

MedicusEHR Application Data Access – API

MedicusEHR® v1.0 Application Data Access API Client Documentation



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IT Division
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Confidentiality Notice

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Document Updates Tracking Table

| Date | User | Description |
|------------|------------|-------------------|
| 10/17/2019 | LFernandez | Document Creation |
| | | |

1. Introduction

This document contains the information necessary for applications to access and consume Application Data Access APIs for MedicusEHR v1.0. This documentation describes the RESTful API, including the endpoints, function names, required and optional parameters and their data types, return variables and their types/structures with sample for successful and failed transactions.

2. Developer Registration

The registration process is not direct with Medicus Clinical, LLC. Developer or User with interest in Application Data Access APIs for MedicusEHR v1.0 will need to contact a healthcare provider and/or Practice with a valid License of Use to the Application and request proper access and credentials in accordance with such provider and/or Practice policies and procedures.

3. Acceptance of Terms of Use

By implementing and/or using the Application Program Interface (API's) to access data on MedicusEHR, you are accepting the **Application Program Interface Terms and Conditions** and agree to be bound to such terms and conditions.

4. API Methods

| HTTP Verb | Method URI | Description |
|-----------|------------------------------------|--|
| POST | /authentication/signin | User authentication method. |
| POST | /appdataaccess/patientsearch | Patient search. |
| POST | /appdataaccess/patientdemographics | Get a patient's demographics. |
| POST | /appdataaccess/patientdatacategory | Get a patient's clinical data for the given data category. |
| POST | /appdataaccess/patientencounters | Get a patient's C-CDA document. |

5. Methods Detail

5.1 SignIn

Method: POST

EndPoint: /appdataaccess/signin

The SignIn method is designed to authenticate the user that is requesting access to the system. The values are assigned by ASSERTUS to the trading partner.

Request Body Parameters:

| Parameter | Type | HTTP Location | Description |
|-----------------------------|--------|---------------|---|
| ConnectorName (required) | String | Body | Contains the user name. |
| AccountCode (required) | String | Body | Contains the account identifier. |
| ServiceName (required) | String | Body | Contains the identifier of the requested functionality. |
| Password (required) | String | Body | Contains the user's password. |
| Token (required) | String | Body | Contains the user's token. |

Request Body Example (JSON has been formatted for display purposes):

```
{
  "ConnectorName": "ClientAccess01",
  "AccountCode": "12-3456",
  "ServiceName": "AppDataAccess",
  "Password": "MyPassword",
  "Token": "F1391DCF-038D-4ECD-AA38-4060AD848953"
}
```

Returns: This method returns a JSON object with the following schema:

| Property | Type | Description |
|---------------------|---------|---|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object | If the authentication succeeds, will contain the values required to invoke other API methods. |
| Data Object | | |
| ConnectorAccountKey | Integer | Contains the user's identifier. |
| Token | String | Contains the user's token. |
| SessionKey | Long | Contains the user's session identifier. |
| LoginToken | String | Token returned by the SignIn method. |

Successful Response Body Example (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "",
  "Data": {
    "ConnectorAccountKey": 1,
    "Token": " F1391DCF-038D-4ECD-AA38-4060AD848953",
    "SessionKey": 1155,
    "LoginToken": "e40d529f0f7bd01f3d57db8686bd47f8"
  }
}
```

Failed Response Example – Missing Values in Request (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Invalid Request"
}
```

Failed Response Example – Invalid Credentials (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Invalid Login"
}
```

5.2 Patient Search

Method: POST

Endpoint: /appdataaccess/patientsearch

Method to search for a patient that the authenticated user has access to.

Request Headers Parameters:

| Parameter | Type | HTTP Location | Description |
|-----------------------------------|---------|---------------|---|
| SessionKey (required) | Long | Header | Contains the user's session identifier returned by the SignIn method. |
| Token (required) | String | Header | Contains the Token returned by the SignIn method (LoginToken). |
| ConnectorAccountKey (required) | Integer | Header | Contains the user's identifier returned by the SignIn method. |

Request Body Parameters:

| Parameter | Type | HTTP Location | Description |
|-------------------------------|--------|---------------|--|
| NameFirst (required) | String | Body | The patient's first name. |
| NameMiddle (optional) | String | Body | The patient's middle name. |
| NameLast (required) | String | Body | The patients' last name. |
| BirthDate (required) | Date | Body | The patient's birth date. Expected format "yyyy-mm-dd". |
| BirthGenderCode (required) | String | Body | The patient's birth gender code. Expected values: "M" - male, "F" - female, "U" - Unknown. |

Request Body Example (JSON has been formatted for display purposes):

```
{
  "NameFirst": "pedro",
  "NameLast": "herrera jimenez",
  "BirthDate": "1930-08-21",
  "BirthGenderCode": "M",
  "NameMiddle": "R"
}
```


Returns: This method returns a JSON object with the following schema:

| Property | Type | Description |
|--------------------|-----------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Array of patients that matched the given criteria. |
| Data Object | | |
| PatientKey | Integer | Contains the patient's unique identifier. |
| NameFirst | String | Contains the patient's first name. |
| NameMiddle | String | Contains the patient's middle name. |
| NameLast | String | Contains the patient's last name. |
| BirthDate | Date | Contains the patient's date of birth |
| BirthGenderCode | String | Contains the patient's birth gender code. Possible values: "M" - male, "F" - female, "U" - Unknown. |
| FullName | String | Contains the patient's full name. |
| PatientAge | String | Contains the patient's age. |

Successful Response Body Example (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "PatientKey": 122372,
      "NameFirst": "PEDRO",
      "NameMiddle": "R",
      "NameLast": "HERRERA JIMENEZ",
      "BirthDate": "1930-08-21T00:00:00",
      "BirthGenderCode": "M",
      "FullName": "PEDRO R HERRERA JIMENEZ",
      "PatientAge": "89y/o"
    },
    {
      "PatientKey": 145594,
      "NameFirst": "PEDRO",
      "NameLast": "HERRERA JIMENEZ",
      "BirthDate": "1930-08-21T00:00:00",
      "BirthGenderCode": "M",
      "FullName": "PEDRO R HERRERA JIMENEZ",
      "PatientAge": "89y/o"
    }
  ]
}
```

Failed Response Example – Missing Values in Request (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Invalid request, missing parameters"
}
```

Failed Response Example – Unmatched Criteria (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Unable to identify the patient with the given parameters"
}
```

Failed Response Example – Invalid Session (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseCode": 1,
  "ResponseMessage": "Invalid Session",
  "Data": null
}
```

5.3 Patient Demographics

Method: POST

Endpoint: /appdataaccess/patientdemographics

This method returns a patient's demographics for the given patient unique identifier that the authenticated user has access to.

Request Headers Parameters:

| Parameter | Type | HTTP Location | Description |
|-----------------------------------|---------|---------------|---|
| SessionKey (required) | Long | Header | Contains the user's session identifier returned by the SignIn method. |
| Token (required) | String | Header | Contains the Token returned by the SignIn method (LoginToken). |
| ConnectorAccountKey (required) | Integer | Header | Contains the user's identifier returned by the SignIn method. |

Request Body Parameters:

| Parameter | Type | HTTP Location | Description |
|--------------------------|---------|---------------|----------------------------------|
| PatientKey (required) | Integer | Body | The patient's unique identifier. |

Request Body Example (JSON has been formatted for display purposes):

```
{
  "PatientKey": 9
}
```

Returns: This method returns a JSON object with the following schema:

| Property | Type | Description |
|--------------------------|---------|---|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object | Patient demographics that matched the given criteria. |
| Data Object | | |
| NameFirst | String | Contains the patient's first name. |
| NameMiddle | String | Contains the patient's middle name. |
| NameLast | String | Contains the patient's last name. |
| BirthDate | Date | Contains the patient's date of birth |
| FullName | String | Contains the patient's full name. |
| Race1Description | String | Contains the patient's race. |
| Ethnicity1Description | String | Contains the patient's ethnicity |
| PreferredLangDescription | String | Contains the patient's preferred language. |
| PatientAge | String | Contains the patient's age. |

Successful Response Body Example (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": {
    "NameFirst": "Michelle",
    "NameMiddle": "T",
    "NameLast": "Blair",
    "BirthDate": "1974-03-27T00:00:00",
    "FullName": "Michelle T Blair",
    "Race1Description": "White",
    "Ethnicity1Description": "Not Hispanic or Latino",
    "PreferredLangDescription": "Spanish; Castilian",
    "PatientAge": "45y/o"
  }
}
```

Failed Response Example – Missing Values in Request (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Invalid request, missing parameters"
}
```

Failed Response Example – Unmatched Criteria (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Unable to identify the patient with the given parameter"
}
```

Failed Response Example – Invalid Session (JSON has been formatted for display purposes):

```
{  
  "Success": false,  
  "ResponseCode": 1,  
  "ResponseMessage": "Invalid Session",  
  "Data": null  
}
```

5.4 Patient Clinical Data by Category

Method: POST

Endpoint: /appdataaccess/patientdatacategory

This method returns a patient's clinical data for the given patient unique identifier and data category.

Request Headers Parameters:

| Parameter | Type | HTTP Location | Description |
|-----------------------------------|---------|---------------|---|
| SessionKey (required) | Long | Header | Contains the user's session identifier returned by the SignIn method. |
| Token (required) | String | Header | Contains the Token returned by the SignIn method (LoginToken). |
| ConnectorAccountKey (required) | Integer | Header | Contains the user's identifier returned by the SignIn method. |

Request Body Parameters:

| Parameter | Type | HTTP Location | Description |
|----------------------------|---------|---------------|---|
| PatientKey (required) | Integer | Body | The patient's unique identifier. |
| DataCategory (required) | String | Body | Clinical data category. The following are the accepted values, case sensitive: <ul style="list-style-type: none"> • MedicationAllergies • Problems • LaboratoryTests • LaboratoryResults • VitalSigns • Procedures • ImplantableDevices • AssessmentTreatmentPlan • Goals • HealthConcerns • SmokingStatus • Medications • CareTeamMembers |

- Immunizations

| | | | |
|-------------------------|------|------|---|
| DateFrom (*optional) | Date | Body | The beginning of the date range to return data for. Expected format "yyyy-mm-dd". * if DateTo is specified, DateFrom is required |
| DateTo (*optional) | Date | Body | The end of the date range to return data for. Expected format "yyyy-mm-dd". * if DateFrom is specified, DateTo is required |

Request Body Example (JSON has been formatted for display purposes):

```
{
  "PatientKey": 9,
  "DataCategory": "MedicationAllergies",
  "DateFrom": "2018-07-01",
  "DateTo": "2018-07-31"
}
```

Success Response Example – No data found (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "No data found for the given category"
}
```

Failed Response Example – Missing Values in Request (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Invalid request, missing parameters"
}
```

Failed Response Example – Invalid Data Criteria (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Invalid request, unrecognized data category"
}
```

Failed Response Example – Invalid Date Criteria (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": " Invalid request, both DateFrom and DateTo must be specified when
specifying date filter"
}
```

Failed Response Example – Invalid Session (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseCode": 1,
  "ResponseMessage": "Invalid Session",
  "Data": null
}
```


Returns: This method returns a JSON object with the following schema:

Data Category: MedicationAllergies

| Property | Type | Description |
|--|--------------|---|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (MedicationAllergies) | | |
| AllergyCode | Object | Contains the coded substance to which the patient is allergic. |
| Data Object (AllergyCode) | | |
| System | String | Coding system of the coded value. |
| Value | String | Coded value of the allergy substance. |
| AllergySubstance | String | Contains the description of the substance to which the patient is allergic. |
| ReactionCode | Object | Contains the coded reaction of the allergy. |
| Data Object (ReactionCode) | | |
| System | String | Coding system of the coded value. |
| Value | String | Coded value of the reaction of the allergy. |
| ReactionDescription | String | Contains the description of the patient's reaction to the substance. |
| AllergySeverity | String | Contains the severity of the patient's reaction to the substance. |
| ObservationDate | Date | Contains the date when the patient's allergy was observed. |
| ConcernStatus | String | Contains the status of the allergy. |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: MedicationAllergies (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "AllergyCode": {
        "System": "RxNorm",
        "Value": "69627"
      },
      "AllergySubstance": "Tea tree oil",
      "ReactionCode": {
        "System": "SNOMED-CT",
        "Value": "725119006"
      },
      "ReactionDescription": "Generalized rash (disorder)",
      "AllergySeverity": "Severe",
      "ObservationDate": "2018-08-22T10:58:31.723",
      "ConcernStatus": "Active",
      "EncounterDate": "2018-07-02T00:00:00"
    },
    {
      "AllergyCode": {
        "System": "RxNorm",
        "Value": "70618"
      },
      "AllergySubstance": "Penicillin",
      "ReactionCode": {
        "System": "SNOMED-CT",
        "Value": "422400008"
      },
      "ReactionDescription": "Vomiting (disorder)",
      "AllergySeverity": "Moderate",
      "ObservationDate": "2018-08-29T00:00:00",
      "ConcernStatus": "Active",
      "EncounterDate": "2018-07-02T00:00:00"
    }
  ]
}
```

Data Category: Problems

| Property | Type | Description |
|----------------------------------|--------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (Problems) | | |
| ProblemCode | Object | Contains the coded patient problem. |
| Data Object (ProblemCode) | | |
| System | String | Coding system of the coded value. |
| Value | String | Coded value of the patient problem. |
| ProblemDescription | String | Description of the problem |
| ChronicityDescription | String | Subjective chronicity of condition. Valid entries include the following; chronic, acute, none |
| ProblemStatus | String | Problem clinical status. Valid entries include the following; active, resolved, entry in error |
| DateStart | Date | The Date Recorded indicates the date when this condition record was created in the EHR |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: Problems (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "ProblemCode": {
        "System": "SNOMED-CT",
        "Value": "384955008"
      },
      "ProblemDescription": "Abnormal histological findings in specimens from respiratory organs and thorax (Surgical bronchial margin involved by malignant neoplasm)",
      "ChronicityDescription": "None",
      "ProblemStatus": "Active",
      "DateStart": "2018-10-09T00:00:00",
      "EncounterDate": "2019-01-04T00:00:00"
    },
    {
      "ProblemCode": {
        "System": "SNOMED-CT",
        "Value": "300954003"
      },
      "ProblemDescription": "Achilles tendinitis, unspecified leg (Pain in calf)",
      "ChronicityDescription": "Chronic",
      "ProblemStatus": "Active",
      "DateStart": "2018-08-02T00:00:00",
    }
  ]
}
```

```

    "EncounterDate": "2019-01-04T00:00:00"
  }
}

```

Data Category: LaboratoryTests

| Property | Type | Description |
|--------------------------------------|--------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (LaboratoryTests) | | |
| LabTestCode | Object | Contains the coded laboratory test. |
| Data Object (LabTestCode) | | |
| System | String | Coding system of the coded value. |
| Value | String | Coded value of the laboratory test. |
| LaboratoryTestDescription | String | Description of the laboratory test |
| OrderDate | Date | Date that the lab test is ordered |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: LaboratoryTests (JSON has been formatted for display purposes):

```

{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "LabTestDescription": "CULTURE ABCESS NO 3",
      "LabTestCode": {
        "System": "CPT",
        "Value": "87070AB3"
      },
      "OrderDate": "2019-08-08T00:00:00",
      "EncounterDate": "2019-08-06T00:00:00"
    },
    {
      "LabTestDescription": "CULTURE ABCESS NO 2",
      "LabTestCode": {
        "System": "CPT",
        "Value": "87070AB2"
      },
      "OrderDate": "2019-08-08T00:00:00",
      "EncounterDate": "2019-08-06T00:00:00"
    }
  ]
}

```

Data Category: LaboratoryResults

| Property | Type | Description |
|--|--------------|---|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (LaboratoryResults) | | |
| ResultDescription | String | Description of the test that was performed |
| ObservationValues | String | The value contains the numerical value of the quantity |
| Units | String | |
| ReferenceRange | String | Range is a set of ordered values defined by a low and high limit. |
| LabResultCode | Object | Code refers to the test that was performed |
| Data Object (LabResultCode) | | |
| System | String | Coding system of the coded value. |
| Value | String | Coded value of the laboratory result. |
| ObservationDate | Date | For lab tests this is the specimen collection date |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: LaboratoryResults (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "ResultDescription": "TRIGLYCERIDES",
      "ObservationValues": "93.00",
      "Units": "MG/DL",
      "ReferenceRange": "40.00 - 150.00",
      "LabResultCode": {},
      "ObservationDate": "2019-10-11T00:00:00",
      "EncounterDate": "2019-10-11T00:00:00"
    },
    {
      "ResultDescription": "GLUC",
      "ObservationValues": "95",
      "Units": "MG/DL",
      "ReferenceRange": "70 - 99",
      "LabResultCode": {
        "System": "LOINC",
        "Value": "2345-7"
      },
      "ObservationDate": "2019-01-15T08:01:15",
      "EncounterDate": "2019-10-11T00:00:00"
    }
  ]
}
```

Data Category: VitalSigns

| Property | Type | Description |
|------------------------------------|--------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (VitalSigns) | | |
| VitalSignCode | Object | Vital sign result type. |
| Data Object (VitalSignCode) | | |
| System | String | Coding system of the coded value |
| Value | String | Coded value of the vital sign |
| VitalSignName | String | Type of observation. Clinical observations measure the body's basic functions such as such as blood pressure, heart rate, respiratory rate, height, weight, body mass index, head circumference, pulse oximetry, temperature |
| VitalSignValue | String | The value of the measured amount |
| VitalSignUnits | String | Representations for units of measure and in many contexts. For example, kg for kilogram, lbs. for pounds |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Kilograms (kg) to Pounds (lbs)**Successful Response Body Example – Data Category: VitalSigns (JSON has been formatted for display purposes):**

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "VitalSignCode": {
        "System": "LOINC",
        "Value": "8462-4"
      },
      "VitalSignName": "Blood Pressure-Diastolic",
      "VitalSignValue": "4",
      "VitalSignUnits": "mmHG",
      "EncounterDate": "2019-05-15T00:00:00"
    },
    {
      "VitalSignCode": {
        "System": "LOINC",
        "Value": "29463-7"
      },
      "VitalSignName": "Weight",
      "VitalSignValue": "80",
      "VitalSignUnits": "lbs",
      "EncounterDate": "2018-08-01T00:00:00"
    }
  ]
}
```

Data Category: Procedures

| Property | Type | Description |
|------------------------------------|--------------|---|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (Procedures) | | |
| ProcedureCode | Object | Identification code of the procedure |
| Data Object (ProcedureCode) | | |
| System | String | Coding system of the coded value. |
| Value | String | Coded value of the procedure |
| ProcedureName | String | Description of the procedure was performed |
| Status | String | Procedure status. Valid entries include the following; completed, in progress |
| ProcedureDate | Date | Date during which the procedure was performed |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: Procedures (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "ProcedureCode": {
        "System": "CPT",
        "Value": "2024F"
      },
      "ProcedureName": "7 FIELD PHOTO INTERP DOC REV",
      "Status": "Completed",
      "ProcedureDate": "2019-08-06T00:00:00",
      "EncounterDate": "2019-08-06T00:00:00"
    },
    {
      "ProcedureCode": {
        "System": "CPT",
        "Value": "3293F"
      },
      "ProcedureName": "ABO RH BLOOD TYPING DOCD",
      "Status": "Completed",
      "ProcedureDate": "2019-08-06T00:00:00",
      "EncounterDate": "2019-08-06T00:00:00"
    }
  ]
}
```

Data Category: ImplantableDevices

| Property | Type | Description |
|---|--------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (ImplantableDevices) | | |
| UID | String | FDA mandated Unique Device Identifier |
| DeviceDescription | String | Description assigned to a device by organizations like manufacturers or owners |
| DeviceBrandName | String | Model ID assigned by the manufacturer |
| DeviceCompanyName | String | Name of device manufacturer |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: ImplantableDevices (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "UDI": "(01)10884521062856(11)141231(17)150707(10)A213B1(21)1234",
      "DeviceDescription": "Coated Braided Polyester",
      "DeviceBrandName": "Ti-Cron",
      "DeviceCompanyName": "Covidien LP",
      "AssigningAuthority": "FDA",
      "ScopingEntity": "FDA",
      "EncounterDate": "2019-05-15T00:00:00"
    },
    {
      "UDI":
"+B066000325011NS1/$$420020216LOT123456789012345/SXYZ456789012345678/16D20130202
C",
      "DeviceDescription": "A sterile, porous device used in the arterial line of an
extracorporeal circuit,",
      "DeviceBrandName": "CAP, NON VENTED FEMALE: BLUE NON-STERILE",
      "DeviceCompanyName": "NOVOSCI CORP.",
      "AssigningAuthority": "FDA",
      "ScopingEntity": "FDA",
      "EncounterDate": "2019-03-11T00:00:00"
    }
  ]
}
```


Data Category: AssessmentTreatmentPlan

| Property | Type | Description |
|--|--------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (AssessmentTreatmentPlan) | | |
| Assessment | String | Text or HTML description of the assessment |
| PlanOfTreatment | String | Text or HTML description of the plan |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: AssessmentTreatmentPlan (JSON has been formatted for display purposes):

```

{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "Assessment": "Encourage control blood sugar and follow up diet and medication. Encourage patient to stop smoking, to decrease salt intake daily, to decrease weight, and to begin exercising at least 30 minutes daily; Diet should be limited fats, and cholesterol, while maintaining caloric intake, emphasizing fruits, vegetables, and grains.",
      "PlanOfTreatment": "Diet",
      "EncounterDate": "2019-08-23T00:00:00"
    },
    {
      "Assessment": "Medication reconciliation has been performed; Review of all medications, documented in the medical record",
      "PlanOfTreatment": "Follow-up every month",
      "EncounterDate": "2019-05-15T00:00:00"
    }
  ]
}

```

Data Category: Goals

| Property | Type | Description |
|---------------------|--------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (Goals) | | |
| GoalNote | String | Description of a specific desired objective of care |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: Goal (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "GoalNote": "Goals for patient",
      "EncounterDate": "2019-10-04T00:00:00"
    }
  ]
}
```

Data Category: HealthConcerns

| Property | Type | Description |
|-------------------------------------|--------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (HealthConcerns) | | |
| ConcernDescription | String | Description of the problem condition, social history status or drug allergy |
| ConcernType | String | Category documented. Categories include the following; social history, problem condition, drug allergy |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: HealthConcerns (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "ConcernDescription": "Alcohol Intake (Occasionally)",
      "ConcernType": "Social Hx",
      "EncounterDate": "2019-09-19T00:00:00"
    },
    {
      "ConcernDescription": "Smoking Status (Current Everyday smoker)",
      "ConcernType": "Social Hx",
      "EncounterDate": "2019-09-19T00:00:00"
    }
  ]
}
```

Data Category: SmokingStatus

| Property | Type | Description |
|--|--------------|---|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (Procedures) | | |
| TypeDescription | String | Observation's type of classification |
| SmokingStatusDescription | String | Observation of smoking status; Values include; Current every day smoker, Current some day smoker, Former smoker, Never Smoker, current status unknown, Unknown if ever smoked ,Heavy tobacco smoker ,Light tobacco smoker |
| SmokingStatusCode | Object | Observation's type or code |
| Data Object (SmokingStatusCode) | | |
| System | String | Coding system of the coded value. |
| Value | String | Coded value of the smoking status. |
| DocumentedDate | Date | Clinically relevant date period for observation |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: SmokingStatus (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "TypeDescription": "Smoking Status",
      "SmokingStatusDescription": "Heavy Tobacco Smoker",
      "SmokingStatusCode": {
        "System": "SNOMED-CT",
        "Value": "428071000124103"
      },
      "DocumentedDate": "2019-03-11T00:00:00",
      "EncounterDate": "2019-03-04T00:00:00"
    },
    {
      "TypeDescription": "Smoking Status",
      "SmokingStatusDescription": "Heavy Tobacco Smoker",
      "SmokingStatusCode": {
        "System": "SNOMED-CT",
        "Value": "428071000124103"
      },
      "DocumentedDate": "2019-03-13T00:00:00",
      "EncounterDate": "2019-03-01T00:00:00"
    }
  ]
}
```

Data Category: Medications

| Property | Type | Description |
|-------------------------------------|--------------|---|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (Procedures) | | |
| MedicationCode | Object | Medication that was taken |
| Data Object (MedicationCode) | | |
| System | String | Coding system of the coded value. |
| Value | String | Coded value of the medication. |
| MedicationDescription | String | Description of the medication that was taken |
| Instructions | String | How the medication is to be used by the patient |
| DateStart | Date | Time during which it is being asserted that the patient was taking the medication |
| Status | String | Medication status. Valid entries include: Active, Discontinue, Entry in error |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: Medications (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "MedicationCode": {
        "System": "RxNorm",
        "Value": "617314"
      },
      "MedicationDescription": "Lipitor 10mg Tablet",
      "Instructions": "Take twice",
      "DateStart": "2019-05-10T00:00:00",
      "Status": "Active",
      "EncounterDate": "2019-09-19T00:00:00"
    },
    {
      "MedicationCode": {
        "System": "RxNorm",
        "Value": "665040"
      },
      "MedicationDescription": "Januvia 25mg Tablet",
      "Instructions": "1 to 2 times daily",
      "DateStart": "2018-11-01T00:00:00",
      "Status": "Active",
      "EncounterDate": "2019-09-19T00:00:00"
    }
  ]
}
```

Data Category: CareTeamMembers

| Property | Type | Description |
|--------------------------------------|--------------|---|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (CareTeamMembers) | | |
| SignedDocumentKey | Integer | Unique identifier of signed encounter. |
| Title | String | Indicates the specific responsibility of an individual within the care team, such as physician, nurse |
| FirstName | String | Name of the members of the team |
| LastName | String | Last name of the members of the team |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: CareTeamMembers (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "SignedDocumentKey": 224,
      "Title": "",
      "FirstName": "King",
      "LastName": "Bundy",
      "EncounterDate": "2019-10-16T00:00:00"
    },
    {
      "SignedDocumentKey": 224,
      "Title": "Dr.",
      "FirstName": "Ricardo",
      "LastName": "Abella",
      "EncounterDate": "2019-10-16T00:00:00"
    }
  ]
}
```

Data Category: Immunizations

| Property | Type | Description |
|------------------------------------|--------------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | Object Array | Clinical data that matched the given criteria. |
| Data Object (Immunizations) | | |
| VaccineCode | Object | Vaccine |
| Data Object (VaccineCode) | | |
| System | String | Coding system of the coded value. |

| | | |
|---------------|--------|--|
| Value | String | Coded value of the vaccine. |
| VaccineName | String | Vaccine description. |
| Date | Date | Event date. |
| Status | String | |
| Lot Number | String | |
| Manufacturer | String | |
| EncounterDate | Date | Contains the date of the patient's visit to the physician. |

Successful Response Body Example – Data Category: Immunizations (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "Success",
  "Data": [
    {
      "VaccineCode": {
        "System": "CVX",
        "Value": "134"
      },
      "VaccineName": "Japanese Encephalitis IM",
      "Date": "2019-10-18T00:00:00",
      "Status": "Completed",
      "LotNumber": "7",
      "Manufacturer": "Valneva",
      "EncounterDate": "2019-10-22T00:00:00"
    },
    {
      "VaccineCode": {
        "System": "CVX",
        "Value": "119"
      },
      "VaccineName": "rotavirus, monovalent",
      "Date": "2019-10-18T00:00:00",
      "Status": "Cancelled",
      "Manufacturer": "GlaxoSmithKline",
      "Notes": "Refused by Patient",
      "EncounterDate": "2019-10-22T00:00:00"
    }
  ]
}
```

5.5 Patient Clinical Data - Encounters

Method: POST

Endpoint: /appdataaccess/patientencounters

This method returns a patient's clinical data in C-CDA for the given patient unique identifier and specific date or date range. For a specific date, set the DateFrom and DateTo parameters to the same value.

Request Headers Parameters:

| Parameter | Type | HTTP Location | Description |
|-----------------------------------|---------|---------------|---|
| SessionKey (required) | Long | Header | Contains the user's session identifier returned by the SignIn method. |
| Token (required) | String | Header | Contains the Token returned by the SignIn method (LoginToken). |
| ConnectorAccountKey (required) | Integer | Header | Contains the user's identifier returned by the SignIn method. |

Request Body Parameters:

| Parameter | Type | HTTP Location | Description |
|--------------------------|---------|---------------|---|
| PatientKey (required) | Integer | Body | The patient's unique identifier. |
| DateFrom (required) | Date | Body | The beginning of the date range to return data for. Expected format "yyyy-mm-dd". |
| DateTo (required) | Date | Body | The end of the date range to return data for. Expected format "yyyy-mm-dd". |

Returns: This method returns a C-CDA document in raw XML format when the API call completes successfully, and data is found for the given request criteria. If the API call does not complete successfully or data is not found for the given request criteria, the method returns a JSON object.

This method returns a JSON object with the following schema:

| Property | Type | Description |
|---------------|---------|--|
| Success | Boolean | Whether the transaction completed successfully. |
| ResultMessage | String | Additional information about the transaction result. |
| Data | String | C-CDA document |

Successful Response and data found Body Example (C-CDA document shortened for display purposes):

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="CDA.xsl"?>
<ClinicalDocument xmlns="urn:hl7-org:v3" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:voc="urn:hl7-org:v3/voc" xmlns:sdctc="urn:hl7-org:sdctc">
  <realmCode code="US"/>
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
  ...
</ClinicalDocument>
```

Success Response Example – No data found (JSON has been formatted for display purposes):

```
{
  "Success": true,
  "ResponseMessage": "No data found for the given parameters"
}
```

Failed Response Example – Missing Values in Request (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseMessage": "Invalid request, missing parameters "
}
```

Failed Response Example – Invalid Credentials (JSON has been formatted for display purposes):

```
{
  "Success": false,
  "ResponseCode": 1,
  "ResponseMessage": "Invalid Session",
  "Data": null
}
```

6. Application Program Interface Terms and Conditions

APPLICATION PROGRAM INTERFACE TERMS & CONDITIONS

This the agreement ("Agreement") between the User ("Customer, Developer") and Medicus Clinical, LLC ("Company").

BY ACCEPTING THIS AGREEMENT, YOU ARE CONSENTING TO BE BOUND BY ITS TERMS.

WHEREAS, Company is willing to supply the Application Program Interface ("API", "API's"), as defined below) to you;

WHEREAS, you desire to have access to the System, and are aware of the purpose of the System;

NOW THEREFORE, in consideration of the foregoing and the mutual covenants hereinafter set forth, the parties hereby agree:

1. Definitions.

"Codes" means access codes, identification codes, tokens, private security keys, passwords and/or public security certificates that Company may issue to you for use with the System.

"Data Transmitter" means any third party that provides data that can be accessed through the System.

"Developer" means a person or business that produces or provides software or services through which a User can access the System.

"Documentation" means any printed or electronic documentation regarding the System, and any other online or other documentation that is generally made available by Company to Users or Developers.

"Software" means the Open Application Programming Interface (API, API's) of the Company software, any applicable related website or network resources intended for use with that software, and any other software provided by Company to you in connection with this Agreement, as applicable, in the form intended by Company for use by you, as documented by the Company, and any updates or upgrades thereto provided by Company in Company's sole discretion.

"System" means any Company websites or network resources, Software and Documentation, Codes, and any services, programs, functions and information provided by Company to you.

"HIPAA" means the Health Insurance Portability and Accountability Act of 1996 and the regulations promulgated thereunder.

"HITECH" means the Health Information Technology for Economic and Clinical Health Act under Title XIII of the American Recovery and Reinvestment Act of 2009 and the regulations promulgated thereunder.

"PHI" means Protected Health Information as defined by HIPAA.

"User" means a person or other entity who accesses the System directly or through any software, API or service.

2. License Grant.

Company hereby grants you a non-transferable, non-exclusive, revocable, limited license to use the System subject to the terms and conditions of this Agreement. RIGHTS NOT EXPRESSLY GRANTED HEREIN ARE RESERVED BY COMPANY.

3. License Restrictions.

YOU MAY NOT, EITHER ON YOUR OWN BEHALF OR THROUGH ANY AGENT OR THIRD PARTY DECOMPILE, DISASSEMBLE, REVERSE ENGINEER, OR OTHERWISE ATTEMPT TO DERIVE SOURCE CODE FROM THE SOFTWARE COMPONENTS OF THE SYSTEM, OR MODIFY OR CREATE DERIVATIVE WORKS BASED ON THE SOFTWARE COMPONENTS OF THE SYSTEM OR ANY DOCUMENTATION. For example, but without limitation, you shall not yourself or through any agent, or third party: (i) translate any Software code, including without limitation for the purpose of reverse engineering or to discover the structure, sequence or organization of the Software or any portion thereof, (ii) monitor, interfere with, or reverse engineer the technical aspects of the System, (iii) intentionally compromise the security of the System or take any action intentionally, or neglect or omit to take, any action that compromises the security of the System, (iv) sell, lease, license or sublicense the System or Documentation except as expressly authorized under this Agreement. You are solely responsible for obtaining all equipment, developing or obtaining software to access the System, for ensuring the compatibility thereof with the System in accordance with the Documentation, for determining the suitability of said equipment and software for the purpose of using the System, and for paying all fees including, without limitation, all taxes and Internet access fees, necessary to use the System. Your responsibilities under the immediately preceding sentence include determining the suitability of any computers or devices, including mobile devices, browser software or other third party software, network configuration and internet service, or other hardware or software used by you, including but not limited to any software provided by Company, to access the System, including but not limited to the assessment of a device's or software's ability to maintain the security and privacy of your Codes and of any data, including PHI, viewed, downloaded, or otherwise accessed through the System. You shall not use Software or System for any purpose other than those permitted by this agreement. You will not use the System for any purpose that is unlawful or prohibited by this Agreement.

4. Registration & Access

User with interest in Application Data Access APIs for MedicusEHR v1.0 will need to contact a healthcare provider and/or Practice with a valid Licence of Use to the Application, and request proper access and credentials in accordance with such provider and/or Practice policies and procedures.

User acknowledges and agrees that by using any API and/or MedicusEHR it assumes individual, personal, corporate and total responsibility for the consequences of submitting false, misleading or incorrect information, in part or in all, and above all, the consequences of such acts.

User shall take reasonable steps to prevent unauthorized access to the Application Software or System, including without limitation by protecting its passwords and other log-in information.

User shall notify Company immediately of any known or suspected unauthorized use of the application or software or breach of its security and shall use best efforts to stop said breach. Company is not responsible or liable in case the unauthorized use of the application or software cause any kind of damages to Developer or any third party.

5. Participant Evaluations and User Submissions; HIPAA and HITECH; User Responsibilities.

A. As requested by Company, you agree to furnish Company with information describing the results of your use of the System as reasonably comprehensive information concerning any errors, problems, difficulties, or suggestions regarding the access to or use of the System. You will be able to also promptly respond to any reasonable questions provided by Company regarding the System. You acknowledge and agree that all information provided in accordance with this section shall be considered User Submissions and subject to the provisions for same set forth in Section 4.D. below.

B. YOU ATTEST THAT YOU ARE AUTHORIZED TO ACCESS ANY PHI THAT YOU REQUEST THROUGH THE SYSTEM, AND YOU AGREE TO HANDLE AND PROCESS SUCH INFORMATION ACCORDING TO ANY AND ALL APPLICABLE LAWS. You acknowledge and agree that you shall use the System only as and to the extent permitted by applicable law, including any applicable import or export laws, and only for applications related to the secure access to health information over the Internet, in a manner compliant with the security and privacy rules of HIPAA, HITECH, and any other applicable law or regulation. You acknowledge and agree that Company is not a Covered Entity. You agree that you will not intentionally submit to Company or otherwise share with Company any Protected Health Information and will not provide Company with access to any Protected Health Information except as required for you to use the System. You acknowledge and agree that Company only acts as a conduit to transfer Protected Health Information or any other data between you and a Data Transmitter. You and Company agree that you and Company do not intend to become each other's Business Associate by virtue of entering into this Agreement or your use of the System. As a result, this Agreement is not intended to serve as a Business Associate Agreement between you and Company.

C. You acknowledge that the System is a data transmission tool and is not intended to serve as a clinical history record, and that it is your sole responsibility to ensure that the content of any data accessed through the System is incorporated into a patient's clinical record, when needed. You agree that it is your sole responsibility to provide or obtain any and all necessary consents and to fulfil any and all obligations that are required by HIPAA, HITECH, or other governmental statute or regulation, including but not limited to entering into any required Business Associate Agreement, prior to use, disclosure, or transmission of any Protected Health Information or other data accessed through the System. You agree that Company has no obligation to archive or otherwise store any PHI or other data transmitted through the System. You acknowledge that the data you request may not be accessible through the System when (i) you are denied access by Data Transmitter to any or all of the data requested or the Data Transmitter does not respond to your request for any reason, (ii) your request or the data provided by a Data Transmitter is not in a format recognized by the System, (iii) your request would cause transfer size or frequency to exceed the allowable maximum permitted by Company, (iv) the Codes you use to access the System are invalid, (v) this Agreement terminates, or (vi) for any other reason. You are solely responsible for obtaining any Codes or other credentials needed to use the System or access PHI or other data through the System. You acknowledge that Company does not control the content of data accessed through the System, that data accessed through the System may contain software viruses or other malicious content, that it is your sole responsibility to protect your computer system from viruses, and that Company has no responsibility to protect your computer system from viruses or other malware. You agree that Company, in its sole discretion, reserves the right not to enable Software or System for any particular Developer or User, should Company determine, in its sole discretion, that use by the Developer or User is a threat to Company's systems or negatively impacts the use of the System by other Users.

D. You may make submissions of certain data and information to Company (the "User Submissions"), such as feedback related to the System. You understand that User Submissions are not and shall not be deemed to be your confidential and/or proprietary information, regardless of whether any submission is marked "Confidential" and/or "Proprietary". All User Submissions of any type, and the responses of Company or any other entity, if any, and all intellectual property rights therein, including any derivatives,

modifications, updates and improvements thereto, shall be owned solely by Company, and you hereby irrevocably assign to Company all such rights in the User Submissions. You hereby warrant that the User Submissions are and will be in compliance with all applicable laws and regulations and will not contain Protected Health Information. Company has a right to use User Submissions, to which it is given access in any form, to evaluate, test or improve the System or for other lawful purpose. You will make User Submissions and will provide Company access to Software-generated data only in accordance with HIPAA/HITECH, applicable state privacy laws and other applicable laws.

E. If the Company (i) determines that a statute or regulation, including any interpretation thereof (e.g., an advisory opinion) (collectively referred to in this subsection as a “Law”) to become effective as of a certain date which, if or when implemented, would have the effect of subjecting the Company to civil or criminal prosecution under state and/or federal laws, or any other material adverse proceeding on the basis of such party’s participation herein, or (ii) receives notice of an actual or threatened decision, finding or action by any governmental or private agency or party or court (collectively referred to in this subsection as an “Action”), which, if or when implemented, would have the effect of subjecting Company to civil or criminal prosecution under state and/or federal laws, or any other material adverse proceeding on the basis of such party’s participation herein, then Company shall amend this Agreement to the minimum extent necessary, as determined reasonably by the Company, in order to comply with such Law or to avoid the Action, as applicable and Company shall have the power to amend this Agreement for this purpose without your consent or the consent of any other person or entity. If the Company determines that compliance with such requirements is impossible, then this Agreement may be terminated by the Company without penalty and without prior written notice.

6. Codes.

A. Company may limit the number of Users who can use the System at any given time. You warrant to Company that (a) all information supplied by you is true, correct and complete, (b) no unauthorized entity has ever had access to your Codes, and (c) you have not included trademarks in your token request unless you also possess the rights to use the respective names, nor have you otherwise misrepresented the identity of your legal organization or software. You are solely responsible for use and proper protection of your Codes and agree to take all reasonable precautions to protect the security and integrity of the Codes and to prevent their unauthorized use. You acknowledge and agree that you are solely responsible for all actions taken that utilize your Codes, unless such actions are taken by Company, its subcontractors or agents without your approval.

B. If Company determines in its sole discretion that you are or may be using a Code issued by Company for purposes other than those allowed by this agreement, Company may, in its sole discretion, revoke the Code. Company may modify a Code or its metadata issued to you if Company determines, in its sole discretion, that such modification is required to meet the initial or ongoing inclusion or interoperability requirements of a trust community or equivalent in which Company participates or intends to participate, or that Company or Developer do not meet or have ceased to meet the inclusion requirements for a trust community or equivalent. You will cease use of all Codes following expiration or revocation of the corresponding Code or of the license granted hereunder. You will promptly notify Company if any information in your Code or its associated metadata is inaccurate or has changed. You will protect all Codes to which you have access from unauthorized access. Without limiting the last sentence of Section 7, this Section 5 will survive any termination of this Agreement.

7. Proprietary Rights and Audits.

The Software, System, Documentation and all content and all information with regard thereto or contained therein including, but not limited to, data, evaluation and test results, any reports, questionnaires or other documentation provided to Company under this Agreement (the “Company Information”) and any User Submissions, including any compilations of any participant information that are created in connection with or as part of the System are proprietary products of Company and its licensors and are protected under various intellectual property laws. Except for the rights expressly granted pursuant to Section 2 above, Company and its licensors retain all right, title, and interest in and to the System and Documentation, all other Company Information and the User Submissions, including all intellectual property rights therein. Company may modify the Software and Documentation at any time and from time to time and the definitions of Software or Documentation shall be deemed to also include such modifications and such Software and Documentation as modified.

8. Confidential Information

(A) Confidential Information means any and all Company proprietary information in any medium, including but not limited to the Documentation, systems, financial information, source code, data, pricing structure, training materials, Provider lists, Client lists, technology, formulas, trade secrets, copyrightable and patentable products, and the terms of this Agreement.

(B)The term “Confidential Information” shall not be deemed to include information which, to the extent that User can establish by competent proof:

- (a) at the time of disclosure is in the public domain;
- (b) after disclosure, becomes part of the public domain by publication or otherwise, except by (i) breach of this Agreement by User, or (ii) disclosure by any person or affiliated company to whom Confidential Information was disclosed under this Agreement;
- (c) was (i) in User possession in documentary form at the time of disclosure by Company, or (ii) independently developed by or for User by any person or persons who had no knowledge of the Confidential Information; or
- (d) User received from a third party who had the lawful right to disclose the Confidential Information and who did not obtain the Confidential Information under an obligation of confidentiality.

(C) Notwithstanding any other provision of this Agreement, disclosure of Confidential Information shall not be precluded if such disclosure:

- (a) is in response to a valid order of a court or to another governmental body of the United States or any political subdivision thereof; or
- (b) is required by law or regulation; provided, however, that the User required to make such disclosure shall make reasonable efforts to give prompt notice to Company and cooperate in all reasonable respects with Company efforts to obtain a protective order or grant of confidentiality, so that the Confidential Information required to be disclosed may be used only for purposes for which such order was issued or as required by such law or regulation.

9. Term and Termination.

The term of this Agreement shall begin on the date of your acceptance of this Agreement, first use of the System, or upon issuance of Codes to you, whichever occurs earliest. This license will automatically terminate without notice to you upon expiration of Codes issued to you and **your Users** or upon the termination of this Agreement as provided herein, whichever occurs earlier. Upon any termination, all rights and licenses granted to you under this Agreement shall immediately terminate and, if you have been issued any Code(s) from Company, you shall destroy and discard (or cause to be destroyed or discarded) and cease use of all copies of such Code(s). The terms of this Agreement that give the parties rights beyond termination of this Agreement will survive any termination of this Agreement.

10. Disclaimers.

A. YOU ACKNOWLEDGE AND AGREE THAT THE SOFTWARE, DOCUMENTATION, SYSTEM AND ANY OTHER MATERIALS OR CONTENT ARE PROVIDED TO YOU “AS-IS,” WITH NO WARRANTY WHATSOEVER, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, ANY WARRANTY OF NON-INFRINGEMENT, OR ANY WARRANTY THAT THE OPERATION OF THE SYSTEM WILL BE UNINTERRUPTED OR ERROR FREE. COMPANY DISCLAIMS ANY LIABILITY FOR UNAUTHORIZED THIRD-PARTY ACCESS, OR RELIANCE ON THE SYSTEM BY YOU OR ANY THIRD PARTY. COMPANY DISCLAIMS ANY LIABILITY FOR ANY DAMAGES TO YOUR COMPUTER OR ANY THIRD PARTY’S COMPUTER OR OTHER PROPERTY CAUSED BY OR ARISING FROM YOUR USE OF THE SYSTEM, WHETHER DUE TO INFECTION BY A SOFTWARE VIRUS OR OTHER MALWARE OR OTHER CAUSE. COMPANY DISCLAIMS ANY LIABILITY RESULTING FROM ANY UNAUTHORIZED ACCESS TO DATA ARISING FROM OR RELATED TO YOUR USE OF THE SYSTEM, INCLUDING BUT NOT LIMITED TO LIABILITY FOR COSTS, DAMAGES, ATTORNEYS’ FEES, OR ANY LIABILITY ARISING FROM OR RELATING TO ANY REGULATORY ACTION BY ANY STATE OR FEDERAL AGENCY. You agree that you and the Company are independent contractors and that neither has any fiduciary responsibility to the other. In furtherance of the immediately preceding sentence, each of you and the Company agree to never assert for its own benefit that the other has any fiduciary duties and to the extent permitted by applicable law, you and Company hereby disclaim any fiduciary relationship between Company on one hand and you on the other hand. You further acknowledge that some content, including but not limited to any health data or directory information, has been supplied by third parties and that Company makes no warranty whatsoever with respect to such content. Company has not attempted to nor has it verified the accuracy or completeness of such content, nor does Company have any obligation to update or correct any such content. You acknowledge that use of the System may require that data is supplied by or passes through systems that are not controlled by Company, including, without limitation, internet service providers, third party applications, routers, domain name system (DNS) servers, and systems run by Developers, Data Transmitters, or other third parties, and you agree that Company is not responsible for the timeliness, reliability or availability of those systems.

B. You acknowledge that the System is designed to facilitate secure delivery of health content over the Internet. You acknowledge and agree that each user’s needs and data are unique, and that your inputs and information and your use to generate customized reports and outputs or other data based on your own needs and data, may cause your experience to differ from that of other users and that you assume the entire risk of your reliance on the System and any reports, information or any other content generated thereby. You acknowledge and agree that you will never use the System in urgent, critical, emergency, life-threatening, time sensitive or mission critical scenarios, and instead shall communicate in such circumstances directly and orally. You shall never use the system as a substitute for direct oral person-to-person communication in urgent, critical, emergency, life-threatening, time-sensitive, or mission-critical situations, including for communication of critical medical results in such circumstances.

11. Application Software or System Revisions.

Company may revise Application Software or System features and functions at any time, including without limitation by removing such features and functions or reducing any service levels.

MedicusEHR on his own terms and from time to time could conform upgrades, changes, testing, and quality assurance processes for the improvement of the Application Software. The availability of the Application Software for multiple mobile devices does not guarantee that the same capabilities, features, and/or look and feel would be available across all the devices and/or for all type of users.

12. Scheduled Maintenance Windows.

Company may perform maintenances and changes to production services and systems every Sunday from 6:00 pm to 10:00 pm without additional notice. Developer may experience intermittence, outages or changes on services, accesses and/or systems during these periods.

13. Limitation of Liability.

IN NO EVENT AND UNDER NO CIRCUMSTANCES SHALL COMPANY OR ITS AFFILIATES, EMPLOYEES, OFFICERS OR LICENSORS BE LIABLE UNDER THIS AGREEMENT, WHETHER WITH RESPECT TO THE SYSTEM OR DOCUMENTATION PROVIDED HEREUNDER OR OTHERWISE, (I) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, RELIANCE OR PUNITIVE DAMAGES OR LOSS OF PROFITS, LOSS OF BUSINESS, LOSS OF REVENUE, LOSS OF DATA, LOSS OF GOODWILL, LOSS OF BUSINESS OPPORTUNITIES, OR BUSINESS INTERRUPTION, HOWEVER CAUSED AND UNDER ANY THEORY OF LIABILITY, INCLUDING BUT NOT LIMITED TO CONTRACT, TORT (INCLUDING PRODUCTS LIABILITY, STRICT LIABILITY AND NEGLIGENCE), STATUTORY OR OTHERWISE, WHETHER OR NOT COMPANY WAS OR SHOULD HAVE BEEN AWARE OR ADVISED OF THE POSSIBILITY OF SUCH DAMAGE, (II) FOR ANY LIABILITY ARISING FROM INFORMATION INCLUDED IN OR EXCLUDED FROM DATA ACCESSED BY YOU THROUGH THE SYSTEM, UNLESS THE FAULT IN THE INFORMATION IS DUE TO FRAUD OR WILLFUL MISCONDUCT OF THE COMPANY, (III) ARISING FROM THE USAGE OF A CODE THAT IS NOT VALID OR HAS NOT BEEN USED IN CONFORMANCE WITH THIS AGREEMENT, (IV) ARISING FROM COMPROMISE OF YOUR CODES, OR (V) FOR ANY MATTER OUTSIDE THE COMPANY'S CONTROL INCLUDING, WITHOUT LIMITATION, IF COMPANY CANNOT REVOKE A CODE OR TERMINATE ACCESS TO DATA FOR ANY REASON OUTSIDE OF COMPANY'S CONTROL. IN NO EVENT SHALL COMPANY'S OR ITS LICENSORS' AGGREGATE LIABILITY ARISING OUT OF THIS AGREEMENT EXCEED THE NET AMOUNT COMPANY HAS ACTUALLY RECEIVED FROM YOU TO ACCESS THE SYSTEM AS A DEVELOPER OR USER IN THE TWELVE MONTHS PRECEDING THE FIRST CLAIM MADE BY YOU AGAINST THE COMPANY. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. THE FOREGOING LIMITATIONS SHALL APPLY NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY STATED IN THIS AGREEMENT. You agree that you are solely responsible for any loss or damage resulting from your failing to meet the requirements of this agreement for the protection of your Codes.

14. Indemnification.

You agree to indemnify, defend, and hold Company, its subsidiaries, officers, employees, agents, contractors, and licensors harmless from and against all claims, damages, and expenses ("Claims")

arising out of or related to your use of the System, other than those Claims arising out of or related to the Company's gross negligence, willful misconduct or fraud in providing the System.

15. Relationship of the Parties

Nothing contained in this AGREEMENT constitutes a partnership relationship, alliance, or joint venture or an employment relationship between Company and the User, nor should it be construed as a possibility for a partnership relation, joint venture, or as an employer or employee relationship between Company and the User.

16. Miscellaneous.

No waiver or modification of the Agreement shall be valid unless made in writing signed by each party, except Company may modify the terms of this Agreement without written notice by posting the modified Agreement on this website. Your continued use of the System after such modification shall constitute acceptance of the modified Agreement. The waiver of a breach of any term hereof shall in no way be construed as a waiver of any other term or breach hereof. This Agreement and all claims arising out of or related to this Agreement will be governed solely by the applicable federal laws of the United States of America and state laws of the Commonwealth of Puerto Rico without reference to conflict of laws principles.

All disputes arising out of this Agreement shall be subject to the exclusive jurisdiction of the state and federal courts of the Commonwealth of Puerto Rico, and the parties agree and submit to the personal and exclusive jurisdiction and venue of these courts. Notwithstanding the foregoing, Company shall have the right to pursue protection of its intellectual property rights in any court of competent jurisdiction. You may not assign this Agreement or any rights or obligations hereunder without the prior written consent of Company. You must give any required notice to the Company via certified mail.

Company may give notices to you through this website or in the sole discretion of the Company through any other method reasonably calculated and intended to provide actual notice to you, provided that any notice from Company received by you or your representative or agent shall be effective, and you shall be deemed to have received any notice that Company attempts to give using means reasonably calculated and intended to provide actual notice to you.

Subject to the foregoing, this Agreement will inure to the benefit of and be binding upon the parties and their respective successors and permitted assigns. Any attempted assignment in violation of this section shall be null and void. If any provision of this Agreement shall be held by a court of competent jurisdiction to be contrary to law, the remaining provisions of this Agreement shall remain in full force and effect. Non-performance of Company shall be excused to the extent that performance is rendered impossible by strike, fire, flood, earthquake or other natural disaster, failure of any electrical, communication, or other system over which Company has no control, acts of war or terrorism, acts of God, governmental acts or restrictions or for any other reason when failure to perform is beyond the reasonable control of Company whether or not the Company could have taken precautions to provide for backup or an alternate data center in another geographic location or otherwise.

This Agreement constitutes the entire understanding and agreement with respect to its subject matter, and supersedes any and all prior or contemporaneous representations, understandings and agreements whether oral or written between the parties relating to the subject matter of this Agreement, all of which are merged in this Agreement, except that (if applicable) any prior confidentiality agreement executed and

signed by both you and Company shall be effective through the Effective Date and any confidential information of Company thereunder will continue to be protected as Proprietary Information hereunder.

17. Notices

User may send notices pursuant to this Agreement to Company designated email: compliance@assertus.com . A copy must be sent by mail to:

Medicus Clinical, LLC
Corporate Office Park,
Assertus Building Suite 104, Guaynabo PR 00966
Attn. Legal & Compliance