



**Requirement Specification for  
Receipt of Alternate Electronic Visit Verification  
Systems Data (altEVV)  
Part of the Open EVV Series of Interfaces**

Version 7.9

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## Revision History

Version	Description	Date Updated
7.1	Clarified wording of acceptable formats (SOAP vs REST)	3/26/2019
7.2	Added Visit Tasks segment	6/10/2019
7.3	Add Client Coordinator, Authorization Effective Dates	6/18/2019
7.4	Removed requirement that client latitude and longitude be set	6/24/2019
7.5	Added Technical Companion Appendix. Removed extra Client ID field in visit segment (ClientIdentifier).	8/9/2019
7.6	Broke client designees out into their own element. Added worker hire and end dates. Made EmployeeEmail optional. Added WADL URLs to technical appendix.	9/30/2019
7.7	Added clarifying logic about visit exceptions.	11/6/2019
7.8	Clarified Workflow sequence in Appendix	02/21/2020
7.9	Added ContingencyPlan and Reschedule fields to visit segment. Added ProviderAssentContPlan to client segment. Clarified verbiage around the sequence when sending multiple elements (employees, clients, and visits) in "Visit Rules" and "Workflow" sections of the document. Added appendix with error message details.	03/02/2020



## **1 Overview**

This specification is intended to document the requirements for using the Sandata Real Time Interface (part of the Open EVV Series of Interface) for receiving information from 3<sup>rd</sup> party EVV Vendors into the Sandata Aggregator. This interface is also referred to as the Alternate EVV Data Interface of altEVV. An Alternate EVV Data Collection System will build one data pipe to the Aggregator and send synchronous data 'packages' per defined provider agency.

This interface includes clients, employees, visits, and their associated calls as well as the ability to send data related to visit modifications.

A companion guide, or addendum, will be created for each customer implementation to specify agreed upon frequencies, additional required fields and those fields which will be omitted or left to the sender's discretion.

In addition, appendix 3.6 contains technical information and examples for each entity type.

### **1.1. Intended Audience**

The intended audience of this document is:

- Project Management and Technical teams at Sandata.
- Project Management and Technical teams at a designated Providers/Vendors who will be implementing this interface.

### **1.2. Transmission Frequency**

For optimal system performance, it is recommended that visits should be sent in near real time. It is expected that information is sent as it is added/changed/deleted in the Alternate EVV Data Collection System. Note that rejection responses will be delivered on a separate API call that is initiated by the third party—in near real time.

### **1.3. Transmission Limits**

A single transaction may contain from 1 to 5,000 records. A single record set would include all associated elements.

If the group size exceeds the maximum limit for the group, the complete group will be rejected.

During peak loads, records received may be queued and processed as resources permit. Other transactions received for the Provider ID will be queued behind these until they are processed since they must be processed in the proper order.

### 1.4. Data Type Format Details

The user will send information in **JSON or XML** format. JSON and XML allow multiple "child" entities for a parent.

The format of the information sent must match exactly the format defined below and must be sent via web service using JSON or XML. Ultimately, we support only three data types during transmission: string, number and Boolean. The specification uses more additional data types to ensure that data is received in the expected formats and appropriate record level editing can be incorporated. Except where numeric, the assumed JSON and XML format should be string. The data type provided in the specification is based on the following field definitions.

See appendix 3.6 for samples transmissions.

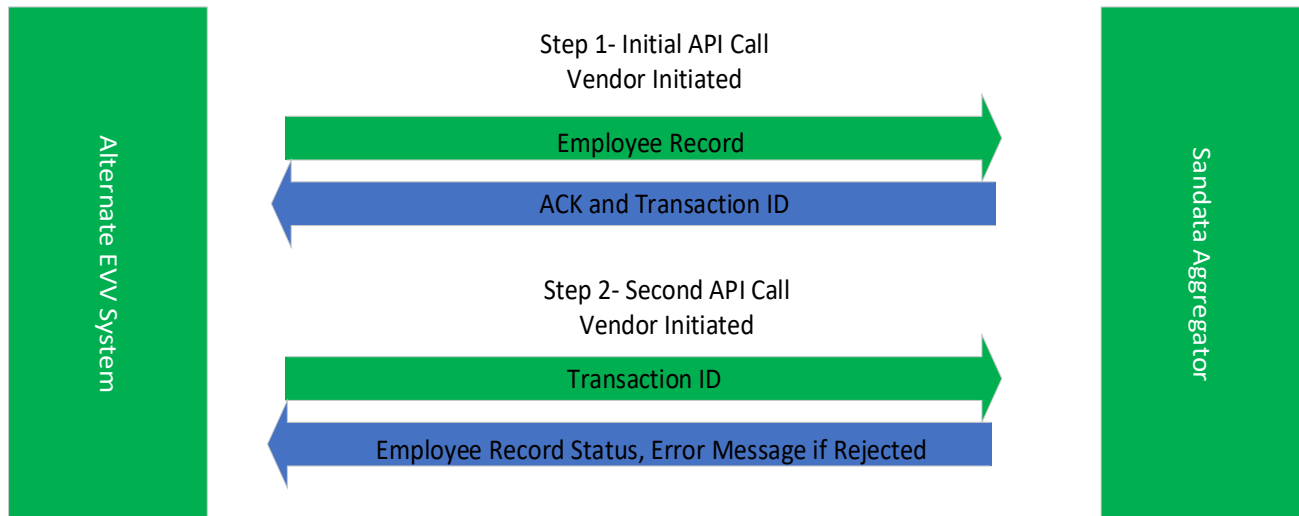
Note that the format is case sensitive. All field names must be provided in EXACTLY the casing used in the definitions below. Sandata recommends using RESTful services with JSON formatting.

Data Type	Description	Example
DateTime	<p>The <b>date</b> and <b>time</b> is represented as a string with the following format: YYYY-MM-DDTHH:MM:SSZ</p> <p>All times will be provided in UTC.</p> <p>If time is not material, it will be provided as is expected.</p>	2016-12-20T16:10:28Z
Date (only Date)	<p>The data is represented as a string with the following format: YYYY-MM-DD</p> <p>Date only will be sent in UTC format.</p>	2016-12-20
Timezone	<p>All time for tracking visits will be in UTC. The Time zone name expected in each transaction is the actual Time zone where the event took place. i.e. US/Eastern</p>	A complete list of time zones can be found in the appendix of this document.
String	<p>A <b>string</b> is a row of zero or more characters which can include letters, numbers, or other types of characters as a unit, not an array of single characters. (e.g. plain text).</p>	<p>"This is a string" (See <a href="#">Wikipedia String</a>)</p>

Data Type	Description	Example
Integer	An <b>integer</b> is a numeric value without a decimal. Integers are whole numbers and can be positive or negative.	52110 (positive) -87721 (negative) (See <a href="#">Wikipedia Integer</a> )
Decimal	A floating point number is referred to as a <b>decimal</b> . Can be positive or negative.	8221.231 (positive) -71.214 (negative) (See <a href="#">Wikipedia Decimal</a> )
Boolean	A logic predicate indicator that can be either true or false.	True False See <a href="#">Wikipedia Boolean</a>

### 1.5. Rejected Record Process

When records are received, Sandata will return against each group a transaction ID and an ACK (acknowledgment of receipt). This transaction ID can be queried by the caller for status of the records in the transaction. This process will allow the provider/vendor to get status on any of the records that may have been rejected. The example below is for an employee record.



### 1.6. New Record and Updates

New records and updates for previously sent data should be provided via clients, employees, visits interfaces ('data packages'). If a set of records is sent (either client, employee, or visit), all associated applicable elements should be sent. Partial updates will be rejected. An update that deletes a record will not actually remove information since Sandata will not physically delete information. The deleted record/s will no longer be visible on the application. However, the record history will maintain the original data received.





## **1.7. Transmission Method**

Sandata supports an SOA architecture. Sandata will provide an API for 3<sup>rd</sup> party vendors or agency's internal IT organizations to utilize. Sandata will provide sample JSON or XML format information (Java equivalent to XML), as well as the WADL (JSON equivalent of the WSDL) to those parties developing the interface. This specification will include the rest endpoints needed to request status on record acceptance /rejection.

See appendix 3.6 for sample transmissions.

## **1.8. Rules**

The following rules apply to information received through this interface. For all rules that result in a rejection, it is expected that the issue will be resolved in the Alternate Data Collection System and the information subsequently retransmitted.

- ✓ There is one set of Interfaces per Sandata Provider Agency ID.
  
- ✓ There will be 3 independent types of data provided through the Alternate EVV interface:
  - Clients;
  - Employees (Field Staff); and
  - Visit Information.

Each will be sent individually but can be delivered through the same single connection.

### **THE ALTERNATE DATA COLLECTION SYSTEM WILL BE RESPONSIBLE FOR:**

- ✓ Visit transmittals. Visits should be transmitted near real time. Actual payer frequency requirements may vary. Note that rejection responses will be delivered as separate API calls initiated by the third party. Information should be sent for only those records that are added, changed, or deleted. This is considered to be an incremental interface. Records which have not changed should not be resent.
  
- ✓ Complete transmissions.
  - When sending a client, all applicable elements and sub elements must be sent during each transmission.
  - When sending an employee, all applicable elements and sub elements must be sent during each transmission.
  - When sending a visit, all applicable elements and sub elements must be sent during each transmission.
  
- ✓ Call matching. Calls received--regardless of the collection method used by the Alternate Data Collection System--are received together into a complete visit by the Aggregator, per the specification. Sandata will not attempt to match or rematch the visits received.



- ✓ Data quality. all data will be accepted from third party data “as is,” including any calculated fields.
- ✓ Latitude and Longitude. Alternate EVV Data Collection Systems are responsible for providing latitude and longitude on all client addresses provided. Latitude and longitude must be provided for both the visit start and visit end time, assuming it is collected via a GPS-enabled device.
- ✓ Assigning sequence numbers. For each of the 3 types of records (client, employee, visit), the Alternate Data Collection System will be responsible for assigning sequence numbers for each interface to ensure that updates are applied in the appropriate sequence. If a record is rejected, an incremented sequence is expected on the next transmission of that record set. Sequence numbers are per unique record (client, employee, visit) and record set (modifications to the same client, employee, visit). For example, the first time a particular client is sent, the sequence would be set to 1. The second time that same client is sent, the sequence would be set to 2, etc.
- ✓ Having the ability to correct defined exceptions. Exceptions must be corrected using the standard set of reason codes provided by Payer/State. Some of the defined reason codes require additional text to provide additional information; this information must also be sent as part of this interface.
- ✓ Change log transmission. Changes made to all visit information must be fully logged, and the log information must be transmitted as part of the visit record, as applicable.
- ✓ Using standard date/time format. All dates and times provided must be sent in UTC (Coordinated Universal Time) format in GMT.

#### **GENERAL PROCESSING RULES:**

- ✓ If a record is received and any required data is missing, malformed, or incomplete as defined in the specification, the record will be rejected or set to default values in accordance with the detailed specifications.
- ✓ If an optional field is provided with an invalid value (one not listed in this specification), the field will be set to the default value, null and/or rejected, unless otherwise specified in this specification.
- ✓ If text (string) field length is longer (>/greater than) than the maximum allowed for that field value, unless otherwise noted, the field will be truncated to the maximum length specified for that field.
- ✓ Any record without a sequence number will be rejected. Sequence numbers are per unique record (client, employee, visit). For example, the first time a particular client is sent, the sequence would be set to 1. The second time the same client is sent, the sequence would be set to 2, etc.
- ✓ Records will be processed in the order received using the assigned sequence number.



- ✓ If a record that has been received has a sequential number that is less than the one already processed, it WILL BE PROCESSED, but will be logged as “received” and inserted into history. It will not be considered to be the current record.
- ✓ Header information as determined for the payer and program must be included in each transmission for each record (client, employee, visit), otherwise the entire collection of records will be rejected.

#### **CLIENT RULES:**

The following represents a subset of the requirements for client information. Please see the Field Information section of this document for all applicable rules.

- ✓ If the client does not include at least 1 complete address (address line 1, city, state, zip code) the client will be rejected.
- ✓ If the client does not include the defined unique identifier, the client will be rejected.
- ✓ If the client does not include a Client Other ID (external ID) and Sequence ID, the client will be rejected.
- ✓ If the client does not include first name, last name and time zone, the client will be rejected.

#### **EMPLOYEE RULES:**

The following represents a subset of the requirements for employee information. Please see the Field Information section of this document for all applicable rules.

- ✓ If Staff Other ID (External ID), Sequence ID and Staff ID are not provided, the employee will be rejected.
- ✓ If employee first name and last name are not provided, the employee will be rejected.

#### **VISIT RULES:**

- ✓ Clients and Employees should be sent before visits, to ensure they exist in the Sandata system at the time of visit receipt.
- ✓ No Client Provided - To allow the Aggregator to determine if the visit is for a Payer/State client, the visit must include a client. If a visit does not include a client, the complete visit will be rejected.
- ✓ Invalid/Unknown Client Provided - To allow the Aggregator to determine if the visit is for a Payer/State Client, the visit must include a valid client associated with the payer. If a visit includes a client that is unknown to Sandata (has not been received and accepted), the complete visit record will be rejected.



- ✓ No Employee Provided / Invalid or Unknown Employee Provided - If a visit does not include an employee (visit record send without an employee associated), the visit will be accepted and the 'Unknown Employee' exception will be calculated and applied. This record is accepted but raises an exception.
- ✓ The Alternate EVV system is expected to be able to handle a visit that crosses calendar days.
- ✓ A visit can only be cancelled if it does not have any calls associated with it or any adjusted times. If a visit has calls but is being cancelled in the source EVV system, the "Bill Visit" indicator should be set to False to indicate that the visit should be disregarded for billing purposes. The visit status will be set to Omit by the Aggregator.
- ✓ The following rules apply to the dates and times provided for the visit:

Date and Time Exists for the Following:				Rule
Call In	Call Out	Adjusted In	Adjusted Out	
x	x			Call Out must be > Call In  Otherwise record rejected.
Superseded by Adj. In	Superseded by Adj. Out	X	x	Adj. Out must be > Adj. In  Otherwise record rejected.
x	Superseded by Adj. Out		x	Adj. Out must be > Call In  Otherwise record rejected.
Superseded by Adj. In	x	X		Call Out must be > Adj. In  Otherwise record rejected.

- ✓ Upon receipt, Sandata will calculate all configured Payer/Program exceptions and apply those exceptions as applicable. For those exceptions that may be recalculated over the life of the visit, these exceptions will be calculated as appropriate.
- ✓ It is assumed that there are some exceptions that cannot be “fixed” in the Alternate Data Collection System by their nature. They are configured for the Payer/State program as requiring acknowledgement by the system user. One of the included visit elements provides the ability for the user to send their acknowledgement. These exceptions require attestation that the exception has been reviewed/acknowledged in the system along with the appropriate reason code and attestation that appropriate documentation exists. Exceptions are specific to a given Payer/Program and will be noted in the associated companion guide.
- ✓ Upon receipt, Sandata will calculate and apply visit status as defined for the Payer/Program.
- ✓ The Alternate Data Collection System will be expected to send a reason code and optionally the defined resolution code if it applies to the payer. Based on the definitions of the reason codes, some reason codes require additional information explaining the change. If additional information is required, the alternate data collection system must collect the information and include it when transmitting the visit to Sandata.

## 1.9. Sequencing

The SequenceID on all three types of records (clients, employees, visits) should be independent per record and should be incremented each time any record is sent. The Sequence ID will be used to ensure that a record is processed only once and that the most current information is used for reporting and claims processing. In the event a visit update is not accepted (rejected), the SequenceID on that transmission should not be reused. The next update should increment to the next number in the sequence. Failure to do so will cause the new record to be rejected as a duplicate.

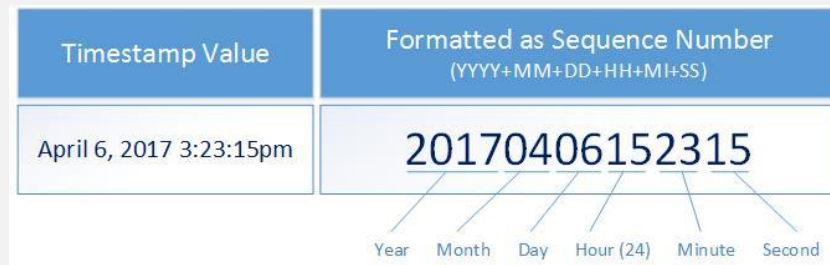
### Sequence Rules:

- If the latest SequenceID is greater than the highest value previously received, the record set will not be rejected. i.e. latest SequenceID = 5, previous SequenceID = 4 → Record accepted and latest record is displayed.
- If the latest SequenceID is less than the value previously received, and the record has not yet been processed, it will be accepted and recorded as historical information. i.e. latest SequenceID = 8, previous SequenceID = 10 → Record accepted and latest record is still SequenceID = 10.
- If the Sequence ID is equal to a value previously received, it will be rejected. i.e. latest SequenceID = 15, previous SequenceID = 15 → Record rejected.
- Gaps in sequence will be allowed.

### **Please Note:**

For those agencies that wish to use the Alternate EVV interface, and would prefer to use timestamps as the sequence number in their deliveries, the Sandata system can accept the timestamp value as the sequence number, under two conditions:

1. The timestamp value provided must contain only numbers, and no other symbols (i.e. “/”, “-”, and “:” characters removed)
2. The timestamp value provided must be formatted as YYYYMMDDHHMMSS. For example:



### 1.10. Message Acknowledgement (ACK) and Transaction ID

Index	Column Name	Description	Max Length	Type
1	AgencyIdentifier	Unique identifier for the agency.	10	String
2	ProviderID	Unique identifier for the agency.	64	String
3	TransactionID	Unique identifier for the request generated by the payer.	50	String
4	Reason	Default and only value provided: "Transaction Received"	250	String

### 1.11. Response for Record Status

Index	Column Name	Description	Max Length	Type
1	AgencyIdentifier	Unique identifier for the agency.	10	String
2	ProviderID	Unique identifier for the agency.	64	String
3	RecordType	Type of record that was rejected Values: Client, Employee, Visit	10	String
4	RecordOtherID	Value of the record identifier	50	String
5	Reason	Default and only value provided: "Transaction Received"	250	String

## 2 Field Information

Note that this element will be required as part of the header information provided for all three types of transmissions. This information will be compared to the connection being used within the interface to ensure that the transmission is appropriate. If this match cannot be validated, the transmission will be rejected. As part of the implementation process, required fields may be adjusted and the available fields may be reduced based on the program specifics.

See appendix 3.6 for sample transmissions.

### 2.1 Provider Identification - Required

Index	Column Name	Description	Max Length	Type	Required
1	ProviderQualifier	Identifier being sent as the unique identifier for the provider. Values: SandataID, NPI, API, MedicaidID, TaxID, Taxonomy, Legacy, Other.	20	String	Yes
2	ProviderID	Unique identifier for the agency.	64	String	Yes

### 2.2 Client General Information - Required

Additional fields may be required depending on the program; fields below may be ignored if a Payer Client Feed is implemented.

Index	Column Name	Description	Max Length	Type	Required
1	ClientID	Assigned client_id. If a value is assigned by another system. Note that this value can be automatically assigned by Sandata EVV. Note that this value may be used as the client identifier for telephony and MVV when Client ID entry is applicable.	10	String	



Index	Column Name	Description	Max Length	Type	Required
2	ClientFirstName	Client's First Name.	30	String	Yes
3	ClientMiddleInitial	Client's Middle Initial.	1	String	
4	ClientLastName	Client's Last Name.	30	String	Yes
5	ClientQualifier	Value being sent to unique identify the client. Values: ClientSSN; ClientOtherID, ClientCustomID. Should be the same as the value used by the Payer if a client feed is provided by the payer.	20	String	Yes. Please see the Addendum for program specific values.
6	ClientMedicaidId	Unique ID provided by the State Medicaid program to the client.	64	String	Yes. Please see the Addendum for program specific values.
7	ClientIdentifier	Payer assigned client identifier identified by ClientQualifier. If client and associated authorization information is received from the payer, this information will be used to link the received Third Party EVV information with the payer information provided.	64	String	Yes. Please see the Addendum for program specific values.
8	MissingMedicaidID	Indicator that a patient is a newborn. If this value is provided, Client Medicaid ID will be ignored and will be valid as null. Values True/False	5	String	

Index	Column Name	Description	Max Length	Type	Required
9	SequenceID	The Third Party visit sequence ID to which the change applied.	16	Integer	Yes
10	ClientCustomID	Additional Client User-Defined ID. Commonly used to customize the built-in client ID within the system. Must be provided if billing is in scope. May be equal to another ID provided.	24	String	
11	ClientOtherID	Additional Client User-Defined ID. Commonly used to store client's ID from another system. This value is used to match the client to an existing record during import. During implementation it will be determined if this value or the ClientSSN will be used for matching.	24	String	
12	ClientSSN	Client's Social Security Number. If the Field is left empty, ClientOtherID must be populated. Not required if ClientOtherID sent. Numbers only, no dashes and leading zeros must be included. May be required if needed for billing. Format - #####.	9	String	
13	ClientTimeZone	Client's primary time zone. Depending on the program, this value may be defaulted or automatically calculated. Please see the appendix for acceptable values.	64	Timezone	Yes
14	Coordinator	The staff member assigned to the Client in a specific Agency as the coordinator for an employee. The values for this field will be defined during implementation.	3	String	

Index	Column Name	Description	Max Length	Type	Required
15	ProviderAssentContPlan	Indicator to capture provider's assent that the member's contingency plan provided will be reviewed with the member every 90 days and documentation will be provided.	5	Boolean	

### 2.3 Client Payer Information - Optional

This segment is only required for programs where members/clients and their association to the associated programs and services is not provided by the payer.

Index	Column Name	Description	Max Length	Type	Required
1	PayerID	Sandata EVV assigned ID for the payer. Payer ID is determined during the implementation process. Please see the Addendum for program specific values.	64	String	Yes
2	PayerProgram	If applicable, the program to which this visit belongs. Potential use and list of values to be determined during implementation. Please see the Addendum for program specific values.	9	String	Yes
3	ProcedureCode	This is the billable procedure code which would be mapped to the associated service. For most programs, it is the HCPCS number. Please see the Addendum for program specific values.	5	String	Yes
4	ClientPayerID	Unique Identifier sent by Payer.	20	String	
5	ClientEligibilityDateBegin	The date the client became eligible with the payor.	10	Date	
6	ClientEligibilityDateEnd	The date the client ended eligibility with the payor.	10	Date	
7	ClientStatus	The client's current status. Provide the 2-digit code including the 0. Available values: 02 = Active, 04 = Inactive. This field is optional if ClientEligibilityDateBegin or ClientEligibilityDateEnd is sent.	2	String	
8	EffectiveStartDate	The date the client is eligible to receive this service.	10	Date	Yes
9	EffectiveEndDate	The last date the client is eligible to receive this service.	10	Date	

## 2.4 Client Address - Required

At least one record for each client is required if GPS validation is required for the program. If an address is provided via a Payer feed, this address information will be regarded as secondary based on program rules.

Index	Column Name	Description	Max Length	Type	Required
1	ClientAddressType	Values: Home, Business, Other. Note that multiple of the same type can be provided. Default to Other if not available.	12	String	Yes
2	ClientAddressIsPrimary	One address must be designated as primary  Values: true/false	5	String	Yes
3	ClientAddressLine1	Street Address Line 1 associated with this address. PO Box may not be acceptable for Billing and PO Box will not function correctly for MVV.	30	String	Yes
4	ClientAddressLine2	Street Address Line 2 associated with this address.	30	String	
5	ClientCounty	County associated with this address	25	String	
6	ClientCity	City associated with this address.	30	String	Yes
7	ClientState	State associated with this address. Two Character standard abbreviation.	2	String	Yes
8	ClientZip	Zip Code associated with this address. Required for Billing. 9-digit primary address zip code. If additional 4 digits are not known, provide zeros. Format #####.	9	String	Yes
9	ClientAddressLongitude	GPS Longitude recorded during event. Longitude has a range of -180 to 180 with a 15 digit precision	20	Decimal	
10	ClientAddressLatitude	GPS Latitude recorded during event. Latitude has a range of -90 to 90 with a 15 digit precision	19	Decimal	

## 2.5 Client Phone - Optional

Index	Column Name	Description	Max Length	Type	Required
1	ClientPhoneType	Values: Home, Mobile, Business and Other. Note that multiple of the same type can be provided. Default to Other if not available.	12	String	
2	ClientPhone	Client phone number. Format #####.	10	String	

## 2.6 Client Designee - Optional

Provide if applicable for the Client and in the absence of a Payer member feed.

Index	Column Name	Description	Max Length	Type	Required
1	ClientDesigneeFirstName	First Name of the Client Designee.	30	String	Yes
2	ClientDesigneeLastName	Last Name of the Client Designee.	30	String	Yes
3	ClientDesigneeEmail	Email address of the Client Designee.	50	String	Yes
4	ClientDesigneeStatus	<p>Status of the Client Designee pertaining to Sandata system access. If the ClientDesigneeStatus is sent, ClientDesigneeStartDate and ClientDesigneeEndDate are not required.</p> <p>(Provide the 2-digit code including the 0) Sandata System can either populate the start and end date based on the date of receipt of the status or the source system can send the activation and termination date.</p> <p>(Please note Activation and termination dates cannot be backdated or futuedated)</p> <p>Available Values: 02 = Active,04 = Inactive.</p>	2	String	Conditional – required when ClientDesigneeStartDate and ClientDesigneeEndDate are not provided
5	ClientDesigneeStartDate	The date Client Designee was assigned. Future date is not acceptable. If the ClientDesigneeStartDate is sent, ClientDesigneeStatus is not required.		Date	Conditional – Required when ClientDesigneeStatus is not provided
6	ClientDesigneeEndDate	The date Client Designee was terminated. Future date and Back date is not		Date	Conditional –

Index	Column Name	Description	Max Length	Type	Required
		acceptable. If the ClientDesigneeEndDate is sent, ClientDesigneeStatus is not required.			Required when ClientDesigneeStatus is not provided
7	ClientDesigneeRelationship	Relationship of the Designee to the Client	30	String	





## 2.7 Responsible Party - Optional

Provide if applicable for the Client and in the absence of a Payer member feed.

Index	Column Name	Description	Max Length	Type	Required
1	ClientContactType	Client Contact Type. Values: Family, Other.	12	String	
2	ClientContactFirstName	Client Contact First Name. Entered by provider agency.	30	String	
3	ClientContactLastName	Client Contact Last Name. Entered by provider agency.	30	String	
4	ClientContactPhoneType	Client Contact's Phone Type. Values: Business, Home, Mobile, Other.	12	String	
5	ClientContactPhone	Client Contact Home Phone Number. Entered by provider agency. Format #####.	10	String	
6	ClientContactEmailAddress	Client Contact's email address. Required if this client will be authorized to login to the client portal as the client's authorized representative and approve timesheets on behalf of the client.	64	String	
7	ClientContactAddressLine1	Client Contact's Street Address, Line 1.	30	String	
8	ClientContactAddressLine2	Client Contact's Street Address, Line 2.	30	String	
9	ClientContactCity	Client Contact's City.	30	String	
10	ClientContactState	Client Contact's State. Two Character standard abbreviation.	2	String	
11	ClientContactZip	Client Contact's Zip Code. 9-digit primary address zip code. If additional 4 digits is not known, provide zeros. Format #####.	9	String	

## 2.8 Employee General Information - Required

Index	Column Name	Description	Max Length	Type	Required
1	EmployeeQualifier	Value being sent to unique identify the employee. Values: EmployeeSSN, EmployeeRegID, EmployeeCustomID.	20	String	Yes
2	EmployeeIdentifier	Employee identifier identified by EmployeeQualifier. If employee information is received from the payer, this information will be used to link the received 3 <sup>rd</sup> party EVV information with the payer information provided and should be defined as the same value.	9	String	Yes
3	EmployeeOtherID	Unique employee identifier in the external system, if any.	64	String	
4	SequenceID	The Third Party visit sequence ID to which the change applied	16	Integer	Yes
5	EmployeeSSN	Employee Social Security Number. Employee SSN may be required depending on the program rules. Please see the Addendum for program specific values.	9	String	
6	EmployeeLastName	Employee's Last Name	30	String	Yes
7	EmployeeFirstName	Employee's First Name	30	String	Yes
8	EmployeeEmail	Employee's Email Address	64	String	
9	EmployeeManagerEmail	Email of the Employee's Manager	64	String	
10	EmployeeAPI	Employee Client's Alternate Provider Identifier or Medicaid ID.	25	String	
11	EmployeePosition	Values for Payer/State Programs to be determined during implementation. If multiple positions, send primary.	3	String	
12	EmployeeHireDate	Employee's Date of Hire	10	Date	
13	EmployeeEndDate	Employee's HR Recorded End Date	10	Date	

## 2.9 Visit General Information - Required

Index	Column Name	Description	Max Length	Type	Required
1	VisitOtherID	Visit identifier in the external system	50	String	Yes
2	SequencelD	The Third Party visit sequence ID to which the change applied	16	Integer	Yes
3	EmployeeQualifier	Value being sent to unique identify the employee. Values: EmployeeSSN, EmployeeRegID, EmployeeCustomID.	20	String	Yes
4	EmployeeOtherID	Unique employee identifier in the external system, if any.	64	String	
5	EmployeeIdentifier	Employee identifier identified by EmployeeQualifier. If employee information is received from the payer, this information will be used to link the received 3 <sup>rd</sup> party EVV information with the payer information provided and should be defined as the same value.	9	String	Yes
6	GroupCode	This visit was part of a group visit. Group Code is used to reassemble all members of the group.	6	String	
7	ClientIDQualifier	Value being sent to unique identify the client. Values: ClientID, ClientSSN; ClientOtherID, ClientCustomID. Should be the same as the value used by the Payer if a client feed is provided by the payer.	20	String	Yes
8	ClientID	Identifier used in the client element.	64	String	Yes
9	ClientOtherID	Additional Client User-Defined ID. Commonly used to store client's ID from another system. This value is used to match the client to an existing record during import.	24	String	
10	VisitCancelledIndicator	true/false – allows a visit to be cancelled / deleted based on defined rules.	5	String	Yes
11	PayerID	Sandata EVV assigned ID for the payer. Payer ID is determined during the implementation process. Please see the Addendum for program specific values.	64	String	Yes
12	PayerProgram	If applicable, the program to which this visit belongs. Potential use and list of values to be determined during implementation. Please see the Addendum for program specific values	9	String	Yes.

Index	Column Name	Description	Max Length	Type	Required
13	ProcedureCode	This is the billable procedure code which would be mapped to the associated service. For most programs, it is the HCPCS number. Please see the Addendum for program specific values.	5	String	Yes
14	Modifier1	Modifier for the HCPCS code for the 837. Up to 4 of these are allowed. Please consult specific program requirements for exact usage.	2	String	
15	Modifier2	Modifier for the HCPCS code for the 837. Up to 4 of these are allowed. Please consult specific program requirements for exact usage.	2	String	
16	Modifier3	Modifier for the HCPCS code for the 837. Up to 4 of these are allowed. Please consult specific program requirements for exact usage.	2	String	
17	Modifier4	Modifier for the HCPCS code for the 837. Up to 4 of these are allowed. Please consult specific program requirements for exact usage.	2	String	
18	VisitTimeZone	Visit primary time zone. Please see the appendix for acceptable values.	64	Timezone	Yes
19	ScheduleStartTime	Activity / Schedule start date and time. This field is generally required but may be omitted if the schedule is denoting services that can happen at any time within the service date.	20	DateTime	
20	ScheduleEndTime	Activity / Schedule end date and time. This field is generally required but may be omitted if the schedule is denoting services that can happen at any time within the service date.	20	DateTime	
21	ContingencyPlan	Indicator of member's contingency plan selected by member. Valid values include (CODE should be sent only): CODE- Description CP01 - Reschedule within 2 Hours CP02 - Reschedule within 24 Hours CP03 - Reschedule within 48 Hours CP04 - Next Scheduled Visit CP05 - Non-Paid Caregiver	64	String	
22	Reschedule	Indicator if schedule is a "reschedule"	5	Boolean	

Index	Column Name	Description	Max Length	Type	Required
23	AdjInDateTime	Adjusted in date/time if entered manually. Otherwise the actual date/time received.	20	DateTime	
24	AdjOutDateTime	Adjusted out date/time if entered manually. Otherwise the actual date/time received.	20	DateTime	
25	BillVisit	True/False. If the visit is going to be billed, should be sent as Y. Otherwise N.	5	String	
26	HoursToBill	Hours that are going to be billed.	99.999	Decimal	
27	HoursToPay	If payroll is in scope for the payer program, the hours to pay.	99.999	Decimal	
28	Memo	Associated free form text.	512	String	
29	ClientVerifiedTimes	True/false	5	String	
30	ClientVerifiedTasks	True/false	5	String	
31	ClientVerifiedService	True/false	5	String	
32	ClientSignatureAvailable	True/false The actual signature will not be transferred. The originating system will be considered the system of record.	5	String	
33	ClientVoiceRecording	True/false The actual voice recording will not be transferred. The originating system will be considered the system of record.	5	String	

## 2.10 Calls - Optional

If calls are not provided, adjusted times must be included in the parent visit element. Calls include any type of clock in or clock out depending on system capabilities. Note that some vendor systems may not record some visit activity as calls. If this is the case, the call element can be omitted. Sandata will treat visit information without calls as manually entered.

Index	Column Name	Description	Max Length	Type	Required
1	CallExternalID	Call identifier in the external system	16	String	Yes
2	CallDateTime	Event date time. Must be at least to the second.	20	DateTime	Yes
3	CallAssignment	Values: Time In, Time Out, Other	10	String	Yes
4	GroupCode	This visit was part of a group visit. Group Code is used to reassemble all members of the group.	6	String	
5	CallType	The type of device used to create the event. Values: Telephony, Mobile, FVV, Manual, Other. Any call with GPS data collected should be identified as Mobile. FVV should be used for any type of Fixed verification device.	20	String	Yes
6	ProcedureCode	This is the billable procedure code if identified on the call. For most programs, it is the HCPCS number. The actual entered value should be provided. Please see the Addendum for program specific values.	5	String	
7	ClientIdentifierOnCall	If a client identifier was entered on the call, this value should be provided.	10	String	Conditional
8	MobileLogin	Log in used if a mobile application is in use for GPS calls. Required if CallType = 'Mobile'.	64	String	Conditional
9	CallLatitude	GPS Latitude recorded during event. Latitude has a range of -90 to 90 with a 15 digit precision. Required for CallType = Mobile.	19	Decimal	Conditional
10	CallLongitude	GPS Longitude recorded during event. Longitude has a range of -180 to 180 with a 15 digit precision. Required for CallType = Mobile.	20	Decimal	Conditional

Index	Column Name	Description	Max Length	Type	Required
11	Location	Specific values to be provided based on the program.	25	String	
12	TelephonyPIN	PIN for telephony. Identification for the employee using telephony. Required if CallType = Telephony.	9	Integer	Conditional
13	OriginatingPhoneNumber	Originating phone number for telephony. Required if CallType = Telephony.	10	String	Conditional

### 2.11 Visit Exception Acknowledgement – Optional

When visits are sent to Sandata via the Alt-EVV API, the Sandata system will calculate “exceptions” based on the incoming data. Business rules are applied to the visit based on the configuration details for a particular customer. These rules may trigger visits to be flagged with exceptions, denoting business rules that are not being met. Visits with exceptions may not be deemed “Approved” or “Verified”, and thus may be excluded from additional processing, such as claims validation or data exports.

Users of the Alt-EVV API have the opportunity to “Acknowledge” the exceptions. This tells the Sandata system that the visit is complete despite the presence of exceptions. Thus, the visit can be treated as “Approved” or “Verified”, so long as all calculated exceptions are marked as “Acknowledged”.

Details of which exceptions apply to a specific program are provided during implementation.

Index	Column Name	Description	Max Length	Type	Required
1	ExceptionID	ID for the exception being acknowledged. Exact values for exceptions implemented are based on program rules. Please see the Addendum for program specific values.	2	String	
2	ExceptionAcknowledged	true/false	5	String	

## 2.12 Visit Changes - Optional

Index	Column Name	Description	Max Length	Type	Required
1	SequenceID	The Third Party visit sequence ID to which the change applied	16	String	Yes
2	ChangeMadeBy	The unique identifier of the user, system or process that made the change. This could be a system identifier for the user or an email. Could also be a system process, in which case it should be identified.	64	String	Yes
3	ChangeDateTime	Date and time when change is made.	20	DateTime	Yes
4	GroupCode	This visit was part of a group visit. Group Code is used to reassemble all members of the group.	6	String	
5	ReasonCode	Reason Code associated with the change. Please see the Addendum for program specific values.	4	String	Yes
6	ChangeReasonMemo	Reason/Description of the change being made if entered. Required for some reason codes.	256	String	Conditional
7	ResolutionCode	Resolution Codes if selected. Resolution Codes are specific to the program. Please see the Addendum for program specific values.	4	String	





### 2.13 Visit Tasks - Optional

Index	Column Name	Description	Max Length	Type	Required
1	TaskID	Task id, this task id must map to the Task IDs used for the agency in the Sandata system.	4	String	Yes
2	TaskReading	Task reading	10	String	
3	TaskRefused	Indicator denoting if the client refused the specific task. True/False	5	Boolean	

### 3 Appendix

#### 3.1 Assumptions

There is no other external interface other than what is mentioned in this document.

#### 3.2 Other Important Points to Note

Please note that this list will have periodic additions as new functionality is added and made available for transmission from Alternate EVV systems.

In the event of any required changes to the web services apart from the functionality covered in this document or the functionality already present in the code, it is recommended that a formal change control process be followed so as to ensure a set process for planning and scheduling, implementation of the same, verification and validation and roll-out for user testing.

#### 3.3 Legend

Legend	
Field Name	Other Possible Naming
Client	Individual Member Patient Recipient
Employee	Caregiver Consumer Directed Worker Home Health Aide Staff Worker
Provider	Agency Third Party Admin (TPA)
Payer	Admission Contract Insurance Company Managed Care Organization (MCO) State

Legend	
Field Name	Other Possible Naming
Contract	Program Program Code
HCPCS	Bill Code <i>Procedure Code</i> <i>Service</i>

### 3.4 Acronyms and Definitions

Term	Definition
AKA	Also Known As
API	Application Programming Interface
GMT	Greenwich Mean Time
HTTP	Hypertext Transfer Protocol
JSON	JavaScript Object Notation
SOAP	Simple Object Access Protocol
SRS	System Requirement Specifications
TBD	To Be Determined
UTC	Universal Time Coordinated
XML	Extensible Markup Language

### 3.5 Time Zone List

This is the common list of time zones we used. If your area is not covered by this list please contact Sandata support to get additional time zone value that we accept. Please note that the value sent must exactly match the value and case shown.

Text Value	Daylight Saving
US/Alaska	Active
US/Aleutian	Active
US/Arizona	Inactive
US/Central	Active
US/East-Indiana	Active
US/Eastern	Active
US/Hawaii	Inactive
US/Indiana-Starke	Active

Text Value	Daylight Saving
US/Michigan	Active
US/Mountain	Active
US/Pacific	Active
US/Samoa	Inactive
America/Indiana/Indianapolis	Active
America/Indiana/Knox	Active
America/Indiana/Marengo	Active
America/Indiana/Petersburg	Active
America/Indiana/Vevay	Active
America/Indiana/Vincennes	Active
Canada/Atlantic	Active
Canada/Central	Active
Canada/East-Saskatchewan	Inactive
Canada/Eastern	Active
Canada/Mountain	Active
Canada/Newfoundland	Active
Canada/Pacific	Active
Canada/Saskatchewan	Active
Canada/Yukon	Active
America/Puerto Rico	Inactive



### 3.6 Technical Companion and Examples

This appendix serves as additional technical documentation for the use of the Sandata OpenEVV Alt-EVV APIs.

#### API Location

The RESTful APIs can be reached at the following locations:

*Production:*

<https://api.sandata.com/interfaces/intake/clients/rest/api/v1.1>  
<https://api.sandata.com/interfaces/intake/employees/rest/api/v1.1>  
<https://api.sandata.com/interfaces/intake/visits/rest/api/v1.1>

*UAT:*

<https://uat-api.sandata.com/interfaces/intake/clients/rest/api/v1.1>  
<https://uat-api.sandata.com/interfaces/intake/employees/rest/api/v1.1>  
<https://uat-api.sandata.com/interfaces/intake/visits/rest/api/v1.1>

The endpoints accept JSON data and support the HTTP POST method.

In addition, WADL documents describing the APIs can be found at the following locations:

*Production:*

<https://api.sandata.com/interfaces/intake/clients/rest/api/v1.1/wadl>  
<https://api.sandata.com/interfaces/intake/employees/rest/api/v1.1/wadl>  
<https://api.sandata.com/interfaces/intake/visits/rest/api/v1.1/wadl>

*UAT:*

<https://uat-api.sandata.com/interfaces/intake/clients/rest/api/v1.1/wadl>  
<https://uat-api.sandata.com/interfaces/intake/employees/rest/api/v1.1/wadl>  
<https://uat-api.sandata.com/interfaces/intake/visits/rest/api/v1.1/wadl>

#### Authentication Header

The API endpoints utilize Basic Authentication. Therefore, a valid "Authorization" header must be sent with each request. This header is simply a Base 64 encoded representation of the username and password in the format "username:password".

The credentials are determined and distributed during implementation.

An example header for "user@example.com" with password "secret" would be:

*Authorization: Basic dXNIckBleGFtcGxLmNvbTpzZWNYZXQ=*

#### Account Header

In addition to the "Authorization" header, a header denoting the callers EVV "Account" must be sent. The credentials provided are specific to an account, and all data sent must also correspond to that account, or the request will be rejected.

An example of this header would be:



*Account: 12345*

Alternatively, for MCO customers and other vendors sending data on behalf of multiple EVV accounts, the "EntityGuid" header is used. This ID will be provided by Sandata during implementation.

An example of this header would be:

*EntityGuid: 12345*

### **Content-Type Header**

As with all RESTful API requests, the "Content-Type" header should also be included:

*Content-Type: application/json*

### **Workflow**

Interacting with the APIs is a two-step process:

For each element being sent (Client, Employee, Visit), the data for must be received successfully and fully processed before the next type of data can be sent. i.e.

Step 1 – Send a POST request with the data to the API

Step 2 – Utilize the "Status" API to check that processing completed successfully

Step 3 – Send the next type of data

If the call for Status check results in a messageSummary of "The result for the input UUID is not ready yet. Please try again.", then the sender process must "sleep" and recheck Status until the Status API call returns a messageSummary of either "All records updated successfully." Or ..."Records uploaded, please check errors/warnings and try again."

It's important to note that the processing of a previously sent type of data MUST complete prior submitting the API call for the next type of data.

Clients and Employees should be sent prior to sending visits. This is necessary in order to ensure that client/employee data exists in the Sandata system when a visit is received, in order to avoid errors on visit processing due to missing client and/or employee data.

Details are as follows:

The first step is to POST the data being sent to the URLs mentioned above in the "API Location" section. When data is sent, the Sandata system will validate the input meets the business requirements, process the data, and return a response.

The response sends back some key pieces of information. This includes any errors that may have been flagged, as well as a UUID, generated by Sandata, which uniquely identifies the request. See example responses below in the "Sample Response" section.



After this response is sent, the Sandata system begins processing the data into the system. Since the initial POST has already received a response, callers must use a second endpoint to check on the status of their request.

To this end, each API is accompanied by an additional endpoint for checking status. This endpoint is reached simply by appending "/status" to the URLs in the "API Location" section above. Calls to this endpoint must utilize the HTTP GET method and send in the UUID that is returned in the response to the POST call.

An example GET request for status for clients, would be sent as follows:

<https://api.sandata.com/interfaces/intake/clients/rest/api/v1.1/status?uuid=8d7c31f7-4a09-41a9-8edd-f9819def58f1>

Sample data can be found below.

In summary, the caller would POST data to the API, receive a response with a UUID, then utilize the "status" endpoint via GET in order to determine if processing was completed and successful.

An example workflow when sending employees, clients, and visits would be:

1. Send POST request with employee data; receive UUID.
2. Utilize UUID to query employee "Status" API; if still processing, sleep and recheck.
3. Once "Status" API for employees indicates processing is finished, send POST request with client data; receive UUID.
4. Utilize UUID to query client "Status" API; if still processing, sleep and recheck.
5. Once "Status" API for client indicates processing is finished, send POST request with visit data; receive UUID.
6. Utilize UUID to query visit "Status" API; if still processing, sleep and recheck.
7. Once "Status" API for visits indicates processing is finished, all data has been transmitted.



## Sample POST Data

Below find sample POST bodies for each entity, as well as sample responses in both successful and unsuccessful situations. Note that, based on implementation, not all fields are required to be present. In addition, certain implementations may include custom fields that are not represented in the samples. Please refer to the addendum for a full set of fields and their details.

### JSON Employee

```
[{
  "ProviderIdentification": {
    "ProviderQualifier": "SandataID",
    "ProviderID": "123456"
  },
  "EmployeeQualifier": "EmployeeSSN",
  "EmployeeIdentifier": "999999999",
  "EmployeeOtherID": "2222",
  "SequenceID": 99811930002,
  "EmployeeSSN": "999999999",
  "EmployeeLastName": "Employee",
  "EmployeeFirstName": "Test",
  "EmployeeEmail": "dummy@sandata.com",
  "EmployeeManagerEmail": "dummymanager@sandata.com",
  "EmployeeAPI": "111111111",
  "EmployeePosition": "RN"
}]
```

### JSON Client

```
[{
  "ProviderIdentification": {
    "ProviderQualifier": "SandataID",
    "ProviderID": "123456"
  },
  "ClientID": "96641",
  "ClientFirstName": "Test",
  "ClientMiddleInitial": "T",
  "ClientLastName": "Client",
  "ClientQualifier": "ClientSSN",
  "ClientMedicaidID": "999999999",
  "ClientIdentifier": "999999999",
  "MissingMedicaidID": "False",
  "SequenceID": 99811930002,
  "ClientCustomID": "111111111",
  "ClientOtherID": "2222",
  "ClientSSN": "999999999",
  "ClientTimezone": "US/Eastern",
  "Coordinator": "123",
  "ProviderAssentContPlan": false,
  "ClientPayerInformation": [{
    "PayerID": "57",
    "PayerProgram": "123",
    "ProcedureCode": "123",
    "ClientPayerID": "987654321",
    "ClientEligibilityDateBegin": "2019-01-01",
    "ClientEligibilityDateEnd": "2020-01-01",
    "ClientStatus": "02",
    "EffectiveStartDate": "2019-01-01",
  }
  ]
}]
```



```

        "EffectiveEndDate": "2020-01-01"
    }],
    "ClientAddress": [{
        "ClientAddressType": "Home",
        "ClientAddressIsPrimary": true,
        "ClientAddressLine1": "36 West 5th Street",
        "ClientAddressLine2": "10th Floor",
        "ClientCounty": "Kings",
        "ClientCity": "Manhattan",
        "ClientState": "NY",
        "ClientZip": "10017",
        "ClientAddressLongitude": -73.4228741,
        "ClientAddressLatitude": 40.7431032
    }],
    "ClientPhone": [{
        "ClientPhoneType": "Home",
        "ClientPhone": "1234567890"
    }],
    "ClientDesignee": [{
        "ClientDesigneeFirstName": "",
        "ClientDesigneeLastName": "",
        "ClientDesigneeEmail": "",
        "ClientDesigneeStatus": "",
        "ClientDesigneeStartDate": "",
        "ClientDesigneeEndDate": "",
        "ClientDesigneeRelationship": ""
    }
  ]
  "ClientResponsibleParty": [{
    "ClientContactType": "Other",
    "ClientContactFirstName": "Test",
    "ClientContactLastName": "Respparty",
    "ClientContactPhoneType": "Mobile",
    "ClientContactPhone": "3478788467",
    "ClientContactEmailAddress": "dummy@sandata.com",
    "ClientContactAddressLine1": "2727 East 29th Street",
    "ClientContactAddressLine2": "Apt 8I",
    "ClientContactCity": "Brooklyn",
    "ClientContactState": "NY",
    "ClientContactZip": "11229"
  }
  ]
}

```

### JSON Visit

```

[ {
  "ProviderIdentification": {
    "ProviderID": "123456",
    "ProviderQualifier": "SandataID"
  },
  "VisitOtherID": "123456789",
  "SequenceID": 111,
  "EmployeeQualifier": "EmployeeSSN",
  "EmployeeOtherID": "999999999",
  "EmployeeIdentifier": "999999999",
  "GroupCode": null,
  "ClientIDQualifier": "ClientMedicaidID",
  "ClientID": "111111111",
  "ClientOtherID": "111111111",
  "VisitCancelledIndicator": false,
  "PayerID": "999",
  "PayerProgram": "PRG",

```

```

"ProcedureCode": "T1000",
"Modifier1": null,
"Modifier2": null,
"Modifier3": null,
"Modifier4": null,
"VisitTimeZone": "US/Eastern",
"ScheduleStartTime": "2019-07-28T16:02:26Z",
"ScheduleEndTime": "2019-07-28T20:02:26Z",
"ContingencyPlan": "CP01",
"Reschedule": false,
"AdjInDateTime": "2019-07-28T15:02:26Z",
"AdjOutDateTime": "2019-07-28T19:02:26Z",
"BillVisit": true,
"HoursToBill": 10,
"HoursToPay": 10,
"Memo": "This is a memo!",
"ClientVerifiedTimes": true,
"ClientVerifiedTasks": true,
"ClientVerifiedService": true,
"ClientSignatureAvailable": true,
"ClientVoiceRecording": true,
"Calls": [{
  "CallExternalID": "123456789",
  "CallDateTime": "2019-07-28T16:02:26Z",
  "CallAssignment": "Time In",
  "GroupCode": null,
  "CallType": "Other",

  "ProcedureCode": "T1000",
  "ClientIdentifierOnCall": "111111111",
  "MobileLogin": null,
  "CallLatitude": 40.34455,
  "CallLongitude": -21.99383,
  "Location": "123",
  "TelephonyPIN": 999999999,
  "OriginatingPhoneNumber": "9997779999"
}],
"VisitExceptionAcknowledgement": [{
  "ExceptionID": "15",
  "ExceptionAcknowledged": false
}],
"VisitChanges": [{
  "SequenceID": "110",
  "ChangeMadeBy": "dummy@sandata.com",
  "ChangeDateTime": "2019-07-25T18:45:00Z",
  "GroupCode": null,
  "ReasonCode": "7227",
  "ChangeReasonMemo": "Change Reason Memo 999",
  "ResolutionCode": "A"
}],
"VisitTasks": [{
  "TaskID": "321",
  "TaskReading": "98.6",
  "TaskRefused": false
}]
}]

```



## Sample Responses

See some sample responses below. Note that the samples are provided for employee, but the same pattern is followed for both client and visit.

### Employee POST (Successful)

```
{
  "id": "7f6dcd1a-ec5e-4efd-a2d4-1049756016a5",
  "status": "SUCCESS",
  "messageSummary": "The result for the input UUID is not ready yet. Please try again.",
  "data": {
    "uuid": "7f6dcd1a-ec5e-4efd-a2d4-1049756016a5",
    "account": "12345",
    "message": "The result for the input UUID is not ready yet. Please try again.",
    "reason": "Transaction Received."
  }
}
```

### Employee POST (Validation Error)

```
{
  "id": "ea76e9a1-9b29-4f3d-af1c-6b573eb29b76",
  "status": "FAILED",
  "messageSummary": "[1] Records uploaded, please check errors/warnings and try again.",
  "data": [
    {
      "ProviderIdentification": {
        "ProviderID": "123456",
        "ProviderQualifier": "SandataID",
        "ErrorCode": null,
        "ErrorMessage": null
      },
      "EmployeeIdentifier": "999999999",
      "EmployeeOtherID": "2222",
      "SequenceID": 99811930002,
      "EmployeeQualifier": "EmployeeSSN",
      "EmployeeSSN": "999999999",
      "EmployeeLastName": "Employee",
      "EmployeeFirstName": "Test",
      "EmployeeEmail": "dummy@sandata.com",
      "EmployeeManagerEmail": "dummymanager@sandata.com",
      "EmployeeAPI": "111111111",
      "EmployeePosition": "AKN",
      "ErrorCode": null,
      "ErrorMessage": "ERROR: The EmployeePosition expected format is not correct. The record should satisfy this regular expression ['HHA|HCA|RN|LPN|PCA']. Invalid Value='AKN'. The record is being rejected."
    }
  ]
}
```

### Employee GET (Status)

A sample response to a status GET request that has finished processing is:

```
{
  "id": "73b7a9d7-a79a-45cc-9def-cb789c111f4b",
  "status": "SUCCESS",
}
```



```
"messageSummary": "All records updated successfully.",
"data": {
  "uuid": "73b7a9d7-a79a-45cc-9def-cb789c111f4b",
  "account": null,
  "message": "All records updated successfully.",
  "reason": "Transaction Received."
}
}
```

If the request is not yet finished being processed, the "messageSummary" will be "The result for the input UUID is not ready yet. Please try again."

```
{
  "id": "873a1d97-0681-402e-8268-b6cad8f2b4b7",
  "status": "SUCCESS",
  "messageSummary": "The result for the input UUID is not ready yet. Please try again.",
  "data": {
    "uuid": "873a1d97-0681-402e-8268-b6cad8f2b4b7",
    "account": "12345",
    "message": "The result for the input UUID is not ready yet. Please try again.",
    "reason": "Transaction Received."
  }
}
```

If the request was processed but failed business rules, an example status would be:

```
{
  "id": "e5de964b-9803-4051-b89b-8a89926e4983",
  "status": "SUCCESS",
  "messageSummary": "[2] Records uploaded, please check errors/warnings and try again.",
  "data": [
    {
      "ProviderIdentification": {
        "ProviderID": "123456",
        "ProviderQualifier": "SandataID",
        "ErrorCode": null,
        "ErrorMessage": null
      },
      "EmployeeIdentifier": "999999999",
      "EmployeeOtherID": "2222",
      "SequenceID": 99811930002,
      "EmployeeQualifier": "EmployeeSSN",
      "EmployeeSSN": "999999999",
      "EmployeeLastName": "Employee",
      "EmployeeFirstName": "Test",
      "EmployeeEmail": "dummy@sandata.com",
      "EmployeeManagerEmail": "dummymanager@sandata.com",
      "EmployeeAPI": "111111111",
      "EmployeePosition": "RN",
      "ErrorCode": "-709",
      "ErrorMessage": "Version number is duplicated or older than current"
    }
  ]
}
```

### 3.7 Error Message Examples

As shown in the section above, it is possible to receive error messages as a result of both the initial POST of data, as well as from the "status" API. The types of errors you can expect from each call are noted below. This list is not intended to cover every possible message, as the exact messages will vary by implementation.

#### **Initial Post**

Errors on the initial POST of data are typically validation related – meaning, there was something about the format of data sent in that was invalid, thus processing could not occur. The exact cause of these types of errors will be noted in the "ErrorMessage" field. Examples include:

- Non-null fields being sent as null:
  - o i.e. EmployeeIdentifier:
    - "ERROR: The EmployeeIdentifier cannot be null. The record is being rejected."
- Fields beneath minimum or exceeding the maximum length:
  - o i.e. VisitOtherId:
    - "ERROR: The VisitOtherID value is greater than the  $\${max}$  characters. The length should be between  $\${min}$  and  $\${max}$ . The record is being rejected."
- Number values smaller than min, or larger than max:
  - o i.e. SequenceID:
    - "ERROR: The SequenceID value cannot be greater than  $\${value}$ . Invalid Value= $\${invalidValue}$ '. The record is being rejected."
- Values that do not belong to preset list or match specified pattern
  - o i.e. ClientIdQualifier:
    - "ERROR: The ClientIDQualifier format is incorrect. The record should satisfy this regular expression "ClientID|ClientSSN|ClientOtherID|ClientCustomID". Invalid Value= $\${invalidValue}$ '. The record is being rejected."
- Date fields that are required to be past values:
  - o i.e. ScheduleStartTime:
    - "ERROR: ScheduleStartTime times must be in the past. The record is being rejected."
- Date fields that to not conform to specified Date pattern:
  - o i.e. ScheduleStartTime:
    - "ERROR: The ScheduleStartTime format is incorrect. The pattern should be 'yyyy-MM-ddTHH:mm:ssZ' like '2016-12-31T11:22:33Z'. Value found= $\${invalidValue}$ '. The record is being rejected."
- When the count of input records is greater than the maximum number allowed:
  - o "The number of input records exceed the max limit."
- The start date must be before end date:
  - o "ERROR: The ClientEligibilityDateEnd must be after ClientEligibilityDateBegin. Invalid Value: ClientEligibilityDateBegin= $\${invalidValue}$ ', ClientEligibilityDateEnd= $\${invalidValue}$ '.."
- Validate duplicate id in list of payload:
  - o "ERROR: The { invalidValue } cannot be duplicated in list"



- Maximum records in payload. Default value is 5000 records:
  - o "ERROR: The number of input records exceed the max limit."
- Duplicate PayerId and AuthorizationReferenceNumber in Auth payload:
  - o "ERROR: The Authorization could not be duplicated in list."
- Save records to database error, Caching records error:
  - o "Records uploaded, please check errors/warnings and try again."

### **Status API**

Errors received from the status API are typically related to business rules or processing errors. These messages will vary by implementation and will denote reasons why the data, though properly formed, was unable to be processed due to a business rule failure. Like validation errors, the reason for the error will be noted in the "ErrorMessage" field.

### **HTTP Status Codes**

Sandata will return different HTTP status codes under different scenarios:

200 – Request processed: this status code is used for both success AND error conditions – it denotes that Sandata was able to receive the request and process it. The JSON returned must be used to determine if processing was successful or not. Most requests should return a 200.

400 – Bad Request: empty request, invalid format

401 – Unauthorized Request: invalid credentials

415 – Unsupported Media: invalid or missing Content-Type Header

500 – Internal Service Error: an unknown processing error occurred.