requires)
- Provide real-time feedback for Text and Excel File Uploads to user if based on predefined rules system detects incorrect selection of data type (e.g.: Inpatient, Emergency etc.).
- Intake data quality checks and feedback provided to the uploader and HQI via email
- Allow HQI to add or modify input formats, quality rules, and how data are processed, including adding subsequent versions of input formats, by hospital ID
- Allow HQI to troubleshoot problems with data uploads by viewing raw data (except raw SSN and abstract record number) and remove uploaded data by user based on upload timestamp
- Social Security numbers and abstract record numbers must undergo enhanced encryption ("Pseudonymization") to mask these data elements, but result in the same string for a given SSN or abstract record number across visits and hospitals
- Standardize data into a common format across years for combination with AB2876 data (e.g., create age in days and years from birth date, month and year of discharge from discharge date, etc.), but retain raw variables (excluding SSN and abstract record number)
- Condition data as described below under Data Conditioning for AB2876 and SIERA Data

# 3. NHSN Data (Hospital-wide Healthcare-Associated Infections):

- Not PHI
- Hospital counts by infection by year/qtr
- Functionality for data to be updated monthly by HQI
- Hospital level aggregates
- Data quality checks completed based on rules developed with HQI and feedback provided to HQI based thereon
- HQI can add or modify input variables, quality rules, and how data are processed moving forward, including adding subsequent versions of input formats
- HQI can troubleshoot problems with data uploads by viewing raw data and group remove uploaded data based on upload timestamp

# 4. CMQCC Data (Hospital-wide Maternity Measures):

- Not PHI
- Annual counts
- Functionality for data to be updated quarterly by HQI; existing data are annual
- Hospital level aggregates
- Data quality checks completed based on rules developed with HQI and feedback provided to HQI based thereon

# **HQI Statement of Work (SOW)**

- HQI can add or modify input variables, quality rules, and how data are processed moving forward, including adding subsequent versions of input formats
- HQI can troubleshoot problems with data uploads by viewing raw data and group remove uploaded data based on upload timestamp

# 5. Hospital Cross Walk Data:

- Not PHI (Names, IDs, other geographic and grouping variables by hospital)
- Functionality for the data file to be updated as needed by HQI and individual values to be updated on-the-fly (e.g., hospital name changes and system changes)
- Data quality checks completed based on rules developed with HQI and feedback provided to HQI based thereon
- HQI can add or modify input variables, quality rules, and how data are processed moving forward, including adding subsequent versions of input formats
- HQI can troubleshoot problems with data uploads by viewing raw data and group remove uploaded data based on upload timestamp
- Data are linked across the sources above and time using hospital IDs from this file as the master (including rolling up old IDs to the current IDs)

#### 6. Current HQIP Accounts and Permissions

 HQI will provide a file of existing HQIP accounts and permissions for import into the new system so those accounts and permissions are set up.

### **Data Conditioning for AB2876 and SIERA Data**

The initial platform will include automatic conditioning of uploaded OSHPD/HCAI AB2876 Non-Public Limited Data Sets and MIRCal/SIERA Data in the following ways:

- 1. Data elements will be removed that:
  - a. Contain patient identifiable data and other confidential information whose use may be restricted by federal and state laws and regulations, including HIPAA.
  - b. That are not necessary for quality improvement surveys or public health purposes, including items identified in the remainder of this Section.

The Parties will undertake the following steps in support of such Data Conditioning:

- i. HQI shall identify which data field elements it has determined contain PHI or other confidential information and which data field elements are or are not necessary for quality improvement surveys or public policy analysis and advocacy. If SpeedTrack believes any identified data field elements should be included or removed from the Hospital Record Data, the Parties will discuss in good faith the rationale for such proposed removal or inclusion, provided, that HQI shall have final authority for determining which data field elements should be removed from or included as part of Data Conditioning of the Hospital Record Data, and HQI will maintain the definitive list of exclusion criteria.
- ii. The only known actions necessary to meet these requirements is the Pseudonymization of SSN and abstract record number in MIRCal/SIERA files.
- 2. HIV ICD-9 and ICD-10 diagnosis and procedure codes, CPT procedure codes, DRG group codes, HIV positive or genetic test results, and all identifying characteristics of persons to whom such test results apply, shall be removed as part of the Data Conditioning process for the MIRCal/SIERA files.
- 3. HQl will provide reasonable and implementable logic so that all deletions shall be

HQI Statement of Work (SOW)

completed in a manner making it impossible to identify those deletions occurred.

4. No unconditioned source files shall be retained after they have been successfully ingested and conditioned.

The Parties will undertake the following steps in support of such Data Conditioning:

i. HQI will provide the relevant codes that fall into the various suppression categories noted in this section and update them as necessary. Subsequent updates to the codes should be self-serviceable by HQI.

#### Security

The initial platform will have reasonable and appropriate safeguards to prevent the unauthorized use or disclosure of the data in accordance with the MSA and BAA with HQI and all applicable HQI Protected Data Security Policies, including:

- Robust identity and access management with multifactor authentication.
- Platform hosting on HIPAA-compliant cloud servers with applicable BAA available and downloaded from AWS.
- Backup and storage of all data files allowing for platform restoration in case of catastrophic failure or cyber-attack.
- Annual compliance audits and provision of the audit reports that are available and downloadable from AWS to HQI.
- Providing HQI administrators the tools necessary to easily manage the user community, protect access to data, and ensure only authorized users have permission.
- Allowing new users to make access requests, create user ids and passwords (including strong password enforcement), and upon approval by an administrator, gain access to the application, and perform self-service password resets.
- The platform will be subsequently self-serviceable by HQI to the extent possible after training for purposes of maintaining and expanding the available functionality, including adding/modifying HQIP user accounts and permissions.

# **Analytic Functionality**

The initial platform will provide user-friendly, web-based, up-to-date analytics and reporting for use by HQI and its hospital members based on the **Startup Data Sources** above that includes the following functionality. The platform will be subsequently self-serviceable by HQI to the extent possible for purposes of maintaining and expanding the available functionality, including adding/modifying filters, comparison groups, and other analytic functions, modifying/expanding existing reports and measures, and creating/coding new reports and measures.

- Dynamic charts, graphs, dashboards, and tables illustrating member hospital performance over time and comparisons against selectable safe harbor peer groups.
- Selection of individual hospitals or multiple hospitals for analysis, when users have access to multiple hospitals (e.g., regional hospital system personnel).
- Enlargement of individual analytic elements for easier viewing.
- Export of analytic elements as pdfs, pictures and Excel files.
- Presentation and export of the case-level data for each analytic element as csv or Excel files
- Interactive and multiple-selection filtering and selection of analytic elements shown below in Initial Analytic Filters
- Unadjusted and risk-adjusted outcomes and observed/expected ratios using the appropriate statistical methodology and best practices, as directed by HQI.

# **HQI Statement of Work (SOW)**

- Presentation of unadjusted and risk-adjusted outcome rates and observed/expected ratios, and associated numerator/denominator case counts for each selected hospital, group of selected hospitals, and comparison hospitals
- Replication of the existing quality measures shown below in Initial Quality Measures.
- Replication of the existing benchmarks and comparison groups shown below in Initial Comparison Groups. Ideally the system would allow users to define and save additional comparison groups of their own making, as long as such groups include at least 5 other hospitals.

### **Initial Analytic Filters:**

The initial platform will provide interactive and multiple-selection filtering of analytics by the following preexisting factors:

- Data type/source
- Time period
- Measure/category
- Payer type (e.g., Medicare, Medi-Cal, uninsured)
- Pay plan (i.e., local county health plan)
- Service line
- Gender
- Race/Ethnicity
- Principal procedure
- Principal diagnosis
- Age
- Type of care (e.g., acute, ED, ambulatory)
- Discharge disposition
- Zip code category (e.g., homeless, foreign address)
- Admission source
- Language
- Present on admission status
- ED treat and release vs. admit

#### **Initial Quality Measures:**

The initial platform will track and analyze data for the following preexisting measures:

- Inpatient episode quality and efficiency\*
- Readmissions (3, 7, 14, 30 day)\*
- Healthcare-associated infections (NHSN HAIs)
- Case mix demographics, comorbidities, index\*
- CMS hospital-acquired conditions (DRA HAC and HACRP)\*
- Cancer surgery volumes
- ED discharge analytics (comorbidities, volume, demographics, revisits)
- Adverse drug events (anticoagulants, glycemic control, and opioids)
- Hospital-acquired conditions (HACs)\*
- AHRQ Patient safety indicators (PSIs)\*
- AHRQ Inpatient quality indicators (IQIs)\*
- Sepsis incidence and mortality
- Maternity measures
- Mortality/serious complications/reoperations/length of stay/discharge disposition
- Nursing-sensitive measures

# **HQI** Statement of Work (SOW)

- Recent (MIRCal/SIERA) discharge volume by source (Inpatient, ED, Ambulatory Surgery)
- Social determinants of health
- Chronic physical and behavioral conditions
   The intent is to retain or enhance the functionality and user experience of the current platform.

# \*NewVolt Solutions Grouper Management responsibilities:

- Setup and maintain hosting server for third-party executables.
- Maintain share drive between main application server and executable hosting server.
   This share will be used to feed formatted files to the executables and receive the output.
- With direction from SpeedTrack, setup and update third-party executables and integrate them into workflow.
- With the direction from SpeedTrack, implement grouper mapping logic to bypass executables wherever possible to reduce dependency and single points of failure.
- Provide second line support.

#### \*SpeedTrack Grouper Management responsibilities:

- Provide direction for initial executable setup.
- Provide NewVolt Solutions with HQI approved business logic to bypass and reduce dependency on third party executables.
- Work with NewVolt Solutions to trouble shoot any errors or data issues related to groupers discovered by HQI or their members.
- Provide direction to NewVolt Solutions for updates of third-party groupers.

# \*HQI Responsibilities:

- Be responsive to SpeedTrack/NewVolt Solutions questions and requests for information.
- Notify SpeedTrack/NewVolt Solutions when third-party grouper updates are available.
- Update non-third-party grouper tables as necessary (e.g., sepsis, cancer, chronic conditions, z-codes, etc.)
- Provide first line support in the event of errors or data issues related to groupers.
- Provide final approval of programs, groupers or logic used to replace or enhance the platform.

#### **Initial Comparison Groups:**

The initial platform will provide the following preexisting comparison group aggregations for benchmarking performance:

- All California hospitals
- Other critical access hospitals
- Other rural hospitals
- Other children's hospitals
- Other teaching hospitals
- Your hospital's past performance
- Other California hospitals:
  - o In the same health system
  - o In the same region
  - o In the same health service area (HSA)

**HQI Statement of Work (SOW)** 

- In the same metropolitan statistical area (MSA)
- o With similar bed size
- With the same type of control (e.g., non-profit)
- o With the same license type
- o With similar Medicare payer mix
- With similar MediCal payer mix
- With the same adult/children's trauma level designation
- o With similar inpatient discharge volume
- With same ED service level (e.g., basic, standby)
- o With similar outpatient visit volume

#### **Data Exports:**

The initial platform will allow HQI to view and export all HQIP data by year and type (ED, AS, IP, etc.) in a standardized format for further analysis and research outside of platform. The platform will be subsequently self-serviceable by HQI to the extent possible after training for purposes of maintaining and expanding the available functionality, including exporting of newly added data and created variables.

# **Project Timeline**

# Weeks 1 – 4: Proof of Concept

- Build a full data pipeline and reporting layer for the simplest data source. Full security and HIPAA compliance should be built from the start.
- Focus on core functionality with the understanding that the UI will be optimized at a later stage
- Provide to HQI for feedback

#### Weeks 5 - 8: Minimum Viable Product

- Add the more complex data sources and data transformations
- o Add the more complex reports, dashboards, and filters
- o Provide to HQI for feedback
- Our goal is to have a working product with the understanding that the user experience will continue to be improved

#### Weeks 8 – 12: Optimization

- o Build out the user-facing tools to provide excellent user experience
- Thorough testing and bug fixes
- Optimize the data pipeline and reporting speeds (e.g. add caching, better parallelism, etc.)
- Work on the nice-to-have items

#### Weeks 13+

- Continue to include any nice-to-have items and product improvements
- o Iterate based on user feedback

# Exhibit HQIP HQI Statement of Work (SOW)

# **Ongoing NewVolt Solutions Support**

- Project Management: Continuity of service is critical to the success of every solution.
   Accordingly, HQI will be assigned a Client Specialist to manage project kickoff, go-live, change/enhancement request assistance, and ongoing subject matter expertise for overall strategic solution planning. The Client Specialist coordinates activities between the SpeedTrack/NewVolt Solutions team and their HQI counterparts.
- Initial education and technical support on self-service capabilities of the system for purposes such as building reports, dashboards, variables, filters, and importing new/refreshed data.
- Data storage, memory computation speed/runtime, and data backup changes as required to maintain reasonable efficient user experience and platform performance.
- Participate in the completion of information security reviews, security questionnaires, and provide required documentation when requested by member hospitals and systems.
- 100 hours gratis per annum towards any product enhancement, continuing education and technical support on self-service capabilities or support of self-service data source addition, filter addition, methodology creation and report or dashboard creation; Excess of 100 hours will be billed at \$225/hour. Maintenance and troubleshooting of initial platform/functionalities/reports such as those that follow should not be included within the 100 hours.
  - Second-level user logon/MFA/management support issues during normal business hours for operational issues not able to be resolved first by HQI staff
  - Bug fixes and platform performance maintenance
    - Scheduled maintenance windows: scheduled maintenance windows are typically between the hours of midnight and 4am EST and on weekends. Should maintenance activities require customer downtime during business hours; notifications will be sent via the application two weeks in advance.
    - Quarterly releases: will publish new versions of the software on a quarterly basis, as necessary. These regular releases will include enhancements to measures, reporting and data integration, as well as non-critical bug fixes.
  - Data upload/import/validation/quality assurance problems or adjustments of startup data sources.
  - Update the third-party grouper programs that get downloaded and run each year as necessary (e.g., AHRQ, MS-DRG, CCS algorithm programs)
  - Annual calibration and optimization of risk and reliability models

#### Ongoing HQI Responsibilities

Upon the completion of user testing of the platform and acceptance by HQI, except as noted above under **Ongoing NewVolt Solutions Support**, the maintenance of existing measures, reports, comparison groups, and filters, addition of new data sources, creation of new measures, reports, comparison groups, and filters, updating of non-third party grouper code sets, maintenance of the data dictionary and training materials, and first level management of user accounts and permissions is the responsibility of HQI.

#### In addition,

HQI agrees to:

- Allow HQIP participating hospitals that are also SpeedTrack customers to use the SpeedTrack platform to access HQIP data.
- Provide SpeedTrack with the quarterly update files in the required format from HQIP.

**HQI Statement of Work (SOW)** 

\$292.750

# HQIP replacement three-year cost breakdown:

#### Year 1:

•	Implementation (\$250/hr @ 600 hrs):	\$150,000	
•	*Hosting support and maintenance:	\$255,000	
•	SpeedTrack Management:	\$ 40,000	
•	Total:	\$445,000	
	*\$75,000 allocated to SpeedTrack		
Year 2:			
•	*Hosting support and maintenance (+5%):	\$267,750	
•	SpeedTrack Management:	\$ 25,000	

# Year 3:

Total:

•	Hosting support and maintenance (+5%):	\$281,138
•	SpeedTrack Management:	\$ 25,000
•	Total:	\$306,138

<sup>\*\$45,000</sup> allocated to SpeedTrack

\*\$45,000 allocated to SpeedTrack

#### Terms:

HQI will pay to SpeedTrack \$87,500 within 10 days after the execution of the HQIP.

January 31, 2022 acceptable progress definition:

- Run the MS-DRG grouper on the data.
- Incorporate the NHSN dataset
- Create visualizations/reports with filters for:
  - Sepsis Mortality
  - NHSN Trends

For purposes hereof, any notice of non-performance shall be given by HQI within 5 business days following the applicable deadline and, unless otherwise agreed to by SpeedTrack, failure to timely deliver such notice shall be deemed satisfaction of the applicable condition by SpeedTrack.

If acceptable progress toward the HQIP project has:

- 1. Not been made (as deemed by HQI) by January 31, 2022, this agreement will be null and void and the first installment will be returned to HQI in full, in 15 days or less.
- 2. Been made (as deemed by HQI) by January 31, 2022,
  - HQI will pay a milestone payment of \$58,333.33 within 10 days to SpeedTrack, and
  - b. SpeedTrack agrees to deliver an acceptable (as deemed by HQI) version of the HQIP replacement with the following key components per the HQIP SOW for production no later than March 31, 2022:
    - i. Comply with the security requirements.
    - ii. Ingestion and conditioning of the data.
    - iii. Integration of the required grouper logic into the data processing.
    - iv. Meeting the analytics/reporting requirements.
    - v. Supporting the required data export capability.

# Exhibit HQIP HQI Statement of Work (SOW)

- c. Provided there are no delays due to scope creep or project deliverables by HQI, if an acceptable product as defined above has:
  - i. Not been received by HQI by March 31, 2022, SpeedTrack will return \$75,000 to HQI within 15 days and this agreement will be null and void.
  - ii. <u>Been</u> received by HQI by March 31, 2022, HQI will pay SpeedTrack a third installment of \$29,166.67

Notwithstanding anything to the contrary contained herein, in the event of notice of any progress or performance failure by SpeedTrack, SpeedTrack shall be given a reasonable opportunity to cure (to the extent curable) any such failure.

The remaining year 1 amount totaling \$270,000 will be paid in three (3) equal quarterly installments of \$90,000 each beginning the earlier of April 1, 2022, or within 10 days of HQI's acceptance of the production version of the HQIP replacement. Subsequent installments will be due on July 1, 2022 and October 1, 2022. If an acceptable product (as deemed by HQI) has not been received by HQI by March 31, 2022 this agreement will be null and void.

Terms for years 2 and 3 will be equal quarterly installments of \$73,200 and \$76,550 respectively. At any time, should any of the agreed upon terms included in the SOW not be fulfilled our executed properly, this agreement and all related payments will be void. SpeedTrack will provide a single invoice at end of year as opposed to multiple quarterly invoices. Payments will be made automatically, and non-payment will allow SpeedTrack to halt the service or project.

[Signatures on next page]

# Exhibit HQIP HQI Statement of Work (SOW)

IN WITNESS WHEREOF, the parties have executed this Statement of Work as of the last date set out below.

Approval of Statement of Work:
SpeedTrack, Inc.
DocuSigned by:
Signed Jeffrey Pratt
Name
TitleCEO
Date1/19/2022
For and on behalf of HQI:
Signed.
Name Robert Tuhoff
Title Presidus / CEO
Date 1-19-2022